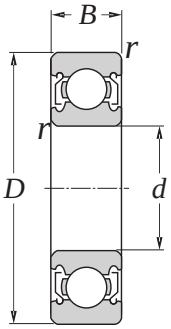
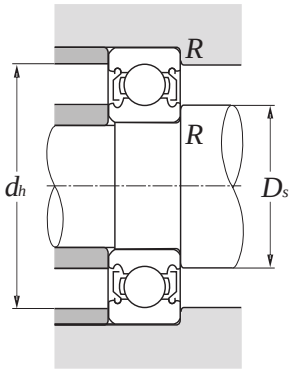
VKE

BEARINGS



Shielded type
(2Z)

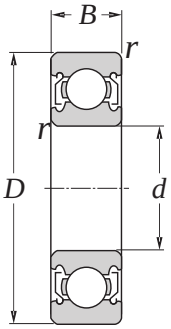
Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers		■ Up-grade	Principal dimensions D	B	rs min1)	Basic load ratings dynamic Cr	static Cor	Limiting speeds grease	oil	Abutment and fillet dimensions Ds min	Ds max	dh max	R max	Mass kg.
				mm			N		rpm		mm				
6	606 2Z	606 2RS	606 2RSR	17	6	0.3	2260	835	38000	45000	8.0	-	15.0	0.3	0.006
7	607 2Z	607 2RS	607 2RSR	19	6	0.3	2340	885	36000	43000	9.0	-	17.0	0.3	0.008
8	608 2Z	608 2RS	608 2RSR	22	7	0.3	3300	1370	34000	40000	10.0	-	20.0	0.3	0.012
9	609 2Z	609 2RS	609 2RSR	24	7	0.3	3350	1430	32000	38000	11.0	-	22.8	0.3	0.015
10	6000 2Z	6000 2RS	6000 2RSR	26	8	0.3	4550	1960	29000	21000	12.5	13.5	23.5	0.3	0.019
12	6001 2Z	6001 2RS	6001 2RSR	28	8	0.3	5100	2390	26000	18000	14.5	16.0	25.5	0.3	0.021
15	6002 2Z	6002 2RS	6002 2RSR	32	9	0.3	5600	2840	22000	15000	17.5	19.0	29.5	0.3	0.030
17	6003 2Z	6003 2RS	6003 2RSR	35	10	0.3	6800	3350	20000	14000	19.5	21.0	32.5	0.3	0.039
20	6004 2Z	6004 2RS	6004 2RSR	42	12	0.6	9400	5050	18000	11000	25.0	26.0	37.0	0.6	0.069
25	6005 2Z	6005 2RS	6005 2RSR	47	12	0.6	10100	5850	15000	9400	30.0	30.5	42.0	0.6	0.080
30	6006 2Z	6006 2RS	6006 2RSR	55	13	1.0	13200	8300	13000	7700	36.0	37.0	49.0	1.0	0.116

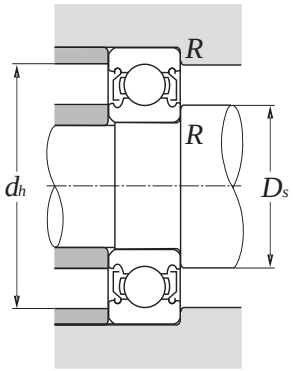
Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	X	Normal	Multemp SRL
Brass -	X	(ISO)	-40 ~ +150



Shielded type
(2Z)

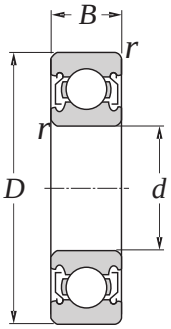
Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers ■ Up-grade			Principal dimensions D mm	B mm	rs min1) mm	Basic load ratings dynamic Cr N	static Cor N	Limiting speeds grease rpm	oil rpm	Abutment and fillet dimensions Ds min mm	Ds max mm	dh max mm	R max mm	Mass kg.
5	625 2Z	625 2RS	625 2RSR	16	5	0.3	1730	670	36000	43000	7.0	-	14.0	0.3	0.005
6	626 2Z	626 2RS	626 2RSR	19	6	0.3	2340	885	32000	40000	8.0	-	20.0	0.3	0.008
7	627 2Z	627 2RS	627 2RSR	22	7	0.3	3300	1370	30000	36000	9.0	-	20.0	0.3	0.013
8	628 2Z	628 2RS	628 2RSR	24	8	0.3	3350	1430	28000	34000	10.0	-	22.0	0.3	0.018
9	629 2Z	629 2RS	629 2RSR	26	8	0.6	4450	1970	28000	34000	11.0	-	24.0	0.3	0.019
10	6200 2Z	6200 2RS	6200 2RSR	30	9	0.6	5100	2390	25000	18000	15.0	16.0	25.0	0.6	0.032
12	6201 2Z	6201 2RS	6201 2RSR	32	10	0.6	6100	2750	22000	16000	17.0	17.5	27.0	0.6	0.037
15	6202 2Z	6202 2RS	6202 2RSR	35	11	0.6	7750	3600	19000	15000	20.0	20.5	30.0	0.6	0.045
17	6203 2Z	6203 2RS	6203 2RSR	40	12	0.6	9600	4600	18000	12000	22.0	23.0	35.0	0.6	0.066
20	6204 2Z	6204 2RS	6204 2RSR	47	14	1.0	12800	6650	16000	10000	26.0	28.0	41.0	1.0	0.106
25	6205 2Z	6205 2RS	6205 2RSR	52	15	1.0	14000	7850	13000	8900	31.0	32.0	46.0	1.0	0.128
30	6206 2Z	6206 2RS	6206 2RSR	62	16	1.0	19500	11300	11000	7300	36.0	39.0	56.0	1.0	0.199

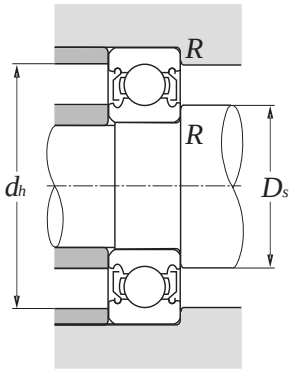
Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Multemp SRL
Brass -	x		-40 ~ +150



Shielded type
(2Z)

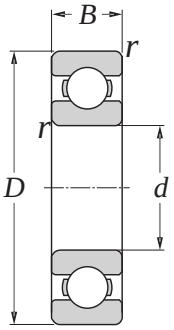
Non-contact
sealed type (2RS)



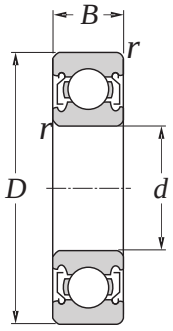
Inner bore d mm	Bearing numbers		■ Up-grade	Principal dimensions D	B	rs min1)	Basic load ratings dynamic Cr	static Cor	Limiting speeds grease	oil	Abutment and fillet dimensions Ds min	Ds max	dh max	R max	Mass kg.
				mm			N		rpm		mm				
4	634 2Z	634 2RS	634 2RSR	16	5	0.3	1730	670	36000	43000	6.0	-	14.0	0.3	0.005
5	635 2Z	635 2RS	635 2RSR	19	6	0.3	2340	885	32000	40000	7.0	-	17.0	0.3	0.008
6	636 2Z	636 2RS	636 2RSR	22	7	0.3	3300	1370	30000	36000	8.0	-	20.0	0.3	0.014
7	637 2Z	637 2RS	637 2RSR	26	9	0.3	4550	1970	28000	34000	9.0	-	24.0	0.3	0.025
8	638 2Z	638 2RS	638 2RSR	28	9	0.3	4550	1970	28000	34000	10.0	-	26.0	0.3	0.029
9	639 2Z	639 2RS	639 2RSR	30	10	0.6	5100	2390	24000	30000	13.0	-	26.0	0.6	0.036
10	6300 2Z	6300 2RS	6300 2RSR	35	11	0.6	8200	3500	23000	16000	15.0	17.0	30.0	0.6	0.053
12	6301 2Z	6301 2RS	6301 2RSR	37	12	1.0	9700	4200	20000	15000	18.0	18.5	31.0	1.0	0.060
15	6302 2Z	6302 2RS	6302 2RSR	42	13	1.0	11400	5450	17000	12000	21.0	23.0	36.0	1.0	0.082
17	6303 2Z	6303 2RS	6303 2RSR	47	14	1.0	13500	6550	16000	11000	23.0	25.0	41.0	1.0	0.115
20	6304 2Z	6304 2RS	6304 2RSR	52	15	1.1	15900	7900	14000	10000	27.0	28.5	45.0	1.0	0.144

Technical supplement

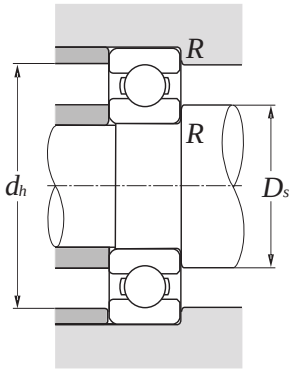
Cages	*Precision*	*Grease*
Steel -		
Polymid - x	Normal (ISO)	Multemp SRL
Brass - x		-40 ~ +150



Open type



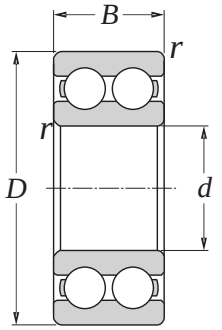
Shielded type
(2Z)



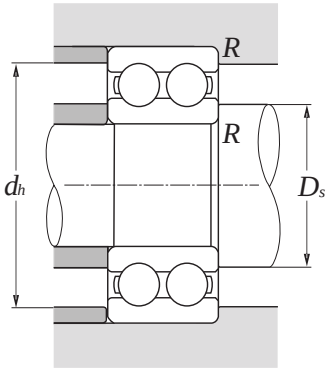
Inner bore d mm	Bearing numbers		Principal dimensions D	B	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r N	static C_{or} N	Limiting speeds grease rpm	oil rpm	Abutment and fillet dimensions $D_{s\,min}$ mm	$d_{h\,max}$ mm	R_{max} mm	Mass kg(s).
12	16001	16001 2Z	28	7	0.3	5100	2390	26000	30000	14.5	25.5	0.3	0.019
15	16002	16002 2Z	32	8	0.3	5600	2840	22000	26000	17.5	29.5	0.3	0.025
17	16003	16003 2Z	35	8	0.3	6800	3350	20000	24000	19.5	32.5	0.3	0.032
20	16004	16004 2Z	42	8	0.3	7900	4500	18000	21000	22.5	39.5	0.3	0.051
25	16005	16005 2Z	47	8	0.3	8350	5100	15000	18000	27.5	44.5	0.3	0.060
30	16006	16006 2Z	55	9	0.3	11200	7350	13000	15000	32.5	52.5	0.3	0.091
35	16007	16007 2Z	62	9	0.3	11700	8200	12000	14000	37.5	59.5	0.3	0.110
40	16008	16008 2Z	68	9	0.3	12600	9650	10000	12000	42.5	65.5	0.3	0.125
45	16009	16009 2Z	75	10	0.6	12900	10500	9200	11000	50.0	70.0	0.6	0.171
50	16010	16010 2Z	80	10	0.6	13200	11300	8400	9800	55.0	75.0	0.6	0.180
55	16011	16011 2Z	90	11	0.6	18600	15300	7700	9000	60.0	85.0	0.6	0.258
60	16012	16012 2Z	95	11	0.6	20000	17500	7000	8300	65.0	90.0	0.6	0.283
65	16013	16013 2Z	100	11	0.6	20500	18700	6500	7700	70.0	95.0	0.6	0.307
70	16014	16014 2Z	110	13	0.6	24400	22600	6100	7100	75.0	105.0	0.6	0.441
75	16015	16015 2Z	115	13	0.6	25000	24000	5700	6700	80.0	110.0	0.6	0.464
80	16016	16016 2Z	125	14	0.6	25400	25100	5300	6200	85.0	120.0	0.6	0.597
85	16017	16017 2Z	130	14	0.6	25900	26200	5000	5900	90.0	125.0	0.6	0.626
90	16018	16018 2Z	140	16	1.0	33500	33500	4700	5600	96.0	134.0	1.0	0.848
95	16019	16019 2Z	145	16	1.0	34500	35000	4500	5300	101.0	139.0	1.0	0.885
100	16020	16020 2Z	150	16	1.0	35000	36500	4200	5000	106.0	144.0	1.0	0.910
105	16021	16021 2Z	160	18	1.0	52000	50500	4000	4700	111.0	154.0	1.0	1.200
110	16022	16022 2Z	170	19	1.0	57500	56500	3800	4500	116.0	164.0	1.0	1.460
120	16024	16024 2Z	180	19	1.0	63000	63500	3500	4100	126.0	174.0	1.0	1.560

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



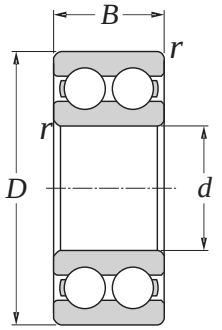
Open type



Inner bore d	Bearing numbers	Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Abutment and fillet dimensions			Mass
		D	B	$r_{s\,min}$[1)]	C_r	C_{or}	grease	oil	$D_{s\,min}$	$d_{h\,max}$	R_{max}	
mm		mm			N		rpm		mm			kg(s).
10	4200 B TVH	30	14	0.6	9150	5200	21500	24000	14.2	25.8	0.6	0.049
12	4201 B TVH	32	14	0.6	9300	5500	19200	20000	16.2	27.8	0.6	0.054
15	4202 B TVH	35	14	0.6	10400	6700	16500	18000	19.2	30.8	0.6	0.061
17	4203 B TVH	40	16	0.6	14600	9500	15100	17000	21.2	35.8	0.6	0.090
20	4204 B TVH	47	18	1.0	18000	12700	12600	14000	25.6	41.4	1.0	0.143
25	4205 B TVH	52	18	1.0	19300	14600	11000	12000	30.6	46.4	1.0	0.166
30	4206 B TVH	62	20	1.0	26000	20800	9500	9500	35.6	56.4	1.0	0.261
35	4207 B TVH	72	23	1.1	32000	26000	8700	8500	42.0	65.0	1.0	0.407
40	4208 B TVH	80	23	1.1	34000	30000	7600	7500	47.0	73.0	1.0	0.507
45	4209 B TVH	85	23	1.1	36000	33500	6900	7000	52.0	78.0	1.0	0.549
50	4210 B TVH	90	23	1.1	37500	36500	6200	6300	57.0	83.0	1.0	0.589
55	4211 B TVH	100	25	1.5	36500	43000	5900	5600	64.0	91.0	1.5	0.808
60	4212 B TVH	110	28	1.5	57000	58500	5400	5000	69.0	101.0	1.5	1.090
65	4213 B TVH	120	31	1.5	67000	67000	5400	4800	74.0	111.0	1.5	1.440
70	4214 B TVH	125	31	1.5	69500	73500	4800	4500	79.0	116.0	1.5	1.500
75	4215 B TVH	130	31	1.5	73500	80000	4450	4300	84.0	121.0	1.5	1.580
80	4216 B TVH	140	33	2.0	80000	90000	4200	4000	91.0	129.0	2.0	1.980
85	4217 B TVH	150	36	2.0	93000	106000	4100	3800	96.0	139.0	2.0	2.500
90	4218 B TVH	160	40	2.0	112000	122000	4100	3600	101.0	149.0	2.0	3.150

Technical supplement

Cages		*Precision*	*Grease*
Steel -	X		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



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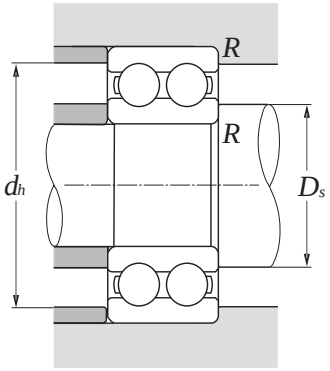
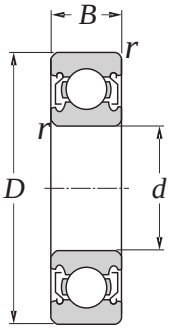


Inner bore d	Bearing numbers	Principal dimensions			Basic load ratings dynamic	Basic load ratings static	Limiting speeds grease	Limiting speeds oil	Abutment and fillet dimensions Ds min	Abutment and fillet dimensions dh max	Abutment and fillet dimensions R max	Mass
		D	B	rs min1)	Cr	Cor						
mm		mm			N		rpm		mm			kg(s).
15	4302 B TVH	42	17	1.0	14600	9150	11600	17000	20.6	36.4	1.0	0.116
17	4303 B TVH	47	19	1.0	19600	13200	9800	15000	22.6	41.4	1.0	0.161
20	4304 B TVH	52	21	1.1	23200	16000	9400	13000	27.0	45.0	1.0	0.211
25	4305 B TVH	62	24	1.1	31500	22400	8100	10000	32.0	55.0	1.0	0.337
30	4306 B TVH	72	27	1.1	40000	30500	6900	8500	37.0	65.0	1.0	0.509
35	4307 B TVH	80	31	1.5	51000	38000	7000	8000	44.0	71.0	1.5	0.683
40	4308 B TVH	90	33	1.5	63000	48000	6300	7000	49.0	81.0	1.5	0.914
45	4309 B TVH	100	36	1.5	72000	60000	5300	6000	54.0	91.0	1.5	1.230
50	4310 B TVH	110	40	2.0	90000	75000	5000	5300	61.0	99.0	2.0	1.620
55	4311 B TVH	120	43	2.0	104000	90000	4650	5000	66.0	109.0	2.0	2.060
60	4312 B TVH	130	46	2.1	120000	106000	4350	4500	72.0	118.0	2.1	2.580

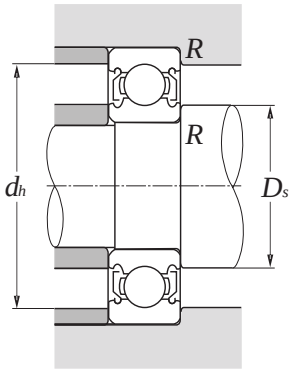
Technical supplement

Cages		*Precision*	*Grease*
Steel -	X		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Shielded type
(2Z)

Non-contact
sealed type (2RS)

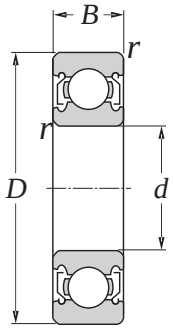


Inner bore d mm	Bearing numbers		Principal dimensions D	B	$r_{s\,min}$ [1] mm	Basic load ratings dynamic C_r	static C_{or} N	Limiting speeds grease rpm	oil rpm	Abutment and fillet dimensions D_s min	D_s max	d_h max	R max mm	Mass kg.
10	61800 2Z	61800 2RS	19	5	0.3	1830	925	32000	24000	12.0	12.5	17.0	0.3	0.005
12	61801 2Z	61801 2RS	21	5	0.3	1920	1040	29000	20000	14.0	14.5	19.0	0.3	0.006
15	61802 2Z	61802 2RS	24	5	0.3	2080	1260	26000	17000	17.0	17.5	22.0	0.3	0.007
17	61803 2Z	61803 2RS	26	5	0.3	2810	1720	24000	15000	19.0	19.5	24.0	0.3	0.008
20	61804 2Z	61804 2RS	32	7	0.3	4000	2470	21000	13000	22.0	23.0	30.0	0.3	0.019
25	61805 2Z	61805 2RS	37	7	0.3	4300	2950	18000	10000	27.0	28.0	35.0	0.3	0.022
30	61806 2Z	61806 2RS	42	7	0.3	4700	3650	15000	8800	32.0	33.0	40.0	0.3	0.026
35	61807 2Z	61807 2RS	47	7	0.3	4900	4050	13000	7600	37.0	38.0	45.0	0.3	0.029
40	61808 2Z	61808 2RS	52	7	0.3	5100	4400	12000	6700	42.0	43.0	50.0	0.3	0.033
45	61809 2Z	61809 2RS	58	7	0.3	6400	5650	11000	5900	47.0	48.0	56.0	0.3	0.040
50	61810 2Z	61810 2RS	65	7	0.3	6600	6100	9600	5300	52.0	54.0	63.0	0.3	0.052

[1] r .

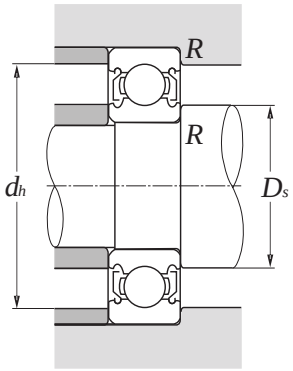
Technical supplement

Cages		***Precision***	***Grease***
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



Shielded type
(2Z)

Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers		Principal dimensions D	B	rs min1)	Basic load ratings dynamic Cr	static Cor	Limiting speeds grease	oil	Abutment and fillet dimensions Ds min	Ds max	dh max	R max	Mass kg.
			mm			N		rpm		mm				
10	61900 2Z	61900 2RS	22	6	0.3	2700	1270	30000	21000	12.0	13.0	20.0	0.3	0.009
12	61901 2Z	61901 2RS	24	6	0.3	2890	1460	27000	19000	14.0	15.0	22.0	0.3	0.011
15	61902 2Z	61902 2RS	28	7	0.3	4100	2060	24000	16000	17.0	18.0	26.0	0.3	0.016
17	61903 2Z	61903 2RS	30	7	0.3	4650	2580	22000	14000	19.0	20.0	28.0	0.3	0.018
20	61904 2Z	61904 2RS	37	9	0.3	6400	3700	19000	12000	22.0	24.0	35.0	0.3	0.036
25	61905 2Z	61905 2RS	42	9	0.3	7050	4550	16000	9800	27.0	29.0	40.0	0.3	0.042
30	61906 2Z	61906 2RS	47	9	0.3	7250	5000	14000	8400	32.0	34.0	45.0	0.3	0.048
35	61907 2Z	61907 2RS	55	10	0.6	11200	7450	12000	7100	39.0	40.0	51.0	0.6	0.074
40	61908 2Z	61908 2RS	62	12	0.6	14600	10200	11000	6300	44.0	45.0	58.0	0.6	0.110
45	61909 2Z	61909 2RS	68	12	0.6	15100	11200	9800	5600	49.0	51.0	64.0	0.6	0.128
50	61910 2Z	61910 2RS	72	12	0.6	15600	12200	8900	5100	54.0	55.5	68.0	0.6	0.132

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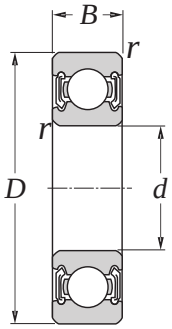
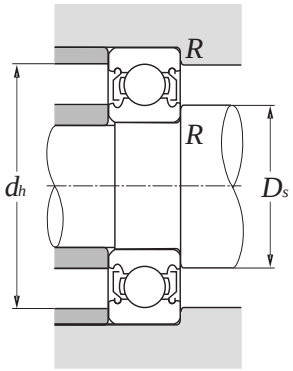
Technical supplement

Cages	*Precision*	*Grease*
Steel -		
Polymid - x	Normal	Alvania S2
Brass - x	(ISO)	-25 ~ +120



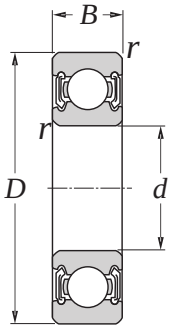
Non-contact
Sealed type (2RS)



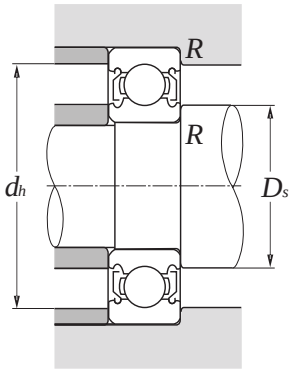
Inner bore d	Bearing numbers	Principal dimensions			Basic load ratings dynamic	static	Limiting speeds	Abutment and fillet dimensions				Mass
		D	B	$r_{s\,min}$ [1]	Cr	Cor	grease	$D_{s\,min}$	$D_{s\,max}$	$d_{h\,max}$	R_{max}	
mm		mm			N		rpm	mm				kg.
10	62200 2RS	30	14	0.6	5070	2360	17000	14.0	14.5	26.0	0.6	0.040
12	62201 2RS	32	14	0.6	6890	3100	15000	16.0	16.0	28.0	0.6	0.045
15	62202 2RS	35	14	0.6	7800	3750	13000	19.0	19.0	31.0	0.6	0.054
17	62203 2RS	40	16	0.6	9560	4750	12000	21.0	21.0	36.0	0.6	0.083
20	62204 2RS	47	18	1.0	12700	6550	10000	25.0	25.5	42.0	1.0	0.130
25	62205 2RS	52	18	1.0	14000	7800	8500	30.0	31.0	47.0	1.0	0.150
30	62206 2RS	62	20	1.0	19500	11200	7500	35.0	37.0	57.0	1.0	0.240
35	62207 2RS	72	23	1.1	25500	15300	6300	41.5	43.5	65.5	1.0	0.370
40	62208 2RS	80	23	1.1	30700	19000	5600	46.5	49.5	73.5	1.0	0.440
45	62209 2RS	85	23	1.1	33200	21600	5000	51.5	54.0	78.5	1.0	0.480
50	62210 2RS	90	23	1.1	35100	23200	4800	56.5	58.0	83.5	1.0	0.520
55	62211 2RS	100	25	1.2	43600	29000	4300	64.0	-	91.0	1.5	0.700
60	62212 2RS	110	28	1.2	52700	36000	4000	69.0	-	101.0	1.5	0.970

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	X	Normal (ISO)	Alvania S2
Brass -	X		-25 ~ +120



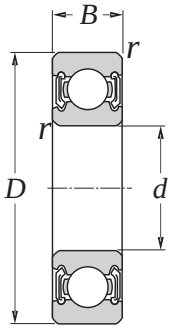
Non-contact
Sealed type (2RS)



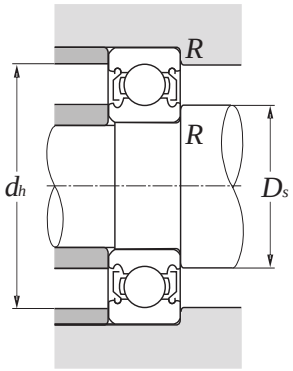
Inner bore d	Bearing numbers	Principal dimensions D	B	$r_{s\,min}$[1]	Basic load ratings dynamic C_r	static C_{or}	Limiting speeds grease	Abutment and fillet dimensions D_s min	D_s max	d_h max	R max	Mass
mm		mm			N		rpm	mm				kg(s).
10	62300 2RS	35	17	0.6	8060	3400	15000	14.0	15.0	31.0	0.6	0.06
12	62301 2RS	37	17	1.0	9750	4150	14000	17.0	17.0	32.0	1.0	0.07
15	62302 2RS	42	17	1.0	11400	5400	12000	20.0	20.5	37.0	1.0	0.11
17	62303 2RS	47	19	1.0	13500	6550	11000	22.0	23.5	42.0	1.0	0.15
20	62304 2RS	52	21	1.1	15900	7800	9500	26.5	27.0	45.5	1.0	0.20
25	62305 2RS	62	24	1.1	22500	11600	7500	31.5	33.5	55.5	1.0	0.32
30	62306 2RS	72	27	1.1	28100	16000	6300	36.5	41.5	65.5	1.0	0.48
35	62307 2RS	80	31	1.5	33200	19000	6000	43.0	44.0	72.0	1.5	0.66
40	62308 2RS	90	33	1.5	41000	24000	5000	48.0	50.5	82.0	1.5	0.89
45	62309 2RS	100	36	1.5	52700	31500	4500	53.0	56.5	92.0	1.5	1.15
50	62310 2RS	110	40	2.0	61800	38000	4300	59.0	63.0	101.0	2.0	1.55

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



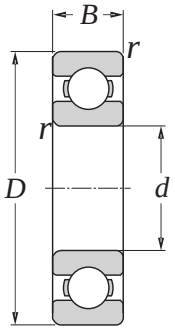
Non-contact
Sealed type (2RS)



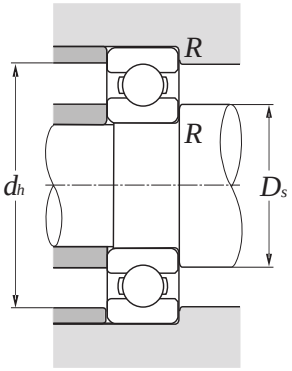
Inner bore d	Bearing numbers	Principal dimensions D	B	$r_{s\,min}$[1]	Basic load ratings dynamic C_r	static C_{or}	Limiting speeds grease	Abutment and fillet dimensions D_s min	D_s max	d_h max	R max	Mass
mm		mm			N		rpm	mm				kg.
10	63000 2RS	26	12	0.3	4620	1960	19000	12	12.5	24	0.3	0.025
12	63001 2RS	28	12	0.3	5070	2360	17000	14	14.5	26	0.3	0.029
15	63002 2RS	32	13	0.3	5590	2850	14000	17	18.0	30	0.3	0.039
17	63003 2RS	35	14	0.3	6050	3250	13000	19	20.0	33	0.3	0.052
20	63004 2RS	42	16	0.6	9360	5000	11000	24	24.5	38	0.6	0.086
25	63005 2RS	47	16	0.6	11200	6550	9500	29	29.0	43	0.6	0.100
30	63006 2RS	55	19	1.0	13300	8300	8000	35	35.5	50	1.0	0.160
35	63007 2RS	62	20	1.0	15900	10200	7000	40	40.5	57	1.0	0.210
40	63008 2RS	68	21	1.0	16800	11600	6300	45	46.0	63	1.0	0.260
45	63009 2RS	75	23	1.0	20800	14600	5600	50	51.0	70	1.0	0.340
50	63010 2RS	80	23	1.0	21600	16000	5000	55	56.0	75	1.0	0.370

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



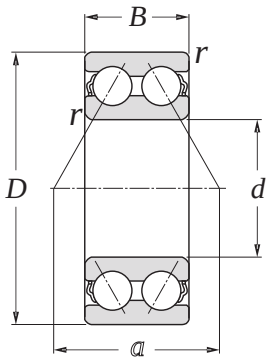
Open type



Inner bore d	Bearing numbers	Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Abutment and fillet dimensions			Mass
		D	B	$r_{s\,min}$[1)]	C_r	C_{or}	grease	oil	$D_{s\,min}$	$d_{h\,max}$	R_{max}	
mm		mm			N		rpm		mm			kg(s).
17	6403	62	17	1.1	22700	10800	14000	16000	24.0	55.0	1.0	0.270
20	6404	72	19	1.1	28500	13900	12000	14000	27.0	65.0	1.0	0.400
25	6405	80	21	1.5	34500	17500	10000	12000	33.5	71.5	1.5	0.530
30	6406	90	23	1.5	43500	23900	8800	10000	38.5	81.5	1.5	0.735
35	6407	100	25	1.5	55000	31000	7800	9100	43.5	91.5	1.5	0.952
40	6408	110	27	2.0	63500	36500	7000	8200	50.0	100.0	2.0	1.230
45	6409	120	29	2.0	77000	45000	6300	7400	55.0	110.0	2.0	1.530
50	6410	130	31	2.1	83000	49500	5700	6700	62.0	118.0	2.0	1.880
55	6411	140	33	2.1	89000	54000	5200	6100	67.0	128.0	2.0	2.290
60	6412	150	35	2.1	102000	64500	4800	5700	72.0	138.0	2.0	2.770

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



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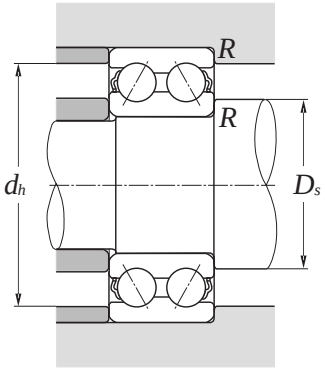
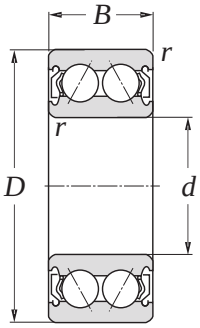


Inner bore d	Bearing numbers		Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Abutment and fillet dimensions				Mass
			D	B	$r_{s\,min}$ [1]	Cr	Cor	grease	oil	$D_{s\,min}$	$d_{h\,max}$	R max	a	
mm			mm			N		rpm		mm				kg(s).
10	3200 B JP	3200 B TVH	30	14.3	0.6	6950	3800	16000	22000	15.0	25.0	0.6	17.5	0.049
12	3201 B JP	3201 B TVH	32	15.9	0.6	9150	5050	15000	20000	17.0	27.0	0.6	19.0	0.057
15	3202 B JP	3202 B TVH	35	15.9	0.6	10000	6050	12000	17000	20.0	30.0	0.6	21.0	0.064
17	3203 B JP	3203 B TVH	40	17.5	0.6	12800	7900	10000	15000	22.0	35.0	0.6	24.0	0.096
20	3204 B JP	3204 B TVH	47	20.6	1.0	19000	12100	9000	13000	26.0	41.0	1.0	28.0	0.153
25	3205 B JP	3205 B TVH	52	20.6	1.0	20600	14300	8000	11000	31.0	46.0	1.0	31.5	0.175
30	3206 B JP	3206 B TVH	62	23.8	1.0	28600	20400	7000	9500	36.0	56.0	1.0	36.5	0.286
35	3207 B JP	3207 B TVH	72	27.0	1.1	38000	27800	6000	8000	42.0	65.0	1.0	42.5	0.436
40	3208 B JP	3208 B TVH	80	30.2	1.1	42500	32500	5600	7500	47.0	73.0	1.0	47.5	0.590
45	3209 B JP	3209 B TVH	85	30.2	1.1	48000	37000	5000	6700	52.0	78.0	1.0	50.5	0.640
50	3210 B JP	3210 B TVH	90	30.2	1.1	51000	42000	4000	5300	57.0	83.0	1.0	54.0	0.689
55	3211 B JP	3211 B TVH	100	33.3	1.5	63000	53000	3600	4900	63.5	91.5	1.5	60.5	0.986
60	3212 B JP	3212 B TVH	110	36.5	1.5	71500	58500	3400	4500	68.5	101.5	1.5	65.5	1.270
65	3213 B JP	3213 B TVH	120	38.1	1.5	83500	72500	3100	4200	73.5	111.5	1.5	71.0	1.570
70	3214 B JP	3214 B TVH	125	39.7	1.5	90500	79500	2900	3900	78.5	116.5	1.5	74.5	1.800
75	3215 B JP	3215 B TVH	130	41.3	1.5	90000	80500	2700	3600	83.5	121.5	1.5	78.0	1.900
80	3216 B JP	3216 B TVH	140	44.4	2.0	106000	95500	2500	3400	90.0	130.0	2.0	83.5	2.390

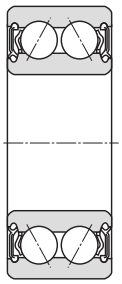
Note: 1) These values are the allowable minimum dimensions of the chamfer dimension r .

Technical supplement

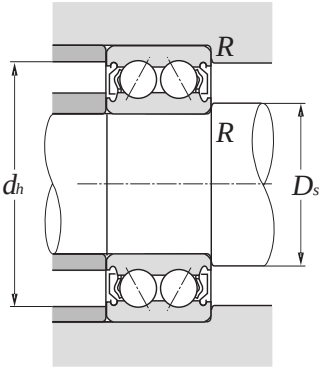
Cages		*Precision*	*Grease*
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Shielded type
(2Z)



Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers				Principal dimensions D	B	rs min1)	Basic load ratings dynamic Cr	static Cor	Limiting speeds grease rpm	Mass kg(s).
						mm		N			
10	3200 B 2Z JP	3200 B 2Z TVH	3200 B 2RS JP	3200 B 2RS TVH	30	14.3	0.6	6950	3800	16000	0.045
12	3201 B 2Z JP	3201 B 2Z TVH	3201 B 2RS JP	3201 B 2RS TVH	32	15.9	0.6	9150	5050	15000	0.050
15	3202 B 2Z JP	3202 B 2Z TVH	3202 B 2RS JP	3202 B 2RS TVH	35	15.9	0.6	10000	6050	12000	0.068
17	3203 B 2Z JP	3203 B 2Z TVH	3203 B 2RS JP	3203 B 2RS TVH	40	17.5	0.6	12800	7900	10000	0.090
20	3204 B 2Z JP	3204 B 2Z TVH	3204 B 2RS JP	3204 B 2RS TVH	47	20.6	1.0	19000	12100	9000	0.140
25	3205 B 2Z JP	3205 B 2Z TVH	3205 B 2RS JP	3205 B 2RS TVH	52	20.6	1.0	20600	14300	8000	0.160
30	3206 B 2Z JP	3206 B 2Z TVH	3206 B 2RS JP	3206 B 2RS TVH	62	23.8	1.0	28600	20400	7000	0.260
35	3207 B 2Z JP	3207 B 2Z TVH	3207 B 2RS JP	3207 B 2RS TVH	72	27.0	1.1	38000	27800	6000	0.400
40	3208 B 2Z JP	3208 B 2Z TVH	3208 B 2RS JP	3208 B 2RS TVH	80	30.2	1.1	42500	32500	5600	0.530
45	3209 B 2Z JP	3209 B 2Z TVH	3209 B 2RS JP	3209 B 2RS TVH	85	30.2	1.1	48000	37000	5000	0.570
50	3210 B 2Z JP	3210 B 2Z TVH	3210 B 2RS JP	3210 B 2RS TVH	90	30.2	1.1	51000	42000	5000	0.670
55	3211 B 2Z JP	3211 B 2Z TVH	3211 B 2RS JP	3211 B 2RS TVH	100	33.3	1.5	63000	53000	4000	0.960
60	3212 B 2Z JP	3212 B 2Z TVH	3212 B 2RS JP	3212 B 2RS TVH	110	36.5	1.5	71500	58500	3800	1.360
65	3213 B 2Z JP	3213 B 2Z TVH	3213 B 2RS JP	3213 B 2RS TVH	120	38.1	1.5	83500	72500	3400	1.660
70	3214 B 2Z JP	3214 B 2Z TVH	3214 B 2RS JP	3214 B 2RS TVH	125	39.7	1.5	90500	79500	3200	1.820
75	3215 B 2Z JP	3215 B 2Z TVH	3215 B 2RS JP	3215 B 2RS TVH	130	41.3	1.5	90000	80500	3200	1.910
80	3216 B 2Z JP	3216 B 2Z TVH	3216 B 2RS JP	3216 B 2RS TVH	140	44.4	2.0	106000	95500	2800	2.480

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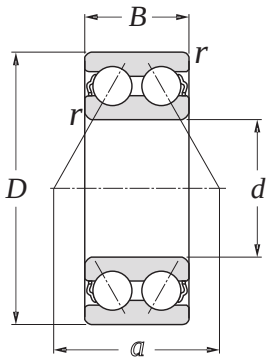
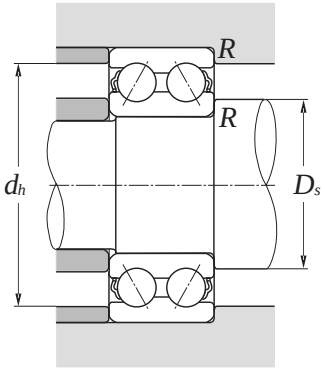
Technical supplement

Cages	*Precision*	*Grease*
Steel - JP Polymid - TVH Brass - X	Normal (ISO)	Alvania S2 -25 ~ +120



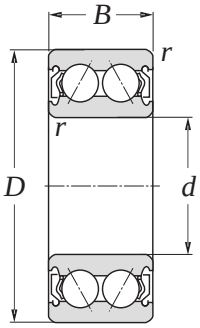
Open type



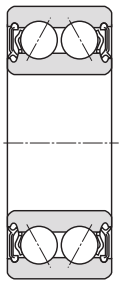
Inner bore d	Bearing numbers		Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Abutment and fillet dimensions				Mass
			D	B	$r_{s\,min}$ [1]	Cr	Cor	grease	oil	$D_{s\,min}$	$d_{h\,max}$	R max	a	
mm			mm			N		rpm		mm				kg(s).
10	3300 B JP	3300 B TVH	35	19.0	1.0	11700	7000	18000	24000	16.0	30.0	0.6	20.6	0.050
12	3301 B JP	3301 B TVH	37	19.0	1.0	11700	7000	17000	22000	18.0	32.0	0.6	21.3	0.058
15	3302 B JP	3302 B TVH	42	19.0	1.0	17200	10100	9900	13000	21.0	36.0	1.0	26.0	0.132
17	3303 B JP	3303 B TVH	47	22.2	1.0	20400	12100	9000	12000	23.0	41.0	1.0	28.5	0.181
20	3304 B JP	3304 B TVH	52	22.2	1.1	20600	12700	8000	11000	27.0	45.0	1.0	30.5	0.217
25	3305 B JP	3305 B TVH	62	25.4	1.1	30500	20500	6700	8900	32.0	55.0	1.0	36.5	0.362
30	3306 B JP	3306 B TVH	72	30.2	1.1	39500	27500	5700	7600	37.0	65.0	1.0	43.0	0.553
35	3307 B JP	3307 B TVH	80	34.9	1.5	49500	35000	5000	6600	43.5	71.5	1.5	48.5	0.766
40	3308 B JP	3308 B TVH	90	36.5	1.5	60500	44000	4400	5900	48.5	81.5	1.5	53.5	1.010
45	3309 B JP	3309 B TVH	100	39.7	1.5	72500	54000	4000	5300	53.5	91.5	1.5	60.0	1.340
50	3310 B JP	3310 B TVH	110	44.4	2.0	85500	64500	3600	4800	60.0	100.0	2.0	65.5	1.810
55	3311 B JP	3311 B TVH	120	49.2	2.0	106000	82000	3300	4400	65.0	110.0	2.0	73.0	2.320
60	3312 B JP	3312 B TVH	130	54.0	2.1	122000	95500	3000	4000	72.0	118.0	2.0	79.5	3.050
65	3313 B JP	3313 B TVH	140	58.7	2.1	138000	109000	2800	3700	77.0	128.0	2.0	84.5	3.960
70	3314 B JP	3314 B TVH	150	63.5	2.1	155000	125000	2600	3500	82.0	138.0	2.0	93.0	4.740
75	3315 B JP	3315 B TVH	160	68.3	2.1	168000	141000	2400	3200	87.0	148.0	2.0	98.0	5.650
80	3316 B JP	3316 B TVH	170	68.3	2.1	182000	156000	2400	3400	92.0	158.0	2.0	112.0	6.950

Technical supplement

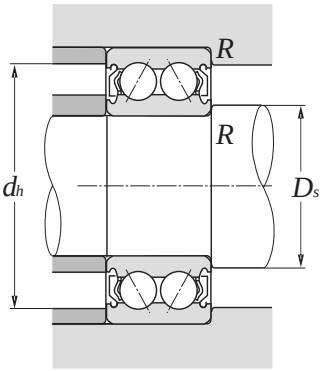
Cages		*Precision*	*Grease*
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Shielded type
(2Z)



Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers				Principal dimensions D	B	$r_{s\,min}$ [1] mm	Basic load ratings dynamic C_r	static C_{or} N	Limiting speeds grease rpm	Mass kg(s).
10	3300 B 2Z JP	3300 B 2Z TVH	3300 B 2RS JP	3300 B 2RS TVH	35	19.0	1.0	11700	7000	18000	0.050
12	3301 B 2Z JP	3301 B 2Z TVH	3301 B 2RS JP	3301 B 2RS TVH	37	19.0	1.0	11700	7000	17000	0.058
15	3302 B 2Z JP	3302 B 2Z TVH	3302 B 2RS JP	3302 B 2RS TVH	42	19.0	1.0	17200	10100	9900	0.132
17	3303 B 2Z JP	3303 B 2Z TVH	3303 B 2RS JP	3303 B 2RS TVH	47	22.2	1.0	20400	12100	9000	0.181
20	3304 B 2Z JP	3304 B 2Z TVH	3304 B 2RS JP	3304 B 2RS TVH	52	22.2	1.1	20600	12700	8500	0.200
25	3305 B 2Z JP	3305 B 2Z TVH	3305 B 2RS JP	3305 B 2RS TVH	62	25.4	1.1	30500	20500	7500	0.320
30	3306 B 2Z JP	3306 B 2Z TVH	3306 B 2RS JP	3306 B 2RS TVH	72	30.2	1.1	39500	27500	6300	0.480
35	3307 B 2Z JP	3307 B 2Z TVH	3307 B 2RS JP	3307 B 2RS TVH	80	34.9	1.5	49500	35000	5000	0.766
40	3308 B 2Z JP	3308 B 2Z TVH	3308 B 2RS JP	3308 B 2RS TVH	90	36.5	1.5	60500	44000	4700	1.010
45	3309 B 2Z JP	3309 B 2Z TVH	3309 B 2RS JP	3309 B 2RS TVH	100	39.7	1.5	72500	54000	4500	1.150
50	3310 B 2Z JP	3310 B 2Z TVH	3310 B 2RS JP	3310 B 2RS TVH	110	44.4	1.5	85500	64500	4500	1.950
55	3311 B 2Z JP	3311 B 2Z TVH	3311 B 2RS JP	3311 B 2RS TVH	120	49.2	1.5	106000	82000	4000	2.350
60	3312 B 2Z JP	3312 B 2Z TVH	3312 B 2RS JP	3312 B 2RS TVH	130	54.0	2.1	122000	95500	2720	3.250
65	3313 B 2Z JP	3313 B 2Z TVH	3313 B 2RS JP	3313 B 2RS TVH	140	58.7	2.1	138000	109000	2560	4.100
70	3314 B 2Z JP	3314 B 2Z TVH	3314 B 2RS JP	3314 B 2RS TVH	150	63.5	2.1	155000	125000	2240	5.050
75	3315 B 2Z JP	3315 B 2Z TVH	3315 B 2RS JP	3315 B 2RS TVH	160	68.3	2.1	168000	141000	2080	6.150
80	3316 B 2Z JP	3316 B 2Z TVH	3316 B 2RS JP	3316 B 2RS TVH	170	68.3	2.1	182000	156000	1920	6.950

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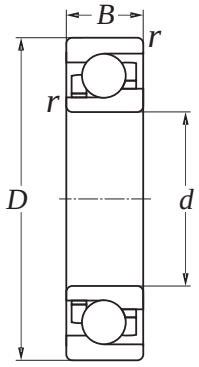
Technical supplement

Cages		*Precision*	*Grease*
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	X		



Inner bore d	Bearing numbers		Principal dimensions D	B	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r	static C_{or}	Limiting speeds grease	oil	Abutment and fillet dimensions $D_{s\,min}$	$d_{h\,max}$	R_{max}	Mass
mm			mm			N		rpm		mm			kg(s).
10	7200 B JP	7200 B TVH	30	9	0.6	5300	2600	22600	32000	14.2	25.8	0.6	0.033
12	7201 B JP	7201 B TVH	32	10	0.6	7400	3550	21100	28000	16.2	27.8	0.6	0.035
15	7202 B JP	7202 B TVH	35	11	0.6	8400	4450	19100	24000	19.2	30.8	0.6	0.044
17	7203 B JP	7203 B TVH	40	12	0.6	10500	5700	17100	20000	21.2	35.8	0.6	0.067
20	7204 B JP	7204 B TVH	47	14	1.0	14000	7800	15400	18000	25.6	41.4	1.0	0.103
25	7205 B JP	7205 B TVH	52	15	1.0	15300	9000	13700	16000	30.6	46.4	1.0	0.127
30	7206 B JP	7206 B TVH	62	16	1.0	21700	14100	11200	13000	35.6	56.4	1.0	0.197
35	7207 B JP	7207 B TVH	72	17	1.1	28000	19000	9600	11000	42.0	65.0	1.0	0.282
40	7208 B JP	7208 B TVH	80	18	1.1	34000	23500	8600	9500	47.0	73.0	1.0	0.372
45	7209 B JP	7209 B TVH	85	19	1.1	37500	27000	8000	8500	52.0	78.0	1.0	0.405
50	7210 B JP	7210 B TVH	90	20	1.1	39000	28500	7600	8000	57.0	83.0	1.0	0.456
55	7211 B JP	7211 B TVH	100	21	1.5	49000	38500	6800	7000	64.0	91.0	1.5	0.645
60	7212 B JP	7212 B TVH	110	22	1.5	59000	45000	6200	6300	69.0	101.0	1.5	0.777
65	7213 B JP	7213 B TVH	120	23	1.5	67000	55000	5700	6000	74.0	111.0	1.5	1.000
70	7214 B JP	7214 B TVH	125	24	1.5	74000	62000	5400	5600	79.0	116.0	1.5	1.080
75	7215 B JP	7215 B TVH	130	25	1.5	73000	62000	5300	5300	84.0	121.0	1.5	1.160
80	7216 B JP	7216 B TVH	140	26	2.0	85000	72000	4650	4950	91.0	129.0	2.0	1.530
85	7217 B JP	7217 B TVH	150	28	2.0	97000	86000	4750	4500	96.0	139.0	2.0	1.820
90	7218 B JP	7218 B TVH	160	30	2.0	114000	98000	4550	4300	101.0	149.0	2.0	2.210
95	7219 B JP	7219 B TVH	170	32	2.1	123000	106000	4450	4000	107.0	158.0	2.1	2.640
100	7220 B JP	7220 B TVH	180	34	2.1	142000	124000	4250	3800	112.0	168.0	2.1	3.170

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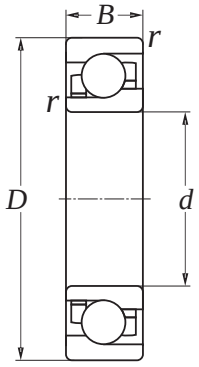
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Inner bore d	Bearing numbers		Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Abutment and fillet dimensions			Mass
			D	B	$r_{s\,min}$[1]	C_r	C_{or}	grease	oil	$D_{s\,min}$	$d_{h\,max}$	R_{max}	
mm			mm			N		rpm		mm			kg(s).
12	7301 B JP	7301 B TVH	37	12	1.0	11400	5300	16300	24000	17.6	31.4	1.0	0.066
15	7302 B JP	7302 B TVH	42	13	1.0	14200	7200	14200	20000	20.6	36.4	1.0	0.081
17	7303 B JP	7303 B TVH	47	14	1.0	17600	9000	12800	18000	22.6	41.4	1.0	0.110
20	7304 B JP	7304 B TVH	52	15	1.1	20400	11100	11500	17000	27.0	45.0	1.0	0.149
25	7305 B JP	7305 B TVH	62	17	1.1	28000	15800	9800	14000	32.0	55.0	1.0	0.223
30	7306 B JP	7306 B TVH	72	19	1.1	35500	22100	8600	11000	37.0	65.0	1.0	0.341
35	7307 B JP	7307 B TVH	80	21	1.5	43000	27500	7900	9500	44.0	71.0	1.5	0.447
40	7308 B JP	7308 B TVH	90	23	1.5	53000	34500	7100	8500	49.0	81.0	1.5	0.610
45	7309 B JP	7309 B TVH	100	25	1.5	65000	43000	6500	7500	54.0	91.0	1.5	0.878
50	7310 B JP	7310 B TVH	110	27	2.0	75000	50000	6100	7000	61.0	99.0	2.0	1.050
55	7311 B JP	7311 B TVH	120	29	2.0	86000	61000	5600	6300	66.0	109.0	2.0	1.380
60	7312 B JP	7312 B TVH	130	31	2.1	96000	69000	5300	5600	72.0	118.0	2.1	1.740
65	7313 B JP	7313 B TVH	140	33	2.1	110000	82000	5000	5300	77.0	128.0	2.1	2.120
70	7314 B JP	7314 B TVH	150	35	2.1	126000	93000	4750	5000	82.0	138.0	2.1	2.580
75	7315 B JP	7315 B TVH	160	37	2.1	140000	107000	4500	4500	87.0	148.0	2.1	3.100
80	7316 B JP	7316 B TVH	170	39	2.1	155000	124000	4250	4300	92.0	158.0	2.1	3.660
85	7317 B JP	7317 B TVH	180	41	3.0	167000	138000	4100	4000	99.0	166.0	2.5	4.400
90	7318 B JP	7318 B TVH	190	43	3.0	180000	155000	3900	3800	104.0	176.0	2.5	5.000
95	7319 B JP	7319 B TVH	200	45	3.0	189000	167000	3800	3800	109.0	186.0	2.5	5.780
100	7320 B JP	7320 B TVH	215	47	3.0	214000	197000	3550	3600	114.0	201.0	2.5	7.380

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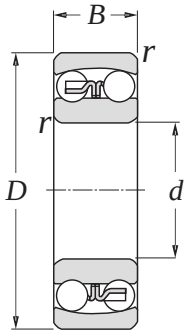
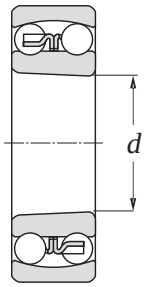
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Cylindrical bore



Tapered bore
taper 1:12

Inner bore	Bearing numbers				Principal dimensions			Basic load ratings dynamic	static	Limiting speeds		Mass	
												cylindrical bore	tapered bore
d					D	B	$r_{s\,min}$ [1]	Cr	Cor	grease	oil		
mm					mm			N		rpm		kg(s).	
10	1200 JP	1200 K JP	1200 TVH	1200 K TVH	30	9	0.6	5500	1190	21000	24000	0.033	-
12	1201 JP	1201 K JP	1201 TVH	1201 K TVH	32	10	0.6	5600	1270	18000	22000	0.040	-
15	1202 JP	1202 K JP	1202 TVH	1202 K TVH	35	11	0.6	7450	1750	16000	19000	0.049	-
17	1203 JP	1203 K JP	1203 TVH	1203 K TVH	40	12	0.6	7900	2010	14000	17000	0.072	-
20	1204 JP	1204 K JP	1204 TVH	1204 K TVH	47	14	1.0	9900	2610	13000	15000	0.116	0.114
25	1205 JP	1205 K JP	1205 TVH	1205 K TVH	52	15	1.0	12100	3300	11000	13000	0.138	0.135
30	1206 JP	1206 K JP	1206 TVH	1206 K TVH	62	16	1.0	15600	4650	9200	11000	0.217	0.213
35	1207 JP	1207 K JP	1207 TVH	1207 K TVH	72	17	1.1	15800	5100	8000	9400	0.317	0.312
40	1208 JP	1208 K JP	1208 TVH	1208 K TVH	80	18	1.1	19300	6550	7100	8400	0.414	0.407
45	1209 JP	1209 K JP	1209 TVH	1209 K TVH	85	19	1.1	21900	7350	6400	7500	0.457	0.448
50	1210 JP	1210 K JP	1210 TVH	1210 K TVH	90	20	1.1	22700	8100	5800	6800	0.515	0.504
55	1211 JP	1211 K JP	1211 TVH	1211 K TVH	100	21	1.5	26800	10000	5300	6200	0.692	0.679
60	1212 JP	1212 K JP	1212 TVH	1212 K TVH	110	22	1.5	30000	11500	4900	5800	0.879	0.864
65	1213 JP	1213 K JP	1213 TVH	1213 K TVH	120	23	1.5	31000	12500	4500	5300	1.130	1.110
70	1214 JP	1214 K JP	1214 TVH	1214 K TVH	125	24	1.5	34500	13800	4200	4900	1.240	-
75	1215 JP	1215 K JP	1215 TVH	1215 K TVH	130	25	1.5	39000	15700	3900	4600	1.330	1.310
80	1216 JP	1216 K JP	1216 TVH	1216 K TVH	140	26	2.0	40000	17000	3700	4300	1.650	1.620

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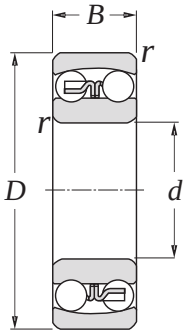
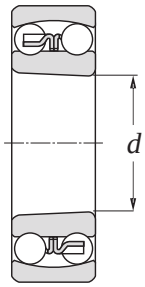
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Cylindrical bore



Tapered bore
taper 1:12

Inner bore d mm	Bearing numbers				Principal dimensions D	B	$r_{s\,min}$ [1] mm	Basic load ratings dynamic C_r	static C_{or} N	Limiting speeds grease	oil rpm	Mass cylindrical bore	tapered bore kg(s).
10	1300 JP	1300 K JP	1300 TVH	1300 K TVH	35	11	0.6	7250	1620	18000	21000	0.058	-
12	1301 JP	1301 K JP	1301 TVH	1301 K TVH	37	12	1.0	9450	2160	16000	18000	0.066	-
15	1302 JP	1302 K JP	1302 TVH	1302 K TVH	42	13	1.0	9550	2300	13000	16000	0.092	-
17	1303 JP	1303 K JP	1303 TVH	1303 K TVH	47	14	1.0	12500	3200	12000	14000	0.128	-
20	1304 JP	1304 K JP	1304 TVH	1304 K TVH	52	15	1.1	12400	3350	11000	13000	0.160	0.158
25	1305 JP	1305 K JP	1305 TVH	1305 K TVH	62	17	1.1	18000	5000	9100	11000	0.255	0.251
30	1306 JP	1306 K JP	1306 TVH	1306 K TVH	72	19	1.1	21300	6300	7700	9100	0.383	0.377
35	1307 JP	1307 K JP	1307 TVH	1307 K TVH	80	21	1.5	25100	7850	6800	8000	0.500	0.492
40	1308 JP	1308 K JP	1308 TVH	1308 K TVH	90	23	1.5	29600	9700	6000	7000	0.709	0.698
45	1309 JP	1309 K JP	1309 TVH	1309 K TVH	100	25	1.5	38000	12700	5400	6300	0.953	0.938
50	1310 JP	1310 K JP	1310 TVH	1310 K TVH	110	27	2.0	43500	14100	4900	5800	1.200	1.180
55	1311 JP	1311 K JP	1311 TVH	1311 K TVH	120	29	2.0	51500	17900	4500	5200	1.580	1.560
60	1312 JP	1312 K JP	1312 TVH	1312 K TVH	130	31	2.1	57000	20800	4100	4800	1.960	1.930

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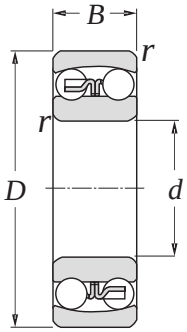
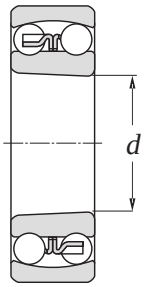
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Cylindrical bore



Tapered bore
taper 1:12

Inner bore d mm	Bearing numbers				Principal dimensions D	B	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r	static C_{or}	Limiting speeds grease	oil	Mass cylindrical bore	tapered bore
					mm			N		rpm		kg(s).	
10	2200 JP	2200 K JP	2200 TVH	2200 K TVH	30	14	0.6	7300	1590	19000	23000	0.047	-
12	2201 JP	2201 K JP	2201 TVH	2201 K TVH	32	14	0.6	7600	1730	17000	20000	0.051	-
15	2202 JP	2202 K JP	2202 TVH	2202 K TVH	35	14	0.6	7700	1850	15000	18000	0.060	-
17	2203 JP	2203 K JP	2203 TVH	2203 K TVH	40	16	0.6	9800	2410	13000	16000	0.088	-
20	2204 JP	2204 K JP	2204 TVH	2204 K TVH	47	18	1.0	12600	3300	12000	14000	0.140	0.137
25	2205 JP	2205 K JP	2205 TVH	2205 K TVH	52	18	1.0	12300	3450	10000	12000	0.157	0.153
30	2206 JP	2206 K JP	2206 TVH	2206 K TVH	62	20	1.0	15200	4500	8600	10000	0.256	0.250
35	2207 JP	2207 K JP	2207 TVH	2207 K TVH	72	23	1.1	21500	6600	7500	8800	0.392	0.382
40	2208 JP	2208 K JP	2208 TVH	2208 K TVH	80	23	1.1	22300	7350	6700	7900	0.493	0.482
45	2209 JP	2209 K JP	2209 TVH	2209 K TVH	85	23	1.1	23200	8150	6000	7100	0.540	0.528
50	2210 JP	2210 K JP	2210 TVH	2210 K TVH	90	23	1.1	23200	8450	5500	6400	0.583	0.569
55	2211 JP	2211 K JP	2211 TVH	2211 K TVH	100	25	1.5	26500	9900	5000	5800	0.787	0.769
60	2212 JP	2212 K JP	2212 TVH	2212 K TVH	110	28	1.5	34000	12600	4600	5400	1.080	1.060

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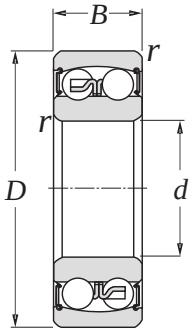
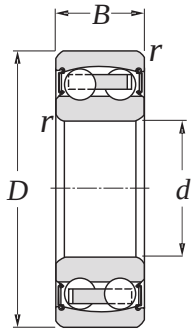
Technical supplement

Cages		*Precision*	*Grease*
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Cylindrical bore
sealed type (JP)



Cylindrical bore
sealed type (TVH)

Inner bore d mm	Bearing numbers		Principal dimensions D	B mm	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r N	static C_{or} N	Limiting speeds grease rpm	Mass kg(s).
10	2200 2RS JP	2200 2RS TVH	30	14	0.6	5530	1180	17000	0.048
12	2201 2RS JP	2201 2RS TVH	32	14	0.6	6240	1430	16000	0.053
15	2202 2RS JP	2202 2RS TVH	35	14	0.6	7410	1760	14000	0.058
17	2203 2RS JP	2203 2RS TVH	40	16	0.6	8840	2200	12000	0.089
20	2204 2RS JP	2204 2RS TVH	47	18	1.0	12700	3400	10000	0.140
25	2205 2RS JP	2205 2RS TVH	52	18	1.0	14300	4000	9000	0.160
30	2206 2RS JP	2206 2RS TVH	62	20	1.0	15600	4650	7500	0.260
35	2207 2RS JP	2207 2RS TVH	72	23	1.1	19000	6000	6300	0.410
40	2208 2RS JP	2208 2RS TVH	80	23	1.1	19900	6950	5600	0.500
45	2209 2RS JP	2209 2RS TVH	85	23	1.1	22900	7800	5300	0.530
50	2210 2RS JP	2210 2RS TVH	90	23	1.1	22900	8150	4800	0.570
55	2211 2RS JP	2211 2RS TVH	100	25	1.5	27600	10600	4300	0.790
60	2212 2RS JP	2212 2RS TVH	110	28	1.5	31200	12200	3800	1.050

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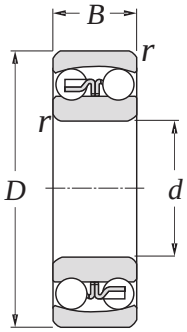
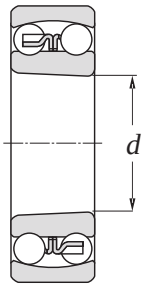
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	X		



Cylindrical bore



Tapered bore
taper 1:12

Inner bore	Bearing numbers				Principal dimensions			Basic load ratings		Limiting speeds		Mass	
								dynamic	static				
d					D	B	$r_{s\,min}$ [1]	C_r	C_{or}	grease	oil	cylindrical bore	tapered bore
mm					mm			N		rpm		kg(s).	
10	2300 JP	2300 K JP	2300 TVH	2300 K TVH	35	17	0.6	10100	2150	17000	20000	0.083	-
12	2301 JP	2301 K JP	2301 TVH	2301 K TVH	37	17	1.0	11800	2710	15000	17000	0.091	-
15	2302 JP	2302 K JP	2302 TVH	2302 K TVH	42	17	1.0	12000	2900	13000	15000	0.114	-
17	2303 JP	2303 K JP	2303 TVH	2303 K TVH	47	19	1.0	14400	3550	11000	14000	0.156	-
20	2304 JP	2304 K JP	2304 TVH	2304 K TVH	52	21	1.1	18100	4700	10000	12000	0.206	0.201
25	2305 JP	2305 K JP	2305 TVH	2305 K TVH	62	24	1.1	24400	6600	8500	10000	0.334	0.326
30	2306 JP	2306 K JP	2306 TVH	2306 K TVH	72	27	1.1	31500	8750	7200	8500	0.496	0.485
35	2307 JP	2307 K JP	2307 TVH	2307 K TVH	80	31	1.5	39500	11300	6300	7400	0.671	0.653
40	2308 JP	2308 K JP	2308 TVH	2308 K TVH	90	33	1.5	45000	13500	5600	6600	0.918	0.895
45	2309 JP	2309 K JP	2309 TVH	2309 K TVH	100	36	1.5	54000	16700	5000	5900	1.230	1.200
50	2310 JP	2310 K JP	2310 TVH	2310 K TVH	110	40	2.0	64500	20200	4600	5400	1.630	1.590
55	2311 JP	2311 K JP	2311 TVH	2311 K TVH	120	43	2.0	75500	24000	4200	4900	2.100	2.050
60	2312 JP	2312 K JP	2312 TVH	2312 K TVH	130	46	2.1	87000	28200	3800	4500	2.590	2.520

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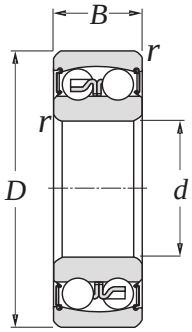
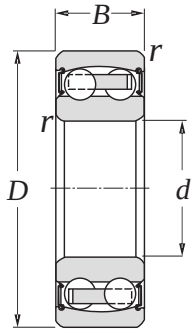
Technical supplement

Cages		***Precision***	***Grease***
Steel -	JP		
Polymid -	TVH	Normal (ISO)	Nil
Brass -	X		



Cylindrical bore
sealed type (JP)



Cylindrical bore
sealed type (TVH)

Inner bore	Bearing numbers		Principal dimensions			Basic load ratings dynamic	static	Limiting speeds	Mass
d			*D*	*B*	$r_{s\,min}$ [1]	*Cr*	*Cor*	grease	
mm				mm		N		rpm	kg(s).
15	2302 2RS JP	2302 2RS TVH	42	17	1.0	10800	2600	12000	0.11
17	2303 2RS JP	2303 2RS TVH	47	19	1.0	12700	3400	11000	0.16
20	2304 2RS JP	2304 2RS TVH	52	21	1.1	14300	4000	9500	0.21
25	2305 2RS JP	2305 2RS TVH	62	24	1.1	19000	5400	7500	0.34
30	2306 2RS JP	2306 2RS TVH	72	27	1.1	22500	6800	6700	0.51
35	2307 2RS JP	2307 2RS TVH	80	31	1.5	26500	8500	5600	0.70
40	2308 2RS JP	2308 2RS TVH	90	33	1.5	33800	11200	5000	0.96
45	2309 2RS JP	2309 2RS TVH	100	36	1.5	39000	13400	4500	1.30
50	2310 2RS JP	2310 2RS TVH	110	40	2.0	43600	14000	4000	1.65

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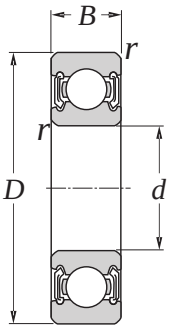
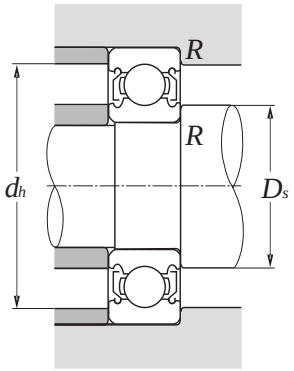
Technical supplement

Cages	***Precision***	***Grease***
Steel - JP Polymid - TVH Brass - X	Normal (ISO)	Alvania S2 -25 ~ +120



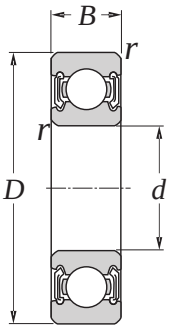
Non-contact
sealed type (2RS)



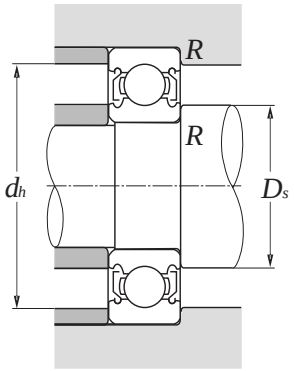
Inner bore d mm	Bearing numbers	Principal dimensions D	B mm	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r N	static C_{or} N	Limiting speeds rpm	Mass kg.
10	S 6000 2RS	26	8	0.3	4550	1960	19000	0.020
12	S 6001 2RS	28	8	0.3	5100	2360	18000	0.023
15	S 6002 2RS	32	9	0.3	5600	2850	16000	0.031
17	S 6003 2RS	35	10	0.3	6000	3250	14000	0.040
20	S 6004 2RS	42	12	0.6	9300	5000	12000	0.067
25	S 6005 2RS	47	12	0.6	10000	5850	10000	0.084
30	S 6006 2RS	55	13	0.6	12700	8000	8000	0.120
35	S 6007 2RS	62	14	0.6	16000	10200	7500	0.163
40	S 6008 2RS	68	15	1.0	17800	11600	6300	0.190
45	S 6009 2RS	75	16	1.0	20000	14300	6000	0.244
50	S 6010 2RS	80	16	1.0	20800	15600	5600	0.271
55	S 6011 2RS	90	18	1.1	29600	21200	4500	0.390
60	S 6012 2RS	95	18	1.1	30700	23200	4300	0.420
65	S 6013 2RS	100	18	1.1	31900	25000	4000	0.440

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



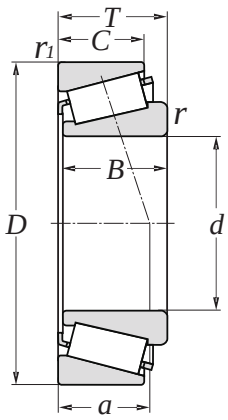
Non-contact
sealed type (2RS)



Inner bore d mm	Bearing numbers	Principal dimensions D	B mm	$r_{s\,min}$ [1]	Basic load ratings dynamic C_r N	static C_{or} N	Limiting speeds rpm	Mass kg.
10	S 6200 2RS	30	9	0.6	6000	2600	17000	0.034
12	S 6201 2RS	32	10	0.6	6950	3100	16000	0.040
15	S 6202 2RS	35	11	0.6	7800	3750	14000	0.045
17	S 6203 2RS	40	12	0.6	9500	4750	12000	0.067
20	S 6204 2RS	47	14	1.0	12700	6550	10000	0.109
25	S 6205 2RS	52	15	1.0	14000	7800	9000	0.133
30	S 6206 2RS	62	16	1.0	19300	11200	7500	0.211
35	S 6207 2RS	72	17	1.1	25500	15300	6300	0.303
40	S 6208 2RS	80	18	1.1	29000	18000	5600	0.384
45	S 6209 2RS	85	19	1.1	31000	20400	5300	0.441
50	S 6210 2RS	90	20	1.1	37100	23200	4800	0.460

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



Inner bore	Bearing numbers	Boundary dimensions						Basic load ratings				Limiting speeds	
								dynamic	static	dynamic	static		
d		*D*	*T*	*B*	*C*	$r_{s\,min}$ [1]	$r_{ls\,min}$ [1]	*Cr*	*Cor*	*Cr*	*Cor*	grease	oil
mm		mm						kN		kgf		min^{-1}	
17	30203-A	40	13.25	12	11	1.0	1.0	20.5	20.3	2090	2070	9900	13000
20	30204-A	47	15.25	14	12	1.0	1.0	28.2	28.7	2870	2930	8800	12000
25	30205-A	52	16.25	15	13	1.0	1.0	31.5	34.0	3200	3450	7300	9800
30	30206-A	62	17.25	16	14	1.0	1.0	43.5	48.0	4450	4900	6300	8400
35	30207-A	72	18.25	17	15	1.5	1.5	55.5	61.5	5650	6250	5500	7400
40	30208-A	80	19.75	18	16	1.5	1.5	61.0	67.0	6250	6850	4900	6600
45	30209-A	85	20.75	19	16	1.5	1.5	67.5	78.5	6900	8000	4400	5900
50	30210-A	90	21.75	20	17	1.5	1.5	77.0	93.0	7850	9450	4000	5300
55	30211-A	100	22.75	21	18	2.0	1.5	93.0	111.0	9500	11300	3600	4900
60	30212-A	110	23.75	22	19	2.0	1.5	105.0	125.0	10700	12700	3400	4500
65	30213-A	120	24.75	23	20	2.0	1.5	123.0	148.0	12500	15000	3100	4200
70	30214-A	125	26.25	24	21	2.0	1.5	131.0	162.0	13400	16500	2900	3900
75	30215-A	130	27.25	25	22	2.0	1.5	139.0	175.0	14200	17900	2700	3600
80	30216-A	140	28.25	26	22	2.5	2.0	160.0	200.0	16300	20400	2500	3400
85	30217-A	150	30.50	28	24	2.5	2.0	183.0	232.0	18600	23600	2400	3200
90	30218-A	160	32.50	30	26	2.5	2.0	208.0	267.0	21200	27200	2200	3000
95	30219-A	170	34.50	32	27	3.0	2.5	226.0	290.0	23000	29600	2100	2800
100	30220-A	180	37.00	34	29	3.0	2.5	258.0	335.0	26300	34500	2000	2700

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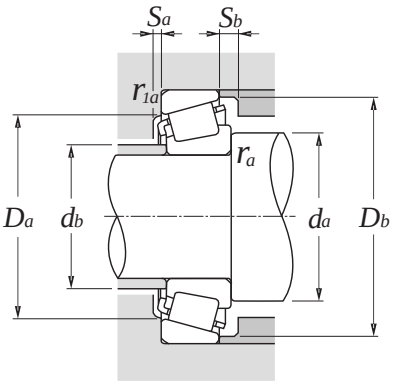
Technical supplement			
Cages		***Precision***	***Grease***
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load
dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

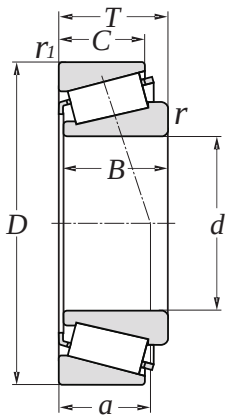
Static

$Pr = 0.5\ Fr+YoFa$

When $Por \quad Fr$ **use** $Por = Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
22.5	23	34.5	33	37	2	2.0	1.0	1.0	9.5	0.35	1.74	0.96	0.080
25.5	27	41.5	40	44	2	3.0	1.0	1.0	11.5	0.35	1.74	0.96	0.127
30.5	31	46.5	44	48	2	3.0	1.0	1.0	12.5	0.37	1.60	0.88	0.154
35.5	37	56.5	53	57	2	3.0	1.0	1.0	13.5	0.37	1.60	0.88	0.241
43.5	44	63.5	62	67	3	3.0	1.5	1.5	15.0	0.37	1.60	0.88	0.344
48.5	49	71.5	69	75	3	3.5	1.5	1.5	16.5	0.37	1.60	0.88	0.435
53.5	54	76.5	74	80	3	4.5	1.5	1.5	18.0	0.40	1.48	0.81	0.495
58.5	58	81.5	79	85	3	4.5	1.5	1.5	19.5	0.42	1.43	0.79	0.563
65.0	64	91.5	88	94	4	4.5	2.0	1.5	21.0	0.40	1.48	0.81	0.740
70.0	70	101.5	96	103	4	4.5	2.0	1.5	22.0	0.40	1.48	0.81	0.949
75.0	77	111.5	106	113	4	4.5	2.0	1.5	23.5	0.40	1.48	0.81	1.180
80.0	81	116.5	110	118	4	5.0	2.0	1.5	25.5	0.42	1.43	0.79	1.260
85.0	85	121.5	115	124	4	5.0	2.0	1.5	27.0	0.44	1.38	0.76	1.410
92.0	91	130.0	124	132	4	6.0	2.0	2.0	27.5	0.42	1.43	0.79	1.720
97.0	97	140.0	132	141	5	6.5	2.0	2.0	30.0	0.42	1.43	0.79	2.140
102.0	103	150.0	140	150	5	6.5	2.0	2.0	32.0	0.42	1.43	0.79	2.660
109.0	110	158.0	149	159	5	7.5	2.5	2.0	34.0	0.42	1.43	0.79	3.070
114.0	116	168.0	157	168	5	8.0	2.5	2.0	36.0	0.42	1.43	0.79	3.780



Inner bore d	Bearing numbers	Boundary dimensions						Basic load ratings dynamic	Basic load ratings static	Basic load ratings dynamic	Basic load ratings static	Limiting speeds	
		D	T	B	C	$r_{s\,min}$ [1]	$r_{1s\,min}$ [1]	Cr	Cor	Cr	Cor	grease	oil
mm		mm						kN		kgf		min^{-1}	
17	30303	47	15.25	14	12	1.0	1.0	28.9	26.3	2940	2680	9000	12000
20	30304	52	16.25	16	13	1.5	1.5	35.5	34.0	3600	3450	8000	11000
25	30305	62	18.25	17	15	1.5	1.5	48.5	47.5	4950	4850	6700	8900
30	30306	72	20.75	19	16	1.5	1.5	60.0	61.0	6100	6200	5700	7600
35	30307	80	22.75	21	18	2.0	1.5	75.0	77.0	7650	7900	5000	6600
40	30308	90	25.25	23	20	2.0	1.5	91.5	102.0	9350	10400	4400	5900
45	30309	100	27.25	25	22	2.0	1.5	111.0	126.0	11300	12800	4000	5300
50	30310	110	29.25	27	23	2.5	2.0	133.0	152.0	13500	15500	3600	4800
55	30311	120	31.50	29	25	2.5	2.0	155.0	179.0	15800	18300	3300	4400
60	30312	130	33.50	31	26	3.0	2.5	180.0	210.0	18300	21400	3000	4000
65	30313	140	36.00	33	28	3.0	2.5	203.0	238.0	20700	24300	2800	3700
70	30314	150	38.00	35	30	3.0	2.5	230.0	272.0	23400	27800	2600	3500
75	30315	160	40.00	37	31	3.0	2.5	255.0	305.0	26000	31000	2400	3200
80	30316	170	42.50	39	33	3.0	2.5	291.0	350.0	29700	36000	2300	3000

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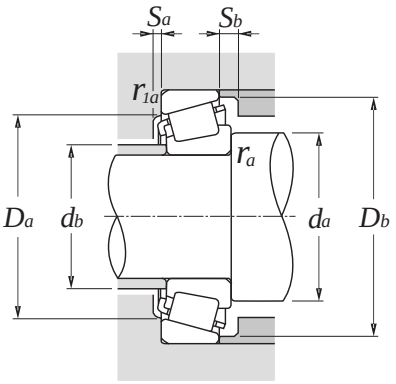
Technical supplement

Cages		***Precision***	***Grease***
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Equivalent radial load dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

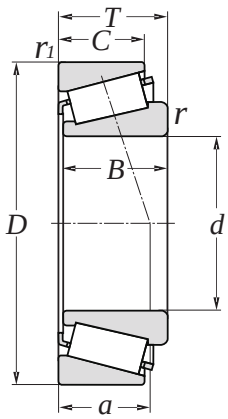
Static

$Pr = 0.5\ Fr+YoFa$

When Por Fr **use** $Por= Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

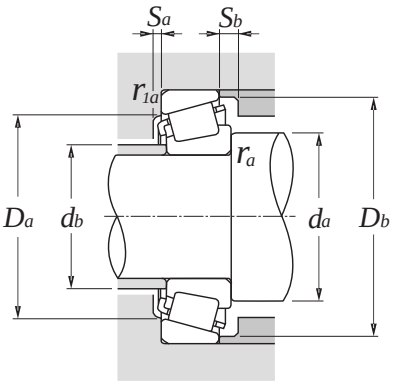
Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
22.5	24.0	41.5	40.0	42.0	3	3.5	1.0	1.0	10.5	0.29	2.11	1.16	0.134
28.5	28.0	43.5	42.5	47.5	3	3.0	1.5	1.5	10.5	0.30	2.00	1.10	0.176
33.5	34.0	53.5	52.0	57.0	3	3.0	1.5	1.5	13.0	0.30	2.00	1.10	0.272
38.5	40.0	63.5	62.0	66.0	3	4.5	1.5	1.5	15.0	0.31	1.90	1.05	0.408
45.0	45.0	71.5	70.0	74.0	3	4.5	2.0	1.5	17.0	0.31	1.90	1.05	0.540
50.0	52.0	81.5	77.0	82.0	3	5.0	2.0	1.5	19.5	0.35	1.74	0.96	0.769
55.0	59.0	91.5	86.0	93.0	3	5.0	2.0	1.5	21.0	0.35	1.74	0.96	1.010
62.0	65.0	100.0	95.0	102.0	3	6.0	2.0	2.0	23.0	0.35	1.74	0.96	1.310
67.0	71.0	110.0	104.0	111.0	4	6.5	2.0	2.0	24.5	0.35	1.74	0.96	1.660
74.0	77.0	118.0	112.0	120.0	4	7.5	2.5	2.0	26.5	0.35	1.74	0.96	2.060
79.0	83.0	128.0	122.0	130.0	4	8.0	2.5	2.0	28.5	0.35	1.74	0.96	2.550
84.0	89.0	138.0	130.0	140.0	4	8.0	2.5	2.0	30.0	0.35	1.74	0.96	3.060
89.0	95.0	148.0	139.0	149.0	4	9.0	2.5	2.0	32.0	0.35	1.74	0.96	3.570
94.0	102.0	158.0	148.0	159.0	4	9.5	2.5	2.0	34.0	0.35	1.74	0.96	4.410



Inner bore	Bearing numbers	Boundary dimensions						Basic load ratings				Limiting speeds	
								dynamic	static	dynamic	static		
d		D	T	B	C	$r_{s\,min}$ [1]	$r_{ls\,min}$ [1]	C_r	C_{or}	C_r	C_{or}	grease	oil
mm		mm						kN		kgf		min^{-1}	
22	320/22 X	44	15	15	11.5	0.6	0.6	27.0	31.5	2760	3250	8900	12000
28	320/28 X	52	16	16	12.0	1.0	1.0	33.0	40.5	3400	4150	7300	9700
32	320/32 X	58	17	17	13.0	1.0	1.0	37.0	46.5	3750	4750	6600	8700
20	32004 X	42	15	15	12.0	0.6	0.6	24.9	27.9	2540	2840	9500	13000
25	32005 X	47	15	15	11.5	0.6	0.6	27.8	33.5	2830	3450	7900	11000
30	32006 X	55	17	17	13.0	1.0	1.0	37.5	46.0	3800	4700	6900	9200
35	32007 X	62	18	18	14.0	1.0	1.0	41.5	52.5	4250	5350	6100	8100
40	32008 X	68	19	19	14.5	1.0	1.0	50.0	65.5	5100	6650	5300	7100
45	32009 X	75	20	20	15.5	1.0	1.0	57.5	76.5	5850	7800	4800	6400
50	32010 X	80	20	20	15.5	1.0	1.0	62.5	88.0	6400	9000	4400	5800
55	32011 X	90	23	23	17.5	1.5	1.5	80.5	118.0	8200	12000	4000	5400
60	32012 X	95	23	23	17.5	1.5	1.5	82.0	123.0	8350	12500	3700	4900
65	32013 X	100	23	23	17.5	1.5	1.5	83.0	128.0	8450	13000	3400	4600
70	32014 X	110	25	25	19.0	1.5	1.5	105.0	160.0	10700	16400	3200	4200
75	32015 X	115	25	25	19.0	1.5	1.5	106.0	167.0	10800	17000	3000	4000
80	32016 X	125	29	29	22.0	1.5	1.5	139.0	216.0	14200	22000	2800	3700
85	32017 X	130	29	29	22.0	1.5	1.5	142.0	224.0	14400	22900	2600	3500
90	32018 X	140	32	32	24.0	2.0	1.5	168.0	270.0	17200	27600	2500	3300
95	32019 X	145	32	32	24.0	2.0	1.5	171.0	280.0	17500	28600	2300	3100
100	32020 X	150	32	32	24.0	2.0	1.5	170.0	281.0	17300	28600	2200	3000
105	32021 X	160	35	35	26.0	2.5	2.0	201.0	335.0	20500	34000	2100	2800
110	32022 X	170	38	38	29.0	2.5	2.0	236.0	390.0	24000	39500	2000	2700
120	32024 X	180	38	38	29.0	2.5	2.0	245.0	420.0	25000	43000	1800	2500

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load
dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

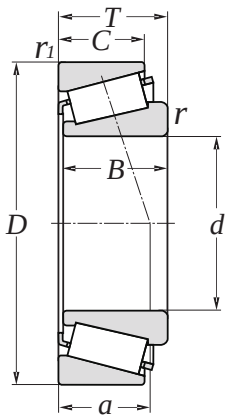
Static

$Pr = 0.5\ Fr+YoFa$

When $Por \quad Fr$ **use** $Por = Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

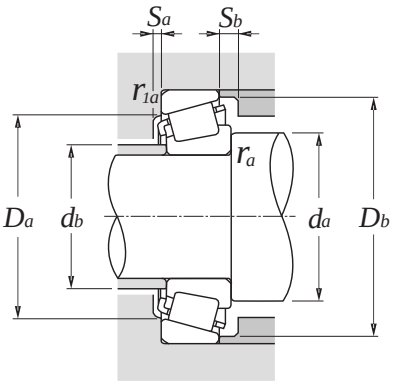
Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
26.5	27	39.5	38	41	3	3.5	0.6	0.6	11.0	0.40	1.51	0.83	0.106
33.5	33	46.5	45	49	3	4.0	1.0	1.0	12.5	0.43	1.39	0.77	0.146
37.5	38	52.5	50	55	3	4.0	1.0	1.0	14.5	0.45	1.32	0.73	0.181
24.5	25	37.5	36	39	3	3.0	0.6	0.6	10.5	0.37	1.60	0.88	0.097
29.5	30	42.5	40	44	3	3.5	0.6	0.6	12.0	0.43	1.39	0.77	0.114
35.5	35	49.5	48	52	3	4.0	1.0	1.0	13.5	0.43	1.39	0.77	0.166
40.5	40	56.5	54	59	4	4.0	1.0	1.0	15.5	0.45	1.32	0.73	0.224
45.5	46	62.5	60	65	4	4.5	1.0	1.0	15.0	0.38	1.58	0.87	0.273
50.5	51	69.5	67	72	4	4.5	1.0	1.0	16.5	0.39	1.53	0.84	0.346
55.5	56	74.5	72	77	4	4.5	1.0	1.0	17.5	0.42	1.42	0.78	0.366
63.5	63	81.5	81	86	4	5.5	1.5	1.5	20.0	0.41	1.48	0.81	0.563
68.5	67	86.5	85	91	4	5.5	1.5	1.5	21.0	0.43	1.39	0.77	0.576
73.5	72	91.5	90	97	4	5.5	1.5	1.5	22.5	0.46	1.31	0.72	0.630
78.5	78	101.5	98	105	5	6.0	1.5	1.5	24.0	0.43	1.38	0.76	0.848
83.5	83	106.5	103	110	5	6.0	1.5	1.5	25.5	0.46	1.31	0.72	0.909
88.5	89	116.5	112	120	6	7.0	1.5	1.5	27.0	0.42	1.42	0.78	1.280
93.5	94	121.5	117	125	6	7.0	1.5	1.5	28.5	0.44	1.36	0.75	1.350
100.0	100	131.5	125	134	6	8.0	2.0	1.5	30.0	0.42	1.42	0.78	1.790
105.0	105	136.5	130	140	6	8.0	2.0	1.5	31.5	0.44	1.36	0.75	1.830
110.0	109	141.5	134	144	6	8.0	2.0	1.5	32.5	0.46	1.31	0.72	1.910
117.0	116	150.0	143	154	6	9.0	2.0	2.0	34.5	0.44	1.35	0.74	2.420
122.0	122	160.0	152	163	7	9.0	2.0	2.0	36.5	0.43	1.39	0.77	3.070
132.0	131	170.0	161	173	7	9.0	2.0	2.0	39.0	0.46	1.31	0.72	3.250



Inner bore	Bearing numbers	Boundary dimensions						Basic load ratings				Limiting speeds	
								dynamic	static	dynamic	static		
d		D	T	B	C	$r_{s\,min}$ [1]	$r_{ls\,min}$ [1]	C_r	C_{or}	C_r	C_{or}	grease	oil
mm		mm						kN		kgf		min^{-1}	
25	**32205-A**	52	19.25	18	16	1.0	1.0	**42.0**	**47.0**	**4300**	**4800**	**7300**	**9800**
30	**32206-A**	62	21.25	20	17	1.0	1.0	**54.5**	**64.0**	**5600**	**6550**	**6300**	**8400**
35	**32207-A**	72	24.25	23	19	1.5	1.5	**72.5**	**87.0**	**7400**	**8900**	**5500**	**7400**
40	**32208-A**	80	24.75	23	19	1.5	1.5	**79.5**	**93.5**	**8100**	**9550**	**4900**	**6600**
45	**32209-A**	85	24.75	23	19	1.5	1.5	**82.0**	**100.0**	**8350**	**10200**	**4400**	**5900**
50	**32210-A**	90	24.75	23	19	1.5	1.5	**87.5**	**109.0**	**8900**	**11100**	**4000**	**5300**
55	**32211-A**	100	26.75	25	21	2.0	1.5	**108.0**	**134.0**	**11000**	**13700**	**3600**	**4900**
60	**32212-A**	110	29.75	28	24	2.0	1.5	**130.0**	**164.0**	**13200**	**16800**	**3400**	**4500**
65	**32213-A**	120	32.75	31	27	2.0	1.5	**159.0**	**206.0**	**16200**	**21000**	**3100**	**4200**
70	**32214-A**	125	33.25	31	27	2.0	1.5	**166.0**	**220.0**	**16900**	**22400**	**2900**	**3900**
75	**32215-A**	130	33.25	31	27	2.0	1.5	**168.0**	**224.0**	**17100**	**22800**	**2700**	**3600**
80	**32216-A**	140	35.25	33	28	2.5	2.0	**199.0**	**265.0**	**20300**	**27000**	**2500**	**3400**
85	**32217-A**	150	38.50	36	30	2.5	2.0	**224.0**	**300.0**	**22900**	**30500**	**2400**	**3200**

Technical supplement

Cages		***Precision***	***Grease***
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

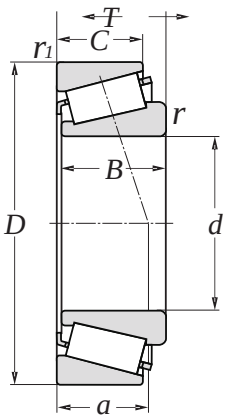
Static

$Pr = 0.5\ Fr+YoFa$

When $Por \quad Fr$ **use** $Por = Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

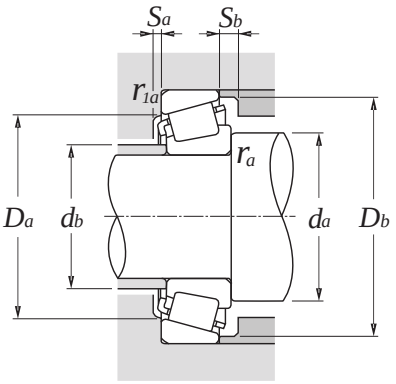
Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
30.5	31	46.5	43	49.5	2.0	4.0	1.0	1.0	14.0	0.36	1.67	0.92	0.187
35.5	37	56.5	52	58.0	2.5	4.0	1.0	1.0	15.5	0.37	1.60	0.88	0.301
43.5	43	63.5	61	67.0	3.0	5.0	1.5	1.5	17.5	0.37	1.60	0.88	0.457
48.5	48	71.5	68	75.0	3.0	5.5	1.5	1.5	19.0	0.37	1.60	0.88	0.558
53.5	53	76.5	73	81.0	3.0	5.5	1.5	1.5	20.0	0.40	1.48	0.81	0.607
58.5	58	81.5	78	85.0	3.0	5.5	1.5	1.5	21.0	0.42	1.43	0.79	0.648
65.0	63	91.5	87	95.0	4.0	5.5	2.0	1.5	22.5	0.40	1.48	0.81	0.876
70.0	69	101.5	95	104.0	4.0	5.5	2.0	1.5	25.0	0.40	1.48	0.81	1.180
75.0	75	111.5	104	115.0	4.0	5.5	2.0	1.5	27.0	0.40	1.48	0.81	1.580
80.0	80	116.5	108	119.0	4.0	6.0	2.0	1.5	28.5	0.42	1.43	0.79	1.680
85.0	85	121.5	114	125.0	4.0	6.0	2.0	1.5	30.0	0.44	1.38	0.76	1.740
92.0	90	130.0	122	134.0	4.0	7.0	2.0	2.0	31.0	0.42	1.43	0.79	2.180
97.0	96	140.0	130	142.0	5.0	8.5	2.0	2.0	33.5	0.42	1.43	0.79	2.750



Inner bore	Bearing numbers	Boundary dimensions						Basic load ratings				Limiting speeds	
								dynamic	static	dynamic	static		
d		D	T	B	C	$r_{s\,min}$ [1]	$r_{ls\,min}$ [1]	Cr	Cor	Cr	Cor	grease	oil
mm		mm						kN		kgf		min^{-1}	
20	32304-A	52	22.25	21	18	1.5	1.5	46.5	48.5	4750	4950	8000	11000
25	32305-A	62	25.25	24	20	1.5	1.5	61.5	64.5	6250	6600	6700	8900
30	32306-A	72	28.75	27	23	1.5	1.5	81.0	90.0	8250	9150	5700	7600
35	32307-A	80	32.75	31	25	2.0	1.5	101.0	115.0	10300	11700	5000	6600
40	32308-A	90	35.25	33	27	2.0	1.5	122.0	150.0	12500	15300	4400	5900
45	32309-A	100	38.25	36	30	2.0	1.5	154.0	191.0	15700	19500	4000	5300
50	32310-A	110	42.25	40	33	2.5	2.0	184.0	232.0	18700	23600	3600	4800
55	32311-A	120	45.50	43	35	2.5	2.0	215.0	275.0	21900	28000	3300	4400
60	32312-A	130	48.50	46	37	3.0	2.5	244.0	315.0	24900	32000	3000	4000

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

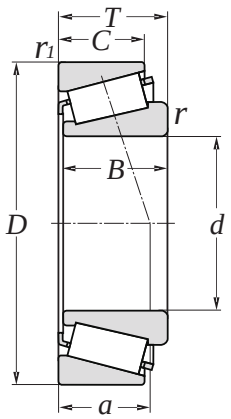
Static

$Pr = 0.5\ Fr+YoFa$

When $Por \quad Fr$ **use** $Por = Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

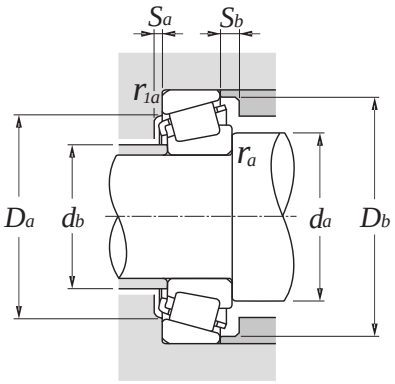
Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
28.5	27	43.5	43	47	3	4.0	1.5	1.5	14.0	0.30	2.00	1.10	0.245
33.5	32	53.5	52	57	3	5.0	1.5	1.5	16.0	0.30	2.00	1.10	0.381
38.5	38	63.5	59	66	3	5.5	1.5	1.5	18.5	0.31	1.90	1.05	0.583
45.0	43	71.5	66	74	3	7.5	2.0	1.5	20.5	0.31	1.90	1.05	0.787
50.0	50	81.5	73	82	3	8.0	2.0	1.5	23.0	0.35	1.74	0.96	1.080
55.0	56	91.5	82	93	3	8.0	2.0	1.5	25.5	0.35	1.74	0.96	1.460
62.0	62	100.0	90	102	3	9.0	2.0	2.0	28.5	0.35	1.74	0.96	1.920
67.0	68	110.0	99	111	4	10.5	2.0	2.0	30.5	0.35	1.74	0.96	2.440
74.0	74	118.0	107	120	4	11.5	2.5	2.0	32.0	0.35	1.74	0.96	3.020



Inner bore	Bearing numbers	Boundary dimensions						Basic load ratings				Limiting speeds	
								dynamic	static	dynamic	static		
d		D	T	B	C	$r_{s\,min}$ [1]	$r_{ls\,min}$ [1]	Cr	Cor	Cr	Cor	grease	oil
mm		mm						kN		kgf		min^{-1}	
25	**33205**	52	22	22	18.0	1.0	1.0	**47.5**	**57.5**	**4850**	**5850**	**7300**	**9800**
30	**33206**	62	25	25	19.5	1.0	1.0	**65.0**	**77.0**	**6600**	**7850**	**6300**	**8400**
35	**33207**	72	28	28	22.0	1.5	1.5	**87.5**	**109.0**	**8900**	**11200**	**5500**	**7400**
40	**33208**	80	32	32	25.0	1.5	1.5	**103.0**	**132.0**	**10500**	**13400**	**4900**	**6600**
45	**33209**	85	32	32	25.0	1.5	1.5	**107.0**	**141.0**	**10900**	**14400**	**4400**	**5900**
50	**33210**	90	32	32	24.5	1.5	1.5	**115.0**	**158.0**	**11700**	**16100**	**4000**	**5300**
55	**33211**	100	35	35	27.0	2.0	1.5	**138.0**	**188.0**	**14100**	**19100**	**3600**	**4900**

Technical supplement

Cages		***Precision***	***Grease***
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

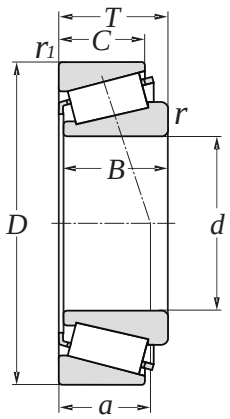
Static

$Pr = 0.5\ Fr+YoFa$

When Por Fr **use** $Por = Fr$

For values of $e, Y2$ **and** Yo **see the tabla below.**

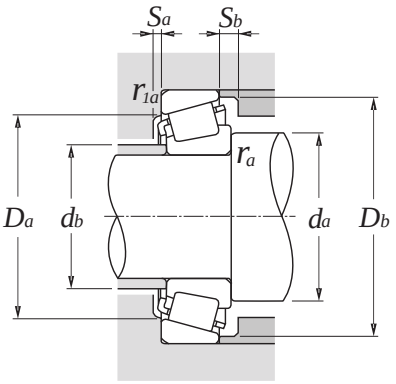
Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
30.5	30	46.5	43	49	4	4.0	1.0	1.0	14.0	0.35	1.71	0.94	0.217
35.5	36	56.5	53	59	5	5.5	1.0	1.0	16.0	0.34	1.76	0.97	0.344
43.5	42	63.5	61	68	5	6.0	1.5	1.5	18.5	0.35	1.70	0.93	0.531
48.5	47	71.5	67	76	5	7.0	1.5	1.5	21.0	0.36	1.68	0.92	0.728
53.5	52	76.5	72	81	5	7.0	1.5	1.5	22.0	0.39	1.56	0.86	0.783
58.5	57	81.5	77	87	5	7.5	1.5	1.5	23.5	0.41	1.45	0.80	0.852
65.0	62	91.5	85	96	6	8.0	2.0	1.5	25.5	0.40	1.50	0.83	1.150



Inner bore d	Bearing numbers	Boundary dimensions						Basic load ratings dynamic	Basic load ratings static	Basic load ratings dynamic	Basic load ratings static	Limiting speeds	
		D	T	B	C	$r_{s\,min}$ [1]	$r_{1s\,min}$ [1]	Cr	Cor	Cr	Cor	grease	oil
mm		mm						kN		kgf		min^{-1}	
25	**33205**	52	22	22	18.0	1.0	1.0	**47.5**	**57.5**	**4850**	**5850**	**7300**	**9800**
30	**33206**	62	25	25	19.5	1.0	1.0	**65.0**	**77.0**	**6600**	**7850**	**6300**	**8400**
35	**33207**	72	28	28	22.0	1.5	1.5	**87.5**	**109.0**	**8900**	**11200**	**5500**	**7400**
40	**33208**	80	32	32	25.0	1.5	1.5	**103.0**	**132.0**	**10500**	**13400**	**4900**	**6600**
45	**33209**	85	32	32	25.0	1.5	1.5	**107.0**	**141.0**	**10900**	**14400**	**4400**	**5900**
50	**33210**	90	32	32	24.5	1.5	1.5	**115.0**	**158.0**	**11700**	**16100**	**4000**	**5300**
55	**33211**	100	35	35	27.0	2.0	1.5	**138.0**	**188.0**	**14100**	**19100**	**3600**	**4900**

Technical supplement

Cages		***Precision***	***Grease***
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Equivalent radial load
dynamic

$Pr = XFr+YFa$

$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	0	0.4	Y_2

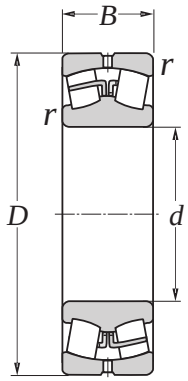
Static

$Pr = 0.5\ Fr+YoFa$

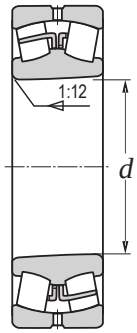
When Por Fr **use** $Por= Fr$

For values of e, $Y2$ **and** Yo **see the tabla below.**

Abutment and fillet dimensions									Load center	Constant	Axial load factors		Weight
d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{las} max	a	e	Y_2	Y_0	
mm									mm				kg(s).
30.5	30	46.5	43	49	4	4.0	1.0	1.0	14.0	0.35	1.71	0.94	0.217
35.5	36	56.5	53	59	5	5.5	1.0	1.0	16.0	0.34	1.76	0.97	0.344
43.5	42	63.5	61	68	5	6.0	1.5	1.5	18.5	0.35	1.70	0.93	0.531
48.5	47	71.5	67	76	5	7.0	1.5	1.5	21.0	0.36	1.68	0.92	0.728
53.5	52	76.5	72	81	5	7.0	1.5	1.5	22.0	0.39	1.56	0.86	0.783
58.5	57	81.5	77	87	5	7.5	1.5	1.5	23.5	0.41	1.45	0.80	0.852
65.0	62	91.5	85	96	6	8.0	2.0	1.5	25.5	0.40	1.50	0.83	1.150



Cylinrical bore

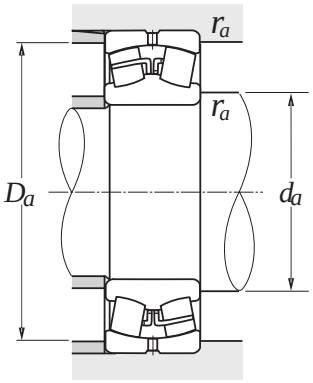


Tapered bore

Inner bore d	Bearing numbers	Boundary dimensions			Basic load ratings dynamic C_r	static C_{or}	dynamic C_r	static C_{or}	Limiting speeds grease	oil
mm		D	B	$r_{s\,min}$ [3]	kN		kgf		min^{-1}	
		mm								
20	21304 MB W33	52	15	1.1	41	33.0	4182	3366	9700	15000
20	21304 MB/K W33	52	15	1.1	41	33.0	4182	3366	9700	15000
25	21305 MB W33	62	17	1.1	53	43.5	5406	4437	8400	13000
25	21305 MB/K W33	62	17	1.1	53	43.5	5406	4437	8400	13000
30	21306 MB W33	72	19	1.1	72	63.0	7344	6426	7300	11000
30	21306 MB/K W33	72	19	1.1	72	63.0	7344	6426	7300	11000
35	21307 MB W33	80	21	1.5	83	74.0	8466	7548	6800	9500
35	21307 MB/K W33	80	21	1.5	83	74.0	8466	7548	6800	9500
40	21308 MB W33	90	23	1.5	88	90.0	8950	9150	4900	6400
40	21308 MB/K W33	90	23	1.5	88	90.0	8950	9150	4900	6400
45	21309 MB W33	100	25	1.5	102	106.0	10400	10800	4400	5700
45	21309 MB/K W33	100	25	1.5	102	106.0	10400	10800	4400	5700
50	21310 MB W33	110	27	2.0	118	127.0	12000	12900	4000	5200
50	21310 MB/K W33	110	27	2.0	118	127.0	12000	12900	4000	5200
55	21311 MB W33	120	29	2.0	145	163.0	14800	16600	3700	4800
55	21311 MB/K W33	120	29	2.0	145	163.0	14800	16600	3700	4800
60	21312 MB W33	130	31	2.1	167	191.0	17100	19500	3400	4400
60	21312 MB/K W33	130	31	2.1	167	191.0	17100	19500	3400	4400
65	21313 MB W33	140	33	2.1	194	228.0	19800	23200	3100	4000
65	21313 MB/K W33	140	33	2.1	194	228.0	19800	23200	3100	4000
70	21314 MB W33	150	35	2.1	220	262.0	22400	26800	2900	3800
70	21314 MB/K W33	150	35	2.1	220	262.0	22400	26800	2900	3800
75	21315 MB W33	160	37	2.1	239	287.0	24300	29300	2700	3500
75	21315 MB/K W33	160	37	2.1	239	287.0	24300	29300	2700	3500

Technical supplement

Cages		*Precision*	*Grease*
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

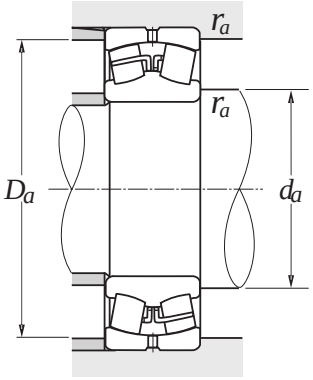


Equivalent radial load
dynamic
$Pr = XFr+YFa$

$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kg(s).	
	mm							
27.0	45.0	1.0	0.30	2.25	3.34	2.20	0.160	-
27.0	45.0	1.0	0.30	2.25	3.34	2.20	-	0.155
32.0	55.0	1.0	0.28	2.43	3.61	2.37	0.254	-
32.0	55.0	1.0	0.28	2.43	3.61	2.37	-	0.247
37.0	65.0	1.0	0.27	2.49	3.71	2.43	0.386	-
37.0	65.0	1.0	0.27	2.49	3.71	2.43	-	0.375
44.0	71.0	1.5	0.26	2.55	3.80	2.50	0.503	-
44.0	71.0	1.5	0.26	2.55	3.80	2.50	-	0.488
48.5	81.5	1.5	0.26	2.55	3.80	2.50	0.705	-
48.5	81.5	1.5	0.26	2.55	3.80	2.50	-	0.694
53.5	91.5	1.5	0.26	2.60	3.87	2.54	0.927	-
53.5	91.5	1.5	0.26	2.60	3.87	2.54	-	0.912
60.0	100.0	2.0	0.26	2.64	3.93	2.58	1.210	-
60.0	100.0	2.0	0.26	2.64	3.93	2.58	-	1.190
65.0	110.0	2.0	0.25	2.69	4.01	2.63	1.710	-
65.0	110.0	2.0	0.25	2.69	4.01	2.63	-	1.690
72.0	118.0	2.0	0.25	2.69	4.00	2.63	2.100	-
72.0	118.0	2.0	0.25	2.69	4.00	2.63	-	2.070
77.0	128.0	2.0	0.25	2.69	4.00	2.63	2.550	-
77.0	128.0	2.0	0.25	2.69	4.00	2.63	-	2.510
82.0	138.0	2.0	0.25	2.69	4.00	2.63	3.180	-
82.0	138.0	2.0	0.25	2.69	4.00	2.63	-	3.140
87.0	148.0	2.0	0.24	2.84	4.23	2.78	3.810	-
87.0	148.0	2.0	0.24	2.84	4.23	2.78	-	3.760

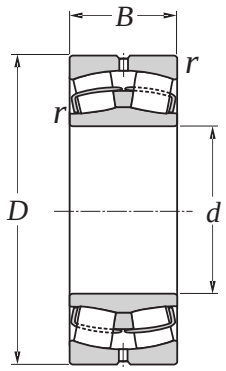


Equivalent radial load
dynamic
$Pr = XFr+YFa$

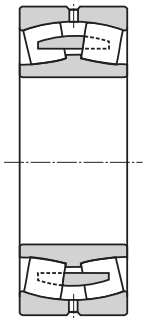
$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

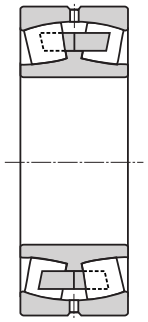
Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
92	158	2.0	0.23	2.95	4.39	2.88	4.53	-
92	158	2.0	0.23	2.95	4.39	2.88	-	4.47
99	166	2.5	0.25	2.69	4.00	2.63	5.35	-
99	166	2.5	0.25	2.69	4.00	2.63	-	5.28
104	176	2.5	0.24	2.83	4.22	2.77	6.30	-
104	176	2.5	0.24	2.83	4.22	2.77	-	6.21
109	186	2.5	0.23	3.00	4.46	2.93	7.10	-
109	186	2.5	0.23	3.00	4.46	2.93	-	7.00
114	201	2.5	0.22	3.01	4.48	2.94	8.89	-
114	201	2.5	0.22	3.01	4.48	2.94	-	8.78
124	226	2.5	0.21	3.20	4.77	3.13	11.20	-
124	226	2.5	0.21	3.20	4.77	3.13	-	11.10



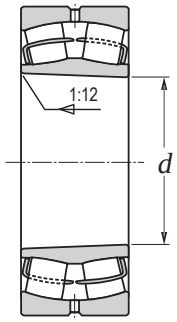
Cylindrical bore
CC Type



Cylindrical bore
CA Type



Cylindrical bore
MB Type

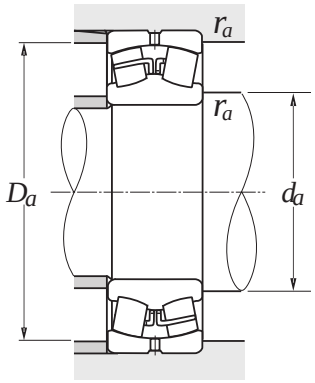


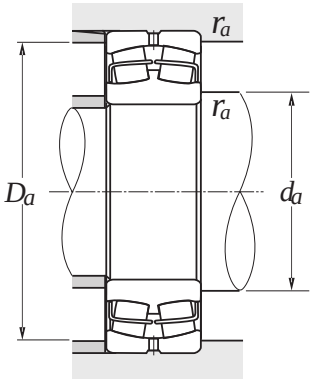
Tapered bore
Taper 1 : 12

Inner bore d mm	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ [3]	Basic load ratings dynamic C_r kN	static C_{or} kN	dynamic C_r kgf	static C_{or} kgf	Limiting speeds grease min^{-1}	oil min^{-1}
		mm								
25	22205 MB W33	52	18	1.0	36.5	36.0	3750	3650	8500	11000
25	22205 MB/K W33	52	18	1.0	36.5	36.0	3750	3650	8500	11000
25	22205 CC W33	52	18	1.0	36.5	36.0	3750	3650	8500	11000
25	22205 CC/K W33	52	18	1.0	36.5	36.0	3750	3650	8500	11000
30	22206 MB W33	62	20	1.0	49.0	49.0	5000	5000	7500	9500
30	22206 MB/K W33	62	20	1.0	49.0	49.0	5000	5000	7500	9500
30	22206 CC W33	62	20	1.0	49.0	49.0	5000	5000	7500	9500
30	22206 CC/K W33	62	20	1.0	49.0	49.0	5000	5000	7500	9500
35	22207 MB W33	72	23	1.1	69.5	71.0	7050	7200	6500	8500
35	22207 MB/K W33	72	23	1.1	69.5	71.0	7050	7200	6500	8500
35	22207 CC W33	72	23	1.1	69.5	71.0	7050	7200	6500	8500
35	22207 CC/K W33	72	23	1.1	69.5	71.0	7050	7200	6500	8500
40	22208 MB W33	80	23	1.1	79.0	88.5	8050	9000	6000	7600
40	22208 MB/K W33	80	23	1.1	79.0	88.5	8050	9000	6000	7600
40	22208 CC W33	80	23	1.1	79.0	88.5	8050	9000	6000	7600
40	22208 CC/K W33	80	23	1.1	79.0	88.5	8050	9000	6000	7600
45	22209 MB W33	85	23	1.1	82.5	95.0	8400	9700	5300	6800
45	22209 MB/K W33	85	23	1.1	82.5	95.0	8400	9700	5300	6800
45	22209 CC W33	85	23	1.1	82.5	95.0	8400	9700	5300	6800
45	22209 CC/K W33	85	23	1.1	82.5	95.0	8400	9700	5300	6800
50	22210 MB W33	90	23	1.1	86.0	102.0	8750	10400	4900	6300
50	22210 MB/K W33	90	23	1.1	86.0	102.0	8750	10400	4900	6300
50	22210 CC W33	90	23	1.1	86.0	102.0	8750	10400	4900	6300
50	22210 CC/K W33	90	23	1.1	86.0	102.0	8750	10400	4900	6300

Technical supplement

Cages		***Precision***	***Grease***
Steel -	CC		
Polymid -	X	Normal (ISO)	Nil
Brass -	MB		



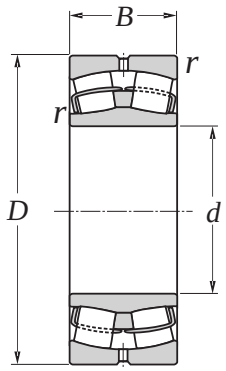


Equivalent radial load
dynamic
$Pr = XFr+YFa$

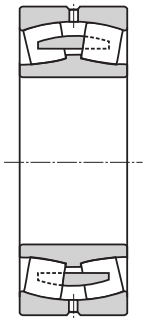
$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+Y_oFa$
For values of e, Y_2 and Y_o see the tabla below.

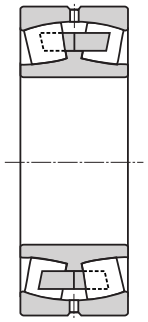
Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kg.	
31	46	1	0.35	1.92	2.86	1.88	0.186	-
31	46	1	0.35	1.92	2.86	1.88	-	0.182
31	46	1	0.35	1.92	2.86	1.88	0.186	-
31	46	1	0.35	1.92	2.86	1.88	-	0.182
36	56	1	0.33	2.07	3.09	2.03	0.287	-
36	56	1	0.33	2.07	3.09	2.03	-	0.282
36	56	1	0.33	2.07	3.09	2.03	0.287	-
36	56	1	0.33	2.07	3.09	2.03	-	0.282
42	65	1	0.32	2.09	3.11	2.04	0.446	-
42	65	1	0.32	2.09	3.11	2.04	-	0.437
42	65	1	0.32	2.09	3.11	2.04	0.446	-
42	65	1	0.32	2.09	3.11	2.04	-	0.437
47	73	1	0.29	2.35	3.50	2.30	0.526	-
47	73	1	0.29	2.35	3.50	2.30	-	0.515
47	73	1	0.29	2.35	3.50	2.30	0.526	-
47	73	1	0.29	2.35	3.50	2.30	-	0.515
52	78	1	0.27	2.50	3.72	2.44	0.584	-
52	78	1	0.27	2.50	3.72	2.44	-	0.572
52	78	1	0.27	2.50	3.72	2.44	0.584	-
52	78	1	0.27	2.50	3.72	2.44	-	0.572
57	83	1	0.25	2.69	4.01	2.63	0.630	-
57	83	1	0.25	2.69	4.01	2.63	-	0.616
57	83	1	0.25	2.69	4.01	2.63	0.630	-
57	83	1	0.25	2.69	4.01	2.63	-	0.616



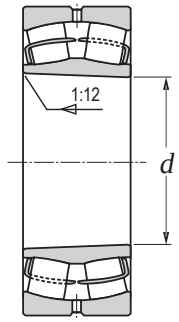
Cylindrical bore
CC Type



Cylindrical bore
CA Type



Cylindrical bore
MB Type

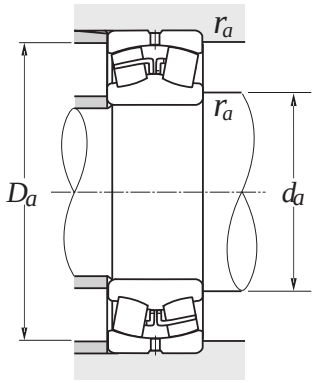


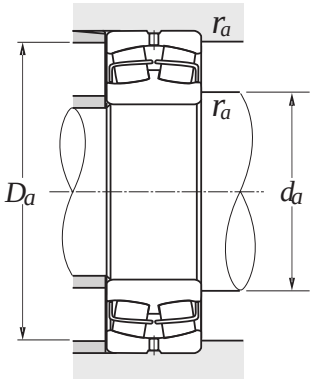
Tapered bore
Taper 1 : 12

Inner bore d	Bearing numbers	Boundary dimensions			Basic load ratings dynamic C_r	static C_{or}	dynamic C_r	static C_{or}	Limiting speeds grease	oil
		D	B	$r_{s\,min}$ [3]						
mm			mm			kN		kgf	min^{-1}	
55	22211 MB W33	100	25	1.5	93.5	110.0	9500	11200	4500	5800
55	22211 MB/K W33	100	25	1.5	93.5	110.0	9500	11200	4500	5800
55	22211 CC W33	100	25	1.5	93.5	110.0	9500	11200	4500	5800
55	22211 CC/K W33	100	25	1.5	93.5	110.0	9500	11200	4500	5800
60	22212 MB W33	110	28	1.5	115.0	147.0	11700	15000	4100	5300
60	22212 MB/K W33	110	28	1.5	115.0	147.0	11700	15000	4100	5300
60	22212 CC W33	110	28	1.5	115.0	147.0	11700	15000	4100	5300
60	22212 CC/K W33	110	28	1.5	115.0	147.0	11700	15000	4100	5300
65	22213 MB W33	120	31	1.5	143.0	179.0	14600	18300	3900	5000
65	22213 MB/K W33	120	31	1.5	143.0	179.0	14600	18300	3900	5000
65	22213 CC W33	120	31	1.5	143.0	179.0	14600	18300	3900	5000
65	22213 CC/K W33	120	31	1.5	143.0	179.0	14600	18300	3900	5000
70	22214 MB W33	125	31	1.5	154.0	201.0	15700	20500	3500	4600
70	22214 MB/K W33	125	31	1.5	154.0	201.0	15700	20500	3500	4600
70	22214 CC W33	125	31	1.5	154.0	201.0	15700	20500	3500	4600
70	22214 CC/K W33	125	31	1.5	154.0	201.0	15700	20500	3500	4600
75	22215 MB W33	130	31	1.5	166.0	223.0	16900	22800	3200	4200
75	22215 MB/K W33	130	31	1.5	166.0	223.0	16900	22800	3200	4200
75	22215 CC W33	130	31	1.5	166.0	223.0	16900	22800	3200	4200
75	22215 CC/K W33	130	31	1.5	166.0	223.0	16900	22800	3200	4200
80	22216 MB W33	140	33	2.0	179.0	239.0	18300	24400	3100	4000
80	22216 MB/K W33	140	33	2.0	179.0	239.0	18300	24400	3100	4000
80	22216 CC W33	140	33	2.0	179.0	239.0	18300	24400	3100	4000
80	22216 CC/K W33	140	33	2.0	179.0	239.0	18300	24400	3100	4000

Technical supplement

Cages		*Precision*	*Grease*
Steel -	CC		
Polymid -	X	Normal (ISO)	Nil
Brass -	MB		



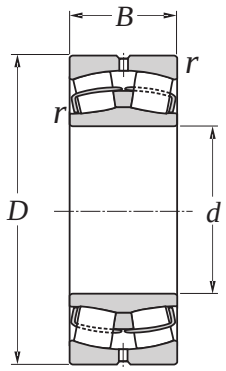


Equivalent radial load
dynamic
$Pr = XFr+YFa$

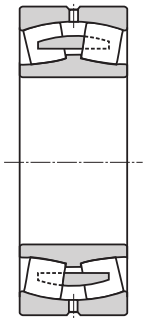
$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

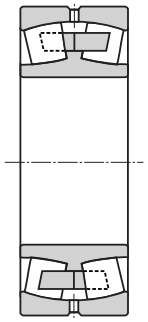
Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
63.5	91.5	1.5	0.28	2.42	3.61	2.37	0.85	-
63.5	91.5	1.5	0.28	2.42	3.61	2.37	-	0.832
63.5	91.5	1.5	0.28	2.42	3.61	2.37	0.85	-
63.5	91.5	1.5	0.28	2.42	3.61	2.37	-	0.832
68.5	101.5	1.5	0.27	2.49	3.71	2.44	1.15	-
68.5	101.5	1.5	0.27	2.49	3.71	2.44	-	1.130
68.5	101.5	1.5	0.27	2.49	3.71	2.44	1.15	-
68.5	101.5	1.5	0.27	2.49	3.71	2.44	-	1.130
73.5	111.5	1.5	0.28	2.42	3.60	2.37	1.50	-
73.5	111.5	1.5	0.28	2.42	3.60	2.37	-	1.470
73.5	111.5	1.5	0.28	2.42	3.60	2.37	1.50	-
73.5	111.5	1.5	0.28	2.42	3.60	2.37	-	1.470
78.5	116.5	1.5	0.26	2.55	3.80	2.50	1.55	-
78.5	116.5	1.5	0.26	2.55	3.80	2.50	-	1.520
78.5	116.5	1.5	0.26	2.55	3.80	2.50	1.55	-
78.5	116.5	1.5	0.26	2.55	3.80	2.50	-	1.520
83.5	121.5	1.5	0.24	2.81	4.19	2.75	1.65	-
83.5	121.5	1.5	0.24	2.81	4.19	2.75	-	1.610
83.5	121.5	1.5	0.24	2.81	4.19	2.75	1.65	-
83.5	121.5	1.5	0.24	2.81	4.19	2.75	-	1.610
90.0	130.0	2.0	0.26	2.64	3.93	2.58	2.15	-
90.0	130.0	2.0	0.26	2.64	3.93	2.58	-	2.110
90.0	130.0	2.0	0.26	2.64	3.93	2.58	2.15	-
90.0	130.0	2.0	0.26	2.64	3.93	2.58	-	2.110



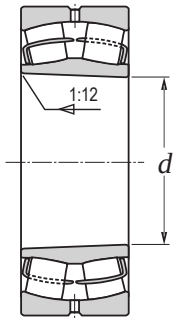
Cylindrical bore
CC Type



Cylindrical bore
CA Type



Cylindrical bore
MB Type

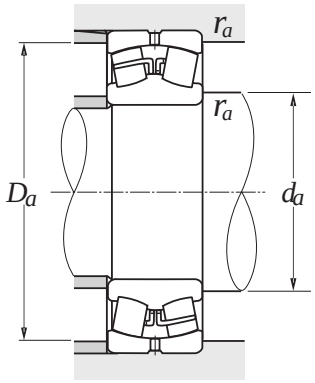


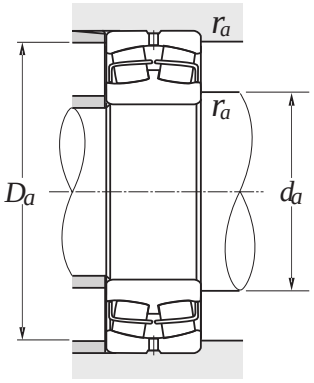
Tapered bore
Taper 1 : 12

Inner bore d mm	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ [3]	Basic load ratings dynamic C_r kN	static C_{or} kN	dynamic C_r kgf	static C_{or} kgf	Limiting speeds grease min^{-1}	oil min^{-1}
		mm								
85	22217 MB W33	150	36	2.0	206.0	272.0	21000	27800	2900	3800
85	22217 MB/K W33	150	36	2.0	206.0	272.0	21000	27800	2900	3800
85	22217 CC W33	150	36	2.0	206.0	272.0	21000	27800	2900	3800
85	22217 CC/K W33	150	36	2.0	206.0	272.0	21000	27800	2900	3800
90	22218 MB W33	160	40	2.0	256.0	345.0	26200	35000	2700	3500
90	22218 MB/K W33	160	40	2.0	256.0	345.0	26200	35000	2700	3500
90	22218 CC W33	160	40	2.0	256.0	345.0	26200	35000	2700	3500
90	22218 CC/K W33	160	40	2.0	256.0	345.0	26200	35000	2700	3500
95	22219 MB W33	170	43	2.1	294.0	390.0	30000	39500	2500	3300
95	22219 MB/K W33	170	43	2.1	294.0	390.0	30000	39500	2500	3300
100	22220 MB W33	180	46	2.1	315.0	415.0	32000	42500	2400	3200
100	22220 MB/K W33	180	46	2.1	315.0	415.0	32000	42500	2400	3200
110	22222 MB W33	200	53	2.1	410.0	570.0	42000	58000	2200	2800
110	22222 MB/K W33	200	53	2.1	410.0	570.0	42000	58000	2200	2800
120	22224 MB W33	215	58	2.1	485.0	700.0	49500	71500	2000	2600
120	22224 MB/K W33	215	58	2.1	485.0	700.0	49500	71500	2000	2600
130	22226 MB W33	230	64	3.0	570.0	790.0	58000	80500	1800	2400
130	22226 MB/K W33	230	64	3.0	570.0	790.0	58000	80500	1800	2400
140	22228 MB W33	250	68	3.0	685.0	975.0	70000	99500	1700	2200
140	22228 MB/K W33	250	68	3.0	685.0	975.0	70000	99500	1700	2200
150	22230 MB W33	270	73	3.0	775.0	1160.0	79000	119000	1600	2000
150	22230 MB/K W33	270	73	3.0	775.0	1160.0	79000	119000	1600	2000

Technical supplement

Cages		***Precision***	***Grease***
Steel -	CC		
Polymid -	X	Normal (ISO)	Nil
Brass -	MB		



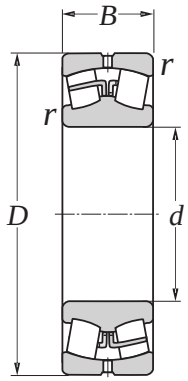


Equivalent radial load
dynamic
$Pr = XFr+YFa$

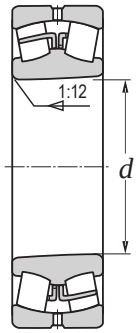
$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of e, Y_2 and Y_o see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
95	140	2.0	0.26	2.60	3.88	2.55	2.66	-
95	140	2.0	0.26	2.60	3.88	2.55	-	2.61
95	140	2.0	0.26	2.60	3.88	2.55	2.66	-
95	140	2.0	0.26	2.60	3.88	2.55	-	2.61
100	150	2.0	0.26	2.55	3.80	2.49	3.50	-
100	150	2.0	0.26	2.55	3.80	2.49	-	3.42
100	150	2.0	0.26	2.55	3.80	2.49	3.50	-
100	150	2.0	0.26	2.55	3.80	2.49	-	3.42
107	158	2.0	0.26	2.63	3.92	2.57	4.20	-
107	158	2.0	0.26	2.63	3.92	2.57	-	2.80
112	168	2.0	0.26	2.55	3.80	2.49	4.95	-
112	168	2.0	0.26	2.55	3.80	2.49	-	4.84
122	188	2.0	0.27	2.51	3.74	2.46	7.20	-
122	188	2.0	0.27	2.51	3.74	2.46	-	7.04
132	203	2.0	0.27	2.47	3.68	2.42	9.10	-
132	203	2.0	0.27	2.47	3.68	2.42	-	8.89
144	216	2.5	0.28	2.39	3.56	2.33	11.20	-
144	216	2.5	0.28	2.39	3.56	2.33	-	10.90
154	236	2.5	0.28	2.39	3.55	2.33	14.00	-
154	236	2.5	0.28	2.39	3.55	2.33	-	13.70
164	256	2.5	0.27	2.46	3.66	2.40	18.10	-
164	256	2.5	0.27	2.46	3.66	2.40	-	17.70



Cylinrical bore

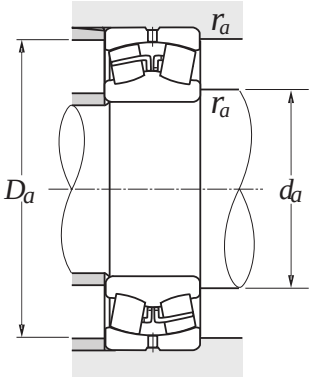


Tapered bore

Inner bore d	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ [3]	Basic load ratings dynamic C_r	static C_{or}	dynamic C_r	static C_{or}	Limiting speeds grease	oil
mm		mm			kN		kgf		min^{-1}	
40	22308 MB W33	90	33	1.5	121	128	12300	13000	4500	5900
40	22308 MB/K W33	90	33	1.5	121	128	12300	13000	4500	5900
45	22309 MB W33	100	36	1.5	148	167	15100	17000	4100	5300
45	22309 MB/K W33	100	36	1.5	148	167	15100	17000	4100	5300
50	22310 MB W33	110	40	2.0	186	212	19000	21600	3700	4800
50	22310 MB/K W33	110	40	2.0	186	212	19000	21600	3700	4800
55	22311 MB W33	120	43	2.0	204	234	20800	23900	3400	4400
55	22311 MB/K W33	120	43	2.0	204	234	20800	23900	3400	4400
60	22312 MB W33	130	46	2.1	238	273	24300	27800	3100	4000
60	22312 MB/K W33	130	46	2.1	238	273	24300	27800	3100	4000
65	22313 MB W33	140	48	2.1	265	320	27100	32500	2800	3700
65	22313 MB/K W33	140	48	2.1	265	320	27100	32500	2800	3700
70	22314 MB W33	150	51	2.1	325	380	33000	39000	2700	3500
70	22314 MB/K W33	150	51	2.1	325	380	33000	39000	2700	3500
75	22315 MB W33	160	55	2.1	330	410	33500	42000	2500	3200
75	22315 MB/K W33	160	55	2.1	330	410	33500	42000	2500	3200
80	22316 MB W33	170	58	2.1	385	470	39500	48000	2300	3000
80	22316 MB/K W33	170	58	2.1	385	470	39500	48000	2300	3000
85	22317 MB W33	180	60	3.0	415	510	42500	52000	2200	2900
85	22317 MB/K W33	180	60	3.0	415	510	42500	52000	2200	2900
90	22318 MB W33	190	64	3.0	480	590	49000	60000	2100	2700
90	22318 MB/K W33	190	64	3.0	480	590	49000	60000	2100	2700
95	22319 MB W33	200	67	3.0	500	615	51000	63000	1900	2500
95	22319 MB/K W33	200	67	3.0	500	615	51000	63000	1900	2500

Technical supplement

Cages		*Precision*	*Grease*
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

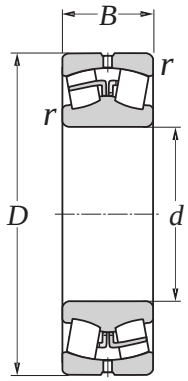


Equivalent radial load
dynamic
$Pr = XFr+YFa$

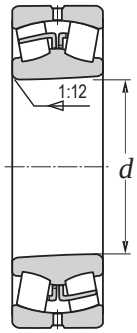
$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kg(s).	
mm								
48.5	81.5	1.5	0.38	1.76	2.62	1.72	0.97	-
48.5	81.5	1.5	0.38	1.76	2.62	1.72	-	0.95
53.5	91.5	1.5	0.36	1.86	2.77	1.82	1.33	-
53.5	91.5	1.5	0.36	1.86	2.77	1.82	-	1.30
60.0	100.0	2.0	0.37	1.80	2.69	1.76	1.79	-
60.0	100.0	2.0	0.37	1.80	2.69	1.76	-	1.75
65.0	110.0	2.0	0.40	1.68	2.50	1.64	2.30	-
65.0	110.0	2.0	0.40	1.68	2.50	1.64	-	2.25
72.0	118.0	2.0	0.42	1.62	2.42	1.59	2.90	-
72.0	118.0	2.0	0.42	1.62	2.42	1.59	-	2.83
77.0	128.0	2.0	0.38	1.79	2.67	1.75	3.45	-
77.0	128.0	2.0	0.38	1.79	2.67	1.75	-	3.37
82.0	138.0	2.0	0.37	1.81	2.70	1.77	4.22	-
82.0	138.0	2.0	0.37	1.81	2.70	1.77	-	4.12
87.0	148.0	2.0	0.37	1.80	2.69	1.76	5.25	-
87.0	148.0	2.0	0.37	1.80	2.69	1.76	-	5.13
92.0	158.0	2.0	0.37	1.80	2.69	1.76	6.05	-
92.0	158.0	2.0	0.37	1.80	2.69	1.76	-	5.91
99.0	166.0	2.5	0.37	1.82	2.71	1.78	7.10	-
99.0	166.0	2.5	0.37	1.82	2.71	1.78	-	6.94
104.0	176.0	2.5	0.37	1.80	2.69	1.76	8.35	-
104.0	176.0	2.5	0.37	1.80	2.69	1.76	-	8.16
109.0	186.0	2.5	0.37	1.80	2.69	1.76	9.76	-
109.0	186.0	2.5	0.37	1.80	2.69	1.76	-	9.54



Cylinrical bore

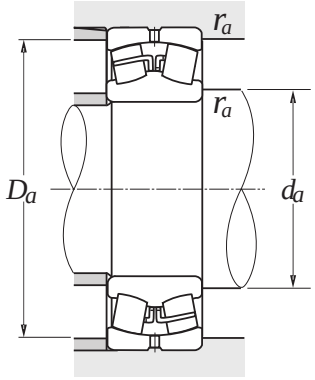


Tapered bore

Inner bore d	Bearing numbers	Boundary dimensions			Basic load ratings dynamic	static	dynamic	static	Limiting speeds	
		D	B	$r_{s\,min}$ [3]	C_r	C_{or}	C_r	C_{or}	grease	oil
mm		mm			kN		kgf		min^{-1}	
100	**22320 MB W33**	215	73	3	**605**	**755**	**61500**	**77000**	**1800**	**2400**
100	**22320 MB/K W33**	215	73	3	**605**	**755**	**61500**	**77000**	**1800**	**2400**
110	**22322 MB W33**	240	80	3	**745**	**930**	**76000**	**95000**	**1700**	**2200**
110	**22322 MB/K W33**	240	80	3	**745**	**930**	**76000**	**95000**	**1700**	**2200**
120	**22324 MB W33**	260	86	3	**880**	**1120**	**89500**	**114000**	**1500**	**2000**
120	**22324 MB/K W33**	260	86	3	**880**	**1120**	**89500**	**114000**	**1500**	**2000**

Technical supplement

Cages		***Precision***	***Grease***
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

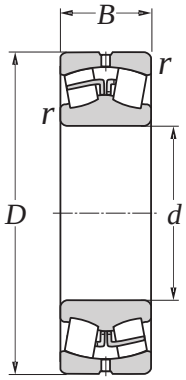


Equivalent radial load
dynamic
$Pr = XFr+YFa$

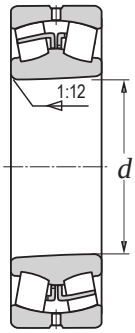
$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
114	201	2.5	0.37	1.80	2.69	1.76	12.40	-
114	201	2.5	0.37	1.80	2.69	1.76	-	12.10
124	226	2.5	0.36	1.87	2.79	1.83	17.10	-
124	226	2.5	0.36	1.87	2.79	1.83	-	16.70
134	246	2.5	0.37	1.80	2.69	1.76	21.50	-
134	246	2.5	0.37	1.80	2.69	1.76	-	21.00



Cylinrical bore

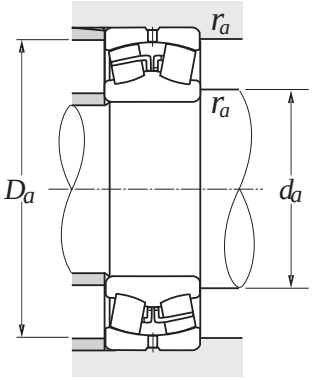


Tapered bore

Inner bore d mm	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ [3]	Basic load ratings dynamic C_r	static C_{or}	dynamic C_r	static C_{or}	Limiting speeds grease	oil
			mm		kN		kgf		min^{-1}	
100	**23120 MB W33**	165	52	2.0	**310**	**470**	**31500**	**47500**	**2000**	**2600**
100	**23120 MB/K W33**	165	52	2.0	**310**	**470**	**31500**	**47500**	**2000**	**2600**
110	**23122 MB W33**	180	56	2.0	**370**	**580**	**37500**	**59500**	**1800**	**2400**
110	**23122 MB/K W33**	180	56	2.0	**370**	**580**	**37500**	**59500**	**1800**	**2400**
120	**23124 MB W33**	200	62	2.0	**455**	**705**	**46500**	**71500**	**1600**	**2100**
120	**23124 MB/K W33**	200	62	2.0	**455**	**705**	**46500**	**71500**	**1600**	**2100**
130	**23126 MB W33**	210	64	2.0	**495**	**795**	**50500**	**81000**	**1500**	**2000**
130	**23126 MB/K W33**	210	64	2.0	**495**	**795**	**50500**	**81000**	**1500**	**2000**
140	**23128 MB W33**	225	68	2.1	**540**	**895**	**55000**	**91000**	**1400**	**1800**
140	**23128 MB/K W33**	225	68	2.1	**540**	**895**	**55000**	**91000**	**1400**	**1800**
150	**23130 MB W33**	250	80	2.1	**730**	**1190**	**74500**	**121000**	**1300**	**1700**
150	**23130 MB/K W33**	250	80	2.1	**730**	**1190**	**74500**	**121000**	**1300**	**1700**
160	**23132 MB W33**	270	86	2.1	**840**	**1370**	**85500**	**140000**	**1200**	**1600**
160	**23132 MB/K W33**	270	86	2.1	**840**	**1370**	**85500**	**140000**	**1200**	**1600**

Technical supplement

Cages		***Precision***	***Grease***
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

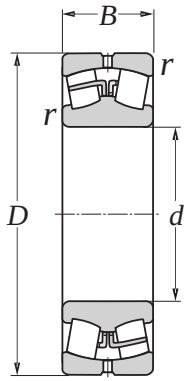


Equivalent radial load
dynamic
$Pr = XFr+YFa$

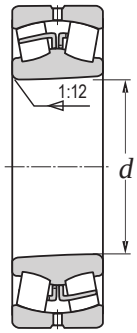
$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
110	155	2	0.32	2.12	3.15	2.07	4.30	-
110	155	2	0.32	2.12	3.15	2.07	-	4.16
120	170	2	0.31	2.17	3.24	2.13	5.40	-
120	170	2	0.31	2.17	3.24	2.13	-	5.22
130	190	2	0.31	2.17	3.24	2.13	7.70	-
130	190	2	0.31	2.17	3.24	2.13	-	7.46
140	200	2	0.30	2.23	3.32	2.18	8.47	-
140	200	2	0.30	2.23	3.32	2.18	-	8.20
152	213	2	0.30	2.25	3.35	2.20	10.20	-
152	213	2	0.30	2.25	3.35	2.20	-	9.86
162	238	2	0.32	2.11	3.15	2.06	15.60	-
162	238	2	0.32	2.11	3.15	2.06	-	15.10
172	258	2	0.32	2.11	3.15	2.07	19.80	-
172	258	2	0.32	2.11	3.15	2.07	-	19.20



Cylinrical bore

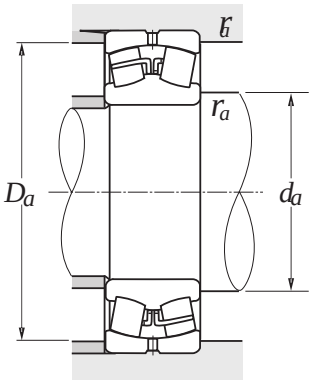


Tapered bore

Inner bore d mm	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ mm	Basic load ratings dynamic C_r	static C_{or}	dynamic C_r	static C_{or} kgf	Limiting speeds grease	oil min^{-1}
					kN					
90	**23218 MB W33**	160	52.4	2.0	**315**	**455**	**32500**	**46500**	**2200**	**2800**
90	**23218 MB/K W33**	160	52.4	2.0	**315**	**455**	**32500**	**46500**	**2200**	**2800**
100	**23220 MB W33**	180	60.3	2.1	**405**	**580**	**41500**	**59000**	**1900**	**2500**
100	**23220 MB/K W33**	180	60.3	2.1	**405**	**580**	**41500**	**59000**	**1900**	**2500**
110	**23222 MB W33**	200	69.8	2.1	**515**	**760**	**52500**	**77500**	**1700**	**2200**
110	**23222 MB/K W33**	200	69.8	2.1	**515**	**760**	**52500**	**77500**	**1700**	**2200**
120	**23224 MB W33**	215	76.0	2.1	**585**	**880**	**59500**	**89500**	**1500**	**2000**
120	**23224 MB/K W33**	215	76.0	2.1	**585**	**880**	**59500**	**89500**	**1500**	**2000**
130	**23226 MB W33**	230	80.0	3.0	**685**	**1060**	**70000**	**108000**	**1500**	**1900**
130	**23226 MB/K W33**	230	80.0	3.0	**685**	**1060**	**70000**	**108000**	**1500**	**1900**
140	**23228 MB W33**	250	88.0	3.0	**805**	**1270**	**82000**	**129000**	**1300**	**1700**
140	**23228 MB/K W33**	250	88.0	3.0	**805**	**1270**	**82000**	**129000**	**1300**	**1700**

Technical supplement

Cages		***Precision***	***Grease***
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

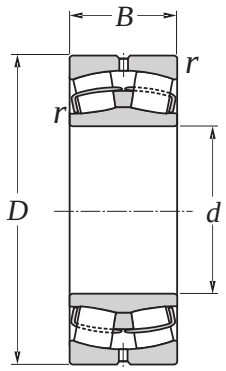


Equivalent radial load
dynamic
$Pr = XFr+YFa$

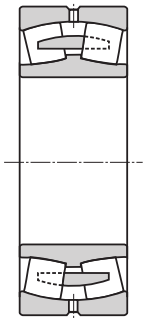
$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of e, Y_2 and Y_o see the tabla below.

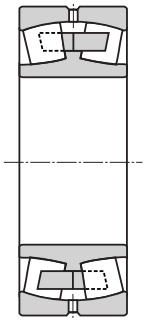
Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
100	150	2.0	0.33	2.04	3.03	1.99	4.45	-
100	150	2.0	0.33	2.04	3.03	1.99	-	4.32
112	168	2.0	0.34	1.98	2.94	1.93	6.47	-
112	168	2.0	0.34	1.98	2.94	1.93	-	6.28
122	188	2.0	0.35	1.91	2.84	1.86	9.71	-
122	188	2.0	0.35	1.91	2.84	1.86	-	9.43
132	203	2.0	0.36	1.89	2.82	1.85	12.10	-
132	203	2.0	0.36	1.89	2.82	1.85	-	11.70
144	216	2.5	0.35	1.92	2.86	1.88	14.30	-
144	216	2.5	0.35	1.92	2.86	1.88	-	13.90
154	236	2.5	0.36	1.90	2.83	1.86	18.80	-
154	236	2.5	0.36	1.90	2.83	1.86	-	18.20



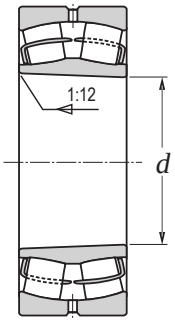
Cylindrical bore
CC Type



Cylindrical bore
CA Type



Cylindrical bore
MB Type

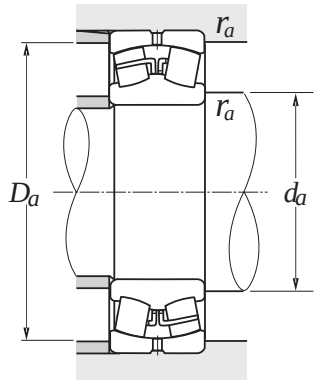


Tapered bore
Taper 1:30

Inner bore d mm	Bearing numbers	Boundary dimensions D	B	$r_{s\,min}$ mm	Basic load ratings dynamic C_r kN	static C_{or} kN	dynamic C_r kgf	static C_{or} kgf	Limiting speeds grease min^{-1}	oil min^{-1}
110	**24022 MB W33**	170	60	1.2	**415**	**620**	**42330**	**63240**	**2400**	**3600**
110	**24022 MB/K W33**	170	60	1.2	**415**	**620**	**42330**	**63240**	**2400**	**3600**
120	**24024 MB W33**	180	60	2.0	**390**	**670**	**39500**	**68500**	**1800**	**2300**
120	**24024 MB/K W33**	180	60	2.0	**390**	**670**	**39500**	**68500**	**1800**	**2300**
130	**24026 MB W33**	200	69	2.0	**505**	**895**	**51500**	**91000**	**1600**	**2100**
130	**24026 MB/K W33**	200	69	2.0	**505**	**895**	**51500**	**91000**	**1600**	**2100**
140	**24028 MB W33**	210	69	2.0	**510**	**945**	**52000**	**96500**	**1500**	**1900**
140	**24028 MB/K W33**	210	69	2.0	**510**	**945**	**52000**	**96500**	**1500**	**1900**
150	**24030 MB W33**	225	75	2.1	**585**	**1060**	**59500**	**108000**	**1400**	**1800**
150	**24030 MB/K W33**	225	75	2.1	**585**	**1060**	**59500**	**108000**	**1400**	**1800**
160	**24032 MB W33**	240	80	2.1	**650**	**1200**	**66500**	**122000**	**1300**	**1700**
160	**24032 MB/K W33**	240	80	2.1	**650**	**1200**	**66500**	**122000**	**1300**	**1700**

Technical supplement

Cages		***Precision***	***Grease***
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

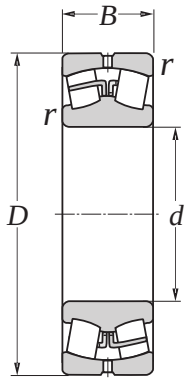


Equivalent radial load
dynamic
$Pr = XFr+YFa$

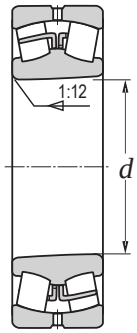
$\frac{Fa}{Fr}$ d e		$\frac{Fa}{Fr}$ e	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
119	161	2	0.33	2.00	3.00	2.00	5.00	-
119	161	2	0.33	2.00	3.00	2.00	-	4.90
130	170	2	0.33	2.06	3.07	2.02	5.48	-
130	170	2	0.33	2.06	3.07	2.02	-	5.39
140	190	2	0.34	1.98	2.95	1.94	8.08	-
140	190	2	0.34	1.98	2.95	1.94	-	7.95
150	200	2	0.32	2.09	3.12	2.05	8.57	-
150	200	2	0.32	2.09	3.12	2.05	-	8.43
162	213	2	0.33	2.06	3.07	2.02	10.70	-
162	213	2	0.33	2.06	3.07	2.02	-	10.50
172	228	2	0.32	2.10	3.13	2.06	13.00	-
172	228	2	0.32	2.10	3.13	2.06	-	12.80



Cylinrical bore

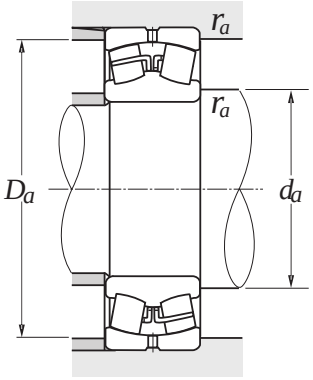


Tapered bore

Inner bore d	Bearing numbers	Boundary dimensions			Basic load ratings dynamic	static	dynamic	static	Limiting speeds	
		D	B	$r_{s\,min}$ [3]	C_r	C_{or}	C_r	C_{or}	grease	oil
mm		mm			kN		kgf		min^{-1}	
110	**24122 MB W33**	180	69	2.0	**450**	**755**	**46000**	**77000**	**1800**	**2400**
110	**24122 MB/K W33**	180	69	2.0	**450**	**755**	**46000**	**77000**	**1800**	**2400**
120	**24124 MB W33**	200	80	2.0	**575**	**945**	**58500**	**96500**	**1600**	**2100**
120	**24124 MB/K W33**	200	80	2.0	**575**	**945**	**58500**	**96500**	**1600**	**2100**
130	**24126 MB W33**	210	80	2.0	**585**	**995**	**60000**	**102000**	**1500**	**2000**
130	**24126 MB/K W33**	210	80	2.0	**585**	**995**	**60000**	**102000**	**1500**	**2000**
140	**24128 MB W33**	225	85	2.1	**670**	**1150**	**68500**	**117000**	**1400**	**1800**
140	**24128 MB/K W33**	225	85	2.1	**670**	**1150**	**68500**	**117000**	**1400**	**1800**
150	**24130 MB W33**	250	100	2.1	**885**	**1520**	**90500**	**155000**	**1300**	**1700**
150	**24130 MB/K W33**	250	100	2.1	**885**	**1520**	**90500**	**155000**	**1300**	**1700**
160	**24132 MB W33**	270	109	2.1	**1040**	**1780**	**106000**	**181000**	**1200**	**1600**
160	**24132 MB/K W33**	270	109	2.1	**1040**	**1780**	**106000**	**181000**	**1200**	**1600**

Technical supplement

Cages		***Precision***	***Grease***
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	MB		

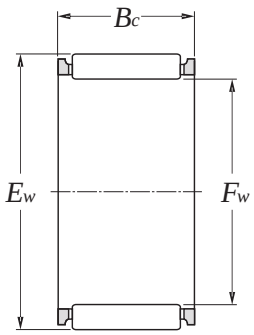


Equivalent radial load
dynamic
$Pr = XFr+YFa$

$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	Y_1	0.67	Y_2

Static
$Pr = Fr+YoFa$
For values of $e, Y2$ and Yo see the tabla below.

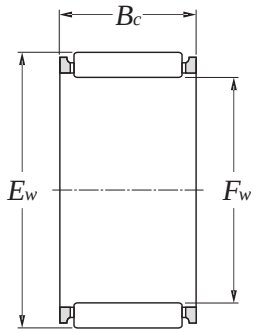
Abutment and fillet dimensions			Constant	Axial load factors			Weight	
							cylindrical bore	tapered bore
d_a min	D_a max	r_{as} max	e	Y_1	Y_2	Y_0	kgs.	
	mm							
120	170	2	0.38	1.76	2.63	1.73	7.07	-
120	170	2	0.38	1.76	2.63	1.73	-	6.96
130	190	2	0.40	1.68	2.50	1.64	10.30	-
130	190	2	0.40	1.68	2.50	1.64	-	10.10
140	200	2	0.38	1.78	2.65	1.74	11.00	-
140	200	2	0.38	1.78	2.65	1.74	-	10.80
152	213	2	0.38	1.80	2.68	1.76	13.30	-
152	213	2	0.38	1.80	2.68	1.76	-	13.10
162	238	2	0.40	1.69	2.51	1.65	20.20	-
162	238	2	0.40	1.69	2.51	1.65	-	20.00
172	258	2	0.40	1.67	2.48	1.63	26.00	-
172	258	2	0.40	1.67	2.48	1.63	-	25.60



Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
3	K 3x6x7	6	7 $^{-0.2}_{-0.55}$	1460	970	149	99	33000	50000	0.0004
4	K 4x7x7	7	7 $^{-0.2}_{-0.55}$	1770	1270	180	129	30000	45000	0.0005
5	K 5x8x8	8	8 $^{-0.2}_{-0.55}$	2640	2190	269	224	27000	40000	0.0007
5	K 5x8x10	8	10 $^{-0.2}_{-0.55}$	2720	2250	277	230	27000	40000	0.0009
6	K 6x9x8	9	8 $^{-0.2}_{-0.55}$	2660	2280	272	233	25000	37000	0.0009
6	K 6x9x10	9	10 $^{-0.2}_{-0.55}$	3400	3150	345	320	25000	37000	0.0011
6	K 6x10x13	10	13 $^{-0.2}_{-0.55}$	4400	3700	450	380	25000	37000	0.0019
7	K 7x10x8	10	8 $^{-0.2}_{-0.55}$	2670	2350	272	239	23000	34000	0.0009
7	K 7x10x10	10	10 $^{-0.2}_{-0.55}$	3400	3200	345	330	23000	34000	0.0011
8	K 8x11x8	11	8 $^{-0.2}_{-0.55}$	3150	3000	320	305	21000	32000	0.0011
8	K 8x11x10	11	10 $^{-0.2}_{-0.55}$	4000	4100	410	420	21000	32000	0.0013
8	K 8x11x13	11	13 $^{-0.2}_{-0.55}$	4850	5200	495	535	21000	32000	0.0026
8	K 8x12x10	12	10 $^{-0.2}_{-0.55}$	4650	4150	475	425	21000	32000	0.0020
8	K 8x12x12	12	12 $^{-0.2}_{-0.55}$	5600	5300	570	540	21000	32000	0.0034
8	K 8x12x13	12	13 $^{-0.2}_{-0.55}$	5600	5300	570	540	21000	32000	0.0036
9	K 9x12x10	12	10 $^{-0.2}_{-0.55}$	4550	5000	465	510	20000	30000	0.0015
9	K 9x12x13	12	13 $^{-0.2}_{-0.55}$	5500	6400	560	650	20000	30000	0.0021
10	K 10x13x10	13	10 $^{-0.2}_{-0.55}$	4550	5100	460	520	19000	28000	0.0016
10	K 10x13x13	13	13 $^{-0.2}_{-0.55}$	5450	6450	555	660	19000	28000	0.0031
10	K 10x14x8	14	8 $^{-0.2}_{-0.55}$	4300	3950	435	405	19000	28000	0.0027
10	K 10x14x10	14	10 $^{-0.2}_{-0.55}$	5500	5450	560	555	19000	28000	0.0034
10	K 10x14x13	14	13 $^{-0.2}_{-0.55}$	6600	6900	675	705	19000	28000	0.0044
10	K 10x16x12	16	12 $^{-0.2}_{-0.55}$	7100	5950	720	610	19000	28000	0.0066
11	K 11x14x10	14	10 $^{-0.2}_{-0.55}$	5050	6000	515	615	18000	27000	0.0028

Technical supplement

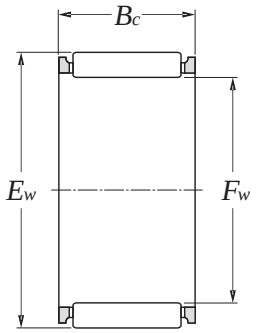
Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Inner bore Fw	Bearing number	Principal dimensions Ew	Bc	Basic load ratings dynamic C	static Co	dynamic C	static Co	Max runout speed grease	oil	Weight
mm		mm		N		kgf		r/min		kg.
12	K 12x15x9	15	9 $^{-0.2}_{-0.55}$	4450	5250	455	535	17000	26000	0.0027
12	K 12x15x13	15	13 $^{-0.2}_{-0.55}$	6000	7700	615	785	17000	26000	0.0038
12	K 12x16x8	16	8 $^{-0.2}_{-0.55}$	4850	4900	495	500	17000	26000	0.0034
12	K 12x16x13	16	13 $^{-0.2}_{-0.55}$	7500	8500	765	870	17000	26000	0.0055
12	K 12x17x13	17	13 $^{-0.2}_{-0.55}$	9000	9400	920	960	17000	26000	0.0075
12	K 12x18x12	18	12 $^{-0.2}_{-0.55}$	8650	8000	880	815	17000	26000	0.0084
14	K 14x17x10	17	10 $^{-0.2}_{-0.55}$	5400	7050	550	720	16000	24000	0.0033
14	K 14x18x10	18	10 $^{-0.2}_{-0.55}$	6900	8000	705	815	16000	24000	0.0046
14	K 14x18x11	18	11 $^{-0.2}_{-0.55}$	7600	9050	775	925	16000	24000	0.0053
14	K 14x18x13	18	13 $^{-0.2}_{-0.55}$	8300	10100	845	1030	16000	24000	0.0063
14	K 14x18x17	18	17 $^{-0.2}_{-0.55}$	10900	14400	1120	1470	16000	24000	0.0081
14	K 14x19x13	19	13 $^{-0.2}_{-0.55}$	8950	9650	915	985	16000	24000	0.0080
14	K 14x20x12	20	12 $^{-0.2}_{-0.55}$	9350	9150	955	930	16000	24000	0.0095
14	K 14x20x17	20	17 $^{-0.2}_{-0.55}$	13500	14600	1370	1490	16000	24000	0.0140
15	K 15x18x14	18	14 $^{-0.2}_{-0.55}$	7850	11600	800	1190	15000	23000	0.0060
15	K 15x19x17	19	17 $^{-0.2}_{-0.55}$	10900	14600	1110	1490	15000	23000	0.0090
15	K 15x20x13	20	13 $^{-0.2}_{-0.55}$	10100	11500	1030	1170	15000	23000	0.0088
15	K 15x21x15	21	15 $^{-0.2}_{-0.55}$	11900	12500	1210	1280	15000	23000	0.0130
15	K 15x21x21	21	21 $^{-0.2}_{-0.55}$	16500	19100	1680	1950	15000	23000	0.0170
16	K 16x20x10	20	10 $^{-0.2}_{-0.55}$	7500	9250	765	945	15000	23000	0.0057
16	K 16x20x11	20	11 $^{-0.2}_{-0.55}$	8300	10500	845	1070	15000	23000	0.0061
16	K 16x20x13	20	13 $^{-0.2}_{-0.55}$	9050	11800	925	1200	15000	23000	0.0071
16	K 16x22x12	22	12 $^{-0.2}_{-0.55}$	11700	12500	1190	1280	15000	23000	0.0100
16	K 16x22x17	22	17 $^{-0.2}_{-0.55}$	14400	16400	1470	1670	15000	23000	0.0150

Technical supplement

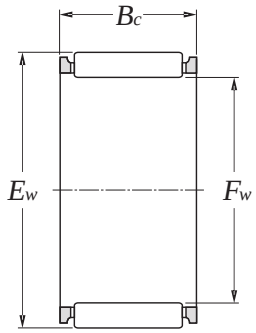
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
16	K 16x22x20	22	20 $^{-0.2}_{-0.55}$	16000	18800	1640	1920	15000	23000	0.0170
17	K 17x21x15	21	15 $^{-0.2}_{-0.55}$	10400	14400	1060	1460	15000	22000	0.0089
17	K 17x21x17	21	17 $^{-0.2}_{-0.55}$	11800	16900	1210	1720	15000	22000	0.0095
17	K 17x22x20	22	20 $^{-0.2}_{-0.55}$	14700	19200	1500	1960	15000	22000	0.0150
17	K 17x23x17	23	17 $^{-0.2}_{-0.55}$	14400	16500	1460	1690	15000	22000	0.0160
18	K 18x22x10	22	10 $^{-0.2}_{-0.55}$	7400	9400	755	955	14000	21000	0.0061
18	K 18x22x13	22	13 $^{-0.2}_{-0.55}$	8900	11900	910	1210	14000	21000	0.0077
18	K 18x22x17	22	17 $^{-0.2}_{-0.55}$	11700	17000	1200	1730	14000	21000	0.0110
18	K 18x24x12	24	12 $^{-0.2}_{-0.55}$	12300	13800	1250	1410	14000	21000	0.0120
18	K 18x24x13	24	13 $^{-0.2}_{-0.55}$	11600	12800	1180	1300	14000	21000	0.0130
18	K 18x24x20	24	20 $^{-0.2}_{-0.55}$	17000	20900	1730	2130	14000	21000	0.0190
18	K 18x25x17	25	17 $^{-0.2}_{-0.55}$	18000	20400	1830	2080	14000	21000	0.0190
18	K 18x25x22	25	22 $^{-0.2}_{-0.55}$	22100	26600	2250	2710	14000	21000	0.0240
19	K 19x23x13	23	13 $^{-0.2}_{-0.55}$	9650	13500	985	1370	14000	21000	0.0082
19	K 19x23x17	23	17 $^{-0.2}_{-0.55}$	12700	19200	1300	1960	14000	21000	0.0110
20	K 20x24x11	24	11 $^{-0.2}_{-0.55}$	9500	13400	970	1370	13000	20000	0.0072
20	K 20x26x12	26	12 $^{-0.2}_{-0.55}$	12900	15100	1320	1540	13000	20000	0.0130
20	K 20x28x25	28	25 $^{-0.2}_{-0.55}$	27100	32500	2760	3300	13000	20000	0.0370
21	K 21x25x13	25	13 $^{-0.2}_{-0.55}$	10300	15100	1050	1540	13000	19000	0.0090
21	K 21x25x17	25	17 $^{-0.2}_{-0.55}$	13600	21500	1380	2200	13000	19000	0.0120
22	K 22x26x13	26	13 $^{-0.2}_{-0.55}$	10200	15200	1040	1550	12000	18000	0.0094
22	K 22x27x20	27	20 $^{-0.2}_{-0.55}$	17500	25900	1780	2640	12000	18000	0.0200
22	K 22x28x17	28	17 $^{-0.2}_{-0.55}$	17700	23300	1810	2380	12000	18000	0.0200
22	K 22x30x15	30	15 $^{-0.2}_{-0.55}$	19300	21700	1970	2210	12000	18000	0.0220

Technical supplement

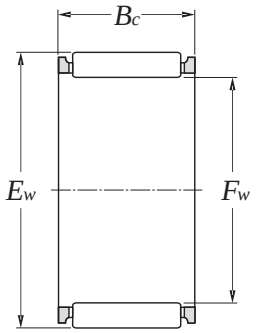
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
23	K 23x28x24	28	24 $^{-0.2}_{-0.55}$	19800	31000	2020	3150	11000	17000	0.0230
24	K 24x28x13	28	13 $^{-0.2}_{-0.55}$	10800	16800	1100	1710	11000	17000	0.0100
24	K 24x28x17	28	17 $^{-0.2}_{-0.55}$	14300	23900	1460	2440	11000	17000	0.0130
24	K 24x29x13	29	13 $^{-0.2}_{-0.55}$	12300	16900	1250	1720	11000	17000	0.0120
24	K 24x30x17	30	17 $^{-0.2}_{-0.55}$	18400	25200	1880	2570	11000	17000	0.0220
25	K 25x29x10	29	10 $^{-0.2}_{-0.55}$	8950	13300	910	1350	11000	16000	0.0083
25	K 25x29x13	29	13 $^{-0.2}_{-0.55}$	10800	16900	1100	1720	11000	16000	0.0100
25	K 25x30x13	30	13 $^{-0.2}_{-0.55}$	13200	18800	1350	1920	11000	16000	0.0130
25	K 25x31x13	31	13 $^{-0.2}_{-0.55}$	15200	19900	1550	2030	11000	16000	0.0160
25	K 25x31x14	31	14 $^{-0.2}_{-0.55}$	16500	22100	1680	2250	11000	16000	0.0180
25	K 25x31x17	31	17 $^{-0.2}_{-0.55}$	18300	25300	1870	2580	11000	16000	0.0220
25	K 25x31x21	31	21 $^{-0.2}_{-0.55}$	22500	33000	2290	3350	11000	16000	0.0260
26	K 26x30x13	30	13 $^{-0.2}_{-0.55}$	11800	19200	1200	1960	10000	15000	0.0110
26	K 26x30x17	30	17 $^{-0.2}_{-0.55}$	15500	27400	1580	2790	10000	15000	0.0150
26	K 26x34x22	34	22 $^{-0.2}_{-0.55}$	24200	30000	2470	3050	10000	15000	0.0410
28	K 28x32x17	32	17 $^{-0.2}_{-0.55}$	15300	27500	1560	2810	9500	14000	0.0170
28	K 28x32x21	32	21 $^{-0.2}_{-0.55}$	18700	35500	1910	3650	9500	14000	0.0200
28	K 28x33x13	33	13 $^{-0.2}_{-0.55}$	13900	20900	1420	2130	9500	14000	0.0150
28	K 28x33x27	33	27 $^{-0.2}_{-0.55}$	28300	52000	2890	5300	9500	14000	0.0320
28	K 28x34x14	34	14 $^{-0.2}_{-0.55}$	17500	24800	1790	2530	9500	14000	0.0200
28	K 28x34x17	34	17 $^{-0.2}_{-0.55}$	18100	25800	1850	2630	9500	14000	0.0240
28	K 28x35x16	35	16 $^{-0.2}_{-0.55}$	21200	28400	2160	2900	9500	14000	0.0290
28	K 28x35x18	35	18 $^{-0.2}_{-0.55}$	21500	28900	2190	2950	9500	14000	0.0310
29	K 29x34x27	34	27 $^{-0.2}_{-0.55}$	28100	52000	2870	5300	9500	14000	0.0330

Technical supplement

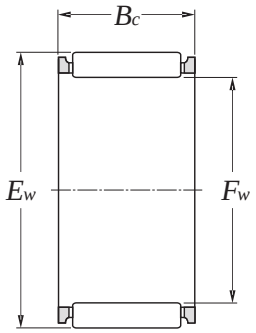
Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
30	K 30x37x16	37	16 $^{-0.2}_{-0.55}$	21900	30500	2230	3100	8500	13000	0.029
30	K 30x37x18	37	18 $^{-0.2}_{-0.55}$	23300	33000	2370	3350	8500	13000	0.034
30	K 30x38x18	38	18 $^{-0.2}_{-0.55}$	25000	33000	2550	3350	8500	13000	0.036
32	K 32x37x13	37	13 $^{-0.2}_{-0.55}$	14500	23000	1480	2350	8500	13000	0.018
32	K 32x38x26	38	26 $^{-0.2}_{-0.55}$	31500	54000	3200	5550	8500	13000	0.041
32	K 32x39x16	39	16 $^{-0.2}_{-0.55}$	22600	32000	2310	3300	8500	13000	0.034
32	K 32x39x18	39	18 $^{-0.2}_{-0.55}$	24000	35000	2450	3550	8500	13000	0.037
35	K 35x40x13	40	13 $^{-0.2}_{-0.55}$	15200	25100	1550	2560	7500	11000	0.019
35	K 35x40x17	40	17 $^{-0.2}_{-0.55}$	20000	36000	2040	3650	7500	11000	0.025
35	K 35x41x14	41	14 $^{-0.2}_{-0.55}$	19400	30500	1980	3100	7500	11000	0.026
35	K 35x41x15	41	15 $^{-0.2}_{-0.55}$	20900	33500	2130	3400	7500	11000	0.027
35	K 35x42x16	42	16 $^{-0.2}_{-0.55}$	24100	36000	2450	3650	7500	11000	0.035
35	K 35x42x18	42	18 $^{-0.2}_{-0.55}$	24700	37000	2510	3750	7500	11000	0.039
35	K 35x42x20	42	20 $^{-0.2}_{-0.55}$	28500	44500	2910	4550	7500	11000	0.041
35	K 35x42x30	42	30 $^{-0.2}_{-0.55}$	39500	68000	4050	6950	7500	11000	0.062
37	K 37x42x13	42	13 $^{-0.2}_{-0.55}$	15900	27100	1620	2770	7500	11000	0.021
37	K 37x44x18	44	18 $^{-0.2}_{-0.55}$	26300	41000	2680	4150	7500	11000	0.042
38	K 38x43x17	43	17 $^{-0.2}_{-0.55}$	20900	38500	2130	3950	7500	11000	0.026
38	K 38x43x27	43	27 $^{-0.2}_{-0.55}$	32000	67500	3300	6900	7500	11000	0.043
38	K 38x46x32	46	32 $^{-0.2}_{-0.55}$	54000	95500	5500	9700	7500	11000	0.073
40	K 40x45x13	45	13 $^{-0.2}_{-0.55}$	16500	29200	1680	2980	6500	10000	0.022
40	K 40x45x17	45	17 $^{-0.2}_{-0.55}$	21800	41500	2220	4250	6500	10000	0.027
40	K 40x45x21	45	21 $^{-0.2}_{-0.55}$	26700	54000	2720	5500	6500	10000	0.037
40	K 40x45x27	45	27 $^{-0.2}_{-0.55}$	33500	72500	3400	7400	6500	10000	0.044

Technical supplement

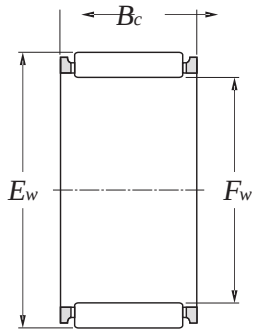
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
80	K 80x86x20	86	20 $^{-0.2}_{-0.55}$	39000	98000	4000	10000	3300	5000	0.077
80	K 80x86x30	86	30 $^{-0.2}_{-0.55}$	57000	159000	5800	16200	3300	5000	0.110
80	K 80x88x23	88	23 $^{-0.2}_{-0.55}$	53000	118000	5400	12100	3300	5000	0.125
80	K 80x88x26	88	26 $^{-0.2}_{-0.55}$	61000	142000	6250	14500	3300	5000	0.131
80	K 80x88x30	88	30 $^{-0.2}_{-0.55}$	69000	66000	7050	17000	3300	5000	0.157
85	K 85x92x30	92	30 $^{-0.2}_{-0.55}$	66000	176000	6750	18000	3100	4700	0.142
85	K 85x93x27	93	27 $^{-0.2}_{-0.55}$	64000	153000	6500	15600	3100	4700	0.145
85	K 85x93x30	93	30 $^{-0.2}_{-0.55}$	71000	175000	7200	17900	3100	4700	0.160
90	K 90x97x20	97	20 $^{-0.2}_{-0.55}$	46000	113000	4700	11500	2900	4400	0.103
90	K 90x97x30	97	30 $^{-0.2}_{-0.55}$	67500	184000	6850	18700	2900	4400	0.151
90	K 90x98x26	98	26 $^{-0.2}_{-0.55}$	64000	157000	6550	16000	2900	4400	0.148
90	K 90x98x27	98	27 $^{-0.2}_{-0.55}$	64000	157000	6550	16000	2900	4400	0.150
90	K 90x98x30	98	30 $^{-0.2}_{-0.55}$	72500	184000	7400	18800	2900	4400	0.172
95	K 95x102x21	102	21 $^{-0.2}_{-0.55}$	48000	122000	4900	12400	2800	4200	0.115
95	K 95x102x31	102	31 $^{-0.2}_{-0.55}$	70500	199000	7200	20300	2800	4200	0.172
95	K 95x103x27	103	27 $^{-0.2}_{-0.55}$	65500	165000	6700	16800	2800	4200	0.159
95	K 95x103x30	103	30 $^{-0.2}_{-0.55}$	74000	193000	7550	19600	2800	4200	0.165
100	K 100x107x21	107	21 $^{-0.3}_{-0.65}$	49000	127000	5000	12900	2700	4000	0.120
100	K 100x107x31	107	31 $^{-0.3}_{-0.65}$	71500	207000	7300	21100	2700	4000	0.173
100	K 100x108x27	108	27 $^{-0.3}_{-0.65}$	61000	153000	6250	15600	2700	4000	0.176
100	K 100x108x30	108	30 $^{-0.3}_{-0.65}$	76000	201000	7700	20500	2700	4000	0.190
105	K 105x112x21	112	21 $^{-0.3}_{-0.65}$	48500	127000	4950	12900	2500	3800	0.130
105	K 105x112x31	112	31 $^{-0.3}_{-0.65}$	71000	207000	7250	21100	2500	3800	0.176
105	K 105x113x30	113	30 $^{-0.3}_{-0.65}$	77500	210000	7900	21400	2500	3800	0.198

Technical supplement

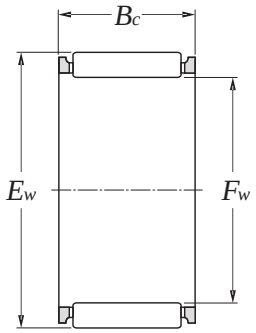
Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Inner bore Fw	Bearing number	Principal dimensions Ew	Bc	Basic load ratings dynamic C	static Co	dynamic C	static Co	Max runout speed grease	oil	Weight
mm		mm		N		kgf		r/min		kg.
110	K 110x117x24	117	24 $^{-0.3}_{-0.65}$	54500	149000	5550	15200	2400	3600	0.145
110	K 110x117x34	117	34 $^{-0.3}_{-0.65}$	77500	235000	7900	24000	2400	3600	0.205
110	K 110x118x30	118	30 $^{-0.3}_{-0.65}$	79000	219000	8050	22300	2400	3600	0.217
115	K 115x123x27	123	27 $^{-0.3}_{-0.65}$	64000	170000	6550	17300	2300	3500	0.200
115	K 115x125x34	125	34 $^{-0.3}_{-0.65}$	95000	241000	9700	24600	2300	3500	0.330
120	K 120x127x24	127	24 $^{-0.3}_{-0.65}$	57500	165000	5850	16800	2200	3300	0.160
120	K 120x127x34	127	34 $^{-0.3}_{-0.65}$	82000	260000	8350	26600	2200	3300	0.235
125	K 125x133x35	133	35 $^{-0.3}_{-0.65}$	87000	260000	8900	26500	2100	3200	0.275
125	K 125x135x34	135	34 $^{-0.3}_{-0.65}$	100000	265000	10200	27000	2100	3200	0.350
130	K 130x137x24	137	24 $^{-0.3}_{-0.65}$	59000	175000	6000	17900	2100	3100	0.170
130	K 130x137x34	137	34 $^{-0.3}_{-0.65}$	84500	277000	8600	28300	2100	3100	0.240
135	K 135x143x35	143	35 $^{-0.3}_{-0.65}$	92500	288000	9450	29400	2000	3000	0.300
135	K 135x150x38	150	38 $^{-0.3}_{-0.65}$	145000	325000	14800	33500	2000	3000	0.590
145	K 145x153x26	153	26 $^{-0.3}_{-0.65}$	72000	214000	7350	21800	1900	2800	0.250
145	K 145x153x28	153	28 $^{-0.3}_{-0.65}$	80500	247000	8200	25200	1900	2800	0.252
145	K 145x153x36	153	36 $^{-0.3}_{-0.65}$	100000	325000	10200	33000	1900	2800	0.335
150	K 150x160x46	160	46 $^{-0.3}_{-0.65}$	149000	470000	15200	48000	1800	2700	0.550
155	K 155x163x26	163	26 $^{-0.3}_{-0.65}$	73500	224000	7500	22800	1700	2600	0.270
155	K 155x163x36	163	36 $^{-0.3}_{-0.65}$	102000	340000	10400	34500	1700	2600	0.355
160	K 160x170x46	170	46 $^{-0.3}_{-0.65}$	155000	505000	15800	51500	1700	2500	0.570
165	K 165x173x26	173	26 $^{-0.3}_{-0.65}$	79000	251000	8050	25600	1600	2400	0.290
165	K 165x173x32	173	32 $^{-0.3}_{-0.65}$	97000	330000	9900	33500	1600	2400	0.340
165	K 165x173x36	173	36 $^{-0.3}_{-0.65}$	109000	380000	11100	39000	1600	2400	0.375
170	K 170x180x46	180	46 $^{-0.3}_{-0.65}$	160000	540000	16400	55000	1600	2400	0.620

Technical supplement

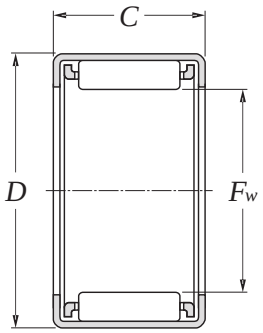
Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



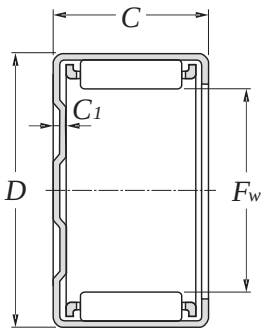
Inner bore Fw	Bearing number	Principal dimensions		Basic load ratings				Max runout speed		Weight
				dynamic	static	dynamic	static	grease	oil	
		Ew	Bc	C	Co	C	Co			
mm		mm		N		kgf		r/min		kg.
175	K 175x183x32	183	32 $^{-0.3}_{-0.65}$	101000	350000	10300	35500	1500	2300	0.360
185	K 185x195x37	195	37 $^{-0.3}_{-0.65}$	131000	425000	13300	43500	1500	2200	0.560
195	K 195x205x37	205	37 $^{-0.3}_{-0.65}$	135000	450000	13800	46000	1400	2100	0.620
210	K 210x220x42	220	42 $^{-0.3}_{-0.65}$	156000	560000	15900	57000	1300	1900	0.740
220	K 220x230x42	230	42 $^{-0.3}_{-0.65}$	161000	590000	16400	60000	1200	1800	0.790
240	K 240x250x42	250	42 $^{-0.3}_{-0.65}$	167000	635000	17000	64500	1100	1700	0.850
265	K 265x280x50	280	50 $^{-0.3}_{-0.65}$	256000	850000	26100	87000	1000	1500	1.810
285	K 285x300x50	300	50 $^{-0.3}_{-0.65}$	268000	930000	27300	94500	950	1400	1.970

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type HK

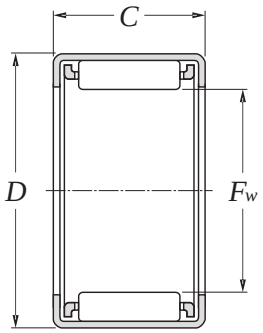


Type BK

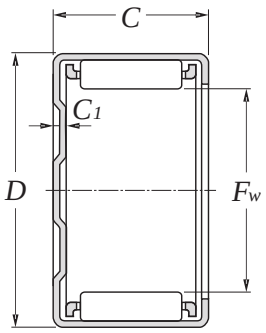
Inner bore Fw	Bearing number		Principal dimensions			Basic load ratings				Max runout speed		Appropriate inner ring	Weight
						dynamic	static	dynamic	static	grease	oil		
	Open	Closed	D	C 0/-0.2	C1 max	C	Co	C	Co				
mm	end design	end design		mm		N		kgf		r/min		(as a reference)	kg.
3	HK 0306	-	6.5	6	-	1250	835	128	85	33000	50000	-	0.0006
3	-	BK 0306	6.5	6	0.8	1250	835	128	85	33000	50000	-	0.0007
4	HK 0408	-	8.0	8	-	1770	1270	180	129	30000	45000	-	0.0016
4	-	BK 0408	8.0	8	1.6	1770	1270	180	129	30000	45000	-	0.0018
5	HK 0509	-	9.0	9	-	2640	2190	269	224	27000	40000	-	0.0019
5	-	BK 0509	9.0	9	1.6	2640	2190	269	224	27000	40000	-	0.0021
6	HK 0609	-	10.0	9	-	2660	2280	272	233	25000	37000	-	0.0022
6	-	BK 0609	10.0	9	1.6	2660	2280	272	233	25000	37000	-	0.0024
7	HK 0709	-	11.0	9	-	3400	3250	345	330	23000	34000	-	0.0025
7	-	BK 0709	11.0	9	1.6	3400	3250	345	330	23000	34000	-	0.0027
8	HK 0810	-	12.0	10	-	3850	3950	395	400	20000	30000	IR 5x8x12	0.0032
8	-	BK 0810	12.0	10	1.6	3850	3950	395	400	20000	30000	IR 5x8x12	0.0034
9	HK 0910	-	13.0	10	-	4600	5050	465	515	18000	27000	IR 6x9x12	0.0035
9	-	BK 0910	13.0	10	1.6	4600	5050	465	515	18000	27000	IR 6x9x12	0.0039
9	HK 0912	-	13.0	12	-	5650	6650	575	680	18000	27000	IR 6x9x12	0.0042
9	-	BK 0912	13.0	12	1.6	5650	6650	575	680	18000	27000	IR 6x9x12	0.0045
10	HK 1010	-	14.0	10	-	4500	5100	460	520	16000	24000	IR 7x10x10.5	0.0038
10	-	BK 1010	14.0	10	1.6	4500	5100	460	520	16000	24000	IR 7x10x10.5	0.0042
10	HK 1012	-	14.0	12	-	5900	7250	605	735	16000	24000	IR 7x1x16	0.0045
10	-	BK 1012	14.0	12	1.6	5900	7250	605	735	16000	24000	IR 7x10x16	0.0050
10	HK 1015	-	14.0	15	-	7100	9150	725	935	16000	24000	IR 7x10x16	0.0056
10	-	BK 1015	14.0	15	1.6	7100	9150	725	935	16000	24000	IR 7x10x16	0.0062
12	HK 1210	-	16.0	10	-	5050	6250	515	635	13000	20000	IR 8x12x10.5	0.0046
12	-	BK 1210	16.0	10	1.6	5050	6250	515	635	13000	20000	IR 8x12x10.5	0.0052

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type HK

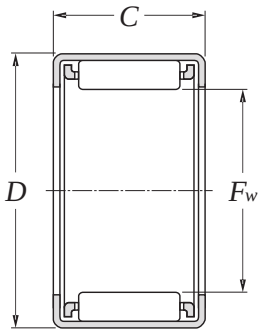


Type BK

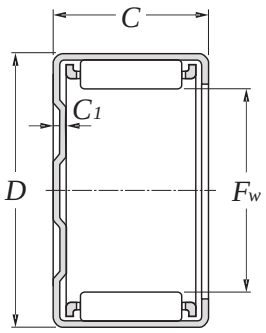
Inner bore	Bearing number		Principal dimensions			Basic load ratings				Max runout speed		Appropriate inner ring	Weight
						dynamic	static	dynamic	static	grease	oil		
Fw	Open	Closed	D	C 0/-0.2	C1 max	C	Co	C	Co				
mm	end design	end design		mm		N		kgf		r/min		(as a reference)	kg.
12	HK 1212	-	18	12	-	6600	7300	675	745	13000	20000	IR 8x12x12.5	0.0091
12	-	BK 1212	18	12	2.7	6600	7300	675	745	13000	20000	IR 8x12x12.5	0.0100
13	HK 1312	-	19	12	-	7300	8450	745	865	12000	18000	IR10x13x12.5	0.0100
13	-	BK 1312	19	12	2.7	7300	8450	745	865	12000	18000	IR10x13x12.5	0.0110
14	HK 1412	-	20	12	-	7200	8500	735	865	11000	17000	IR 10x14x13	0.0110
14	-	BK 1412	20	12	2.7	7200	8500	735	865	11000	17000	IR 10x14x13	0.0120
14	HK 1416	-	20	16	-	10700	14000	1090	1430	11000	17000	-	0.0150
14	-	BK 1416	20	16	2.7	10700	14000	1090	1430	11000	17000	-	0.0160
15	HK 1512	-	21	12	-	7500	9100	765	930	11000	16000	IR 12x15x12.5	0.011
15	-	BK 1512	21	12	2.7	7500	9100	765	930	11000	16000	IR 12x15x12.5	0.013
15	HK 1516	-	21	16	-	10700	14400	1090	1470	11000	16000	IR 12x15x16.5	0.015
15	-	BK 1516	21	16	2.7	10700	14400	1090	1470	11000	16000	IR 12x15x16.5	0.017
16	HK 1612	-	22	12	-	7750	9700	795	990	10000	15000	IR 12x16x13	0.012
16	-	BK 1612	22	12	2.7	7750	9700	795	990	10000	15000	IR 12x16x13	0.014
16	HK 1616	-	22	16	-	11100	15300	1130	1570	10000	15000	IR 12x16x20	0.016
16	-	BK 1616	22	16	2.7	11100	15300	1130	1570	10000	15000	IR 12x16x20	0.018
17	HK 1712	-	23	12	-	8500	11100	865	1130	9500	14000	-	0.012
17	-	BK 1712	23	12	2.7	8500	11100	865	1130	9500	14000	-	0.015
18	HK 1812	-	24	12	-	8300	10900	845	1110	8500	13000	IR 15x18x12.5	0.013
18	-	BK 1812	24	12	2.7	8300	10900	845	1110	8500	13000	IR 15x18x12.5	0.015
18	HK 1816	-	24	16	-	11800	17300	1210	1760	8500	13000	IR 15x18x16.5	0.018
18	-	BK 1816	24	16	2.7	11800	17300	1210	1760	8500	13000	IR 15x18x16.5	0.020
20	HK 2012	-	26	12	-	9250	13000	945	1330	8000	12000	IR 15x20x13	0.014
20	-	BK 2012	26	12	2.7	9250	13000	945	1330	8000	12000	IR 15x20x13	0.017

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type HK

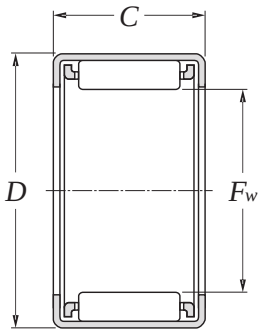


Type BK

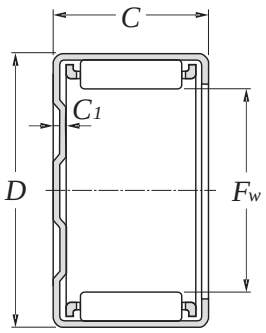
Inner bore	Bearing number		Principal dimensions			Basic load ratings				Max runout speed		Appropriate inner ring	Weight
						dynamic	static	dynamic	static	grease	oil		
Fw	Open	Closed	D	C 0/-0.2	C1 max	C	Co	C	Co				
mm	end design	end design	mm			N		kgf		r/min		(as a reference)	kg.
20	HK 2016	-	26	16	-	13000	20100	1320	2050	8000	12000	IR 17x20x16.5	0.019
20	-	BK 2016	26	16	2.7	13000	20100	1320	2050	8000	12000	IR 17x20x16.5	0.022
20	HK 2020	-	26	20	-	16400	27100	1670	2760	8000	12000	IR 17x20x20.5	0.024
20	-	BK 2020	26	20	2.7	16400	27100	1670	2760	8000	12000	IR 17x20x20.5	0.027
22	HK 2212	-	28	12	-	9750	14300	995	1460	7500	11000	IR 17x22x13	0.013
22	-	BK 2212	28	12	2.7	9750	14300	995	1460	7500	11000	IR 17x22x13	0.015
22	HK 2216	-	28	16	-	13600	22100	1390	2250	7500	11000	IR 17x22x18	0.021
22	-	BK 2216	28	16	2.7	13600	22100	1390	2250	7500	11000	IR 17x22x18	0.024
22	HK 2220	-	28	20	-	17200	29800	1760	3050	7500	11000	IR 17x22x20.5	0.026
22	-	BK 2220	28	20	2.7	17200	29800	1760	3050	7500	11000	IR 17x22x20.5	0.030
25	HK 2512	-	32	12	-	11800	16300	1200	1660	6500	9500	IR 20x25x12.5	0.021
25	-	BK 2512	32	12	2.7	11800	16300	1200	1660	6500	9500	IR 20x25x12.5	0.023
25	HK 2516	-	32	16	-	15900	24000	1620	2450	6500	9500	IR 20x25x17	0.027
25	-	BK 2516	32	16	2.7	15900	24000	1620	2450	6500	9500	IR 20x25x17	0.031
25	HK 2520	-	32	20	-	20300	33000	2070	3350	6500	9500	IR 20x25x20.5	0.034
25	-	BK 2520	32	20	2.7	20300	33000	2070	3350	6500	9500	IR 20x25x20.5	0.039
25	HK 2526	-	32	26	-	26400	46000	2690	4700	6500	9500	IR 20x25x26.5	0.045
25	-	BK 2526	32	26	2.7	26400	46000	2690	4700	6500	9500	IR 20x25x26.5	0.049
28	HK 2816	-	35	16	-	17300	27600	1760	2820	5500	8500	IR 22x28x17	0.030
28	-	BK 2816	35	16	2.7	17300	27600	1760	2820	5500	8500	IR 22x28x17	0.034
28	HK 2820	-	35	20	-	21300	36000	2170	3700	5500	8500	IR 22x28x20.5	0.038
28	-	BK 2820	35	20	2.7	21300	36000	2170	3700	5500	8500	IR 22x28x20.5	0.043
30	HK 3012	-	37	12	-	13000	19500	1320	1990	5500	8000	IR 25x30x12.5	0.024
30	-	BK 3012	37	12	2.7	13000	19500	1320	1990	5500	8000	IR 25x30x12.5	0.028

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type HK

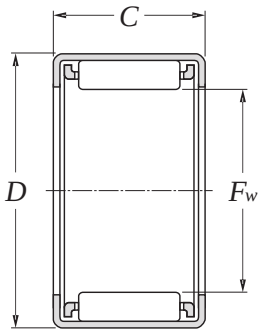


Type BK

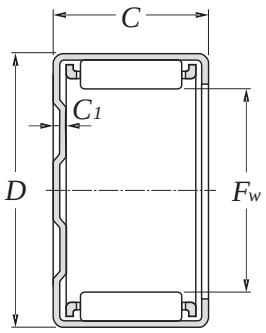
Inner bore	Bearing number		Principal dimensions			Basic load ratings				Max runout speed		Appropriate	Weight
						dynamic	static	dynamic	static	grease	oil	inner ring	
Fw	Open	Closed	D	C 0/-0.2	C1 max	C	Co	C	Co				
mm	end design	end design		mm		N		kgf		r/min		(as a reference)	kg.
50	HK 5025	-	58	25	-	38500	82000	3900	8400	3200	4800	IR 45x50x25.5	0.090
50	-	BK 5025	58	25	2.7	38500	82000	3900	8400	3200	4800	IR 45x50x25.5	0.109

Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type HK

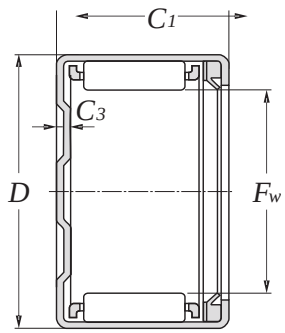


Type BK

Inner bore	Bearing number		Principal dimensions			Basic load ratings				Max runout speed		Appropriate	Weight
						dynamic	static	dynamic	static	grease	oil	inner ring	
Fw	Open	Closed	D	C 0/-0.2	C1 max	C	Co	C	Co				
mm	end design	end design		mm		N		kgf		r/min		(as a reference)	kg.
30	HK 3016	-	37	16	-	18100	30000	1850	3050	5500	8000	IR 25x30x17	0.032
30	-	BK 3016	37	16	2.7	18100	30000	1850	3050	5500	8000	IR 25x30x17	0.037
30	HK 3020	-	37	20	-	22300	39500	2280	4000	5500	8000	IR 25x30x20.5	0.040
30	-	BK 3020	37	20	2.7	22300	39500	2280	4000	5500	8000	IR 25x30x20.5	0.047
30	HK 3026	-	37	26	-	29100	55000	2960	5650	5500	8000	IR 25x30x26.5	0.053
30	-	BK 3026	37	26	2.7	29100	55000	2960	5650	5500	8000	IR 25x30x26.5	0.059
35	HK 3512	-	42	12	-	14000	22800	1430	2320	4700	7000	-	0.028
35	-	BK 3512	42	12	2.7	14000	22800	1430	2320	4700	7000	-	0.033
35	HK 3516	-	42	16	-	19700	35000	2000	3600	4700	7000	-	0.037
35	-	BK 3516	42	16	2.7	19700	35000	2000	3600	4700	7000	-	0.044
35	HK 3520	-	42	20	-	24800	47500	2530	4850	4700	7000	-	0.046
35	-	BK 3520	42	20	2.7	24800	47500	2530	4850	4700	7000	-	0.055
40	HK 4012	-	47	12	-	15100	26000	1540	2660	4000	6000	IR 35x40x12.5	0.031
40	-	BK 4012	47	12	2.7	15100	26000	1540	2660	4000	6000	IR 35x40x12.5	0.038
40	HK 4016	-	47	16	-	21100	40000	2150	4100	4000	6000	IR 35x40x17	0.041
40	-	BK 4016	47	16	2.7	21100	40000	2150	4100	4000	6000	IR 35x40x17	0.051
40	HK 4020	-	47	20	-	25900	52500	2650	5350	4000	6000	IR 35x40x20.5	0.052
40	-	BK 4020	47	20	2.7	25900	52500	2650	5350	4000	6000	IR 35x40x20.5	0.064
45	HK 4516	-	52	16	-	21600	43000	2210	4400	3700	5500	IR 40x45x17	0.046
45	-	BK 4516	52	16	2.7	21600	43000	2210	4400	3700	5500	IR 40x45x17	0.058
45	HK 4520	-	52	20	-	27600	59000	2810	6000	3700	5500	IR 40x45x20.5	0.058
45	-	BK 4520	52	20	2.7	27600	59000	2810	6000	3700	5500	IR 40x45x20.5	0.072
50	HK 5020	-	58	20	-	31500	63000	3200	6450	3200	4800	IR 40x50x22	0.072
50	-	BK 5020	58	20	2.7	31500	63000	3200	6450	3200	4800	IR 40x50x22	0.087

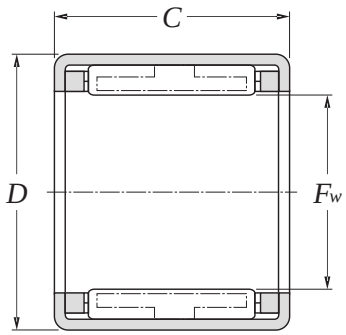
Technical supplement

Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type BK..RS
(Closed end, single seal)

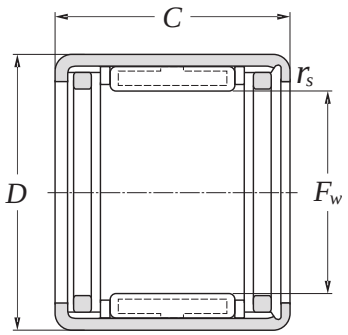
Max runout speed grease	Appropriate inner ring (as a reference)		Weight kg.		
r/min	single seal	double seals	open end single seal	open end double seals	closed end single seal
10000	IR 9× 12× 16	-	0.011	0.012	0.012
10000	IR 10× 14× 16	IR 10× 14× 20	0.012	0.014	0.014
10000	IR 12× 15× 16.5	IR 12× 15× 16.5	0.013	0.014	0.014
10000	IR 12× 16× 16	IR 12× 16× 20	0.013	0.015	0.015
9000	IR 15× 18× 16	IR 15× 18× 17.5	0.015	0.017	0.017
8000	-	IR 15× 20× 18	-	0.019	-
8000	IR 17× 20× 20	IR 17× 20× 20.5	0.021	0.024	0.024
7500	-	IR 17× 22× 18	-	0.020	-
7500	IR 17× 22× 20.5	IR 17× 22× 23	0.024	0.026	0.027
6500	-	IR 20× 25× 18D	-	0.027	-
6500	IR 20× 25× 20	IR 20× 25× 23	0.031	0.033	0.035
5500	-	IR 22× 28× 23	-	0.037	-
5500	-	IR 25× 30× 18D	-	0.027	-
5500	IR 25× 30× 20	IR 25× 30× 23	0.037	0.039	0.045
4600	-	-	-	0.036	-
4600	-	-	0.037	0.040	0.047
4000	-	IR 35× 40× 17	-	0.041	-
4000	IR 35× 40× 20	-	0.047	0.050	0.062
3600	IR 40× 45× 20	-	0.054	0.057	0.072
3200	IR 45× 50× 25	IR 45× 50× 25.5	0.086	0.089	0.104



Inner bore F_w mm	Bearing number	Principal dimensions D mm	C mm	Torque capacity N·m Md	kgf·m Md	Part number by radial load needle roller bearing	oil retaining bearing	Weight kg.
6	HF 0612 TV	10	12	1.76	0.18	HK 0609 T2	B-S 6-22	0.0030
8	HF 0812 TV	12	12	3.15	0.32	HK 0810	B-S 8-25	0.0035
10	HF 1012 TV	14	12	5.30	0.54	HK 1010	B-S 10-21	0.0040
12	HF 1216 TV	18	16	12.20	1.24	HK 1212	B-S 12-32	0.0116
14	HF 1416 TV	20	16	17.30	1.76	HK 1412	B-S 14-13	0.0130
16	HF 1616 TV	22	16	20.50	2.09	HK 1612	B-S 16-13	0.0140
18	HF 1816 TV	24	16	24.10	2.46	HK 1812	B-S 18-8	0.0155
20	HF 2016 TV	26	16	28.50	2.91	HK 2012	B-S 20-19	0.0170
25	HF 2520 TV	32	20	66.00	6.73	HK 2512	B-S 25-11	0.0309
30	HF 3020 TV	37	20	90.00	9.18	HK 3012	B-S 30-19	0.0360
35	HF 3520 TV	42	20	121.00	12.30	HK 3512	B-S 35-7	0.0400

Technical supplement

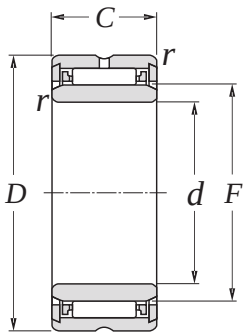
Cages		Precision	Grease
Steel -	X		
Polymid -	TV	Normal (ISO)	Nil
Brass -	X		



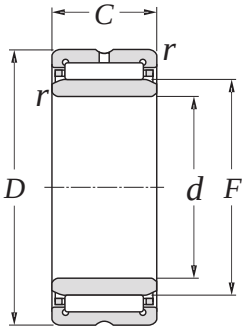
Inner bore F_w	Bearing number	Principal dimensions		Basic load ratings		Limiting speed		Permissible torque	Weight
		D	C	dynamic C	static Co	n	nl**		
mm		mm		N		rpm		Nm	kg.
4	HFL 0408 TV	8	8	1270	1740	34000	14000	0.34	0.002
6	HFL 0615 TV	10	15	1650	2030	23000	13000	1.76	0.004
8	HFL 0822 TV	12	22	4050	4150	17000	12000	3.15	0.007
10	HFL 1022 TV	14	22	4300	4650	14000	11000	5.30	0.008
12	HFL 1226 TV	18	26	6300	6500	11000	8000	12.20	0.018
14	HFL 1426 TV	20	26	6300	6500	9500	8000	17.30	0.020
16	HFL 1626 TV	22	26	7300	8400	8500	7500	20.50	0.022
18	HFL 1826 TV	24	26	8200	10300	7500	7500	24.10	0.025
20	HFL 2026 TV	26	26	8300	10400	7000	6500	28.50	0.027
25	HFL 2530 TV	32	30	10900	14100	5500	5500	66.00	0.044
30	HFL 3030 TV	37	30	12600	17600	4500	4500	90.00	0.051
35	HFL 3530 TV	42	30	13000	19300	3900	3900	121.00	0.058

Technical supplement

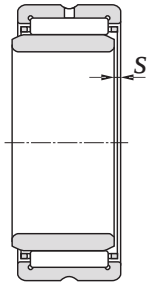
Cages		Precision	Grease
Steel -	X		
Polymid -	TV	Normal (ISO)	Nil
Brass -	X		



Type NA 49 (dd 9 mm)



Type NA 49 (de 10 mm)
Type NA 59
Type NA 69 (dd 30 mm)



Inner bore	Bearing number	Principal dimensions					Basic load ratings			
							dynamic	static	dynamic	static
d		*D*	*C*	*rs min*[1)]	*F*	*s*[2)]	C	Co	C	Co
mm		mm					N		kgf	
5	NA 495	13	10	0.15	7	-	2670	2350	272	239
6	NA 496	15	10	0.15	8	-	3150	3000	320	305
7	NA 497	17	10	0.15	9	-	3600	3650	365	375
8	NA 498	19	11	0.15	10	-	4300	3950	435	405
9	NA 499	20	11	0.30	12	-	4850	4900	495	500
10	NA 4900	22	13	0.30	14	0.5	8600	9200	875	935
12	NA 4901	24	13	0.30	16	0.5	9550	10900	975	1110
12	NA 6901	24	22	0.30	16	1.0	15400	20000	1570	2040
15	NA 4902	28	13	0.30	20	0.5	10300	12800	1050	1310
15	NA 5902	28	18	0.30	20	0.5	14100	19100	1440	1950
15	NA 6902	28	23	0.30	20	1.0	17600	25300	1790	2580
17	NA 4903	30	13	0.30	22	0.5	11200	14600	1140	1490
17	NA 5903	30	18	0.30	22	0.5	15200	21700	1550	2210
17	NA 6903	30	23	0.30	22	1.0	18200	27200	1850	2770
20	NA 4904	37	17	0.30	25	0.8	21300	25500	2170	2600
20	NA 5904	37	23	0.30	25	0.8	28400	37000	2900	3750
20	NA 6904	37	30	0.30	25	1.0	36500	50500	3700	5150
22	NA 49/22	39	17	0.30	28	0.8	23200	29300	2360	2990
22	NA 59/22	39	23	0.30	28	0.8	26400	37500	2690	3850
22	NA 69/22	39	30	0.30	28	0.5	40000	58500	4050	6000
25	NA 4905	42	17	0.30	30	0.8	24000	31500	2450	3200
25	NA 5905	42	23	0.30	30	0.8	30500	43000	3150	4350
25	NA 6905	42	30	0.30	30	1.0	41500	63000	4200	6400
28	NA 49/28	45	17	0.30	32	0.8	24800	33500	2530	3400

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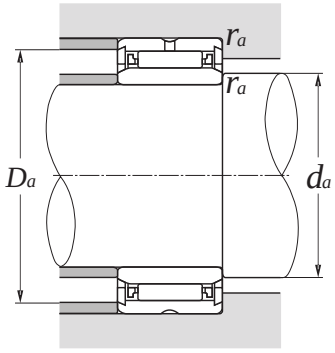
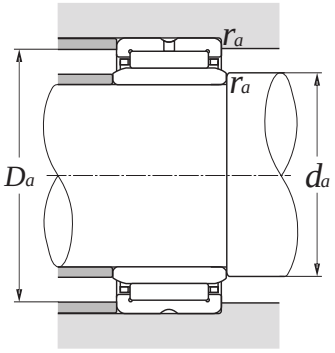
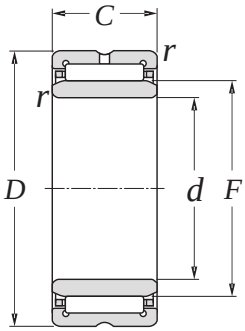
Technical supplement		
Cages	Precision	Grease
Steel - Polymid - x Brass - x	Normal (ISO)	Nil

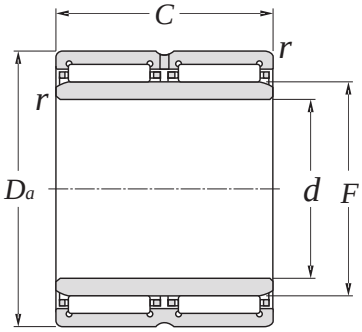




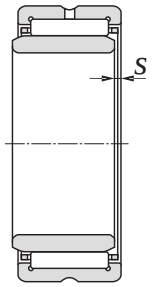
Max runout speed grease	Max runout speed oil	Abutment dimensions			Weight
r/min		$d_{a\ min}$	$D_{a\ max}$	$r_{as\ max}$	kg.
23000	34000	6.2	8.5	0.15	0.007
21000	32000	8.0	9.5	0.15	0.009
20000	30000	9.0	10.5	0.15	0.010
19000	28000	10.0	12.0	0.15	0.016
17000	26000	11.0	14.0	0.30	0.017
16000	24000	12.0	20.0	0.30	0.024
15000	23000	14.0	22.0	0.30	0.026
15000	23000	14.0	22.0	0.30	0.046
13000	20000	17.0	26.0	0.30	0.036
13000	20000	17.0	26.0	0.30	0.052
13000	20000	17.0	26.0	0.30	0.064
12000	18000	19.0	28.0	0.30	0.056
12000	18000	19.0	28.0	0.30	0.037
12000	18000	19.0	28.0	0.30	0.069
11000	16000	22.0	35.0	0.30	0.074
11000	16000	22.0	35.0	0.30	0.115
11000	16000	22.0	35.0	0.30	0.141
9500	14000	24.0	37.0	0.30	0.080
9500	14000	24.0	37.0	0.30	0.134
9500	14000	24.0	37.0	0.30	0.154
8500	13000	27.0	40.0	0.30	0.088
8500	13000	27.0	40.0	0.30	0.139
8500	13000	27.0	40.0	0.30	0.162
8500	13000	30.0	43.0	0.30	0.098



Type NA 49 (de 10 mm)
Type NA 59



Type NA 69 ZW (de 32 mm)



Inner bore d mm	Bearing number	Principal dimensions D	C	rs min[1] mm	F	s[2]	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
28	NA 59/28	45	23	0.30	32	0.8	32000	45500	3250	4650
28	NA 69/28	45	30	0.30	32	1.0	43000	67000	4350	6850
30	NA 4906	47	17	0.30	35	0.8	25500	35500	2600	3600
30	NA 5906	47	23	0.30	35	0.8	32500	48500	3350	4950
30	NA 6906	47	30	0.30	35	1.0	42500	67500	4300	6900
32	NA 49/32	52	20	0.60	40	0.8	31500	47500	3200	4850
32	NA 59/32	52	27	0.60	40	0.8	38000	61000	3850	6250
32	NA 69/32 ZW	52	36	0.6	40	0.5	47500	82000	4850	4350
35	NA 4907	55	20	0.6	42	0.8	32000	50000	3300	5100
35	NA 5907	55	27	0.6	42	0.8	39000	64500	3950	6550
35	NA 6907 ZW	55	36	0.6	42	0.5	49000	86500	5000	8800
40	NA 4908	62	22	0.6	48	1.0	43500	66500	4450	6800
40	NA 5908	62	30	0.6	48	1.0	53000	92500	5450	9450
40	NA 6908 ZW	62	40	0.6	48	0.5	67000	116000	6850	11800
45	NA 4909	68	22	0.6	52	1.0	46000	73000	4700	7450
45	NA 5909	68	30	0.6	52	1.0	56000	101000	5700	10300
45	NA 6909 ZW	68	40	0.6	52	0.5	70500	127000	7200	13000
50	NA 4910	72	22	0.6	58	1.0	48000	80000	4900	8150
50	NA 5910	72	30	0.6	58	1.0	58000	110000	5950	11200
50	NA 6910 ZW	72	40	0.6	58	0.5	74000	139000	7500	14200
55	NA 4911	80	25	1.0	63	1.5	58500	99500	6000	10100
55	NA 5911	80	34	1.0	63	1.5	76500	140000	7800	14300
55	NA 6911 ZW	80	45	1.0	63	1.5	94000	183000	9600	18600
60	NA 4912	85	25	1.0	68	1.5	61500	108000	6250	11000

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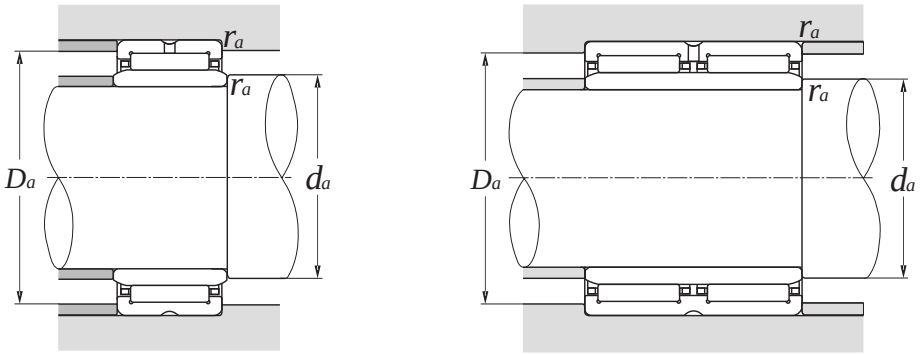
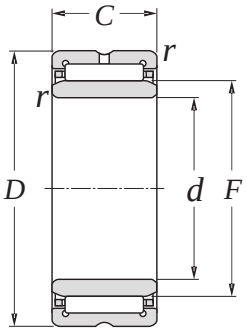
Technical supplement

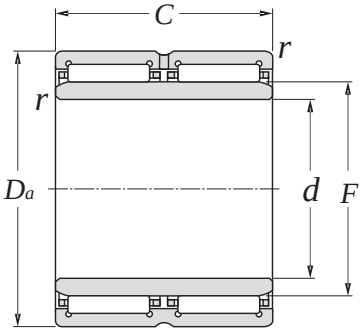
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



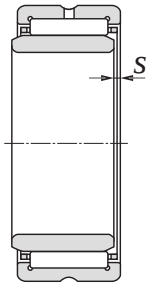
Max runout speed grease	Max runout speed oil	Abutment dimensions d_a min	Abutment dimensions D_a max	Abutment dimensions r_{as} max	Weight
r/min					kg.
8500	13000	30.0	43.0	0.30	0.142
8500	13000	30.0	43.0	0.30	0.179
7500	11000	32.0	45.0	0.30	0.101
7500	11000	32.0	45.0	0.30	0.152
7500	11000	32.0	45.0	0.30	0.185
6500	10000	36.0	48.0	0.60	0.157
6500	10000	36.0	48.0	0.60	0.241
6500	10000	36	48	0.6	0.286
6500	9500	39	51	0.6	0.171
6500	9500	39	51	0.6	0.256
6500	9500	39	51	0.6	0.310
5500	8500	44	58	0.6	0.232
5500	8500	44	58	0.6	0.348
5500	8500	44	58	0.6	0.426
5000	7500	49	64	0.6	0.270
5000	7500	49	64	0.6	0.396
5000	7500	49	64	0.6	0.437
4700	7000	54	68	0.6	0.276
4700	7000	54	68	0.6	0.498
4700	7000	54	68	0.6	0.529
4300	6500	60	75	1.0	0.396
4300	6500	60	75	1.0	0.559
4300	6500	60	75	1.0	0.726
4000	6000	65	80	1.0	0.427



Type NA 48
Type NA 49 (de 10 mm)
Type NA 59



Type NA 69 ZW (de 32 mm)



Inner bore d mm	Bearing number	Principal dimensions D	C	rs min[1] mm	F	s[2]	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
60	NA 5912	85	34	1.0	68	1.5	80500	153000	8200	15600
60	NA 6912 ZW	85	45	1.0	68	1.5	95500	191000	9750	19400
65	NA 4913	90	25	1.0	72	1.5	62500	112000	6350	11400
65	NA 5913	90	34	1.0	72	1.5	84000	165000	8600	16800
65	NA 6913 ZW	90	45	1.0	72	1.5	97000	198000	9900	20200
70	NA 4914	100	30	1.0	80	1.5	85500	156000	8750	15900
70	NA 5914	100	40	1.0	80	1.5	103000	187000	10500	19100
70	NA 6914 ZW	100	54	1.0	80	1.0	130000	267000	13300	27200
75	NA 4915	105	30	1.0	85	1.5	87000	162000	8900	16500
75	NA 5915	105	40	1.0	85	1.5	109000	205000	11100	20900
75	NA 6915 ZW	105	54	1.0	85	1.0	132000	277000	13500	28300
80	NA 4916	110	30	1.0	90	1.5	90500	174000	9250	17700
80	NA 5916	110	40	1.0	90	1.5	115000	223000	11700	22700
80	NA 6916 ZW	110	54	1.0	90	1.5	137000	298000	14000	30500
85	NA 4917	120	35	1.1	100	1.0	112000	237000	11500	24200
85	NA 5917	120	46	1.1	100	1.5	137000	290000	14000	29600
85	NA 6917 ZW	120	63	1.1	100	1.0	169000	400000	17300	41000
90	NA 4918	125	35	1.1	105	1.0	116000	252000	11900	25700
90	NA 5918	125	46	1.1	105	1.0	143000	310000	14600	32000
90	NA 6918 ZW	125	63	1.1	105	1.0	175000	425000	17900	43500
95	NA 4919	130	35	1.1	110	1.0	118000	260000	12000	26500
95	NA 5919	130	46	1.1	110	1.0	149000	335000	15200	34000
95	NA 6919 ZW	130	63	1.1	110	1.0	177000	440000	18100	45000
100	NA 4920	140	40	1.1	115	2.0	127000	260000	12900	26500

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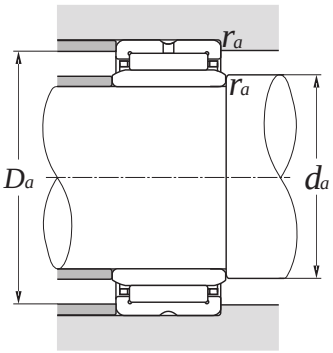
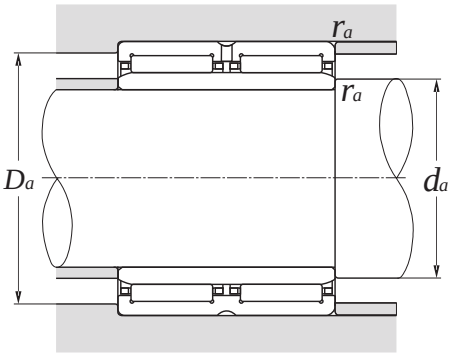
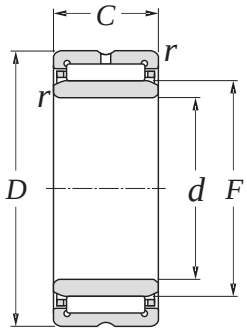
Technical supplement

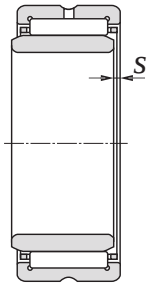
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		





Max runout speed grease	Max runout speed oil	Abutment dimensions $d_{a\ min}$	Abutment dimensions $D_{a\ max}$	Abutment dimensions $r_{as\ max}$	Weight
r/min					kg.
4000	6000	65	80	1.0	0.614
4000	6000	65	80	1.0	0.758
3700	5500	70	85	1.0	0.454
3700	5500	70	85	1.0	0.655
3700	5500	70	85	1.0	0.779
3300	5000	75	95	1.0	0.727
3300	5000	75	95	1.0	1.060
3300	5000	75	95	1.0	1.340
3100	4700	80	100	1.0	0.776
3100	4700	80	100	1.0	1.130
3100	4700	80	100	1.0	1.450
2900	4400	85	105	1.0	0.820
2900	4400	85	105	1.0	1.150
2900	4400	85	105	1.0	1.530
2700	4000	91.5	113.5	1.0	1.24
2700	4000	91.5	113.5	1.0	1.76
2700	4000	91.5	113.5	1.0	2.25
2500	3800	96.5	118.5	1.0	1.31
2500	3800	96.5	118.5	1.0	1.84
2500	3800	96.5	118.5	1.0	2.44
2400	3600	101.5	123.5	1.0	1.36
2400	3600	101.5	123.5	1.0	1.98
2400	3600	101.5	123.5	1.0	2.63
2300	3500	106.5	133.5	1.0	1.93





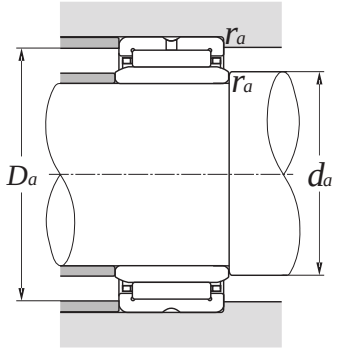
Type NA 48
Type NA 49 (de 10 mm)

Inner bore d	Bearing number	Principal dimensions					Basic load ratings			
							dynamic	static	dynamic	static
		D	C	rs min[1]	F	s[2]	C	Co	C	Co
mm		mm					N		kgf	
100	NA 5920	140	54	1.1	115	2.0	182000	395000	18600	40500
110	NA 4822	140	30	1.0	120	0.8	93500	210000	9550	21400
110	NA 4922	150	40	1.1	125	2.0	131000	279000	13300	28400
110	NA 5922	150	54	1.1	125	2.0	193000	440000	19700	45000
120	NA 4824	150	30	1.0	130	0.8	99500	233000	10100	23800
120	NA 4924	165	45	1.1	135	2.0	180000	380000	18300	38500
120	NA 5924	165	60	1.1	135	2.0	245000	525000	25000	53500
130	NA 4826	165	35	1.1	145	1.0	118000	305000	12100	31000
130	NA 4926	180	50	1.5	150	1.5	202000	455000	20600	46500
130	NA 5926	180	67	1.5	150	1.5	294000	685000	30000	70000
140	NA 4828	175	35	1.1	155	1.0	121000	315000	12300	32500
140	NA 4928	190	50	1.5	160	1.5	209000	485000	21300	49500
140	NA 5928	190	67	1.5	160	1.5	310000	755000	31500	77000
150	NA 4830	190	40	1.1	165	1.5	152000	390000	15500	40000
150	NA 4930	210	60	2.0	170	1.5	261000	610000	26600	62500
160	NA 4832	200	40	1.1	175	1.5	160000	425000	16300	43500
160	NA 4932	220	60	2.0	180	1.5	270000	650000	27600	66500
170	NA 4834	215	45	1.1	185	1.5	185000	495000	18800	50500
170	NA 4934	230	60	2.0	190	1.5	279000	690000	28500	70500
180	NA 4836	225	45	1.1	195	1.5	195000	540000	19800	55000
180	NA 4936	250	69	2.0	205	1.5	375000	890000	38500	90500
190	NA 4838	240	50	1.5	210	1.5	227000	680000	23200	69000
190	NA 4938	260	69	2.0	215	1.5	390000	945000	40000	96500
200	NA 4840	250	50	1.5	220	1.5	231000	705000	23600	71500

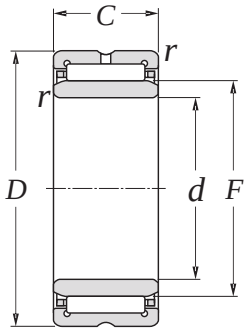
r

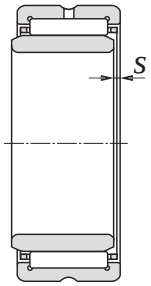
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Max runout speed grease	Max runout speed oil	Abutment dimensions			Weight
r/min	r/min	$d_{a\ min}$	$D_{a\ max}$	$r_{as\ max}$	kg.
2300	3500	106.5	133.5	1.0	2.85
2200	3300	115.0	135.0	1.0	1.11
2100	3200	116.5	143.5	1.0	2.08
2100	3200	116.5	143.5	1.0	2.98
2100	3100	125.0	145.0	1.0	1.17
2000	3000	126.5	158.5	1.0	2.84
2000	3000	126.5	158.5	1.0	3.92
1900	2800	136.5	158.5	1.0	1.60
1800	2700	138.0	172.0	1.5	3.90
1800	2700	138.0	172.0	1.5	5.60
1700	2600	146.5	168.5	1.0	1.82
1700	2500	148.0	182.0	1.5	4.05
1700	2500	148.0	182.0	1.5	6.18
1600	2400	156.5	183.5	1.0	2.72
1600	2400	159.0	201.0	2.0	5.33
1500	2300	166.5	193.5	1.0	2.90
1500	2200	169.0	211.0	2.0	5.60
1500	2200	176.5	208.5	1.0	3.99
1400	2100	179.0	221.0	2.0	5.87
1400	2100	186.5	218.5	1.0	4.19
1300	2000	189.0	241.0	2.0	8.58
1300	1900	198	232	1.5	5.62
1300	1900	199	251	2.0	8.68
1200	1800	208	242	1.5	5.84





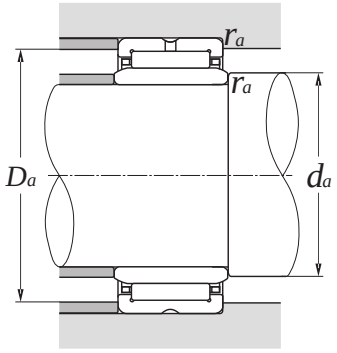
Type NA 48
Type NA 49 (de 10 mm)

Inner bore d	Bearing number	Principal dimensions					Basic load ratings			
							dynamic	static	dynamic	static
		D	C	rs min[1]	F	s[2]	C	Co	C	Co
mm		mm					N		kgf	
200	NA 4940	280	80	2.1	225	1.5	505000	1180000	51500	120000
220	NA 4844	270	50	1.5	240	1.5	244000	780000	24900	79500
220	NA 4944	300	80	2.1	245	1.5	525000	1270000	53500	129000
240	NA 4848	300	60	2.0	265	2.0	360000	1080000	37000	110000
240	NA 4948	320	80	2.1	265	2.0	540000	1350000	55000	138000
260	NA 4852	320	60	2.0	285	2.0	375000	1160000	38000	119000
260	NA 4952	360	100	2.1	290	2.0	805000	1900000	82000	193000
280	NA 4856	350	69	2.0	305	2.5	455000	1300000	46500	133000
280	NA 4956	380	100	2.1	310	2.5	835000	2030000	85000	207000
300	NA 4860	380	80	2.1	330	2.0	625000	1770000	64000	180000
300	NA 4960	420	118	3.0	340	2.0	1080000	2640000	110000	269000
320	NA 4864	400	80	2.1	350	2.0	640000	1850000	65500	189000
320	NA 4964	440	118	3.0	360	2.0	1120000	2820000	114000	288000
340	NA 4868	420	80	2.1	370	2.0	655000	1940000	66500	197000
340	NA 4968	460	118	3.0	380	2.0	1160000	3000000	118000	305000
360	NA 4872	440	80	2.1	390	2.0	665000	2020000	68000	206000
360	NA 4972	480	118	3.0	400	2.0	1200000	3200000	122000	325000
380	NA 4876	480	100	2.1	415	2.0	1000000	2840000	102000	289000
380	NA 4976	520	140	4.0	430	2.0	1400000	3750000	143000	385000
400	NA 4980	540	140	4.0	450	2.5	1450000	4000000	148000	410000
420	NA 4984	560	140	4.0	470	2.5	1500000	4250000	153000	430000
440	NA 4988	600	160	4.0	490	2.5	1750000	4600000	179000	470000

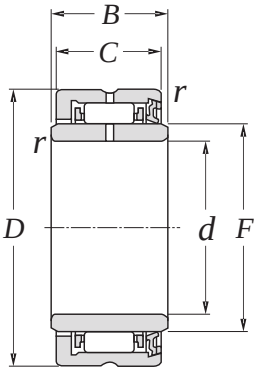
r

Technical supplement

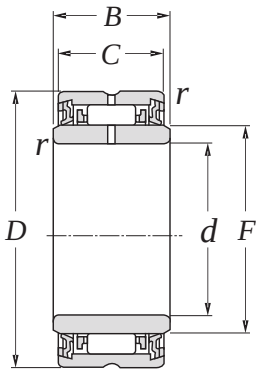
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



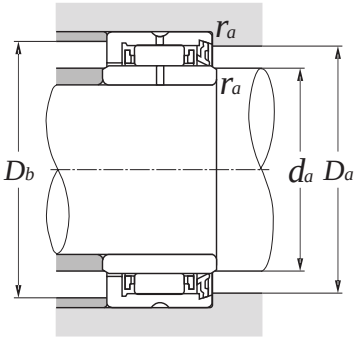
Max runout speed grease	Max runout speed oil	Abutment dimensions $d_{a\,min}$	Abutment dimensions $D_{a\,max}$	Abutment dimensions $r_{as\,max}$	Weight
r/min					kg.
1200	1800	211	269	2.0	12.20
1100	1700	228	262	1.5	6.37
1100	1600	231	289	2.0	13.50
1000	1500	249	291	2.0	10.00
1000	1500	251	309	2.0	14.70
950	1400	269	311	2.0	10.80
950	1400	271	349	2.0	25.90
850	1300	289	341	2.0	15.50
850	1300	291	369	2.0	27.50
800	1200	311	369	2.0	22.00
800	1200	313	407	2.5	42.50
750	1100	331	389	2.0	23.20
750	1100	333	427	2.5	45.20
750	1100	351	409	2.0	24.10
750	1100	353	447	2.5	47.30
650	1000	371	429	2.0	25.70
650	1000	373	467	2.5	49.00
650	950	391	469	2.0	44.50
650	950	396	504	3.0	73.60
600	900	416	524	3.0	76.60
550	850	436	544	3.0	89.80
550	800	456	584	3.0	123.00



Type NA 49..RSR
(With single seal)



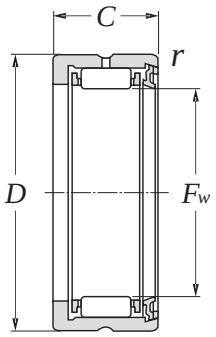
Type NA 49..2RSR
(With double seals)



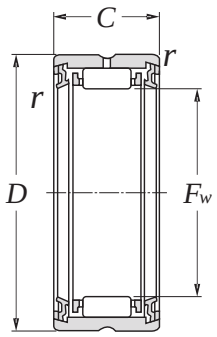
Inner bore d	Bearing number	Principal dimensions					Basic load ratings				Limiting speeds	Abutment dimensions				Weight
							dynamic	static	dynamic	static						
		D	B	C	F	rs min[1]	C	Co	C	Co		da max	Da max	Db max	ras max	
mm		mm					N		kgf		rpm					kg.
10	NA 4900 RSR NA 4900 2RSR	22	14	13	14	0.3	7200	8500	735	865	10000	12	16	20	0.3	0.025
12	NA 4901 RSR NA 4901 2RSR	24	14	13	16	0.3	7750	9700	795	990	10000	14	18	22	0.3	0.028
15	NA 4902 RSR NA 4902 2RSR	28	14	13	20	0.3	8300	11200	845	1150	10000	17	22	26	0.3	0.036
17	NA 4903 RSR NA 4903 2RSR	30	14	13	22	0.3	8500	11900	865	1220	9000	19	24	28	0.3	0.039
20	NA 4904 RSR NA 4904 2RSR	37	18	17	25	0.3	15200	19900	1550	2030	8000	22	28	35	0.3	0.080
25	NA 4905 RSR NA 4905 2RSR	42	18	17	30	0.3	16000	22600	1640	2300	6500	27	33	40	0.3	0.093
30	NA 4906 RSR NA 4906 2RSR	47	18	17	35	0.3	18000	27400	1830	2800	5500	32	38	45	0.3	0.107
35	NA 4907 RSR NA 4907 2RSR	55	21	20	42	0.6	22700	39500	2320	4000	4800	39	45	51	0.6	0.175
40	NA 4908 RSR NA 4908 2RSR	62	23	22	48	0.6	27800	53500	2830	5450	4200	44	51	58	0.6	0.252
45	NA 4909 RSR NA 4909 2RSR	68	23	22	52	0.6	28600	57000	2920	5800	3800	49	55	64	0.6	0.290
50	NA 4910 RSR NA 4910 2RSR	72	23	22	58	0.6	30500	64000	3100	6500	3400	54	61	68	0.6	0.295

Technical supplement

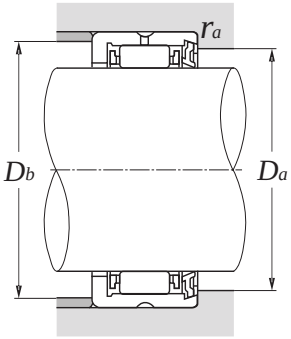
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		



Type RNA 49..RSR
(With single seal)



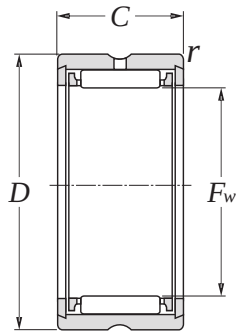
Type RNA 49..2RSR
(With double seals)



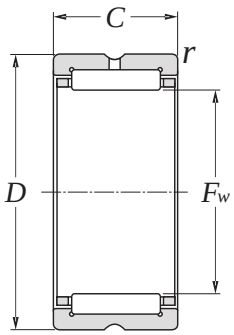
Inner bore F_w mm	Bearing number		Principal dimensions D	C	$r_{s\,min}$[1] mm	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf	Limiting speeds rpm	Abutment dimensions $D_{a\,max}$	$D_{b\,max}$	$r_{as\,max}$	Weight kg.
14 $^{+0.027}_{+0.016}$	RNA 4900 RSR	RNA 4900 2RSR	22	13	0.3	7200	8500	735	865	10000	16	20	0.3	0.016
16 $^{+0.027}_{+0.016}$	RNA 4901 RSR	RNA 4901 2RSR	24	13	0.3	7750	9700	795	990	10000	18	22	0.3	0.018
20 $^{+0.033}_{+0.020}$	RNA 4902 RSR	RNA 4902 2RSR	28	13	0.3	8300	11200	845	1150	10000	22	26	0.3	0.022
22 $^{+0.033}_{+0.020}$	RNA 4903 RSR	RNA 4903 2RSR	30	13	0.3	8500	11900	865	1220	9000	24	28	0.3	0.022
25 $^{+0.033}_{+0.020}$	RNA 4904 RSR	RNA 4904 2RSR	37	17	0.3	15200	19900	1550	2030	8000	28	35	0.3	0.055
30 $^{+0.033}_{+0.020}$	RNA 4905 RSR	RNA 4905 2RSR	42	17	0.3	16000	22600	1640	2300	6500	33	40	0.3	0.063
35 $^{+0.041}_{+0.025}$	RNA 4906 RSR	RNA 4906 2RSR	47	17	0.3	18000	27400	1830	2800	5500	38	45	0.3	0.072
42 $^{+0.041}_{+0.025}$	RNA 4907 RSR	RNA 4907 2RSR	55	20	0.6	22700	39500	2320	4000	4800	45	51	0.6	0.113
48 $^{+0.041}_{+0.025}$	RNA 4908 RSR	RNA 4908 2RSR	62	22	0.6	27800	53500	2830	5450	4200	51	58	0.6	0.154
52 $^{+0.049}_{+0.030}$	RNA 4909 RSR	RNA 4909 2RSR	68	22	0.6	28600	57000	2920	5800	3800	55	64	0.6	0.157
58 $^{+0.049}_{+0.030}$	RNA 4910 RSR	RNA 4910 2RSR	72	22	0.6	30500	64000	3100	6500	3400	61	68	0.6	0.160

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		



Type RNA 49 (Fwd 12 mm)

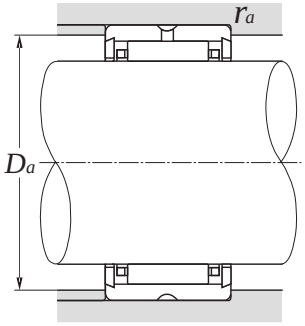


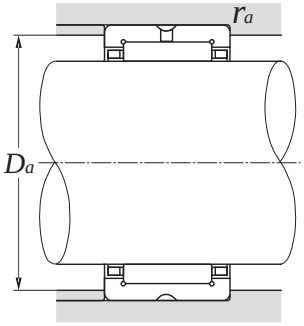
Type RNA 49 (Fwe 14 mm)
Type RNA 59
Type RNA 69 (Fwd 35 mm)

Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings			
		D	C	r_s min[1)]	dynamic C	static Co	dynamic C	static Co
mm		mm			N		kgf	
7 $^{+0.022}_{+0.013}$	RNA 495	13	10	0.15	2670	2350	272	239
8 $^{+0.022}_{+0.013}$	RNA 496	15	10	0.15	3150	3000	320	305
9 $^{+0.022}_{+0.013}$	RNA 497	17	10	0.15	3600	3650	365	375
10 $^{+0.022}_{+0.013}$	RNA 498	19	11	0.15	4300	3950	435	405
12 $^{+0.027}_{+0.016}$	RNA 499	20	11	0.30	4850	4900	495	500
14 $^{+0.027}_{+0.016}$	RNA 4900	22	13	0.30	8600	9200	875	935
16 $^{+0.027}_{+0.016}$	RNA 4901	24	13	0.30	9550	10900	975	1110
16 $^{+0.027}_{+0.016}$	RNA 6901	24	22	0.30	15400	20000	1570	2040
20 $^{+0.033}_{+0.020}$	RNA 4902	28	13	0.30	10300	12800	1050	1310
20 $^{+0.033}_{+0.020}$	RNA 5902	28	18	0.30	14100	19100	1440	1950
20 $^{+0.033}_{+0.020}$	RNA 6902	28	23	0.30	17600	25300	1790	2580
22 $^{+0.033}_{+0.020}$	RNA 4903	30	13	0.30	11200	14600	1140	1490
22 $^{+0.033}_{+0.020}$	RNA 5903	30	18	0.30	15200	21700	1550	2210
22 $^{+0.033}_{+0.020}$	RNA 6903	30	23	0.30	18200	27200	1850	2770
25 $^{+0.033}_{+0.020}$	RNA 4904	37	17	0.30	21300	25500	2170	2600
25 $^{+0.033}_{+0.020}$	RNA 5904	37	23	0.30	28400	37000	2900	3750
25 $^{+0.033}_{+0.020}$	RNA 6904	37	30	0.30	36500	50500	3700	5150
28 $^{+0.033}_{+0.020}$	RNA 49/22	39	17	0.30	23200	29300	2360	2990
28 $^{+0.033}_{+0.020}$	RNA 59/22	39	23	0.30	26400	37500	2690	3850
28 $^{+0.033}_{+0.020}$	RNA 69/22	39	30	0.30	40000	58500	4050	6000
30 $^{+0.033}_{+0.020}$	RNA 4905	42	17	0.30	24000	31500	2450	3200
30 $^{+0.033}_{+0.020}$	RNA 5905	42	23	0.30	30500	43000	3150	4350
30 $^{+0.033}_{+0.020}$	RNA 6905	42	30	0.30	41500	63000	4200	6400
32 $^{+0.041}_{+0.025}$	RNA 49/28	45	17	0.30	24800	33500	2530	3400

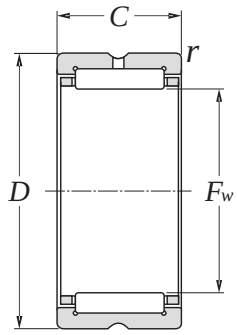
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

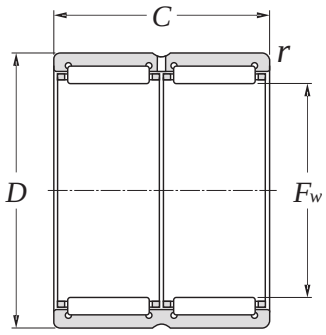




Max runout speed grease	Max runout speed oil	Abutment dimensions $D_{a\,max}$	Abutment dimensions $r_{as\,max}$	Weight
r/min				kg.
23000	34000	8.5	0.15	0.0055
21000	32000	9.5	0.15	0.0073
20000	30000	10.5	0.15	0.0095
19000	28000	12.0	0.15	0.0130
17000	26000	14.0	0.30	0.0130
16000	24000	20.0	0.30	0.0170
15000	23000	22.0	0.30	0.0170
15000	23000	22.0	0.30	0.0310
13000	20000	26.0	0.30	0.0220
13000	20000	26.0	0.30	0.0330
13000	20000	26.0	0.30	0.0400
12000	18000	28.0	0.30	0.0220
12000	18000	28.0	0.30	0.0350
12000	18000	28.0	0.30	0.0420
11000	16000	35.0	0.30	0.0520
11000	16000	35.0	0.30	0.0840
11000	16000	35.0	0.30	0.1000
9500	14000	37.0	0.30	0.0500
9500	14000	37.0	0.30	0.0920
9500	14000	37.0	0.30	0.1000
8500	13000	40.0	0.30	0.0610
8500	13000	40.0	0.30	0.1010
8500	13000	40.0	0.30	0.1120
8500	13000	43.0	0.30	0.0730



Type RNA 49 (Fwe 14 mm)
Type RNA 59

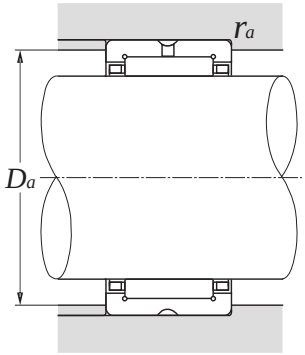


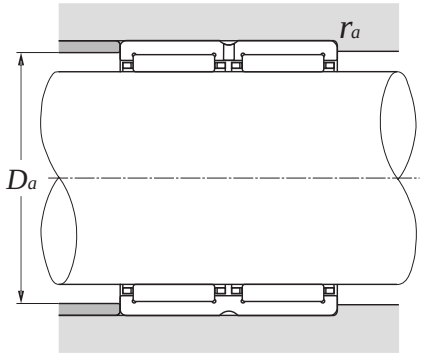
Type RNA 69 ZW (Fwe 40 mm)

Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings			
					dynamic	static	dynamic	static
		D	C	r_s min[1)]	C	Co	C	Co
mm		mm			N		kgf	
32 $^{+0.041}_{+0.025}$	RNA 59/28	45	23	0.30	32000	45500	3250	4650
32 $^{+0.041}_{+0.025}$	RNA 69/28	45	30	0.30	43000	67000	4350	6850
35 $^{+0.041}_{+0.025}$	RNA 4906	47	17	0.30	25500	35500	2600	3600
35 $^{+0.041}_{+0.025}$	RNA 5906	47	23	0.30	32500	48500	3350	4950
35 $^{+0.041}_{+0.025}$	RNA 6906	47	30	0.30	42500	67500	4300	6900
40 $^{+0.041}_{+0.025}$	RNA 49/32	52	20	0.60	31500	47500	3200	4850
40 $^{+0.041}_{+0.025}$	RNA 59/32	52	27	0.60	38000	61000	3850	6250
40 $^{+0.041}_{+0.025}$	RNA 69/32 ZW	52	36	0.6	47500	82000	4850	8350
42 $^{+0.041}_{+0.025}$	RNA 4907	55	20	0.6	32000	50000	3300	5100
42 $^{+0.041}_{+0.025}$	RNA 5907	55	27	0.6	39000	64500	3950	6550
42 $^{+0.041}_{+0.025}$	RNA 6907 ZW	55	36	0.6	49000	86500	5000	8800
48 $^{+0.041}_{+0.025}$	RNA 4908	62	22	0.6	43500	66500	4450	6800
48 $^{+0.041}_{+0.025}$	RNA 5908	62	30	0.6	53000	92500	5450	9450
48 $^{+0.041}_{+0.025}$	RNA 6908 ZW	62	40	0.6	67000	116000	6850	11800
52 $^{+0.049}_{+0.030}$	RNA 4909	68	22	0.6	46000	73000	4700	7450
52 $^{+0.049}_{+0.030}$	RNA 5909	68	30	0.6	56000	101000	5700	10300
52 $^{+0.049}_{+0.030}$	RNA 6909	68	40	0.6	70500	127000	7200	13000
58 $^{+0.049}_{+0.030}$	RNA 4910	72	22	0.6	48000	80000	4900	8150
58 $^{+0.049}_{+0.030}$	RNA 5910	72	30	0.6	58000	110000	5950	11200
58 $^{+0.049}_{+0.030}$	RNA 6910 ZW	72	40	0.6	74000	139000	7500	14200
63 $^{+0.049}_{+0.030}$	RNA 4911	80	25	1.0	58500	99500	6000	10100
63 $^{+0.049}_{+0.030}$	RNA 5911	80	34	1.0	76500	140000	7800	14300
63 $^{+0.049}_{+0.030}$	RNA 6911 ZW	80	45	1.0	94000	183000	9600	18600
68 $^{+0.049}_{+0.030}$	RNA 4912	85	25	1.0	61500	108000	6250	11000

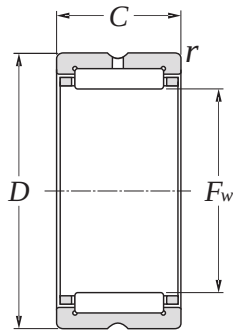
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

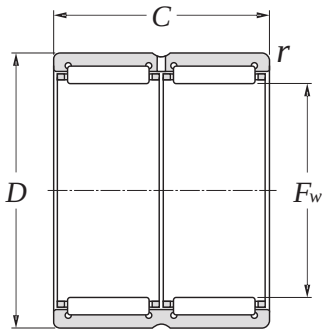




Max runout speed grease	Max runout speed oil	Abutment dimensions $D_{a\,max}$	Abutment dimensions $r_{as\,max}$	Weight
r/min				kg.
8500	13000	43.0	0.30	0.1080
8500	13000	43.0	0.30	0.1350
7500	11000	45.0	0.30	0.0690
7500	11000	45.0	0.30	0.1080
7500	11000	45.0	0.30	0.1260
6500	10000	48.0	0.60	0.0890
6500	10000	48.0	0.60	0.1490
6500	10000	48	0.6	0.162
6500	9500	51	0.6	0.107
6500	9500	51	0.6	0.176
6500	9500	51	0.6	0.193
5500	8500	58	0.6	0.140
5500	8500	58	0.6	0.225
5500	8500	58	0.6	0.256
5000	7500	64	0.6	0.182
5000	7500	64	0.6	0.232
5000	7500	64	0.6	0.273
4700	7000	68	0.6	0.163
4700	7000	68	0.6	0.289
4700	7000	68	0.6	0.320
4300	6500	75	1.0	0.255
4300	6500	75	1.0	0.367
4300	6500	75	1.0	0.470
4000	6000	80	1.0	0.275



Type RNA 48
Type RNA 49 (Fwe 14 mm)
Type RNA 59

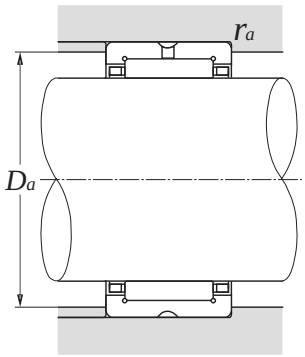


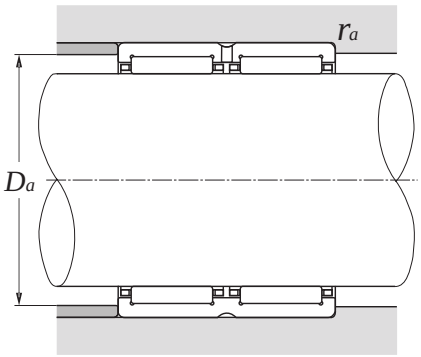
Type RNA 69 ZW (Fwe 40 mm)

Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings			
		D	C	r_s min[1)]	dynamic C	static Co	dynamic C	static Co
mm		mm			N		kgf	
68 $^{+0.049}_{+0.030}$	RNA 5912	85	34	1.0	80500	153000	8200	15600
68 $^{+0.049}_{+0.030}$	RNA 6912 ZW	85	45	1.0	95500	191000	9750	19400
72 $^{+0.049}_{+0.030}$	RNA 4913	90	25	1.0	62500	112000	6350	11400
72 $^{+0.049}_{+0.030}$	RNA 5913	90	34	1.0	84000	165000	8600	16800
72 $^{+0.049}_{+0.030}$	RNA 6913 ZW	90	45	1.0	97000	198000	9900	20200
80 $^{+0.049}_{+0.030}$	RNA 4914	100	30	1.0	85500	156000	8750	15900
80 $^{+0.049}_{+0.030}$	RNA 5914	100	40	1.0	103000	187000	10500	19100
80 $^{+0.049}_{+0.030}$	RNA 6914 ZW	100	54	1.0	130000	267000	13300	27200
85 $^{+0.058}_{+0.036}$	RNA 4915	105	30	1.0	87000	162000	8900	16500
85 $^{+0.058}_{+0.036}$	RNA 5915	105	40	1.0	109000	205000	11100	20900
85 $^{+0.058}_{+0.036}$	RNA 6915 ZW	105	54	1.0	132000	277000	13500	28300
90 $^{+0.058}_{+0.036}$	RNA 4916	110	30	1.0	90500	174000	9250	17700
90 $^{+0.058}_{+0.036}$	RNA 5916	110	40	1.0	115000	223000	11700	22700
90 $^{+0.058}_{+0.036}$	RNA 6916 ZW	110	54	1.0	137000	298000	14000	30500
100 $^{+0.058}_{+0.036}$	RNA 4917	120	35	1.1	112000	237000	11500	24200
100 $^{+0.058}_{+0.036}$	RNA 5917	120	46	1.1	137000	290000	14000	29600
100 $^{+0.058}_{+0.036}$	RNA 6917 ZW	120	63	1.1	169000	400000	17300	41000
105 $^{+0.058}_{+0.036}$	RNA 4918	125	35	1.1	116000	252000	11900	25700
105 $^{+0.058}_{+0.036}$	RNA 5918	125	46	1.1	143000	310000	14600	32000
105 $^{+0.058}_{+0.036}$	RNA 6918 ZW	125	63	1.1	175000	425000	17900	43500
110 $^{+0.058}_{+0.036}$	RNA 4919	130	35	1.1	118000	260000	12000	26500
110 $^{+0.058}_{+0.036}$	RNA 5919	130	46	1.1	149000	335000	15200	34000
110 $^{+0.058}_{+0.036}$	RNA 6919 ZW	130	63	1.1	177000	440000	18100	45000
115 $^{+0.058}_{+0.036}$	RNA 4920	140	40	1.1	127000	260000	12900	26500

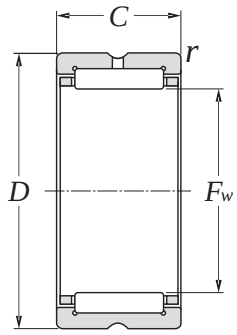
r

Technical supplement			
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

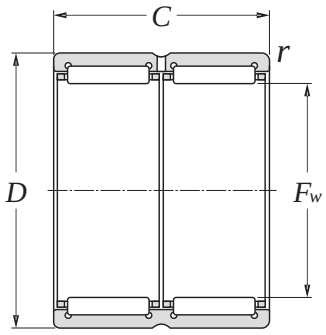




Max runout speed grease	Max runout speed oil	Abutment dimensions $D_{a\,max}$	Abutment dimensions $r_{as\,max}$	Weight
r/min				kg.
4000	6000	80	1.0	0.408
4000	6000	80	1.0	0.488
3700	5500	85	1.0	0.312
3700	5500	85	1.0	0.462
3700	5500	85	1.0	0.520
3300	5000	95	1.0	0.460
3300	5000	95	1.0	0.706
3300	5000	95	1.0	0.857
3100	4700	100	1.0	0.489
3100	4700	100	1.0	0.745
3100	4700	100	1.0	0.935
2900	4400	105	1.0	0.516
2900	4400	105	1.0	0.787
2900	4400	105	1.0	0.987
2700	4000	113.5	1.0	0.657
2700	4000	113.5	1.0	1.000
2700	4000	113.5	1.0	1.200
2500	3800	118.5	1.0	0.697
2500	3800	118.5	1.0	1.040
2500	3800	118.5	1.0	1.330
2400	3600	123.5	1.0	0.719
2400	3600	123.5	1.0	1.130
2400	3600	123.5	1.0	1.460
2300	3500	133.5	1.0	1.150



Type RNA 48
Type RNA 49 (Fwe 14 mm)
Type RNA 59

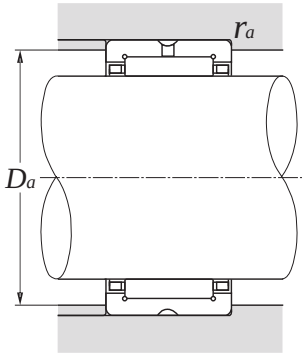


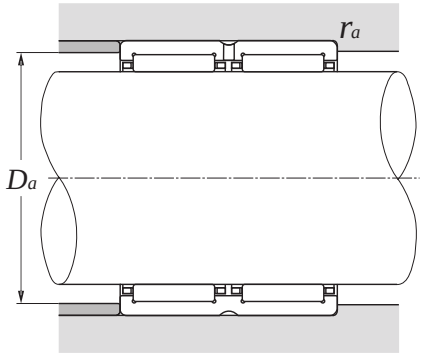
Type RNA 69 ZW (Fwe 40 mm)

Inner bore F_w mm	Bearing number	Principal dimensions D	C mm	r_s min[1)]	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
115 $^{+0.058}_{+0.036}$	RNA 5920	140	54	1.1	182000	395000	18600	40500
120 $^{+0.058}_{+0.036}$	RNA 4822	140	30	1.0	93500	210000	9550	21400
125 $^{+0.068}_{+0.043}$	RNA 4922	150	40	1.1	131000	279000	13300	28400
125 $^{+0.068}_{+0.043}$	RNA 5922	150	54	1.1	193000	440000	19700	45000
130 $^{+0.068}_{+0.043}$	RNA 4824	150	30	1.0	99500	233000	10100	23800
135 $^{+0.068}_{+0.043}$	RNA 4924	165	45	1.1	180000	380000	18300	38500
135 $^{+0.068}_{+0.043}$	RNA 5924	165	60	1.1	245000	525000	25000	53500
145 $^{+0.068}_{+0.043}$	RNA 4826	165	35	1.1	118000	305000	12100	31000
150 $^{+0.068}_{+0.043}$	RNA 4926	180	50	1.5	202000	455000	20600	46500
150 $^{+0.068}_{+0.043}$	RNA 5926	180	67	1.5	294000	685000	30000	70000
155 $^{+0.068}_{+0.043}$	RNA 4828	175	35	1.1	121000	315000	12300	32500
160 $^{+0.068}_{+0.043}$	RNA 4928	190	50	1.5	209000	485000	21300	49500
160 $^{+0.068}_{+0.043}$	RNA 5928	190	67	1.5	310000	755000	31500	77000
165 $^{+0.068}_{+0.043}$	RNA 4830	190	40	1.1	152000	390000	15500	40000
170 $^{+0.068}_{+0.043}$	RNA 4930	210	60	2.0	261000	610000	26600	62500
175 $^{+0.068}_{+0.043}$	RNA 4832	200	40	1.1	160000	425000	16300	43500
180 $^{+0.068}_{+0.043}$	RNA 4932	220	60	2.0	270000	650000	27600	66500
185 $^{+0.079}_{+0.050}$	RNA 4834	215	45	1.1	185000	495000	18800	50500
190 $^{+0.079}_{+0.050}$	RNA 4934	230	60	2.0	279000	690000	28500	70500
195 $^{+0.079}_{+0.050}$	RNA 4836	225	45	1.1	195000	540000	19800	55000
205 $^{+0.079}_{+0.050}$	RNA 4936	250	69	2.0	375000	890000	38500	90500
210 $^{+0.079}_{+0.050}$	RNA 4838	240	50	1.5	227000	680000	23200	69000
215 $^{+0.079}_{+0.050}$	RNA 4938	260	69	2.0	390000	945000	40000	96500
220 $^{+0.079}_{+0.050}$	RNA 4840	250	50	1.5	231000	705000	23600	71500

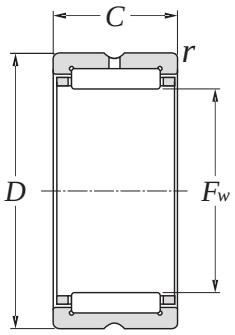
r

Technical supplement			
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		





Max runout speed grease r/min	Max runout speed oil r/min	Abutment dimensions $D_{a\,max}$	Abutment dimensions $r_{as\,max}$	Weight kg.
2300	3500	133.5	1.0	1.760
2200	3300	135.0	1.0	0.670
2100	3200	143.5	1.0	1.240
2100	3200	143.5	1.0	1.890
2100	3100	145.0	1.0	0.730
2000	3000	158.5	1.0	1.860
2000	3000	158.5	1.0	2.670
1900	2800	158.5	1.0	0.950
1800	2700	172.0	1.5	2.210
1800	2700	172.0	1.5	3.210
1700	2600	168.5	1.0	1.020
1700	2500	182.0	1.5	2.350
1700	2500	182.0	1.5	3.480
1600	2400	183.5	1.0	1.600
1600	2400	201.0	2.0	2.980
1500	2300	193.5	1.0	1.700
1500	2200	211.0	2.0	3.100
1500	2200	208.5	1.0	2.540
1400	2100	221.0	2.0	3.220
1400	2100	218.5	1.0	2.680
1300	2000	241.0	2.0	4.480
1300	1900	232	1.5	3.210
1300	1900	251	2.0	4.530
1200	1800	242	1.5	3.350

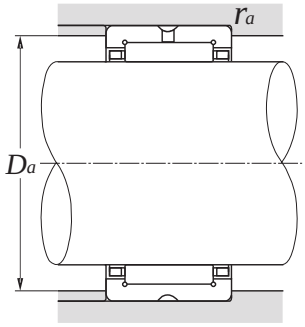


Type RNA 48
Type RNA 49 (Fwe 14 mm)
Type RNA 59

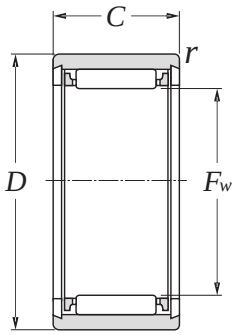
Inner bore F_w mm	Bearing number	Principal dimensions D	C mm	r_s min[1)]	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
225 $^{+0.079}_{+0.050}$	RNA 4940	280	80	2.1	505000	1180000	51500	120000
240 $^{+0.079}_{+0.050}$	RNA 4844	270	50	1.5	242000	770000	24700	78500
245 $^{+0.079}_{+0.050}$	RNA 4944	300	80	2.1	525000	1270000	53500	129000
265 $^{+0.088}_{+0.056}$	RNA 4848	300	60	2.0	360000	1080000	37000	110000
265 $^{+0.088}_{+0.056}$	RNA 4948	320	80	2.1	540000	1350000	55000	138000
285 $^{+0.088}_{+0.056}$	RNA 4852	320	60	2.0	375000	1160000	38000	119000
290 $^{+0.088}_{+0.056}$	RNA 4952	360	100	2.1	805000	1900000	82000	193000
305 $^{+0.088}_{+0.056}$	RNA 4856	350	69	2.0	455000	1300000	46500	133000
310 $^{+0.088}_{+0.056}$	RNA 4956	380	100	2.1	835000	2030000	85000	207000
330 $^{+0.098}_{+0.062}$	RNA 4860	380	80	2.1	625000	1770000	64000	180000
340 $^{+0.098}_{+0.062}$	RNA 4960	420	118	3.0	1080000	2640000	110000	269000
350 $^{+0.098}_{+0.062}$	RNA 4864	400	80	2.1	640000	1850000	655000	189000
360 $^{+0.098}_{+0.062}$	RNA 4964	440	118	3.0	1120000	2820000	114000	288000
370 $^{+0.098}_{+0.062}$	RNA 4868	420	80	2.1	665000	1940000	66500	197000
380 $^{+0.098}_{+0.062}$	RNA 4968	460	118	3.0	1160000	3000000	118000	305000
390 $^{+0.098}_{+0.062}$	RNA 4872	440	80	2.1	665000	2020000	68000	206000
400 $^{+0.108}_{+0.068}$	RNA 4972	480	118	3.0	1200000	3200000	122000	325000
415 $^{+0.108}_{+0.068}$	RNA 4876	480	100	2.1	1000000	2840000	102000	289000
430 $^{+0.108}_{+0.068}$	RNA 4976	520	140	4.0	1400000	3750000	143000	385000
450 $^{+0.108}_{+0.068}$	RNA 4980	540	140	4.0	1450000	4000000	148000	410000
470 $^{+0.108}_{+0.068}$	RNA 4984	560	140	4.0	1500000	4250000	153000	430000
490 $^{+0.108}_{+0.068}$	RNA 4988	600	160	4.0	1750000	4600000	179000	470000

Technical supplement

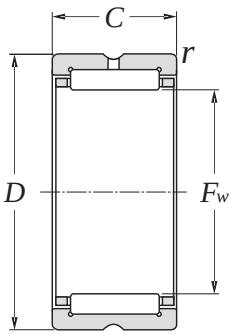
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



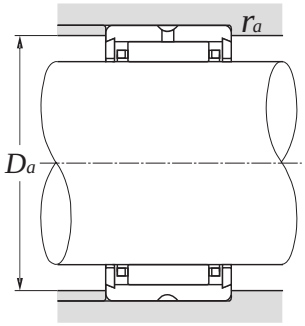
Max runout speed grease	Max runout speed oil	Abutment dimensions		Weight
r/min		$D_{a\ max}$	$r_{as\ max}$	kg.
1200	1800	269	2.0	7.200
1100	1700	262	1.5	3.620
1100	1600	289	2.0	7.810
1000	1500	291	2.0	5.400
1000	1500	309	2.0	8.400
950	1400	311	2.0	5.800
950	1400	349	2.0	15.900
850	1300	341	2.0	9.300
850	1300	369	2.0	16.700
800	1200	369	2.0	12.700
800	1200	407	2.5	24.000
750	1100	389	2.0	13.400
750	1100	427	2.5	25.200
750	1100	409	2.0	14.000
750	1100	447	2.5	26.500
650	1000	429	2.0	14.800
650	1000	467	2.5	28.200
650	950	469	3.0	26.000
650	950	504	3.0	38.600
600	900	524	3.0	40.100
550	850	544	3.0	51.600
550	800	584	3.0	66.900

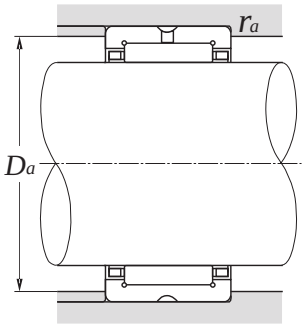


Type NK (Fwd 12 mm)



Type NK (Fwe 14 mm)

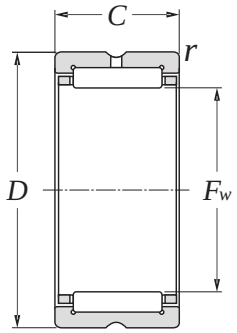




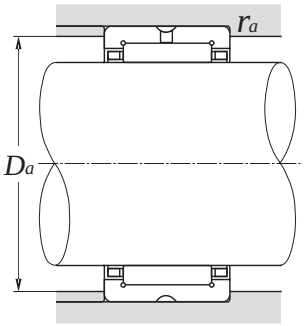
Inner bore Fw	Bearing number	Principal dimensions			Basic load ratings				Max runout speed		Abutment dimensions		Weight
					dynamic	static	dynamic	static	grease	oil			
		D	C	rs min[1]	C	Co	C	Co			Da max	Db max	
mm		mm			N		kgf		r/min				kg.
5 +0.018 +0.010	NK 5/10	10	10	0.15	2640	2190	269	224	27000	40000	6.5	0.15	0.0031
5 +0.018 +0.010	NK 5/12	10	12	0.15	2720	2250	277	230	27000	40000	6.5	0.15	0.0037
6 +0.018 +0.010	NK 6/10	12	10	0.15	2660	2280	272	233	25000	37000	7.5	0.15	0.0047
6 +0.018 +0.010	NK 6/12	12	12	0.15	3400	3150	345	320	25000	37000	7.5	0.15	0.0057
7 +0.022 +0.013	NK 7/10	14	10	0.30	2670	2350	272	239	23000	34000	8.5	0.30	0.0069
7 +0.022 +0.013	NK 7/12	14	12	0.30	3400	3200	345	330	23000	34000	8.5	0.30	0.0082
8 +0.022 +0.013	NK 8/12	15	12	0.30	4000	4100	410	420	21000	32000	9.5	0.30	0.0087
8 +0.022 +0.013	NK 8/16	15	16	0.30	4850	5200	495	535	21000	32000	9.5	0.30	0.0120
9 +0.022 +0.013	NK 9/12	16	12	0.30	4550	5000	465	510	20000	30000	10.5	0.30	0.0100
9 +0.022 +0.013	NK 9/16	16	16	0.30	5500	6400	560	650	20000	30000	10.5	0.30	0.0130
10 +0.022 +0.013	NK 10/12	17	12	0.30	4550	5100	460	520	19000	28000	11.5	0.30	0.0100
10 +0.022 +0.013	NK 10/16	17	16	0.30	5450	6450	555	660	19000	28000	11.5	0.30	0.0130
12 +0.027 +0.016	NK 12/12	19	12	0.30	5000	6100	510	620	17000	26000	13.5	0.30	0.0130
12 +0.027 +0.016	NK 12/16	19	16	0.30	6000	7700	615	785	17000	26000	13.5	0.30	0.0160
14 +0.027 +0.016	NK 14/16	22	16	0.30	10300	11500	1050	1170	16000	24000	20.0	0.30	0.0210
14 +0.027 +0.016	NK 14/20	22	20	0.30	13000	15600	1330	1590	16000	24000	20.0	0.30	0.0260
15 +0.027 +0.016	NK 15/16	23	16	0.30	10900	12700	1110	1290	15000	23000	21.0	0.30	0.0220
15 +0.027 +0.016	NK 15/20	23	20	0.30	13800	17200	1410	1750	15000	23000	21.0	0.30	0.0270
16 +0.027 +0.016	NK 16/16	24	16	0.30	12200	14900	1240	1520	15000	23000	22.0	0.30	0.0220
16 +0.027 +0.016	NK 16/20	24	20	0.30	14600	18800	1490	1920	15000	23000	22.0	0.30	0.0280
17 +0.027 +0.016	NK 17/16	25	16	0.30	12100	15000	1240	1530	15000	22000	23.0	0.30	0.0240
17 +0.027 +0.016	NK 17/20	25	20	0.30	15400	20400	1570	2080	15000	22000	23.0	0.30	0.0300
18 +0.027 +0.016	NK 18/16	26	16	0.30	12700	16200	1300	1650	14000	21000	24.0	0.30	0.0250
18 +0.027 +0.016	NK 18/20	26	20	0.30	16100	22000	1640	2250	14000	21000	24.0	0.30	0.0310

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Type NK (Fwe 14 mm)

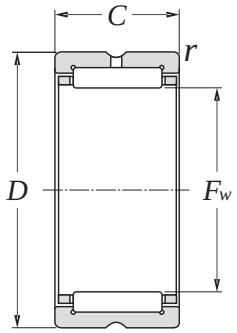


Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings				Max runout speed		Abutment dimensions		Weight
					dynamic	static	dynamic	static	grease	oil			
		D	C	$r_{s\,min}$[1]	C	Co	C	Co			$D_{a\,max}$	$D_{b\,max}$	
mm			mm		N		kgf		r/min				kg.
19 $^{+0.033}_{+0.020}$	NK 19/16	27	16	0.30	13300	17400	1350	1780	14000	21000	25.0	0.30	0.0260
19 $^{+0.033}_{+0.020}$	NK 19/20	27	20	0.30	16000	22200	1630	2260	14000	21000	25.0	0.30	0.0320
20 $^{+0.033}_{+0.020}$	NK 20/16	28	16	0.30	13200	17500	1340	1790	13000	20000	26.0	0.30	0.0270
20 $^{+0.033}_{+0.020}$	NK 20/20	28	20	0.30	16700	23800	1700	2420	13000	20000	26.0	0.30	0.0340
21 $^{+0.033}_{+0.020}$	NK 21/16	29	16	0.30	13700	18700	1400	1910	13000	19000	27.0	0.30	0.0280
21 $^{+0.033}_{+0.020}$	NK 21/20	29	20	0.30	18300	27100	1860	2760	13000	19000	27.0	0.30	0.0350
22 $^{+0.033}_{+0.020}$	NK 22/16	30	16	0.30	14200	19900	1450	2030	12000	18000	28.0	0.30	0.0340
22 $^{+0.033}_{+0.020}$	NK 22/20	30	20	0.3	18000	27000	1840	2760	12000	18000	28	0.3	0.037
24 $^{+0.033}_{+0.020}$	NK 24/16	32	16	0.3	15200	22300	1550	2280	11000	17000	30	0.3	0.032
24 $^{+0.033}_{+0.020}$	NK 24/20	32	20	0.3	18600	28800	1890	2930	11000	17000	30	0.3	0.040
25 $^{+0.033}_{+0.020}$	NK 25/16	33	16	0.3	15100	22400	1540	2280	11000	16000	31	0.3	0.033
25 $^{+0.033}_{+0.020}$	NK 25/20	33	20	0.3	19200	30500	1960	3100	11000	16000	31	0.3	0.042
26 $^{+0.033}_{+0.020}$	NK 26/16	34	16	0.3	15600	23600	1590	2410	10000	15000	32	0.3	0.034
26 $^{+0.033}_{+0.020}$	NK 26/20	34	20	0.3	19100	30500	1940	3100	10000	15000	32	0.3	0.042
28 $^{+0.033}_{+0.020}$	NK 28/20	37	20	0.3	22300	34000	2280	3450	9500	14000	35	0.3	0.052
28 $^{+0.033}_{+0.020}$	NK 28/30	37	30	0.3	26700	48000	2720	4900	9500	14000	35	0.3	0.082
29 $^{+0.033}_{+0.020}$	NK 29/20	38	20	0.3	22200	34000	2270	3450	9500	14000	36	0.3	0.054
29 $^{+0.033}_{+0.020}$	NK 29/30	38	30	0.3	27500	50500	2810	5150	9500	14000	36	0.3	0.084
30 $^{+0.033}_{+0.020}$	NK 30/20	40	20	0.3	22100	34000	2260	3500	8500	13000	38	0.3	0.065
30 $^{+0.033}_{+0.020}$	NK 30/30	40	30	0.3	33000	57000	3350	5800	8500	13000	38	0.3	0.098
32 $^{+0.041}_{+0.025}$	NK 32/20	42	20	0.3	23500	37500	2400	3850	8500	13000	40	0.3	0.068
32 $^{+0.041}_{+0.025}$	NK 32/30	42	30	0.3	34000	60500	3450	6150	8500	13000	40	0.3	0.102
35 $^{+0.041}_{+0.025}$	NK 35/20	45	20	0.3	24800	41500	2520	4250	7500	11000	43	0.3	0.074
35 $^{+0.041}_{+0.025}$	NK 35/30	45	30	0.3	36000	66500	3650	6800	7500	11000	43	0.3	0.112

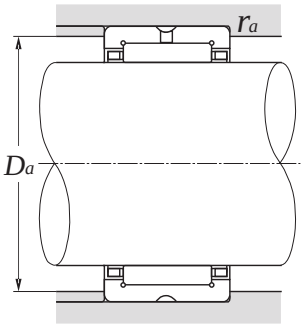
r

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type NK (Fwe 14 mm)

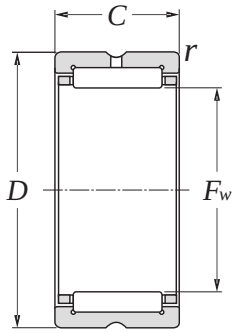


Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings				Max runout speed		Abutment dimensions		Weight
					dynamic	static	dynamic	static	grease	oil			
		D	C	$r_{s\,min}$[1)]	C	Co	C	Co			$D_{a\,max}$	$D_{b\,max}$	
mm			mm		N		kgf		r/min				kg.
37 $^{+0.041}_{+0.025}$	NK 37/20	47	20	0.3	25300	43500	2580	4400	7500	11000	45	0.3	0.077
37 $^{+0.041}_{+0.025}$	NK 37/30	47	30	0.3	36500	69500	3750	7100	7500	11000	45	0.3	0.107
38 $^{+0.041}_{+0.025}$	NK 38/20	48	20	0.3	25900	45000	2640	4600	7500	11000	46	0.3	0.079
38 $^{+0.041}_{+0.025}$	NK 38/30	48	30	0.3	37500	73000	3850	7400	7500	11000	46	0.3	0.107
40 $^{+0.041}_{+0.025}$	NK 40/20	50	20	0.3	26400	47000	2700	4800	6500	10000	48	0.3	0.083
40 $^{+0.041}_{+0.025}$	NK 40/30	50	30	0.3	38500	76000	3900	7750	6500	10000	48	0.3	0.125
42 $^{+0.041}_{+0.025}$	NK 42/20	52	20	0.3	26900	49000	2750	5000	6500	9500	50	0.3	0.086
42 $^{+0.041}_{+0.025}$	NK 42/30	52	30	0.3	39000	79000	4000	8050	6500	9500	50	0.3	0.130
43 $^{+0.041}_{+0.025}$	NK 43/20	53	20	0.3	27500	51000	2810	5200	6500	9500	51	0.3	0.086
43 $^{+0.041}_{+0.025}$	NK 43/30	53	30	0.3	40000	82000	4100	8400	6500	9500	51	0.3	0.133
45 $^{+0.041}_{+0.025}$	NK 45/20	55	20	0.3	28000	52500	2860	5400	6000	9000	53	0.3	0.092
45 $^{+0.041}_{+0.025}$	NK 45/30	55	30	0.3	41000	85500	4150	8700	6000	9000	53	0.3	0.139
47 $^{+0.041}_{+0.025}$	NK 47/20	57	20	0.3	28800	55500	2940	5650	5500	8500	55	0.3	0.095
47 $^{+0.041}_{+0.025}$	NK 47/30	57	30	0.3	42500	91500	4350	9350	5500	8500	55	0.3	0.142
50 $^{+0.041}_{+0.025}$	NK 50/25	62	25	0.6	38500	74500	3950	7550	5500	8000	58	0.6	0.158
50 $^{+0.041}_{+0.025}$	NK 50/35	62	35	0.6	51000	106000	5200	10800	5500	8000	58	0.6	0.221
55 $^{+0.049}_{+0.030}$	NK 55/25	68	25	0.6	41000	82000	4150	8400	5000	7500	64	0.6	0.193
55 $^{+0.049}_{+0.030}$	NK 55/35	68	35	0.6	54000	118000	5500	12000	5000	7500	64	0.6	0.267
60 $^{+0.049}_{+0.030}$	NK 60/25	72	25	0.6	41000	85000	4200	8700	4300	6500	68	0.6	0.185
60 $^{+0.049}_{+0.030}$	NK 60/35	72	35	0.6	57000	130000	5800	13200	4300	6500	68	0.6	0.258
65 $^{+0.049}_{+0.030}$	NK 65/25	78	25	0.6	45000	98000	4550	10000	4000	6000	74	0.6	0.221
65 $^{+0.049}_{+0.030}$	NK 65/35	78	35	0.6	60000	142000	6100	14400	4000	6000	74	0.6	0.310
68 $^{+0.049}_{+0.030}$	NK 68/25	82	25	1.0	44500	89000	4500	9050	4000	6000	77	0.6	0.241
68 $^{+0.049}_{+0.030}$	NK 68/35	82	35	0.6	63000	139000	6400	14200	4000	6000	78	0.6	0.338

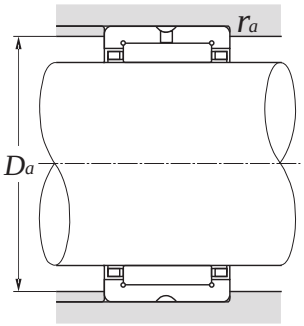
r

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



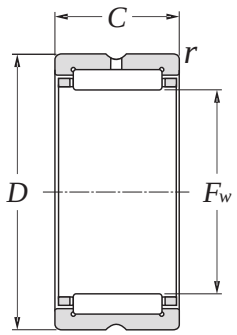
Type NK (Fwe 14 mm)



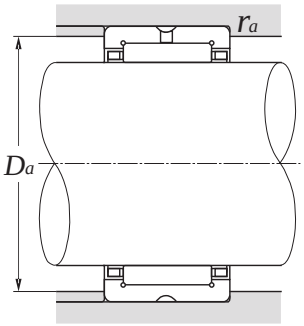
Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings				Max runout speed		Abutment dimensions		Weight
					dynamic	static	dynamic	static	grease	oil			
		D	C	$r_{s\,min}$[1)]	C	Co	C	Co			$D_{a\,max}$	$D_{b\,max}$	
mm			mm		N		kgf		r/min				kg.
70 $^{+0.049}_{+0.030}$	NK 70/25	85	25	0.6	45000	91500	4600	9350	3700	5500	81.0	0.6	0.275
70 $^{+0.049}_{+0.030}$	NK 70/35	85	35	0.6	64000	144000	6550	14700	3700	5500	81.0	0.6	0.386
73 $^{+0.049}_{+0.030}$	NK 73/25	90	25	0.6	54000	100000	5500	10200	3700	5500	86.0	0.6	0.302
73 $^{+0.049}_{+0.030}$	NK 73/35	90	35	0.6	76500	156000	7800	16000	3700	5500	86.0	0.6	0.428
75 $^{+0.049}_{+0.030}$	NK 75/25	92	25	0.6	55000	104000	5600	10600	3700	5500	88.0	0.6	0.315
75 $^{+0.049}_{+0.030}$	NK 75/35	92	35	0.6	78000	162000	7950	16500	3700	5500	88.0	0.6	0.492
80 $^{+0.049}_{+0.030}$	NK 80/25	95	25	1.0	57000	119000	5800	12200	3300	5000	90.0	1.0	0.301
80 $^{+0.049}_{+0.030}$	NK 80/35	95	35	1.0	79500	184000	8150	18700	3300	5000	90.0	1.0	0.425
85 $^{+0.058}_{+0.036}$	NK 85/25	105	25	1.0	70500	123000	7200	12600	3100	4700	100.0	1.0	0.404
85 $^{+0.058}_{+0.036}$	NK 85/35	105	35	1.0	100000	193000	10200	19700	3100	4700	100.0	1.0	0.517
90 $^{+0.058}_{+0.036}$	NK 90/25	110	25	1.0	71500	128000	7300	13100	2900	4400	105.0	1.0	0.426
90 $^{+0.058}_{+0.036}$	NK 90/35	110	35	1.0	104000	208000	10600	21200	2900	4400	105.0	1.0	0.604
95 $^{+0.058}_{+0.036}$	NK 95/26	115	26	1.0	74500	137000	7600	14000	2800	4200	110.0	1.0	0.364
95 $^{+0.058}_{+0.036}$	NK 95/36	115	36	1.0	108000	223000	11100	22700	2800	4200	110.0	1.0	0.652
100 $^{+0.058}_{+0.036}$	NK 100/26	120	26	1.0	73500	137000	7500	14000	2700	4000	115.0	1.0	0.487
100 $^{+0.058}_{+0.036}$	NK 100/36	120	36	1.0	107000	223000	11000	22800	2700	4000	115.0	1.0	0.679
105 $^{+0.058}_{+0.036}$	NK 105/26	125	26	1.0	76500	147000	7800	14900	2500	3800	120.0	1.0	0.506
105 $^{+0.058}_{+0.036}$	NK 105/36	125	36	1.0	111000	238000	11400	24300	2500	3800	120.0	1.0	0.713
110 $^{+0.058}_{+0.036}$	NK 110/30	130	30	1.1	97500	204000	9950	20800	2400	3600	123.5	1.0	0.612
110 $^{+0.058}_{+0.036}$	NK 110/40	130	40	1.1	129000	292000	13100	29700	2400	3600	123.5	1.0	0.830
120 $^{+0.058}_{+0.036}$	NK 120/40	140	40	1.1	113000	268000	11500	27300	2200	3300	133.5	1.0	0.910
130 $^{+0.068}_{+0.043}$	NK 130/40	150	40	1.1	116000	283000	11800	28800	2100	3100	143.5	1.0	0.980
145 $^{+0.068}_{+0.043}$	NK 145/32	170	32	1.5	111000	238000	11300	24300	1900	2800	162.5	1.5	1.120
145 $^{+0.068}_{+0.043}$	NK 145/42	170	42	1.5	153000	360000	15600	36500	1900	2800	162.5	1.5	1.490

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



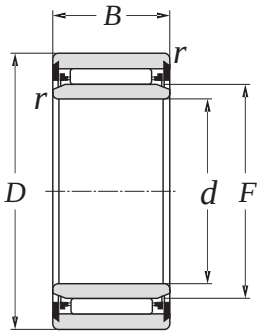
Type NK (Fwe 14 mm)



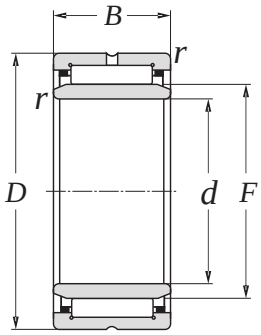
Inner bore F_w	Bearing number	Principal dimensions			Basic load ratings				Max runout speed		Abutment dimensions		Weight
					dynamic	static	dynamic	static	grease	oil			
		D	C	$r_{s\,min}$ [1)]	C	Co	C	Co			$D_{a\,max}$	$D_{b\,max}$	
mm		mm			N		kgf		r/min				kg.
$155^{+0.068}_{+0.043}$	NK 155/32	180	32	1.5	114000	252000	11600	25700	1700	2600	172.0	1.5	1.200
$155^{+0.068}_{+0.043}$	NK 155/42	180	42	1.5	156000	380000	16000	38500	1700	2600	172.0	1.5	1.590
$165^{+0.068}_{+0.043}$	NK 165/32	190	32	1.5	117000	265000	11900	27000	1600	2400	182.0	1.5	1.420
$165^{+0.068}_{+0.043}$	NK 165/42	190	42	1.5	160000	400000	16300	40500	1600	2400	182.0	1.5	1.660

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Type NKI (dd 9 mm)

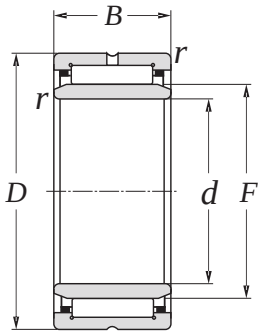


Type NKI (de 10 mm)

Inner bore	Bearing number	Principal dimensions				Basic load ratings		Limiting speed oil	Weight
						dynamic	static		
d		*F*	*D*	*B*	*rs min*[1)]	C	Co		
mm		mm				N		r/min	kg.
5	NKI 5/12	8	15	12	0.3	3950	4100	32000	0.012
5	NKI 5/16	8	15	16	0.3	5100	5800	32000	0.015
6	NKI 6/12	9	16	12	0.3	4500	5000	31000	0.014
6	NKI 6/16	9	16	16	0.3	5900	7100	31000	0.018
7	NKI 7/12	10	17	12	0.3	4750	5500	29000	0.014
7	NKI 7/16	10	17	16	0.3	6200	7800	29000	0.018
9	NKI 9/12	12	19	12	0.3	6400	7100	27000	0.017
9	NKI 9/16	12	19	16	0.3	9000	11000	27000	0.022
10	NKI 10/16	14	22	16	0.3	10100	11500	25000	0.029
10	NKI 10/20	14	22	20	0.3	12800	15600	25000	0.037
12	NKI 12/16	16	24	16	0.3	11300	13900	23000	0.033
12	NKI 12/20	16	24	20	0.3	14400	18800	23000	0.042
15	NKI 15/16	19	27	16	0.3	13000	17400	22000	0.039
15	NKI 15/20	19	27	20	0.3	16500	23600	22000	0.049
17	NKI 17/16	21	29	16	0.3	13500	18700	21000	0.043
17	NKI 17/20	21	29	20	0.3	17100	25500	21000	0.054
20	NKI 20/16	24	32	16	0.3	15000	22300	18000	0.049
20	NKI 20/20	24	32	20	0.3	19000	30500	18000	0.061
22	NKI 22/16	26	34	16	0.3	15300	23600	17000	0.052
22	NKI 22/20	26	34	20	0.3	19400	32000	17000	0.065
25	NKI 25/20	29	38	20	0.3	21900	34000	15000	0.080
25	NKI 25/30	29	38	30	0.3	32500	57000	15000	0.120
28	NKI 28/20	32	42	20	0.3	23100	37500	14000	0.097
28	NKI 28/30	32	42	30	0.3	34500	63000	14000	0.150

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

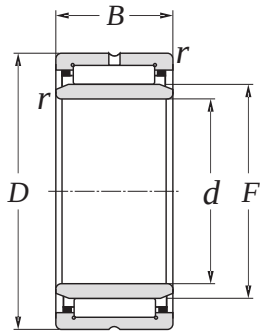


Type NKI (de 10 mm)

Inner bore d	Bearing number	Principal dimensions F	D	B	rs min[1]	Basic load ratings dynamic C	static Co	Limiting speed oil	Weight
mm		mm				N		r/min	kg.
30	NKI 30/20	35	45	20	0.3	24300	41500	13000	0.110
30	NKI 30/30	35	45	30	0.3	36500	69000	13000	0.170
32	NKI 32/20	37	47	20	0.3	24900	43500	12000	0.120
32	NKI 32/30	37	47	30	0.3	37000	73000	12000	0.180
35	NKI 35/20	40	50	20	0.3	26000	47000	11000	0.130
35	NKI 35/30	40	50	30	0.3	39000	79000	11000	0.190
38	NKI 38/20	43	53	20	0.3	27000	51000	11000	0.140
38	NKI 38/30	43	53	30	0.3	40500	85000	11000	0.210
40	NKI 40/20	45	55	20	0.3	27500	53000	10000	0.140
40	NKI 40/30	45	55	30	0.3	41000	88000	10000	0.220
42	NKI 42/20	47	57	20	0.3	28500	56000	10000	0.150
42	NKI 42/30	47	57	30	0.3	43000	94000	10000	0.220
45	NKI 45/25	50	62	25	0.6	38000	74000	9000	0.230
45	NKI 45/35	50	62	35	0.6	50000	106000	9000	0.320
50	NKI 50/25	55	68	25	0.6	40000	82000	8500	0.270
50	NKI 50/35	55	68	35	0.6	53000	118000	8500	0.380
55	NKI 55/25	60	72	25	0.6	42000	90000	7500	0.270
55	NKI 55/35	60	72	35	0.6	56000	130000	7500	0.380
60	NKI 60/25	68	82	25	0.6	43500	89000	7000	0.400
60	NKI 60/35	68	82	35	0.6	62000	139000	7000	0.550
65	NKI 65/25	73	90	25	1.0	53000	100000	6500	0.470
65	NKI 65/35	73	90	35	1.0	75000	156000	6500	0.660
70	NKI 70/25	80	95	25	1.0	56000	119000	6000	0.520
70	NKI 70/35	80	95	35	1.0	78000	184000	6000	0.740

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

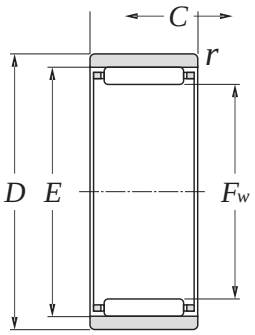


Type NKI (de 10 mm)

Inner bore d	Bearing number	Principal dimensions				Basic load ratings		Limiting speed oil	Weight
		F	D	B	rs min[1]	dynamic C	static Co		
mm		mm				N		r/min	kg.
75	NKI 75/25	85	105	25	1.0	69000	123000	5500	0.640
75	NKI 75/35	85	105	35	1.0	98000	193000	5500	0.910
80	NKI 80/25	90	110	25	1.0	72000	132000	5000	0.680
80	NKI 80/35	90	110	35	1.0	103000	208000	5000	0.960
85	NKI 85/26	95	115	26	1.0	73000	137000	4800	0.750
85	NKI 85/36	95	115	36	1.0	107000	223000	4800	1.050
90	NKI 90/26	100	120	26	1.0	76000	146000	4600	0.780
90	NKI 90/36	100	120	36	1.0	111000	237000	4600	1.100
95	NKI 95/26	105	125	26	1.0	78000	155000	4400	0.820
95	NKI 95/36	105	125	36	1.0	114000	250000	4400	1.150
100	NKI 100/30	110	130	30	1.1	98000	210000	4200	1.000
100	NKI 100/40	110	130	40	1.1	127000	290000	4200	1.350

Technical supplement

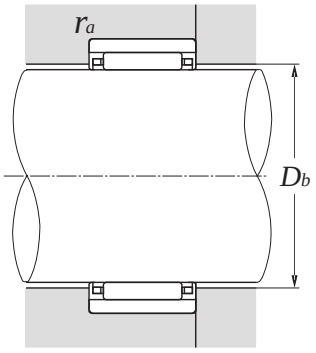
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

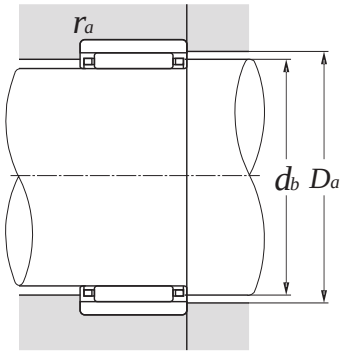


Inner bore F_w	Bearing number	Boundary dimensions				Basic load ratings (Radial)			
						dynamic	static	dynamic	static
		D	C	r_s min[1)]	E	C	Co	C	Co
mm		mm				N		kgf	
5 $^{+0.018}_{+0.010}$	RNAO 5x10x8	10	8.0	0.15	8	2640	2190	269	224
6 $^{+0.018}_{+0.010}$	RNAO 6x13x8	13	8.0	0.30	9	2660	2280	272	233
7 $^{+0.022}_{+0.013}$	RNAO 7x14x8	14	8.0	0.30	10	2670	2350	272	239
8 $^{+0.022}_{+0.013}$	RNAO 8x15x10	15	10.0	0.30	11	4000	4100	410	420
10 $^{+0.022}_{+0.013}$	RNAO 10x17x10	17	10.0	0.30	13	4550	5100	460	520
10 $^{+0.022}_{+0.013}$	RNAO 10x20x12	20	12.0	0.30	16	7100	5950	720	610
12 $^{+0.027}_{+0.016}$	RNAO 12x19x13.5	19	13.5	0.30	15	6000	7700	615	785
12 $^{+0.027}_{+0.016}$	RNAO 12x22x12	22	12.0	0.30	18	8650	8000	880	815
14 $^{+0.027}_{+0.016}$	RNAO 14x22x13	22	13.0	0.30	18	8300	10100	845	1030
14 $^{+0.027}_{+0.016}$	RNAO 14x26x12	26	12.0	0.30	20	9350	9150	955	930
15 $^{+0.027}_{+0.016}$	RNAO 15x23x13	23	13.0	0.30	19	8250	10200	840	1040
16 $^{+0.027}_{+0.016}$	RNAO 16x24x13	24	13.0	0.30	20	9050	11800	925	1200
16 $^{+0.027}_{+0.016}$	RNAO 16x28x12	28	12.0	0.30	22	11700	12500	1190	1280
17 $^{+0.027}_{+0.016}$	RNAO 17x25x13	25	13.0	0.30	21	9400	12600	960	1280
18 $^{+0.027}_{+0.016}$	RNAO 18x26x13	26	13.0	0.30	22	8900	11900	910	1210
18 $^{+0.027}_{+0.016}$	RNAO 18x30x12	30	12.0	0.30	24	12300	13800	1250	1410
20 $^{+0.033}_{+0.020}$	RNAO 20x28x13	28	13.0	0.30	24	10000	14300	1020	1460
20 $^{+0.033}_{+0.020}$	RNAO 20x32 x12	32	12.0	0.30	26	12900	15100	1320	1540
22 $^{+0.033}_{+0.020}$	RNAO 22x30x13	30	13.0	0.30	26	10200	15200	1040	1550
22 $^{+0.033}_{+0.020}$	RNAO 22x35x16	35	16.0	0.30	29	18700	22700	1910	2310
25 $^{+0.033}_{+0.020}$	RNAO 25x35x17	35	17.0	0.30	29	14200	24000	1450	2450
25 $^{+0.033}_{+0.020}$	RNAO 25x37x16	37	16.0	0.30	32	19500	24700	1990	2520
26 $^{+0.033}_{+0.020}$	RNAO 26x39x13	39	13.0	0.30	30	11800	19200	1200	1960
28 $^{+0.033}_{+0.020}$	RNAO 28x40x16	40	16.0	0.30	35	21200	28400	2160	2900

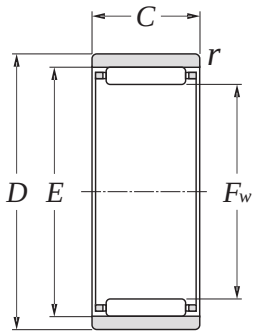
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		





Max runout speed grease	oil	Abutment dimensions				Weight
r/min		$D_{b\,min}$	$D_{a\,max}$	$d_{b\,min}$	$r_{a\,max}$	kg.
27000	40000	7.7	8.8	5.3	0.15	0.003
25000	37000	8.7	11.0	6.3	0.30	0.006
23000	34000	9.7	12.0	7.3	0.30	0.006
21000	32000	10.7	13.0	8.3	0.30	0.008
19000	28000	12.7	15.0	10.3	0.30	0.010
19000	28000	15.7	18.0	10.3	0.30	0.018
17000	26000	14.7	17.0	12.3	0.30	0.015
17000	26000	17.6	20.0	12.3	0.30	0.019
16000	24000	17.6	20.0	14.4	0.30	0.018
16000	24000	19.6	24.0	14.4	0.30	0.029
15000	23000	18.6	21.0	15.4	0.30	0.020
15000	23000	19.6	22.0	16.4	0.30	0.021
15000	23000	21.6	26.0	16.4	0.30	0.032
15000	22000	20.6	23.0	17.4	0.30	0.022
14000	21000	21.6	24.0	18.4	0.30	0.022
14000	21000	23.6	28.0	18.4	0.30	0.035
13000	20000	23.6	26.0	20.4	0.30	0.025
13000	20000	25.6	30.0	20.4	0.30	0.038
12000	18000	25.6	28.0	22.4	0.30	0.027
12000	18000	28.4	33.0	22.4	0.30	0.059
11000	16000	28.4	33.0	25.6	0.30	0.053
11000	16000	31.4	35.0	25.6	0.30	0.060
10000	15000	29.4	37.0	26.6	0.30	0.060
9500	14000	34.4	38.0	28.6	0.30	0.061



Inner bore F_w	Bearing number	Boundary dimensions				Basic load ratings (Radial)			
		D	C	r_s min[1)]	E	dynamic C	static Co	dynamic C	static Co
mm		mm				N		kgf	
30 $^{+0.033}_{+0.020}$	RNAO 30x40x17	40	17	0.3	35	19400	32500	1970	3350
30 $^{+0.033}_{+0.020}$	RNAO 30x42x16	42	16	0.3	37	21900	30500	2230	3100
32 $^{+0.041}_{+0.025}$	RNAO 32x42x13	42	13	0.3	37	14500	23000	1480	2350
35 $^{+0.041}_{+0.025}$	RNAO 35x45x13	45	13	0.3	40	15200	25100	1550	2560
35 $^{+0.041}_{+0.025}$	RNAO 35x45x17	45	17	0.3	40	20000	36000	2040	3650
35 $^{+0.041}_{+0.025}$	RNAO 35x47x16	47	16	0.3	42	24100	36000	2450	3650
35 $^{+0.041}_{+0.025}$	RNAO 35x47x18	47	18	0.3	42	24700	37000	2510	3750
37 $^{+0.041}_{+0.025}$	RNAO 37x47x13	47	13	0.3	42	15900	27100	1620	2770
37 $^{+0.041}_{+0.025}$	RNAO 37x52x18	52	18	0.3	44	26300	41000	2680	4150
40 $^{+0.041}_{+0.025}$	RNAO 40x50x17	50	17	0.3	45	21800	41500	2220	4250
40 $^{+0.041}_{+0.025}$	RNAO 40x55x20	55	20	0.3	47	31000	51500	3150	5250
45 $^{+0.041}_{+0.025}$	RNAO 45x55x17	55	17	0.3	50	22300	44500	2280	4550
45 $^{+0.041}_{+0.025}$	RNAO 45x62x20	62	20	0.3	53	36000	59000	3650	6000
50 $^{+0.041}_{+0.025}$	RNAO 50x62x20	62	20	0.3	55	27900	62000	2850	6300
50 $^{+0.041}_{+0.025}$	RNAO 50x65x20	65	20	0.3	58	38500	67500	3950	6850
55 $^{+0.049}_{+0.060}$	RNAO 55x68x20	68	20	0.6	60	28800	66500	2940	6750
55 $^{+0.049}_{+0.030}$	RNAO 55x68x25	68	25	0.6	63	50500	97500	5150	9950
55 $^{+0.049}_{+0.030}$	RNAO 55x72x20	72	20	0.6	63	39000	70000	3950	7100
60 $^{+0.049}_{+0.030}$	RNAO 60x78x20	78	20	1.0	68	40000	75000	4100	7650
65 $^{+0.049}_{+0.030}$	RNAO 65x85x30	85	30	1.0	73	61000	132000	6200	13400
70 $^{+0.049}_{+0.030}$	RNAO 70x90x30	90	30	1.0	78	65500	149000	6700	15200
75 $^{+0.049}_{+0.030}$	RNAO 75x95x30	95	30	1.0	83	67500	157000	6850	16100
80 $^{+0.049}_{+0.030}$	RNAO 80x95x30	95	30	1.0	86	57000	159000	5800	16200
80 $^{+0.049}_{+0.030}$	RNAO 80x100x30	100	30	1.0	88	69000	166000	7050	17000

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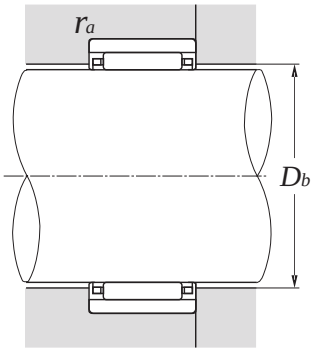
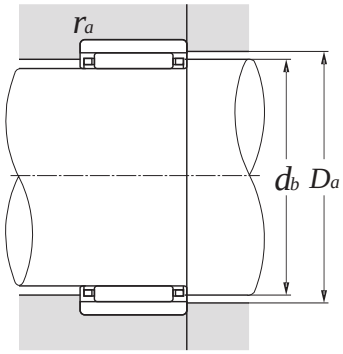
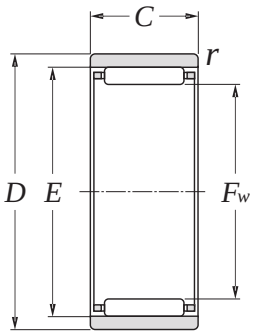
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		





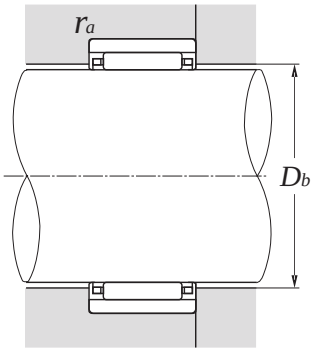
Max runout speed grease	Max runout speed oil	Abutment dimensions D_b min	Abutment dimensions D_a max	Abutment dimensions d_b min	Abutment dimensions r_a max	Weight
r/min						kg.
9000	13000	34.4	38	30.6	0.3	0.060
9000	13000	36.4	40	30.6	0.3	0.069
8500	13000	36.4	40	32.6	0.3	0.049
7500	11000	39.4	43	35.6	0.3	0.053
7500	11000	39.4	43	35.6	0.3	0.069
7500	11000	41.4	45	35.6	0.3	0.078
7500	11000	41.4	45	35.6	0.3	0.089
7000	11000	41.4	45	37.6	0.3	0.056
7000	11000	43.4	50	37.6	0.3	0.125
6500	10000	44.4	48	40.6	0.3	0.074
6500	10000	46.2	53	40.6	0.3	0.145
6000	9000	49.2	53	45.6	0.3	0.083
6000	9000	52.2	60	45.6	0.3	0.175
5500	8000	54.2	60	50.6	0.3	0.140
5500	8000	57.2	63	50.6	0.3	0.168
4800	7500	59.4	64	55.8	0.6	0.166
4800	7500	62.4	64	55.8	0.6	0.200
4800	7500	62.4	68	55.8	0.6	0.216
4400	6500	67.2	73	60.8	1.0	0.255
4100	6000	72.2	80	66.0	1.0	0.464
3800	5500	77.2	85	71.0	1.0	0.199
3600	5500	82.2	90	76.0	1.0	0.520
3300	5000	85.2	90	81.0	1.0	0.405
3300	5000	87.2	95	81.0	1.0	0.580

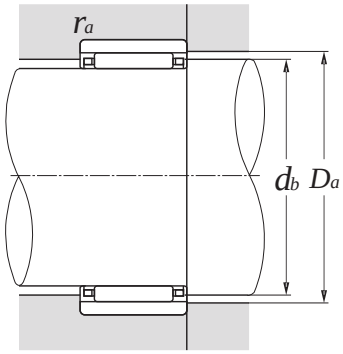


Inner bore F_w mm	Bearing number	Boundary dimensions D	C	$r_{s\,min}$ [1]	E mm	Basic load ratings (Radial) dynamic C N	static Co N	dynamic C kgf	static Co kgf
85 $^{+0.058}_{+0.036}$	RNAO 85x105x25	105	25	1	93	61500	146000	6250	14900
85 $^{+0.058}_{+0.036}$	RNAO 85x105x30	105	30	1	93	71000	175000	7200	17900
90 $^{+0.058}_{+0.036}$	RNAO 90x105x26	105	26	1	98	64000	157000	6550	16000
90 $^{+0.058}_{+0.036}$	RNAO 90x110x30	110	30	1	98	72500	184000	7400	18800
95 $^{+0.058}_{+0.036}$	RNAO 95x115x30	115	30	1	103	74000	193000	7550	19600
100 $^{+0.058}_{+0.035}$	RNAO 100x120x30	120	30	1	108	76000	201000	7700	20500

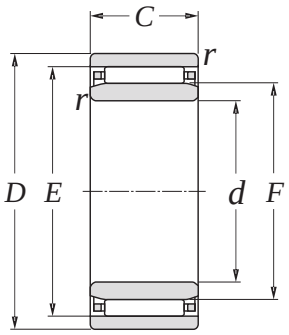
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



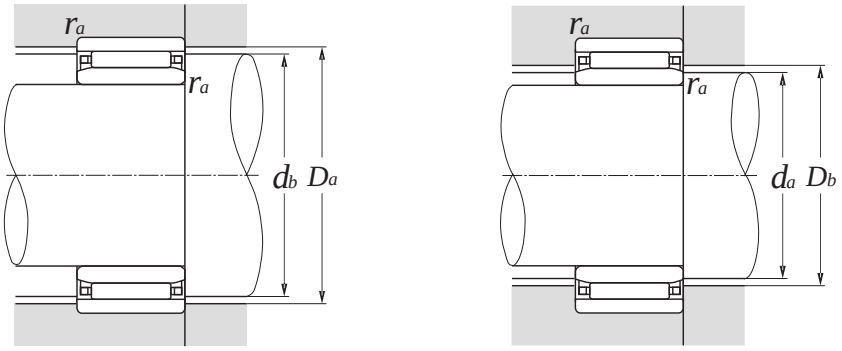


Max runout speed grease	Max runout speed oil	Abutment dimensions D_b min	Abutment dimensions D_a max	Abutment dimensions d_b min	Abutment dimensions r_a max	Weight
r/min						kg.
3100	4700	92.2	100	86	1	0.459
3100	4700	92.2	100	86	1	0.585
3000	4400	97.2	100	91	1	0.373
3000	4400	97.2	105	91	1	0.610
2800	4200	102.2	110	96	1	0.640
2700	4000	107.2	115	101	1	0.694

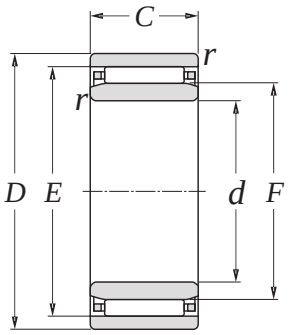


Inner bore d	Bearing number	Boundary dimensions					Basic load ratings (Radial)			
		D	C	rs min[1]	F	E	dynamic C	static Co	dynamic C	static Co
mm		mm					N		kgf	
6	NAO 6x17x10	17	10	0.3	10	13	4550	5100	460	520
7	NAO 7x20x12	20	12	0.3	10	16	7100	5950	720	610
9	NAO 9x22x12	22	12	0.3	12	18	8650	8000	880	815
10	NAO 10x22x13	22	13	0.3	14	18	8300	10100	845	1030
10	NAO 10x26x12	26	12	0.3	14	20	9350	9150	955	930
12	NAO 12x24x13	24	13	0.3	16	20	9050	11800	925	1200
12	NAO 12x28x12	28	12	0.3	16	22	11700	12500	1190	1280
15	NAO 15x28x13	28	13	0.3	20	24	10000	14300	1020	1460
15	NAO 15x32x12	32	12	0.3	20	26	12900	15100	1320	1540
17	NAO 17x30x13	30	13	0.3	22	26	10200	15200	1040	1550
17	NAO 17x35x16	35	16	0.3	22	29	18700	22700	1910	2310
20	NAO 20x35x17	35	17	0.3	25	29	14200	24000	1450	2450
20	NAO 20x37x16	37	16	0.3	25	32	19500	24700	1990	2520
25	NAO 25x40x17	40	17	0.3	30	35	19400	32500	1970	3350
25	NAO 25x42x16	42	16	0.3	30	37	21900	30500	2230	3100
29	NAO 29x42x13	42	13	0.3	32	37	14500	23000	1480	2350
30	NAO 30x45x13	45	13	0.3	35	40	15200	25100	1550	2560
30	NAO 30x45x17	45	17	0.3	35	40	20000	36000	2040	3650
30	NAO 30x47x16	47	16	0.3	35	42	24100	36000	2450	3650
30	NAO 30x47x18	47	18	0.3	35	42	24700	37000	2510	3750
30	NAO 30x52x18	52	18	0.3	37	44	26300	41000	2680	4150
33	NAO 33x47x13	47	13	0.3	37	42	15900	27100	1620	2770
35	NAO 35x50x17	50	17	0.3	40	45	21800	41500	2220	4250
35	NAO 35x55x20	55	20	0.3	40	47	31000	51500	3150	5250

Technical supplement			
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



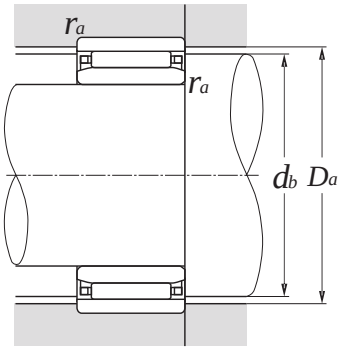
Max runout speed grease	Max runout speed oil	Abutment dimensions					Weight
		d_a min	d_b	D_a max	D_b	r_a max	
r/min							kg.
19000	28000	8	12.7	15	10.3	0.3	0.014
19000	28000	9	15.7	18	10.3	0.3	0.022
17000	26000	11	17.6	20	12.3	0.3	0.024
16000	24000	12	17.6	20	14.4	0.3	0.026
16000	24000	12	19.6	24	14.4	0.3	0.036
15000	23000	14	19.6	22	16.4	0.3	0.030
15000	23000	14	21.6	26	16.4	0.3	0.040
13000	20000	17	23.6	26	20.4	0.3	0.029
13000	20000	17	25.6	30	20.4	0.3	0.050
12000	18000	19	25.6	28	22.4	0.3	0.042
12000	18000	19	28.4	33	22.4	0.3	0.078
11000	16000	22	28.4	33	25.6	0.3	0.076
11000	16000	22	31.4	35	25.6	0.3	0.082
9000	13000	27	34.4	38	30.6	0.3	0.088
9000	13000	27	36.4	40	30.6	0.3	0.086
8500	13000	31	36.4	40	32.6	0.3	0.062
7500	11000	32	39.4	43	35.6	0.3	0.077
7500	11000	32	39.4	43	35.6	0.3	0.102
7500	11000	32	41.4	45	35.6	0.3	0.109
7500	11000	32	41.4	45	35.6	0.3	0.119
7000	11000	32	43.4	50	37.6	0.3	0.177
7000	11000	35	41.4	45	37.6	0.3	0.085
6500	10000	37	44.4	48	40.6	0.3	0.113
6500	10000	37	46.2	53	40.6	0.3	0.190

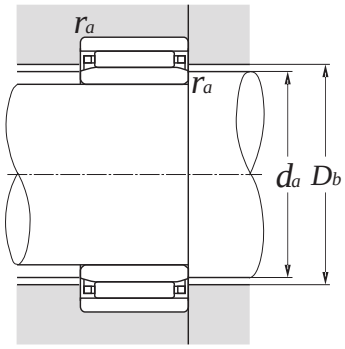


Inner bore d	Bearing number	Boundary dimensions					Basic load ratings (Radial)			
		D	C	r_s min[1]	F	E	dynamic C	static Co	dynamic C	static Co
mm		mm					N		kgf	
40	NAO 40x55x17	55	17	0.3	45	50	22300	44500	2280	4550
40	NAO 40x62x20	62	20	0.3	45	53	36000	59000	3650	6000
40	NAO 40x65x20	65	20	0.3	50	58	38500	67500	3950	6850
45	NAO 45x62x20	62	20	0.3	50	55	27900	62000	2850	6300
45	NAO 45x72x20	72	20	0.6	55	63	39000	70000	3950	7100
50	NAO 50x68x20	68	20	0.6	55	60	28800	66500	2940	6750
50	NAO 50x78x20	78	20	1.0	60	68	40000	75000	4100	7650
55	NAO 55x85x30	85	30	1.0	65	73	61000	132000	6200	13400
60	NAO 60x90x30	90	30	1.0	70	78	65500	149000	6700	15200
65	NAO 65x95x30	95	30	1.0	75	83	67500	157000	6850	16100
70	NAO 70x95x30	95	30	1.0	80	86	57000	159000	5800	16200
70	NAO 70x100x30	100	30	1.0	80	88	69000	166000	7050	17000
75	NAO 75x105x25	105	25	1.0	85	93	61500	146000	6250	14900
75	NAO 75x105x30	105	30	1.0	85	93	71000	175000	7200	17900
80	NAO 80x110x30	110	30	1.0	90	98	72500	184000	7400	18800
85	NAO 85x115x30	115	30	1.0	95	103	74000	193000	7550	19600
90	NAO 90x120x30	120	30	1.0	100	108	76000	201000	7700	20500

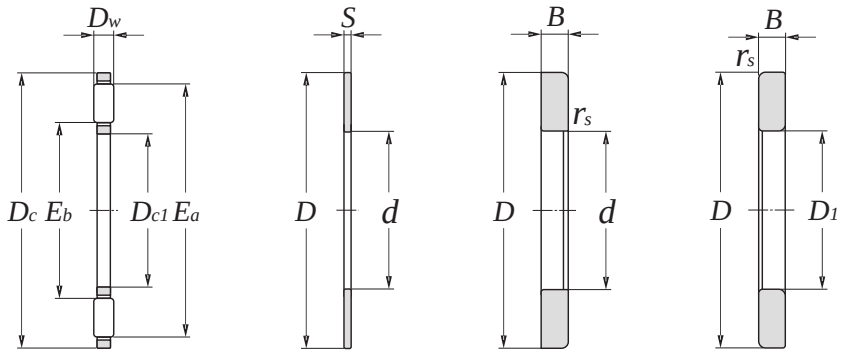
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		





Max runout speed		Abutment dimensions					Weight
grease	oil						
r/min		$d_{a\ min}$	d_b	$D_{a\ max}$	D_b	$r_{a\ max}$	kg.
6000	9000	42	49.2	53	45.6	0.3	0.127
6000	9000	42	52.2	60	45.6	0.3	0.230
5500	9000	42	57.2	63	50.6	0.3	0.279
5500	8000	47	54.2	60	50.6	0.3	0.192
4800	7500	49	62.4	68	55.8	0.6	0.335
4800	7500	54	59.4	64	55.8	0.6	0.230
4400	6500	55	67.2	73	60.8	1.0	0.410
4100	6000	60	72.2	80	66.0	1.0	0.680
3800	5500	65	77.2	85	71.0	1.0	0.720
3600	5500	70	82.2	90	76.0	1.0	0.770
3300	5000	75	85.2	90	81.0	1.0	0.675
3300	5000	75	87.2	95	81.0	1.0	0.850
3100	4700	80	92.2	100	86.0	1.0	0.700
3100	4700	80	92.2	100	86.0	1.0	0.880
3000	4400	85	97.2	105	91.0	1.0	0.920
2800	4200	90	102.2	110	96.0	1.0	0.960
2700	4000	95	107.2	115	101.0	1.0	1.040



Type AXK | Type AS | Type WS | Type GS

Inner bore D_{c1} E11 mm	Bearing number: thrust needle roller and cage assembly (consistant with cylindrical)	Washer	Inner ring	Outer ring	Boundary dimensions (mm): D_c C12	D_w 0 -0.01	D_p e13	D_{p1} E12	$S^{2)}$ ±0.05	d	d_1 -0.2 -0.5	D	D_1 +0.5 +0.2	B	r_s min$^{1)}$
10	AXK 1024	AS 1024	WS 1024	GS 1024	24	2	24	10	1	10	24	24	10	2.75 $^{0}_{-0.060}$	0.3
12	AXK 1226	AS 1226	WS 1226	GS 1226	26	2	26	12	1	12	26	26	12	2.75 $^{0}_{-0.060}$	0.3
15	AXK 1528	AS 1528	WS 1528	GS 1528	28	2	28	15	1	15	28	28	16	2.75 $^{0}_{-0.060}$	0.3
17	AXK 1730	AS 1730	WS 1730	GS 1730	30	2	30	17	1	17	30	30	18	2.75 $^{0}_{-0.060}$	0.3
20	AXK 2035	AS 2035	WS 2035	GS 2035	35	2	35	20	1	20	35	35	21	2.75 $^{0}_{-0.060}$	0.3
25	AXK 2542	AS 2542	WS 2542	GS 2542	42	2	42	25	1	25	42	42	26	3.00 $^{0}_{-0.060}$	0.6
30	AXK 3047	AS 3047	WS 3047	GS 3047	47	2	47	30	1	30	47	47	32	3.00 $^{0}_{-0.060}$	0.6
35	AXK 3552	AS 3552	WS 3552	GS 3552	52	2	52	35	1	35	52	52	37	3.50 $^{0}_{-0.075}$	0.6
40	AXK 4060	AS 4060	WS 4060	GS 4060	60	3	60	40	1	40	60	60	42	3.50 $^{0}_{-0.075}$	0.6
45	AXK 4565	AS 4565	WS 4565	GS 4565	65	3	65	45	1	45	65	65	47	4.00 $^{0}_{-0.075}$	0.6
50	AXK 5070	AS 5070	WS 5070	GS 5070	70	3	70	50	1	50	70	70	52	4.00 $^{0}_{-0.075}$	0.6
55	AXK 5578	AS 5578	WS 5578	GS 5578	78	3	78	55	1	55	78	78	57	5.00 $^{0}_{-0.075}$	0.6
60	AXK 6085	AS 6085	WS 6085	GS 6085	85	3	85	60	1	60	85	85	62	4.75 $^{0}_{-0.075}$	1.0
65	AXK 6590	AS 6590	WS 6590	GS 6590	90	3	90	65	1	65	90	90	67	5.25 $^{0}_{-0.075}$	1.0
70	AXK 7095	AS 7095	WS 7095	GS 7095	95	4	95	70	1	70	95	95	72	5.25 $^{0}_{-0.075}$	1.0
75	AXK 75100	AS 75100	WS 75100	GS 75100	100	4	100	75	1	75	100	100	77	5.75 $^{0}_{-0.075}$	1.0
80	AXK 80105	AS 80105	WS 80105	GS 80105	105	4	105	80	1	80	105	105	82	5.75 $^{0}_{-0.075}$	1.0
85	AXK 85110	AS 85110	WS 85110	GS 85110	110	4	110	85	1	85	110	110	87	5.75 $^{0}_{-0.075}$	1.0
90	AXK 90120	AS 90120	WS 90120	GS 90120	120	4	120	90	1	90	120	120	92	6.50 $^{0}_{-0.090}$	1.0
100	AXK 100135	AS 100135	WS 100135	GS 100135	135	4	135	100	1	100	135	135	102	7.00 $^{0}_{-0.090}$	1.0
110	AXK 110145	AS 110145	WS 110145	GS 110145	145	4	145	110	1	110	145	145	112	7.00 $^{0}_{-0.090}$	1.0
120	AXK 120155	AS 120155	WS 120155	GS 120155	155	4	155	120	1	120	155	155	122	7.00 $^{0}_{-0.090}$	1.0
130	AXK 130170	AS 130170	WS 130170	GS 130170	170	5	170	130	1	130	170	170	132	9.00 $^{0}_{-0.090}$	1.0
140	AXK 140180	AS 140180	WS 140180	GS 140180	180	5	180	140	1	140	178	180	142	9.50 $^{0}_{-0.090}$	1.0

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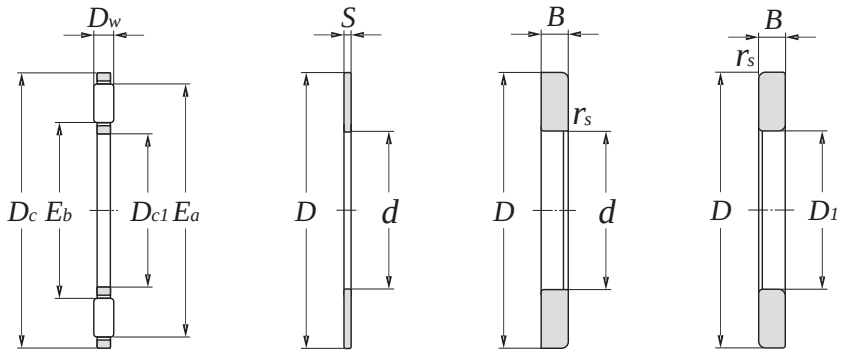
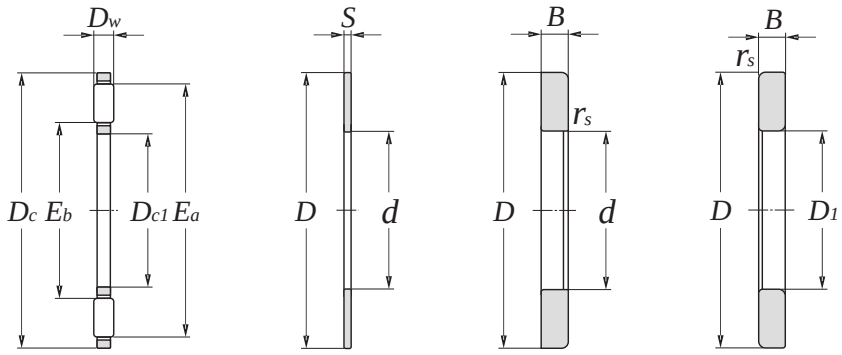
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type AXK | Type AS | Type WS | Type GS

Basic load ratings				Max runout speed		Reference dimensions		Weight		
dynamic C	static Co	dynamic C	static Co	grease	oil	Eb	Ea	AXK..	AS..	WS.. GS..
N		kgf		r/min		mm		kg.		
9150	25300	935	2580	3500	14000	11	21	0.0028	0.0030	0.008
9850	28900	1010	2940	3300	13000	13	23	0.0030	0.0033	0.009
11300	36000	1150	3700	2800	11000	17	27	0.0035	0.0035	0.010
11900	39500	1220	4050	2500	10000	19	29	0.0040	0.0038	0.011
13200	46500	1340	4750	2100	8500	22	34	0.0050	0.0051	0.014
14600	58000	1490	5900	1800	7000	29	41	0.0070	0.0070	0.021
16300	69500	1660	7100	1500	6000	35	46	0.0080	0.0080	0.025
17800	81500	1820	8300	1400	5500	40	51	0.0100	0.0091	0.033
27400	110000	2790	11300	1200	4700	45	58	0.0185	0.0123	0.044
29800	128000	3050	13100	1100	4300	50	63	0.0205	0.0136	0.055
31500	143000	3250	14500	1000	3900	55	68	0.0235	0.0148	0.060
38000	186000	3850	19000	900	3500	60	76	0.0308	0.0189	0.095
44500	234000	4550	23900	800	3200	65	83	0.0390	0.0223	0.101
46500	254000	4750	25900	750	3000	70	88	0.0400	0.0239	0.125
53500	253000	5500	25800	750	2900	74	93	0.0600	0.0254	0.134
55000	266000	5650	27100	700	2700	79	98	0.0610	0.0270	0.155
56500	279000	5750	28400	650	2600	84	103	0.0630	0.0284	0.163
57500	291000	5900	29700	600	2400	89	108	0.0668	0.0301	0.175
71000	390000	7250	39500	600	2300	94	118	0.0860	0.0388	0.250
90500	550000	9200	56500	500	2000	105	133	0.1120	0.0505	0.350
93500	590000	9550	60500	480	1900	115	143	0.1220	0.0549	0.385
99000	650000	10100	66500	430	1700	125	153	0.1310	0.0592	0.415
140000	900000	14300	92000	400	1600	136	167	0.2050	0.0740	0.663
145000	960000	14800	97500	380	1500	146	177	0.2190	0.0790	0.749



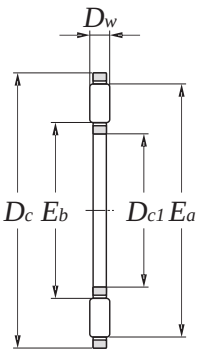
Type AXK | Type AS | Type WS | Type GS

Inner bore D_{c1} E11 mm	Bearing number: thrust needle roller and cage assembly (consistant with cylindrical)	Washer	Inner ring	Outer ring	Boundary dimensions (mm): D_c C12	D_w 0 -0.01	D_p e13	D_{p1} E12	$S^{2)}$ ±0.05	d	d_1 -0.2 -0.5	D	D_1 +0.5 +0.2	B	r_s min$^{1)}$
150	AXK 150190	AS 150190	WS 150190	GS 150190	190	5	190	150	1	150	188	190	152	$9.50^{\ 0}_{-0.090}$	1.0
160	AXK 160200	AS 160200	WS 160200	GS 160200	200	5	200	160	1	160	198	200	162	$9.50^{\ 0}_{-0.090}$	1.0

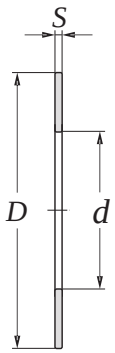
r

Technical supplement

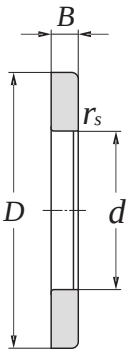
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



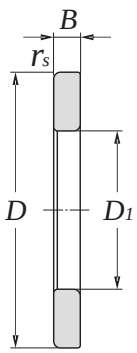
Type AXK



Type AS

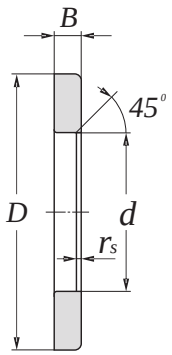


Type WS



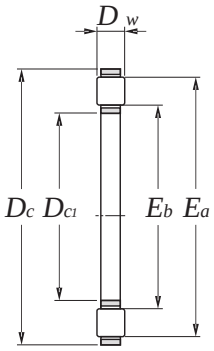
Type GS

Basic load ratings				Max runout speed		Reference dimensions		Weight		
dynamic C	static Co	dynamic C	static Co	grease	oil	Eb	Ea	AXK..	AS..	WS.. GS..
N		kgf		r/min		mm		kg.		
149000	1020000	15200	104000	350	1400	156	187	0.2320	0.0840	0.796
154000	1070000	15700	110000	330	1300	166	197	0.2460	0.0890	0.842



Inner bore d mm	Bearing number	Boundary dimensions D	B mm	rs min	Basic load ratings dynamic C N	static Co N	Limiting speed n1grease H min-1	Roll path size Eb	Ea
6	LS 0619	19	2.75	0.3	6800	15500	16000	7	18
8	LS 0821	21	2.75	0.3	7800	19400	15000	9	20
10	LS 1024	24	2.75	0.3	9200	25500	14000	12	23
12	LS 1226	26	2.75	0.3	9900	29000	13000	14	25
15	LS 1528	28	2.75	0.3	11300	36000	11000	17	27
17	LS 1730	30	2.75	0.3	11900	39500	10000	19	29
20	LS 2035	35	2.75	0.3	13100	46500	8500	22	34
25	LS 2542	42	3.00	0.6	14700	58000	7000	29	41
30	LS 3047	47	3.00	0.6	16300	70000	6000	34	46
35	LS 3552	52	3.50	0.6	17800	81000	5500	39	51
40	LS 4060	60	3.50	0.6	28000	114000	4700	45	58
45	LS 4565	65	4.00	0.6	30000	128000	4300	50	63
50	LS 5070	70	4.00	0.6	32000	143000	3900	55	68
55	LS 5578	78	5.00	0.6	38000	186000	3500	60	76
60	LS 6085	85	4.75	1.0	44500	234000	3200	65	83
65	LS 6590	90	5.25	1.0	46500	255000	3000	70	88
70	LS 7095	95	5.25	1.0	54000	255000	2900	74	93
75	LS 75100	100	5.75	1.0	55000	265000	2700	79	98
80	LS 80105	105	5.75	1.0	56000	280000	2600	84	103
85	LS 85110	110	5.75	1.0	58000	290000	2400	89	108
90	LS 90120	120	6.50	1.0	73000	405000	2300	94	118
100	LS 100135	135	7.00	1.0	91000	560000	2000	105	133
110	LS 110145	145	7.00	1.0	97000	620000	1900	115	143

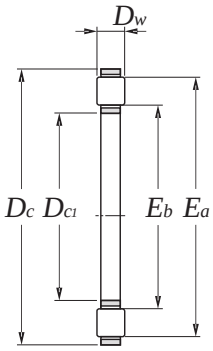
Technical supplement			
Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Inner bore D_{c1} E11 mm	Bearing number thrust needle roller and cage assembly	Boundary dimensions (mm) D_c C12	D_w 0 -0.01	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf	Max runout speed grease r/min	oil r/min	Reference dimensions E_b	E_a	Weight kg.
10	K 81100	24	3.5	10800	21500	1110	2190	3400	13000	12	23	0.0035
12	K 81101	26	3.5	11500	23900	1170	2430	3000	12000	14	25	0.0040
15	K 81102	28	3.5	12900	28600	1310	2920	2800	11000	16	27	0.0060
17	K 81103	30	3.5	13400	31000	1370	3150	2500	10000	18	29	0.0080
20	K 81104	35	4.5	20200	46500	2060	4700	2100	8500	21	34	0.0120
25	K 81105	42	5.0	27300	68000	2780	6900	1800	7000	27	40	0.0180
30	K 81106	47	5.0	27800	72500	2840	7400	1500	6000	32	45	0.0200
35	K 81107	52	5.0	31000	87000	3150	8900	1400	5500	37	50	0.0240
40	K 81108	60	6.0	43000	121000	4350	12400	1200	4800	42	58	0.0350
45	K 81109	65	6.0	45500	135000	4650	13800	1100	4400	47	63	0.0400
50	K 81110	70	6.0	48000	150000	4900	15300	1000	4000	52	68	0.0450
55	K 81111	78	6.0	62500	215000	6350	21900	900	3600	57	76	0.0600
60	K 81112	85	7.5	69000	215000	7000	21900	830	3300	63	82	0.0830
65	K 81113	90	7.5	73000	236000	7400	24100	780	3100	68	87	0.0900
70	K 81114	95	7.5	76500	257000	7800	26200	730	2900	73	92	0.0970
75	K 81115	100	7.5	78000	268000	7950	27300	680	2700	78	97	0.1150
80	K 81116	105	7.5	79500	279000	8100	28400	650	2600	83	102	0.1190
85	K 81117	110	7.5	83000	300000	8450	30500	630	2500	88	107	0.1250
90	K 81118	120	9.0	112000	395000	11400	40500	580	2300	93	117	0.1700

Technical supplement

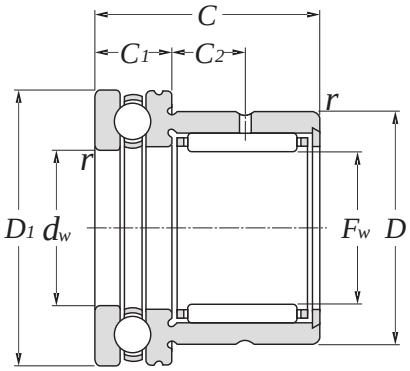
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



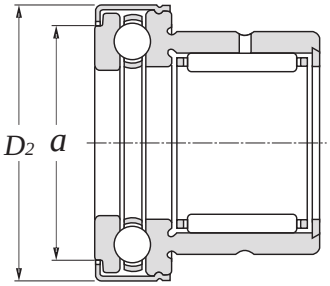
Inner bore D_{c1} E11 mm	Bearing number thrust needle roller and cage assembly	Boundary dimensions (mm) D_c C12	D_w 0 -0.01	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf	Max runout speed grease r/min	oil r/min	Reference dimensions E_b	E_a	Weight kg.
30	K 81206	52	7.5	53500	129000	5450	13100	1500	6000	32	50	0.050
35	K 81207	62	7.5	54500	139000	5550	14200	1200	4900	37	60	0.065
40	K 81208	68	9.0	74500	190000	7600	19400	1100	4400	43	66	0.085
45	K 81209	73	9.0	82000	222000	8350	22600	1000	4100	48	71	0.100
50	K 81210	78	9.0	85000	238000	8650	24200	950	3800	53	76	0.105
55	K 81211	90	11.0	121000	340000	12300	34500	830	3300	58	87	0.190
60	K 81212	95	11.0	125000	365000	12800	37000	780	3100	64	92	0.200
65	K 81213	100	11.0	130000	385000	13200	39500	730	2900	69	97	0.215
70	K 81214	105	11.0	134000	410000	13700	42000	680	2700	74	102	0.225
75	K 81215	110	11.0	138000	435000	14100	44500	650	2600	79	107	0.240
80	K 81216	115	11.0	142000	460000	14500	47000	630	2500	84	112	0.250

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Nil
Brass -	X		



Type NKX
(Open type)

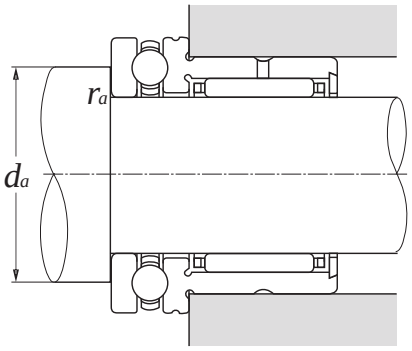


Type NKX..Z
(With cover)

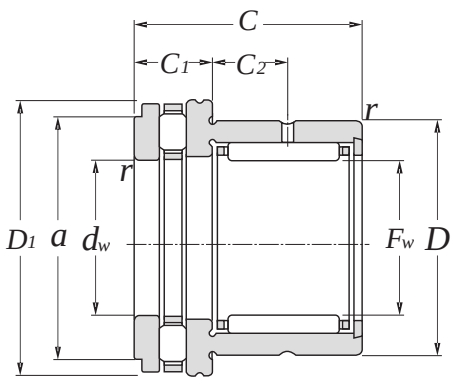
Inner bore Fw mm	Bearing number		Boundary dimensions (mm)									Basic load ratings (Radial)			
			dw	D	D1	D2	C 0 -0.25	C1 0 -0.20	C2	a	rs min1)	dynamic C	static Co	dynamic C	static Co
												N		kgf	
10 +0.022 +0.013	NKX 10	NKX 10 Z	10 +0.040 +0.025	19	24	25.0	23	9	6.5	19.7	0.3	5450	6450	555	660
12 +0.027 +0.016	NKX 12	NKX 12 Z	12 +0.050 +0.032	21	26	27.0	23	9	6.5	21.7	0.3	6000	7700	615	785
15 +0.027 +0.016	NKX 15	NKX 15 Z	15 +0.050 +0.032	24	28	29.0	23	9	6.5	23.7	0.3	8250	10200	840	1040
17 +0.027 +0.016	NKX 17	NKX 17 Z	17 +0.050 +0.032	26	30	31.0	25	9	8.0	25.7	0.3	10400	14400	1060	1460
20 +0.033 +0.020	NKX 20	NKX 20 Z	20 +0.061 +0.040	30	35	36.0	30	10	10.5	30.7	0.3	16400	27100	1670	2760
25 +0.033 +0.020	NKX 25	NKX 25 Z	25 +0.061 +0.040	37	42	43.0	30	11	9.5	37.7	0.6	14200	24000	1450	2450
30 +0.033 +0.020	NKX 30	NKX 30 Z	30 +0.061 +0.040	42	47	48.0	30	11	9.5	42.7	0.6	22300	39500	2280	4000
35 +0.041 +0.025	NKX 35	NKX 35 Z	35 +0.075 +0.050	47	52	53.0	30	12	9.0	47.7	0.6	20000	36000	2040	3650
40 +0.041 +0.025	NKX 40	NKX 40 Z	40 +0.075 +0.050	52	60	61.0	32	13	10.0	55.7	0.6	25900	52500	2650	5350
45 +0.041 +0.025	NKX 45	NKX 45 Z	45 +0.075 +0.050	58	65	66.5	32	14	9.0	60.5	0.6	27600	59000	2810	6000
50 +0.041 +0.025	NKX 50	NKX 50 Z	50 +0.075 +0.050	62	70	71.5	35	14	10.0	65.5	0.6	27900	62000	2850	6300
60 +0.049 +0.030	NKX 60	NKX 60 Z	60 +0.090 +0.060	72	85	86.5	40	17	12.0	80.5	1.0	29800	71500	3050	7300
70 +0.049 +0.030	NKX 70	NKX 70 Z	70 +0.090 +0.060	85	95	96.5	40	18	11.0	90.5	1.0	36500	86000	3700	8750

Technical supplement

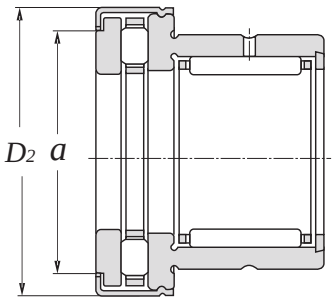
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Basic load ratings (Axial)				Max runout speed		Abutment dimensions		Weight kg.	
dynamic C	static Co	dynamic C	static Co	grease	oil	d_a min	r_{as} max		
N		kgf		r/min				Type NKX	Type NKX..Z
10000	14000	1020	1420	6700	9500	18	0.3	0.037	0.039
10300	15400	1050	1570	6400	9200	20	0.3	0.042	0.044
10500	16800	1070	1710	6200	8800	23	0.3	0.044	0.048
10800	18200	1100	1850	6000	8500	25	0.3	0.051	0.056
14200	24700	1450	2520	5200	7500	29	0.3	0.085	0.090
19600	37000	1990	3800	4600	6500	35	0.6	0.125	0.132
20400	42000	2080	4300	4300	6200	40	0.6	0.140	0.148
20400	44500	2080	4550	3900	5600	45	0.6	0.167	0.175
26900	63000	2740	6400	3500	5000	52	0.6	0.216	0.225
27900	69000	2840	7050	3200	4600	57	0.6	0.252	0.265
28800	75500	2930	7700	3100	4500	62	0.6	0.302	0.318
41500	113000	4200	11500	2600	3700	75	1.0	0.465	0.484
43000	127000	4400	12900	2400	3400	85	1.0	0.612	0.635



Type NKXR
(Open type)

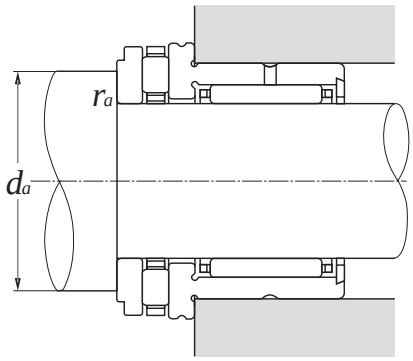


Type NKXR..Z
(With cover)

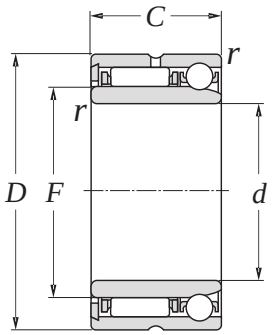
Inner bore Fw mm	Bearing number		Boundary dimensions (mm)									Basic load ratings (Radial)			
			dw	D	D1	D2	C 0 -0.25	C1 0 -0.20	C2	a	rs min1)	dynamic C	static Co	dynamic C	static Co
												N		kgf	
15 +0.027 +0.016	NKXR 15	NKXR 15 Z	15 +0.050 +0.032	24	28	29.0	23	9	6.5	23.7	0.3	8250	10200	840	1040
17 +0.027 +0.016	NKXR 17	NKXR 17 Z	17 +0.050 +0.032	26	30	31.0	25	9	8.0	25.7	0.3	10400	14400	1060	1460
20 +0.033 +0.020	NKXR 20	NKXR 20 Z	20 +0.061 +0.040	30	35	36.0	30	10	10.5	30.7	0.3	16400	27100	1670	2760
25 +0.033 +0.020	NKXR 25	NKXR 25 Z	25 +0.061 +0.040	37	42	43.0	30	11	9.5	37.7	0.6	14200	24000	1450	2450
30 +0.033 +0.020	NKXR 30	NKXR 30 Z	30 +0.061 +0.040	42	47	48.0	30	11	9.5	42.7	0.6	22300	39500	2280	4000
35 +0.041 +0.025	NKXR 35	NKXR 35 Z	35 +0.075 +0.050	47	52	53.0	30	12	9.0	47.7	0.6	20000	36000	2040	3650
40 +0.041 +0.025	NKXR 40	NKXR 40 Z	40 +0.075 +0.050	52	60	61.0	32	13	10.0	55.7	0.6	25900	52500	2650	5350
45 +0.041 +0.025	NKXR 45	NKXR 45 Z	45 +0.075 +0.050	58	65	66.5	32	14	9.0	60.5	0.6	27600	59000	2810	6000
50 +0.041 +0.025	NKXR 50	NKXR 50 Z	50 +0.075 +0.050	62	70	71.5	35	14	10.0	65.5	0.6	27900	62000	2850	6300

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



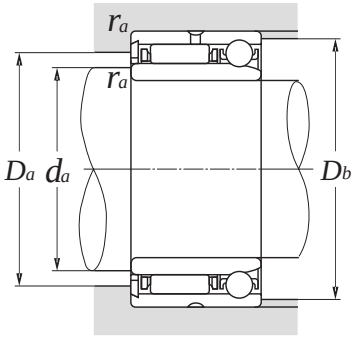
Basic load ratings (Axial)				Max runout speed		Abutment dimensions		Weight kg.	
dynamic C	static Co	dynamic C	static Co	grease	oil	d_a min	r_{as} max		
N		kgf		r/min				Type NKXR	Type NKXR..Z
12900	28600	1310	2920	2800	11000	25	0.3	0.048	0.052
13400	31000	1370	3150	2500	10000	27	0.3	0.050	0.053
20200	46500	2060	4700	2100	8500	32	0.3	0.090	0.095
27300	68000	2780	6900	1800	7000	39	0.6	0.128	0.135
27800	72500	2840	7400	1500	6000	44	0.6	0.162	0.169
31000	87000	3150	8900	1400	5500	49	0.6	0.184	0.195
43000	121000	4350	12400	1200	4800	56	0.6	0.226	0.237
45500	135000	4650	13800	1100	4400	61	0.6	0.267	0.286
48000	150000	4900	15300	1000	4000	66	0.6	0.309	0.329



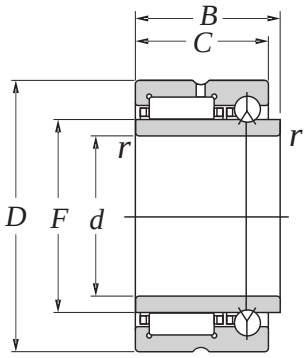
Inner bore d	Bearing number	Boundary dimensions				Basic load ratings (Radial)			
		D	C	F	rs min[1]	dynamic C	static Co	dynamic C	static Co
mm		mm				N		kgf	
15	NKIA 5902	28	18	20	0.3	9500	13400	970	1370
17	NKIA 5903	30	18	22	0.3	10100	14900	1030	1520
20	NKIA 5904	37	23	25	0.3	16500	22100	1680	2250
22	NKIA 59/22	39	23	28	0.3	17500	24800	1790	2530
25	NKIA 5905	42	23	30	0.3	17400	25000	1770	2550
30	NKIA 5906	47	23	35	0.3	19400	30500	1980	3100
35	NKIA 5907	55	27	42	0.6	25700	46000	2630	4700
40	NKIA 5908	62	30	48	0.6	31000	61000	3150	6250
45	NKIA 5909	68	30	55	0.6	33000	69500	3350	7100
50	NKIA 5910	72	30	60	0.6	33500	73500	3450	7500
55	NKIA 5911	80	34	63	1.0	44500	95500	4500	9700
60	NKIA 5912	85	34	68	1.0	45500	101000	4600	10300
65	NKIA 5913	90	34	75	1.0	46000	106000	4700	10800
70	NKIA 5914	100	40	80	1.0	62500	146000	6350	14900

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



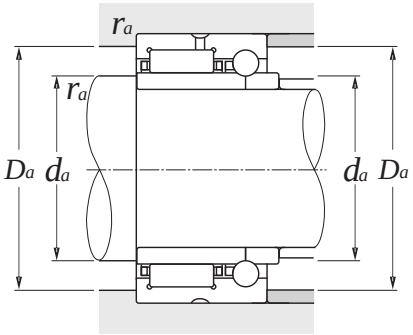
Basic load ratings (Axial)				Max runout speed		Abutment dimensions				Weight
dynamic C	static Co	dynamic C	static Co	grease	oil	$d_{a\ min}$	$D_{a\ max}$	$D_{b\ max}$	$r_{as\ max}$	
N		kgf		r/min						kg(s).
2340	3050	239	310	13000	20000	17.5	22.0	25.5	0.3	0.050
2530	3550	258	360	12000	18000	19.5	24.0	27.5	0.3	0.056
4700	6150	480	625	11000	16000	22.5	28.0	34.5	0.3	0.111
4900	6750	500	690	9500	14000	24.5	31.0	36.5	0.3	0.120
5100	7350	520	750	8500	13000	27.5	33.0	39.5	0.3	0.130
5400	8550	550	870	7500	11000	32.5	38.0	44.5	0.3	0.147
7400	12300	755	1260	6500	9500	40.0	45.0	50.0	0.6	0.243
7750	14000	790	1430	5500	8500	45.0	51.0	57.0	0.6	0.347
8500	17100	870	1740	5000	7500	50.0	58.0	63.0	0.6	0.401
8800	18700	900	1910	4300	6500	55.0	63.0	67.0	0.6	0.410
14300	33000	1460	3350	4300	6500	61.0	66.5	74.0	1.0	0.590
14800	36000	1510	3650	4000	6000	66.0	71.5	79.0	1.0	0.632
15200	39000	1550	4000	3700	5500	71.0	78.5	84.0	1.0	0.708
18600	47500	1890	4850	3300	5000	76.0	84.0	94.0	1.0	1.050



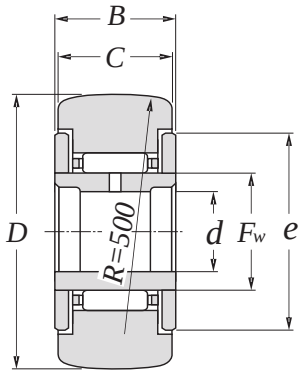
Inner bore d	Bearing number	Boundary dimensions					Basic load ratings (Radial)			
		D	B	C	F	rs min[1]	dynamic C	static Co	dynamic C	static Co
mm		mm					N		kgf	
15	NKIB 5902	28	20	18	20	0.3	10800	13600	1100	1390
17	NKIB 5903	30	20	18	22	0.3	11200	14600	1140	1490
20	NKIB 5904	37	25	23	25	0.3	21300	25500	2170	2600
22	NKIB 59/22	39	25	23	28	0.3	23200	29300	2360	2990
25	NKIB 5905	42	25	23	30	0.3	24000	31500	2450	3200
30	NKIB 5906	47	25	23	35	0.3	25500	35500	2600	3600
35	NKIB 5907	55	30	27	42	0.6	32000	50000	3300	5100
40	NKIB 5908	62	34	30	28	0.6	43500	66500	4450	6800
45	NKIB 5909	68	34	30	52	0.6	46000	73000	4700	7450
50	NKIB 5910	72	34	30	58	0.6	48000	80000	4900	8150
55	NKIB 5911	80	38	34	63	1.0	58500	99500	6000	10100
60	NKIB 5912	85	38	34	68	1.0	61500	108000	6250	11000
65	NKIB 5913	90	38	34	72	1.0	62500	112000	6350	11400
70	NKIB 5914	100	45	40	80	1.0	85500	156000	8750	15900

Technical supplement

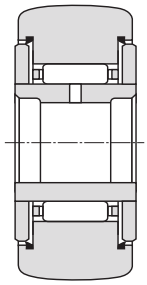
Cages		*Precision*	*Grease*
Steel -			
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Basic load ratings (Axial)				Max runout speed		Abutment dimensions			Weight
dynamic C	static Co	dynamic C	static Co	grease	oil	d_a min	D_a max	r_{as} max	
N		kgf		r/min					kg.
2750	4200	280	430	13000	20000	17.5	25.5	0.3	0.052
2960	4900	300	495	12000	18000	19.5	27.5	0.3	0.058
4650	7400	475	755	11000	16000	22.5	34.5	0.3	0.107
5000	8650	510	880	9500	14000	24.5	36.5	0.3	0.122
5150	9250	525	945	8500	13000	27.5	39.5	0.3	0.134
5600	11200	570	1140	7500	11000	32.5	44.5	0.3	0.151
7050	14900	720	1520	6500	9500	40.0	50.0	0.6	0.247
8700	19400	890	1980	5500	8500	45.0	57.0	0.6	0.320
9100	21400	925	2180	5000	7500	50.0	63.0	0.6	0.380
9600	24300	980	2480	4300	6500	55.0	67.0	0.6	0.385
11400	29400	1170	3000	4300	6500	61.0	74.0	1.0	0.555
11800	32000	1200	3250	4000	6000	66.0	79.0	1.0	0.595
12100	34000	1240	3500	3700	5500	71.0	84.0	1.0	0.640
15900	44500	1620	4550	3300	5000	76.0	94.0	1.0	0.985



Type NATR
(With cage)

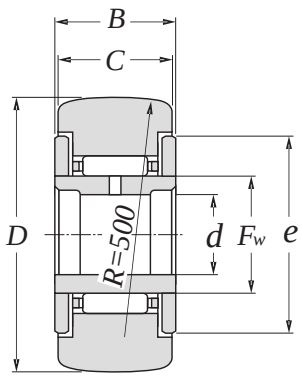


Type NATR..PP
(Double seals with cage)

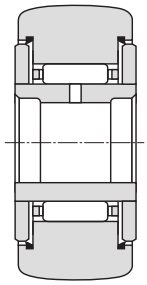
Inner bore D $^{0}_{-0.05}$ mm	Bearing number		Boundary dimensions B	C	d	e	F_w	Basic load ratings dynamic C	static Co	dynamic C	static Co
					mm			N		kgf	
16	NATR 5	NATR 5 PP	12 $^{0}_{-0.180}$	11	5	12	8.0	3850	3950	395	400
19	NATR 6	NATR 6 PP	12 $^{0}_{-0.180}$	11	6	14	10.0	4500	5100	460	520
24	NATR 8	NATR 8 PP	15 $^{0}_{-0.180}$	14	8	19	12.0	6600	7300	675	745
30	NATR 10	NATR 10 PP	15 $^{0}_{-0.180}$	14	10	23	15.0	7500	9100	765	930
32	NATR 12	NATR 12 PP	15 $^{0}_{-0.180}$	14	12	25	17.0	8500	11100	865	1130
35	NATR 15	NATR 15 PP	19 $^{0}_{-0.210}$	18	15	27	20.0	13000	20100	1320	2050
40	NATR 17	NATR 17 PP	21 $^{0}_{-0.210}$	20	17	32	22.0	13600	22100	1390	2250
47	NATR 20	NATR 20 PP	25 $^{0}_{-0.210}$	24	20	37	25.0	20300	33000	2070	3350
52	NATR 25	NATR 25 PP	25 $^{0}_{-0.210}$	24	25	42	30.0	22300	39500	2280	4000
62	NATR 30	NATR 30 PP	29 $^{0}_{-0.210}$	28	30	51	38.0	35000	64000	3600	6550
72	NATR 35	NATR 35 PP	29 $^{0}_{-0.210}$	28	35	58	44.5	38000	74500	3850	7600
80	NATR 40	NATR 40 PP	32 $^{0}_{-0.250}$	30	40	66	50.0	48500	90000	4950	9150
85	NATR 45	NATR 45 PP	32 $^{0}_{-0.250}$	30	45	71	55.0	50500	97500	5150	9950
90	NATR 50	NATR 50 PP	32 $^{0}_{-0.250}$	30	50	76	60.0	52000	105000	5300	10700

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		

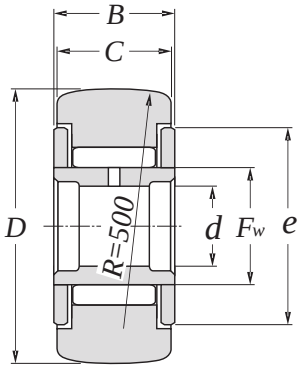


Type NATR
(With cage)

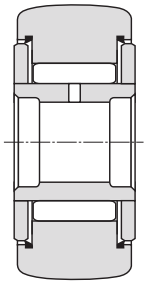


Type NATR..PP
(Double seals with cage)

Load ratings of truck				Max runout speed		Weight
Spherical outer ring	Cylindrical outer ring	Cylindrical outer ring	Cylindrical outer ring	grease	oil	
N		kgf		r/min		kg.
1080	3400	110	350	; 19000	; 25000	0.018
1380	4050	141	415	; 15000	; 20000	0.025
1900	6650	193	680	; 12000	; 16000	0.042
2620	7700	267	785	10000	; 13000	0.061
2860	8200	291	835	9000	; 12000	0.069
3200	11900	325	1220	7500	10000	0.098
3850	14500	390	1480	7000	9000	0.140
4700	21000	480	2150	6000	8000	0.246
5500	23300	565	2370	5000	6500	0.275
6950	33000	710	3350	4000	5500	0.470
8050	37000	820	3750	3300	4500	0.635
9800	44500	1000	4500	3000	4000	0.875
10400	47000	1060	4800	2700	3600	0.910
11400	50000	1160	5100	2500	3300	0.960



Type NATV
(Full complement type)

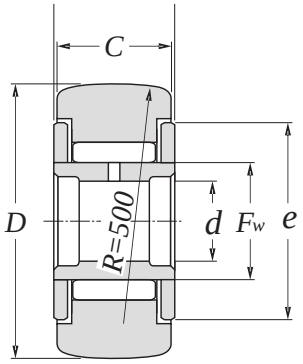


Type NATV..PP
(Full complement type with seals)

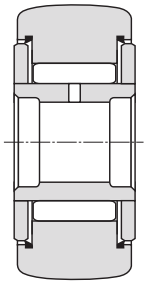
Inner bore D $^{0}_{-0.05}$ mm	Bearing number		Boundary dimensions B	C	d	e	F_w	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
					mm						
16	NATV 5	NATV 5 PP	12 $^{0}_{-0.180}$	11	5	12	8.0	6250	8900	640	910
19	NATV 6	NATV 6 PP	12 $^{0}_{-0.180}$	11	6	14	10.0	7200	11200	735	1140
24	NATV 8	NATV 8 PP	15 $^{0}_{-0.180}$	14	8	19	12.0	10300	15500	1050	1580
30	NATV 10	NATV 10 PP	15 $^{0}_{-0.180}$	14	10	23	15.0	11700	19500	1190	1980
32	NATV 12	NATV 12 PP	15 $^{0}_{-0.180}$	14	12	25	17.0	12600	22100	1280	2250
35	NATV 15	NATV 15 PP	19 $^{0}_{-0.210}$	18	15	27	20.0	18000	37000	1830	3750
40	NATV 17	NATV 17 PP	21 $^{0}_{-0.210}$	20	17	32	22.0	18900	40500	1930	4150
47	NATV 20	NATV 20 PP	25 $^{0}_{-0.210}$	24	20	37	25.0	28400	60000	2900	6100
52	NATV 25	NATV 25 PP	25 $^{0}_{-0.210}$	24	25	42	30.0	31000	72000	3150	7350
62	NATV 30	NATV 30 PP	29 $^{0}_{-0.210}$	28	30	51	38.0	46500	112000	4750	11400
72	NATV 35	NATV 35 PP	29 $^{0}_{-0.210}$	28	35	58	44.5	51000	130000	5200	13300
80	NATV 40	NATV 40 PP	32 $^{0}_{-0.250}$	30	40	66	50.0	67500	167000	6850	17100
90	NATV 50	NATV 50 PP	32 $^{0}_{-0.250}$	30	50	76	60.0	74500	200000	7600	20400

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		

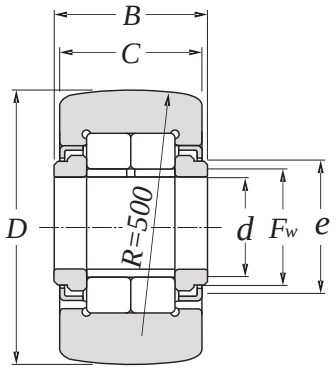


Type NATV
(Full complement type)



Type NATV..PP
(Full complement type with seals)

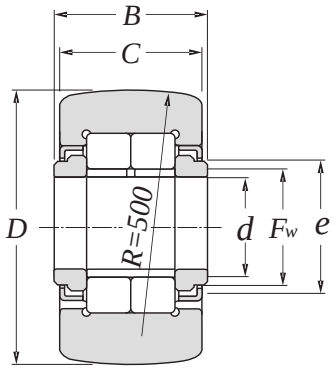
Load ratings of truck				Max runout speed		Weight
Spherical outer ring	Cylindrical outer ring	Cylindrical outer ring	Cylindrical outer ring	grease	oil	
N		kgf		r/min		kg.
1080	3400	110	350	; 13000	; 16000	0.020
1380	4050	141	415	10000	; 13000	0.027
1900	6650	193	680	8500	; 11000	0.044
2620	7700	267	785	6500	8500	0.065
2860	8200	291	835	6000	7500	0.074
3200	11900	325	1220	5000	6500	0.102
3850	14500	390	1480	4500	6000	0.145
4700	21000	480	2150	4000	5000	0.254
5500	23300	565	2370	3300	4500	0.285
6950	33000	710	3350	2600	3500	0.481
8050	37000	820	3750	2200	2900	0.647
9800	44500	1000	4500	2000	2600	0.890
11400	50000	1160	5100	1600	2100	0.990



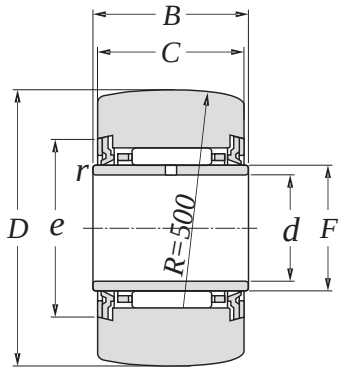
Inner bore D $^{0}_{-0.05}$ mm	Bearing number	Boundary dimensions						Basic load ratings			
		B	C	d	e	F_w	$r_{s\,min}$ [1]	dynamic C	static Co	dynamic C	static Co
		mm						N		kgf	
35	NUTR 15	19 $^{0}_{-0.210}$	18	15	20	19.0	0.3	22300	25700	2280	2620
40	NUTR 17	21 $^{0}_{-0.210}$	20	17	22	21.5	0.3	24100	29100	2450	2970
42	NUTR 1542	19 $^{0}_{-0.210}$	18	15	20	19.0	0.3	22300	25700	2280	2620
47	NUTR 1747	21 $^{0}_{-0.210}$	20	17	22	21.5	0.3	24100	29100	2450	2970
47	NUTR 20	25 $^{0}_{-0.210}$	24	20	27	25.5	0.3	38500	48000	3950	4900
52	NUTR 2052	25 $^{0}_{-0.210}$	24	20	27	25.5	0.3	38500	48000	3950	4900
52	NUTR 25	25 $^{0}_{-0.210}$	24	25	31	30.0	0.3	42500	57500	4350	5850
62	NUTR 2562	25 $^{0}_{-0.210}$	24	25	31	30.0	0.3	42500	57500	4350	5850
62	NUTR 30	29 $^{0}_{-0.210}$	28	30	38	35.0	0.3	56500	72500	5750	7400
72	NUTR 3072	29 $^{0}_{-0.210}$	28	30	38	35.0	0.3	56500	72500	5750	7400
72	NUTR 35	29 $^{0}_{-0.210}$	28	35	44	41.5	0.6	62000	85500	6350	8700
80	NUTR 3580	29 $^{0}_{-0.210}$	28	35	44	41.5	0.6	62000	85500	6350	8700
80	NUTR 40	32 $^{0}_{-0.250}$	30	40	51	47.5	0.6	87000	125000	8850	12700
85	NUTR 45	32 $^{0}_{-0.250}$	30	45	55	52.5	0.6	92000	137000	9350	14000
90	NUTR 4090	32 $^{0}_{-0.250}$	30	40	51	47.5	0.6	87000	125000	8850	12700
90	NUTR 50	32 $^{0}_{-0.250}$	30	50	60	57.0	0.6	96500	150000	9800	15300
100	NUTR 45100	32 $^{0}_{-0.250}$	30	45	55	52.5	0.6	92000	137000	9350	14000
110	NUTR 50110	32 $^{0}_{-0.250}$	30	50	60	57.0	0.6	96500	150000	9800	15300

Technical supplement

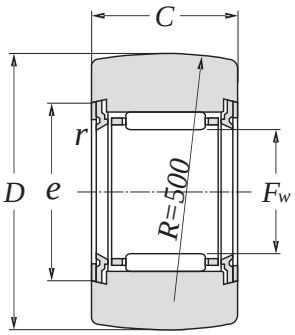
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		



Load ratings of truck				Max runout speed grease	Weight
Spherical outer ring	Cylindrical outer ring	Cylindrical outer ring	Cylindrical outer ring		
N		kgf		r/min	kg(s).
3200	11900	325	1220	5500	0.100
3850	14500	390	1480	4700	0.147
4100	14300	415	1460	5500	0.160
4700	17000	480	1740	4700	0.222
4700	21000	480	2150	4000	0.245
5550	23300	565	2370	4000	0.321
5550	23300	565	2370	3300	0.281
6950	27800	710	2830	3300	0.450
6950	33000	710	3350	2900	0.466
8050	38500	820	3900	2900	0.697
8050	37000	820	3750	2400	0.630
9800	41000	1000	4150	2400	0.840
9800	44500	1000	4500	2100	0.817
10400	47000	1060	4800	1900	0.883
11400	50000	1160	5100	2100	1.130
11400	50000	1160	5100	1800	0.950
13000	55500	1330	5650	1900	1.400
14700	61000	1500	6200	1800	1.690



Type NA 22..2RSR
(With inner ring and double seals)

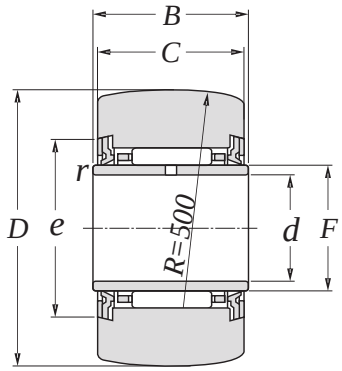


Type RNA 22..2RSR
(Without inner ring and double seals)

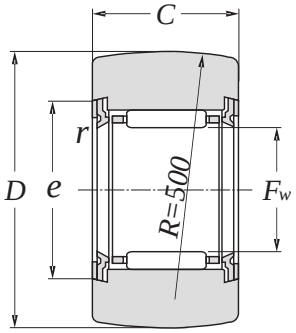
Inner bore D $^{0/-0.05}$ mm	Bearing number		Boundary dimensions B	C	d	F_w	e	F	$r_{s\,min}$ [1]	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf
19	NA 22/6 2RSR	RNA 22/6 2RSR	12	11.8	6	$10^{+0.022}_{+0.013}$	16	10	0.3	4300	3950	435	405
24	NA 22/8 2RSR	RNA 22/8 2RSR	12	11.8	8	$12^{+0.027}_{+0.016}$	18	12	0.3	4850	4900	495	500
30	NA 2200 2RSR	RNA 2200 2RSR	14	13.8	10	$14^{+0.027}_{+0.016}$	20	14	0.3	7200	8500	735	865
32	NA 2201 2RSR	RNA 2201 2RSR	14	13.8	12	$16^{+0.027}_{+0.016}$	22	16	0.3	7750	9700	795	990
35	NA 2202 2RSR	RNA 2202 2RSR	14	13.8	15	$20^{+0.033}_{+0.020}$	26	20	0.3	9500	13400	970	1370
40	NA 2203 2RSR	RNA 2203 2RSR	16	15.8	17	$22^{+0.033}_{+0.020}$	28	22	0.3	10100	14900	1030	1520
47	NA 2204 2RSR	RNA 2204 2RSR	18	17.8	20	$25^{+0.033}_{+0.020}$	33	25	0.3	16500	22100	1680	2250
52	NA 2205 2RSR	RNA 2205 2RSR	18	17.8	25	$30^{+0.033}_{+0.020}$	38	30	0.3	17400	25000	1770	2550
62	NA 2206 2RSR	RNA 2206 2RSR	20	19.8	30	$35^{+0.041}_{+0.025}$	43	35	0.3	20900	33500	2130	3400
72	NA 2207 2RSR	RNA 2207 2RSR	23	22.7	35	$42^{+0.041}_{+0.025}$	50	42	0.6	25700	46000	2630	4700
80	NA 2208 2RSR	RNA 2208 2RSR	23	22.7	40	$48^{+0.041}_{+0.025}$	57	48	0.6	27800	53500	2830	5450
85	NA 2209 2RSR	RNA 2209 2RSR	23	22.7	45	$52^{+0.049}_{+0.030}$	62	52	0.6	28600	57000	2920	5800
90	NA 2210 2RSR	RNA 2210 2RSR	23	22.7	50	$58^{+0.049}_{+0.030}$	68	58	0.6	30500	64000	3100	6500

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Alvania S2
Brass -	X		-25 ~ +120

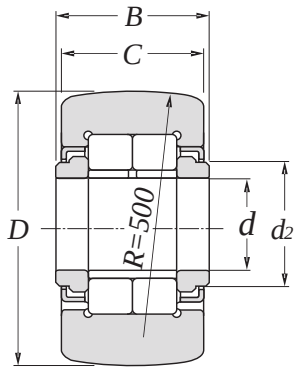


Type NA 22..2RSR
(With inner ring and double seals)



Type RNA 22..2RSR
(Without inner ring and double seals)

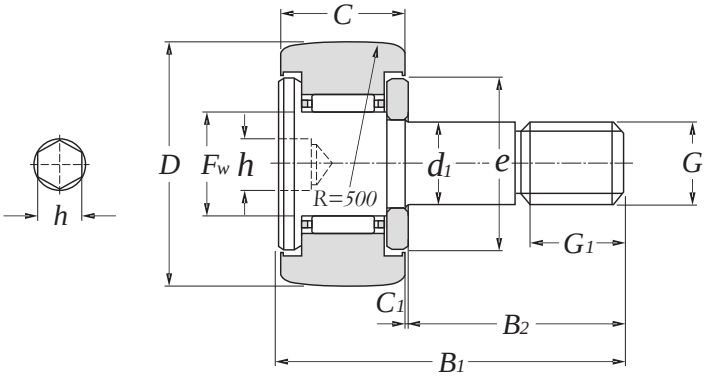
Load ratings of truck				Max runout speed	Weight	
Spherical outer ring	Cylindrical outer ring	Cylindrical outer ring	Cylindrical outer ring	grease	Typt NA 22..2RSR	Typt RNA 22..2RSR
N		kgf		r/min	kg.	
1380	4400	141	445	10000	0.023	0.018
1900	5500	193	565	10000	0.035	0.027
2620	7550	267	770	10000	0.060	0.052
2860	8050	291	820	9500	0.067	0.057
3200	8800	325	900	7500	0.075	0.060
3850	10900	390	1110	7000	0.113	0.094
4700	14800	480	1510	6000	0.176	0.152
5550	16400	565	1670	5000	0.209	0.179
6950	22200	710	2260	4300	0.322	0.284
8050	28700	820	2930	3600	0.506	0.432
9800	32000	1000	3250	3100	0.623	0.530
10400	34000	1060	3450	2900	0.638	0.545
11400	36000	1160	3650	2600	0.682	0.563



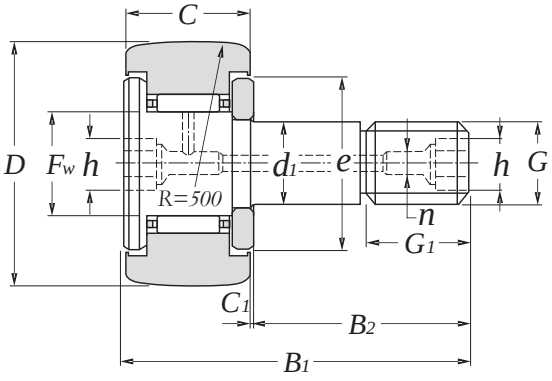
Inner bore D 0/-0.05 mm	Bearing number	Boundary dimensions d	B	C	d2	r	r1	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf	Fatigue limit load N	Max runout speed grease r/min	Weight kg(s).
35	PWTR 15 2RS	15	19	18	20.0	0.6	0.3	12600	14600	10700	14600	1760	6000	0.099
40	PWTR 17 2RS	17	21	20	22.0	1.0	0.5	14300	17900	16500	17900	2160	5000	0.147
42	PWTR 1542 2RS	15	19	18	20.0	0.6	0.3	14700	16200	16200	16200	2140	6000	0.158
47	PWTR 1747 2RS	17	21	20	22.0	1.0	0.5	15900	18400	18400	18400	2440	5000	0.220
47	PWTR 20 2RS	20	25	24	27.0	1.0	0.5	24500	30500	20700	30500	3750	3800	0.245
52	PWTR 2052 2RS	20	25	24	27.0	1.0	0.5	27000	35000	31000	35000	4250	3800	0.321
52	PWTR 25 2RS	25	25	24	31.0	1.0	0.5	25000	33000	21800	33000	4100	3800	0.281
62	PWTR 2562 2RS	25	25	24	31.0	1.0	0.5	30000	42500	42500	42500	5200	3800	0.450
62	PWTR 30 2RS	30	29	28	38.0	1.0	0.5	35000	45500	29000	45500	5800	2200	0.465
72	PWTR 3072 2RS	30	29	28	38.0	1.0	0.5	41000	56000	54000	56000	7200	2200	0.697
72	PWTR 35 2RS	35	29	28	44.0	1.1	0.6	38500	54000	39000	54000	6900	1800	0.630
80	PWTR 3580 2RS	35	29	28	44.0	1.1	0.6	43500	63000	59000	63000	8100	1800	0.836
80	PWTR 40 2RS	40	32	30	50.5	1.1	0.6	45000	61000	39500	61000	7900	1500	0.816
85	PWTR 45 2RS	45	32	30	55.2	1.1	0.6	45500	63000	41000	63000	8200	1300	0.883
90	PWTR 4090 2RS	40	32	30	50.5	1.1	0.6	52000	75000	67000	75000	9600	1500	1.129
90	PWTR 50 2RS	50	32	30	59.8	1.1	0.6	46000	66000	42000	66000	8500	1100	0.950
100	PWTR 45100 2RS	45	32	30	55.2	1.1	0.6	56000	85000	85000	85000	10900	1300	1.396
110	PWTR 50110 2RS	50	32	30	59.8	1.1	0.6	59000	94000	94000	94000	12100	1100	1.690

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	X		



Type KR (10~19 mm)

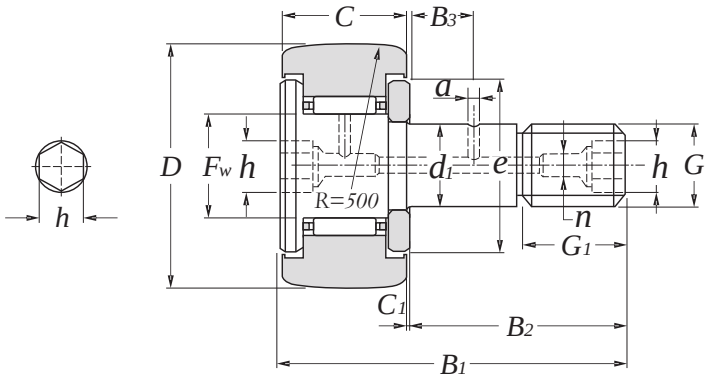


Type KR (22~26 mm)

Inner bore D $^{0}_{-0.05}$ mm	Bearing number		Boundary dimensions											
			C	d_1	F_w	B_1	B_2	G	G_1	C_1	n	B_3	a	e	h
			mm												
10	KR 10	KR 10 PP	7	$3^{0}_{-0.010}$	4.00	17	9.0	M 3 X 0.5	5.0	0.5	-	-	-	7.0	-
12	KR 12	KR 12 PP	8	$4^{0}_{-0.012}$	4.80	20	11.0	M 4 X 0.7	6.0	0.5	-	-	-	8.5	-
13	KR 13	KR 13 PP	9	$5^{0}_{-0.012}$	5.75	23	13.0	M 5 X 0.8	7.5	0.5	-	-	-	9.5	-
16	KR 16	KR 16 PP	11	$6^{0}_{-0.012}$	8.00	28	16.0	M 6 X 1.0	8.0	0.6	-	-	-	12.0	4
19	KR 19	KR 19 PP	11	$8^{0}_{-0.015}$	10.00	32	20.0	M 8 X 1.25	10.0	0.6	-	-	-	14.0	4
22	KR 22	KR 22 PP	12	$10^{0}_{-0.015}$	12.00	36	23.0	M 10 X 1.0	12.0	0.6	4	-	-	17.0	5
26	KR 26	KR 26 PP	12	$10^{0}_{-0.015}$	12.00	36	23.0	M 10 X 1.0	12.0	0.6	4	-	-	17.0	5
30	KR 30	KR 30 PP	14	$12^{0}_{-0.018}$	15.00	40	25.0	M 12 X 1.5	13.0	0.6	4	6	3	23.0	6
32	KR 32	KR 32 PP	14	$12^{0}_{-0.018}$	15.00	40	25.0	M 12 X 1.5	13.0	0.6	4	6	3	23.0	6
35	KR 35	KR 35 PP	18	$16^{0}_{-0.018}$	18.00	52	32.5	M 16 X 1.5	17.0	0.8	6	8	3	27.0	8
40	KR 40	KR 40 PP	20	$18^{0}_{-0.018}$	22.00	58	36.5	M 18 X 1.5	19.0	0.8	6	8	3	32.0	8
47	KR 47	KR 47 PP	24	$20^{0}_{-0.021}$	25.00	66	40.5	M 20 X 1.5	21.0	0.8	6	9	4	37.0	10
52	KR 52	KR 52 PP	24	$20^{0}_{-0.021}$	25.00	66	40.5	M 20 X 1.5	21.0	0.8	6	9	4	37.0	10
62	KR 62	KR 62 PP	29	$24^{0}_{-0.021}$	30.00	80	49.5	M 24 X 1.5	25.0	0.8	8	11	4	44.0	14
72	KR 72	KR 72 PP	29	$24^{0}_{-0.021}$	30.00	80	49.5	M 24 X 1.5	25.0	0.8	8	11	4	44.0	14
80	KR 80	KR 80 PP	35	$30^{0}_{-0.021}$	38.00	100	63.0	M 30 X 1.5	32.0	1.0	8	15	4	53.0	14
85	KR 85	KR 85 PP	35	$30^{0}_{-0.021}$	38.00	100	63.0	M 30 X 1.5	32.0	1.0	8	15	4	53.0	14
90	KR 90	KR 90 PP	35	$30^{0}_{-0.021}$	38.00	100	63.0	M 30 X 1.5	32.0	1.0	8	15	4	53.0	14

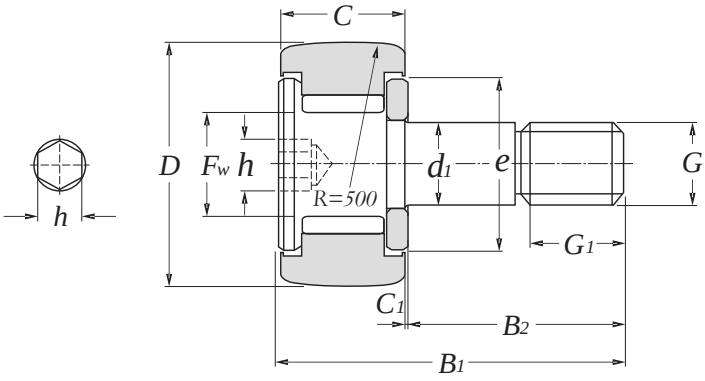
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	X		

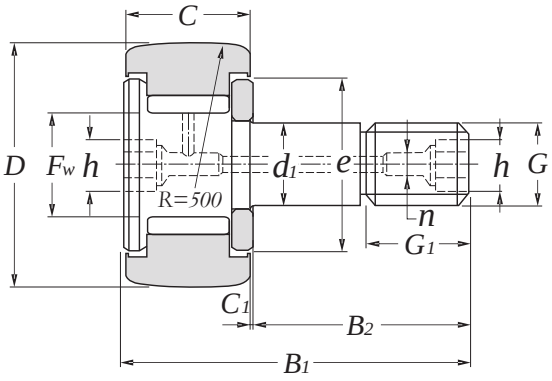


Type KR (30~90 mm)

Basic load ratings				Load ratings of truck				Max runout speed		Maximum tightening torque		Weight	Stud diameter
dynamic C	static Co	dynamic C	static Co	Spherical outer ring	Cylindrical outer ring	Spherical outer ring	Cylindrical outer ring	grease	oil				
N		kgf		N		kgf		r/min		N.m	Kgf.m	kg(s).	mm
1510	1140	154	116	560	1360	57	139	; 27000	; 40000	0.5	0.05	0.005	3
2030	1550	207	159	725	1790	74	183	; 25000	; 36000	1.0	0.10	0.008	4
2480	2070	253	211	805	2220	82	226	; 23000	; 33000	2.0	0.20	0.010	5
3850	3950	395	400	1080	3400	110	350	; 19000	; 25000	3.0	0.30	0.019	6
4500	5100	460	520	1380	4050	141	415	; 15000	; 20000	8.0	0.80	0.031	8
5050	6250	515	635	1690	5150	172	525	; 12000	; 16000	15.0	1.50	0.046	10
5050	6250	515	635	2120	6100	216	620	; 12000	; 16000	15.0	1.50	0.059	10
7500	9100	765	930	2620	7700	267	785	10000	; 13000	22.0	2.20	0.087	12
7500	9100	765	930	2860	8200	291	835	10000	; 13000	22.0	2.20	0.097	12
11800	17300	1210	1760	3200	11900	325	1220	8000	; 11000	58.0	5.80	0.169	16
13600	22100	1390	2250	3850	14500	390	1480	7000	9000	87.0	8.70	0.248	18
20300	33000	2070	3350	4700	21000	480	2150	6000	8000	120.0	12.00	0.386	20
20300	33000	2070	3350	5550	23300	565	2370	6000	8000	120.0	12.00	0.461	20
29100	55000	2960	5650	6950	34500	710	3500	5000	6500	220.0	22.00	0.790	24
29100	55000	2960	5650	8050	38500	820	3900	5000	6500	220.0	22.00	1.040	24
44000	86500	4500	8800	9800	53000	1000	5400	4000	5500	450.0	45.00	1.550	30
44000	86500	4500	8800	10400	56000	1060	5750	4000	5500	450.0	45.00	1.740	30
44000	86500	4500	8800	11400	59000	1160	6100	4000	5500	450.0	45.00	1.950	30



Type KRV (10~19 mm)

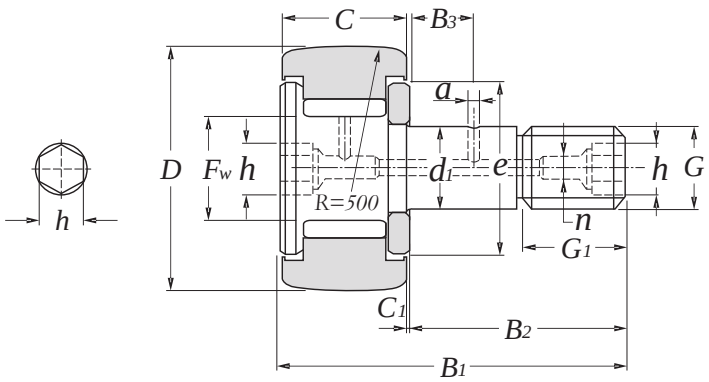


Type KRV (22~26 mm)

Inner bore D $^{0}_{-0.05}$ mm	Bearing number		Boundary dimensions mm												
			C	d_1	F_w	B_1	B_2	G	G_1	C_1	n	B_3	a	e	h
10	KRV 10	KRV 10 PP	7	$3\ ^{0}_{-0.010}$	4.00	17	9.0	M 3 X 0.5	5.0	0.5	-	-	-	7.0	-
12	KRV 12	KRV 12 PP	8	$4\ ^{0}_{-0.012}$	4.80	20	11.0	M 4 X 0.7	6.0	0.5	-	-	-	8.5	-
13	KRV 13	KRV 13 PP	9	$5\ ^{0}_{-0.012}$	5.75	23	13.0	M 5 X 0.8	7.5	0.5	-	-	-	9.5	-
16	KRV 16	KRV 16 PP	11	$6\ ^{0}_{-0.012}$	8.00	28	16.0	M 6 X 1.0	8.0	0.6	-	-	-	12.0	-
19	KRV 19	KRV 19 PP	11	$8\ ^{0}_{-0.015}$	10.00	32	20.0	M 8 X 1.25	10.0	0.6	-	-	-	14.0	-
22	KRV 22	KRV 22 PP	12	$10\ ^{0}_{-0.015}$	12.00	36	23.0	M 10 X 1.0	12.0	0.6	4	-	-	17.0	5
26	KRV 26	KRV 26 PP	12	$10\ ^{0}_{-0.015}$	12.00	36	23.0	M 10 X 1.0	12.0	0.6	4	-	-	17.0	5
30	KRV 30	KRV 30 PP	14	$12\ ^{0}_{-0.018}$	15.00	40	25.0	M 12 X 1.5	13.0	0.6	4	6	3	23.0	6
32	KRV 32	KRV 32 PP	14	$12\ ^{0}_{-0.018}$	15.00	40	25.0	M 12 X 1.5	13.0	0.6	4	6	3	23.0	6
35	KRV 35	KRV 35 PP	18	$16\ ^{0}_{-0.018}$	18.00	52	32.5	M 16 X 1.5	17.0	0.8	6	8	3	27.0	8
40	KRV 40	KRV 40 PP	20	$18\ ^{0}_{-0.018}$	22.00	58	36.5	M 18 X 1.5	19.0	0.8	6	8	3	32.0	8
47	KRV 47	KRV 47 PP	24	$20\ ^{0}_{-0.021}$	25.00	66	40.5	M 20 X 1.5	21.0	0.8	6	9	4	37.0	10
52	KRV 52	KRV 52 PP	24	$20\ ^{0}_{-0.021}$	25.00	66	40.5	M 20 X 1.5	21.0	0.8	6	9	4	37.0	10
62	KRV 62	KRV 62 PP	29	$24\ ^{0}_{-0.021}$	30.00	80	49.5	M 24 X 1.5	25.0	0.8	8	11	4	44.0	14
72	KRV 72	KRV 72 PP	29	$24\ ^{0}_{-0.021}$	30.00	80	49.5	M 24 X 1.5	25.0	0.8	8	11	4	44.0	14
80	KRV 80	KRV 80 PP	35	$30\ ^{0}_{-0.021}$	38.00	100	63.0	M 30 X 1.5	32.0	1.0	8	15	4	53.0	14
90	KRV 90	KRV 90 PP	35	$30\ ^{0}_{-0.021}$	38.00	100	63.0	M 30 X 1.5	32.0	1.0	8	15	4	53.0	14

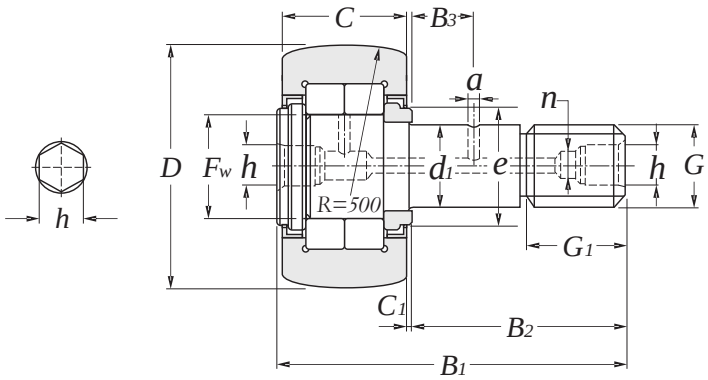
Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	X	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	X		



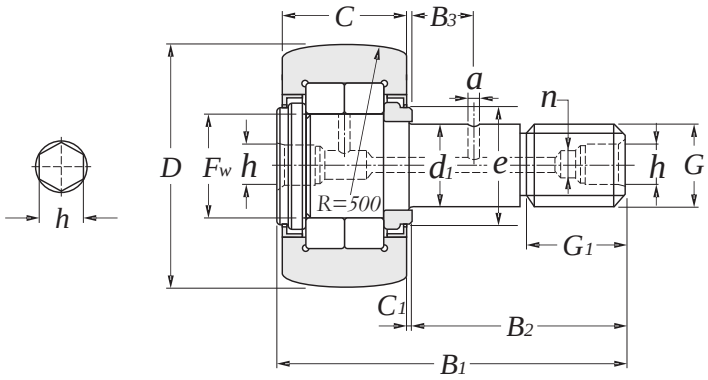
Type KRV (30~90 mm)

Basic load ratings				Load ratings of truck				Max runout speed		Maximum tightening torque		Weight	Stud diameter
dynamic C	static Co	dynamic C	static Co	Spherical outer ring	Cylindrical outer ring	Spherical outer ring	Cylindrical outer ring	grease	oil				
N		kgf		N		kgf		r/min		N.m	Kgf.m	kg(s).	mm
2330	2400	238	244	560	1360	57	139	; 25000	; 32000	0.5	0.05	0.005	3
3350	3550	340	360	725	1790	74	183	; 20000	; 27000	1.0	0.10	0.008	4
4300	5050	435	510	805	2220	82	226	; 17000	; 22000	2.0	0.20	0.011	5
6250	8900	640	910	1080	3400	110	350	; 13000	; 16000	3.0	0.30	0.020	6
7200	11200	735	1140	1380	4050	141	415	10000	; 13000	8.0	0.80	0.032	8
7900	13300	810	1360	1690	5150	172	525	8500	; 11000	15.0	1.50	0.047	10
7900	13300	810	1360	2120	6100	216	620	8500	; 11000	15.0	1.50	0.061	10
11700	19500	1190	1980	2620	7700	267	785	6500	8500	22.0	2.20	0.089	12
11700	19500	1190	1980	2860	8200	291	835	6500	8500	22.0	2.20	0.100	12
17200	33000	1750	3400	3200	11900	325	1220	5500	7000	58.0	5.80	0.172	16
18900	40500	1930	4150	3850	14500	390	1480	4500	6000	87.0	8.70	0.252	18
28300	60000	2890	6100	4700	21000	480	2150	4000	5000	120.0	12.00	0.390	20
28300	60000	2890	6100	5550	23300	565	2370	4000	5000	120.0	12.00	0.465	20
39000	96500	3950	9850	6950	34500	710	3500	3300	4500	220.0	22.00	0.800	24
39000	96500	3950	9850	8050	38500	820	3900	3300	4500	220.0	22.00	1.050	24
57000	144000	5800	14700	9800	53000	1000	5400	2600	3500	450.0	45.00	1.560	30
57000	144000	5800	14700	11400	59000	1160	6100	2600	3500	450.0	45.00	1.970	30



Type NUKR (D<100 mm) (Double row type full complement with seals)

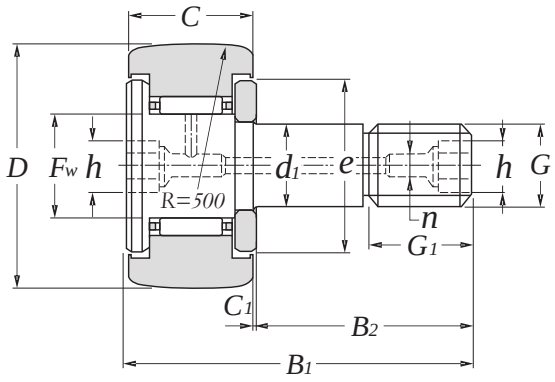
Basic load ratings				Load ratings of truck				Max runout speed grease	Maximum tightening torque		Weight	Stud diameter
dynamic C	static Co	dynamic C	static Co	Spherical outer ring	Cylindrical outer ring	Spherical outer ring	Cylindrical outer ring					
N		kgf		N		kgf		r/min	N.m	Kgf.m	kg(s)	mm
22300	25700	2280	2620	3200	11900	325	1220	5500	58	5.8	0.165	16
24100	29100	2450	2970	3850	14500	390	1480	4700	87	8.7	0.242	18
38500	48000	3950	4900	4700	21000	480	2150	4000	120	12.0	0.380	20
42500	57500	4350	5850	5550	23300	565	2370	3300	120	12.0	0.450	20
56500	72500	5750	7400	6950	34500	710	3500	2900	220	22.0	0.795	24
62000	85500	6350	8700	8050	38500	820	3900	2400	220	22.0	1.010	24
101000	151000	10300	15400	9800	53000	1000	5400	2100	450	45.0	1.540	30
101000	151000	10300	15400	11400	59000	1160	6100	2100	450	45.0	1.960	30



Inner bore D 0/-0.05 mm	Bearing number	Boundary dimensions d	B	C	d2	r	r1	Basic load ratings dynamic C N	static Co N	dynamic C kgf	static Co kgf	Fatigue limit load N	Max runout speed grease r/min	Weight kg(s).
35	NUKRE 35	16	52	18	27.6	3.8	0.6	15300	18700	8500	16800	2430	6500	0.177
40	NUKRE 40	18	58	20	30.0	3.8	1.0	18700	24900	13000	24900	3150	5500	0.258
47	NUKRE 47	20	66	24	27.0	0.8	1.0	28500	37500	16200	32500	4850	4200	0.400
52	NUKRE 52	20	66	24	31.0	0.8	1.0	29000	40500	17100	34000	5300	4200	0.470
62	NUKRE 62	24	80	28	38.0	1.3	1.0	40000	55000	23400	46000	7300	2600	0.824
72	NUKRE 72	24	80	28	44.0	1.3	1.1	45000	65000	31500	63000	8700	2600	1.050
80	NUKRE 80	30	100	35	47.0	1.0	1.1	69000	104000	47500	95000	14100	1800	1.670
90	NUKRE 90	30	100	35	47.0	1.0	1.1	78000	123000	76000	123000	16700	1800	2.020

Technical supplement

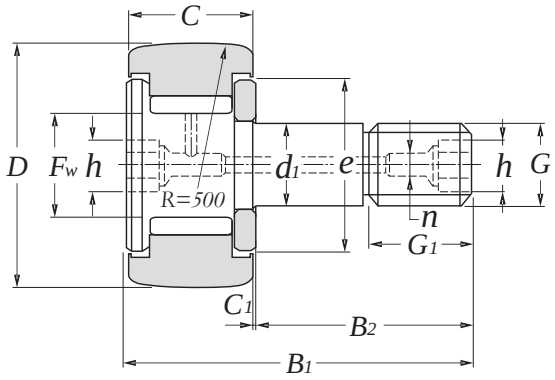
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		



Inner bore $D_{0/-0.05}$ mm	Bearing number	Boundary dimensions						Basic load ratings				Fatigue limit load	Max runout speed grease	Weight
		d	B	C	d2	r	r1	dynamic C	static Co	dynamic C	static Co			
		mm						N		kgf		N	r/min	kg(s).
35	PWKR 35 2RS	16	52	18	20	0.8	0.6	12600	14600	10700	14600	1760	6000	-
40	PWKR 40 2RS	18	58	20	22	0.8	1.0	14300	17900	16500	17900	2160	5000	-
47	PWKR 47 2RS	20	66	24	27	0.8	1.0	24500	30500	20700	30500	3750	3800	0.400
52	PWKR 52 2RS	20	66	24	31	0.8	1.0	25000	33000	21800	33000	4100	3800	0.470
62	PWKR 62 2RS	24	80	28	38	1.3	1.0	35000	45500	29000	45500	5800	2200	0.824
72	PWKR 72 2RS	24	80	28	44	1.3	1.1	38500	54000	39000	54000	6900	2200	1.050
80	PWKR 80 2RS	30	100	35	47	1.0	1.1	56000	79000	60000	79000	10600	1800	1.670
90	PWKR 90 2RS	30	100	35	47	1.0	1.1	62000	92000	92000	92000	12200	1800	2.020

Technical supplement

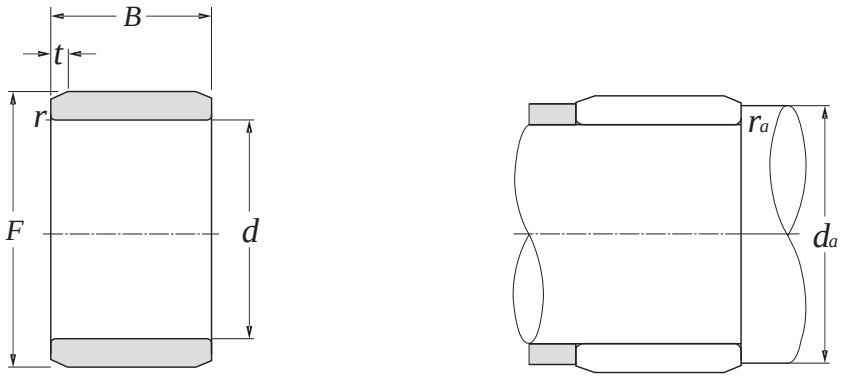
Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



Inner bore D 0/-0.05 mm	Bearing number	Boundary dimensions						Basic load ratings				Fatigue limit load	Max runout speed grease	Weight
		d	B	C	d_2	r	r_1	dynamic C	static Co	dynamic C	static Co			
		mm						N		kgf		N	r/min	kg(s).
35	PWKRE 35 2RS	16	52	18	27.6	3.8	0.6	12600	14600	10700	14600	1760	6000	-
40	PWKRE 40 2RS	18	58	20	30.0	3.8	1.0	14300	17900	16500	17900	2160	5000	-
47	PWKRE 47 2RS	20	66	24	27.0	0.8	1.0	24500	30500	20700	30500	3750	3800	0.400
52	PWKRE 52 2RS	20	66	24	31.0	0.8	1.0	25000	33000	21800	33000	4100	3800	0.470
62	PWKRE 62 2RS	24	80	28	38.0	1.3	1.0	35000	45500	29000	45500	5800	2200	0.824
72	PWKRE 72 2RS	24	80	28	44.0	1.3	1.1	38500	54000	39000	54000	6900	2200	1.050
80	PWKRE 80 2RS	30	100	35	47.0	1.0	1.1	56000	79000	60000	79000	10600	1800	1.670
90	PWKRE 90 2RS	30	100	35	47.0	1.0	1.1	62000	92000	92000	92000	12200	1800	2.020

Technical supplement

Cages		Precision	Grease
Steel -			
Polymid -	x	Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		



Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm			mm		
5	IR 5x7x10	$7\ ^{0}_{-0.006}$	10.0	0.15	1	6.2	0.15	0.0014
5	IR 5x8x12	$8\ ^{0}_{-0.006}$	12.0	0.30	1	7.0	0.30	0.0028
5	IR 5x8x16	$8\ ^{0}_{-0.006}$	16.0	0.30	-	7.0	0.30	0.0038
6	IR 6x8x10	$8\ ^{0}_{-0.006}$	10.0	0.15	1	7.2	0.15	0.0017
6	IR 6x9x12	$9\ ^{0}_{-0.006}$	12.0	0.30	1	8.0	0.30	0.0032
6	IR 6x9x16	$9\ ^{0}_{-0.006}$	16.0	0.30	1	8.0	0.30	0.0043
6	IR 6x10x10	$10\ ^{0}_{-0.006}$	10.0	0.30	1	8.0	0.30	0.0037
6	IR 6x10x12	$10\ ^{0}_{-0.006}$	12.0	0.30	-	8.0	0.30	0.0046
6	IR 6x10x13	$10\ ^{0}_{-0.006}$	13.0	0.30	1	8.0	0.30	0.0050
7	IR 7x9x10	$9\ ^{0}_{-0.006}$	10.0	0.15	1	8.2	0.15	0.0019
7	IR 7x10x10.5	$10\ ^{0}_{-0.006}$	10.5	0.30	1	9.0	0.30	0.0031
7	IR 7x10x12	$10\ ^{0}_{-0.006}$	12.0	0.30	1	9.0	0.30	0.0036
7	IR 7x10x16	$10\ ^{0}_{-0.006}$	16.0	0.30	1	9.0	0.30	0.0049
7	IR 7x12x16	$12\ ^{0}_{-0.008}$	16.0	0.30	1	9.0	0.30	0.0093
8	IR 8x10x11	$10\ ^{0}_{-0.006}$	11.0	0.15	1	9.2	0.15	0.0024
8	IR 8x12x10	$12\ ^{0}_{-0.008}$	10.0	0.30	1	10.0	0.30	0.0048
8	IR 8x12x10.5	$12\ ^{0}_{-0.008}$	10.5	0.30	1	10.0	0.30	0.0050
8	IR 8x12x12	$12\ ^{0}_{-0.008}$	12.0	0.30	-	10.0	0.30	0.0057
8	IR 8x12x12.5	$12\ ^{0}_{-0.008}$	12.5	0.30	1	10.0	0.30	0.0059
8	IR 8x14x16	$14\ ^{0}_{-0.008}$	16.0	0.30	1	10.0	0.30	0.0130
9	IR 9x12x11	$12\ ^{0}_{-0.008}$	11.0	0.30	1	11.0	0.30	0.0041
9	IR 9x12x12	$12\ ^{0}_{-0.008}$	12.0	0.30	1	11.0	0.30	0.0045
9	IR 9x12x16	$12\ ^{0}_{-0.008}$	16.0	0.30	1	11.0	0.30	0.0061
9	IR 9x15x16	$15\ ^{0}_{-0.008}$	16.0	0.30	1	11.0	0.30	0.0140

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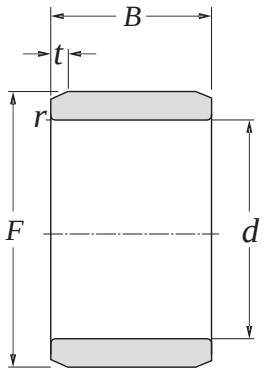
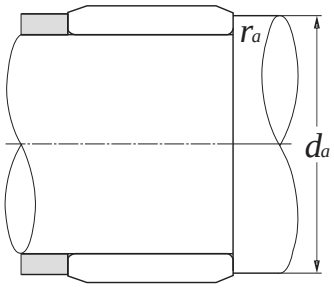
Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

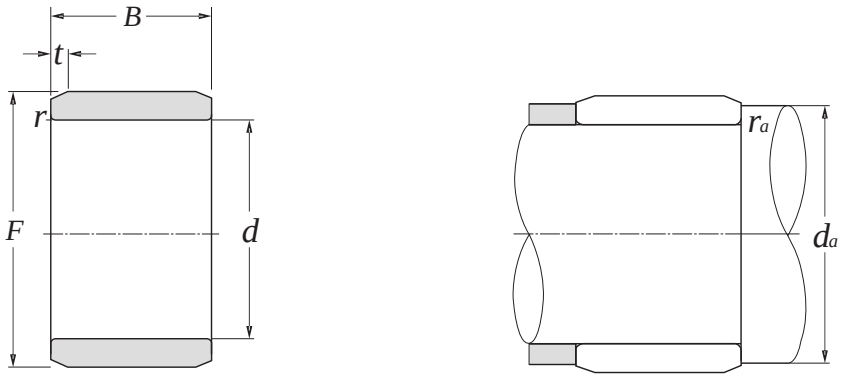




Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm			mm		
10	IIR 10x13x12.5	$13^{\ 0}_{-0.008}$	12.5	0.3	1.0	12	0.3	0.0052
10	IR 10x14x12	$14^{\ 0}_{-0.008}$	12.0	0.3	1.0	12	0.3	0.0073
10	IR 10x14x13	$14^{\ 0}_{-0.008}$	13.0	0.3	1.0	12	0.3	0.0074
10	IR 10x14x14	$14^{\ 0}_{-0.008}$	14.0	0.3	-	12	0.3	0.0080
10	IR 10x14x16	$14^{\ 0}_{-0.008}$	16.0	0.3	-	12	0.3	0.0092
10	IR 10x14x20	$14^{\ 0}_{-0.008}$	20.0	0.3	1.0	12	0.3	0.0120
10	IR 10x15x15.5	$15^{\ 0}_{-0.008}$	15.5	0.3	1.0	12	0.3	0.0120
10	IR 10x15x20.5	$15^{\ 0}_{-0.008}$	20.5	0.3	1.0	12	0.3	0.0150
10	IR 10x16x16	$16^{\ 0}_{-0.008}$	16.0	0.3	1.0	12	0.3	0.0150
12	IR 12x15x12	$15^{\ 0}_{-0.008}$	12.0	0.3	1.0	14	0.3	0.0058
12	IR 12x15x12.5	$15^{\ 0}_{-0.008}$	12.5	0.3	1.0	14	0.3	0.0061
12	IR 12x15x16	$15^{\ 0}_{-0.008}$	16.0	0.3	1.0	14	0.3	0.0078
12	IR 12x15x16.5	$15^{\ 0}_{-0.008}$	16.5	0.3	-	14	0.3	0.0080
12	IR 12x15x22.5	$15^{\ 0}_{-0.008}$	22.5	0.3	-	14	0.3	0.0110
12	IR 12x16x12	$16^{\ 0}_{-0.008}$	12.0	0.3	1.5	14	0.3	0.0079
12	IR 12x16x13	$16^{\ 0}_{-0.008}$	13.0	0.3	1.5	14	0.3	0.0087
12	IR 12x16x14	$16^{\ 0}_{-0.008}$	14.0	0.3	-	14	0.3	0.0095
12	IR 12x16x16	$16^{\ 0}_{-0.008}$	16.0	0.3	1.5	14	0.3	0.0110
12	IR 12x16x20	$16^{\ 0}_{-0.008}$	20.0	0.3	1.5	14	0.3	0.0140
12	IR 12x16x22	$16^{\ 0}_{-0.008}$	22.0	0.3	1.5	14	0.3	0.0150
12	IR 12x17x20.5	$17^{\ 0}_{-0.008}$	20.5	0.3	1.5	14	0.3	0.0190
12	IR 12x17x25.5	$17^{\ 0}_{-0.008}$	25.5	0.3	1.5	14	0.3	0.0240
12	IR 12x18x16	$18^{\ 0}_{-0.008}$	16.0	0.3	1.5	14	0.3	0.0180
14	IR 14x17x17	$17^{\ 0}_{-0.008}$	17.0	0.3	1.5	16	0.3	0.0095

Technical supplement

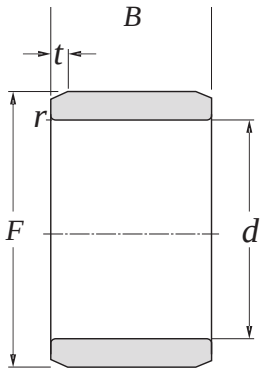
Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

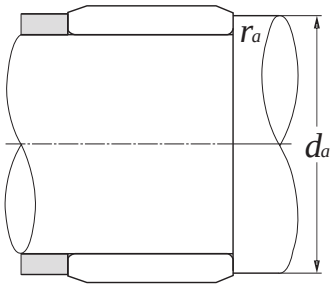


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm			mm		
15	IR 15x18x12.5	$18^{\ 0}_{-0.008}$	12.5	0.3	1.5	17	0.3	0.0072
15	IR 15x18x16	$18^{\ 0}_{-0.008}$	16.0	0.3	1.5	17	0.3	0.0093
15	IR 15x18x16.5	$18^{\ 0}_{-0.008}$	16.5	0.3	1.5	17	0.3	0.0096
15	IR 15x18x17.5	$18^{\ 0}_{-0.008}$	17.5	0.3	1.5	17	0.3	0.0100
15	IR 15x18x20.5	$18^{\ 0}_{-0.008}$	20.5	0.3	1.5	17	0.3	0.0120
15	IR 15x18x25.5	$18^{\ 0}_{-0.008}$	25.5	0.3	1.5	17	0.3	0.0150
15	IR 15x19x16	$19^{\ 0}_{-0.009}$	16.0	0.3	1.5	17	0.3	0.0130
15	IR 15x19x20	$19^{\ 0}_{-0.009}$	20.0	0.3	1.5	17	0.3	0.0160
15	IR 15x20x12	$20^{\ 0}_{-0.009}$	12.0	0.3	1.5	17	0.3	0.0120
15	IR 15x20x13	$20^{\ 0}_{-0.009}$	13.0	0.3	1.5	17	0.3	0.0140
15	IR 15x20x14	$20^{\ 0}_{-0.009}$	14.0	0.3	-	17	0.3	0.0150
15	IR 15x20x18	$20^{\ 0}_{-0.009}$	18.0	0.3	1.5	17	0.3	0.0190
15	IR 15x20x20.5	$20^{\ 0}_{-0.009}$	20.5	0.3	1.5	17	0.3	0.0210
15	IR 15x20x23	$20^{\ 0}_{-0.009}$	23.0	0.3	-	17	0.3	0.0240
15	IR 15x20x26	$20^{\ 0}_{-0.009}$	26.0	0.3	1.5	17	0.3	0.0270
15	IR 15x20x30.5	$20^{\ 0}_{-0.009}$	30.5	0.3	1.5	17	0.3	0.0320
15	IR 15x22x20	$22^{\ 0}_{-0.009}$	20.0	0.6	1.5	19	0.6	0.0320
17	IR 17x20x16	$20^{\ 0}_{-0.009}$	16.0	0.3	1.5	19	0.3	0.0110
17	IR 17x20x16.5	$20^{\ 0}_{-0.009}$	16.5	0.3	1.5	19	0.3	0.0110
17	IR 17x20x20	$20^{\ 0}_{-0.009}$	20.0	0.3	1.5	19	0.3	0.0140
17	IR 17x20x20.5	$20^{\ 0}_{-0.009}$	20.5	0.3	-	19	0.3	0.0140
17	IR 17x20x30.5	$20^{\ 0}_{-0.009}$	30.5	0.3	-	19	0.3	0.0210
17	IR 17x21x16	$21^{\ 0}_{-0.009}$	16.0	0.3	1.5	19	0.3	0.0140
17	IR 17x21x20	$21^{\ 0}_{-0.009}$	20.0	0.3	-	19	0.3	0.0180

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

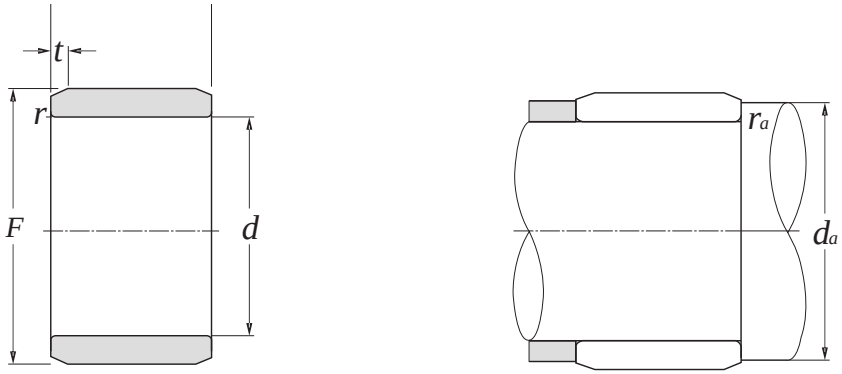




Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}{}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm					
17	IR 17x22x13	$22^{\ 0}_{-0.009}$	13.0	0.3	1.5	19	0.3	0.015
17	IR 17x22x14	$22^{\ 0}_{-0.009}$	14.0	0.3	-	19	0.3	0.016
17	IR 17x22x16	$22^{\ 0}_{-0.009}$	16.0	0.3	-	19	0.3	0.019
17	IR 17x22x18	$22^{\ 0}_{-0.009}$	18.0	0.3	1.5	19	0.3	0.021
17	IR 17x22x20.5	$22^{\ 0}_{-0.009}$	20.5	0.3	1.5	19	0.3	0.024
17	IR 17x22x23	$22^{\ 0}_{-0.009}$	23.0	0.3	-	19	0.3	0.027
17	IR 17x22x26	$22^{\ 0}_{-0.009}$	26.0	0.3	1.5	19	0.3	0.030
17	IR 17x22x32	$22^{\ 0}_{-0.009}$	32.0	0.3	1.5	19	0.3	0.036
17	IR 17x24x20	$24^{\ 0}_{-0.009}$	20.0	0.6	1.5	21	0.6	0.034
20	IR 20x24x16	$24^{\ 0}_{-0.009}$	16.0	0.3	1.8	22	0.3	0.017
20	IR 20x24x20	$24^{\ 0}_{-0.009}$	20.0	0.3	-	22	0.3	0.021
20	IR 20x24x28.5	$24^{\ 0}_{-0.009}$	28.5	0.3	-	22	0.3	0.030
20	IR 20x25x12.5	$25^{\ 0}_{-0.009}$	12.5	0.3	1.8	22	0.3	0.016
20	IR 20x25x16	$25^{\ 0}_{-0.009}$	16.0	0.3	-	22	0.3	0.021
20	IR 20x25x16.5	$25^{\ 0}_{-0.009}$	16.5	0.3	1.8	22	0.3	0.022
20	IR 20x25x17	$25^{\ 0}_{-0.009}$	17.0	0.3	1.8	22	0.3	0.022
20	IR 20x25x18	$25^{\ 0}_{-0.009}$	18.0	0.3	-	22	0.3	0.024
20	IR 20x25x20	$25^{\ 0}_{-0.009}$	20.0	0.3	-	22	0.3	0.027
20	IR 20x25x20.5	$25^{\ 0}_{-0.009}$	20.5	0.3	1.8	22	0.3	0.028
20	IR 20x25x23	$25^{\ 0}_{-0.009}$	23.0	0.3	1.8	22	0.3	0.031
20	IR 20x25x26	$25^{\ 0}_{-0.009}$	26.0	0.3	1.8	22	0.3	0.034
20	IR 20x25x26.5	$25^{\ 0}_{-0.009}$	26.5	0.3	-	22	0.3	0.036
20	IR 20x25x30	$25^{\ 0}_{-0.009}$	30.0	0.3	1.8	22	0.3	0.041
20	IR 20x25x32	$25^{\ 0}_{-0.009}$	32.0	0.3	1.8	22	0.3	0.041

Technical supplement

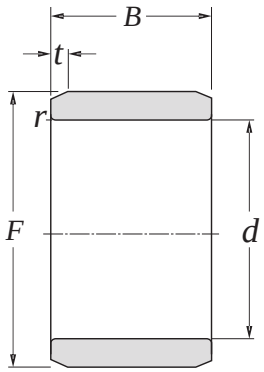
Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

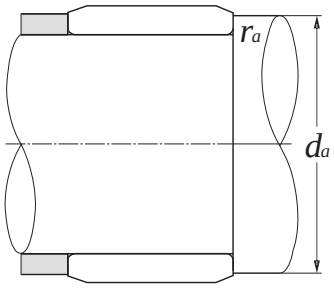


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm					
20	IR 20x25x38.5	$25^{\ 0}_{-0.009}$	38.5	0.3	-	22	0.3	0.053
20	IR 20x28x20	$28^{\ 0}_{-0.009}$	20.0	0.6	1.8	24	0.6	0.045
22	IR 22x26x16	$26^{\ 0}_{-0.009}$	16.0	0.3	1.8	24	0.3	0.017
22	IR 22x26x20	$26^{\ 0}_{-0.009}$	20.0	0.3	-	24	0.3	0.022
22	IR 22x28x17	$28^{\ 0}_{-0.009}$	17.0	0.3	1.8	24	0.3	0.030
22	IR 22x28x20	$28^{\ 0}_{-0.009}$	20.0	0.3	1.8	24	0.3	0.035
22	IR 22x28x20.5	$28^{\ 0}_{-0.009}$	20.5	0.3	1.8	24	0.3	0.036
22	IR 22x28x23	$28^{\ 0}_{-0.009}$	23.0	0.3	1.8	24	0.3	0.042
22	IR 22x28x30	$28^{\ 0}_{-0.009}$	30.0	0.3	-	24	0.3	0.054
25	IR 25x29x20	$29^{\ 0}_{-0.009}$	20.0	0.3	-	27	0.3	0.026
25	IR 25x29x30	$29^{\ 0}_{-0.009}$	30.0	0.3	1.8	27	0.3	0.039
25	IR 25x30x12.5	$30^{\ 0}_{-0.009}$	12.5	0.3	1.8	27	0.3	0.020
25	IR 25x30x16	$30^{\ 0}_{-0.009}$	16.0	0.3	1.0	27	0.3	0.024
25	IR 25x30x16.5	$30^{\ 0}_{-0.009}$	16.5	0.3	1.8	27	0.3	0.026
25	IR 25x30x17	$30^{\ 0}_{-0.009}$	17.0	0.3	1.8	27	0.3	0.027
25	IR 25x30x18	$30^{\ 0}_{-0.009}$	18.0	0.3	-	27	0.3	0.030
25	IR 25x30x20	$30^{\ 0}_{-0.009}$	20.0	0.3	1.8	27	0.3	0.033
25	IR 25x30x20.5	$30^{\ 0}_{-0.009}$	20.5	0.3	1.8	27	0.3	0.034
25	IR 25x30x23	$30^{\ 0}_{-0.009}$	23.0	0.3	1.8	27	0.3	0.038
25	IR 25x30x26	$30^{\ 0}_{-0.009}$	26.0	0.3	1.8	27	0.3	0.041
25	IR 25x30x26.5	$30^{\ 0}_{-0.009}$	26.5	0.3	-	27	0.3	0.043
25	IR 25x30x30	$30^{\ 0}_{-0.009}$	30.0	0.3	1.8	27	0.3	0.050
25	IR 25x30x32	$30^{\ 0}_{-0.009}$	32.0	0.3	1.0	27	0.3	0.054
25	IR 25x30x38.5	$30^{\ 0}_{-0.009}$	38.5	0.3	-	27	0.3	0.064

Technical supplement

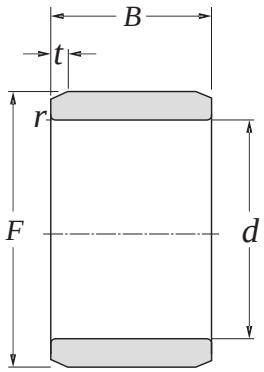
Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

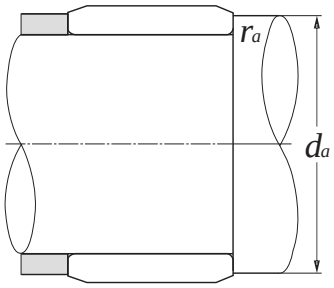




Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
			mm					
25	IR 25x32x22	$32^{+0.008}_{-0.002}$	22.0	0.6	1.8	29	0.6	0.052
25	IR 25x32x30.5	$32^{+0.008}_{-0.002}$	30.5	0.6	1.8	29	0.6	0.072
28	IR 28x32x17	$32^{+0.008}_{-0.002}$	17.0	0.3	1.8	30	0.3	0.025
28	IR 28x32x20	$32^{+0.008}_{-0.002}$	20.0	0.3	1.8	30	0.3	0.028
28	IR 28x32x23	$32^{+0.008}_{-0.002}$	23.0	0.3	1.8	30	0.3	0.034
28	IR 28x32x30	$32^{+0.008}_{-0.002}$	30.0	0.3	-	30	0.3	0.044
29	IR 29x32x13	$32^{+0.008}_{-0.002}$	13.0	0.3	1.8	31	0.3	0.015
30	IR 30x35x12.5	$35^{+0.008}_{-0.002}$	12.5	0.3	1.8	32	0.3	0.024
30	IR 30x35x13	$35^{+0.008}_{-0.002}$	13.0	0.3	1.3	32	0.3	0.025
30	IR 30x35x16	$35^{+0.008}_{-0.002}$	16.0	0.3	-	32	0.3	0.031
30	IR 30x35x16.5	$35^{+0.008}_{-0.002}$	16.5	0.3	1.8	32	0.3	0.032
30	IR 30x35x17	$35^{+0.008}_{-0.002}$	17.0	0.3	1.8	32	0.3	0.032
30	IR 30x35x18	$35^{+0.008}_{-0.002}$	18.0	0.3	-	32	0.3	0.035
30	IR 30x35x20	$35^{+0.008}_{-0.002}$	20.0	0.3	-	32	0.3	0.038
30	IR 30x35x20.5	$35^{+0.008}_{-0.002}$	20.5	0.3	1.8	32	0.3	0.039
30	IR 30x35x23	$35^{+0.008}_{-0.002}$	23.0	0.3	1.8	32	0.3	0.044
30	IR 30x35x26	$35^{+0.008}_{-0.002}$	26.0	0.3	1.8	32	0.3	0.050
30	IR 30x35x30	$35^{+0.008}_{-0.002}$	30.0	0.3	-	32	0.3	0.059
30	IR 30x35x32	$35^{+0.008}_{-0.002}$	32.0	0.3	1.8	32	0.3	0.063
30	IR 30x37x18	$37^{+0.008}_{-0.002}$	18.0	0.3	1.8	32	0.3	0.050
30	IR 30x37x22	$37^{+0.008}_{-0.002}$	22.0	0.6	1.8	34	0.6	0.061
30	IR 30x38x20	$38^{+0.008}_{-0.002}$	20.0	0.6	-	34	0.6	0.065
32	IR 32x37x20	$37^{0}_{-0.011}$	20.0	0.3	2.0	34	0.3	0.040
32	IR 32x37x30	$37^{0}_{-0.011}$	30.0	0.3	-	34	0.3	0.063

Technical supplement			
Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

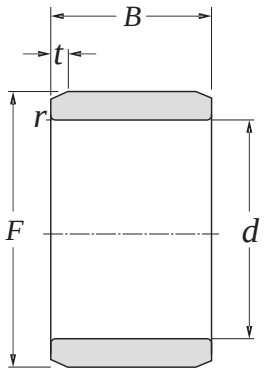


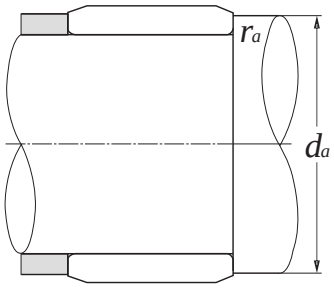


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\ min}{}^{2)}$	t	Abutment dimensions $d_{a\ min}$	$r_{as\ max}$	Weight kg.
32	IIR 32x38x32	$38^{\ 0}_{-0.011}$	32.0	0.3	2.0	34	0.3	00.082
32	IR 32x40x20	$40^{\ 0}_{-0.011}$	20.0	0.6	2.0	36	0.6	0.068
32	IR 32x40x27	$40^{\ 0}_{-0.011}$	27.0	0.6	2.0	36	0.6	0.092
32	IR 32x40x36	$40^{\ 0}_{-0.011}$	36.0	0.6	2.0	36	0.6	0.124
33	IR 33x37x13	$37^{\ 0}_{-0.011}$	13.0	0.3	2.0	35	0.3	0.022
35	IR 35x40x12.5	$40^{\ 0}_{-0.011}$	12.5	0.3	2.0	37	0.3	0.027
35	IR 35x40x16.5	$40^{\ 0}_{-0.011}$	16.5	0.3	2.0	37	0.3	0.037
35	IR 35x40x17	$40^{\ 0}_{-0.011}$	17.0	0.3	2.0	37	0.3	0.038
35	IR 35x40x20	$40^{\ 0}_{-0.011}$	20.0	0.3	2.0	37	0.3	0.044
35	IR 35x40x20.5	$40^{\ 0}_{-0.011}$	20.5	0.3	2.0	37	0.3	0.046
35	IR 35x40x30	$40^{\ 0}_{-0.011}$	30.0	0.3	-	37	0.3	0.068
35	IR 35x40x34	$40^{\ 0}_{-0.011}$	34.0	0.3	1.8	37	0.3	0.079
35	IR 35x40x40	$40^{\ 0}_{-0.011}$	40.0	0.3	2.0	37	0.3	0.091
35	IR 35x42x20	$42^{\ 0}_{-0.011}$	20.0	0.6	1.8	39	0.6	0.064
35	IR 35x42x21	$42^{\ 0}_{-0.011}$	21.0	0.6	-	39	0.6	0.068
35	IR 35x42x23	$42^{\ 0}_{-0.011}$	23.0	0.6	-	39	0.6	0.074
35	IR 35x42x27	$42^{\ 0}_{-0.011}$	27.0	0.6	2.0	39	0.6	0.080
35	IR 35x42x36	$42^{\ 0}_{-0.011}$	36.0	0.6	2.0	39	0.6	0.117
35	IR 35x43x22	$43^{\ 0}_{-0.011}$	22.0	0.6	2.0	39	0.6	0.081
38	IR 38x43x20	$43^{\ 0}_{-0.011}$	20.0	0.3	1.8	40	0.3	0.048
38	IR 38x43x30	$43^{\ 0}_{-0.011}$	30.0	0.3	-	40	0.3	0.074
40	IR 40x45x16.5	$45^{\ 0}_{-0.011}$	16.5	0.3	2.0	42	0.3	0.042
40	IR 40x45x17	$45^{\ 0}_{-0.011}$	17.0	0.3	2.0	42	0.3	0.043
40	IR 40x45x20	$45^{\ 0}_{-0.011}$	20.0	0.3	2.0	42	0.3	0.051

Technical supplement

Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

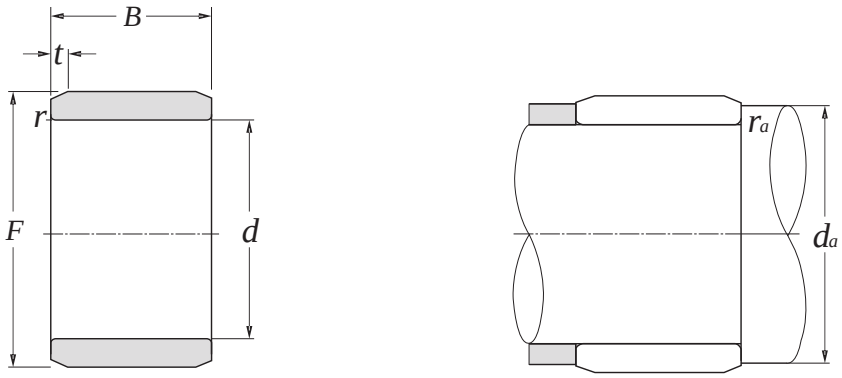




Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\ min}{}^{2)}$	t	Abutment dimensions $d_{a\ min}$	$r_{as\ max}$	Weight kg.
40	IR 40x45x20.5	$45^{\ 0}_{-0.011}$	20.5	0.3	2.0	42	0.3	0.053
40	IR 40x45x26.5	$45^{\ 0}_{-0.011}$	26.5	0.3	-	42	0.3	0.068
40	IR 40x45x30	$45^{\ 0}_{-0.011}$	30.0	0.3	2.0	42	0.3	0.077
40	IR 40x45x34	$45^{\ 0}_{-0.011}$	34.0	0.3	2.0	42	0.3	0.088
40	IR 40x45x40	$45^{\ 0}_{-0.011}$	40.0	0.3	2.0	42	0.3	0.106
40	IR 40x48x22	$48^{\ 0}_{-0.011}$	22.0	0.6	2.0	44	0.6	0.092
40	IR 40x48x23	$48^{\ 0}_{-0.011}$	23.0	0.6	-	44	0.6	0.097
40	IR 40x48x30	$48^{\ 0}_{-0.011}$	30.0	0.6	2.0	44	0.6	0.123
40	IR 40x48x40	$48^{\ 0}_{-0.011}$	40.0	0.6	2.0	44	0.6	0.170
40	IR 40x50x20	$50^{\ 0}_{-0.011}$	20.0	0.3	0.8	44	0.3	0.106
40	IR 40x50x22	$50^{\ 0}_{-0.011}$	22.0	1.0	2.0	45	1.0	0.118
42	IR 42x47x20	$47^{\ 0}_{-0.011}$	20.0	0.3	2.0	44	0.3	0.053
42	IR 42x47x30	$47^{\ 0}_{-0.011}$	30.0	0.3	2.0	44	0.3	0.080
45	IR 45x50x20	$50^{\ 0}_{-0.011}$	20.0	0.3	2.0	47	0.3	0.057
45	IR 45x50x25	$50^{\ 0}_{-0.011}$	25.0	0.6	2.0	49	0.6	0.071
45	IR 45x50x25.5	$50^{\ 0}_{-0.011}$	25.5	0.3	-	47	0.3	0.074
45	IR 45x50x32	$50^{\ 0}_{-0.011}$	32.0	0.6	-	49	0.6	0.092
45	IR 45x50x35	$50^{\ 0}_{-0.011}$	35.0	0.6	2.0	49	0.6	0.101
45	IR 45x50x40	$50^{\ 0}_{-0.011}$	40.0	0.3	1.5	47	0.3	0.115
45	IR 45x52x22	$52^{\ +0.008}_{-\ 0.004}$	22.0	0.6	2.0	49	0.6	0.088
45	IR 45x52x23	$52^{\ +0.008}_{-\ 0.004}$	23.0	0.6	-	49	0.6	0.093
45	IR 45x52x30	$52^{\ +0.008}_{-\ 0.004}$	30.0	0.6	2.0	49	0.6	0.123
45	IR 45x52x40	$52^{\ +0.008}_{-\ 0.004}$	40.0	0.6	2.0	49	0.6	0.164
45	IR 45x55x20	$55^{\ +0.008}_{-\ 0.004}$	20.0	0.6	2.0	49	0.6	0.116

Technical supplement

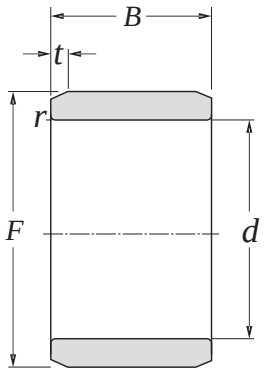
Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

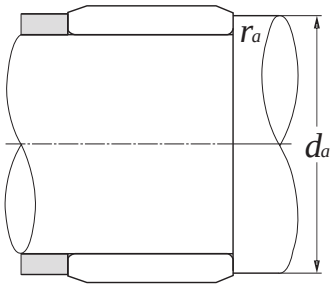


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}{}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
45	IR 45x55x22	$55^{+0.008}_{-0.004}$	22	1.0	2.0	50.0	1.0	0.130
45	IR 45x55x40	$55^{+0.008}_{-0.004}$	40	0.6	2.0	49.0	0.6	0.173
50	IR 50x55x20	$55^{+0.008}_{-0.004}$	20	0.6	2.0	54.0	0.6	0.063
50	IR 50x55x25	$55^{+0.008}_{-0.004}$	25	0.6	2.0	54.0	0.6	0.780
50	IR 50x55x35	$55^{+0.008}_{-0.004}$	35	0.6	2.0	54.0	0.6	0.112
50	IR 50x55x40	$55^{+0.008}_{-0.004}$	40	0.6	2.0	54.0	0.6	0.128
50	IR 50x58x22	$58^{+0.008}_{-0.004}$	22	0.6	2.0	54.0	0.6	0.113
50	IR 50x58x23	$58^{+0.008}_{-0.004}$	23	0.6	-	54.0	0.6	0.119
50	IR 50x58x30	$58^{+0.008}_{-0.004}$	30	0.6	2.0	54.0	0.6	0.159
50	IR 50x58x40	$58^{+0.008}_{-0.004}$	40	0.6	2.0	54.0	0.6	0.209
50	IR 50x60x20	$60^{+0.008}_{-0.004}$	20	1.0	2.0	55.0	1.0	0.129
50	IR 50x60x25	$60^{+0.008}_{-0.004}$	25	1.0	2.0	55.0	1.0	0.163
50	IR 50x60x28	$60^{+0.008}_{-0.004}$	28	1.1	2.0	56.5	1.0	0.183
50	IR 50x60x40	$60^{+0.008}_{-0.004}$	40	1.0	2.0	55.0	1.0	0.262
55	IR 55x60x25	$60^{0}_{-0.013}$	25	0.6	2.2	59.0	0.6	0.086
55	IR 55x60x35	$60^{0}_{-0.013}$	35	0.6	2.0	59.0	0.6	0.121
55	IR 55x63x25	$63^{0}_{-0.013}$	25	1.0	2.0	60.0	1.0	0.141
55	IR 55x63x34	$63^{0}_{-0.013}$	34	1.0	2.2	60.0	1.0	0.192
55	IR 55x63x45	$63^{0}_{-0.013}$	45	1.0	2.2	60.0	1.0	0.256
55	IR 55x65x28	$65^{0}_{-0.013}$	28	1.1	2.2	61.5	1.0	0.206
55	IR 55x65x30	$65^{0}_{-0.013}$	30	1.0	2.2	60.0	1.0	0.220
55	IR 55x65x60	$65^{0}_{-0.013}$	60	1.0	1.5	60.0	1.0	0.440
60	IR 60x68x25	$68^{0}_{-0.013}$	25	1.0	2.2	65.0	1.0	0.152
60	IR 60x68x34	$68^{0}_{-0.013}$	34	1.0	2.2	65.0	1.0	0.206

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

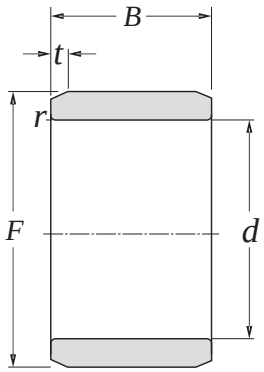


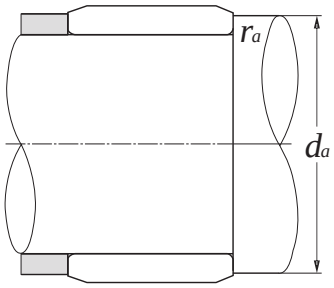


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\ min}{}^{2)}$	t	Abutment dimensions $d_{a\ min}$	$r_{as\ max}$	Weight kg.
60	IR 60x68x35	$68\,^{0}_{-0.013}$	35	0.6	2.2	64.0	0.6	0.213
60	IR 60x68x45	$68\,^{0}_{-0.013}$	45	1.0	2.2	65.0	1.0	0.270
60	IR 60x70x25	$70\,^{0}_{-0.013}$	25	1.0	2.2	65.0	1.0	0.195
60	IR 60x70x28	$70\,^{0}_{-0.013}$	28	1.1	2.2	66.5	1.0	0.216
60	IR 60x70x30	$70\,^{0}_{-0.013}$	30	1.0	2.2	65.0	1.0	0.232
60	IR 60x70x60	$70\,^{0}_{-0.013}$	60	1.0	2.2	65.0	1.0	0.463
65	IR 65x72x25	$72\,^{0}_{-0.013}$	25	1.0	2.2	70.0	1.0	0.142
65	IR 65x72x34	$72\,^{0}_{-0.013}$	34	1.0	2.2	70.0	1.0	0.193
65	IR 65x72x45	$72\,^{0}_{-0.013}$	45	1.0	2.2	70.0	1.0	0.259
65	IR 65x73x25	$73\,^{0}_{-0.013}$	25	0.6	2.2	69.0	0.6	0.164
65	IR 65x73x35	$73\,^{0}_{-0.013}$	35	0.6	2.2	69.0	0.6	0.232
65	IR 65x75x28	$75\,^{0}_{-0.013}$	28	1.1	2.2	71.5	1.0	0.240
65	IR 65x75x30	$75\,^{0}_{-0.013}$	30	1.0	2.2	70.0	1.0	0.256
65	IR 65x75x60	$75\,^{0}_{-0.013}$	60	1.0	2.2	70.0	1.0	0.513
70	IR 70x80x25	$80\,^{0}_{-0.013}$	25	1.0	2.2	75.0	1.0	0.224
70	IR 70x80x28	$80\,^{0}_{-0.013}$	28	1.1	2.2	76.5	1.0	0.250
70	IR 70x80x30	$80\,^{0}_{-0.013}$	30	1.0	2.2	75.0	1.0	0.267
70	IR 70x80x35	$80\,^{0}_{-0.013}$	35	1.0	2.2	75.0	1.0	0.313
70	IR 70x80x40	$80\,^{0}_{-0.013}$	40	1.0	2.2	75.0	1.0	0.358
70	IR 70x80x54	$80\,^{0}_{-0.013}$	54	1.0	2.2	75.0	1.0	0.483
70	IR 70x80x56	$80\,^{0}_{-0.013}$	56	1.0	2.2	75.0	1.0	0.502
70	IR 70x80x60	$80\,^{0}_{-0.013}$	60	1.0	2.2	75.0	1.0	0.540
75	IR 75x85x25	$85\,^{0}_{-0.015}$	25	1.0	2.2	80.0	1.0	0.238
75	IR 75x85x30	$85\,^{0}_{-0.015}$	30	1.0	2.2	80.0	1.0	0.287

Technical supplement

Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

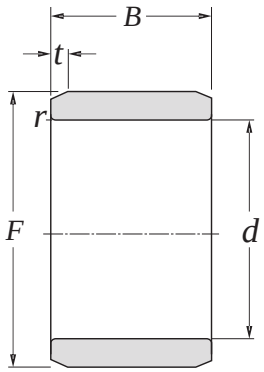


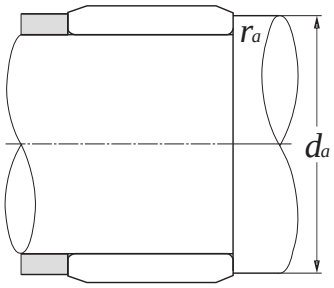


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}{}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg.
75	IR 75x85x35	$85^{0}_{-0.015}$	35	1.0	2.2	80.0	1	0.336
75	IR 75x85x40	$85^{0}_{-0.015}$	40	1.0	2.2	80.0	1	0.385
75	IR 75x85x54	$85^{0}_{-0.015}$	54	1.0	2.2	80.0	1	0.515
75	IR 75x90x32	$90^{0}_{-0.015}$	32	1.1	2.2	81.5	1	0.480
80	IR 80x90x25	$90^{0}_{-0.015}$	25	1.0	2.2	85.0	1	0.254
80	IR 80x90x30	$90^{0}_{-0.015}$	30	1.0	2.2	85.0	1	0.304
80	IR 80x90x35	$90^{0}_{-0.015}$	35	1.0	2.2	85.0	1	0.355
80	IR 80x90x40	$90^{0}_{-0.015}$	40	1.0	2.2	85.0	1	0.408
80	IR 80x90x54	$90^{0}_{-0.015}$	54	1.0	2.2	85.0	1	0.543
80	IR 80x95x32	$95^{0}_{-0.015}$	32	1.1	2.2	86.5	1	0.510
85	IR 85x95x26	$95^{0}_{-0.015}$	26	1.0	2.5	90.0	1	0.280
85	IR 85x95x30	$95^{0}_{-0.015}$	30	1.0	2.5	90.0	1	0.323
85	IR 85x95x36	$95^{0}_{-0.015}$	36	1.0	2.5	90.0	1	0.398
85	IR 85x100x32	$100^{0}_{-0.015}$	32	1.1	2.5	91.5	1	0.530
85	IR 85x100x35	$100^{0}_{-0.015}$	35	1.1	2.5	91.5	1	0.580
85	IR 85x100x46	$100^{0}_{-0.015}$	46	1.1	2.5	91.5	1	0.760
85	IR 85x100x63	$100^{0}_{-0.015}$	63	1.1	2.5	91.5	1	1.050
90	IR 90x100x26	$100^{0}_{-0.015}$	26	1.0	2.5	95.0	1	0.294
90	IR 90x100x30	$100^{0}_{-0.015}$	30	1.0	2.5	95.0	1	0.340
90	IR 90x100x36	$100^{0}_{-0.015}$	36	1.0	2.5	95.0	1	0.406
90	IR 90x105x32	$105^{0}_{-0.015}$	32	1.1	2.5	96.5	1	0.560
90	IR 90x105x35	$105^{0}_{-0.015}$	35	1.1	2.5	96.5	1	0.610
90	IR 90x105x46	$105^{0}_{-0.015}$	46	1.1	2.5	96.5	1	0.800
90	IR 90x105x63	$105^{0}_{-0.015}$	63	1.1	2.5	96.5	1	1.110

Technical supplement

Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

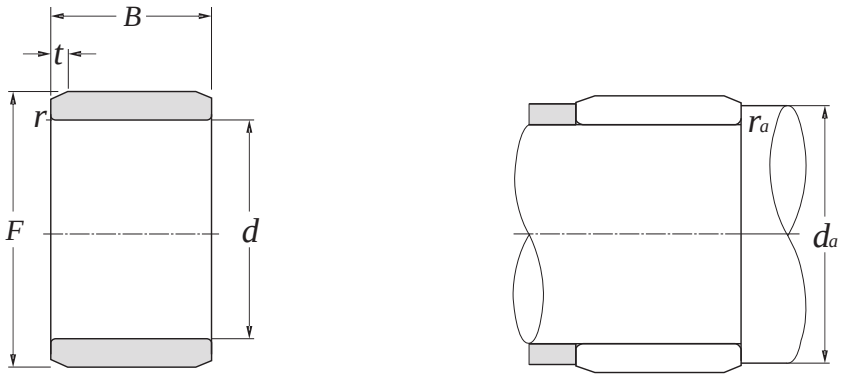




Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\ min}{}^{2)}$	t	Abutment dimensions d_a min	r_{as} max	Weight kg(s).
95	IR 95x105x26	$105^{0}_{-0.015}$	26	1.0	2.5	100.0	1.0	0.313
95	IR 95x105x36	$105^{0}_{-0.015}$	36	1.0	2.5	100.0	1.0	0.430
95	IR 95x110x32	$110^{0}_{-0.015}$	32	1.1	2.5	101.5	1.0	0.590
95	IR 95x110x35	$110^{0}_{-0.015}$	35	1.1	2.5	101.5	1.0	0.640
95	IR 95x110x46	$110^{0}_{-0.015}$	46	1.1	2.5	101.5	1.0	0.850
95	IR 95x110x63	$110^{0}_{-0.015}$	63	1.1	2.5	101.5	1.0	1.170
100	IR 100x110x30	$110^{0}_{-0.015}$	30	1.1	2.5	106.5	1.0	0.375
100	IR 100x110x40	$110^{0}_{-0.015}$	40	1.1	2.5	106.5	1.0	0.505
100	IR 100x115x32	$115^{0}_{-0.015}$	32	1.1	2.5	106.5	1.0	0.620
100	IR 100x115x40	$115^{0}_{-0.015}$	40	1.1	2.5	106.5	1.0	0.775
100	IR 100x115x54	$115^{0}_{-0.015}$	54	1.1	2.5	106.5	1.0	1.090
110	IR 110x120x30	$120^{0}_{-0.015}$	30	1.0	2.5	115.0	1.0	0.440
110	IR 110x120x40	$120^{0}_{-0.015}$	40	1.1	2.5	116.5	1.0	0.580
110	IR 110x125x40	$125^{0}_{-0.018}$	40	1.1	2.5	116.5	1.0	0.840
110	IR 110x125x54	$125^{0}_{-0.018}$	54	1.1	2.5	116.5	1.0	1.160
120	IR 120x130x30	$130^{0}_{-0.018}$	30	1.0	2.2	125.0	1.0	0.440
120	IR 120x130x40	$130^{0}_{-0.018}$	40	1.1	2.5	126.5	1.0	0.590
120	IR 120x135x40	$135^{0}_{-0.018}$	40	2.0	2.5	129.0	2.0	0.870
120	IR 120x135x45	$135^{0}_{-0.018}$	45	1.1	2.5	126.5	1.0	0.980
120	IR 120x135x60	$135^{0}_{-0.018}$	60	1.1	2.5	126.5	1.0	1.250
130	IR 130x145x32	$145^{0}_{-0.018}$	32	1.5	3.0	138.0	1.5	0.780
130	IR 130x145x35	$145^{0}_{-0.018}$	35	1.1	3.0	136.5	1.0	0.855
130	IR 130x145x42	$145^{0}_{-0.018}$	42	1.5	3.0	138.0	1.5	1.050
130	IR 130x150x50	$150^{0}_{-0.018}$	50	1.5	3.0	138.0	1.5	1.690

Technical supplement

Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

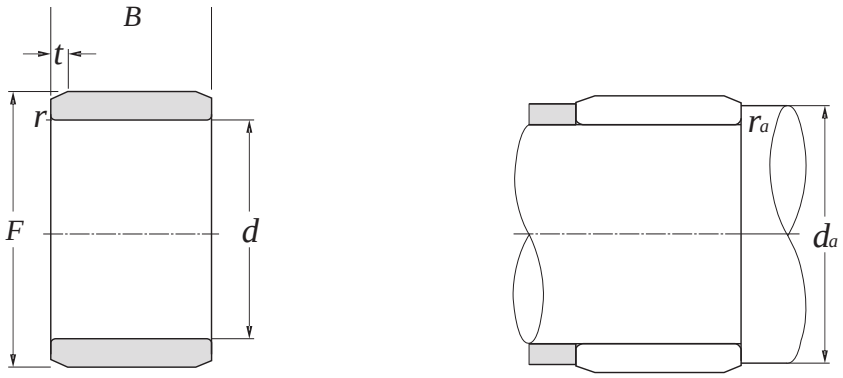


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}{}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kg(s).
130	IR 130x150x52	$150\ ^{0}_{-0.018}$	52	2.0	3.0	139.0	2.0	1.750
130	IR 130x150x67	$150\ ^{0}_{-0.018}$	67	1.5	3.0	138.0	1.5	2.250
140	IR 140x155x32	$155\ ^{0}_{-0.018}$	32	1.5	3.0	148.0	1.5	0.840
140	IR 140x155x35	$155\ ^{0}_{-0.018}$	35	1.1	3.0	146.5	1.0	0.917
140	IR 140x155x42	$155\ ^{0}_{-0.018}$	42	1.5	3.0	148.0	1.5	1.100
140	IR 140x160x50	$160\ ^{0}_{-0.018}$	50	1.5	3.0	148.0	1.5	1.700
140	IR 140x160x52	$160\ ^{0}_{-0.018}$	52	2.0	3.0	149.0	2.0	1.780
140	IR 140x160x67	$160\ ^{0}_{-0.018}$	67	1.5	3.0	148.0	1.5	2.300
150	IR 150x165x32	$165\ ^{-0.017}_{-0.035}$	32	1.5	3.0	158.0	1.5	0.900
150	IR 150x165x40	$165\ ^{-0.017}_{-0.035}$	40	1.1	3.0	156.5	1.0	1.120
150	IR 150x165x42	$165\ ^{-0.017}_{-0.035}$	42	1.5	3.0	158.0	1.5	1.180
150	IR 150x170x52	$170\ ^{-0.017}_{-0.035}$	52	2.0	3.0	159.0	2.0	2.000
150	IR 150x170x60	$170\ ^{-0.017}_{-0.035}$	60	2.0	3.0	159.0	2.0	2.350
160	IR 160x175x40	$175\ ^{-0.017}_{-0.035}$	40	1.1	3.0	166.5	1.0	1.200
160	IR 160x180x60	$180\ ^{-0.017}_{-0.035}$	60	2.0	3.0	169.0	2.0	2.500
170	IR 170x185x45	$185\ ^{-0.013}_{-0.043}$	45	1.1	3.0	176.5	1.0	1.450
170	IR 170x190x60	$190\ ^{-0.013}_{-0.043}$	60	2.0	3.0	179.0	2.0	2.650
180	IR 180x195x45	$195\ ^{-0.013}_{-0.043}$	45	1.1	3.0	186.5	1.0	1.510
180	IR 180x205x69	$205\ ^{-0.013}_{-0.043}$	69	2.0	3.0	189.0	2.0	4.100
190	IR 190x210x50	$210\ ^{-0.020}_{-0.050}$	50	1.5	3.5	198.0	1.5	2.410
190	IR 190x215x69	$215\ ^{-0.020}_{-0.050}$	69	2.0	3.5	199.0	2.0	4.100
200	IR 200x220x50	$220\ ^{-0.020}_{-0.050}$	50	1.5	3.5	208.0	1.5	2.490
200	IR 200x225x80	$225\ ^{-0.020}_{-0.050}$	80	2.1	3.5	211	2.0	5.100
220	IR 220x240x50	$240\ ^{-0.033}_{-0.063}$	50	1.5	3.5	228	1.5	2.750

Technical supplement

Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

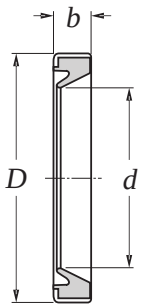
NEEDLE ROLLER BEARINGS



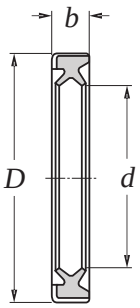
Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\,min}{}^{2)}$	t	Abutment dimensions $d_{a\,min}$	$r_{as\,max}$	Weight kgs.
220	IR 220x245x80	$245^{-0.033}_{-0.063}$	80	2.1	3.5	231	2.0	5.700
240	IR 240x265x60	$265^{-0.037}_{-0.069}$	60	2.0	3.5	249	2.0	4.600
240	IR 240x265x80	$265^{-0.037}_{-0.069}$	80	2.1	3.5	251	2.0	6.300
260	IR 260x285x60	$285^{-0.064}_{-0.092}$	60	2.0	4.0	269	2.0	4.980
260	IR 260x290x100	$290^{-0.064}_{-0.092}$	100	2.1	4.0	271	2.0	10.000
280	IR 280x305x69	$305^{-0.064}_{-0.092}$	69	2.0	4.0	289	2.0	6.200
280	IR 280x310x100	$310^{-0.064}_{-0.092}$	100	2.1	4.0	291	2.0	10.800
300	IR 300x330x80	$330^{-0.062}_{-0.098}$	80	2.1	4.0	311	2.0	9.300
300	IR 300x340x118	$340^{-0.062}_{-0.098}$	118	3.0	4.0	313	2.5	18.500
320	IR 320x350x80	$350^{-0.062}_{-0.098}$	80	2.1	5.0	331	2.0	9.800
320	IR 320x360x118	$360^{-0.062}_{-0.098}$	118	3.0	5.0	333	2.5	20.000
340	IR 340x370x80	$370^{-0.062}_{-0.098}$	80	2.1	5.0	351	2.0	10.100
340	IR 340x380x118	$380^{-0.062}_{-0.098}$	118	3.0	5.0	353	2.5	22.000
360	IR 360x390x80	$390^{-0.090}_{-0.126}$	80	2.1	5.0	371	2.0	10.900
360	IR 360x400x118	$400^{-0.090}_{-0.126}$	118	3.0	5.0	373	2.5	22.000
380	IR 380x415x100	$415^{-0.080}_{-0.120}$	100	2.1	5.0	391	2.0	18.500
380	IR 380x430x140	$430^{-0.080}_{-0.120}$	140	4.0	5.0	396	3.0	35.000
400	IR 400x450x140	$450^{-0.080}_{-0.120}$	140	4.0	5.0	416	3.0	36.500
420	IR 420x470x140	$470^{-0.105}_{-0.145}$	140	4.0	5.0	436	3.0	38.200
440	IR 440x490x160	$490^{-0.105}_{-0.145}$	160	4.0	5.0	456	3.0	46.500

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type G

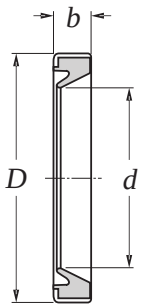


Type SD

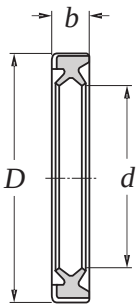
Inner bore d mm	Bearing number		Boundary dimensions $D^{1)}$ mm	Boundary dimensions b $^{+0.2}_{0}$ mm	Weight G kg(s).	Weight SD kg(s).
4	G 4x8x2	-	8 $^{+0.081}_{+0.023}$	2	0.18	-
5	G 5x9x3	-	9 $^{+0.081}_{+0.023}$	2	0.19	-
5	G 5x10x2	-	10 $^{+0.081}_{+0.023}$	2	0.22	-
6	G 6x10x2	-	10 $^{+0.081}_{+0.023}$	2	0.21	-
6	G 6x12x2	-	12 $^{+0.098}_{+0.028}$	2	0.38	-
7	G 7x11x2	-	11 $^{+0.098}_{+0.028}$	2	0.25	-
7	G 7x14x2	-	14 $^{+0.098}_{+0.028}$	2	0.52	-
8	G 8x12x3	-	12 $^{+0.098}_{+0.028}$	3	0.41	-
8	G 8x15x3	-	15 $^{+0.098}_{+0.028}$	3	0.74	-
9	G 9x13x3	-	13 $^{+0.098}_{+0.028}$	3	0.44	-
9	G 9x16x3	-	16 $^{+0.098}_{+0.028}$	3	0.69	-
10	G 10x14x3	-	14 $^{+0.098}_{+0.028}$	3	0.50	-
10	G 10x17x3	-	17 $^{+0.098}_{+0.028}$	3	0.87	-
12	G 12x16x3	-	16 $^{+0.098}_{+0.028}$	3	0.56	-
12	G 12x18x3	-	18 $^{+0.098}_{+0.028}$	3	0.86	-
12	G 12x19x3	-	19 $^{+0.119}_{+0.035}$	3	0.94	-
13	G 13x19x3	-	19 $^{+0.119}_{+0.035}$	3	0.87	-
14	G 14x20x3	SD 14x20x3	20 $^{+0.119}_{+0.035}$	3	0.96	0.99
14	G 14x21x3	SD 14x21x3	21 $^{+0.119}_{+0.035}$	3	1.10	1.10
14	G 14x22x3	SD 14x22x3	22 $^{+0.119}_{+0.035}$	3	1.30	1.30
15	G 15x21x3	SD 15x21x3	21 $^{+0.119}_{+0.035}$	3	1.00	1.00
15	G 15x23x3	SD 15x23x3	23 $^{+0.119}_{+0.035}$	3	1.30	1.30
16	G 16x22x3	SD 16x22x3	22 $^{+0.119}_{+0.035}$	3	1.30	1.10
16	G 16x24x3	SD 16x24x3	24 $^{+0.119}_{+0.035}$	3	1.30	1.30

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type G

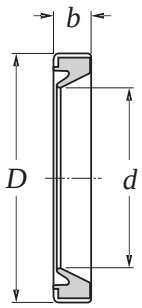


Type SD

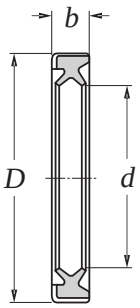
Inner bore d mm	Bearing number		Boundary dimensions $D^{1)}$ mm	b $^{+0.2}_{0}$	Weight G kg(s).	SD
16	G 16x25x3	SD 16x25x3	$25^{+0.119}_{+0.035}$	3	1.6	1.6
17	G 17x23x3	SD 17x23x3	$23^{+0.119}_{+0.035}$	3	1.3	1.1
17	G 17x25x3	SD 17x25x3	$25^{+0.119}_{+0.035}$	3	1.5	1.4
18	G 18x24x3	SD 18x24x3	$24^{+0.119}_{+0.035}$	3	1.2	1.2
18	G 18x26x4	SD 18x26x4	$26^{+0.119}_{+0.035}$	4	1.8	1.8
19	G 19x27x4	SD 19x27x4	$27^{+0.119}_{+0.035}$	4	2.0	1.9
20	G 20x26x4	SD 20x26x4	$26^{+0.119}_{+0.035}$	4	1.8	1.8
20	G 20x28x4	SD 20x28x4	$28^{+0.119}_{+0.035}$	4	2.1	2.1
21	G 21x29x4	SD 21x29x4	$29^{+0.119}_{+0.035}$	4	2.2	2.1
22	G 22x28x4	SD 22x28x4	$28^{+0.119}_{+0.035}$	4	1.8	1.9
22	G 22x30x4	SD 22x30x4	$30^{+0.119}_{+0.035}$	4	2.2	2.3
24	G 24x32x4	SD 24x32x4	$32^{+0.143}_{+0.043}$	4	2.5	2.4
25	G 25x32x4	SD 25x32x4	$32^{+0.143}_{+0.043}$	4	2.3	2.2
25	G 25x33x4	SD 25x33x4	$33^{+0.143}_{+0.043}$	4	2.5	2.5
25	G 25x35x4	SD 25x35x4	$35^{+0.143}_{+0.043}$	4	2.6	2.6
26	G 26x34x4	SD 26x34x4	$34^{+0.143}_{+0.043}$	4	2.6	2.6
28	G 28x35x4	SD 28x35x4	$35^{+0.143}_{+0.043}$	4	2.4	2.5
28	G 28x37x4	SD 28x37x4	$37^{+0.143}_{+0.043}$	4	3.1	2.8
29	G 29x37x4	SD 29x37x4	$37^{+0.143}_{+0.043}$	4	2.7	2.7
29	G 29x38x4	SD 29x38x4	$38^{+0.143}_{+0.043}$	4	3.2	2.9
30	G 30x37x4	SD 30x37x4	$37^{+0.143}_{+0.043}$	4	2.7	2.6
30	G 30x40x4	SD 30x40x4	$40^{+0.143}_{+0.043}$	4	3.6	3.3
32	G 32x42x4	SD 32x42x4	$42^{+0.143}_{+0.043}$	4	3.7	3.9
32	G 32x45x4	SD 32x45x4	$45^{+0.143}_{+0.043}$	4	5.1	5.2

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		



Type G

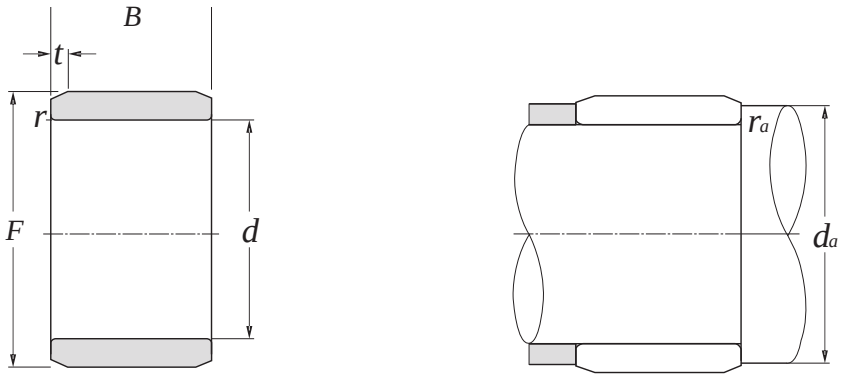


Type SD

Inner bore d mm	Bearing number		Boundary dimensions $D^{1)}$ mm	b $^{+0.2}_{0}$	Weight G kgs.	SD
35	G 35x42x4	SD 35x42x4	$42^{+0.143}_{+0.043}$	4	3.0	2.9
35	G 35x45x4	SD 35x45x4	$45^{+0.143}_{+0.043}$	4	4.1	3.6
37	G 37x47x4	SD 37x47x4	$47^{+0.143}_{+0.043}$	4	4.0	3.8
38	G 38x48x4	SD 38x48x4	$48^{+0.143}_{+0.043}$	4	4.4	4.0
40	G 40x47x4	SD 40x47x4	$47^{+0.143}_{+0.043}$	4	3.3	3.5
40	G 40x50x4	SD 40x50x4	$50^{+0.143}_{+0.043}$	4	4.6	4.0
40	G 40x52x4	SD 40x52x4	$52^{+0.173}_{+0.053}$	4	4.8	4.7
42	G 42x52x4	SD 42x52x4	$52^{+0.173}_{+0.053}$	4	4.7	4.2
43	G 43x53x4	SD 43x53x4	$53^{+0.173}_{+0.053}$	4	4.8	4.3
45	G 45x52x4	SD 45x52x4	$52^{+0.173}_{+0.053}$	4	3.8	3.8
45	G 45x55x4	SD 45x55x4	$55^{+0.173}_{+0.053}$	4	5.2	5.5
50	G 50x58x4	SD 50x58x4	$58^{+0.173}_{+0.053}$	4	4.5	5.2
50	G 50x62x4	SD 50x62x4	$62^{+0.173}_{+0.053}$	4	10.4	10.0

Technical supplement

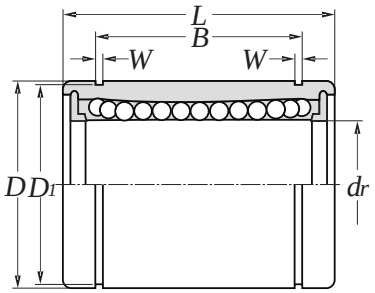
Cages		Precision	Grease
Steel -	X		
Polymid -	X	Normal (ISO)	Nil
Brass -	X		

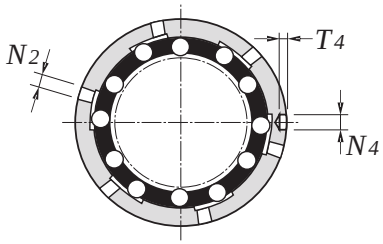


Inner bore d mm	Bearing number	Principal dimensions $F^{1)}$	B	$r_{s\ min}{}^{2)}$	t	Abutment dimensions $d_{a\ min}$	$r_{as\ max}$	Weight kgs.
220	IR 220x245x80	$245^{-0.033}_{-0.063}$	80	2.1	3.5	231	2.0	5.700
240	IR 240x265x60	$265^{-0.037}_{-0.069}$	60	2.0	3.5	249	2.0	4.600
240	IR 240x265x80	$265^{-0.037}_{-0.069}$	80	2.1	3.5	251	2.0	6.300
260	IR 260x285x60	$285^{-0.064}_{-0.092}$	60	2.0	4.0	269	2.0	4.980
260	IR 260x290x100	$290^{-0.064}_{-0.092}$	100	2.1	4.0	271	2.0	10.000
280	IR 280x305x69	$305^{-0.064}_{-0.092}$	69	2.0	4.0	289	2.0	6.200
280	IR 280x310x100	$310^{-0.064}_{-0.092}$	100	2.1	4.0	291	2.0	10.800
300	IR 300x330x80	$330^{-0.062}_{-0.098}$	80	2.1	4.0	311	2.0	9.300
300	IR 300x340x118	$340^{-0.062}_{-0.098}$	118	3.0	4.0	313	2.5	18.500
320	IR 320x350x80	$350^{-0.062}_{-0.098}$	80	2.1	5.0	331	2.0	9.800
320	IR 320x360x118	$360^{-0.062}_{-0.098}$	118	3.0	5.0	333	2.5	20.000
340	IR 340x370x80	$370^{-0.062}_{-0.098}$	80	2.1	5.0	351	2.0	10.100
340	IR 340x380x118	$380^{-0.062}_{-0.098}$	118	3.0	5.0	353	2.5	22.000
360	IR 360x390x80	$390^{-0.090}_{-0.126}$	80	2.1	5.0	371	2.0	10.900
360	IR 360x400x118	$400^{-0.090}_{-0.126}$	118	3.0	5.0	373	2.5	22.000
380	IR 380x415x100	$415^{-0.080}_{-0.120}$	100	2.1	5.0	391	2.0	18.500
380	IR 380x430x140	$430^{-0.080}_{-0.120}$	140	4.0	5.0	396	3.0	35.000
400	IR 400x450x140	$450^{-0.080}_{-0.120}$	140	4.0	5.0	416	3.0	36.500
420	IR 420x470x140	$470^{-0.105}_{-0.145}$	140	4.0	5.0	436	3.0	38.200
440	IR 440x490x160	$490^{-0.105}_{-0.145}$	160	4.0	5.0	456	3.0	46.500

Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -	x	Normal (ISO)	Nil
Brass -	x		

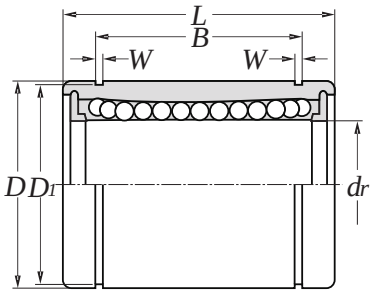


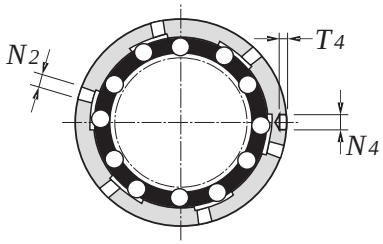


Inner bore d mm	Bearing number standard resin retainer	Bearing number with seals resin retainer	Number of ball tracks	Principal dimensions dr tolerance mm	dr tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
5	KB 5 AS	KB 5 PP AS	3	5	(+8/0)	12	(0/-8)	22	(0/-0.2)
8	KB 8 AS	KB 8 PP AS	4	8	(+8/0)	16	(0/-8)	25	(0/-0.2)
12	KB 12 AS	KB 12 PP AS	4	12	(+8/0)	22	(0/-9)	32	(0/-0.2)
16	KB 16 AS	KB 16 PP AS	5	16	(+9/-1)	26	(0/-9)	36	(0/-0.2)
20	KB 20 AS	KB 20 PP AS	5	20	(+9/-1)	32	(0/-11)	45	(0/-0.2)
25	KB 25 AS	KB 25 PP AS	6	25	(+11/-1)	40	(0/-11)	58	(0/-0.3)
30	KB 30 AS	KB 30 PP AS	6	30	(+11/-1)	47	(0/-11)	68	(0/-0.3)
40	KB 40 AS	KB 40 PP AS	6	40	(+13/-2)	62	(0/-13)	80	(0/-0.3)
50	KB 50 AS	KB 50 PP AS	6	50	(+13/-2)	75	(0/-13)	100	(0/-0.3)
60	KB 60 AS	KB 60 PP AS	6	60	(+13/-2)	90	(0/-15)	125	(0/-0.4)

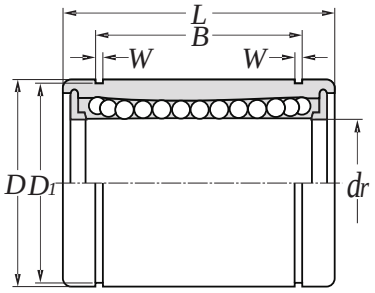
Technical supplement

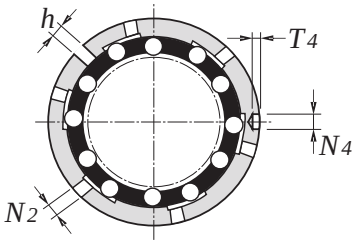
Cages		Precision	Grease
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		





Principal dimensions				Roundness	Steel retainer	Resin retainer	Load ratings		Weight	
B		W	D_1		maximum radial clearance	maximum radial clearance	dynamic	static	steel	resin
tolerance							C	Co	retainer	retainer
mm				0.001mm	0.001mm	0.001mm	N		kg(s).	
14.5	(0/-0.2)	1.10	11.5	12	-	-5	206	265	-	0.011
16.5	(0/-0.2)	1.10	15.2	12	-3	-5	265	402	0.022	0.020
22.9	(0/-0.2)	1.30	21.0	12	-4	-7	510	784	0.045	0.041
24.9	(0/-0.2)	1.30	24.9	12	-4	-7	578	892	0.060	0.065
31.5	(0/-0.2)	1.60	30.3	15	-6	-9	862	1370	0.102	0.091
44.1	(0/-0.3)	1.85	37.5	15	-6	-9	980	1570	0.235	0.215
52.1	(0/-0.3)	1.85	44.5	15	-8	-9	1570	2740	0.360	0.325
60.6	(0/-0.3)	2.15	59.0	17	-8	-13	2160	4020	0.770	0.705
77.6	(0/-0.3)	2.65	72.0	17	-13	-13	3820	7940	1.250	1.130
101.7	(0/-0.4)	3.15	86.5	20	-13	-16	4700	9800	2.220	2.220

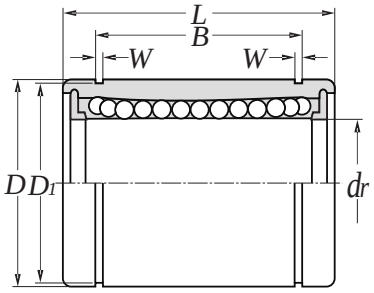


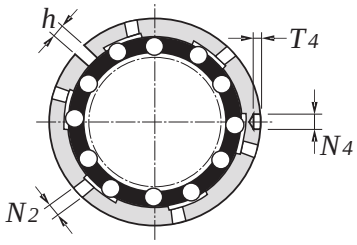


Inner bore d mm	Bearing number standard resin retainer	Bearing number with seals resin retainer	Number of ball tracks	Principal dimensions dr tolerance mm	dr tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
5	KBS 5 AS	KBS 5 PP AS	3	5	(+8/0)	12	(0/-8)	22	(0/-0.2)
8	KBS 8 AS	KBS 8 PP AS	4	8	(+8/0)	16	(0/-8)	25	(0/-0.2)
12	KBS 12 AS	KBS 12 PP AS	4	12	(+8/0)	22	(0/-9)	32	(0/-0.2)
16	KBS 16 AS	KBS 16 PP AS	5	16	(+9/-1)	26	(0/-9)	36	(0/-0.2)
20	KBS 20 AS	KBS 20 PP AS	5	20	(+9/-1)	32	(0/-11)	45	(0/-0.2)
25	KBS 25 AS	KBS 25 PP AS	6	25	(+11/-1)	40	(0/-11)	58	(0/-0.3)
30	KBS 30 AS	KBS 30 PP AS	6	30	(+11/-1)	47	(0/-11)	68	(0/-0.3)
40	KBS 40 AS	KBS 40 PP AS	6	40	(+13/-2)	62	(0/-13)	80	(0/-0.3)
50	KBS 50 AS	KBS 50 PP AS	6	50	(+13/-2)	75	(0/-13)	100	(0/-0.3)
60	KBS 60 AS	KBS 60 PP AS	6	60	(+13/-2)	90	(0/-15)	125	(0/-0.4)

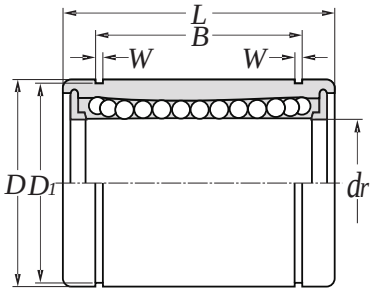
Technical supplement

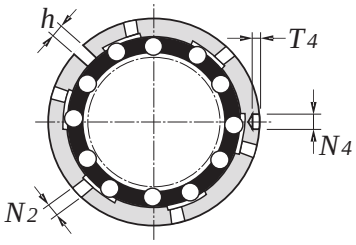
Cages		Precision	Grease
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		





Principal dimensions					Roundness	Steel retainer	Resin retainer	Load ratings		Weight	
B	tolerance	W	D_1	h		maximum radial clearance	maximum radial clearance	dynamic C	static Co	steel retainer	resin retainer
mm					0.001mm	0.001mm	0.001mm	N		kg(s).	
14.5	(0/-0.2)	1.10	11.5	1.0	12	-	-5	206	265	0.011	-
16.5	(0/-0.2)	1.10	15.2	1.0	12	-3	-5	265	402	0.020	0.022
22.9	(0/-0.2)	1.30	21.0	1.5	12	-4	-7	510	784	0.041	0.045
24.9	(0/-0.2)	1.30	24.9	1.5	12	-4	-7	578	892	0.065	0.060
31.5	(0/-0.2)	1.60	30.3	2.0	15	-6	-9	862	1370	0.091	0.102
44.1	(0/-0.3)	1.85	37.5	2.0	15	-6	-9	980	1570	0.215	0.235
52.1	(0/-0.3)	1.85	44.5	2.0	15	-8	-9	1570	2740	0.325	0.360
60.6	(0/-0.3)	2.15	59.0	3.0	17	-8	-13	2160	4020	0.705	0.770
77.6	(0/-0.3)	2.65	72.0	3.0	17	-13	-13	3820	7940	1.130	1.250
101.7	(0/-0.4)	3.15	86.5	3.0	20	-13	-16	4700	9800	2.220	2.220

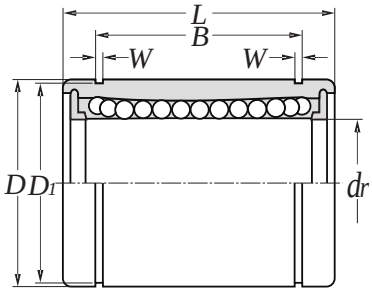


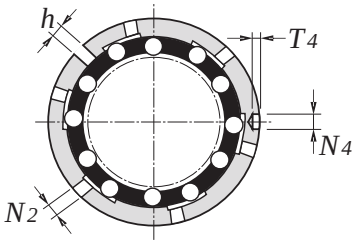


Inner bore d mm	Bearing number standard resin retainer	Bearing number with seals resin retainer	Number of ball tracks	Principal dimensions dr tolerance mm	dr tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
12	**KBO 12 AS**	**KBO 12 PP AS**	3	12	(+8/0)	22	(0/-9)	32	(0/-0.2)
16	**KBO 16 AS**	**KBO 16 PP AS**	4	16	(+9/-1)	26	(0/-9)	36	(0/-0.2)
20	**KBO 20 AS**	**KBO 20 PP AS**	4	20	(+9/-1)	32	(0/-11)	45	(0/-0.2)
25	**KBO 25 AS**	**KBO 25 PP AS**	5	25	(+11/-1)	40	(0/-11)	58	(0/-0.3)
30	**KBO 30 AS**	**KBO 30 PP AS**	5	30	(+11/-1)	47	(0/-11)	68	(0/-0.3)
40	**KBO 40 AS**	**KBO 40 PP AS**	5	40	(+13/-2)	62	(0/-13)	80	(0/-0.3)
50	**KBO 50 AS**	**KBO 50 PP AS**	5	50	(+13/-2)	75	(0/-13)	100	(0/-0.4)
60	**KBO 60 AS**	**KBO 60 PP AS**	5	60	(+13/-2)	90	(0/-15)	125	(0/-0.4)

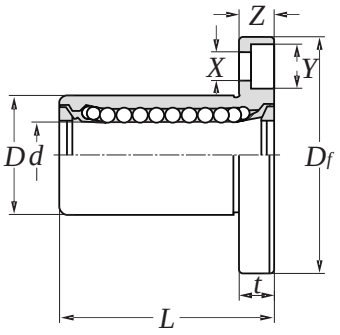
Technical supplement

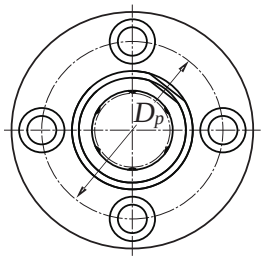
Cages		Precision	Grease
Steel -	x		
Polymid -		**Normal (ISO)**	**Alvania S2**
Brass -	x		**-25 ~ +120**





Principal dimensions						Roundness	Steel retainer	Resin retainer	Load ratings		Weight	
B	tolerance	W	D1	h1	θ		maximum radial clearance	maximum radial clearance	dynamic C	static Co	steel retainer	resin retainer
mm						0.001mm	0.001mm	0.001mm	N		kg(s).	
22.9	(0/-0.2)	1.30	21.0	7.5	78	12	-4	-7	510	784	0.045	0.041
24.9	(0/-0.2)	1.30	24.9	10.0	78	12	-4	-7	578	892	0.060	0.065
31.5	(0/-0.2)	1.60	30.3	10.0	60	15	-6	-9	862	1370	0.102	0.091
44.1	(0/-0.3)	1.85	37.5	12.5	60	15	-6	-9	980	1570	0.235	0.215
52.1	(0/-0.3)	1.85	44.5	12.5	50	15	-8	-9	1570	2740	0.360	0.325
60.6	(0/-0.3)	2.15	59.0	16.8	50	17	-8	-13	2160	4020	0.770	0.705
77.6	(0/-0.4)	2.65	72.0	21.0	50	17	-13	-13	3820	7940	1.250	1.130
101.7	(0/-0.4)	3.15	86.5	27.2	54	20	-13	-16	4700	9800	2.220	2.220

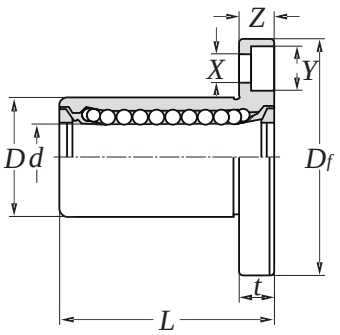


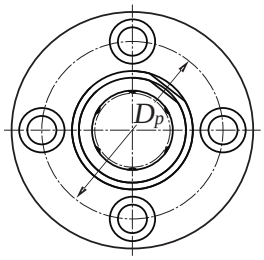


Inner bore d mm	Bearing number standard resin retainer	Bearing number with seals resin retainer	Number of ball tracks	Principal dimensions d tolerance mm	d tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
8	KBF 8 G	KBF 8 G UU	4	8	(+8/0)	16	(0/-13)	25	(± 0.3)
12	KBF 12 G	KBF 12 G UU	4	12	(+8/0)	22	(0/-16)	32	(± 0.3)
16	KBF 16 G	KBF 16 G UU	5	16	(+9/-1)	26	(0/-16)	36	(± 0.3)
20	KBF 20 G	KBF 20 G UU	5	20	(+9/-1)	32	(0/-19)	45	(± 0.3)
25	KBF 25 G	KBF 25 G UU	6	25	(+11/-1)	40	(0/-19)	58	(± 0.3)
30	KBF 30 G	KBF 30 G UU	6	30	(+11/-1)	47	(0/-19)	68	(± 0.3)
40	KBF 40 G	KBF 40 G UU	6	40	(+13/-2)	62	(0/-22)	80	(± 0.3)
50	KBF 50 G	KBF 50 G UU	6	50	(+13/-2)	75	(0/-22)	100	(± 0.3)
60	KBF 60 G	KBF 60 G UU	6	60	(+13/-2)	90	(0/-25)	125	(± 0.3)

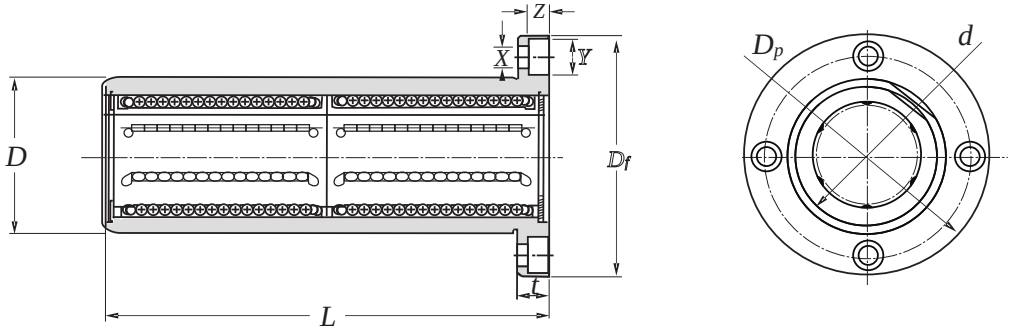
Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		





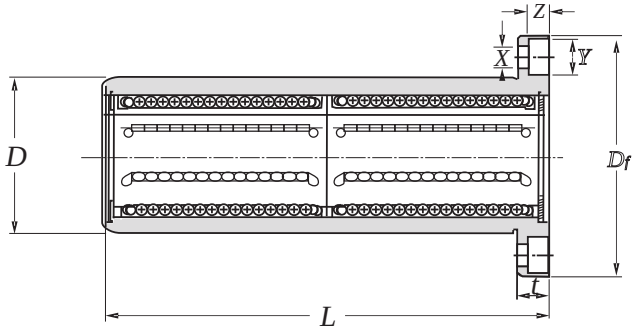
Principa dimensions flange				Roundness	Squareness	Load ratings		Weight
D_f	t	D_p	$XxYxZ$			dynamic C	static Co	
mm				0.001mm	0.001mm	N		kg(s).
32	5	24	3.5 x 6.0 x 3.1	12	12	265	402	0.041
42	6	32	4.5 x 7.5 x 4.1	12	12	510	784	0.080
46	6	36	4.5 x 7.5 x 4.1	12	12	578	892	0.103
54	8	43	5.5 x 9.0 x 5.1	15	15	862	1370	0.182
62	8	51	5.5 x 9.0 x 5.1	15	15	980	1570	0.335
76	10	62	6.6 x 11 x 6.1	15	15	1570	2740	0.560
98	13	80	9.0 x 14 x 8.1	17	17	2160	4020	1.175
112	13	94	9.0 x 14 x 8.1	17	17	3820	7940	1.745
134	18	112	11 x 17 x 11.1	20	20	4700	9800	3.220

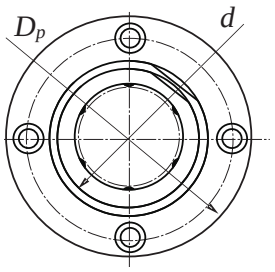


Inner bore d mm	Bearing number	Number of ball tracks	Principal dimensions d tolerance mm	0.001mm	D tolerance mm	0.001mm	L tolerance mm	mm
8	**KBF 8 GW UU**	4	8	(+9/-1)	16	(0/-13)	46	(± 0.3)
12	**KBF 12 GW UU**	4	12	(+9/-1)	22	(0/-16)	61	(± 0.3)
16	**KBF 16 GW UU**	4	16	(+11/-1)	26	(0/-16)	68	(± 0.3)
20	**KBF 20 GW UU**	5	20	(+11/-1)	32	(0/-19)	80	(± 0.3)
25	**KBF 25 GW UU**	6	25	(+13/-2)	40	(0/-19)	112	(± 0.3)
30	**KBF 30 GW UU**	6	30	(+13/-2)	47	(0/-19)	123	(± 0.3)
40	**KBF 40 GW UU**	6	40	(+16/-4)	62	(0/-22)	151	(± 0.3)
50	**KBF 50 GW UU**	6	50	(+16/-4)	75	(0/-22)	192	(± 0.3)
60	**KBF 60 GW UU**	6	60	(+16/-4)	90	(0/-25)	209	(± 0.3)

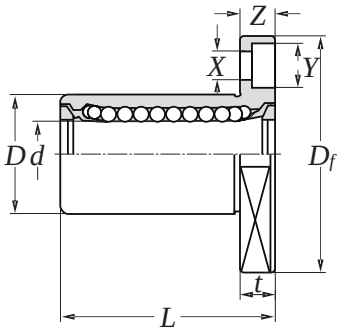
Technical supplement

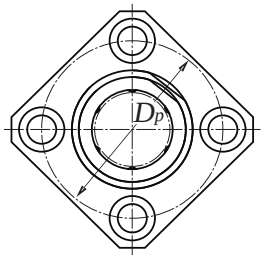
Cages		Precision	Grease
Steel -	**X**		
Polymid -		**Normal (ISO)**	**Alvania S2 -25 ~ +120**
Brass -	**X**		





Principa dimensions flange				Eccentricity	Perpendicularity	Load ratings		Weight
D_f	t	D_p	$XxYxZ$			dynamic C	static Co	
mm				0.001mm	0.001mm	N		kg(s).
32	5	24	3.5 x 6.0 x 3.1	15	15	421	804	0.059
42	6	32	4.5 x 7.5 x 4.1	15	15	813	1570	0.110
46	6	36	4.5 x 7.5 x 4.1	15	15	921	1780	0.160
54	8	43	5.5 x 9.0 x 5.1	17	17	1370	2740	0.260
62	8	51	5.5 x 9.0 x 5.1	17	17	1570	3140	0.540
76	10	62	6.6 x 11 x 6.1	17	17	2500	5490	0.815
98	13	80	9.0 x 14 x 8.1	20	20	3430	8040	1.805
112	13	94	9.0 x 14 x 8.1	20	20	6080	15900	2.820
134	18	112	11 x 17 x 11.1	25	25	7550	20000	4.920

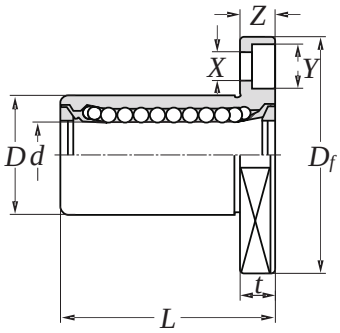


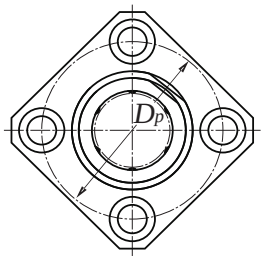


Inner bore d mm	Bearing number standard resin retainer	Bearing number with seals resin retainer	Number of ball tracks	Principal dimensions d tolerance mm	d tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
8	**KBK 8 G**	**KBK 8 G UU**	4	8	(+8/0)	16	(0/-13)	25	(± 0.3)
12	**KBK 12 G**	**KBK 12 G UU**	4	12	(+8/0)	22	(0/-16)	32	(± 0.3)
16	**KBK 16 G**	**KBK 16 G UU**	5	16	(+9/-1)	26	(0/-16)	36	(± 0.3)
20	**KBK 20 G**	**KBK 20 G UU**	5	20	(+9/-1)	32	(0/-19)	45	(± 0.3)
25	**KBK 25 G**	**KBK 25 G UU**	6	25	(+11/-1)	40	(0/-19)	58	(± 0.3)
30	**KBK 30 G**	**KBK 30 G UU**	6	30	(+11/-1)	47	(0/-19)	68	(± 0.3)
40	**KBK 40 G**	**KBK 40 G UU**	6	40	(+13/-2)	62	(0/-22)	80	(± 0.3)
50	**KBK 50 G**	**KBK 50 G UU**	6	50	(+13/-2)	75	(0/-22)	100	(± 0.3)
60	**KBK 60 G**	**KBK 60 G UU**	6	60	(+13/-2)	90	(0/-25)	125	(± 0.3)

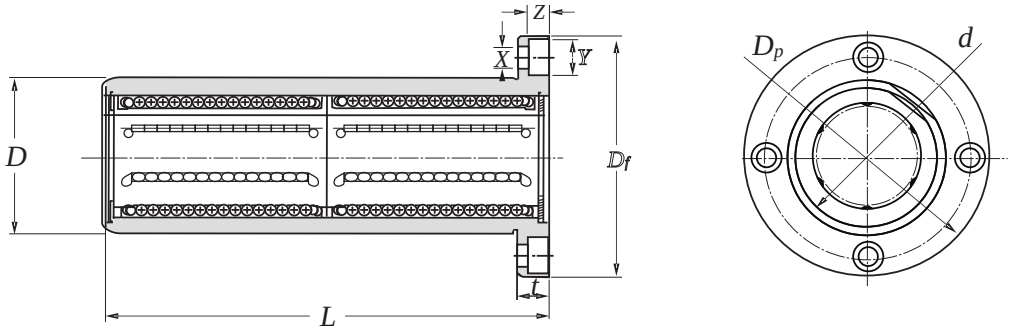
Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -		**Normal (ISO)**	**Alvania S2**
Brass -	x		**-25 ~ +120**





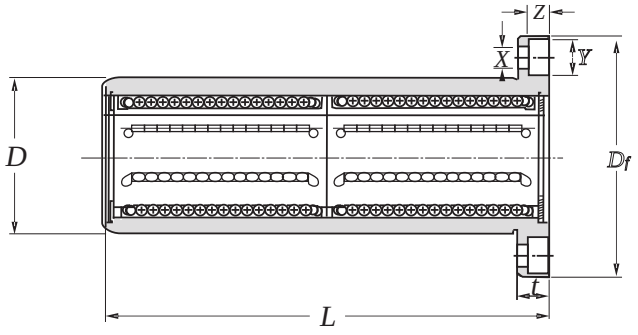
Principa dimensions flange				Roundness	Squareness	Load ratings		Weight
D_f	t	D_p	$XxYxZ$			dynamic C	static Co	
		mm		0.001mm	0.001mm	N		kg(s).
32	5	24	3.5 x 6.0 x 3.1	12	12	265	402	0.041
42	6	32	4.5 x 7.5 x 4.1	12	12	510	784	0.080
46	6	36	4.5 x 7.5 x 4.1	12	12	578	892	0.103
54	8	43	5.5 x 9.0 x 5.1	15	15	862	1370	0.182
62	8	51	5.5 x 9.0 x 5.1	15	15	980	1570	0.335
76	10	62	6.6 x 11 x 6.1	15	15	1570	2740	0.560
98	13	80	9.0 x 14 x 8.1	17	17	2160	4020	1.175
112	13	94	9.0 x 14 x 8.1	17	17	3820	7940	1.745
134	18	112	11.0 x 17 x 11.1	20	20	4700	9800	3.220

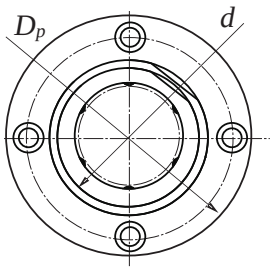


Inner bore d mm	Bearing number	Number of ball tracks	Principal dimensions d tolerance mm	0.001mm	D tolerance mm	0.001mm	L tolerance mm	mm
8	**KBK 8 GW UU**	4	8	(+9/-1)	16	(0/-13)	46	(± 0.3)
12	**KBK 12 GW UU**	4	12	(+9/-1)	22	(0/-16)	61	(± 0.3)
16	**KBK 16 GW UU**	4	16	(+11/-1)	26	(0/-16)	68	(± 0.3)
20	**KBK 20 GW UU**	5	20	(+11/-1)	32	(0/-19)	80	(± 0.3)
25	**KBK 25 GW UU**	6	25	(+13/-2)	40	(0/-19)	112	(± 0.3)
30	**KBK 30 GW UU**	6	30	(+13/-2)	47	(0/-19)	123	(± 0.3)
40	**KBK 40 GW UU**	6	40	(+16/-4)	62	(0/-22)	151	(± 0.3)
50	**KBK 50 GW UU**	6	50	(+16/-4)	75	(0/-22)	192	(± 0.3)
60	**KBK 60 GW UU**	6	60	(+16/-4)	90	(0/-25)	209	(± 0.3)

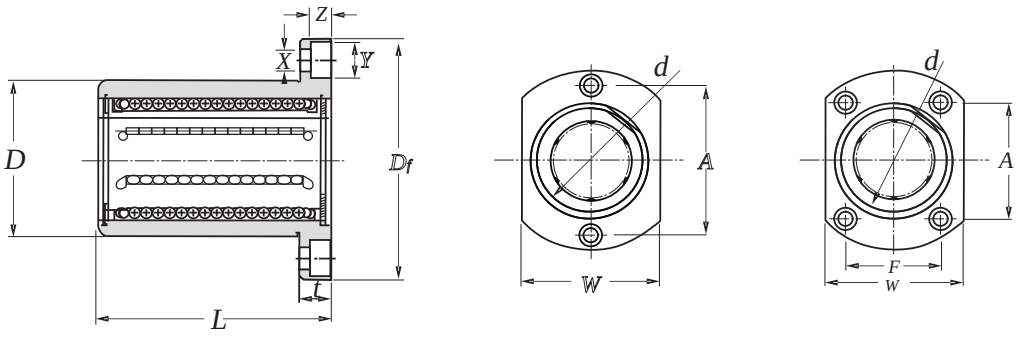
Technical supplement

Cages		Precision	Grease
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2 -25 ~ +120
Brass -	x		





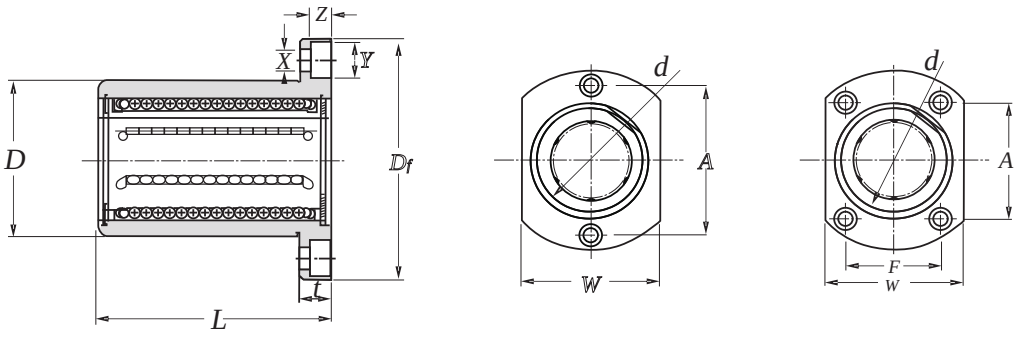
Principa dimensions flange					Eccentricity	Perpendicularity	Load ratings		Weight
D_f	K	t	D_p	$XxYxZ$			dynamic C	static Co	
mm					0.001mm	0.001mm	N		kg(s).
32	25	5	24	3.5 x 6.0 x 3.1	15	15	421	804	0.051
42	32	6	32	4.5 x 7.5 x 4.1	15	15	813	1570	0.090
46	35	6	36	4.5 x 7.5 x 4.1	15	15	921	1780	0.135
54	42	8	43	5.5 x 9.0 x 5.1	17	17	1370	2740	0.225
62	50	8	51	5.5 x 9.0 x 5.1	17	17	1570	3140	0.500
76	60	10	62	6.6 x 11 x 6.1	17	17	2500	5490	0.720
98	75	13	80	9.0 x 14 x 8.1	20	20	3430	8040	1.600
112	88	13	94	9.0 x 14 x 8.1	20	20	6080	15900	2.620
134	106	18	112	11 x 17 x 11.1	25	25	7550	20000	4.480



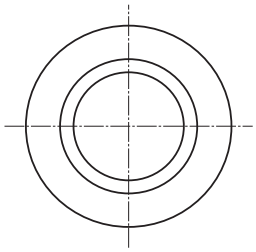
Inner bore d mm	Bearing number	Number of ball tracks	Principal dimensions d tolerance mm	d tolerance 0.001mm	D tolerance mm	D tolerance 0.001mm	L tolerance mm	L tolerance mm
8	**KBT 8 G UU**	4	8	(+8/0)	16	(0/-13)	25	(± 0.3)
12	**KBT 12 G UU**	4	12	(+8/0)	22	(0/-16)	32	(± 0.3)
16	**KBT 16 G UU**	4	16	(+9/-1)	26	(0/-16)	36	(± 0.3)
20	**KBT 20 G UU**	5	20	(+9/-1)	32	(0/-19)	45	(± 0.3)
25	**KBT 25 G UU**	6	25	(+11/-1)	40	(0/-19)	58	(± 0.3)
30	**KBT 30 G UU**	6	30	(+11/-1)	47	(0/-19)	68	(± 0.3)

Technical supplement

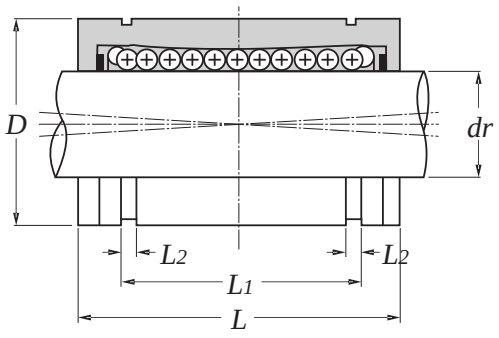
Cages		Precision	Grease
Steel -	x		
Polymid -		**Normal (ISO)**	**Alvania S2 -25 ~ +120**
Brass -	x		



Principa dimensions flange						Eccentricity	Perpendicularity	Load ratings		Weight
D_f	W	t	A	F	$XxYxZ$			dynamic C	static C_o	
mm						0.001mm	0.001mm	N		kg(s).
32	22	5	24	-	3.5 x 6.0 x 3.1	12	12	265	402	0.037
42	28	6	32	-	4.5 x 7.5 x 4.1	12	12	510	784	0.073
46	32	6	28	22	4.5 x 7.5 x 4.1	12	12	578	892	0.090
54	38	8	36	24	5.5 x 9.0 x 5.1	15	15	862	1370	0.155
62	46	8	40	32	5.5 x 9.0 x 5.1	15	15	980	1570	0.295
76	53	10	48	36	6.6 x 11 x 6.1	15	15	1570	2740	0.471



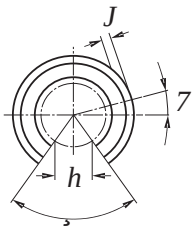
KS..close, PP

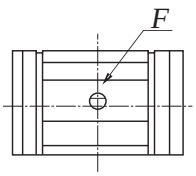


Inner bore d_r mm	Bearing number		Number of ball tracks	Principal dimensions d_r tolerance mm	0.001mm	D ± 0.1 mm	L ± 0.2 mm	L_1 ± 0.2 mm	L_2 min. mm	Basic load ratings dynamic C N	static C_o N	Weight kg.
10	**KS 10**	**KS 10 PP**	5	10	+8 ~ 0	19	29	21.7	1.35	**750**	**550**	0.017
12	**KS 12**	**KS 12 PP**	5	12	+8 ~ 0	22	32	22.7	1.35	**1230**	**1100**	0.023
16	**KS 16**	**KS 16 PP**	5	16	+9 ~ 1	26	36	24.7	1.35	**1550**	**1250**	0.028
20	**KS 20**	**KS 20 PP**	6	20	+9 ~ 1	32	45	31.3	1.65	**2580**	**1670**	0.061
25	**KS 25**	**KS 25 PP**	6	25	+11 ~ 1	40	58	43.8	1.90	**3800**	**2750**	0.122
30	**KS 30**	**KS 30 PP**	6	30	+11 ~ 1	47	68	51.8	1.90	**4710**	**2800**	0.185
40	**KS 40**	**KS 40 PP**	6	40	+13 ~ 2	62	80	60.4	2.20	**6500**	**5720**	0.360
50	**KS 50**	**KS 50 PP**	6	50	+13 ~ 2	75	100	77.4	2.70	**11460**	**7940**	0.580

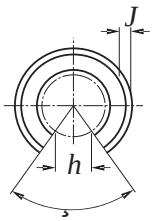
Technical supplement

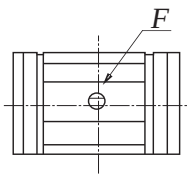
Cages		Precision	Grease
Steel -	x		
Polymid -		**Normal (ISO)**	**Alvania S2**
Brass -	x		**-25 ~ +120**



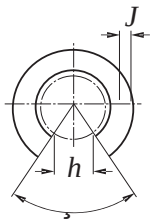


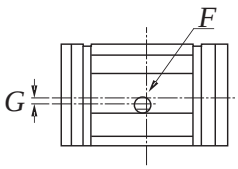
KSO 12



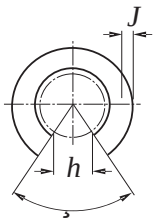


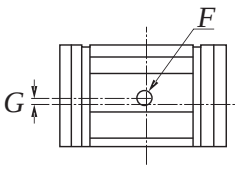
KSO 16, KSO 20





KSO 25



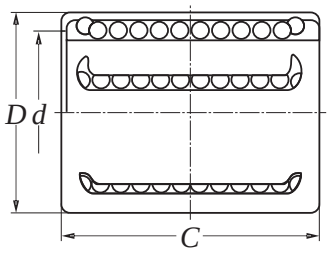


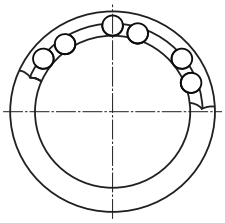
KSO 30, KSO 40, KSO 50

Inner bore d mm	Bearing number		Number of ball tracks	Principal dimensions D ± 0.1	L ± 0.2	L_2	h	¸	F	G	J	Basic load ratings dynamic C N	static C_o N	Weight kg.
12	**KSO 12**	**KSO 12 PP**	4	22	32	1.35	6.5	66	3.0	-	0.7	**1290**	**1260**	0.018
16	**KSO 16**	**KSO 16 PP**	4	26	36	1.35	9.0	68	3.0	-	0.7	**1640**	**1320**	0.022
20	**KSO 20**	**KSO 20 PP**	5	32	45	1.65	9.0	55	3.0	-	0.9	**2630**	**1720**	0.051
25	**KSO 25**	**KSO 25 PP**	5	40	58	1.90	11.5	57	3.0	1.5	1.4	**3910**	**2850**	0.102
30	**KSO 30**	**KSO 30 PP**	5	47	68	1.90	14.0	57	3.0	2.0	2.2	**4850**	**2900**	0.155
40	**KSO 40**	**KSO 40 PP**	5	62	80	2.20	19.5	56	3.0	1.5	2.2	**6700**	**5900**	0.300
50	**KSO 50**	**KSO 50 PP**	5	75	100	2.70	22.5	54	3.0	2.5	2.3	**11700**	**8100**	0.480

Technical supplement

Cages		Precision	Grease
Steel -	**X**		
Polymid -		**Normal (ISO)**	**Alvania S2**
Brass -	**X**		**-25 ~ +120**

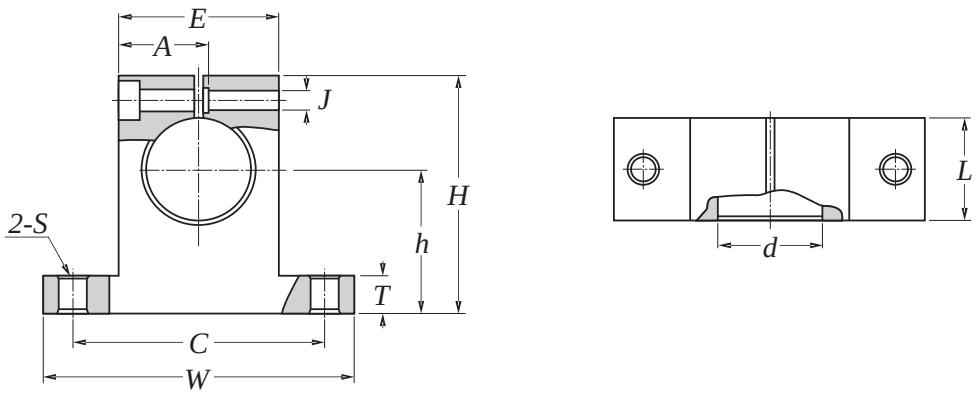




Inner bore d mm	Bearing number	Number of ball tracks	Principal dimensions D	C mm	Basic load ratings dynamic C	static C_o N	Max runout speed grease	oil r/min	Weight kg.
6	**KH 06**	4	12	22	**400**	**239**	**41**	**24**	0.0070
6	**KH 06 PP**	4	12	22	**400**	**239**	**41**	**24**	0.0070
8	**KH 08**	4	15	24	**435**	**280**	**44**	**29**	0.0120
8	**KH 08 PP**	4	15	24	**435**	**280**	**44**	**29**	0.0120
10	**KH 10**	4	17	26	**500**	**370**	**51**	**38**	0.0145
10	**KH 10 PP**	4	17	26	**500**	**370**	**51**	**38**	0.0145
12	**KH 12**	5	19	28	**620**	**510**	**63**	**52**	0.0185
12	**KH 12 PP**	5	19	28	**620**	**510**	**63**	**52**	0.0185
14	**KH 14**	5	21	28	**620**	**520**	**63**	**53**	0.0205
14	**KH 14 PP**	5	21	28	**620**	**520**	**63**	**53**	0.0205
16	**KH 16**	5	24	30	**800**	**620**	**82**	**63**	0.0275
16	**KH 16 PP**	5	24	30	**800**	**620**	**82**	**63**	0.0275
20	**KH 20**	6	28	30	**950**	**790**	**97**	**81**	0.0325
20	**KH 20 PP**	6	28	30	**950**	**790**	**97**	**81**	0.0325
25	**KH 25**	6	35	40	**1990**	**1670**	**203**	**170**	0.0660
25	**KH 25 PP**	6	35	40	**1990**	**1670**	**203**	**170**	0.0660
30	**KH 30**	7	40	50	**2800**	**2700**	**285**	**275**	0.0950
30	**KH 30 PP**	7	40	50	**2800**	**2700**	**285**	**275**	0.0950
40	**KH 40**	8	52	60	**4400**	**4450**	**449**	**454**	0.1820
40	**KH 40 PP**	8	52	60	**4400**	**4450**	**449**	**454**	0.1820
50	**KH 50**	9	62	70	**5500**	**6300**	**561**	**642**	0.2520
50	**KH 50 PP**	9	62	70	**5500**	**6300**	**561**	**642**	0.2520

Technical supplement

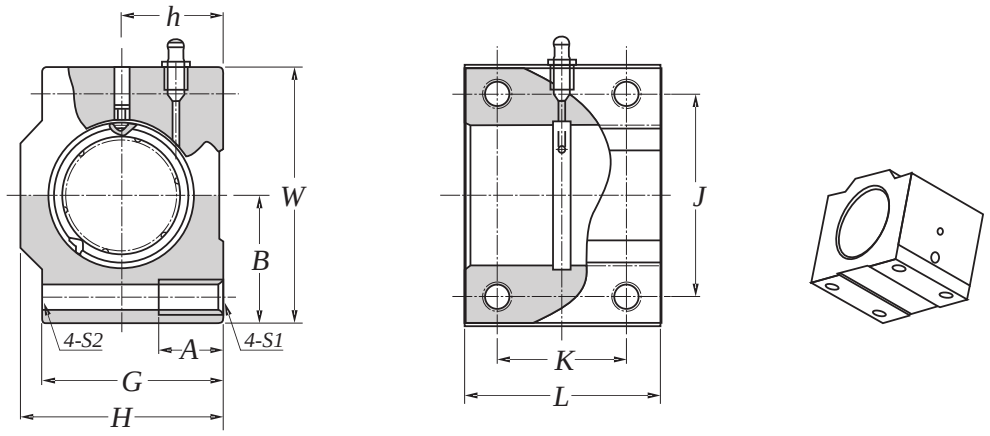
Cages		Precision	Grease
Steel -	**x**		
Polymid -		**Normal (ISO)**	**Alvania S2**
Brass -	**x**		**-25 ~ +120**



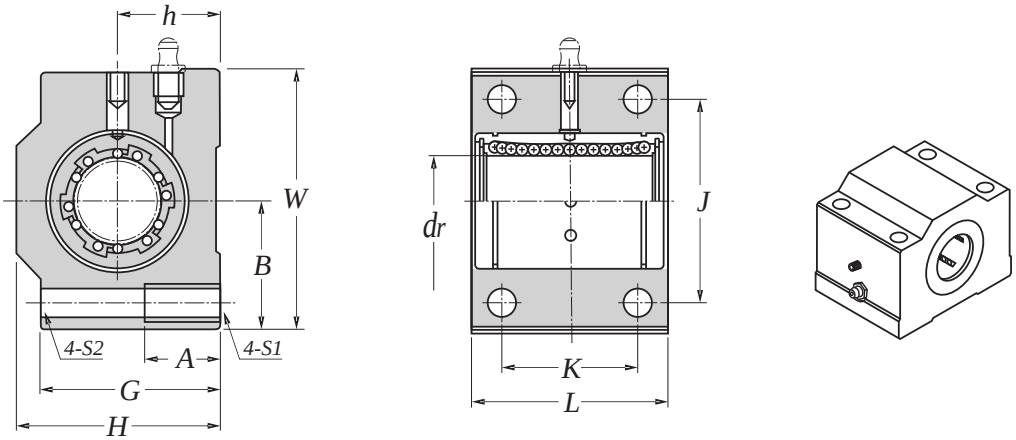
Inner bore *d* mm	Bearing number	Principal dimensions																Weight
		d tolerance		*W*	*C* tolerance		*H* tolerance		*L* tolerance		*h* tolerance		*T*	*E*	*A*	*J*	*S*	
		mm	0.001mm		mm	0.001mm	mm	0.001mm	mm	0.001mm	mm	0.001mm			mm			kg.
12	**FGWA 12**	12	$^{+0.018}_{0}$	42	32	± 0.15	35	± 0.30	12	± 0.20	20	± 0.020	5.5	20	12.0	M3	5.5	0.024
16	**FGWA 16**	16	$^{+0.018}_{0}$	50	40	± 0.15	42	± 0.30	16	± 0.20	25	± 0.020	6.5	28	16.0	M3	5.5	0.050
20	**FGWA 20**	20	$^{+0.021}_{0}$	60	45	±0.15	50	± 0.30	20	± 0.20	30	± 0.020	8.0	32	18.0	M4	5.5	0.080
25	**FGWA 25**	25	$^{+0.021}_{0}$	74	60	± 0.15	58	± 0.30	25	± 0.20	35	± 0.020	9.0	38	21.0	M5	6.6	0.132
30	**FGWA 30**	30	$^{+0.021}_{0}$	84	68	± 0.15	68	± 0.30	28	± 0.20	40	± 0.020	10.0	45	24.5	M6	9.0	0.200
40	**FGWA 40**	40	$^{+0.025}_{0}$	108	86	± 0.15	86	± 0.30	32	± 0.20	50	± 0.020	12.0	56	31.0	M8	11.0	0.350

Technical supplement

Cages		Precision	Grease
Steel -	Nil		
Polymid -	Nil	**Normal (ISO)**	**Nil**
Brass -	Nil		



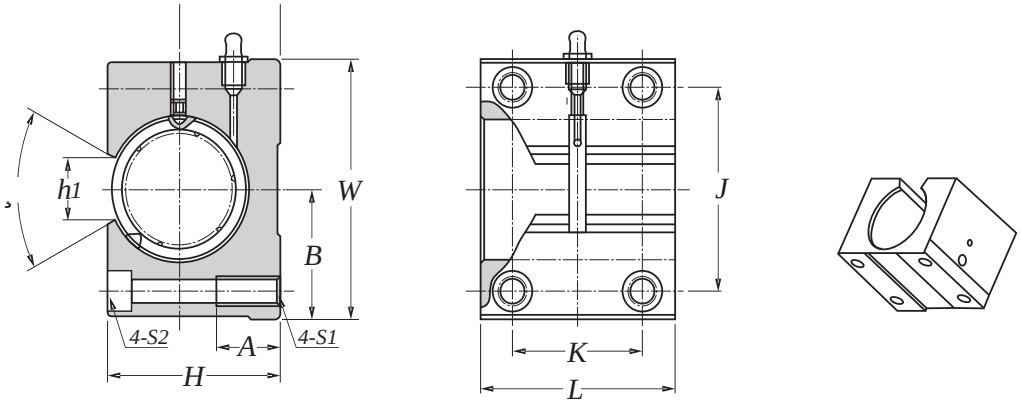
Bearing number	Principal dimensions											Weight
	h Tolerance mm 0.001mm	*B* Tolerance mm 0.001mm	*W* Tolerance mm 0.001mm	*H* Tolerance mm 0.001mm	*G*	*A*	*J* Tolerance mm 0.001mm	*S1*	*S2*	*K* Tolerance mm 0.001mm	*L* Tolerance mm 0.001mm	kg(s).
SB 16 AS	22 ± 0.02	26.5 ± 0.02	53 0 ~ -0.3	42 0 ~ -0.3	37.0	13	40 ± 0.15	M6	5.3	26 ± 0.15	36 0 ~ -0.2	0.202
SB 20 AS	25 ± 0.02	30.0 ± 0.02	60 0 ~ -0.3	50 0 ~ -0.3	44.0	18	45 ± 0.15	M8	6.6	32 ± 0.15	45 0 ~ -0.2	0.301
SB 25 AS	35 ± 0.02	39.0 ± 0.02	78 0 ~ -0.3	60 0 ~ -0.3	52.5	26	60 ± 0.15	M10	8.4	40 ± 0.15	58 0 ~ -0.2	0.659
SB 30 AS	35 ± 0.02	43.5 ± 0.02	87 0 ~ -0.3	70 0 ~ -0.3	62.5	26	68 ± 0.15	M10	8.4	45 ± 0.15	68 0 ~ -0.2	1.000
SB 40 AS	45 ± 0.02	54.0 ± 0.01	108 0 ~ -0.3	90 0 ~ -0.3	80.0	26	86 ± 0.15	M12	10.5	58 ± 0.15	80 0 ~ -0.2	2.233



Bearing number	Principal dimensions											Weight
	h Tolerance mm 0.001mm	*B* Tolerance mm 0.001mm	*W* Tolerance mm 0.001mm	*H* Tolerance mm 0.001mm	*G*	*A*	*J* Tolerance mm 0.001mm	*S1*	*S2*	*K* Tolerance mm 0.001mm	*L* Tolerance mm 0.001mm	kg(s).
SB KB 16 PP AS	22 ± 0.02	26.5 ± 0.02	53 0 ~-0.3	42 0 ~-0.3	37.0	13	40 ± 0.15	M6	5.3	26 ± 0.15	36 0 ~-0.2	0.202
SB KB 20 PP AS	25 ± 0.02	30.0 ± 0.02	60 0 ~-0.3	50 0 ~-0.3	44.0	18	45 ± 0.15	M8	6.6	32 ± 0.15	45 0 ~-0.2	0.301
SB KB 25 PP AS	30 ± 0.02	39.0 ± 0.02	78 0 ~-0.3	60 0 ~-0.3	52.5	26	60 ± 0.15	M10	8.4	40 ± 0.15	58 0 ~-0.2	0.659
SB KB 30 PP AS	35 ± 0.02	43.5 ± 0.02	87 0 ~-0.3	70 0 ~-0.3	62.5	26	68 ± 0.15	M10	8.4	45 ± 0.15	68 0 ~-0.2	1.000
SB KB 40 PP AS	45 ± 0.02	54.0 ± 0.01	108 0 ~-0.3	90 0 ~-0.3	80.0	26	86 ± 0.15	M12	10.5	58 ± 0.15	80 0 ~-0.2	2.233

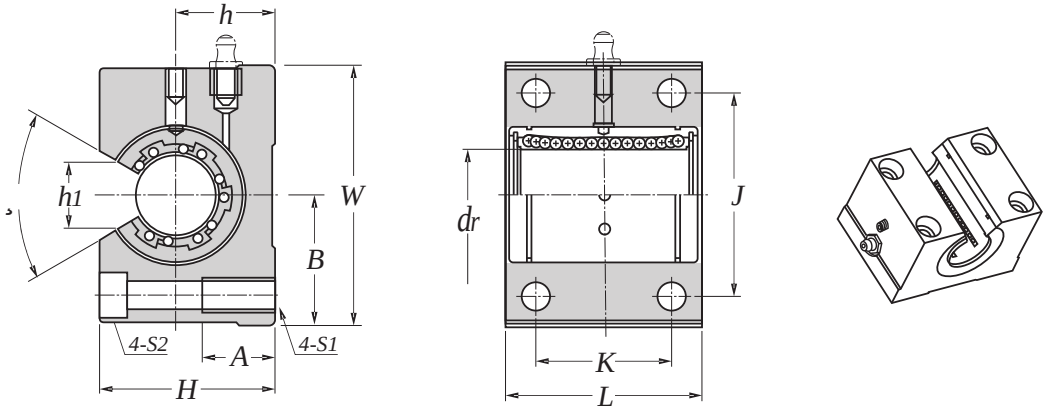
Technical supplement

Cages		Precision	Grease
Steel -	Nil		
Polymid -	Nil	**Normal (ISO)**	**Nil**
Brass -	Nil		



Bearing number	Principal dimensions												Weight
	h Tolerance mm 0.001mm	B Tolerance mm 0.001mm	W Tolerance mm 0.001mm	H Tolerance mm 0.001mm	A	J Tolerance mm 0.001mm	S1	S2	K Tolerance mm 0.001mm	L Tolerance mm 0.001mm	h1 Tolerance mm 0.001mm	r	kg(s).
SO 16 AS	22 ± 0.02	26.5 ± 0.02	53 0 ~ -0.3	35 0 ~ -0.3	13	40 ± 0.15	M6	5.3	26 ± 0.15	36 0 ~ -0.2	16.4 ± 0.3	78	0.159
SO 20 AS	25 ± 0.02	30.0 ± 0.02	60 0 ~ -0.3	42 0 ~ -0.3	18	45 ± 0.15	M8	6.5	32 ± 0.15	45 0 ~ -0.2	16.0 ± 0.3	60	0.259
SO 25 AS	30 ± 0.02	39.0 ± 0.02	78 0 ~ -0.3	51 0 ~ -0.3	22	60 ± 0.15	M10	8.5	40 ± 0.15	58 0 ~ -0.2	20.0 ± 0.3	60	0.574
SO 30 AS	35 ± 0.02	43.5 ± 0.02	87 0 ~ -0.3	60 0 ~ -0.3	22	68 ± 0.15	M10	8.5	45 ± 0.15	68 0 ~ -0.2	19.9 ± 0.3	50	1.453
SO 40 AS	45 ± 0.02	54.0 ± 0.01	108 0 ~ -0.3	77 0 ~ -0.3	26	86 ± 0.15	M12	10.5	58 ± 0.15	80 0 ~ -0.2	26.1 ± 0.3	50	1.996

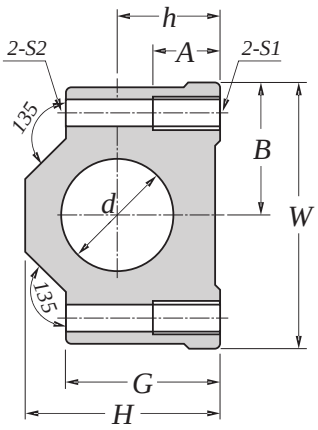
Note: 1) These values are the allowable minimum dimensions of the chamfer dimension r .

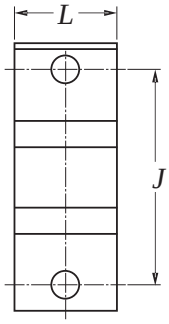


Bearing number	Principal dimensions												Weight
	h Tolerance mm 0.001mm	B Tolerance mm 0.001mm	W Tolerance mm 0.001mm	H Tolerance mm 0.001mm	A	J Tolerance mm 0.001mm	S1	S2	K Tolerance mm 0.001mm	L Tolerance mm 0.001mm	h1 Tolerance mm 0.001mm	r	kg(s).
SO KBO 16 PP AS	22 ± 0.02	26.5 ± 0.02	53 0 ~-0.3	35 0 ~-0.3	13	40 ± 0.15	M6	5.3	26 ± 0.15	36 0 ~-0.2	16.4 ± 0.3	78	0.159
SO KBO 20 PP AS	25 ± 0.02	30.0 ± 0.02	60 0 ~-0.3	42 0 ~-0.3	18	45 ± 0.15	M8	6.5	32 ± 0.15	45 0 ~-0.2	16.0 ± 0.3	60	0.259
SO KBO 25 PP AS	30 ± 0.02	39.0 ± 0.02	78 0 ~-0.3	51 0 ~-0.3	22	60 ± 0.15	M10	8.5	40 ± 0.15	58 0 ~-0.2	20.0 ± 0.3	60	0.574
SO KBO 30 PP AS	35 ± 0.02	43.5 ± 0.02	87 0 ~-0.3	60 0 ~-0.3	22	68 ± 0.15	M10	8.5	45 ± 0.15	68 0 ~-0.2	19.9 ± 0.3	50	1.453
SO KBO 40 PP AS	45 ± 0.02	54.0 ± 0.01	108 0 ~-0.3	77 0 ~-0.3	26	86 ± 0.15	M12	10.5	58 ± 0.15	80 0 ~-0.2	26.1 ± 0.3	50	1.996

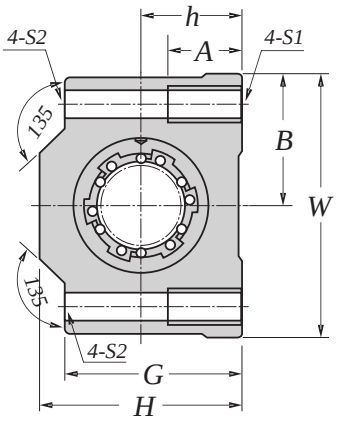
Technical supplement

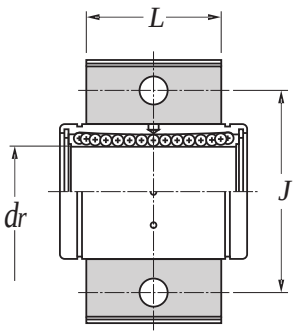
Cages		Precision	Grease
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Nil
Brass -	Nil		

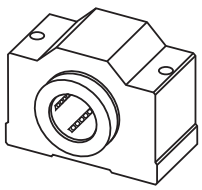




Inner bore d mm	Bearing number	Principal dimensions h Tolerance mm	0.001mm	B Tolerance mm	0.001mm	W	H	A	J Tolerance mm	0.001mm	S1	S2	L	Weight kg.
22	S2B 12 N	20	+0.010 ~ -0.014	26.0	± 0.015	52	38	13	42	± 0.15	M6	5.3	20	0.025
26	S2B 16 N	20	± 0.015	28.0	± 0.015	56	40	13	46	± 0.15	M6	5.3	22	0.060
32	S2B 20 N	25	± 0.015	35.0	± 0.015	70	50	15	58	± 0.20	M8	6.6	28	0.098
40	S2B 25 N	30	± 0.015	40.0	± 0.015	80	60	18	68	± 0.15	M8	6.6	40	0.125
47	S2B 30 N	35	± 0.015	44.0	± 0.015	88	70	18	76	± 0.15	M8	6.6	48	0.140
62	S2B 40 N	45	± 0.015	54.0	± 0.015	108	85	22	94	± 0.15	M10	8.5	56	0.080
75	S2B 50 N	50	± 0.015	67.5	± 0.015	135	102	27	116	± 0.15	M12	10.5	72	0.400



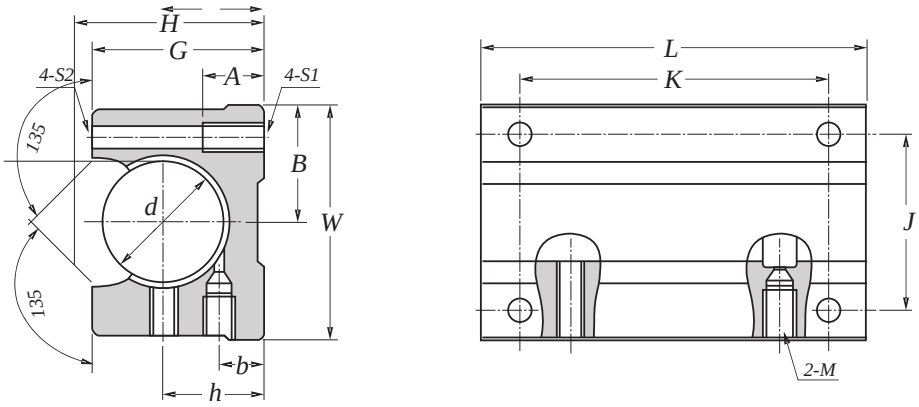




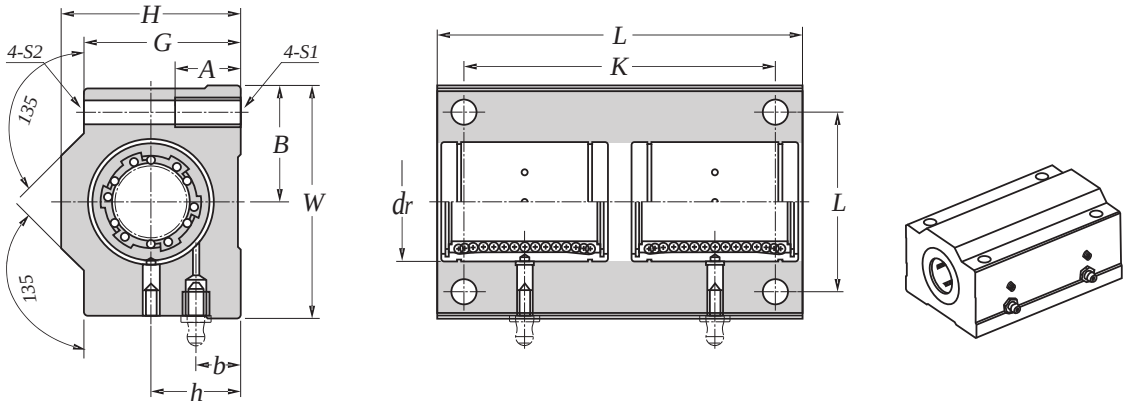
Inner bore d mm	Bearing number	Principal dimensions h Tolerance mm	0.001mm	B Tolerance mm	0.001mm	W	H	A	J Tolerance mm	0.001mm	S1	S2	L	Weight kg.
22	S2B 12 N + KB 12 PP AS	20	+0.010 ~ -0.014	26.0	± 0.015	52	38	13	42	± 0.15	M6	5.3	20	0.025
26	S2B 16 N + KB 16 PP AS	20	± 0.015	28.0	± 0.015	56	40	13	46	± 0.15	M6	5.3	22	0.060
32	S2B 20 N + KB 20 PP AS	25	± 0.015	35.0	± 0.015	70	50	15	58	± 0.20	M8	6.6	28	0.098
40	S2B 25 N + KB 25 PP AS	30	± 0.015	40.0	± 0.015	80	60	18	68	± 0.15	M8	6.6	40	0.125
47	S2B 30 N + KB 30 PP AS	35	± 0.015	44.0	± 0.015	88	70	18	76	± 0.15	M8	6.6	48	0.140
62	S2B 40 N + KB 40 PP AS	45	± 0.015	54.0	± 0.015	108	85	22	94	± 0.15	M10	8.5	56	0.080
75	S2B 50 N + KB 50 PP AS	50	± 0.015	67.5	± 0.015	135	102	27	116	± 0.15	M12	10.5	72	0.400

Technical supplement

Cages		Precision	Grease
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Nil
Brass -	Nil		



Inner bore d mm	Bearing number	Principal dimensions h Tolerance mm 0.001mm	B Tolerance mm 0.001mm	W	H	b	A	J Tolerance mm 0.001mm	S1	S2	K Tolerance mm 0.001mm	L	M	G	Weight kg(s).
22	SBT 12 AS	18 +0.010 ~ -0.014	21.5 ± 0.015	43	35	8	11	32 ± 0.15	M5	4.3	56 ± 0.10	70	M6X1	31.0	0.170
26	SBT 16 AS	22 +0.010 ~ -0.014	26.5 ± 0.015	53	42	12	13	40 ± 0.15	M6	5.3	64 ± 0.15	78	M6X1	37.0	0.310
32	SBT 20 AS	25 +0.008 ~ -0.016	30.0 ± 0.010	60	50	13	18	45 ± 0.15	M8	6.6	76 ± 0.15	96	M6X1	44.0	0.486
40	SBT 25 AS	30 +0.008 ~ -0.016	39.0 ± 0.010	78	60	15	22	60 ± 0.15	M10	8.4	94 ± 0.15	122	M8X1	52.5	0.630
47	SBT 30 AS	35 +0.008 ~ -0.016	43.5 ± 0.010	87	70	16	22	68 ± 0.15	M10	8.4	106 ± 0.15	142	M8X1	62.5	0.760
62	SBT 40 AS	45 +0.008 ~ -0.016	54.0 ± 0.010	108	90	26	26	86 ± 0.15	M12	10.5	124 ± 0.15	166	M8X1	80.0	0.980
75	SBT 50 AS	50 +0.005 ~ -0.016	66.0 ± 0.015	132	101	22	34	108 ± 0.15	M14	13.5	160 ± 0.15	212	M8X1	88.0	2.360



Inner bore d mm	Bearing number	Principal dimensions h Tolerance mm 0.001mm	B Tolerance mm 0.001mm	W	H	b	A	J Tolerance mm 0.001mm	S1	S2	K Tolerance mm 0.001mm	L	M	G	Weight kg(s).
22	SBT 12 AS + KB 12 PP AS	18 +0.010 ~ -0.014	21.5 ± 0.015	43	35	8	11	32 ± 0.15	M5	4.3	56 ± 0.10	70	M6X1	31.0	0.170
26	SBT 16 AS + KB 16 PP AS	22 +0.010 ~ -0.014	26.5 ± 0.015	53	42	12	13	40 ± 0.15	M6	5.3	64 ± 0.15	78	M6X1	37.0	0.310
32	SBT 20 AS + KB 20 PP AS	25 +0.008 ~ -0.016	30.0 ± 0.010	60	50	13	18	45 ± 0.15	M8	6.6	76 ± 0.15	96	M6X1	44.0	0.486
40	SBT 25 AS + KB 25 PP AS	30 +0.008 ~ -0.016	39.0 ± 0.010	78	60	15	22	60 ± 0.15	M10	8.4	94 ± 0.15	122	M8X1	52.5	0.630
47	SBT 30 AS + KB 30 PP AS	35 +0.008 ~ -0.016	43.5 ± 0.010	87	70	16	22	68 ± 0.15	M10	8.4	106 ± 0.15	142	M8X1	62.5	0.760
62	SBT 40 AS + KB 40 PP AS	45 +0.008 ~ -0.016	54.0 ± 0.010	108	90	26	26	86 ± 0.15	M12	10.5	124 ± 0.15	166	M8X1	80.0	0.980
75	SBT 50 AS + KB 50 PP AS	50 +0.005 ~ -0.016	66.0 ± 0.015	132	101	22	34	108 ± 0.15	M14	13.5	160 ± 0.15	212	M8X1	88.0	2.360

Technical supplement

Cages		Precision	Grease
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Nil
Brass -	Nil		

1. BEARING MATERIALS

The internal design of VKE track rollers is the same as in single row or Double-row Angular Contact Ball Bearings. The units can carry axial loads in both directions and, due to the thickness of the outer ring, large radial loads.The standard product are produced from high quality bearing steel, with a hardness of 58 to 62 HRC. Some types are also available in stainless steel (440C) with hardness58 HRC.
The track rollers contained in this catalogue are produced with standard tolerances (ISO 492) and standard clearance (Normal).
The track rollers are produced in two distinct families. Cylindrical or crowned outer ring and profiled outer ring.

These track rollers are available in single and double row design. They are available with straight cylindrical OD or crowned profile OD. The crowned OD is used to reduce the edge stresses caused by possible misalignment errors. The cylindrical OD can provide increased support due to the longer contact profile.

There products are used typically on flat surfaces.Some of them ostcommon applications are:
-transfer rolls
-idler rollers
-Support rollers
-Straightening rolls

1. SHIELDS AND SEALS

2.1 Types

2.1.1 Track rollers LR 2, LR 2..RRU
These single row ball track rollers are available in following different versions.
- LR 2..X-2RS: cylindrical OD, with light contact seals.
- LR 2..X-2RSR: crowned cylindrical OD, with contact seals.
- LR 2..2RS: crowned OD, with light contact seals.
- LR 2..2RSR: crowned OD, with contact seals.
- LR 2..RRU: crowned OD with contact seals protected by a metal shield, inner ring with increased width to allow additional lubricant storage.

2.1.2 Track rollers LR 52, LR 53
These are double row angular contact ball track rollers. Due to their internal design, they can carry axial loads of large magnitude. They are available in three versions:
- LR 52..2RS, LR 53..2RS: crowned OD, with light contact seals.
- LR 52..X-2Z, LR 53..X-2Z: cylindrical OD, with metal shields.
- LR 52..2Z, LR 53..2Z: crowned OD, with metal shields.

The track rollers with profiled outer ring are basically Double-row Angular Contact Ball Bearings with a reinforced and profiled outer ring. The outer ring profile allows the units to operate on round shafts or other types of profiled raceways. The outer profile can have three different designs;

- Track rollers with gothic arch groove - type LFR

The track rollers series LFR can be used on round shafts with diameter from 4 mm to 50 mm. The contact between track roller gothic arch groove profile and shaft is on two points.
This allows the units to carry loads in both axial and radial direction.
The track rollers are available with either shields 2Z or contact seals 2RS.

They are available with either non-contacting seals 2RS or contact seals 2RSR.

3. BEARING TOLERANCES

3.1 Standard of tolerances

Track roller bearing "tolerances" or dimensional accuracy and running accuracy, are regulated by ISO standard (rolling bearing tolerances). For dimensional accuracy, these standards prescribe the tolerances necessary when installing bearings on shafts or in housings.
Running accuracy is defined as the allowable limits for bearing runout during operation.

Table 3.1 Comparison of tolerance classifications of national standards

Standard		Tolerance class				
International Organization for Standardization (ISO)	ISO	P0	P6	P5	P4	P2
Deutsches Institut fur Normung (DIN)	DIN	Normal class Class 6X	Class 6	Class 5	Class 4	Class 2
American National Standards Institute (ANSI)	JIS	ABEC-1	ABEC-3	ABEC-5	ABEC-7	ABEC-9

3.2 Tolerances for radial bearings

Table 3.2 Inner rings

(Unit : ¼m)

Nominal bore diameter d mm		Single plane mean bore diameter deviation ³dmp										Single radial plane bore diameter variation Vdp									
		class 0		class 6		class 5		class 4❶		class 2❶		diameter series 9					maxdiameter series 0.1				
												class	class	class	class	class	class	class	class	class	class
over	incl.	high	low	high	low	high	low	high	low	high	low	0	6	5 max.	4	2	0	6	5 max.	4	2
10	18	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5	8	7	4	3	2.5
18	30	0	-10	0	-8	0	-6	0	-5	0	-2.5	13	10	6	5	2.5	10	8	5	4	2.5
30	50	0	-12	0	-10	0	-8	0	-6	0	-2.5	15	13	8	6	2.5	12	10	6	5	2.5

Table 3.3 Inner rings

(Unit : ¼m)

Nominal bore diameter d mm		Single radial plane bore diameter variation Vdp maxdiameter series 2,3,4					Mean single plane bore diameter variation Vdmp					Inner ring radial runout Kia					Face runout with bore Sd		
		class	class	class	class	class	class	class	class	class	class	class	class	class	class	class	class	class	class
over	incl.	0	6	5 max.	4	2	0	6	5 max.	4	2	0	6	5 max.	4	2	5	4 max.	2
10	18	6	5	4	3	2.5	6	5	3	2.0	1.5	10	7	4	2.5	1.5	7.0	3.0	1.5
18	30	8	6	5	4	2.5	8	6	3	2.5	1.5	13	8	4	3.0	2.5	8.0	4.0	1.5
30	50	9	8	6	5	2.5	9	8	4	3.0	1.5	15	10	5	4.0	2.5	8.0	4.0	1.5

Table 3.4 Inner rings

(Unit : ¼m)

Nominal bore diameter d mm		Inner ring axial runout (with side) Sia❷			Inner ring width deviation ³Bs										Inner ring width varietion VBs				
					normal						modified❸								
		class	class	class	class 0,6		class 5,4		class 2		class 0,6		class 5,4		class	class	class	class	class
over	incl.	5	4	2	high	low	high	low	high	low	high	low	high	low	0	6	5 max.	4	2
10	18	7	3	1.5	0	-120	0	- 80	0	- 80	0	-250	0	-250	20	20	5	2.5	1.5
18	30	8	4	2.5	0	-120	0	-120	0	-120	0	-250	0	-250	20	20	5	2.5	1.5
30	50	8	4	2.5	0	-120	0	-120	0	-120	0	-380	0	-250	20	20	5	3.0	1.5

Note: ❶ The dimensional difference Δ_{ds} of bore diameter to applied for class 4 and 2 is the same as the tolerance of dimentional difference ³dmp of average bore diameter. However, the dimensional difference is applied to diameter series 0, 1, 2, 3 and 4 against Class 4, and to all the diameter series against Class 2.

❷To be applied for deep groove ball bearing and angular contact ball bearings.

❸To be applied for individual raceway rings manufactured for combined bearing use.

Symbols: ³dmp: deviation of the mean bore diameter from the nominal (³dmp = dmp - d).

Vdp: bore diameter variation; difference between the largest and smallest single bore diameters in one plane.

Vdmp: mean bore diameter variation; difference between the largest and smallest mean bore diameters of one ring or washer.

Kia: radial runout of assembled bearing inner ring and assembled bearing outer ring, respectively.

Sd: side face runout with reference to bore (of inner ring).

Sia: side face runout of assembled bearing inner ring and assembled bearing outer ring, respectively.

³Bs: deviation of single inner ring width or single outer ring width from the nominal (³Bs = Bs - B etc.)

VBs: ring width variation; difference between the largest and smallest single widths of inner ring and of outer ring, respectively.

1. BEARING FITS

Track rollers are precision machine elements. These products must be very carefully handled before and during fitting. Their trouble-free operation depends largely on the care taken during fitting

4.1 Compatibility and miscibility
The anti-corrosive preservation oil used for rolling bearings is compatible and miscible with oils and greases with a mineral oil base. Compatibility should be checked if the following are used:
- synthetic lubricants
- thickeners other than lithium or lithium complex soaps.

If there is an incompatibility, the anti-corrosive oil should be washed out before greasing, particularly in the following cases:
- lubricants based on PTFE/alkoxyfluoroether
- lubricants with a polycarbamide thickener

and if
- the lubricant is changed
- the rolling bearings are contaminated.

If in doubt, please contact the relevant lubricant manufacturer.

4.2 Guidelines for fitting
- The assembly area must be kept clean and free from dust
- Protect bearings from dust, contaminants and moisture
  - contaminants have a detrimental influence on the running and operating life of rolling bearings
- Inspect the housing bore and shaft/axis seating for
  - dimensional and geometrical tolerances
  - cleanliness
- Lightly oil the bearing ring seating surfaces or rub with solid lubricant
- Do not cool the bearings excessively
  - Moisture due to condensation can lead to corrosion in the bearings and bearing seatings
- After fitting
  - charge ungreased rolling bearings with lubricant
  - check the correct functioning of the bearing arrangement.

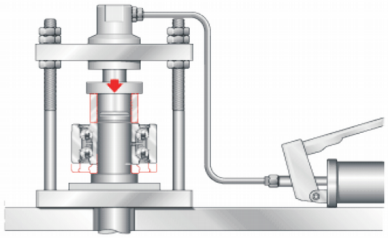
4.3 Fitting tools
- Induction heating device (see figure below)
- Heating cupboard
  - heating up to +80 °C

Mechanical or hydraulic press
  - fitting sleeves should be used which cover the whole circumference of the bearing ring end faces
- Hammer and fitting sleeve
  - light hammer blows should be centrally directed on the fitting sleeve

Note: Fitting forces must never be directed through the rolling elements.
Direct blows on the bearing rings must be avoided.

4.4 Dismantling guidelines
- Dismantling should be taken into consideration in the original design of the bearing location
- If the bearings are to be reused:
  - direct blows on the bearing rings should be avoided
  - dismantling forces should not be applied through the rolling elements
  - bearings should be carefully cleaned once dismantled
  - do not use a concentrated or hard flame.

4.5 Fitting and dismantling of yoke type track rollers (ball type)
- If the tolerance zone is unfavourable: the bearing should be pressed into place using a fitting press (see figure below)
  - The inner ring must be fitted such that the pressing-in force is distributed uniformly on theend face of the inner ring.

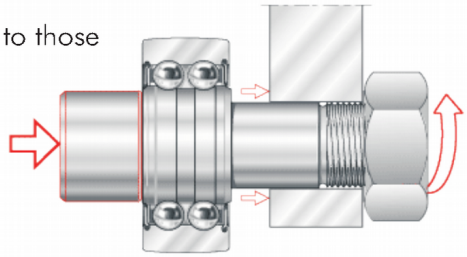

Fitting of the yoke type track roller using a fitting press

Note: Fitting forces must not be directed through the rolling elements. It must be ensured that the seals are not damaged during fitting.
- Track rollers must be secured axially according to the advice given.

Note: Extraction forces must not be directed through the outer ring. This could damage the rolling elements and seals.

4.6 Fitting and dismantling of stud type track rollers (ball type)
Stud type track rollers are fitted and dismantled by methods similar to those used for yoke type track rollers (see figure below).

Note: The tightening torques given in the dimension table must be observed. Only then can the permissible radial load be ensured.
Screws and nuts of grade ⩾ 8.8 must be used.


Fitting of a stud type track roller

5. BEARING INTERNAL CLEARANCE

Track Roller Bearing internal clearance (initial clearance) is the amount of internal clearance a bearing has before being installed on a shaft or in a housing. The internal clearance valves for VKE Track roller bearing classes are shown in tables 5.1

Table 5.1 Radial internal clearance of track roller bearings **(Unit : μm)**

Nominal bore diameter d (mm)		C2		Normal		C3		C4	
over	Incl.	min.	max.	min.	max.	min.	max.	min.	max.
-	10	6	12	8	15	15	22	22	30
10	18	6	12	8	15	15	24	30	40
18	30	6	12	10	20	20	32	40	55
30	50	8	14	14	25	25	40	55	75

6. LUBRICATION

6.1 Track rollers series LR 2..are supplied grease filled. (The lithium soap grease).

6.2 Track rollers series LR 52..are supplied grease filled. (The lithium soap grease).

6.3 Track rollers LFR
The units are supplied with lifetime grease lubrication
The size with an outside diameter 52 mm or greater have a lubrication hole in the inner ring. To prevent mixing of greases with different characteristics, please insure to perform the lubrication of the units with lubricants that have the same characteristics as the grease used at the factory. Mounting bolts are available in both eccentric

7. LOAD RATING AND LIFE

If the track rollers operate on a flat surface/raceway, the outer ring deforms (fig.1)
When compared with a bearing mounted in a suitable housing, track rollers have the following characteristics:
- Modified load distribution
This is accounted for by using the load factors C_w and C_{ow} when calculating the life.
- Alternating bending stress on the outer ring
This is taken into account by the load coefficients Fr perm and Fro perm (see dimension tables). The stresses must not exceed the allowable limits.

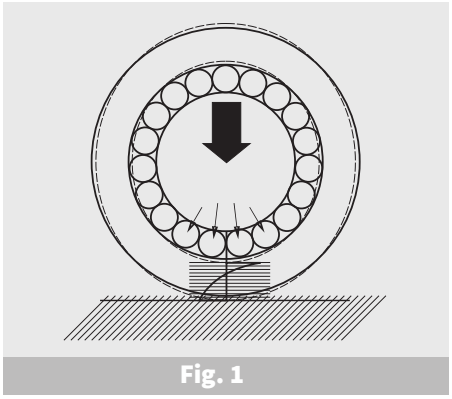


Fig. 1

7.1 Load ratings and life calculation
The dynamic load rating of the track roller is determined by the fatigue limit of the material. The life of the track roller is defined as the period of use before the pearance of fatigue. The ability of a track roller to carry dynamic loads is statistically derived.

7.1.1 Life calculation

The formula to calculate the nominal life is as follows:

$$L = \left(\frac{C_W}{P}\right)^3$$

$$L_h = \frac{833}{H.n_{osz}} \left(\frac{C_W}{P}\right)^3$$

$$L_h = \frac{1666}{Vm} \left(\frac{C_W}{P}\right)^3$$

L = nominal life in 10^ 5 m reached by 90% of a statistically significant number of apparently identical bearing operating under the same loading condition before the onset of metal fatigue.

L_h [h] = nominal life in hours

C_W [N] = dynamic load rating. Is the load that would yield a nominal life of 105 m.

P [N] = equivalent dynamic load

H [m] = stroke

n_{osz} [min^{-1}] = frequency of operation

Vm [m/min] = mean operating velocity

7.1.2 Radial dynamic limit load Fr perm

When selecting the product it is necessary to insure that no loading condition will exceed the allowable load.

7. BEARING HANDLING

8.1 Storage

The bearings should be stored:

- in dry, clean rooms with the temperature as constant as possible
- at a relative humidity of max. 65%.

The storage period for greased and sealed bearings is limited by the shelf life of the grease.

8.2 Removal from packaging

Perspiration from handling leads to corrosion. Hands should be kept clean and dry and gloves worn if necessary.

Bearings should only be removed from their original packaging immediately before assembly.

If only a few bearings are taken out of a multi-piece package preserved by volatile corrosion inhibitor paper, the package must be closed again immediately

- the protective vapour phase is only effective when the package is closed
- the bearings which have been taken out must be greased or oiled immediately.

9. ALLOWABLE SPEED

As bearing speed increases, the temperature of the bearing also increases due to friction heat generated in the bearing interior. If the temperature continues to rise and exceeds certain limits, the efficiency of the lubricant start to fail down drastically, and the bearing can no longer continue to operate in a stable manner. Therefore, maximum speed at which it is possible for the bearing to continuously operate without the generation of excessive heat beyond specified limits, is called the allowable speed (r/min). The allowable speed of a bearing depends on the type of bearing, bearing dimensions, type of cage, load, lubricating conditions, and cooling conditions.

The allowable speeds listed in the bearing tables for grease and oil lubrication are for VKE track roller under normal operating conditions, correctly installed, using the suitable lubricants with adequate supply and proper maintenance. Moreover, these values are based on normal load conditions (Pd0.09C,Fa/Frd0.3). For track roller with contact seals, the allowable speed is determined by the peripheral lip speed of the seal.

For track roller to be used under heavier than normal load conditions, the allowable speed values listed in the bearing tables must be multiplied by an adjustment factor.The a djustment factors fL and fc are given in Figs. 9.1 and 9.2.

Under such high speed operating conditions , when special care is taken , the standard allowable speeds given in the bearing tables can be adjusted upward. The maximum speed adjustment values, /B, by which the bearing table speeds can be multiplied, are shown in Table 9.1. However, for any application requiring speeds in excess of the standard allowable speed, please consult VKE Engineering.

Fig.9.1 Value of adjustment factor FL depends on bearing load

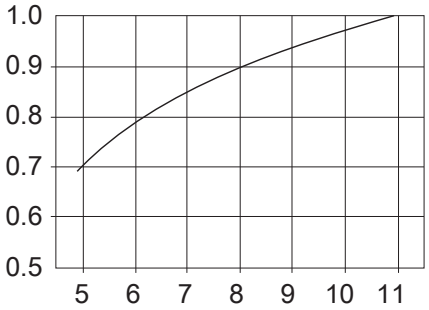


Fig.9.2 Value of adjustment factor Fc depends on combined load

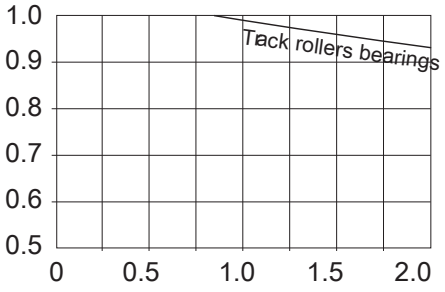
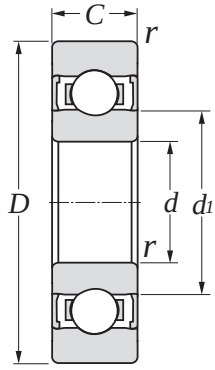
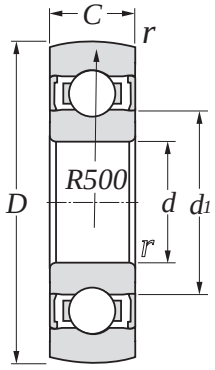


Table 9.1 Adjustment factor, f_B, for allowable number of revolutions

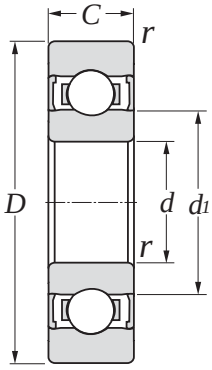
Type of bearing	Adjustment factor f_B
Track rollers bearings	2.0



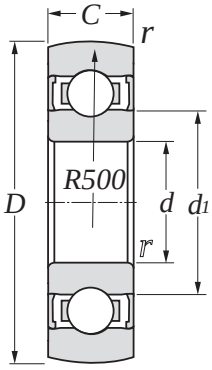
Type LR 2..X-2RSR
(Contact, double seals)



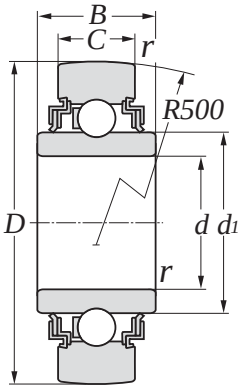
Type LR 2..2RSR
(Contact, double seals)



Type LR 2..X-2RS
(Light-contact, double seals)



Type LR 2..2RS
(Light-contact, double seals)

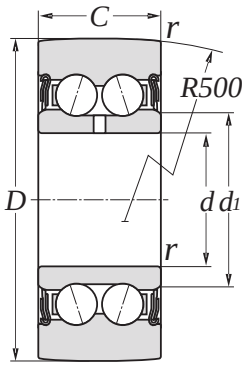


Type LR 2..RRU
(Contact, double seals)

Inner bore d mm	Bearing number		Boundary dimensions D	C	rs	d1	B	Basic load ratings dynamic C	static Co	Limiting speeds grease	oil	Weight kg.
					mm			N		rpm		
10	LR 200 X-2RS	LR 200 2RS	32	9	0.6	15.4	-	4,200	2,050	13,000	-	0.050
12	LR 201 X-2RSR	LR 201 2RSR	35	10	0.6	17.1	-	5,500	2,600	15,000	-	0.050
15	LR 202 X-2RSR	LR 202 2RSR	40	11	0.6	20.0	-	6,700	3,150	14,000	-	0.070
17	LR 203 X-2RSR	LR 203 2RSR	47	12	0.6	22.5	-	9,100	4,200	11,000	-	0.110
20	LR 204 X-2RSR	LR 204 2RSR	52	14	1.0	26.5	-	11,800	5,400	10,000	-	0.150
25	LR 205 X-2RSR	LR 205 2RSR	62	15	1.0	30.3	-	14,900	6,800	9,000	-	0.230
30	LR 206 X-2RS	LR 206 2RS	72	16	1.0	37.4	-	20,800	9,200	5,500	-	0.330
35	LR 207 X-2RS	LR 207 2RS	80	17	1.1	42.4	-	26,100	11,400	4,500	-	0.400
45	LR 209 X-2RS	LR 209 2RS	90	19	1.1	53.2	-	30,300	13,100	3,600	-	0.450
12	LR 201 RRU	-	35	10	0.6	18.5	15.0	5,500	3,000	15,000	-	0.070
15	LR 202 RRU	-	40	11	0.6	21.5	14.4	6,700	3,500	14,000	-	0.080

Technical supplement

Cages		***Precision***	***Grease***
Steel -	√		
Polymid -	X	Normal (ISO)	Alvania S2 -25°C~ +120°C
Brass -	X		

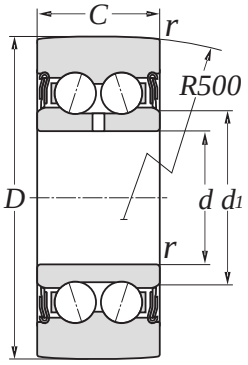


Type LR 50..2RS
(Light-contact, double seals)

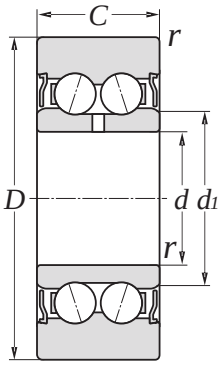
Inner bore d mm	Bearing number	Boundary dimensions D	C	rs	d1 mm	Basic load ratings dynamic C	static Co N	Limiting speeds grease	oil rpm	Weight kg.
5	LR 50/5 2RSR	17	7	0.2	8.2	1960	940	12000	-	0.01
6	LR 50/6 2RSR	19	9	0.3	9.3	2700	1370	11000	-	0.02
7	LR 50/7 2RSR	22	10	0.3	10.5	3300	1700	10000	-	0.02
8	LR 50/8 2RSR	24	11	0.3	10.5	4300	2390	10000	-	0.03
10	LR 5000 2RS	28	12	0.3	13.5	4750	2850	9000	-	0.03
12	LR 5001 2RS	30	12	0.3	15.5	5100	3100	8500	-	0.03
15	LR 5002 2RS	35	13	0.3	20.4	6500	4150	7000	-	0.05
17	LR 5003 2RS	40	14	0.3	21.6	7800	5300	6000	-	0.07
20	LR 5004 2RS	47	16	0.6	25.2	11700	7700	5500	-	0.12
25	LR 5005 2RS	52	16	0.6	29.8	11800	8200	4700	-	0.15
30	LR 5006 2RS	62	19	1.0	35.5	16100	11900	4000	-	0.25
35	LR 5007 2RS	68	20	1.0	41.7	17800	13300	4300	-	0.30

Technical supplement

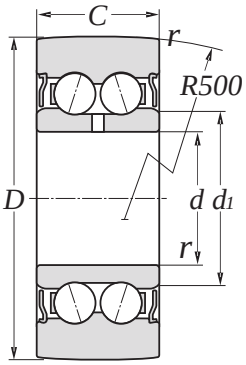
Cages		*Precision*	*Grease*
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



Type LR 52..2RS
(Light-contact, double seals)



Type LR 52..X-2Z
(Double shields)

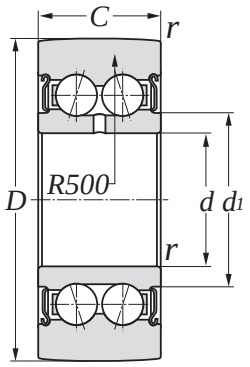


Type LR 52..2Z
(Double shields)

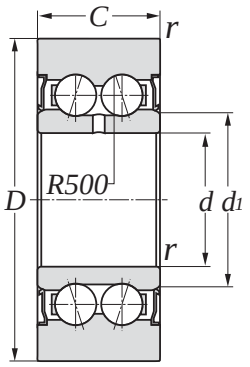
Inner bore d mm	Bearing number		Boundary dimensions D	C	rs	d1	Basic load ratings dynamic C	static Co	Limiting speeds grease	oil	Weight kg.
			mm				N		rpm		
10	LR 5200 2RS	-	32	14.0	0.6	15.4	6800	4100	8000	-	0.07
12	LR 5201 2RS	-	35	15.9	0.6	17.1	8700	5200	7500	-	0.08
15	LR 5202 2RS	-	40	15.9	0.6	20.0	10000	6300	7000	-	0.11
17	LR 5203 2RS	-	47	17.5	0.6	22.5	12800	8400	5500	-	0.17
20	LR 5204 2RS	-	52	20.6	1.0	26.5	16100	10700	5000	-	0.23
25	LR 5205 2RS	-	62	20.6	1.0	30.3	18800	13200	4500	-	0.34
30	LR 5206 2RS	-	72	23.8	1.0	37.4	25000	18000	3500	-	0.51
35	LR 5207 2RS	-	80	27.0	1.1	42.4	31000	22800	2800	-	0.66
40	LR 5208 2RS	-	85	30.2	1.1	48.4	35000	26000	2500	-	0.75
10	LR 5200 X-2Z	LR 5200 2Z	32	14.0	0.6	15.4	6800	4100	11000	-	0.07
12	LR 5201 X-2Z	LR 5201 2Z	35	15.9	0.6	17.1	8700	5200	10000	-	0.08
15	LR 5202 X-2Z	LR 5202 2Z	40	15.9	0.6	20.0	10000	6300	10000	-	0.11
17	LR 5203 X-2Z	LR 5203 2Z	47	17.5	0.6	22.5	12800	8400	7500	-	0.17
20	LR 5204 X-2Z	LR 5204 2Z	52	20.6	1.0	26.5	16100	10700	7000	-	0.23
25	LR 5205 X-2Z	LR 5205 2Z	62	20.6	1.0	30.3	18800	13200	6500	-	0.34
30	LR 5206 X-2Z	LR 5206 2Z	72	23.8	1.0	37.4	25000	18000	5000	-	0.51
35	LR 5207 X-2Z	LR 5207 2Z	80	27.0	1.1	42.4	31000	22800	3900	-	0.66
40	LR 5208 X-2Z	LR 5208 2Z	85	30.2	1.1	48.4	35000	26000	3500	-	0.75

Technical supplement

Cages		*Precision*	*Grease*
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120



Type LR 53..2RS
(Light-contact, double seals)

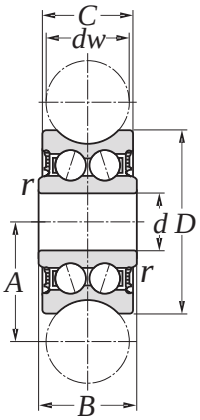


Type LR 53..2Z
(Double shields)

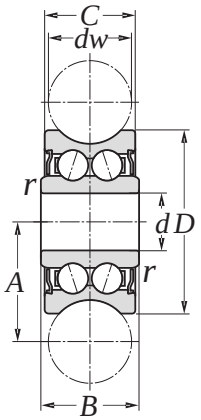
Inner bore d mm	Bearing number	Boundary dimensions D	C	rs	d1	Basic load ratings dynamic C	static Co	Limiting speeds grease	oil	Weight kg(s).
		mm				N		rpm		
17	LR 5303 2RS	52	22.2	1.0	23.5	17500	11300	4700	-	0.21
20	LR 5304 2RS	62	22.2	1.1	29.0	21500	14800	4500	-	0.34
25	LR 5305 2RS	72	25.4	1.1	34.4	28000	19900	3900	-	0.50
30	LR 5306 2RS	80	30.2	1.1	41.4	35500	25500	3100	-	0.67
35	LR 5307 2RS	90	34.9	1.5	47.7	44000	32500	2500	-	0.97
40	LR 5308 2RS	100	36.5	1.5	52.4	54000	40500	2300	-	1.20
20	LR 5304 2Z	62	22.2	1.1	29.0	21500	14800	6500	-	0.34
25	LR 5305 2Z	72	25.4	1.1	34.4	28000	19900	5500	-	0.50
30	LR 5306 2Z	80	30.2	1.1	41.4	35500	25500	4300	-	0.67
35	LR 5307 2Z	90	34.9	1.5	47.7	44000	32500	3600	-	0.97
40	LR 5308 2Z	100	36.5	1.5	52.4	54000	40500	3300	-	1.20

Technical supplement

Cages		***Precision***	***Grease***
Steel -	X		
Polymid -	√	Normal (ISO)	Alvania S2 -25℃+120 ℃
Brass -	X		



Type LFR..2RS
(Light-contact, double seals)

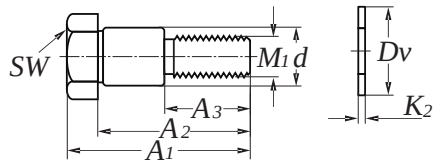


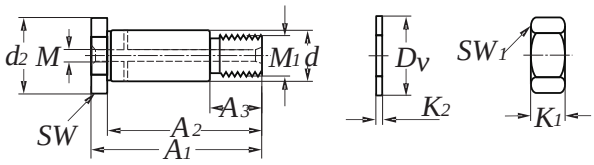
Type LFR..2Z
(Double shields)

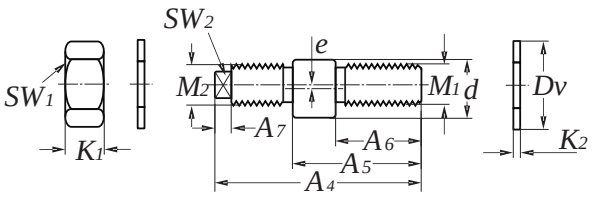
Inner bore d mm	Bearing number	Boundary dimensions dw	D	C	B	A	rs (mm)	Basic load ratings dynamic C	static Co (N)	Limiting speeds grease	oil (rpm)	Weight kg(s).
4	LFR 50/4-4 2Z LFR 50/4-4 2RS	4	13.0	6.0	7.0	7.55	0.2	1050	850	1150	1600	0.007
5	LFR 50/5-4 2Z LFR 50/5-4 2RS	4	16.0	7.0	8.0	9.00	0.2	1200	860	1300	1780	0.009
5	LFR 50/5-6 2Z LFR 50/5-6 2RS	6	17.0	7.0	8.0	10.50	0.2	1270	820	1300	1780	0.010
8	LFR 50/8-6 2Z LFR 50/8-6 2RS	6	24.0	11.0	11.0	14.00	0.3	3670	2280	1300	4560	0.020
12	LFR 5201-10 2Z LFR 5201-10 2RS	10	35.0	15.9	15.9	20.65	0.3	8500	5100	5100	10200	0.080
12	LFR 5301-10 2Z LFR 5301-10 2RS	10	42.0	19.0	19.0	24.00	0.6	13000	7700	7500	14200	0.100
15	LFR 5302-10 2Z LFR 5302-10 2RS	10	47.0	19.0	19.0	26.65	1.0	16200	9200	6200	18400	0.170
12	LFR 5201-12 2Z LFR 5201-12 2RS	12	35.0	15.9	15.9	21.75	0.3	8400	5000	5100	10000	0.085
12	LFR 5201-14 2Z LFR 5201-14 2RS	14	39.9	18.0	20.0	24.00	0.3	8900	5000	6700	12100	0.095
20	LFR 5204-16 2Z LFR 5204-16 2RS	16	52.0	20.6	22.6	31.50	0.6	16800	9500	12100	16600	0.230
25	LFR 5206-20 2Z LFR 5206-20 2RS	20	72.0	23.8	25.8	41.00	0.6	29500	16600	20700	33200	0.250
25	LFR 5206-25 2Z LFR 5206-25 2RS	25	72.0	23.8	25.8	43.50	0.6	29200	16400	23100	32800	0.250
30	LFR 5207-30 2Z LFR 5207-30 2RS	30	80.0	27.0	29.0	51.00	1.0	38000	20800	21400	36200	0.660
40	LFR 5208-40 2Z LFR 5208-40 2RS	40	98.0	36.0	38.0	62.50	1.0	54800	29000	55000	58000	1.360
40	LFR 5308-50 2Z LFR 5308-50 2RS	50	110.0	44.0	46.0	72.50	1.1	53000	39500	69000	79000	1.400

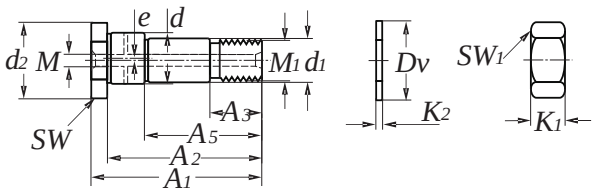
Technical supplement

Cages		*Precision*	*Grease*
Steel -	x		
Polymid -		Normal (ISO)	Alvania S2
Brass -	x		-25 ~ +120









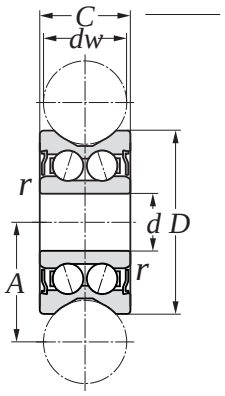
LFZ.., concentric bolts for track rollers LFR
LFE.., eccentric bolts for track roller LFR

LFZ.. A1, concentric bolts for track rollers LFR
LFE.. A1, eccentric bolts for track roller LFR

Bearing number	Boundary dimensions																			Weight
	A_1	A_2	A_3	A_4	A_5	A_6	A_7 $h9$	d_1	d_2	M_1 mm	M_2	K_1	K_2	D_V	SW	SW_1	SW_2	e	M	kg(s).
LFZ 5; LFE 5-05	19.5	16.0	9.5	20.5	15.0	9.0	-	-	-	M4	M4	2.9	-	-	3	7	2	0.50	-	0.010
LFZ 8; LFE 8-1	28.3	24.3	14.0	33.2	22.0	13.7	3.5	-	-	M8	M8x0.75	4.0	1.0	14	13	13	2	1.00	-	0.020
LFZ 12; LFE 12-1	43.0	36.0	22.0	50.0	33.5	19.5	5.0	-	-	M10	M10	8.0	1.8	21	17	17	5	1.00	-	0.040
LFZ 12/M12; LFE 12-1/M12	50.8	43.8	24.0	57.0	41.0	24.0	5.0	-	-	M12	M12	6.5	1.8	19	17	17	6	1.00	-	0.060
LFZ 15; LFE 15-1	50.8	43.8	26.0	57.0	41.0	24.0	5.0	-	-	M12	M12	6.5	1.8	21	19	19	6	1.00	-	0.060
LFZ 12x45 A1; LFE 12x45 A1	50.0	45.0	16.0	-	30.0	-	-	10	20	M10x1.5	-	8.0	2.0	21	17	17	6	0.75	5.9	0.040
LFZ 20x67 A1; LFE 20x67 A1	75.0	67.0	23.0	-	45.0	-	-	17	30	M16x1.5	-	13.0	3.0	30	27	24	-	1.00	5.9	0.200
LFZ 25x82 A1; LFE 25x82 A1	92.0	82.0	30.0	-	57.0	-	-	22	40	M20x1.5	-	16.0	3.0	37	36	30	-	1.00	5.9	0.400
LFZ 30x95 A1; LFE 30x95 A1	107.0	95.0	32.0	-	67.0	-	-	27	45	M24x1.5	-	19.0	4.0	44	41	36	-	1.00	5.9	0.620
LFZ 40x107 A1; LFE 40x107 A1	117.0	107.0	42.0	-	72.0	-	-	36	55	M30x1.5	-	24.0	4.0	56	46	46	-	1.00	5.9	1.100
LFZ 40x115 A1; LFE 40x115 A1	125.0	115.0	42.0	-	72.0	-	-	36	55	M30x1.5	-	24.0	4.0	56	46	46	-	1.00	5.9	1.200

Technical supplement

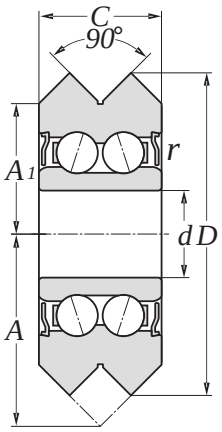
Cages		***Precision***	***Grease***
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Nil
Brass -	Nil		



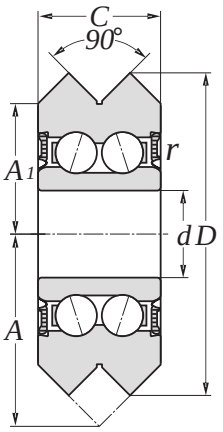
Inner bore d mm	Bearing number	Boundary dimensions d_w	D	C mm	A	r_s	Basic load ratings dynamic C N	static Co N	Limiting speeds grease rpm	oil rpm	Weight kg.
7	RV 20/7-10	10	22	11	14.50	0.3	2450	1620	2350	4150	0.017
8	RV 20/8-10	10	30	14	18.10	0.3	4490	2700	11000	19800	0.062
15	RV 202/15.38-10	10	38	17	22.25	0.5	7290	4550	10200	17900	0.086
15	RV 20/15.40-10	10	40	18	22.00	0.5	7950	4950	14500	26500	0.110
12	RV 201/12-20	20	41	20	28.00	0.3	8180	5100	17200	31500	0.130
15	RV 202/15.41-20	20	41	20	28.00	0.5	8180	5100	17200	31500	0.120
17	RV 203/17-20	20	58	25	35.00	0.5	16580	9200	47000	86000	0.325
20	RV 204/20.57-30	30	57	22	41.00	0.6	16910	9200	47000	86000	0.290
20	RV 204/20.58-30	30	58	25	41.00	0.6	16790	9200	40000	72000	0.310

Technical supplement

Cages		***Precision***	***Grease***
Steel -	X		
Polymid -	√	Class 0 (J IS)	Alvania S2 -25 °C+120 °C
Brass -	X		



2Z

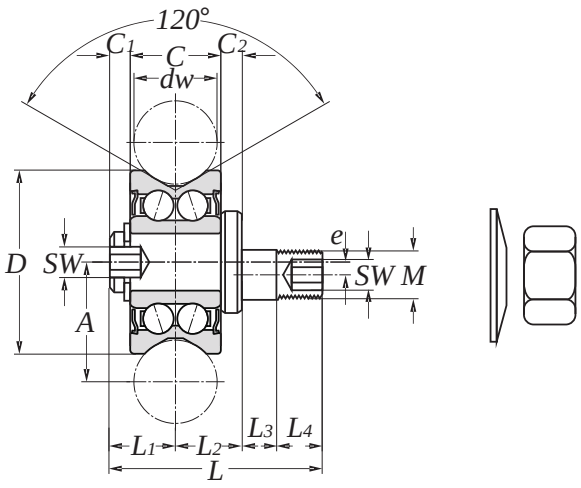


2RS

Inner bore d mm	Bearing number		Boundary dimensions D	A	C	A1	rs	Basic load ratings dynamic C	static Co	Limiting speeds grease	oil	Weight kg.
			mm					N		rpm		
4.763	RM 1 2Z	RM 1 2RS	19.56	11.86	7.87	7.93	0.3	1650	1140	4150	7500	0.012
9.525	RM 2 2Z	RM 2 2RS	30.73	18.24	11.10	12.70	0.3	8260	2650	6500	11700	0.040
11.999	RM 3 2Z	RM 3 2RS	45.72	26.98	15.88	19.05	0.6	5530	5200	31000	55000	0.136
15.001	RM 4 2Z	RM 4 2RS	59.94	34.93	19.05	25.40	1.0	16250	9200	39500	72000	0.285

Technical supplement

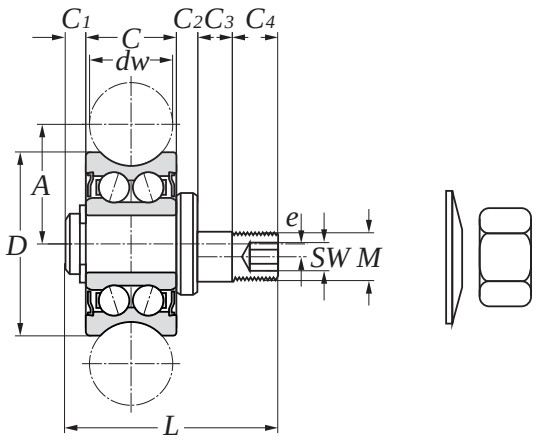
Cages		*Precision*	*Grease*
Steel -	x		
Polymid -		Class 0 (JIS)	Alvania S2 -25 ~ +120
Brass -	x		



Inner bore d mm	Bearing number concentric	Bearing number eccentric	Boundary dimensions D	C	A	L	L1	L2	L3	L4	C1	C2	e	SW	M	Basic load ratings dynamic C N	Basic load ratings static Co N	Limiting speeds grease rpm	Limiting speeds oil rpm	Weight kg.
10	**RV 22 C**	**RV 22 E**	22	11	14.5	26	8.5	8	4	5.5	3	3.0	1.5	3	M 6	**2450**	**1620**	**2350**	**4150**	0.028
10	**RV 30 C**	**RV 30 E**	30	14	18.1	33	9.5	9	6	8.0	2	2.5	1.5	4	M 8	**4490**	**2700**	**11000**	**19800**	0.069
10	**RV 38 C**	**RV 38 E**	38	17	22.3	42	11.0	11	8	12.0	3	2.5	2.0	5	M 10	**7290**	**4550**	**10200**	**17900**	0.145
20	**RV 41 C**	**RV 41 E**	41	20	28.0	47	15.0	13	6	13.0	3	5.0	2.0	6	M 12	**8180**	**5100**	**17200**	**31500**	0.190
20	**RV 58 C**	**RV 58 E**	58	25	35.0	59	17.0	19	11	13.0	6	4.0	2.5	6	M 16	**16580**	**9200**	**47000**	**86000**	0.460

Technical supplement

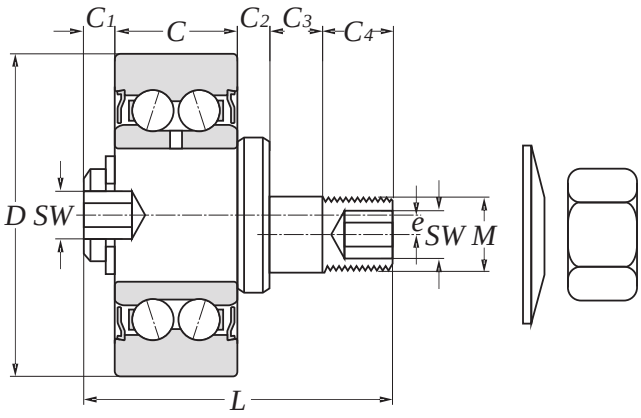
Cages		***Precision***	***Grease***
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Alvania S2
Brass -	Nil		-25 ~ +120



Inner bore d mm	Bearing number concentric	eccentric	Boundary dimensions D	C	A	L	C1	C2	C3	C4	e	SW	M	Basic load ratings dynamic C N	static Co N	Limiting speeds grease rpm	oil rpm	Weight kg.
6	RPC 17	RPE 17	17	7.0	10.50	23	1.5	1.5	5	5.5	0.50	2.5	M5	1250	850	1250	1700	0.015
6	RPC 24	RPE 24	24	11.0	14.00	29	3.0	2.0	6	7.0	0.50	4.0	M8	3500	2200	1250	4350	0.042
10	RPC 35	RPE 35	35	15.9	20.65	44	3.2	2.0	10	13.0	0.75	5.0	M10	8100	8100	4900	9700	0.120

Technical supplement

Cages		***Precision***	***Grease***
Steel -	Nil		
Polymid -	Nil	Normal (ISO)	Alvania S2 -25°C+120 °C
Brass -	Nil		



Bearing number	Boundary dimensions										Basic load ratings dynamic	static	Limiting speeds grease	oil	Weight
	D	*C*	*L*	*C1*	*C2*	*C3*	*C4*	*e*	*SW*	*M*	*C*	*Co*			
	mm										N		rpm		kg.
RA 35 A	35	15.9	42	2.1	5	6.0	13	1.0	5	M 12	**8100**	**4900**	**4900**	**9700**	0.150
RA 52 A	52	22.2	57	3.3	8	9.5	14	1.5	6	M 16	**16000**	**9100**	**11500**	**15800**	0.345

Technical supplement

Cages	***Precision***	***Grease***
Steel - Nil		
Polymid - Nil	Normal (ISO)	Alvania S2
Brass - Nil		-25 ~ +120

FEATURE

The Spherical Outside Surface Ball Bearings of ITJ are deep groove ball bearing with wide and narrow inner rings, consisting of insert bearings (SA200, SB200, UC200, UEL200, UK200, UCX00 and UC300) and various housings. The types of bearing units are defined according to the different mounting methods of the bearings to shafts : the set-screws type, the adapter type, the eccentric locking collar type.

The ITJ housings are mainly casting housings. There are pressed steel plate housings as well align with ease during operation and can be conveniently mounted or dismounted.

The bearing units can operate satisfactorily under working conditions, especially for machines operating in dusty or muddy surroundings. Thus, they are widely used in agricultural, construction and transmission machineries, etc..

There are varioustypes of sealing devices for our products, such as synthetic rubber seals, slinger with synthetic rubber seals and triple lip seals etc..

Sufficient lubricating grease has been put into the bearings during manufacturing, which can act as lubricating as well as rust proof. No more grease is needed to put in during the lubricating period when the bearings operate under normal conditions. Lubricating grease can be added from the fittings when the relubricate bearings operate under hard conditions.

The outer ring of the bearing has spherical outside surface which can be fitted to the concave spherical surface of the housing, and the fit between them can be clearance fit or interference fit according to different conditions. This combination provides self-alignment between the self-contained bearing and the housing, and compensates for a certain alignment errors or flexing of the shaft when the bearing is in operation. This definitely increases the bearing service life.

1. LUBRICATION

The Spherical Outside Surface Ball Bearings of ITJ generally use CG-2 rust proof lithium based lubricating grease, with physical chemical properties shown in the following Table 1.1. Grease is filled in the Spherical Outside Surface Ball Bearings during manufacturing.

Table 1.1 Physical chemical properties of lubricating grease

Density (1/mm)	Without operation	268
	Operated 60 times	260
Dropping point (°C)		128
Mechanical impurities	10-25 μm	within 1000
(pc / gram)	25-75 μm	within 500
	above 75 μm	0
Base oil kinematical Viscosity °40 C cst		80.3

The bearings usually operate below the temperature of 120℃ (the measuring temperature of the outer rings is 100℃) . Grease life reduction has to be taken into account when the bearing continues to operate at a temperature above 70℃. The lowest operating temperature should not be lower than - 30℃.

The permissible speed of rotation is connected with the fit between shaft and bearing . It is recommended that, under normal operating conditions, the fit between the bearing and the shaft is h7. Looser fit allowing lower speed is recommended when heavier load is applied.

2. TOLERANCE FOR BEARING UNITS

Table 2.1.1 Tolerances on inner rings of bearing with cylindrical bore Unit:0.001 mm

Nominal bore diameter d		Cylindrical bore						Radial run-out
		Bore diameter				Width		
Over (mm)	Incl. (mm)	dm Deviations		d Deviations		Bi Deviations		
		High	Low	High	Low	High	Low	(Max.)
10	18	+18	0	+22	-4	0	-120	12
18	30	+21	0	+25	-4	0	-120	15
30	50	+25	0	+30	-5	0	-120	18
50	80	+30	0	+36	-6	0	-150	22
80	120	+35	0	+42	-7	0	-200	28
120	150	+40	0	+48	-8	0	-250	35

Note: dm is defined as the arithmetical mean of the largest and the smallest diameter obtained by two-point measurements.

Table 2.1.2 Tolerances on inner rings of bearings with tapered bore Unit:0.001 mm

Nominal bore diameter d		Δd Deviations		Δd1- Δd	
Over (mm)	Incl. (mm)	High	Low	Max.	Min.
18	30	+33	0	+21	0
30	50	+39	0	+25	0
50	80	+46	0	+30	0
80	120	+54	0	+35	0
120	150	+63	0	+40	0

Note (1) The deviations from nominal taper are defined by the limits of Δd_1 (Δd_1 - Δd), where Δd is actual deviation of d from nominal diameter at the largest end of bore and Δd is actual deviation of d from bearing bore nominal diameter.

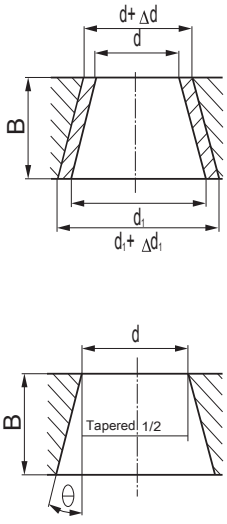
(2) d_1 is obtained by the following formula:

$d_1 = d + 0.083333\ B$

Where B is width of the bearing inner ring.

(3) The nominal taper angle = 2°23'9.4"

(4) Pleas refer to the Figs. 2.1.2



Figs. 2.1.2

Table 2.1.3 Tolerances on outer ring Unit: 0.001 mm

Nominal bore diameter D		Dm Deviations		Radial run-out
Over (mm)	Incl. (mm)	High	Low	(Max.)
40	50	0	-11	20
50	80	0	-13	25
80	120	0	-15	35
120	180	0	-18	40
180	250	0	-20	45

Table 2.1.4 Tolerance for distance "n" between the radial plane passing through center of outer ring and aside of inner ring

Unit: 0.001 mm

Nominal bore diameter d		n Deviations
Over (mm)	Incl. (mm)	
40	50	200
50	80	250
80	120	300
120	160	350

Please refer to Fig. 2.1.4

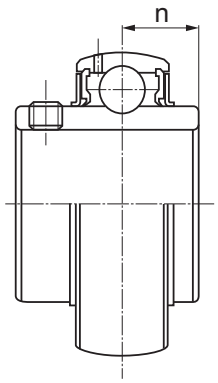


Fig. 2.1.4

Table 2.1.5 Chamfer dimensions

Nominal dimensions r (mm)	r	
	Max. (mm)	Min. (mm)
1.0	1.5	0.6
1.5	2.0	1.0
2.0	2.5	1.5
2.5	3.0	2.0
3.0	3.5	2.5
3.5	4.0	3.0
4.0	4.5	3.5
5.0	6.0	4.0

Please refer to Fig. 2.1.5

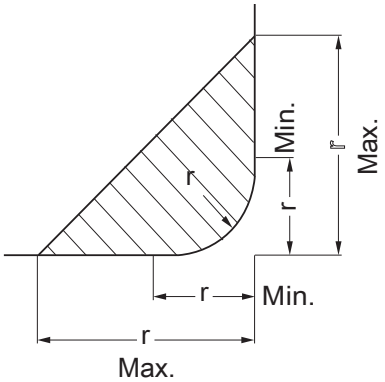


Fig. 2.1.5

2.2.1 Center height tolerances for pillow block type housings

Please refer to below Figs. 2.2.1 and Table 2.2.1

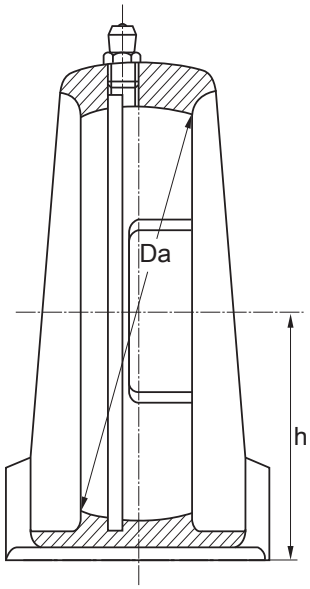


Fig. 2.2.1

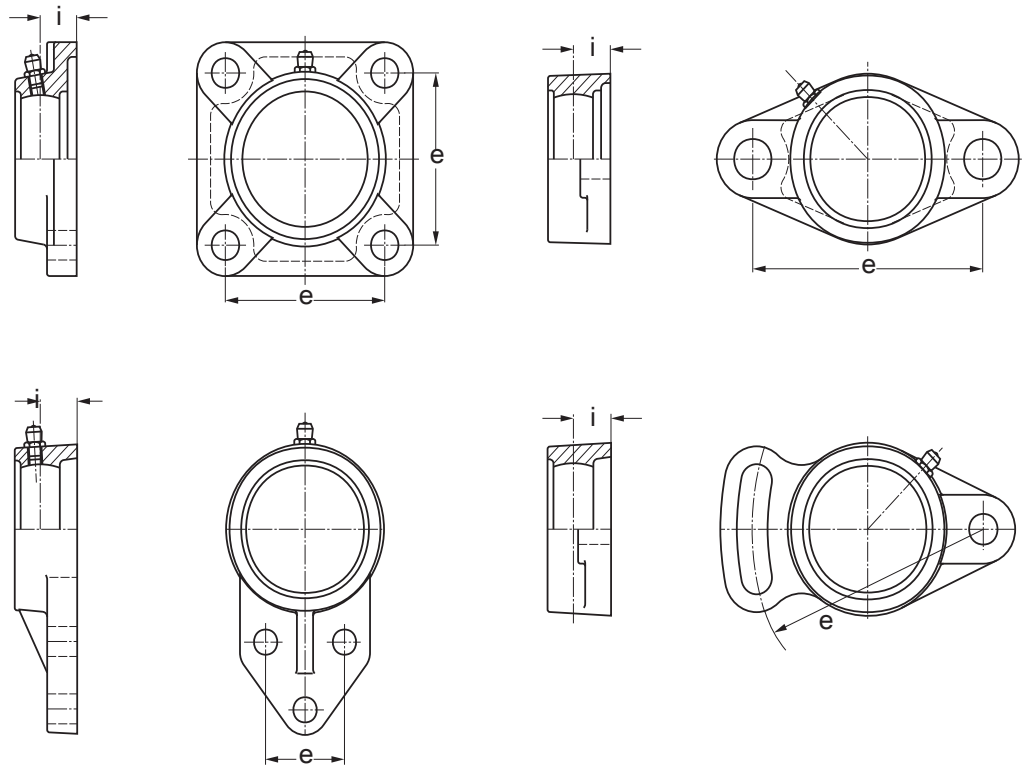
Table 2.2.1 Center height tolerances for pillow block type housings
(P, PA, PW, PH)

Unit: 0.001 mm

Housing No.						h Deviations
P 203			PA 203			
P 204			PA 204	PW 204	PH 204	
P 205	P X05	P 305	PA 205	PW 205	PH 205	
P 206	P X06	P 306	PA 206	PW 206	PH 206	150
P 207	P X07	P 307	PA 207		PH 207	
P 208	P X08	P 308	PA 208	PW 208	PH 208	
P 209	P X09	P 309	PA 209		PH 209	
P 210	P X10	P 310	PA 210		PH 210	
P 211	P X11	P 311	PA 211		PH 211	
P 212	P X12	P 312	PA 212		PA 212	
P 213	P X13	P 313	PA 213		PH 213	
P 214	P X14	P 314			PH 214	
P 215	P X15	P 315			PH 215	200
P 216	P X16	P 316			PH 216	
P 217						
P 218						

2.2.2 Tolerances for flanged type housings (F, FL, FA, FB, FC)

Please refer to below Figs. 2.2.2 (a), 2.2.2 (b) and Table 2.2.2 (a), 2.2.2 (b).



Figs. 2.2.2 (a)

Table 2.2.2 (a) Tolerances for flanged type housings (F, FL, FA, FB)

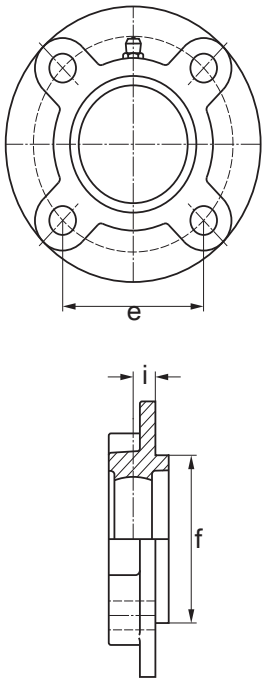
Unit: 0.001 mm

Housing number								e Deviations	i Deviations
F 204			FL 204			FA 204	FB 204	700	500
F 205	F 305	F X05	FL 205	FL 305	FL X05	FA 205	FB 205		
F 206	F 306	F X06	FL 206	FL 306	FL X06	FA 206	FB 206		
F 207	F 307	F X07	FL 207	FL 307	FL X07	FA 207	FB 207		
F 208	F 308	F X08	FL 208	FL 308	FL X08	FA 208	FB 208		
F 209	F 309	F X09	FL 209	FL 309	FL X09	FA 209	FB 209		
F 210	F 310	F X10	FL 210	FL 310	FL X10	FA 210	FB 210		
F 211	F 311	F X11	FL 211	FL 311		FA 211	FB 211	1000	800
F 212	F 312	F X12	FL 212	FL 312		FA 212	FB 212		
F 213	F 313	F X13	FL 213	FL 313		FA 213	FB 213		
F 214	F 314	F X14	FL 214	FL 314					
F 215	F 315	F X15	FL 215	FL 315					
F 216		F X16	FL 216						
F 217			FL 217						
F 218			FL 218						

Table 2.2.2 (b) Tolerance for flanged type housing (FC)

Unit: 0.001 mm

Housing number	f Deviations High	f Deviations Low	e Deviations	i Deviations	Radial run-out of machined pilot Max.
FC 204			700	500	200
FC 205	0	-46			
FC 206					
FC 207					
FC 208					
FC 209	0	-54			
FC 210					
FC 211			1000	800	300
FC 212					
FC 213					
FC 214					
FC 215	0	-63			
FC 216					
FC 217					
FC 218	0	-72			



Figs. 2.2.2 (b)

2.2.3 Tolerance for take-up type housing (T)

Unit: 0.001 mm

Housing No.	k Deviations High	k Deviations Low	e Deviations	Parallelism of guide Max.
T204	+200	0	0	500
~T210	0		-500	
T211	+300	0	0	600
~T217	0		-800	

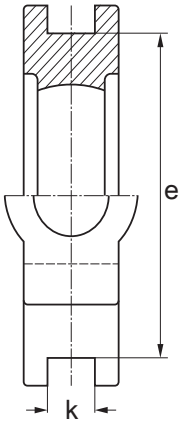


Fig. 2.2.3

Table 2.2.4 Tolerance on spherical inside diameter **Unit: 0.001 mm**

Nominal spherical inside diameter		Symbol H7				Symbol J7			
Da		Dam Deviations		Da Deviations		Dam Deviations		Da Deviations	
Over (mm)	Incl. (mm)	High	Low	High	Low	High	Low	High	Low
30	50	+25	0	+30	-5	+14	-11	+19	-16
50	80	+30	0	+36	-6	+18	-12	+24	-18
80	120	+35	0	+42	-7	+22	-13	+29	-20
120	180	+40	0	+48	-8	+26	-14	+34	-22
180	250	+46	0	+55	-9	+30	-16	+39	-25

Table 2.2.5 Machining tolerances

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
4	16	0.2
16	63	0.3
63	250	0.5

Table 2.2.6 Casting tolerances on length

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
Up	100	1.5
100	200	2.0
200	400	3.0
400	800	4.0

Table 2.2.7 Casting tolerances on thickness

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
Up	5	1.0
5	10	1.5
10	20	2.0
20	30	3.0
30	50	3.5

Table 2.2.8 One side machining tolerances

Nominal dimension			Dimensional Tolerance
Over (mm)		Incl. (mm)	(mm)
Up	~	5	1.0
5	~	100	1.5
100	~	200	2.0
200	~	400	3.0

3. RADIAL INTERNAL CLEARANCE OF BEARINGS

The radial internal clearance of the bearing for the unit is the same as the value of ISO 9628, the internal radial clearance for the Spherical Outside Surface Ball Bearing is usually greater than that for the same size of Deep Groove Ball Bearing. The clearance for the cylindrical bore bearing is shown in Table 3.1 while the clearance for the tapered bore bearing is shown in Table 3.2 .

Table 3.1 Radial internal clearance of cylindrical bore bearings

(with set-screws and eccentric locking collar) **Unit: 0.001mm**

Nominal bore diameter d		Clearance symbol			
Over	Incl.	Normal		C 3	
(mm)	(mm)	Min.	Max.	Min.	Max.
10	18	10	25	18	33
18	20	12	28	20	36
20	32	12	28	23	41
32	40	13	33	28	46
40	50	14	36	30	51
50	65	18	43	38	61
65	80	20	51	46	71
80	100	24	58	53	84

Table 3.2 Radial internal clearance of tapered bore bearings (with adapter sleeve)

Unit: 0.001mm

Nominal bore diameter d		Clearance symbol			
Over	Incl.	Normal		C 3	
(mm)	(mm)	Min.	Max.	Min.	Max.
10	18	18	33	25	45
18	20	20	36	28	48
20	32	23	41	30	53
32	40	28	46	40	64
40	50	30	51	45	73
50	65	38	61	55	90
65	80	46	71	65	105
80	100	53	84	75	120

4. BEARING SIZE SELECTION

4.1 The bearing size is usually selected according to the required life and reliability under a specific type of load charged on the Spherical Outside Surface Ball Bearing

The load applied to the bearing operating under static or slow oscillating and rotating(n<10r/min)condition is defined as static load, while the load applied to the bearing operating under a speedy rotating (n>10 r/min) condition is defined as dynamic load.

The load capacity of the bearing is expressed by the basic dynamic load rating which is shown in the Spherical Outside Surface Ball Bearing's table.

Under normal mounting, lubricating and maintaining conditions, the operating bearing will have fatigue flaking due to the repeating action of variable load charged on the contact area between the rings and rolling elements. Generally, the fatigue flaking is the cause of normal damage of rolling bearings. Therefore, the usual bearing life refers to the bearing fatigue life. The life of group of apparently identical bearings operating under a considerable dispersion. For this reason, the bearing life is closely connected with the damaging probability or the reliability requirement.

The radial rating load of ball bearing with 90% reliability and 500 hours minimum life is shown in Fig. 4.1 (Refer to page 18).

Life: The life of a rolling bearing is defined as the total number of revolution which the bearing is capable of enduring before the first evidence of fatigue flaking develops on any one rings or rolling elements.

Reliability: The reliability is the percentage of the bearings of a group of apparently identical bearings operating under identical conditions which can expect to attain or exceed a certain defined life. The reliability of individual bearing is the probability of the bearing to attain or exceed a defined life.

Basic rating life: For a group of apparently identical rolling bearings operating under identical conditions, the basic rating life is defined as the total number of revolution that 90% of the bearings can be expected to complete or exceed.

Basic Rating life

The fatigue rating life of Spherical Outside Surface Ball Bearing is calculated by the following formula:

$$L_{10} = \left(\frac{C}{P}\right)^3 \text{ or } \frac{C}{P} = L_{10}^{1/3}$$

Where L_{10} = basic rating life (10^6r)
P = basic dynamic load rating (N)
N = equivalent dynamic bearing load (N)

The basic dynamic load rating C is a hypothetical constant load with a fixed direction under which the bearing can attain a basic life of one million revolutions theoretically. For radial bearings , the load refers to the radial load.

The equivalent dynamic bearing load P is a constant load with a fixed direction under which the bearing life is identical to that of the bearing operating under actual load.

For a bearing operating with a constant rotation speed, the basic rating life can be expressed in terms of operating hours:

$$L_{10h}=\frac{10^6}{60n}\left(\frac{C}{P}\right)^3 \text{ or } L_{10h}=\frac{10^6}{60n}\ L_{10h}=\frac{16666}{n}\left(\frac{C}{P}\right)^3$$

Where: L_{10h} = basic rating life (h)
n = bearing operating speed of rotation (r/min)

For easier calculation, 500 hours as base of rating life is taken, and the speed factor f_n and the life factor f_h is introduced.

$$f_n=\left(\frac{331/3}{n}\right)^{1/3} \qquad f_h=\left(\frac{L_{10h}}{500}\right)^{1/3}$$

In this way, the formula is simplified to:

$$C=\frac{f_h}{f_n}P$$

The values of f_h and f_n can be found in Fig. 4.1 by referring to the operation speed n and the anticipated bearing service life L_{10h}. Then, with the radial load (or the equivalent dynamic bearing load), the basic dynamic load rating can be determined. By this way, the bearing size can be determined according to the basic dynamic load rating value in the Spherical Outside Surface Ball Bearing's table.
If the bearing operate under indeterminate loads and rotation speed, the following formula should be applied when calculating the bearing life:

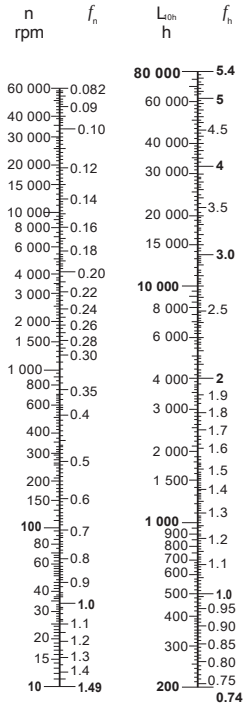


Fig. 4.1

$$Pm=\sqrt[3]{\frac{1}{N}\int_0^N P^3\,dN}$$

Where Pm = mean equivalent dynamic bearing load (N)
P = equivalent dynamic bearing load (N)
N = total revolution numbers within one load changing cycle (r)

4.2 Anticipated bearing service life

Where selecting a bearing, one should usually predetermine an appropriate service life according to the relevant machine type, operating condition and reliability requirement. Generally the anticipated bearing service life can be determined by referring to the maintenance period of a machine.

Calculating method of equivalent dynamic bearing load P
The basic equivalent dynamic bearing load is determined under a hypothetical condition. When calculating the bearing life, the actual load has to be converted to dynamic bearing load which is in conformity with the load condition determining the dynamic load rating. General equation for calculating the equivalent dynamic bearing load:

$P = XFr + YFa$

Where: P --- equivalent dynamic bearing load (N)
Fr --- actual radial load (N)
Fa --- actual axial load (N)
X --- radial factor
Y --- thrust factor

The values of X and Y are determined by the ratio between the applied axial load Fa and the basic static load rating Co. The axial load which the Spherical Outside Surface Ball Bearing can carry is determined by the mounting method of the bearing on the shaft.

For bearings of set-screw Locking type or eccentric Locking collar type, if flexible shafts are applied and the set-screws are tightened enough, the axial load Fa which the bearings can carry not surpass 20% of the radial load Fr.

For bearing of adapter sleeve Locking type, if the nut is properly tightened, the axial load Fa can be maximally 15% to 20% of the radial load.

The value of radial and thrust factors X and Y for Spherical Outside Surface Ball Bearings can be obtained from the following Table 4.3.1.

When twist load is applied to the bearing, the equivalent dynamic bearing load is calculated by the following equation:

Where: $Pm = fm \cdot P$

Pm --- equivalent dynamic bearing load when considering twist load

fm --- twist load factor, which is defined as follows:

when the twist load is small : fm=1.5

when the twist load is big : fm=2

4.3 Example of bearing size selection

When shocking load is applied to the bearing, the equivalent dynamic bearing load can be calculated by the following equation:

$Pd = fd \cdot P$

Where: Pd --- equivalent dynamic bearing load when considerating shocking load

fd --- shocking load factor, which is defined as follows:

when no shocking load or mirror shocking load is applied: fd = 1 - 1.2

when adequate shocking load is applied: fd = 1.2 - 1.8

Table 4.3.1 Radial and thrust factors X and Y for Spherical Outside Surface Ball Bearings

	Clearance for normal					Clearance for C 3				
$\frac{Fa}{Ca}$	$\frac{Fa}{Fr} \leqslant e$		$\frac{Fa}{Fr} > e$		e	$\frac{Fa}{Fr} \leqslant e$		$\frac{Fa}{Fr} > e$		e
	X	Y	X	Y		X	Y	X	Y	
0.025	1	0	0.56	2.0	0.22	1	0	0.46	1.74	0.3
0.04	1	0	0.56	1.8	0.24	1	0	0.46	1.61	0.33
0.07	1	0	0.56	1.6	0.27	1	0	0.46	1.46	0.36
0.13	1	0	0.56	1.4	0.31	1	0	0.46	1.30	0.41
0.25	1	0	0.56	1.2	0.37	1	0	0.46	1.14	0.47
0.5	1	0	0.56	1.0	0.44	1	0	0.46	1.00	0.54

How to select the size of bearing

One Spherical Outside Surface Ball Bearings is to operate at a rotation speed of 1000 r/min under only a radial load of Fr = 3000 N , with a basic rating life of at least 20,000 hours.

Select the bearing size.

From the required rotation speed it can be found that:

f_n = 0.322 (Fig. 4.1 shows about 0.32, refer to page 18)

From the required basic rating life (anticipated service life), it can be found that:

f_h = 3.42 (Fig. 4.1 shows about 3.4, refer to page 18)

Under only radial load, i.e.

P = Fr = 3000 N

Therefore,

$$C = \frac{f_h}{f_n} P = \frac{3.42}{0.322} X\ 3000 = 31{,}863(\ N\ )$$

A simplified way to calculate the bearing life can be applied by using Fig. 4.3: By connecting n and the required basic rating life L_{10h} with a straight line, it can be found that C/P value is 10.6 . As is known, P = Fr = 3000 N, thus the required basic dynamic load rating is:

C = 3000 10.6 = 31,800(N)

In this way, we can select the Spherical Outside Surface Ball Bearings inside this catalogue(Refer to pages 116-127).

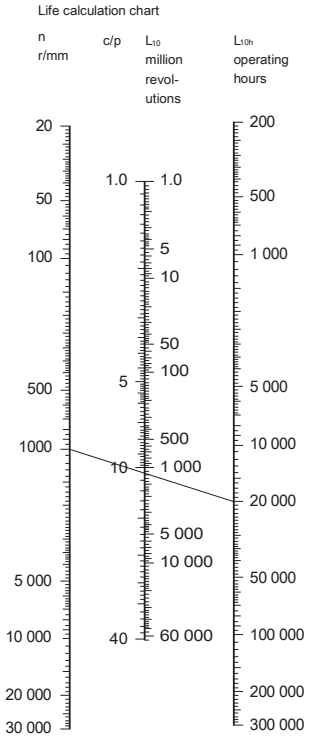


Fig. 4.3

4.4 Adjusted rating life equation

The basic rating life L calculated with the bearing life calculation formula can be applied to calculate the rating life of bearing made of ordinary bearing steel (i.e. bearing life with reliability of 90%).

Due to more and more of machinery products demanding higher reliability and better quality steel (ISO 281/1-1977), an adjusted rating life calculation equation is suggested, i. e.

Ln = a1·a2·a3 ·L

For Spherical Outside Surface Ball Bearing:

Ln = a1·a2·a3 ·(C/P)

Where Ln---under specified material and lubricating conditions, bearing life with (100-n)% no breaking probability (i. e. reliability).

a1 ---- life adjustment factor for reliability (Table 4.4.1)
a2 ---- life adjustment factor materials (Table 4.4.2)
a3 ---- life adjustment factor for operating conditions (Table 4.4.3)

Table 4.4.1 Life adjustment factor for reliability a1

Reliability%	90	95	96	97	98	99
Ln	L10	L5	L4	L3	L2	L1
a1	1	0.62	0.53	0.44	0.33	0.21

Table 4.4.2 Life adjustment factor for materials a2

Normal chromium bearing steel		a2 = 1
Special smelted bearing steel	--- Vacuum degassed bearing steel	a2 = 3
	--- Vacuum resmelted bearing steel	a2 = 5
When material hardness lowered by high frequency tempering		a2 < 1

Table 4.4.3 Life adjustment factor for operating conditions a3

When under normal operating conditions: (1) Properly mounted, (2) Sufficiently lubricated, (3) Without outside matters intrusion.	a3 = 1
When under operating temperature, the Spherical Outside Surface Ball Bearings lubricating grease viscosity lower than 13 mm^2/s	a3 < 1

5. SELECTION OF SHAFT

The shaft on which bearing units are mounted shall be free from bend and flexure.

For the units with cylindrical bore (with set-screws or eccentric locking collar) clearance fit is usually adopted for mounting the units on the shaft, and shaft tolerances in Table 5.1 are recommended for such loose fit, but for high speed or highly accurate operation or such application which is accompanied by heavy shock loads, interference fit is to be adopted. Table 5.2 shows recommended shaft tolerances for interference fit, when bearing units with eccentric locking collar are mounted on the shaft with interference fit, the eccentric locking collar may be omitted.

Tapered bore bearings permit wider tolerances of the shaft since they are locked to the shaft by means of adapted sleeves.

Recommended shaft tolerances for tapered bore bearings listed in Table 5.3.

Table 5.1 Shaft tolerances for clearance fit for bearing with cylindrical bore

Shaft diameter		Deviation of tolerances in shaft							
		For lower speed		For medium speed		For rather high speed		For high speed	
Over	Incl.	h9		h8		h7		J6	
mm	mm	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
10	18	0	-43	0	-27	0	-18	+8	-3
18	30	0	-52	0	-33	0	-21	+9	-4
30	50	0	-62	0	-39	0	-25	+11	-5
50	80	0	-74	0	-46	0	-30	+12	-7
80	120	0	-87	0	-54	0	-35	+13	-9
120	180	0	-100	0	-63	0	-40	+14	-11

Table 5.2 Shaft tolerance for interference fit for bearing with cylindrical bore

Shaft diameter		Deviation of tolerances in shaft							
		Higher speed		Rather heavy load		Highest load		Heavy load	
Over	Incl.	m6		m7		m6		m7	
mm	mm	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
10	18	+18	+7	+25	+7	+23	+12	+30	+12
18	30	+21	+8	+29	+8	+28	+15	+36	+15
30	50	+25	+9	+34	+9	+33	+17	+42	+17
50	80	+30	+11	+41	+11	+39	+20	+50	+20
80	120	+35	+13	+48	+13	+45	+23	+58	+23
120	180	+40	+15	+55	+15	+52	+27	+67	+27

Table 5.3 Shaft tolerances for bearing with tapered bore

Shaft diameter		Deviation of tolerances in shaft			
		For shot shaft		For shot shaft	
Over	Incl.	h9		h10	
mm	mm	Max.	Min.	Max.	Min.
10	18	0	-43	0	-70
18	30	0	-52	0	-84
30	50	0	-62	0	-100
50	80	0	-74	0	-120
80	120	0	-87	0	-140
120	180	0	-100	0	-160

6. MOUNTING OF BEARING UNITS ON SHAFT

The bearing units can be easily installed in principle at any place. However, in order to have a long service life, it is desirable that the mounting base if flat and rigid.

In case of either the vibration is caused to the bearing, the alternating movement takes place, the load applied to the bearing is large, or the shaft rotation speed is rapid, it is desired to provide with the filed seat or concave section at the part where the set-screws contact with the shaft. If large thrust load is charged, it is recommended that joggling tightened with nuts be used to install the bearing most effectively to the shaft: As shown in Fig 6.1.

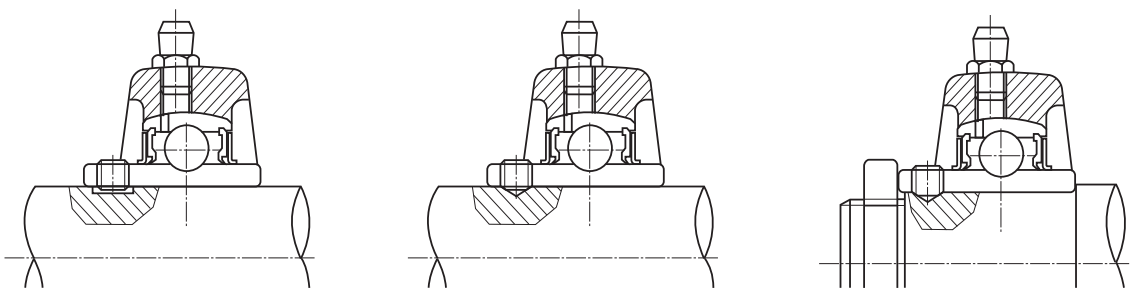


Fig 6.1

6.1 Bearings units with adapter sleeve

Bearing unit with adapter sleeve permits wider shaft tolerance and can be used in applications where vibrations and shocks are heavy.

Mounting processes of these units are as follows:
First, the sleeve is installed to an arbitrary position. After the shark proof washer is inserted, the nut is tightened. The proper nut tightening condition can be obtained if it is tightened enough by hand and then rotated by 2/5 to 3/5 revolution with a spanner.

After tightening the nut, bend the shark proof washer within the slot. Otherwise, the nut may be loosened and creep may be caused between the shaft and sleeve. It is necessary the nut can not be tightened too much.

6.2 Bearings units with eccentric locking collar

The eccentric part of the collar mates with the inner ring of the bearing which is made eccentric with the collar. When locked to the shaft by hand in direction of the shaft rotation, the eccentric locking collar tightens automatically to the shaft by force of working radial load. Then, lock the set-screws provided on the collar to fix the eccentric collar to the shaft. At the shaft rotation force or load is not charged on the set-screws directly, it will not loosen during operation.

7. BEARING UNITS WITH SET-SCREWS

There are two set-screws located at two places on one side of the wide inner ring 120 apart with which the bearing units can be mounted to the shaft. When mounting the bearing to the shaft, the torque shown in the following Table 7.1 is recommended to tighten the set-screws to shaft.

Table 7.1 Proper tightening torque of set-screws

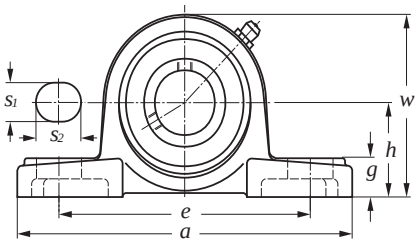
Set-screws tap (mm)	Set-screws tap (inch)	Bearing No.	Tightening torque (N.m)	Tightening torque (lbf.in)
M 5X0.8	No.10#-32 UNF	SB 201 D1~SB 203 D1,	3.9	34
M 6X0.75	1/4-28 UNF	SB 204 D1~SB 206 D1, UC 201 D1~UC 206 D1 SA 201 D1~SA 205 D1, UEL 201 D1~UEL 205 D1 UC X05 D1, UC 305 D1~UC 306 D1	5.8	52
M 8X1	5/16-24 UNF	SB 207 D1~SB 208 D1, UC 207 D1~UC 209 D1 SA 206 D1~SA 207 D1, UEL 206 D1~UEL 207 D1 UC X06 D1~UC X08 D1, UC 307 D1	9.8	86
M 10X1.25	3/8-24 UNF	UC 210 D1~UC 212 D1, SA 208 D1~SA 211 D1 UEL 208 D1~UEL 215 D1, UC X09 D1~UC X11 D1 UC 308 D1~UC 309 D1	24.5	216
M 12X1.5	1/2-20 UNF	UC 213 D1~UC 218 D1, UC X12 D1~UC X16 D1 UC 310 D1~UC 314 D1	34.3	303
M 14X1.5	9/16-18 UNF	UC 315 D1~UC 316 D1	34.3	303

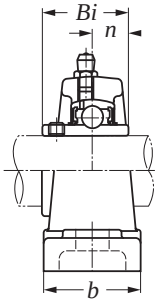
8. THE MATERIAL FOR CAST IRON HOUSING

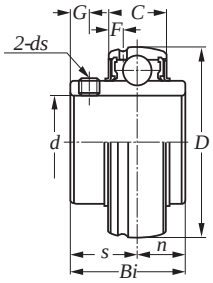
The material of cast iron housing under ISO / DIS GG20, the mechanical properties please refer to Tabel 8.1.

Table 8.1 The mechanical properties of cast iron housing

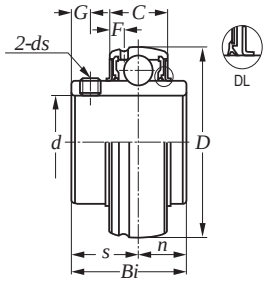
Number	Major wall thickness of casting piece	Strain stress σ_b	Hardness
	(mm)	(N/mm^2)	HB
ISO / DIS GG20	2.5 - 10	220	
U.S.A Grade 35	>10 - 20	195	170 - 220
JIS FC20	>20 - 30	170	
	>30 - 50	160	





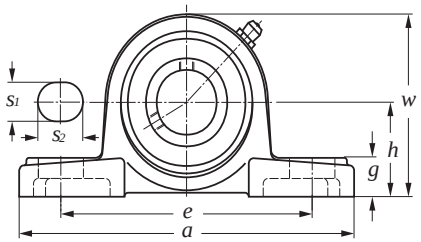


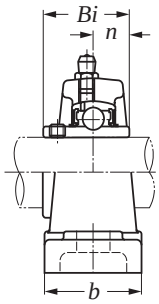
(Singel Lips)

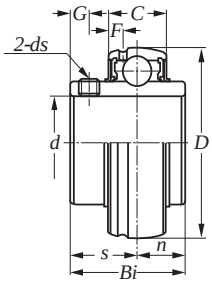


(Double Lips DL)

Shaft dia. mm / inch	Unit number	Nominal dimensions mm / Inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12 1/2	UCP 201 UCP 201-8	30.2 1-3/16	127 5	96 3-25/32	37 1-29/64	13 3/64	19 3 /4	14 35/64	60.7 2-25/64	31.0 1.2205	12.7 0.5000	M 10 3/8	UC 201 UC 201-8	P 203	0.68 0.68
15 5/8	UCP 202 UCP 202-10	30.2 1-3/16	127 5	96 3-25/32	37 1-29/64	13 3/64	19 3 /4	14 35/64	60.7 2-25/64	31.0 1.2205	12.7 0.5000	M 10 3/8	UC 202 UC 202-10	P 203	0.67 0.67
17 11/16	UCP 203 UCP 203-11	30.2 1-3/16	127 5	96 3-25/32	37 1-29/64	13 3/64	19 3 /4	14 35/64	60.7 2-25/64	31.0 1.2205	12.7 0.5000	M 10 3/8	UC 203 UC 203-11	P 203	0.66 0.66
20 3/4	UCP 204 UCP 204-12	33.3 1-5/16	127 5	96 3-25/32	37 1-29/64	13 3/64	16 5/8	14 35/64	65.0 2-9/16	31.0 1.2205	12.7 0.5000	M 10 3/8	UC 204 UC 204-12	P 204	0.66 0.67
25 1	UCP 205 UCP 205-16	36.5 1-7/16	140 5-3/64	105 4-9/64	38 1-1/2	13 3/64	19 3/4	15 19/32	71.0 2-51/64	34.1 1.3425	14.3 0.5630	M 10 3/8	UC 205 UC 205-16	P 205	0.77 0.76
30 1-1/8 1-1/4	UCP 206 UCP 206-18 UCP 206-20	42.9 1-11/16	160 6-19/64	121 4-49/64	44 1-47/64	14 35/64	19 3/4	16 5/8	83.0 3-17/64	38.1 1.5000	15.9 0.6260	M 12 7/ 16	UC 206 UC 206-18 UC 206-20	P 206	1.22 1.24 1.20
35 1-1/4 1-3/8	UCP 207 UCP 207-20 UCP 207-22	47.6 1-7/8	167 6-37/64	126 4-31/32	48 1-57/64	15 19/32	19 3/4	17 43/64	93.0 3-43/64	42.9 1.6890	17.5 0.6890	M 12 7/ 16	UC 207 UC 207-20 UC 207-22	P 207	1.55 1.61 1.56
40 1-1/2	UCP 208 UCP 208-24	49.2 1-15/16	180 7-3/32	136 5-23/64	52 2-3/64	15 19/32	21 53/64	18 45/64	100.0 3-15/16	49.2 1.9370	19.0 0.7480	M 12 7/ 16	UC 208 UC 208-24	P 208	1.88 1.92
45 1-5/8 1-3/4	UCP 209 UCP 209-26 UCP 209-28	54 2-1/8	190 7-31/64	146 5-3/4	54 2-1/8	15 19/32	21 53/64	20 25/32	108.0 4-1/4	49.2 1.9370	19.0 0.7480	M 12 7/ 16	UC 209 UC 209-26 UC 209-28	P 209	2.19 2.29 2.21
50 1-7/8	UCP 210 UCP 210-30	57.2 2-1/4	204 8-1/64	159 6-17/64	57 2-15/64	19 3/4	22 55/64	21 53/64	114.0 4-31/64	51.6 2.0315	19.0 0.7480	M 16 5/8	UC 210 UC 210-30	P 210	2.73 2.80
55 2	UCP 211 UCP 211-32	63.5 2-1/2	217 8-35/64	172 6-49/64	60 2-23/64	19 3/4	22 55/64	22 55/64	126 4-61/64	55.6 2.1890	22.2 0.8740	M 16 5/8	UC 211 UC 211-32	P 211	3.38 3.53
60 2-1/4	UCP 212 UCP 212-36	69.9 2-3/4	238 9-3/8	186 7-21/64	66 2-39/64	19 3/4	25 63/64	24 15/16	138 5-7/16	65.1 2.5630	25.4 1.0000	M 16 5/8	UC 212 UC 212-36	P 212	4.75 4.89
65 2-1/2	UCP 213 UCP 213-40	76.2 3	262 10-5/16	203 7-63/64	70 2-3/4	23 29/32	29 1-9/64	26 1-1/64	151 5-61/64	65.1 2.5630	25.4 1.0000	M 20 3/4	UC 213 UC 213-40	P 213	5.81 5.89
70 2-3/4	UCP 214 UCP 214-44	79.4 3-1/8	266 10-15/32	210 8-17/64	72 2-53/64	23 29/32	29 1-9/64	27 1-1/16	155 6-7/64	74.6 2.9370	30.2 1.1890	M 20 3/4	UC 214 UC 214-44	P 214	6.50 6.51







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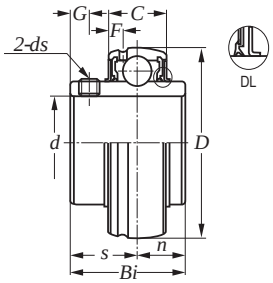
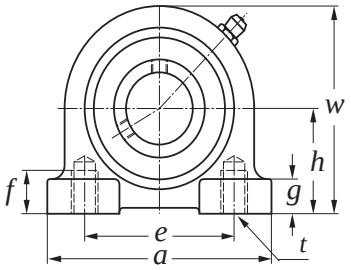
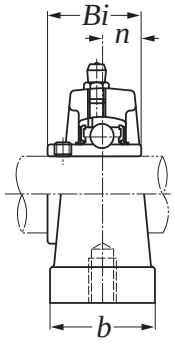
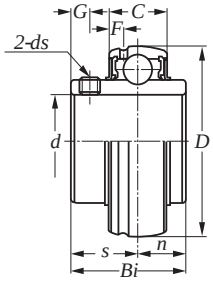


(Double Lips DL)

Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UCP 215	82.6	274	217	74	25	29	28	161.6	77.8	33.3	M 20	UC 215	P 215	7.11
3	UCP 215-48	3-1/4	10-25/32	8-35/64	2-29/32	63/64	1-9/64	1-7/64	6-23/64	3.0630	1.3110	3/4	UC 215-48		7.03
80	UCP 216	88.9	292	232	78	25	30	30	174	82.6	33.3	M 20	UC 216	P 216	8.69
3-1/8	UCP 216-50	3-1/2	11-1/2	9-9/64	3-5/64	63/64	1-3/16	1-3/16	6-27/32	3.2520	1.3110	3/4	UC 216-50		8.74
85	UCP 217	95.2	310	247	83	25	30	32	186	85.7	34.1	M 20	UC 217	P 217	10.63
3-1/4	UCP 217-52	3-3/4	12-13/64	9-23/32	3-17/64	63/64	1-3/16	1-17/64	7-21/64	3.3740	1.3425	3/4	UC 217-52		10.85
90	UCP 218	101.6	326	262	88	27	30	33	198	96.0	39.7	M 22	UC 218	P 218	12.95
3-1/2	UCP 218-56	4	12-53/64	10-5/16	3-15/32	1-1/16	1-3/16	1-19/64	7-51/64	3.7800	1.5630	7/8	UC 218-56		13.06







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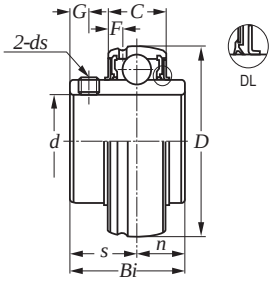
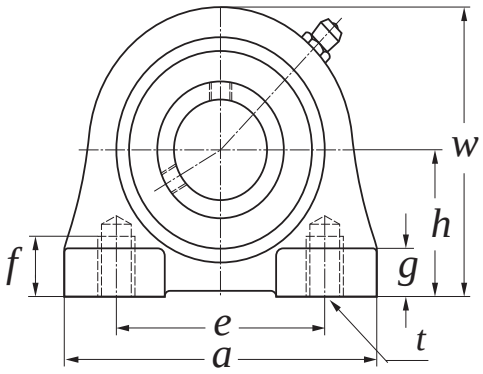
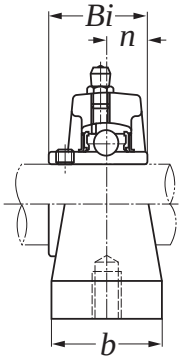
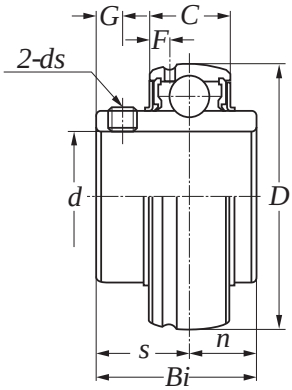


(Double Lips DL)

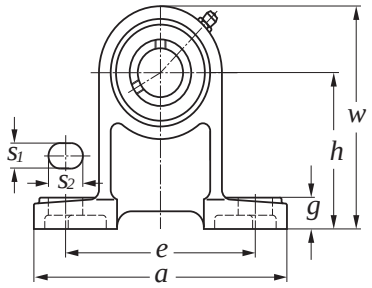
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCPA 201	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 201	PA 204	0.57
1/2	UCPA 201-8	1-3/16	2-63/64	2-1/16	1-37/64	7/16	2-7/16	3/64	3/8	1.2205	0.5000	3/8	UC 201-8		0.57
15	UCPA 202	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 202	PA 204	0.56
5/8	UCPA 202-10	1-3/16	2-63/64	2-1/16	1-37/64	7/16	2-7/16	3/64	3/8	1.2205	0.5000	3/8	UC 202-10		0.56
17	UCPA 203	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 203	PA 204	0.55
11/16	UCPA 203-11	1-3/16	2-63/64	2-1/16	1-37/64	7/16	2-7/16	3/64	3/8	1.2205	0.5000	3/8	UC 203-11		0.55
20	UCPA 204	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 204	PA 204	0.53
3/4	UCPA 204-12	1-3/16	2-63/64	2-1/16	1-37/64	7/16	2-7/16	3/64	3/8	1.2205	0.5000	3/8	UC 204-12		0.54
25	UCPA 205	36.5	84	56	38	12	72	15	M 10	34.1	14.3	M 10	UC 205	PA 205	0.71
1	UCPA 205-16	1-7/16	3-5/16	2-13/64	1-1/2	15/32	2-53/64	19/32	3/8	1.3425	0.5630	3/8	UC 205-16		0.70
30	UCPA 206	42.9	94	66	48	13	84	18	M 14	38.1	15.9	M 14	UC 206	PA 206	1.07
1-1/8	UCPA 206-18	1-11/16	3-45/64	2-19/32	1-57/64	3/64	3-5/16	45/64	1/2	1.5000	0.6260	1/2	UC 206-18		1.09
1-1/4	UCPA 206-20												UC 206-20		1.05
35	UCPA 207	47.6	110	80	48	13	95	20	M 14	42.9	17.5	M 14	UC 207	PA 207	1.49
1-1/4	UCPA 207-20	1-7/8	4-21/64	3-5/32	1-57/64	3/64	3-47/64	25/32	1/2	1.6890	0.6890	1/2	UC 207-20		1.55
1-3/8	UCPA 207-22												UC 207-22		1.50
40	UCPA 208	49.2	116	84	54	13	100	20	M 14	49.2	19.0	M 14	UC 208	PA 208	1.75
1-1/2	UCPA 208-24	1-15/16	4-9/16	3-5/16	2-1/8	3/64	3-15/16	25/32	1/2	1.9370	0.7480	1/2	UC 208-24		1.79
45	UCPA 209	54.2	120	90	60	13	108	25	M 14	49.2	19.0	M 14	UC 209	PA 209	2.17
1-5/8	UCPA 209-26	2-9/64	4-23/32	3-35/64	2-23/64	3/64	4-1/4	63/64	1/2	1.9370	0.7480	1/2	UC 209-26		2.27
1-3/4	UCPA 209-28												UC 209-28		2.19
50	UCPA 210	57.2	130	94	60	14	116	25	M 16	51.6	19.0	M 16	UC 210	PA 210	2.53
1-7/8	UCPA 210-30	2-1/4	5-1/8	3-45/64	2-23/64	35/64	4-9/16	63/64	5/8	2.0315	0.7480	5/8	UC 210-30		2.60
55	UCPA 211	63.5	140	104	66	14	125	25	M 16	55.6	22.2	M 16	UC 211	PA 211	3.17
2	UCPA 211-32	2-1/2	5-3/64	4-3/32	2-19/32	35/64	4-59/64	63/64	5/8	2.1890	0.8740	5/8	UC 211-32		3.32
60	UCPA 212	69.9	150	114	68	15	138	25	M 16	65.1	25.4	M 16	UC 212	PA 212	4.17
2-1/4	UCPA 212-36	2-3/4	5-29/32	4-31/64	2-43/64	19/32	5-7/16	63/64	5/8	2.5630	1.0000	5/8	UC 212-36		4.31
65	UCPA 213	76.2	160	124	70	15	150	25	M 16	65.1	25.4	M 16	UC 213	PA 213	4.96
2-1/2	UCPA 213-40	3	6-19/64	4-7/8	2-3/4	19/32	5-29/32	63/64	5/8	2.5630	1.0000	5/8	UC 213-40		5.04

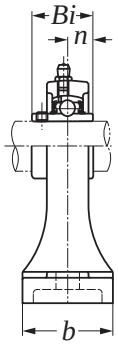


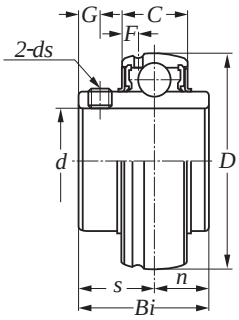




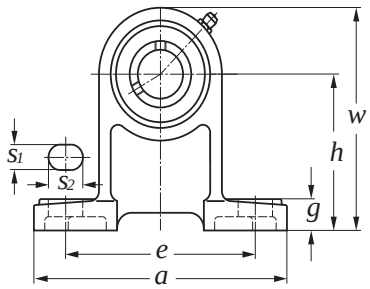
Shaft dia. mm	Unit number	Nominal dimensions mm										Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	*g*	*w*	*f*	*t*	*Bi*	*n*				
20	UCPW 204	33.3	73.0	50.8	38.0	12	65.0	13	M8	31.0	12.7	M8	UC 204	PW 204	0.53
25	UCPW 205	36.5	76.2	50.8	38.0	12	71.4	13	M10	34.1	14.3	M10	UC 205	PW 205	0.71
30	UCPW 206	42.9	101.6	76.2	38.0	15	85.7	16	M10	38.1	15.9	M10	UC 206	PW 206	1.07
35	UCPW 207	47.6	108.0	82.5	47.6	16	95.2	19	M10	42.9	17.5	M10	UC 207	PW 207	1.48
40	UCPW 208	49.2	117.5	88.9	47.6	16	100.0	19	M12	49.2	19.0	M12	UC 208	PW 208	1.75
50	UCPW 210	57.2	139.7	101.6	50.8	18	117.5	25	M16	51.6	19.0	M16	UC 210	PW 210	2.48

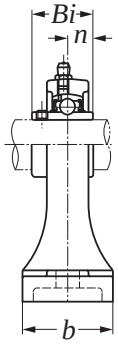


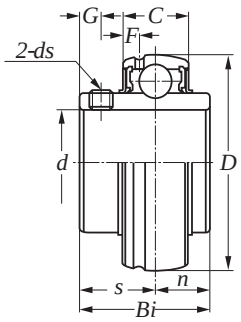




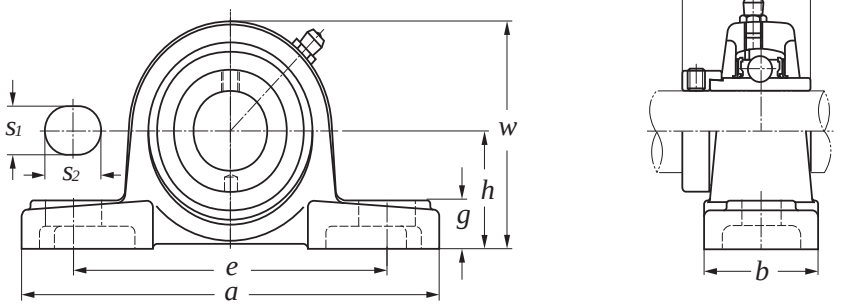
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCPH 201	70	127	95	40	12	16	13	101	31.0	12.7	M 10	UC 201	PH 204	0.81
1/2	UCPH 201-8	2-3/4	5	3-47/64	1-37/64	15/32	5/8	3/64	3-31/32	1.2205	0.5000	3/8	UC 201-8		0.81
15	UCPH 202	70	127	95	40	12	16	13	101	31.0	12.7	M 10	UC 202	PH 204	0.80
5/8	UCPH 202-10	2-3/4	5	3-47/64	1-37/64	15/32	5/8	3/64	3-31/32	1.2205	0.5000	3/8	UC 202-10		0.80
17	UCPH 203	70	127	95	40	12	16	13	101	31.0	12.7	M 10	UC 203	PH 204	0.79
11/16	UCPH 203-11	2-3/4	5	3-47/64	1-37/64	15/32	5/8	3/64	3-31/32	1.2205	0.5000	3/8	UC 203-11		0.79
20	UCPH 204	70	127	95	40	12	16	13	101	31.0	12.7	M 10	UC 204	PH 204	0.77
3/4	UCPH 204-12	2-3/4	5	3-47/64	1-37/64	15/32	5/8	3/64	3-31/32	1.2205	0.5000	3/8	UC 204-12		0.78
25	UCPH 205	80	140	105	50	13	19	16	114	34.1	14.3	M 10	UC 205	PH 205	1.01
1	UCPH 205-16	3-5/32	5-3/64	4-9/64	1-31/32	3/64	3/4	5/8	4-31/64	1.3425	0.5630	3/8	UC 205-16		1.00
30	UCPH 206	90	165	121	50	17	21	18	130	38.1	15.9	M 14	UC 206	PH 206	1.56
1-1/8	UCPH 206-18	3-35/64	6-1/2	4-49/64	1-31/32	43/64	53/64	45/64	5-1/8	1.5000	0.6260	1/2	UC 206-18		1.58
1-1/4	UCPH 206-20												UC 206-20		1.54
35	UCPH 207	95	167	127	60	17	21	19	140	42.9	17.5	M 14	UC 207	PH 207	1.88
1-1/4	UCPH 207-20	3-47/64	6-37/64	5	2-23/64	43/64	53/64	3/4	5-3/64	1.6890	0.6890	1/2	UC 207-20		1.94
1-3/8	UCPH 207-22												UC 207-22		1.89
40	UCPH 208	100	184	137	66	17	21	20	150	49.2	19.0	M 14	UC 208	PH 208	2.44
1-1/2	UCPH 208-24	3-15/16	7-1/4	5-25/64	2-19/32	43/64	53/64	25/32	5-29/32	1.9370	0.7480	1/2	UC 208-24		2.48
45	UCPH 209	105	190	146	70	17	21	20	158	49.2	19.0	M 14	UC 209	PH 209	2.72
1-5/8	UCPH 209-26	4-9/64	7-31/64	5-3/4	2-3/4	43/64	53/64	25/32	6-7/32	1.9370	0.7480	1/2	UC 209-26		2.82
1-3/4	UCPH 209-28												UC 209-28		2.74
50	UCPH 210	110	204	159	70	19	22	22	165	51.6	19.0	M 16	UC 210	PH 210	3.08
1-7/8	UCPH 210-30	4-21/64	8-1/64	6-17/64	2-3/4	3/4	55/64	55/64	6-1/2	2.0315	0.7480	5/8	UC 210-30		3.15
55	UCPH 211	120	217	171	75	19	22	23	181	55.6	22.2	M 16	UC 211	PH 211	4.05
2	UCPH 211-32	4-23/32	8-35/64	6-47/64	2-61/64	3/4	55/64	29/32	7-1/8	2.1890	0.8740	5/8	UC 211-32		4.20
60	UCPH 212	130	236	186	80	19	22	24	197	65.1	25.4	M 16	UC 212	PH 212	4.78
2-1/4	UCPH 212-36	5-1/8	9-19/64	7-21/64	3-5/32	3/4	55/64	15/16	7-3/4	2.5630	1.0000	5/8	UC 212-36		4.92
65	UCPH 213	140	258	203	85	23	28	26	213	65.1	25.4	M 20	UC 213	PH 213	5.93
2-1/2	UCPH 213-40	5-3/64	10-5/32	7-63/64	3-11/32	29/32	1-7/64	1-1/64	8-25/64	2.563	1.0000	3/4	UC 213-40		6.01
70	UCPH 214	150	266	210	90	23	28	27	227	74.6	30.2	M 20	UC 214	PH 214	6.99
2-3/4	UCPH 214-44	5-29/32	10-15/32	8-17/64	3-35/64	29/32	1-7/64	1-1/16	8-15/16	2.9370	1.1890	3/4	UC 214-44		7.00



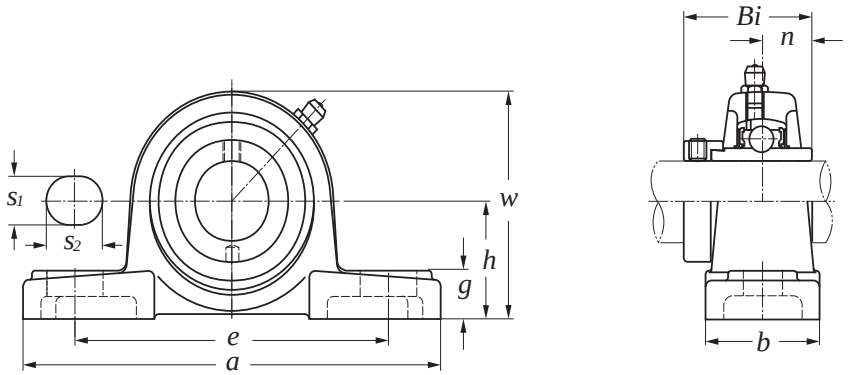




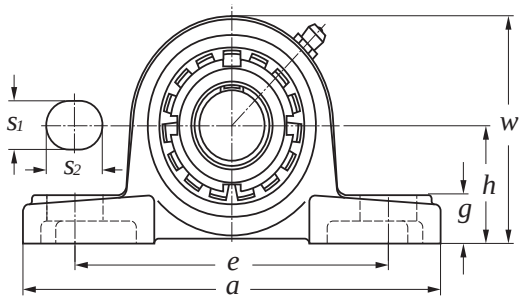
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UCPH 215	160	274	217	95	23	28	28	240	77.8	33.3	M 20	UC 215	PH 215	7.84
3	UCPH 215-48	6-19/64	10-25/32	8-35/64	3-47/64	29/32	1-7/64	1-7/64	9-29/64	3.0630	1.3110	3/4	UC 215-48		7.76
80	UCPH 216	170	290	232	100	24	28	30	256	82.6	33.3	M 20	UC 216	PH 216	9.13
3-1/8	UCPH 216-50	6-11/16	11-27/64	9-9/64	3-15/16	15/16	1-7/64	1-3/16	10-5/64	3.252	1.3110	3/4	UC 216-50		9.18

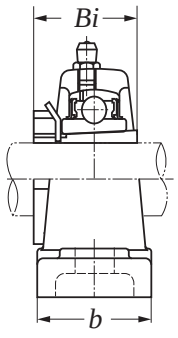


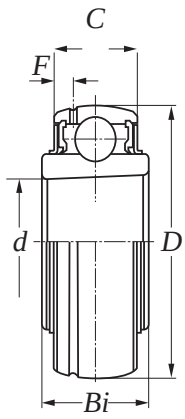
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch										Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	s_1	s_2	*g*	*w*	*Bi*	*n*				
12	UELP 201	30.2	127	96	37	13	19	14	60.7	43.5	17.0	M 10	UEL 201	P 203	0.74
1/2	UELP 201-8	1-3/16	5	3-25/32	1-29/64	3/64	3 /4	35/64	2-25/64	1.7126	0.6693	3/8	UEL 201-8		0.74
15	UELP 202	30.2	127	96	37	13	19	14	60.7	43.5	17.0	M 10	UEL 202	P 203	0.72
5/8	UELP 202-10	1-3/16	5	3-25/32	1-29/64	3/64	3 /4	35/64	2-25/64	1.7126	0.6693	3/8	UEL 202-10		0.72
17	UELP 203	30.2	127	96	37	13	19	14	60.7	43.5	17.0	M 10	UEL 203	P 203	0.71
11/16	UELP 203-11	1-3/16	5	3-25/32	1-29/64	3/64	3 /4	35/64	2-25/64	1.7126	0.6693	3/8	UEL 203-11		0.71
20	UELP 204	33.3	127	96	37	13	16	14	65.0	43.5	17.0	M 10	UEL 204	P 204	0.71
3/4	UELP 204-12	1-5/16	5	3-25/32	1-29/64	3/64	5/8	35/64	2-9/16	1.7126	0.6693	3/8	UEL 204-12		0.72
25	UELP 205	36.5	140	105	38	13	19	15	71.0	44.3	17.4	M 10	UEL 205	P 205	0.81
1	UELP 205-16	1-7/16	5-3/64	4-9/64	1-1/2	3/64	3/4	19/32	2-51/64	1.7441	0.6850	3/8	UEL 205-16		0.80
30	UELP 206	42.9	160	121	44	14	19	16	83.0	48.3	18.2	M 12	UEL 206	P 206	1.31
1-1/8	UELP 206-18	1-11/16	6-19/64	4-49/64	1-47/64	35/64	3/4	5/8	3-17/64	1.9016	0.7165	7/16	UEL 206-18		1.33
1-1/4	UELP 206-20												UEL 206-20		1.28
35	UELP 207	47.6	167	126	48	15	19	17	93.0	51.1	18.8	M 12	UEL 207	P 207	1.68
1-1/4	UELP 207-20	1-7/8	6-37/64	4-31/32	1-57/64	19/32	3/4	43/64	3-43/64	2.0118	0.7402	7/16	UEL 207-20		1.76
1-3/8	UELP 207-22												UEL 207-22		1.69
40	UELP 208	49.2	180	136	52	15	21	18	100.0	56.3	21.4	M 12	UEL 208	P 208	2.02
1-1/2	UELP 208-24	1-15/16	7-3/32	5-23/64	2-3/64	19/32	53/64	45/64	3-15/16	2.2165	0.8425	7/16	UEL 208-24		2.07
45	UELP 209	54.0	190	146	54	15	21	20	108.0	56.3	21.4	M 12	UEL 209	P 209	2.36
1-5/8	UELP 209-26	2-1/8	7-31/64	5-3/4	2-1/8	19/32	53/64	25/32	4-1/4	2.2165	0.8425	7/16	UEL 209-26		2.47
1-3/4	UELP 209-28												UEL 209-28		2.38
50	UELP 210	57.2	204	159	57	19	22	21	114.0	62.7	24.6	M 16	UEL 210	P 210	2.94
1-7/8	UELP 210-30	2-1/4	8-1/64	6-17/64	2-15/64	3/4	55/64	53/64	4-31/64	2.4685	0.9685	5/8	UEL 210-30		3.03
55	UELP 211	63.5	217	172	60	19	22	22	126.0	71.4	27.7	M 16	UEL 211	P 211	3.59
2	UELP 211-32	2-1/2	8-35/64	6-49/64	2-23/64	3/4	55/64	55/64	4-61/64	2.8110	1.0906	5/8	UEL 211-32		3.78
60	UELP 212	69.9	238	186	66	19	25	24	138	77.8	30.9	M 16	UEL 212	P 212	4.95
2-1/4	UELP 212-36	2-3/4	9-3/8	7-21/64	2-39/64	3/4	63/64	15/16	5-7/16	3.0630	1.2165	5/8	UEL 212-36		5.11
65	UELP 213	76.2	262	203	70	23	29	26	151	85.7	34.1	M 20	UEL 213	P 213	6.35
2-1/2	UELP 213-40	3	10-5/16	7-63/64	2-3/4	29/32	1-9/64	1-1/64	5-61/64	3.3740	1.3425	3/4	UEL 213-40		6.45
70	UELP 214	79.4	266	210	72	23	29	27	155.0	85.7	34.1	M 20	UEL 214	P 214	6.95
2-3/4	UELP 214-44	3-1/8	10-15/32	8-17/64	2-53/64	29/32	1-9/64	1-1/16	6-7/64	3.3740	1.3425	3/4	UEL 214-44		6.96



Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch										Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	s_1	s_2	*g*	*w*	*Bi*	*n*				
75	UELP 215	82.6	274	217	74	25	29	28	161.6	92.1	37.3	M 20	UEL 215	P 215	7.70
3	UELP 215-48	3-1/4	10-25/32	8-35/64	2-29/32	63/64	1-9/64	1-7/64	6-23/64	3.6260	1.4685	3/4	UEL 215-48		7.60

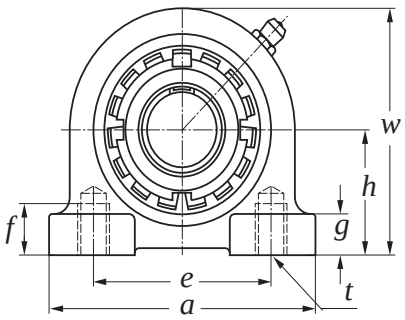


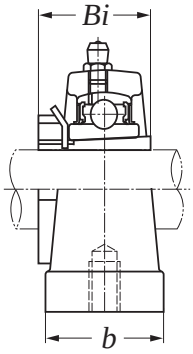


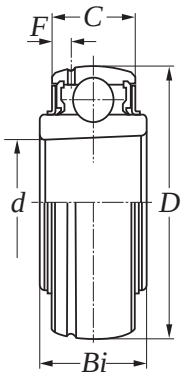


Taper 1:12

Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	*s1*	*s2*	*g*	*w*	*Bi*				
20	UKP 205	36.5	140	105	38	13	19	15	71.0	35	M 10	UK 205	P 205	0.71
25	UKP 206	42.9	160	121	44	14	19	16	83.0	38	M 12	UK 206	P 206	1.15
30	UKP 207	47.6	167	126	48	15	19	17	93.0	43	M 12	UK 207	P 207	1.45
35	UKP 208	49.2	180	136	52	15	21	18	100.0	46	M 12	UK 208	P 208	1.72
40	UKP 209	54.0	190	146	54	15	21	20	108.0	50	M 12	UK 209	P 209	2.04
45	UKP 210	57.2	204	159	57	19	22	21	114.0	55	M 16	UK 210	P 210	2.52
50	UKP 211	63.5	217	172	60	19	22	22	126.0	59	M 16	UK 211	P 211	3.03
55	UKP 212	69.9	238	186	66	19	25	24	138.0	62	M 16	UK 212	P 212	4.25
60	UKP 213	76.2	262	203	70	23	29	26	151.0	65	M 20	UK 213	P 213	5.31

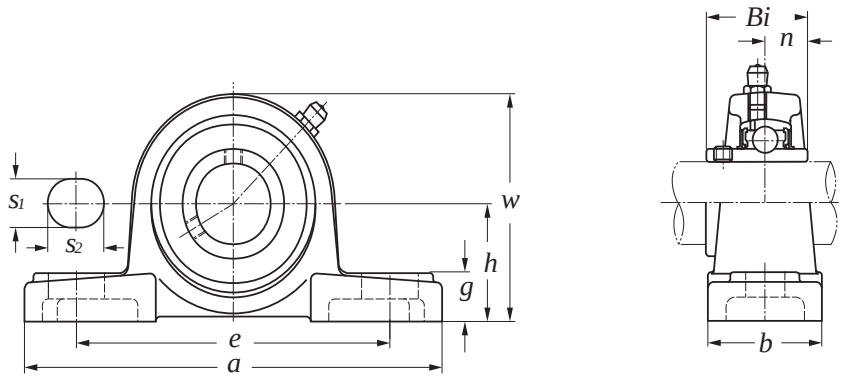




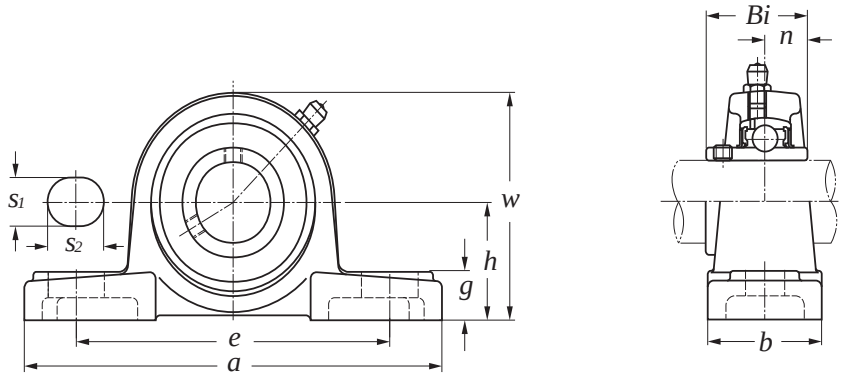


Taper 1:12

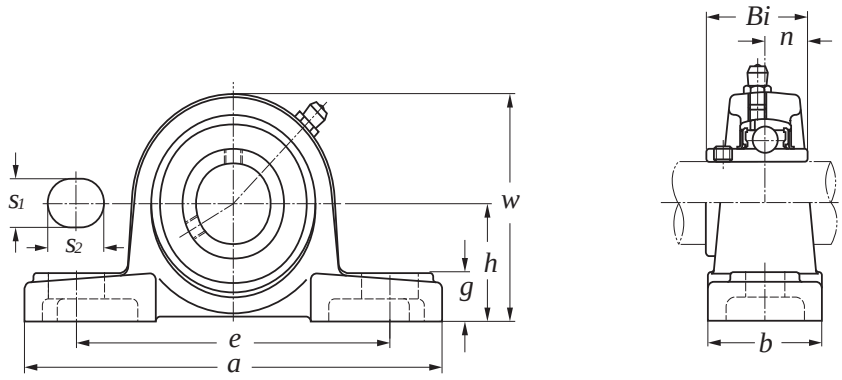
Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	*g*	*w*	*f*	*t*	*Bi*				
20	UKPA 205	36.5	84	56	38	12	72	15	M 10	35	M 10	UK 205	PA 205	0.65
25	UKPA 206	42.9	94	66	48	13	84	18	M 14	38	M 14	UK 206	PA 206	1.00
30	UKPA 207	47.6	110	80	48	13	95	20	M 14	43	M 14	UK 207	PA 207	1.39
35	UKPA 208	49.2	116	84	54	13	100	20	M 14	46	M 14	UK 208	PA 208	1.59
40	UKPA 209	54.2	120	90	60	13	108	25	M 14	50	M 14	UK 209	PA 209	2.02
45	UKPA 210	57.2	130	94	60	14	116	25	M 16	55	M 16	UK 210	PA 210	2.32
50	UKPA 211	63.5	140	104	66	14	125	25	M 16	59	M 16	UK 211	PA 211	2.82
55	UKPA 212	69.9	150	114	68	15	138	25	M 16	62	M 16	UK 212	PA 212	3.67
60	UKPA 213	76.2	160	124	70	15	150	25	M 16	65	M 16	UK 213	PA 213	4.46



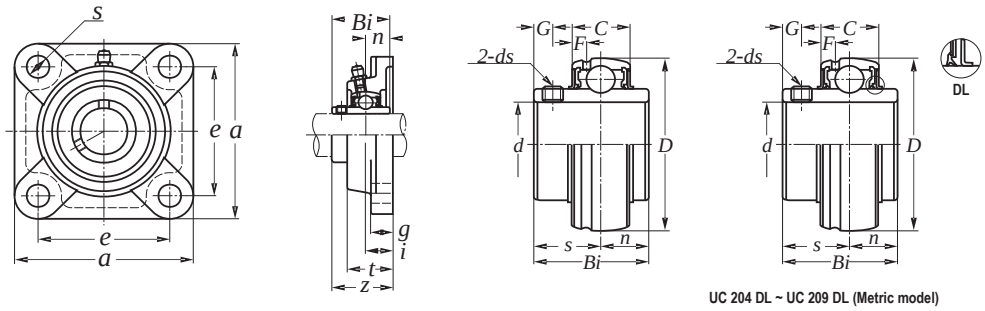
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
25	UCP X05	44.4	159	119	51	17	20	17	85	38.1	15.9	M 14	UC X05		1.48
13/16	UCP X05-13												UC X05-13		1.53
7/8	UCP X05-14	1-3/4	6-17/64	4-11/16	2-1/64	43/64	25/32	43/64	3-11/32	1.5000	0.6260	1/2	UC X05-14	P X05	1.51
15/16	UCP X05-15												UC X05-15		1.49
1	UCP X05-16												UC X05-16		1.47
30	UCP X06	47.6	175	127	54	17	20	20	93	42.9	17.5	M 14	UC X06		1.85
1-1/16	UCP X06-17												UC X06-17		1.87
1-1/8	UCP X06-18	1-7/8	6-57/64	5	2-1/8	43/64	25/32	25/32	3-21/32	1.6890	0.6890	1/2	UC X06-18	P X06	1.86
1-3/16	UCP X06-19												UC X06-19		1.83
1-1/4	UCP X06-20												UC X06-20		1.82
35	UCP X07	54.0	203	144	57	17	20	21	105	49.2	19.0	M 14	UC X07		2.49
1-1/4	UCP X07-20												UC X07-20		2.53
1-5/16	UCP X07-21	2-1/8	7-63/64	5-43/64	2-1/4	43/64	25/32	53/64	4-9/64	1.9370	0.7480	1/2	UC X07-21	P X07	2.52
1-3/8	UCP X07-22												UC X07-22		2.51
1-7/16	UCP X07-23												UC X07-23		2.47
40	UCP X08	58.7	222	156	65	20	23	23	112	49.2	19.0	M 16	UC X08	P X08	3.13
1-1/2	UCP X08-24	2-5/16	8-47/64	6-9/64	2-9/16	25/32	29/32	29/32	4-13/32	1.9370	0.7480	5/8	UC X08-24		3.17
45	UCP X09	58.7	222	156	67	20	23	25	116	51.6	19.0	M 16	UC X09		3.35
1-5/8	UCP X09-26												UC X09-26	P X09	3.50
1-11/16	UCP X09-27	2-5/16	8-47/64	6-9/64	2-41/64	25/32	29/32	63/64	4-9/16	2.0315	0.7480	5/8	UC X09-27		3.41
1-3/4	UCP X09-28												UC X09-28		3.37
50	UCP X10	63.5	240	171	71	20	23	25	126	55.6	22.2	M 16	UC X10		4.17
1-7/8	UCP X10-30												UC X10-30	P X10	4.31
1-15/16	UCP X10-31	2-1/2	9-29/64	6-47/64	2-51/64	25/32	29/32	63/64	4-61/64	2.1890	0.8740	5/8	UC X10-31		4.20
2	UCP X10-32												UC X10-32		4.14
55	UCP X11	69.8	260	184	79	25	28	29	137	65.1	25.4	M 20	UC X11		5.65
2	UCP X11-32												UC X11-32		5.86
2-1/16	UCP X11-33	2-3/4	10-15/64	7-1/4	3-7/64	63/64	1-7/64	1-9/64	5-25/64	2.5630	1.0000	3/4	UC X11-33	P X11	5.83
2-1/8	UCP X11-34												UC X11-34		5.80
2-3/16	UCP X11-35												UC X11-35		5.63



Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch h	a	e	b	s_1	s_2	g	w	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
60	UCP X12	76.2	280	203	81	25	28	31	149	65.1	25.4	M 20	UC X12		6.80
2-1/4	UCP X12-36												UC X12-36		6.86
2-5/16	UCP X12-37	3	11-1/64	7-63/64	3-3/16	63/64	1-7/64	1-7/32	5-55/64	2.5630	1.0000	3/4	UC X12-37	P X12	6.83
2-3/8	UCP X12-38												UC X12-38		6.78
2-7/16	UCP X12-39												UC X12-39		6.70
65	UCP X13	76.2	286	203	83	25	28	33	152	74.6	30.2	M 20	UC X13		7.42
2-1/2	UCP X13-40	3	11-17/64	7-63/64	3-17/64	63/64	1-7/64	1-19/64	5-63/64	2.9370	1.1890	3/4	UC X13-40	P X13	7.51
2-9/16	UCP X13-41												UC X13-41		7.37
70	UCP X14	88.9	320	229	85	27	30	34	170	77.8	33.3	M 22	UC X14		9.59
2-5/8	UCP X14-42												UC X14-42	P X14	9.63
2-11/16	UCP X14-43	3-1/2	12-19/32	9-1/64	3-11/32	1-1/16	1-3/16	1-11/32	6-11/16	3.0630	1.3110	7/8	UC X14-43		9.61
2-3/4	UCP X14-44												UC X14-44		9.60
75	UCP X15	88.9	330	229	92	27	30	35	175	82.6	33.3	M 22	UC X15		10.91
2-13/16	UCP X15-45												UC X15-45		11.00
2-7/8	UCP X15-46	3-1/2	12-63/64	9-1/64	3-5/8	1-1/16	1-3/16	1-3/8	6-57/64	3.2520	1.3110	7/8	UC X15-46	P X15	10.97
2-15/16	UCP X15-47												UC X15-47		10.94
3	UCP X15-48												UC X15-48		10.82
80	UCP X16	101.6	378	283	99	27	30	37	194	85.7	34.1	M 22	UC X16		15.09
3-1/16	UCP X16-49	4	14-7/8	11-9/16	3-57/64	1-1/16	1-3/16	1-29/64	7-41/64	3.3740	1.3425	7/8	UC X16-49	P X16	15.15
3-1/8	UCP X16-50												UC X16-50		15.12

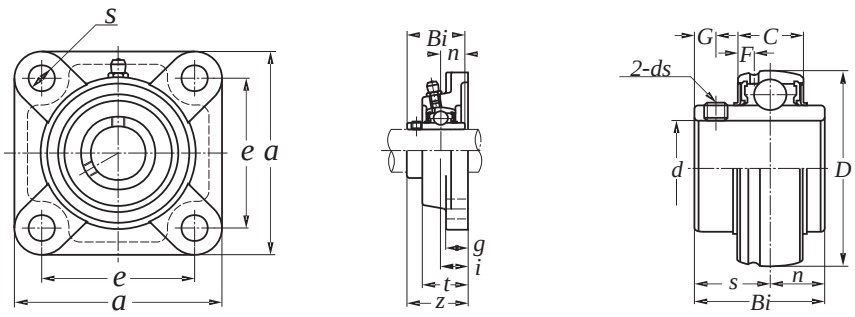


Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch										Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
		h	*a*	*e*	*b*	s_1	s_2	*g*	*w*	*Bi*	*n*				
25	UCP 305	45	173	132	45	17	20	15	85	38	15	M 14	UC 305	P 305	1.27
1	UCP 305-16	1-49/64	6-13/16	5-13/64	1-49/64	43/64	25/32	19/32	3-11/32	1.4961	0.5906	1/2	UC 305-16		1.26
30	UCP 306	50	180	140	50	17	20	15	95	43	17	M 14	UC 306		1.86
1-1/8	UCP 306-18	1-31/32	7-3/32	5-3/64	1-31/32	43/64	25/32	19/32	3-47/64	1.6929	0.6693	1/2	UC 306-18	P 306	1.88
1-1/4	UCP 306-20												UC 306-20		1.84
35	UCP 307	56	210	160	56	17	25	19	106	48	19	M 14	UC 307		2.66
1-1/4	UCP 307-20	2-13/64	8-17/64	6-19/64	2-13/64	43/64	63/64	3/4	4-11/64	1.8898	0.7480	1/2	UC 307-20	P 307	2.72
1-3/8	UCP 307-22												UC 307-22		2.68
40	UCP 308	60	218	170	62	18	25	19	116	52	19	M 14	UC 308	P 308	3.37
1-1/2	UCP 308-24	2-23/64	8-37/64	6-11/16	2-7/16	45/64	63/64	3/4	4-9/16	2.0472	0.7480	1/2	UC 308-24		3.41
45	UCP 309	67	244	190	66	20	26	23	129	57	22	M 16	UC 309		4.26
1-5/8	UCP 309-26	2-41/64	9-39/64	7-31/64	2-19/32	25/32	1-1/64	29/32	5-5/64	2.2441	0.8661	5/8	UC 309-26	P 309	4.34
1-3/4	UCP 309-28												UC 309-28		4.28
50	UCP 310	75	271	212	74	20	30	26	143	61	22	M 16	UC 310	P 310	6.17
1-7/8	UCP 310-30	2-61/64	10-43/64	8-11/32	2-29/32	25/32	1-3/16	1-1/64	5-5/8	2.4016	0.8661	5/8	UC 310-30		6.26
55	UCP 311	80	300	236	80	20	32	29	154	66	25	M 16	UC 311	P 311	7.12
2	UCP 311-32	3-5/32	11-13/16	9-19/64	3-5/32	25/32	1-17/64	1-9/64	6-1/16	2.5984	0.9843	5/8	UC 311-32		7.30
60	UCP 312	85	325	250	85	23	35	31	164	71	26	M 20	UC 312	P 312	9.10
2-1/4	UCP 312-36	3-11/32	12-51/64	9-27/32	3-11/32	29/32	1-3/8	1-7/32	6-29/64	2.7953	1.0236	3/4	UC 312-36		9.15
65	UCP 313	90	335	260	90	25	38	33	176	75	30	M 20	UC 313	P 313	11.04
2-1/2	UCP 313-40	3-35/64	13-3/16	10-15/64	3-35/64	63/64	1-1/2	1-19/64	6-59/64	2.9528	1.1811	3/4	UC 313-40		11.09
70	UCP 314	95	360	280	93	27	40	34	187	78	33	M 22	UC 314	P 314	12.82
2-3/4	UCP 314-44	3-47/64	14-11/64	11-1/64	3-21/32	1-1/16	1-37/64	1-11/32	7-23/64	3.0709	1.2992	7/8	UC 314-44		12.83
75	UCP 315	100	380	290	100	27	40	35	198	82	32	M 22	UC 315	P 315	15.40
3	UCP 315-48	3-15/16	14-61/64	11-27/64	3-15/16	1-1/16	1-37/64	1-3/8	7-51/64	3.2283	1.2598	7/8	UC 315-48		15.31
80	UCP 316	106	400	300	105	27	40	37	210	86	34	M 22	UC 316	P 316	18.00
3-1/8	UCP 316-50	4-11/64	15-3/4	11-13/16	4-9/64	1-1/16	1-37/64	1-29/64	8-17/64	3.3858	1.3386	7/8	UC 316-50		18.03

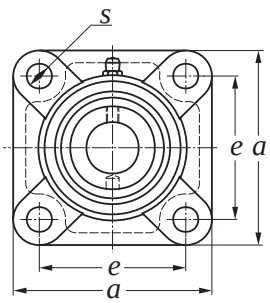


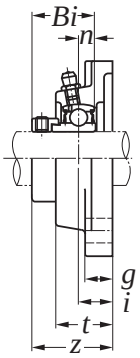
UC 204 DL ~ UC 209 DL (Metric model)

Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCF 201	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 201	F 204	0.57
1/2	UCF 201-8	3-25/64	2-3/64	19/32	15/32	1	15/32	1-5/16	1.2205	0.5000	3/8	UC 201-8		0.57
15	UCF 202	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 202	F 204	0.56
5/8	UCF 202-10	3-25/64	2-3/64	19/32	15/32	1	15/32	1-5/16	1.2205	0.5000	3/8	UC 202-10		0.56
17	UCF 203	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 203	F 204	0.55
11/16	UCF 203-11	3-25/64	2-3/64	19/32	15/32	1	15/32	1-5/16	1.2205	0.5000	3/8	UC 203-11		0.55
20	UCF 204	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 204	F 204	0.53
3/4	UCF 204-12	3-25/64	2-3/64	19/32	15/32	1	15/32	1-5/16	1.2205	0.5000	3/8	UC 204-12		0.54
25	UCF 205	95	70	16	13	27.0	12	35.7	34.1	14.3	M 10	UC 205	F 205	0.74
1	UCF 205-16	3-47/64	2-3/4	5/8	3/64	1-1/16	15/32	1-13/32	1.3425	0.5630	3/8	UC 205-16		0.73
30	UCF 206	108	83	18	13	31.0	12	40.2	38.1	15.9	M 10	UC 206	F 206	1.05
1-1/8	UCF 206-18	4-1/4	3-17/64	45/64	3/64	1-7/32	15/32	1-37/64	1.5000	0.6260	3/8	UC 206-18		1.07
1-1/4	UCF 206-20											UC 206-20		1.03
35	UCF 207	117	92	19	15	34.0	14	44.4	42.9	17.5	M 12	UC 207	F 207	1.34
1-1/4	UCF 207-20	4-39/64	3-5/8	3/4	19/32	1-11/32	35/64	1-3/4	1.6890	0.6890	7/16	UC 207-20		1.40
1-3/8	UCF 207-22											UC 207-22		1.35
40	UCF 208	130	102	21	15	36.0	16	51.2	49.2	19.0	M 14	UC 208	F 208	1.77
1-1/2	UCF 208-24	5-1/8	4-1/64	53/64	19/32	1-27/64	5/8	2-1/64	1.9370	0.7480	1/2	UC 208-24		1.81
45	UCF 209	137	105	22	16	38.0	16	52.2	49.2	19.0	M 14	UC 209	F 209	2.05
1-5/8	UCF 209-26	5-25/64	4-9/64	55/64	5/8	1-1/2	5/8	2-1/16	1.9370	0.7480	1/2	UC 209-26		2.15
1-3/4	UCF 209-28											UC 209-28		2.07
50	UCF 210	143	111	22	16	40.0	16	54.6	51.6	19.0	M 14	UC 210	F 210	2.35
1-7/8	UCF 210-30	5-5/8	4-3/8	55/64	5/8	1-37/64	5/8	2-5/32	2.0315	0.7480	1/2	UC 210-30		2.42
55	UCF 211	162	130	25	18	43.0	19	58.4	55.6	22.2	M 16	UC 211	F 211	3.00
2	UCF 211-32	6-3/8	5-1/8	63/64	45/64	1-11/16	3/4	2-19/64	2.1890	0.8740	5/8	UC 211-32		3.15
60	UCF 212	175	143	29	18	48.0	19	68.7	65.1	25.4	M 16	UC 212	F 212	3.57
2-1/4	UCF 212-36	6-57/64	5-5/8	1-9/64	45/64	1-57/64	3/4	2-45/64	2.5630	1.0000	5/8	UC 212-36		3.71
65	UCF 213	187	149	30	22	50.0	19	69.7	65.1	25.4	M 16	UC 213	F 213	4.92
2-1/2	UCF 213-40	7-23/64	5-55/64	1-3/16	55/64	1-31/32	3/4	2-3/4	2.5630	1.0000	5/8	UC 213-40		5.00
70	UCF 214	193	152	31	22	54.0	19	75.4	74.6	30.2	M 16	UC 214	F 214	5.62
2-3/4	UCF 214-44	7-19/32	5-63/64	1-7/32	55/64	2-1/8	3/4	2-31/32	2.9370	1.1890	5/8	UC 214-44		5.63

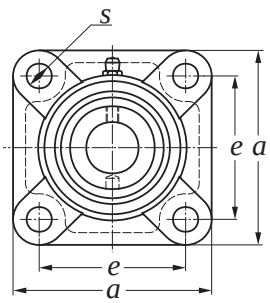


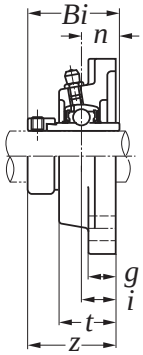
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UCF 215	200	159	34	22	56.0	19	78.5	77.8	33.3	M 16	UC 215	F 215	5.55
3	UCF 215-48	7-7/8	6-17/64	1-11/32	55/64	2-13/64	3/4	3-3/32	3.0630	1.3110	5/8	UC 215-48		5.47
80	UCF 216	208	165	34	24	58.0	23	83.3	82.6	33.3	M 20	UC 216	F 216	6.99
3-1/8	UCF 216-50	8-3/16	6-1/2	1-11/32	15/16	2-9/32	29/32	3-9/32	3.2520	1.3110	3/4	UC 216-50		7.04
85	UCF 217	220	175	36	26	63.0	23	87.6	85.7	34.1	M 20	UC 217	F 217	8.58
3-1/4	UCF 217-52	8-21/32	6-57/64	1-27/64	1-1/64	2-31/64	29/32	3-29/64	3.3740	1.3425	3/4	UC 217-52		8.80
90	UCF 218	235	187	40	26	68.0	23	96.3	96.0	39.7	M 20	UC 218	F 218	11.20
3-1/2	UCF 218-56	9-1/4	7-23/64	1-37/64	1-1/64	2-43/64	29/32	3-51/64	3.7800	1.5630	3/4	UC 218-56		11.31



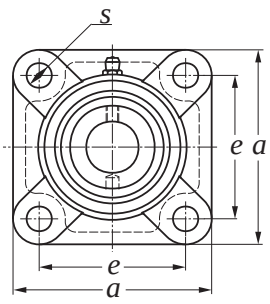


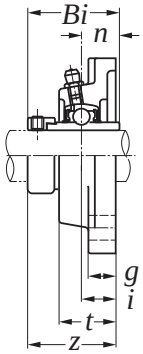
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
20	SAF 204	86	64	15	12	25.5	12	37.5	31.0	7.5	M 10	SA 204	F 204	0.54
3/4	SAF 204-12	3-25/64	2-3/64	19/32	15/32	1	15/32	1-15/32	1.2205	0.2953	3/8	SA 204-12		0.55
25	SAF 205	95	70	16	13	27.0	12	39.0	31.0	7.5	M 10	SA 205	F 205	0.73
1	SAF 205-16	3-47/64	2-3/4	5/8	3/64	1-1/16	15/32	1-17/32	1.2205	0.2953	3/8	SA 205-16		0.71
30	SAF 206	108	83	18	13	31.0	12	43.9	35.7	9.0	M 10	SA 206		1.06
1-1/8	SAF 206-18	4-1/4	3-17/64	45/64	3/64	1-7/32	15/32	1-47/64	1.4055	0.3543	3/8	SA 206-18	F 206	1.08
1-1/4	SAF 206-20											SA 206-20		1.01
35	SAF 207	117	92	19	15	34.0	14	48.0	38.9	9.5	M 12	SA 207		1.37
1-1/4	SAF 207-20	4-39/64	3-5/8	3/4	19/32	1-11/32	35/64	1-57/64	1.5315	0.3740	7/16	SA 207-20	F 207	1.43
1-3/8	SAF 207-22											SA 207-22		1.38
40	SAF 208	130	102	21	15	36.0	16	52.0	43.7	11.0	M 14	SA 208	F 208	1.78
1-1/2	SAF 208-24	5-1/8	4-1/64	53/64	19/32	1-27/64	5/8	2-1/16	1.7205	0.4331	1/2	SA 208-24		1.81
45	SAF 209	137	105	22	16	38.0	16	54.2	43.7	11.0	M 14	SA 209		2.06
1-5/8	SAF 209-26	5-25/64	4-9/64	55/64	5/8	1-1/2	5/8	2-9/64	1.7205	0.4331	1/2	SA 209-26	F 209	2.19
1-3/4	SAF 209-28											SA 209-28		2.10
50	SAF 210	143	111	22	16	40.0	16	55.2	43.7	11.0	M 14	SA 210	F 210	2.35
1-7/8	SAF 210-30	5-5/8	4-3/8	55/64	5/8	1-37/64	5/8	2-11/64	1.7205	0.4331	1/2	SA 210-30		2.40
55	SAF 211	162	130	25	18	43.0	19	61.9	48.4	12.0	M 16	SA 211	F 211	2.75
2	SAF 211-32	6-3/8	5-1/8	63/64	45/64	1-11/16	3/4	2-7/16	1.9055	0.4724	5/8	SA 211-32		3.06



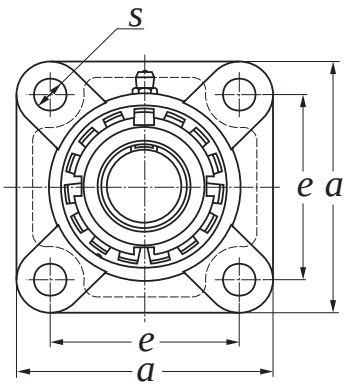


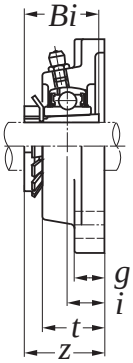
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UELF 201	86	64	15	12	25.5	12	41.5	43.5	17.0	M 10	UEL 201	F 204	0.63
1/2	UELF 201-8	3-25/64	2-3/64	19/32	15/32	1	15/32	1-41/64	1.7126	0.6693	3/8	UEL 201-8		0.63
15	UELF 202	86	64	15	12	25.5	12	41.5	43.5	17.0	M 10	UEL 202	F 204	0.61
5/8	UELF 202-10	3-25/64	2-3/64	19/32	15/32	1	15/32	1-41/64	1.7126	0.6693	3/8	UEL 202-10		0.61
17	UELF 203	86	64	15	12	25.5	12	41.5	43.5	17.0	M 10	UEL 203	F 204	0.60
11/16	UELF 203-11	3-25/64	2-3/64	19/32	15/32	1	15/32	1-41/64	1.7126	0.6693	3/8	UEL 203-11		0.60
20	UELF 204	86	64	15	12	25.5	12	41.5	43.5	17.0	M 10	UEL 204	F 204	0.58
3/4	UELF 204-12	3-25/64	2-3/64	19/32	15/32	1	15/32	1-41/64	1.7126	0.6693	3/8	UEL 204-12		0.59
25	UELF 205	95	70	16	13	27.0	12	42.9	44.3	17.4	M 10	UEL 205	F 205	0.78
1	UELF 205-16	3-47/64	2-3/4	5/8	3/64	1-1/16	15/32	1-11/16	1.7441	0.6850	3/8	UEL 205-16		0.77
30	UELF 206	108	83	18	13	31.0	12	48.1	48.3	18.2	M 10	UEL 206		1.14
1-1/8	UELF 206-18	4-1/4	3-17/64	45/64	3/64	1-7/32	15/32	1-57/64	1.9016	0.7165	3/8	UEL 206-18	F 206	1.16
1-1/4	UELF 206-20											UEL 206-20		1.11
35	UELF 207	117	92	19	15	34.0	14	51.3	51.1	18.8	M 12	UEL 207		1.47
1-1/4	UELF 207-20	4-39/64	3-5/8	3/4	19/32	1-11/32	35/64	2-1/64	2.0118	0.7402	7/16	UEL 207-20	F 207	1.55
1-3/8	UELF 207-22											UEL 207-22		1.48
40	UELF 208	130	102	21	15	36.0	16	55.9	56.3	21.4	M 14	UEL 208	F 208	1.91
1-1/2	UELF 208-24	5-1/8	4-1/64	53/64	19/32	1-27/64	5/8	2-13/64	2.2165	0.8425	1/2	UEL 208-24		1.96
45	UELF 209	137	105	22	16	38.0	16	56.9	56.3	21.4	M 14	UEL 209		2.22
1-5/8	UELF 209-26	5-25/64	4-9/64	55/64	5/8	1-1/2	5/8	2-15/64	2.2165	0.8425	1/2	UEL 209-26	F 209	2.33
1-3/4	UELF 209-28											UEL 209-28		2.24
50	UELF 210	143	111	22	16	40.0	16	60.1	62.7	24.6	M 14	UEL 210	F 210	2.56
1-7/8	UELF 210-30	5-5/8	4-3/8	55/64	5/8	1-37/64	5/8	2-23/64	2.4685	0.9685	1/2	UEL 210-30		2.65
55	UELF 211	162	130	25	18	43.0	19	68.6	71.4	27.7	M 16	UEL 211	F 211	3.27
2	UELF 211-32	6-3/8	5-1/8	63/64	45/64	1-11/16	3/4	2-45/64	2.8110	1.0906	5/8	UEL 211-32		3.46
60	UELF 212	175	143	29	18	48.0	19	75.8	77.8	30.9	M 16	UEL 212	F 212	3.91
2-1/4	UELF 212-36	6-57/64	5-5/8	1-9/64	45/64	1-57/64	3/4	2-63/64	3.0630	1.2165	5/8	UEL 212-36		4.07
65	UELF 213	187	149	30	22	50.0	19	81.6	85.7	34.1	M 16	UEL 213	F 213	5.47
2-1/2	UELF 213-40	7-23/64	5-55/64	1-3/16	55/64	1-31/32	3/4	3-7/32	3.3740	1.3425	5/8	UEL 213-40		5.57
70	UELF 214	193	152	31	22	54.0	19	82.6	85.7	34.1	M 16	UEL 214	F 214	6.14
2-3/4	UELF 214-44	7-19/32	5-63/64	1-7/32	55/64	2-1/8	3/4	3-1/4	3.3740	1.3425	5/8	UEL 214-44		6.15

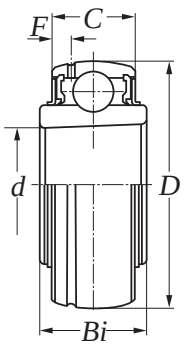




Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UELF 215	200	159	34	22	56.0	19	88.8	92.1	37.3	M 16	UEL 215	F 215	6.18
3	UELF 215-48	7-7/8	6-17/64	1-11/32	55/64	2-13/64	3/4	3-1/2	3.6260	1.4685	5/8	UEL 215-48		6.08







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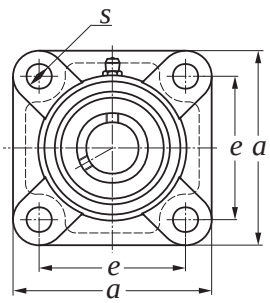
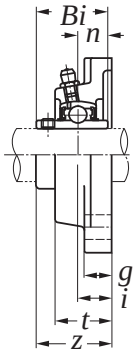
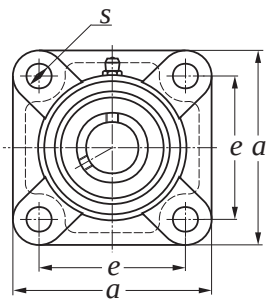
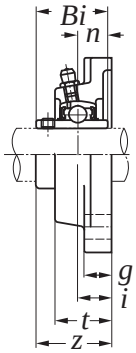
Shaft dia. mm	Unit number	Nominal dimensions mm								Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	*e*	*i*	*g*	*t*	*s*	*z*	*Bi*				
20	UKF 205	95	70	16	13	27.0	12	35.5	35	M 10	UK 205	F 205	0.68
25	UKF 206	108	83	18	13	31.0	12	39.0	38	M 10	UK 206	F 206	0.98
30	UKF 207	117	92	19	15	34.0	14	42.5	43	M 12	UK 207	F 207	1.24
35	UKF 208	130	102	21	15	36.0	16	46.5	46	M 14	UK 208	F 208	1.61
40	UKF 209	137	105	22	16	38.0	16	48.5	50	M 14	UK 209	F 209	1.90
45	UKF 210	143	111	22	16	40.0	16	50.0	55	M 14	UK 210	F 210	2.14
50	UKF 211	162	130	25	18	43.0	19	54.5	59	M 16	UK 211	F 211	2.65
55	UKF 212	175	143	29	18	48.0	19	61.0	62	M 16	UK 212	F 212	3.07
60	UKF 213	187	149	30	22	50.0	19	64.0	65	M 16	UK 213	F 213	4.42



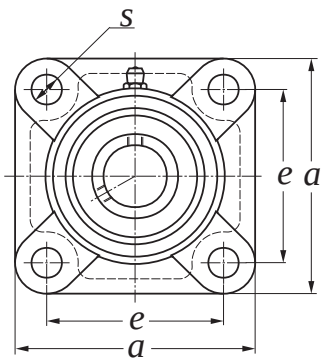


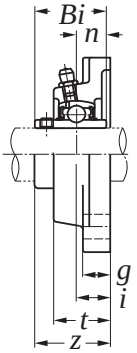
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
25	UCF X05	108	82.5	18	13	30	12	40.2	38.1	15.9	M 10	UC X05		1.15
13/16	UCF X05-13											UC X05-13		1.20
7/8	UCF X05-14	4-1/4	3-1/4	45/64	3/64	1-3/16	15/32	1-37/64	1.5000	0.6260	3/8	UC X05-14	F X05	1.18
15/16	UCF X05-15											UC X05-15		1.16
1	UCF X05-16											UC X05-16		1.14
30	UCF X06	117	92.0	19	14	34	16	44.4	42.9	17.5	M 14	UC X06		1.50
1-1/16	UCF X06-17											UC X06-17		1.52
1-1/8	UCF X06-18	4-39/64	3-5/8	3/4	35/64	1-11/32	5/8	1-3/4	1.6890	0.6890	1/2	UC X06-18	F X06	1.51
1-3/16	UCF X06-19											UC X06-19		1.48
1-1/4	UCF X06-20											UC X06-20		1.47
35	UCF X07	130	101.5	21	14	38	16	51.2	49.2	19.0	M 14	UC X07		1.97
1-1/4	UCF X07-20											UC X07-20		2.01
1-5/16	UCF X07-21	5-1/8	3-63/64	53/64	35/64	1-1/2	5/8	2-1/64	1.9370	0.7480	1/2	UC X07-21	F X07	2.00
1-3/8	UCF X07-22											UC X07-22		1.99
1-7/16	UCF X07-23											UC X07-23		1.95
40	UCF X08	137	105.0	22	14	40	19	52.2	49.2	19.0	M 16	UC X08	F X08	2.18
1-1/2	UCF X08-24	5-25/64	4-9/64	55/64	35/64	1-37/64	3/4	2-1/16	1.9370	0.7480	5/8	UC X08-24		2.22
45	UCF X09	143	111.0	23	14	40	19	55.6	51.6	19.0	M 16	UC X09		2.37
1-5/8	UCF X09-26											UC X09-26	F X09	2.52
1-11/16	UCF X09-27	5-5/8	4-3/8	29/32	35/64	1-37/64	3/4	2-3/16	2.0315	0.7480	5/8	UC X09-27		2.43
1-3/4	UCF X09-28											UC X09-28		2.39
50	UCF X10	162	130.0	26	20	44	19	59.4	55.6	22.2	M 16	UC X10		3.47
1-7/8	UCF X10-30											UC X10-30	F X10	3.61
1-15/16	UCF X10-31	6-3/8	5-1/8	1-1/64	25/32	1-47/64	3/4	2-11/32	2.1890	0.8740	5/8	UC X10-31		3.50
2	UCF X10-32											UC X10-32		3.44
55	UCF X11	175	143.0	29	20	49	19	68.7	65.1	25.4	M 16	UC X11		4.13
2	UCF X11-32											UC X11-32		4.34
2-1/16	UCF X11-33	6-57/64	5-5/8	1-9/64	25/32	1-59/64	3/4	2-45/64	2.5630	1.0000	5/8	UC X11-33	F X11	4.31
2-1/8	UCF X11-34											UC X11-34		4.28
2-3/16	UCF X11-35											UC X11-35		4.11



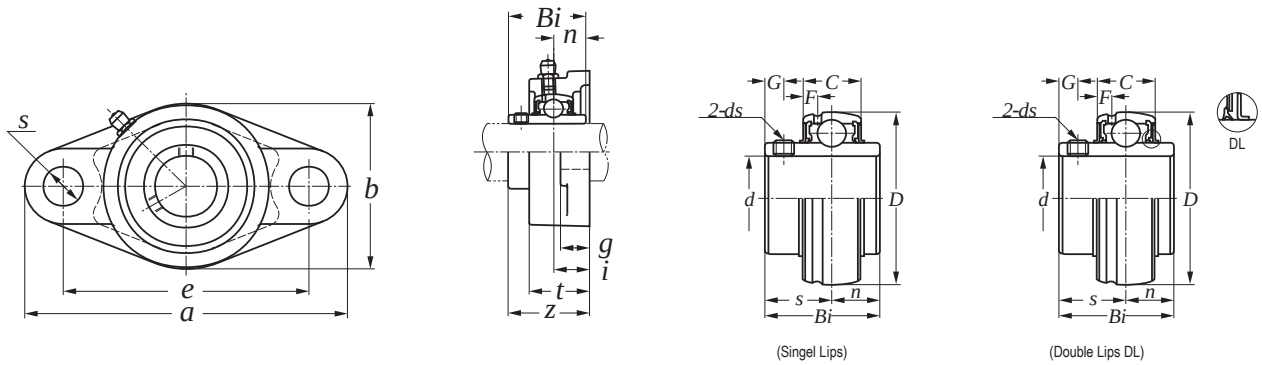


Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
60	UCF X12	187	149.0	34	21	59	19	73.7	65.1	25.4	M 16	UC X12		5.70
2-1/4	UCF X12-36											UC X12-36		5.76
2-5/16	UCF X12-37	7-23/64	5-55/64	1-11/32	53/64	2-21/64	3/4	2-29/32	2.5630	1.0000	5/8	UC X12-37	F X12	5.73
2-3/8	UCF X12-38											UC X12-38		5.68
2-7/16	UCF X12-39											UC X12-39		5.60
65	UCF X13	187	149.0	34	21	59	19	78.4	74.6	30.2	M 16	UC X13		5.77
2-1/2	UCF X13-40	7-23/64	5-55/64	1-11/32	53/64	2-21/64	3/4	3-3/32	2.9370	1.1890	5/8	UC X13-40	F X13	5.86
2-9/16	UCF X13-41											UC X13-41		5.72
70	UCF X14	197	152.0	37	24	60	23	81.5	77.8	33.3	M 20	UC X14		6.79
2-5/8	UCF X14-42											UC X14-42	F X14	6.83
2-11/16	UCF X14-43	7-3/4	5-63/64	1-29/64	15/16	2-23/64	29/32	3-13/64	3.0630	1.3110	3/4	UC X14-43		6.81
2-3/4	UCF X14-44											UC X14-44		6.80
75	UCF X15	197	152.0	40	24	68	23	89.3	82.6	33.3	M 20	UC X15		7.66
2-13/16	UCF X15-45											UC X15-45		7.75
2-7/8	UCF X15-46	7-3/4	5-63/64	1-37/64	15/16	2-43/64	29/32	3-3/64	3.2520	1.3110	3/4	UC X15-46	F X15	7.72
2-15/16	UCF X15-47											UC X15-47		7.69
3	UCF X15-48											UC X15-48		7.57
80	UCF X16	214	171.0	40	24	70	23	91.6	85.7	34.1	M 20	UC X16		9.99
3-1/16	UCF X16-49	8-27/64	6-47/64	1-37/64	15/16	2-3/4	29/32	3-39/64	3.3740	1.3425	3/4	UC X16-49	F X16	10.05
3-1/8	UCF X16-50											UC X16-50		10.02





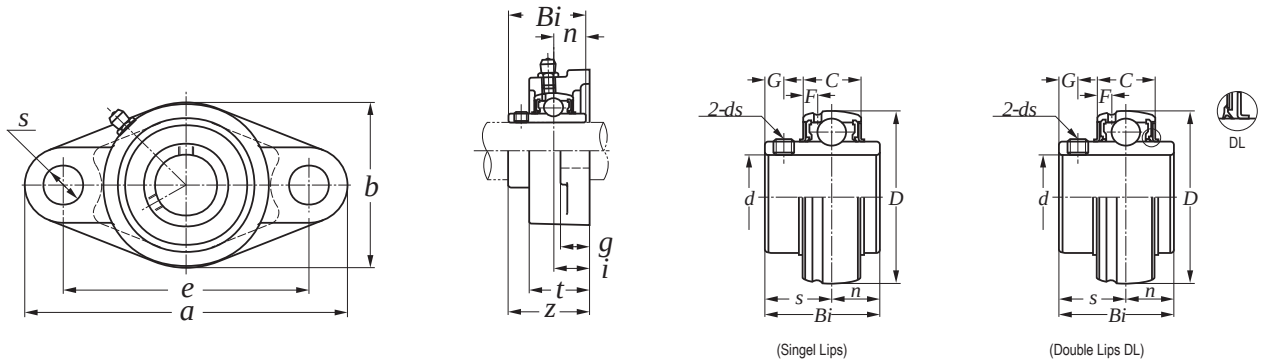
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
25	UCF 305	108	80	16	13	29	16	39	38	15	M 14	UC 305	F 305	1.01
1	UCF 305-16	4-1/4	3-5/32	5/8	3/64	1-9/64	5/8	1-17/32	1.4961	0.5906	1/2	UC 305-16		1.00
30	UCF 306	125	95	18	15	32	16	44	43	17	M 14	UC 306		1.53
1-1/8	UCF 306-18	4-59/64	3-47/64	45/64	19/32	1-17/64	5/8	1-47/64	1.6929	0.6693	1/2	UC 306-18	F 306	1.55
1-1/4	UCF 306-20											UC 306-20		1.51
35	UCF 307	135	100	20	16	36	19	49	48	19	M 16	UC 307		1.86
1-1/4	UCF 307-20	5-5/16	3-15/16	25/32	5/8	1-27/64	3/4	1-59/64	1.8898	0.7480	5/8	UC 307-20	F 307	1.92
1-3/8	UCF 307-22											UC 307-22		1.88
40	UCF 308	150	112	23	17	40	19	56	52	19	M 16	UC 308	F 308	2.65
1-1/2	UCF 308-24	5-29/32	4-13/32	29/32	43/64	1-37/64	3/4	2-13/64	2.0472	0.7480	5/8	UC 308-24		2.69
45	UCF 309	160	125	25	18	44	19	60	57	22	M 16	UC 309		3.21
1-5/8	UCF 309-26	6-19/64	4-59/64	63/64	45/64	1-47/64	3/4	2-23/64	2.2441	0.8661	5/8	UC 309-26	F 309	3.29
1-3/4	UCF 309-28											UC 309-28		3.23
50	UCF 310	175	132	28	20	48	23	67	61	22	M 20	UC 310	F 310	4.32
1-7/8	UCF 310-30	6-57/64	5-13/64	1-7/64	25/32	1-57/64	29/32	2-41/64	2.4016	0.8661	3/4	UC 310-30		4.41
55	UCF 311	185	140	30	20	52	23	71	66	25	M 20	UC 311	F 311	5.24
2	UCF 311-32	7-9/32	5-3/64	1-3/16	25/32	2-1/16	29/32	2-51/64	2.5984	0.9843	3/4	UC 311-32		5.42
60	UCF 312	193	150	33	22	56	23	78	71	26	M 20	UC 312	F 312	6.40
2-1/4	UCF 312-36	7-19/32	5-29/32	1-19/64	55/64	2-13/64	29/32	3-5/64	2.7953	1.0236	3/4	UC 312-36		6.45
65	UCF 313	208	166	33	22	58	23	78	75	30	M 20	UC 313	F 313	7.54
2-1/2	UCF 313-40	8-3/16	6-17/32	1-19/64	55/64	2-9/32	29/32	3-5/64	2.9528	1.1811	3/4	UC 313-40		7.59
70	UCF 314	226	178	36	25	61	25	81	78	33	M 22	UC 314	F 314	9.02
2-3/4	UCF 314-44	8-57/64	7-1/64	1-27/64	63/64	2-13/32	63/64	3-3/16	3.0709	1.2992	7/8	UC 314-44		9.03
75	UCF 315	236	184	39	25	66	25	89	82	32	M 22	UC 315	F 315	10.45
3	UCF 315-48	9-19/64	7-1/4	1-17/32	63/64	2-19/32	63/64	3-1/2	3.2283	1.2598	7/8	UC 315-48		10.36
80	UCF 316	250	196	38	27	68	31	90	86	34	M 27	UC 316	F 316	14.00
3-1/8	UCF 316-50	9-27/32	7-23/32	1-1/2	1-1/16	2-43/64	1-7/32	3-35/64	3.3858	1.3386	1	UC 316-50		14.03



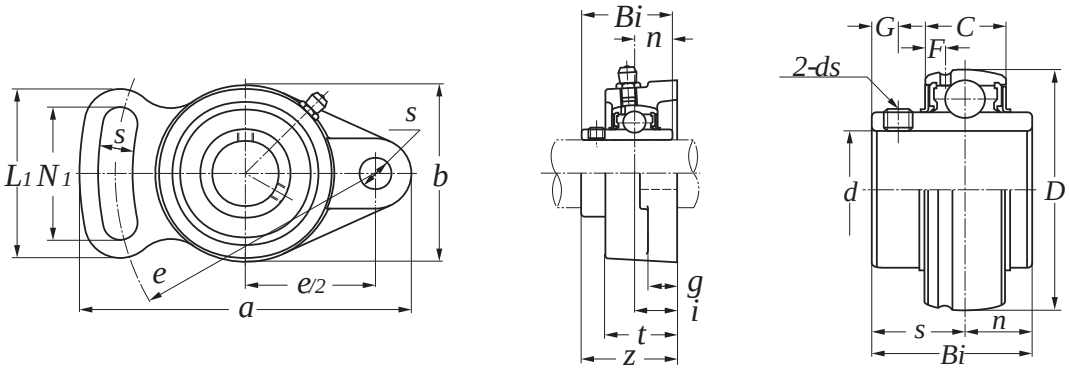
(Singel Lips)

(Double Lips DL)

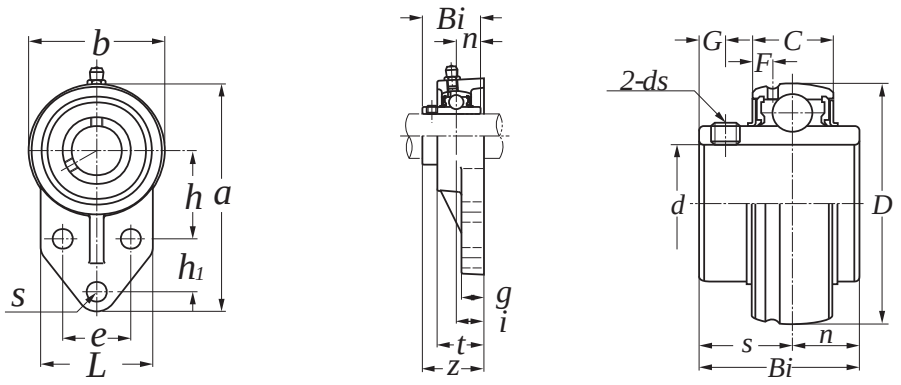
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	b	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCFL 201	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 201	FL 204	0.47
1/2	UCFL 201-8	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-5/16	1.2205	0.5000	3/8	UC 201-8		0.47
15	UCFL 202	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 202	FL 204	0.46
5/8	UCFL 202-10	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-5/16	1.2205	0.5000	3/8	UC 202-10		0.46
17	UCFL 203	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 203	FL 204	0.45
11/16	UCFL 203-11	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-5/16	1.2205	0.5000	3/8	UC 203-11		0.45
20	UCFL 204	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 204	FL 204	0.43
3/4	UCFL 204-12	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-5/16	1.2205	0.5000	3/8	UC 204-12		0.44
25	UCFL 205	130	99	16	13	27.0	16	68	35.7	34.1	14.3	M 14	UC 205	FL 205	0.60
1	UCFL 205-16	5-1/8	3-57/64	5/8	3/64	1-1/16	5/8	2-43/64	1-13/32	1.3425	0.5630	1/2	UC 205-16		0.59
30	UCFL 206	148	117	18	13	31.0	16	80	40.2	38.1	15.9	M 14	UC 206		0.91
1-1/8	UCFL 206-18	5-53/64	4-39/64	45/64	3/64	1-7/32	5/8	3-5/32	1-37/64	1.5000	0.6260	1/2	UC 206-18	FL 206	0.93
1-1/4	UCFL 206-20												UC 206-20		0.89
35	UCFL 207	161	130	19	14	34.0	16	90	44.4	42.9	17.5	M 14	UC 207		1.14
1-1/4	UCFL 207-20	6-11/32	5-1/8	3/4	35/64	1-11/32	5/8	3-35/64	1-3/4	1.6890	0.6890	1/2	UC 207-20	FL 207	1.20
1-3/8	UCFL 207-22												UC 207-22		1.15
40	UCFL 208	175	144	21	14	36.0	16	100	51.2	49.2	19.0	M 14	UC 208	FL 208	1.43
1-1/2	UCFL 208-24	6-57/64	5-43/64	53/64	35/64	1-27/64	5/8	3-15/16	2-1/64	1.9370	0.7480	1/2	UC 208-24		1.47
45	UCFL 209	188	148	22	16	38.0	19	108	52.2	49.2	19.0	M 16	UC 209		1.80
1-5/8	UCFL 209-26	7-13/32	5-53/64	55/64	5/8	1-1/2	3/4	4-1/4	2-1/16	1.9370	0.7480	5/8	UC 209-26	FL 209	1.90
1-3/4	UCFL 209-28												UC 209-28		1.82
50	UCFL 210	197	157	22	16	40.0	19	115	54.6	51.6	19.0	M 16	UC 210	FL 210	2.13
1-7/8	UCFL 210-30	7-3/4	6-3/16	55/64	5/8	1-37/64	3/4	4-17/32	2-5/32	2.0315	0.7480	5/8	UC 210-30		2.20
55	UCFL 211	224	184	25	18	43.0	19	130	58.4	55.6	22.2	M 16	UC 211	FL 211	2.86
2	UCFL 211-32	8-13/16	7-1/4	63/64	45/64	1-11/16	3/4	5-1/8	2-19/64	2.1890	0.8740	5/8	UC 211-32		3.01
60	UCFL 212	250	202	29	18	48.0	23	140	68.7	65.1	25.4	M 20	UC 212	FL 212	3.76
2-1/4	UCFL 212-36	9-27/32	7-61/64	1-9/64	45/64	1-57/64	29/32	5-3/64	2-45/64	2.5630	1.0000	3/4	UC 212-36		3.90
65	UCFL 213	258	210	30	20	50.0	23	155	69.7	65.1	25.4	M 20	UC 213	FL 213	4.63
2-1/2	UCFL 213-40	10-5/32	8-17/64	1-3/16	25/32	1-31/32	29/32	6-7/64	2-3/4	2.5630	1.0000	3/4	UC 213-40		4.71
70	UCFL 214	265	216	31	20	54.0	23	160	75.4	74.6	30.2	M 20	UC 214	FL 214	5.22
2-3/4	UCFL 214-44	10-7/16	8-1/2	1-7/32	25/32	2-1/8	29/32	6-19/64	2-31/32	2.9370	1.1890	3/4	UC 214-44		5.23



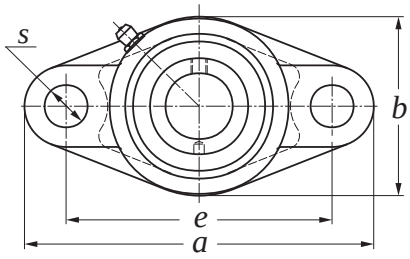
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	b	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UCFL 215	275	225	34	22	55.0	23	164	78.5	77.8	33.3	M 20	UC 215	FL 215	5.36
3	UCFL 215-48	10-53/64	8-55/64	1-11/32	25/32	2-13/64	29/32	6-1/2	3-3/32	3.0630	1.3110	3/4	UC 215-48		5.28
80	UCFL 216	290	233	34	22	58.0	25	180	83.3	82.6	33.3	M 22	UC 216	FL 216	6.99
3-1/8	UCFL 216-50	11-27/64	9-11/64	1-11/32	55/64	2-9/32	63/64	7-3/32	3-9/32	3.2520	1.3110	7/8	UC 216-50		7.04
85	UCFL 217	305	248	36	22	63.0	25	190	87.6	85.7	34.1	M 22	UC 217	FL 217	8.28
3-1/4	UCFL 217-52	12-1/64	9-49/64	1-27/64	55/64	2-31/64	63/64	7-31/64	3-29/64	3.3740	1.3425	7/8	UC 217-52		8.50
90	UCFL 218	320	265	40	23	68.0	25	205	96.3	96.0	39.7	M 22	UC 218	FL 218	10.70
3-1/2	UCFL 218-56	12-19/32	10-7/16	1-37/64	29/32	2-43/64	63/64	8-5/64	3-51/64	3.7800	1.5630	7/8	UC 218-56		10.81

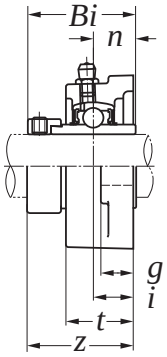


Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	N_1	b	L_1	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCFA 201	102	78	15	12	25.5	10	40	60	54	33.3	31.0	12.7	M 8	UC 201	FA 204	0.49
1/2	UCFA 201-8	4-1/64	3-5/64	19/32	15/32	1	25/64	1-37/64	2-23/64	2-1/8	1-5/16	1.2205	0.5000	5/16	UC 201-8		0.49
15	UCFA 202	102	78	15	12	25.5	10	40	60	54	33.3	31.0	12.7	M 8	UC 202	FA 204	0.48
5/8	UCFA 202-10	4-1/64	3-5/64	19/32	15/32	1	25/64	1-37/64	2-23/64	2-1/8	1-5/16	1.2205	0.5000	5/16	UC 202-10		0.48
17	UCFA 203	102	78	15	12	25.5	10	40	60	54	33.3	31.0	12.7	M 8	UC 203	FA 204	0.47
11/16	UCFA 203-11	4-1/64	3-5/64	19/32	15/32	1	25/64	1-37/64	2-23/64	2-1/8	1-5/16	1.2205	0.5000	5/16	UC 203-11		0.47
20	UCFA 204	102	78	15	12	25.5	10	40	60	54	33.3	31.0	12.7	M 8	UC 204	FA 204	0.45
3/4	UCFA 204-12	4-1/64	3-5/64	19/32	15/32	1	25/64	1-37/64	2-23/64	2-1/8	1-5/16	1.2205	0.5000	5/16	UC 204-12		0.46
25	UCFA 205	125	98	16	14	27.0	12	51	68	65	34.7	34.1	14.3	M 10	UC 205	FA 205	0.64
1	UCFA 205-16	4-59/64	3-55/64	5/8	35/64	1-1/16	15/32	2-1/64	2-43/64	2-9/16	1-23/64	1.3425	0.5630	3/8	UC 205-16		0.63
30	UCFA 206	144	117	18	14	31.0	12	58	80	72	40.2	38.1	15.9	M 10	UC 206		0.92
1-1/8	UCFA 206-18	5-43/64	4-39/64	45/64	35/64	1-7/32	15/32	2-9/32	3-5/32	2-53/64	1-37/64	1.5000	0.6260	3/8	UC 206-18	FA 206	0.94
1-1/4	UCFA 206-20														UC 206-20		0.90
35	UCFA 207	161	130	19	16	34.0	14	66	90	82	45.4	42.9	17.5	M 12	UC 207		1.27
1-1/4	UCFA 207-20	6-11/32	5-1/8	3/4	5/8	1-11/32	35/64	2-19/32	3-35/64	3-15/64	1-25/32	1.6890	0.6890	7/16	UC 207-20	FA 207	1.33
1-3/8	UCFA 207-22														UC 207-22		1.28
40	UCFA 208	175	144	21	16	36.0	14	71	100	87	52.2	49.2	19.0	M 12	UC 208	FA 208	1.62
1-1/2	UCFA 208-24	6-57/64	5-43/64	53/64	5/8	1-27/64	35/64	2-51/64	3-15/16	3-27/64	2-1/16	1.9370	0.7480	7/16	UC 208-24		1.66
45	UCFA 209	178	146	22	16	38.0	16	72	108	88	52.2	49.2	19.0	M 14	UC 209		1.84
1-5/8	UCFA 209-26	7-1/64	5-3/4	55/64	5/8	1-1/2	5/8	2-53/64	4-1/4	3-15/32	2-1/16	1.9370	0.7480	1/2	UC 209-26	FA 209	1.94
1-3/4	UCFA 209-28														UC 209-28		1.86
50	UCFA 210	188	155	22	16	39.0	16	75	114	92	54.6	51.6	19.0	M 14	UC 210	FA 210	2.10
1-7/8	UCFA 210-30	7-13/32	6-7/64	55/64	5/8	1-17/32	5/8	2-61/64	4-31/64	3-5/8	2-5/32	2.0315	0.7480	1/2	UC 210-30		2.17
55	UCFA 211	216	182	25	18	42.5	16	84	128	102	58.4	55.6	22.2	M 14	UC 211	FA 211	2.16
2	UCFA 211-32	8-1/2	7-11/64	63/64	45/64	1-43/64	5/8	3-5/16	5-1/16	4-1/64	2-19/64	2.1890	0.8740	1/2	UC 211-32		2.31
60	UCFA 212	238	202	29	19	47.5	18	104	140	122	68.7	65.1	25.4	M 16	UC 212	FA 212	2.92
2-1/4	UCFA 212-36	9-3/8	7-61/64	1-9/64	3/4	1-7/8	45/64	4-3/32	5-3/64	4-51/64	2-45/64	2.5630	1.0000	5/8	UC 212-36		3.06
65	UCFA 213	248	210	30	20	49.0	18	106	152	126	69.7	65.1	25.4	M 16	UC 213	FA 213	3.61
2-1/2	UCFA 213-40	9-49/64	8-17/64	1-3/16	25/32	1-59/64	45/64	4-11/64	5-63/64	4-61/64	2-3/4	2.5630	1.0000	5/8	UC 213-40		3.69

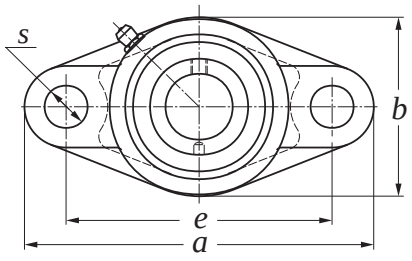


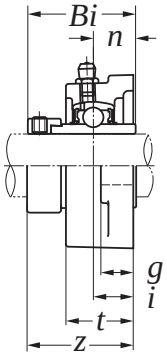
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	s	h	h1	L	b	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCFB 201	109	32	15	11	25.5	10	42	27	52	60	33.3	31.0	12.7	M 8	UC 201	FB 204	0.53
1/2	UCFB 201-8	4-19/64	1-17/64	19/32	7/16	1	25/64	1-21/32	1-1/16	2-1/16	2-23/64	1-5/16	1.2205	0.5000	5/16	UC 201-8		0.53
15	UCFB 202	109	32	15	11	25.5	10	42	27	52	60	33.3	31.0	12.7	M 8	UC 202	FB 204	0.52
5/8	UCFB 202-10	4-19/64	1-17/64	19/32	7/16	1	25/64	1-21/32	1-1/16	2-1/16	2-23/64	1-5/16	1.2205	0.5000	5/16	UC 202-10		0.52
17	UCFB 203	109	32	15	11	25.5	10	42	27	52	60	33.3	31.0	12.7	M 8	UC 203	FB 204	0.51
11/16	UCFB 203-11	4-19/64	1-17/64	19/32	7/16	1	25/64	1-21/32	1-1/16	2-1/16	2-23/64	1-5/16	1.2205	0.5000	5/16	UC 203-11		0.51
20	UCFB 204	109	32	15	11	25.5	10	42	27	52	60	33.3	31.0	12.7	M 8	UC 204	FB 204	0.49
3/4	UCFB 204-12	4-19/64	1-17/64	19/32	7/16	1	25/64	1-21/32	1-1/16	2-1/16	2-23/64	1-5/16	1.2205	0.5000	5/16	UC 204-12		0.50
25	UCFB 205	116	34	16	13	27.0	10	45	27	56	68	35.7	34.1	14.3	M 8	UC 205	FB 205	0.66
1	UCFB 205-16	4-9/16	1-11/32	5/8	3/64	1-1/16	25/64	1-49/64	1-1/16	2-13/64	2-43/64	1-13/32	1.3425	0.5630	5/16	UC 205-16		0.65
30	UCFB 206	132	40	18	13	31.0	10	50	29	65	80	40.2	38.1	15.9	M 8	UC 206		0.99
1-1/8	UCFB 206-18	5-13/64	1-37/64	45/64	3/64	1-7/32	25/64	1-31/32	1-9/64	2-9/16	3-5/32	1-37/64	1.5000	0.6260	5/16	UC 206-18	FB 206	1.01
1-1/4	UCFB 206-20															UC 206-20		0.97
35	UCFB 207	144	46	19	14	33.0	10	55	32	70	90	44.4	42.9	17.5	M 8	UC 207		1.21
1-1/4	UCFB 207-20	5-43/64	1-13/16	3/4	35/64	1-19/64	25/64	2-11/64	1-17/64	2-3/4	3-35/64	1-3/4	1.6890	0.6890	5/16	UC 207-20	FB 207	1.27
1-3/8	UCFB 207-22															UC 207-22		1.22
40	UCFB 208	164	50	21	16	35.0	12	60	41	78	100	51.2	49.2	19.0	M 10	UC 208	FB 208	1.72
1-1/2	UCFB 208-24	6-29/64	1-31/32	53/64	5/8	1-3/8	15/32	2-23/64	1-39/64	3-5/64	3-15/16	2-1/64	1.9370	0.7480	3/8	UC 208-24		1.76
45	UCFB 209	175	54	22	16	38.0	12	65	43	80	108	52.2	49.2	19.0	M 10	UC 209		1.86
1-5/8	UCFB 209-26	6-57/64	2-1/8	55/64	5/8	1-1/2	15/32	2-9/16	1-11/16	3-5/32	4-1/4	2-1/16	1.9370	0.7480	3/8	UC 209-26	FB 209	1.96
1-3/4	UCFB 209-28															UC 209-28		1.88
50	UCFB 210	184	58	22	16	39.0	12	68	46	86	114	54.6	51.6	19.0	M 10	UC 210	FB 210	2.36
1-7/8	UCFB 210-30	7-1/4	2-9/32	55/64	5/8	1-17/32	15/32	2-43/64	1-13/16	3-25/64	4-31/64	2-5/32	2.0315	0.7480	3/8	UC 210-30		2.43
55	UCFB 211	207	62	25	18	42.5	14	78	50	90	128	58.4	55.6	22.2	M 12	UC 211	FB 211	3.11
2	UCFB 211-32	8-5/32	2-7/16	63/64	45/64	1-43/64	35/64	3-5/64	1-31/32	3-35/64	5-1/16	2-19/64	2.1890	0.8740	7/16	UC 211-32		3.26
60	UCFB 212	224	66	29	19	47.5	14	84	55	94	140	68.7	65.1	25.4	M 12	UC 212	FB 212	4.07
2-1/4	UCFB 212-36	8-13/16	2-19/32	1-9/64	3/4	1-7/8	35/64	3-5/16	2-11/64	3-45/64	5-3/64	2-45/64	2.5630	1.0000	7/16	UC 212-36		4.21
65	UCFB 213	244	70	30	20	49.0	14	92	60	102	152	69.7	65.1	25.4	M 12	UC 213	FB 213	4.86
2-1/2	UCFB 213-40	9-39/64	2-3/4	1-3/16	25/32	1-59/64	35/64	3-5/8	2-23/64	4-1/64	5-63/64	2-3/4	2.5630	1.0000	7/16	UC 213-40		4.94



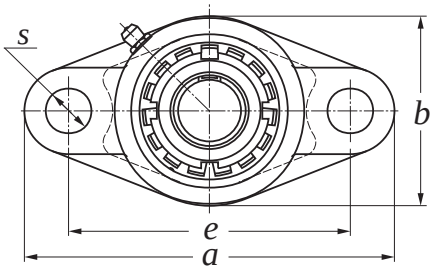


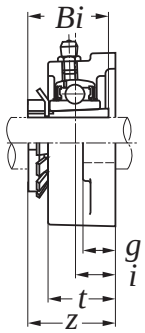
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	b	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UELFL 201	113	90	15	11	25.5	60	12	41.5	43.5	17.0	M 10	UEL 201	FL 204	0.53
1/2	UELFL 201-8	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-41/64	1.7126	0.6693	3/8	UEL 201-8		0.53
15	UELFL 202	113	90	15	11	25.5	60	12	41.5	43.5	17.0	M 10	UEL 202	FL 204	0.51
5/8	UELFL 202-10	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-41/64	1.7126	0.6693	3/8	UEL 202-10		0.51
17	UELFL 203	113	90	15	11	25.5	60	12	41.5	43.5	17.0	M 10	UEL 203	FL 204	0.50
11/16	UELFL 203-11	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-41/64	1.7126	0.6693	3/8	UEL 203-11		0.50
20	UELFL 204	113	90	15	11	25.5	60	12	41.5	43.5	17.0	M 10	UEL 204	FL 204	0.48
3/4	UELFL 204-12	4-29/64	3-35/64	19/32	7/16	1	15/32	2-23/64	1-41/64	1.7126	0.6693	3/8	UEL 204-12		0.49
25	UELFL 205	130	99	16	13	27.0	68	16	42.9	44.3	17.4	M 14	UEL 205	FL 205	0.64
1	UELFL 205-16	5-1/8	3-57/64	5/8	3/64	1-1/16	5/8	2-43/64	1-11/16	1.7441	0.6850	1/2	UEL 205-16		0.63
30	UELFL 206	148	117	18	13	31.0	80	16	48.1	48.3	18.2	M 14	UEL 206		1.00
1-1/8	UELFL 206-18	5-53/64	4-39/64	45/64	3/64	1-7/32	5/8	3-5/32	1-57/64	1.9016	0.7165	1/2	UEL 206-18	FL 206	1.02
1-1/4	UELFL 206-20												UEL 206-20		0.97
35	UELFL 207	161	130	19	14	34.0	90	16	51.3	51.1	18.8	M 14	UEL 207		1.27
1-1/4	UELFL 207-20	6-11/32	5-1/8	3/4	35/64	1-11/32	5/8	3-35/64	2-1/64	2.0118	0.7402	1/2	UEL 207-20	FL 207	1.35
1-3/8	UELFL 207-22												UEL 207-22		1.28
40	UELFL 208	175	144	21	14	36.0	100	16	55.9	56.3	21.4	M 14	UEL 208	FL 208	1.57
1-1/2	UELFL 208-24	6-57/64	5-43/64	53/64	35/64	1-27/64	5/8	3-15/16	2-13/64	2.2165	0.8425	1/2	UEL 208-24		1.62
45	UELFL 209	188	148	22	16	38.0	108	19	56.9	56.3	21.4	M 16	UEL 209		1.97
1-5/8	UELFL 209-26	7-13/32	5-53/64	55/64	5/8	1-1/2	3/4	4-1/4	2-15/64	2.2165	0.8425	5/8	UEL 209-26	FL 209	2.08
1-3/4	UELFL 209-28												UEL 209-28		1.99
50	UELFL 210	197	157	22	16	40.0	115	19	60.1	62.7	24.6	M 16	UEL 210	FL 210	2.34
1-7/8	UELFL 210-30	7-3/4	6-3/16	55/64	5/8	1-37/64	3/4	4-17/32	2-23/64	2.4685	0.9685	5/8	UEL 210-30		2.43
55	UELFL 211	224	184	25	18	43.0	130	19	68.6	71.4	27.7	M 16	UEL 211	FL 211	3.13
2	UELFL 211-32	8-13/16	7-1/4	63/64	45/64	1-11/16	3/4	5-1/8	2-45/64	2.8110	1.0906	5/8	UEL 211-32		3.32
60	UELFL 212	250	202	29	18	48.0	140	23	75.8	77.8	30.9	M 20	UEL 212	FL 212	4.10
2-1/4	UELFL 212-36	9-27/32	7-61/64	1-9/64	45/64	1-57/64	29/32	5-3/64	2-63/64	3.0630	1.2165	3/4	UEL 212-36		4.26
65	UELFL 213	258	210	30	20	50.0	155	23	81.6	85.7	34.1	M 20	UEL 213	FL 213	5.18
2-1/2	UELFL 213-40	10-5/32	8-17/64	1-3/16	25/32	1-31/32	29/32	6-7/64	3-7/32	3.3740	1.3425	3/4	UEL 213-40		5.28
70	UELFL 214	265	216	31	20	54.0	160	23	82.6	85.7	34.1	M 20	UEL 214	FL 214	5.74
2-3/4	UELFL 214-44	10-7/16	8-1/2	1-7/32	25/32	2-1/8	29/32	6-19/64	3-1/4	3.3740	1.3425	3/4	UEL 214-44		5.75

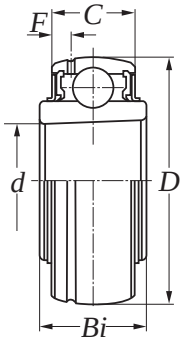




Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	b	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UELFL 215	275	225	34	22	55.0	164	23	88.8	92.1	37.3	M 20	UEL 215	FL 215	5.99
3	UELFL 215-48	10-53/64	8-55/64	1-11/32	25/32	2-13/64	29/32	6-1/2	3-1/2	3.6260	1.4685	3/4	UEL 215-48		5.89

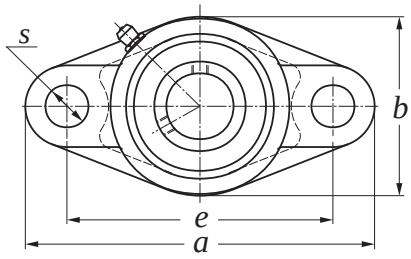


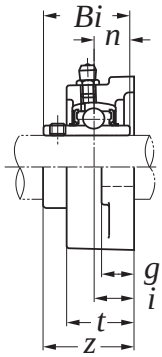




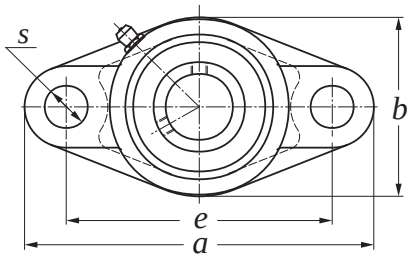
Taper 1:12

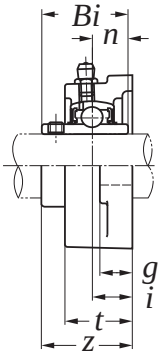
Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	*e*	*i*	*g*	*t*	*b*	*s*	*z*	*Bi*				
20	UKFL 205	130	99	16	13	27.0	68	16	35.5	35	M 14	UK 205	FL 205	0.54
25	UKFL 206	148	117	18	13	31.0	80	16	39.0	38	M 14	UK 206	FL 206	0.84
30	UKFL 207	161	130	19	14	34.0	90	16	42.5	43	M 14	UK 207	FL 207	1.04
35	UKFL 208	175	144	21	14	36.0	100	16	46.5	46	M 14	UK 208	FL 208	1.27
40	UKFL 209	188	148	22	16	38.0	108	19	48.5	50	M 16	UK 209	FL 209	1.65
45	UKFL 210	197	157	22	16	40.0	115	19	50.0	55	M 16	UK 210	FL 210	1.92
50	UKFL 211	224	184	25	18	43.0	130	19	54.5	59	M 16	UK 211	FL 211	2.51
55	UKFL 212	250	202	29	18	48.0	140	23	61.0	62	M 20	UK 212	FL 212	3.26
60	UKFL 213	258	210	30	20	50.0	155	23	64.0	65	M 20	UK 213	FL 213	4.13



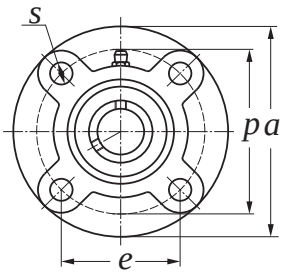


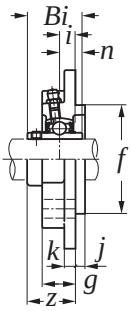
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	b	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
25	UCFL X05	141	117	18	13	30	83	12	40.2	38.1	15.9	M 10	UC X05		0.95
13/16	UCFL X05-13												UC X05-13		1.00
7/8	UCFL X05-14	5-35/64	4-39/64	45/64	3/64	1-3/16	3-17/64	15/32	1-37/64	1.5000	0.6260	3/8	UC X05-14	FL X05	0.98
15/16	UCFL X05-15												UC X05-15		0.96
1	UCFL X05-16												UC X05-16		0.94
30	UCFL X06	156	130	19	14	34	95	16	44.4	42.9	17.5	M 14	UC X06		1.34
1-1/16	UCFL X06-17												UC X06-17		1.36
1-1/8	UCFL X06-18	6-9/64	5-1/8	3/4	19/32	1-11/32	3-47/64	5/8	1-3/4	1.6890	0.6890	1/2	UC X06-18	FL X06	1.35
1-3/16	UCFL X06-19												UC X06-19		1.32
1-1/4	UCFL X06-20												UC X06-20		1.31
35	UCFL X07	171	144	21	14	38	105	16	51.2	49.2	19.0	M 14	UC X07		1.74
1-1/4	UCFL X07-20												UC X07-20		1.78
1-5/16	UCFL X07-21	6-47/64	5-43/64	53/64	5/8	1-1/2	4-9/64	5/8	2-1/64	1.9370	0.7480	1/2	UC X07-21	FL X07	1.77
1-3/8	UCFL X07-22												UC X07-22		1.76
1-7/16	UCFL X07-23												UC X07-23		1.72
40	UCFL X08	179	148	22	14	40	111	16	52.2	49.2	19.0	M 14	UC X08	FL X08	1.97
1-1/2	UCFL X08-24	7-1/16	5-53/64	55/64	5/8	1-37/64	4-3/8	5/8	2-1/16	1.9370	0.7480	1/2	UC X08-24		2.01
45	UCFL X09	189	157	23	14	40	116	16	55.6	51.6	19.0	M 14	UC X09		2.18
1-5/8	UCFL X09-26												UC X09-26	FL X09	2.33
1-11/16	UCFL X09-27	7-7/16	6-3/16	29/32	5/8	1-37/64	4-9/16	5/8	2-3/16	2.0315	0.7480	1/2	UC X09-27		2.24
1-3/4	UCFL X09-28												UC X09-28		2.20
50	UCFL X10	216	184	26	20	44	133	19	59.4	55.6	22.2	M 16	UC X10		3.19
1-7/8	UCFL X10-30												UC X10-30	FL X10	3.33
1-15/16	UCFL X10-31	8-1/2	7-1/4	1-1/64	45/64	1-47/64	5-15/64	3/4	2-11/32	2.1890	0.8740	5/8	UC X10-31		3.22
2	UCFL X10-32												UC X10-32		3.16

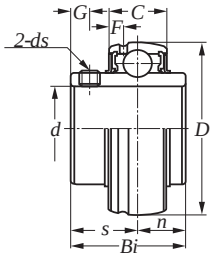




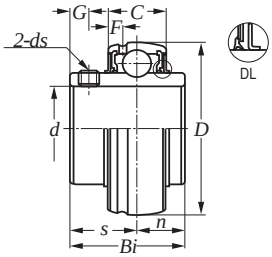
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	e	i	g	t	b	s	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
25	UCFL 305	150	113	16	13	29	80	19	39	38	15	M 16	UC 305	FL 305	0.88
1	UCFL 305-16	5-29/32	4-29/64	5/8	3/64	1-9/64	3-5/32	3/4	1-17/32	1.4961	0.5906	5/8	UC 305-16		0.87
30	UCFL 306	180	134	18	15	32	90	23	44	43	17	M 20	UC 306		1.34
1-1/8	UCFL 306-18	7-3/32	5-9/32	45/64	19/32	1-17/64	3-35/64	29/32	1-47/64	1.6929	0.6693	3/4	UC 306-18	FL 306	1.36
1-1/4	UCFL 306-20												UC 306-20		1.32
35	UCFL 307	185	141	20	16	36	100	23	49	48	19	M 20	UC 307		1.59
1-1/4	UCFL 307-20	7-9/32	5-35/64	25/32	5/8	1-27/64	3-15/16	29/32	1-59/64	1.8898	0.7480	3/4	UC 307-20	FL 307	1.65
1-3/8	UCFL 307-22												UC 307-22		1.61
40	UCFL 308	200	158	23	17	40	112	23	56	52	19	M 20	UC 308	FL 308	2.11
1-1/2	UCFL 308-24	7-7/8	6-7/32	29/32	43/64	1-37/64	4-13/32	29/32	2-13/64	2.0472	0.7480	3/4	UC 308-24		2.15
45	UCFL 309	230	177	25	18	44	125	25	60	57	22	M 22	UC 309		3.07
1-5/8	UCFL 309-26	9-1/16	6-31/32	63/64	45/64	1-47/64	4-59/64	63/64	2-23/64	2.2441	0.8661	7/8	UC 309-26	FL 309	3.15
1-3/4	UCFL 309-28												UC 309-28		3.09
50	UCFL 310	240	187	28	19	48	140	25	67	61	22	M 22	UC 310	FL 310	3.83
1-7/8	UCFL 310-30	9-29/64	7-23/64	1-7/64	3/4	1-57/64	5-3/64	63/64	2-41/64	2.4016	0.8661	7/8	UC 310-30		3.92
55	UCFL 311	250	198	30	20	52	150	25	71	66	25	M 22	UC 311	FL 311	4.66
2	UCFL 311-32	9-27/32	7-51/64	1-3/16	25/32	2-1/16	5-29/32	63/64	2-51/64	2.5984	0.9843	7/8	UC 311-32		4.84
60	UCFL 312	270	212	33	22	56	160	31	78	71	26	M 27	UC 312	FL 312	5.59
2-1/4	UCFL 312-36	10-5/8	8-11/32	1-19/64	55/64	2-13/64	6-19/64	1-7/32	3-5/64	2.7953	1.0236	1	UC 312-36		5.64
65	UCFL 313	295	240	33	25	58	175	31	78	75	30	M 27	UC 313	FL 313	6.99
2-1/2	UCFL 313-40	11-39/64	9-29/64	1-19/64	63/64	2-9/32	6-57/64	1-7/32	3-5/64	2.9528	1.1811	1	UC 313-40		7.04
70	UCFL 314	315	250	36	28	61	185	35	81	78	33	M 30	UC 314	FL 314	8.42
2-3/4	UCFL 314-44	12-13/32	9-27/32	1-27/64	1-7/64	2-13/32	7-9/32	1-3/8	3-3/16	3.0709	1.2992	1-1/8	UC 314-44		8.43
75	UCFL 315	320	260	39	30	66	195	35	89	82	32	M 30	UC 315	FL 315	9.80
3	UCFL 315-48	12-19/32	10-15/64	1-17/32	1-3/16	2-19/32	7-43/64	1-3/8	3-1/2	3.2283	1.2598	1-1/8	UC 315-48		9.71
80	UCFL 316	355	285	38	32	68	210	38	90	86	34	M 33	UC 316	FL 316	13.00
3-1/8	UCFL 316-50	13-31/64	11-7/64	1-1/2	1-17/64	2-43/64	8-17/64	1-1/2	3-35/64	3.3858	1.3386	1-1/4	UC 316-50		13.03





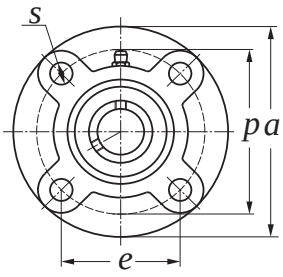


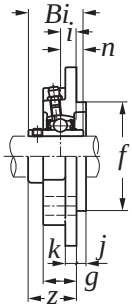
(Singel Lips)

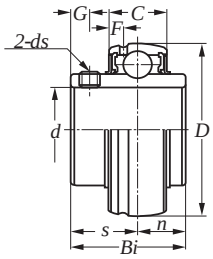


(Double Lips DL)

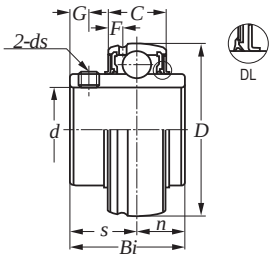
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	p	e	i	s	j	k	g	f	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UCFC 201	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 201	FC 204	0.73
1/2	UCFC 201-8	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/64	1.2205	0.5000	3/8	UC 201-8		0.73
15	UCFC 202	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 202	FC 204	0.72
5/8	UCFC 202-10	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/64	1.2205	0.5000	3/8	UC 202-10		0.72
17	UCFC 203	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 203	FC 204	0.71
11/16	UCFC 203-11	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/64	1.2205	0.5000	3/8	UC 203-11		0.71
20	UCFC 204	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 204	FC 204	0.69
3/4	UCFC 204-12	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/64	1.2205	0.5000	3/8	UC 204-12		0.70
25	UCFC 205	115	90	63.6	10	12	6	7	21.0	70	29.7	34.1	14.3	M 10	UC 205	FC 205	0.99
1	UCFC 205-16	4-17/32	3-35/64	2-1/2	25/64	15/32	15/64	9/32	53/64	2-3/4	1-11/64	1.3425	0.5630	3/8	UC 205-16		0.98
30	UCFC 206	125	100	70.7	10	12	8	8	23.0	80	32.2	38.1	15.9	M 10	UC 206		1.25
1-1/8	UCFC 206-18	4-59/64	3-15/16	2-25/32	25/64	15/32	5/16	5/16	29/32	3-5/32	1-17/64	1.5000	0.6260	3/8	UC 206-18	FC 206	1.27
1-1/4	UCFC 206-20														UC 206-20		1.23
35	UCFC 207	135	110	77.8	11	14	8	9	26.0	90	36.4	42.9	17.5	M 12	UC 207		1.64
1-1/4	UCFC 207-20	5-5/16	4-21/64	3-1/16	7/16	35/64	5/16	23/64	1-1/64	3-35/64	1-7/16	1.6890	0.6890	7/16	UC 207-20	FC 207	1.70
1-3/8	UCFC 207-22														UC 207-22		1.65
40	UCFC 208	145	120	84.8	11	14	10	9	26.0	100	41.2	49.2	19.0	M 12	UC 208	FC 208	2.01
1-1/2	UCFC 208-24	5-45/64	4-23/32	3-11/32	7/16	35/64	25/64	23/64	1-1/64	3-15/16	1-5/8	1.9370	0.7480	7/16	UC 208-24		2.05
45	UCFC 209	160	132	93.3	10	16	12	10	26.0	105	40.2	49.2	19.0	M 14	UC 209		2.57
1-5/8	UCFC 209-26	6-19/64	5-13/64	3-43/64	25/64	5/8	15/32	25/64	1-1/64	4-9/64	1-37/64	1.9370	0.7480	1/2	UC 209-26	FC 209	2.67
1-3/4	UCFC 209-28														UC 209-28		2.59
50	UCFC 210	165	138	97.6	10	16	12	14	28.0	110	42.6	51.6	19.0	M 14	UC 210	FC 210	2.85
1-7/8	UCFC 210-30	6-1/2	5-7/16	3-27/32	25/64	5/8	15/32	35/64	1-7/64	4-21/64	1-43/64	2.0315	0.7480	1/2	UC 210-30		2.92
55	UCFC 211	185	150	106.1	13	19	12	13	30.0	125	46.4	55.6	22.2	M 16	UC 211	FC 211	3.92
2	UCFC 211-32	7-9/32	5-29/32	4-11/64	3/64	3/4	15/32	3/64	1-3/16	4-59/64	1-53/64	2.1890	0.8740	5/8	UC 211-32		4.07
60	UCFC 212	195	160	113.1	17	19	12	15	36.0	135	56.7	65.1	25.4	M 16	UC 212	FC 212	5.03
2-1/4	UCFC 212-36	7-43/64	6-19/64	4-29/64	43/64	3/4	15/32	19/32	1-27/64	5-5/16	2-15/64	2.5630	1.0000	5/8	UC 212-36		5.17
65	UCFC 213	205	170	120.2	16	19	14	15	35.0	145	55.7	65.1	25.4	M 16	UC 213	FC 213	5.52
2-1/2	UCFC 213-40	8-5/64	6-11/16	4-47/64	5/8	3/4	35/64	19/32	1-3/8	5-45/64	2-3/16	2.5630	1.0000	5/8	UC 213-40		5.60
70	UCFC 214	215	177	125.1	17	19	14	16	38.0	150	61.4	74.6	30.2	M 16	UC 214	FC 214	6.55
2-3/4	UCFC 214-44	8-15/32	6-31/32	4-59/64	43/64	3/4	35/64	5/8	1-1/2	5-29/32	2-27/64	2.9370	1.1890	5/8	UC 214-44		6.56





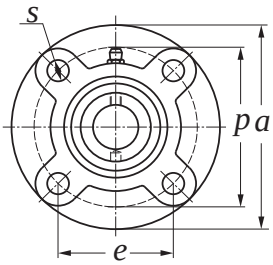


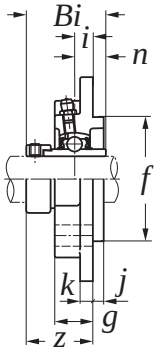
(Singel Lips)



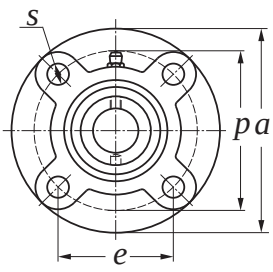
(Double Lips DL)

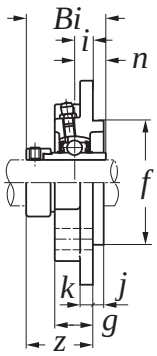
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	p	e	i	s	j	k	g	f	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UCFC 215	220	184	130.1	18	19	16	17	39.0	160	62.5	77.8	33.3	M 16	UC 215	FC 215	7.01
3	UCFC 215-48	8-21/32	7-1/4	5-1/8	45/64	3/4	5/8	43/64	1-17/32	6-19/64	2-29/64	3.0630	1.3110	5/8	UC 215-48		6.93
80	UCFC 216	240	200	141.4	18	23	16	18	42.0	170	67.3	82.6	33.3	M 20	UC 216	FC 216	8.94
3-1/8	UCFC 216-50	9-29/64	7-7/8	5-9/16	45/64	29/32	5/8	45/64	1-21/32	6-11/16	2-21/32	3.2520	1.3110	3/4	UC 216-50		8.99
85	UCFC 217	250	208	147.1	18	23	18	20	45.0	180	69.6	85.7	34.1	M 20	UC 217	FC 217	10.68
3-1/4	UCFC 217-52	9-27/32	8-3/16	5-51/64	45/64	29/32	45/64	25/32	1-49/64	7-3/32	2-47/64	3.3740	1.3425	3/4	UC 217-52		10.90
90	UCFC 218	265	220	155.5	22	23	18	20	50.0	190	78.3	96.0	39.7	M 20	UC 218	FC 218	12.95
3-1/2	UCFC 218-56	10-7/16	8-21/32	6-1/8	55/64	29/32	45/64	25/32	1-31/32	7-31/64	3-5/64	3.7800	1.5630	3/4	UC 218-56		13.06



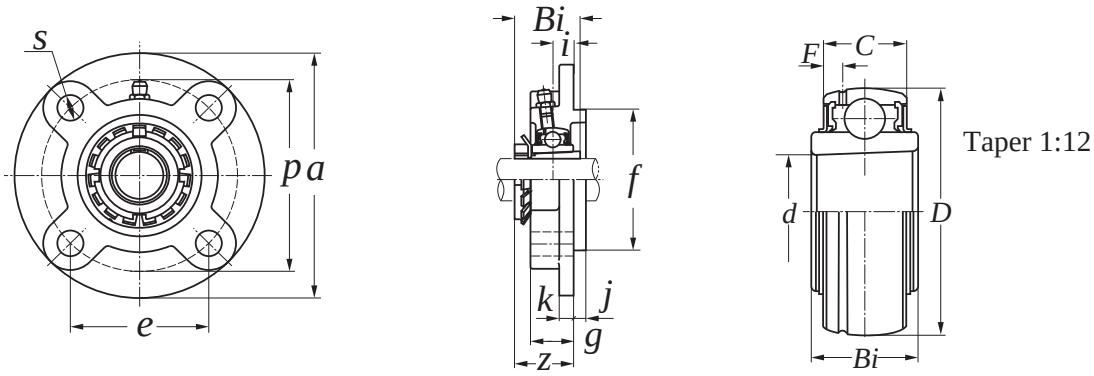


Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	p	e	i	s	j	k	g	f	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
12	UELFC 201	100	78	55.1	10	12	5	6	20.5	62	36.5	43.5	17.0	M 10	UEL 201	FC 204	0.79
1/2	UELFC 201-8	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/16	1.7126	0.6693	3/8	UEL 201-8		0.79
15	UELFC 202	100	78	55.1	10	12	5	6	20.5	62	36.5	43.5	17.0	M 10	UEL 202	FC 204	0.77
5/8	UELFC 202-10	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/16	1.7126	0.6693	3/8	UEL 202-10		0.77
17	UELFC 203	100	78	55.1	10	12	5	6	20.5	62	36.5	43.5	17.0	M 10	UEL 203	FC 204	0.76
11/16	UELFC 203-11	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/16	1.7126	0.6693	3/8	UEL 203-11		0.76
20	UELFC 204	100	78	55.1	10	12	5	6	20.5	62	36.5	43.5	17.0	M 10	UEL 204	FC 204	0.74
3/4	UELFC 204-12	3-15/16	3-5/64	2-11/64	25/64	15/32	13/64	15/64	13/16	2-7/16	1-7/16	1.7126	0.6693	3/8	UEL 204-12		0.75
25	UELFC 205	115	90	63.6	10	12	6	7	21.0	70	36.9	44.3	17.4	M 10	UEL 205	FC 205	1.03
1	UELFC 205-16	4-17/32	3-35/64	2-1/2	25/64	15/32	15/64	9/32	53/64	2-3/4	1-29/64	1.7441	0.6850	3/8	UEL 205-16		1.02
30	UELFC 206	125	100	70.7	10	12	8	8	23.0	80	40.1	48.3	18.2	M 10	UEL 206	FC 206	1.34
1-1/8	UELFC 206-18	4-59/64	3-15/16	2-25/32	25/64	15/32	5/16	5/16	29/32	3-5/32	1-37/64	1.9016	0.7165	3/8	UEL 206-18		1.36
1-1/4	UELFC 206-20														UEL 206-20		1.31
35	UELFC 207	135	110	77.8	11	14	8	9	26.0	90	43.3	51.1	18.8	M 12	UEL 207	FC 207	1.77
1-1/4	UELFC 207-20	5-5/16	4-21/64	3-1/16	7/16	35/64	5/16	23/64	1-1/64	3-35/64	1-45/64	2.0118	0.7402	7/16	UEL 207-20		1.85
1-3/8	UELFC 207-22														UEL 207-22		1.78
40	UELFC 208	145	120	84.8	11	14	10	9	26.0	100	45.9	56.3	21.4	M 12	UEL 208	FC 208	2.15
1-1/2	UELFC 208-24	5-45/64	4-23/32	3-11/32	7/16	35/64	25/64	23/64	1-1/64	3-15/16	1-13/16	2.2165	0.8425	7/16	UEL 208-24		2.20
45	UELFC 209	160	132	93.3	10	16	12	10	26.0	105	44.9	56.3	21.4	M 14	UEL 209	FC 209	2.74
1-5/8	UELFC 209-26	6-19/64	5-13/64	3-43/64	25/64	5/8	15/32	25/64	1-1/64	4-9/64	1-49/64	2.2165	0.8425	1/2	UEL 209-26		2.85
1-3/4	UELFC 209-28														UEL 209-28		2.76
50	UELFC 210	165	138	97.6	10	16	12	14	28.0	110	48.1	62.7	24.6	M 14	UEL 210	FC 210	3.06
1-7/8	UELFC 210-30	6-1/2	5-7/16	3-27/32	25/64	5/8	15/32	35/64	1-7/64	4-21/64	1-57/64	2.4685	0.9685	1/2	UEL 210-30		3.15
55	UELFC 211	185	150	106.1	13	19	12	13	30.0	125	56.6	71.4	27.7	M 16	UEL 211	FC 211	4.19
2	UELFC 211-32	7-9/32	5-29/32	4-11/64	3/64	3/4	15/32	3/64	1-3/16	4-59/64	2-15/64	2.8110	1.0906	5/8	UEL 211-32		4.38
60	UELFC 212	195	160	113.1	17	19	12	15	36.0	135	63.8	77.8	30.9	M 16	UEL 212	FC 212	5.37
2-1/4	UELFC 212-36	7-43/64	6-19/64	4-29/64	43/64	3/4	15/32	19/32	1-27/64	5-5/16	2-3/64	3.0630	1.2165	5/8	UEL 212-36		5.53
65	UELFC 213	205	170	120.2	16	19	14	15	35.0	145	67.6	85.7	34.1	M 16	UEL 213	FC 213	6.07
2-1/2	UELFC 213-40	8-5/64	6-11/16	4-47/64	5/8	3/4	35/64	19/32	1-3/8	5-45/64	2-21/32	3.3740	1.3425	5/8	UEL 213-40		6.17
70	UELFC 214	215	177	125.1	17	19	14	16	38.0	150	68.6	85.7	34.1	M 16	UEL 214	FC 214	7.07
2-3/4	UELFC 214-44	8-15/32	6-31/32	4-59/64	43/64	3/4	35/64	5/8	1-1/2	5-29/32	2-45/64	3.3740	1.3425	5/8	UEL 214-44		7.08

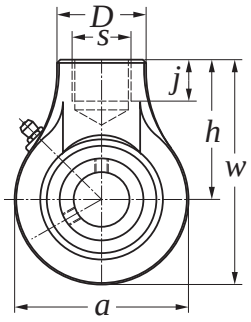


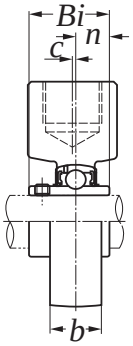


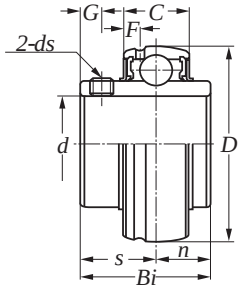
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	p	e	i	s	j	k	g	f	z	Bi	n	Bolt size mm / inch	Bearing number	Housing number	Mass of unit Kg
75	UELFC 215	220	184	130.1	18	19	16	17	39.0	160	72.8	92.1	37.3	M 16	UEL 215	FC 215	7.64
3	UELFC 215-48	8-21/32	7-1/4	5-1/8	45/64	3/4	5/8	43/64	1-17/32	6-19/64	2-55/64	3.6260	1.4685	5/8	UEL 215-48		7.54



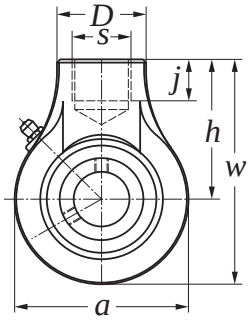
Shaft dia. mm	Unit number	Nominal dimensions mm											Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	*p*	*e*	*i*	*s*	*j*	*k*	*g*	*f*	*z*	*Bi*				
20	UKFC 205	115	90	63.6	10	12	6	7	21.0	70	29.5	35	M 10	UK 205	FC 205	0.93
25	UKFC 206	125	100	70.7	10	12	8	8	23.0	80	31.0	38	M 10	UK 206	FC 206	1.18
30	UKFC 207	135	110	77.8	11	14	8	9	26.0	90	34.5	43	M 12	UK 207	FC 207	1.54
35	UKFC 208	145	120	84.8	11	14	10	9	26.0	100	36.5	46	M 12	UK 208	FC 208	1.85
40	UKFC 209	160	132	93.3	10	16	12	10	26.0	105	36.5	50	M 14	UK 209	FC 209	2.42
45	UKFC 210	165	138	97.6	10	16	12	14	28.0	110	38.0	55	M 14	UK 210	FC 210	2.64
50	UKFC 211	185	150	106.1	13	19	12	13	30.0	125	42.5	59	M 16	UK 211	FC 211	3.57
55	UKFC 212	195	160	113.1	17	19	12	15	36.0	135	49.0	62	M 16	UK 212	FC 212	4.53
60	UKFC 213	205	170	120.2	16	19	14	15	35.0	145	50.0	65	M 16	UK 213	FC 213	5.02

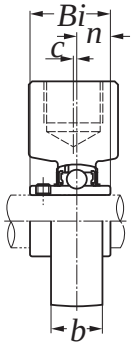


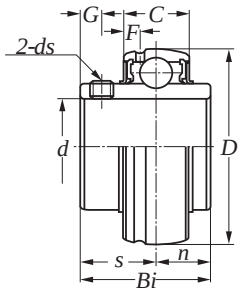




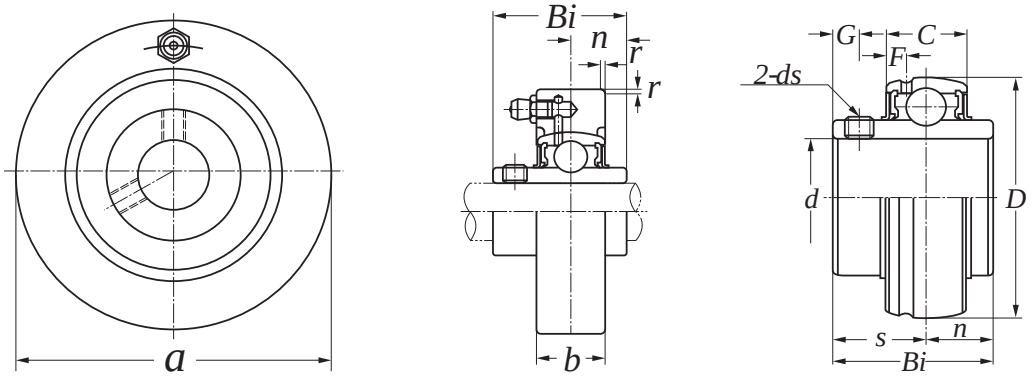
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	w	c	b	h	s	D	j	Bi	n	Bearing number	Housing number	Mass of unit Kg
12	UCHA 201	64	96.0	0	22	64	RP 3/4	40	19	31.0	12.7	UC 201	HA 204	0.66
1/2	UCHA 201-8	2-3/64	3-25/32	0	55/64	2-3/64	RP 3/4	1-37/64	3/4	1.2205	0.5000	UC 201-8		0.66
15	UCHA 202	64	96.0	0	22	64	RP 3/4	40	19	31.0	12.7	UC 202	HA 204	0.65
5/8	UCHA 202-10	2-3/64	3-25/32	0	55/64	2-3/64	RP 3/4	1-37/64	3/4	1.2205	0.5000	UC 202-10		0.65
17	UCHA 203	64	96.0	0	22	64	RP 3/4	40	19	31.0	12.7	UC 203	HA 204	0.64
11/16	UCHA 203-11	2-3/64	3-25/32	0	55/64	2-3/64	RP 3/4	1-37/64	3/4	1.2205	0.5000	UC 203-11		0.64
20	UCHA 204	64	96.0	0	22	64	RP 3/4	40	19	31.0	12.7	UC 204	HA 204	0.62
3/4	UCHA 204-12	2-3/64	3-25/32	0	55/64	2-3/64	RP 3/4	1-37/64	3/4	1.2205	0.5000	UC 204-12		0.63
25	UCHA 205	78	103.0	0	23	64	RP 3/4	40	19	34.1	14.3	UC 205	HA 205	0.83
1	UCHA 205-16	3-5/64	4-1/16	0	29/32	2-3/64	RP 3/4	1-37/64	3/4	1.3425	0.5630	UC 205-16		0.82
30	UCHA 206	78	103.0	0	25	64	RP 3/4	40	19	38.1	15.9	UC 206		0.78
1-1/8	UCHA 206-18	3-5/64	4-1/16	0	63/64	2-3/64	RP 3/4	1-37/64	3/4	1.5000	0.6260	UC 206-18	HA 206	0.80
1-1/4	UCHA 206-20											UC 206-20		0.76
35	UCHA 207	92	116.0	0	26	70	RP 3/4	40	19	42.9	17.5	UC 207		1.11
1-1/4	UCHA 207-20	3-5/8	4-9/16	0	1-1/64	2-3/4	RP 3/4	1-37/64	3/4	1.6890	0.6890	UC 207-20	HA 207	1.17
1-3/8	UCHA 207-22											UC 207-22		1.12
40	UCHA 208	96	121.0	2.0	30	73	RP 3/4	40	19	49.2	19.0	UC 208	HA 208	1.25
1-1/2	UCHA 208-24	3-25/32	4-49/64	5/64	1-3/16	2-7/8	RP 3/4	1-37/64	3/4	1.9370	0.7480	UC 208-24		1.29
45	UCHA 209	108	136.0	5.0	30	82	RP 1	48	21	49.2	19.0	UC 209		1.65
1-5/8	UCHA 209-26	4-1/4	5-23/64	13/64	1-3/16	3-15/64	RP 1	1-57/64	53/64	1.9370	0.7480	UC 209-26	HA 209	1.75
1-3/4	UCHA 209-28											UC 209-28		1.67
50	UCHA 210	115	140.5	5.0	32	83	RP 1	48	21	51.6	19.0	UC 210	HA 210	1.95
1-7/8	UCHA 210-30	4-17/32	5-17/32	13/64	1-17/64	3-17/64	RP 1	1-57/64	53/64	2.0315	0.7480	UC 210-30		2.02
55	UCHA 211	126	150.0	7.0	33	87	RP 1-1/4	60	24	55.6	22.2	UC 211	HA 211	2.48
2	UCHA 211-32	4-61/64	5-29/32	9/32	1-19/64	3-27/64	RP 1-1/4	2-23/64	15/16	2.1890	0.874	UC 211-32		2.63
60	UCHA 212	142	173.0	9.0	36	102	RP 1-1/4	60	28	65.1	25.4	UC 212	HA 212	3.59
2-1/4	UCHA 212-36	5-19/32	6-13/16	23/64	1-27/64	4-1/64	RP 1-1/4	2-23/64	1-7/64	2.5630	1.0000	UC 212-36		3.73
65	UCHA 213	166	200.0	9.5	38	117	RP 1-1/2	70	32	65.1	25.4	UC 213	HA 213	5.37
2-1/2	UCHA 213-40	6-17/32	7-7/8	3/8	1-1/2	4-39/64	RP 1-1/2	2-3/4	1-17/64	2.5630	1.0000	UC 213-40		5.45
70	UCHA 214	166	200.0	9.5	40	117	RP 1-1/2	70	32	74.6	30.2	UC 214	HA 214	5.47
2-3/4	UCHA 214-44	6-17/32	7-7/8	3/8	1-37/64	4-39/64	RP 1-1/2	2-3/4	1-17/64	2.9370	1.1890	UC 214-44		5.48



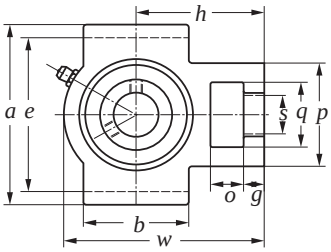


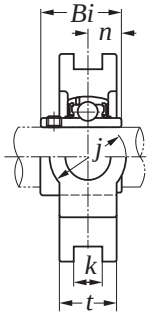


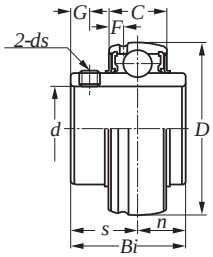
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	w	c	b	h	s	D	j	Bi	n	Bearing number	Housing number	Mass of unit Kg
75	UCHA 215	166	200.0	9.5	40	117	RP 1-1/2	70	32	77.8	33.3	UC 215	HA 215	5.11
3	UCHA 215-48	6-17/32	7-7/8	3/8	1-37/64	4-39/64	RP 1-1/2	2-3/4	1-17/64	3.0630	1.3110	UC 215-48		5.03



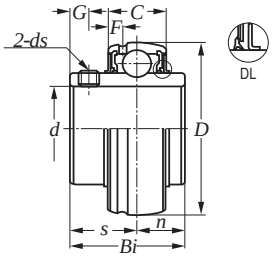
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch a	b	r	Bi	n	Bearing number	Housing number	Mass of unit Kg
12	UCC 201	72	20	2.0	31.0	12.7	UC 201	C 204	0.53
1/2	UCC 201-8	2-53/64	25/32	5/64	1.2205	0.5000	UC 201-8		0.53
15	UCC 202	72	20	2.0	31.0	12.7	UC 202	C 204	0.52
5/8	UCC 202-10	2-53/64	25/32	5/64	1.2205	0.5000	UC 202-10		0.52
17	UCC 203	72	20	2.0	31.0	12.7	UC 203	C 204	0.51
11/16	UCC 203-11	2-53/64	25/32	5/64	1.2205	0.5000	UC 203-11		0.51
20	UCC 204	72	20	2.0	31.0	12.7	UC 204	C 204	0.49
3/4	UCC 204-12	2-53/64	25/32	5/64	1.2205	0.5000	UC 204-12		0.50
25	UCC 205	80	22	2.0	34.1	14.3	UC 205	C 205	0.65
1	UCC 205-16	3-5/32	55/64	5/64	1.3425	0.5630	UC 205-16		0.64
30	UCC 206	85	27	2.0	38.1	15.9	UC 206	C 206	0.81
1-1/8	UCC 206-18	3-11/32	1-1/16	5/64	1.5000	0.6260	UC 206-18		0.83
1-1/4	UCC 206-20						UC 206-20		0.79
35	UCC 207	90	28	2.0	42.9	17.5	UC 207	C 207	0.90
1-1/4	UCC 207-20	3-35/64	1-7/64	5/64	1.6890	0.6890	UC 207-20		0.96
1-3/8	UCC 207-22						UC 207-22		0.91
40	UCC 208	100	30	2.5	49.2	19.0	UC 208	C 208	1.19
1-1/2	UCC 208-24	3-15/16	1-3/16	3/32	1.9370	0.7480	UC 208-24		1.23
45	UCC 209	110	31	2.5	49.2	19.0	UC 209	C 209	1.49
1-5/8	UCC 209-26	4-21/64	1-7/32	3/32	1.9370	0.7480	UC 209-26		1.59
1-3/4	UCC 209-28						UC 209-28		1.51
50	UCC 210	120	33	2.5	51.6	19.0	UC 210	C 210	1.92
1-7/8	UCC 210-30	4-23/32	1-19/64	3/32	2.0315	0.7480	UC 210-30		1.99
55	UCC 211	125	35	2.5	55.6	22.2	UC 211	C 211	2.21
2	UCC 211-32	4-59/64	1-3/8	3/32	2.1890	0.8740	UC 211-32		2.36
60	UCC 212	130	38	2.5	65.1	25.4	UC 212	C 212	2.48
2-1/4	UCC 212-36	5-1/8	1-1/2	3/32	2.5630	1.0000	UC 212-36		2.62
65	UCC 213	140	40	3.0	65.1	25.4	UC 213	C 213	2.97
2-1/2	UCC 213-40	5-3/64	1-37/64	1/8	2.5630	1.0000	UC 213-40		3.05





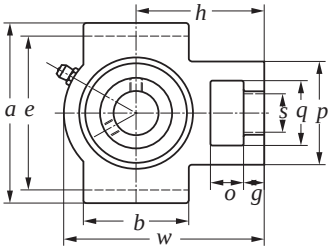


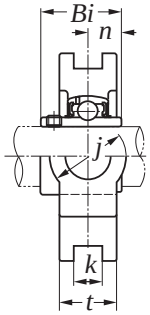
(Singel Lips)

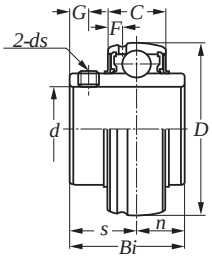


(Double Lips DL)

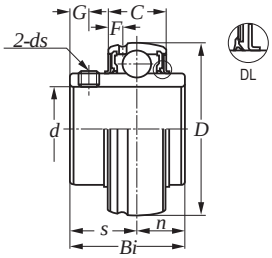
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch o	g	p	q	s	b	k	e	a	w	j	t	h	Bi	n	Bearing number	Housing number	Mass of unit Kg
12	UCT 201	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 201	T 204	0.77
1/2	UCT 201-8	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.2205	0.5000	UC 201-8		0.77
15	UCT 202	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 202	T 204	0.76
5/8	UCT 202-10	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.2205	0.5000	UC 202-10		0.76
17	UCT 203	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 203	T 204	0.75
11/16	UCT 203-11	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.2205	0.5000	UC 203-11		0.75
20	UCT 204	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 204	T 204	0.73
3/4	UCT 204-12	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.2205	0.5000	UC 204-12		0.74
25	UCT 205	16	10	51	32	19	51	12	76	89	97	32	24	62	34.1	14.3	UC 205	T 205	0.83
1	UCT 205-16	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-13/16	1-17/64	15/16	2-7/16	1.3425	0.5630	UC 205-16		0.82
30	UCT 206	16	10	56	37	22	57	12	89	102	113	37	28	70	38.1	15.9	UC 206		1.26
1-1/8	UCT 206-18	5/8	25/64	2-13/64	1-29/64	55/64	2-1/4	15/32	3-1/2	4-1/64	4-29/64	1-29/64	1-7/64	2-3/4	1.5000	0.6260	UC 206-18	T 206	1.28
1-1/4	UCT 206-20																UC 206-20		1.24
35	UCT 207	16	13	64	37	22	64	12	89	102	129	37	30	78	42.9	17.5	UC 207		1.58
1-1/4	UCT 207-20	5/8	3/64	2-3/64	1-29/64	55/64	2-3/64	15/32	3-1/2	4-1/64	5-5/64	1-29/64	1-3/16	3-5/64	1.6890	0.6890	UC 207-20	T 207	1.64
1-3/8	UCT 207-22																UC 207-22		1.59
40	UCT 208	19	16	83	49	29	83	16	102	114	144	49	33	88	49.2	19.0	UC 208	T 208	2.31
1-1/2	UCT 208-24	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-31/64	5-43/64	1-59/64	1-19/64	3-15/32	1.9370	0.7480	UC 208-24		2.35
45	UCT 209	19	16	83	49	29	83	16	102	117	144	49	35	87	49.2	19.0	UC 209		2.28
1-5/8	UCT 209-26	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-39/64	5-43/64	1-59/64	1-3/8	3-27/64	1.9370	0.7480	UC 209-26	T 209	2.38
1-3/4	UCT 209-28																UC 209-28		2.30
50	UCT 210	19	16	83	49	29	86	16	102	117	149	49	37	90	51.6	19.0	UC 210	T 210	2.50
1-7/8	UCT 210-30	3/4	5/8	3-17/64	1-59/64	1-9/64	3-25/64	5/8	4-1/64	4-39/64	5-55/64	1-59/64	1-29/64	3-35/64	2.0315	0.7480	UC 210-30		2.57
55	UCT 211	25	19	102	64	35	95	22	130	146	171	64	38	106	55.6	22.2	UC 211	T 211	3.79
2	UCT 211-32	63/64	3/4	4-1/64	2-3/64	1-3/8	3-47/64	55/64	5-1/8	5-3/4	6-47/64	2-3/64	1-1/2	4-11/64	2.1890	0.8740	UC 211-32		3.94
60	UCT 212	32	19	102	64	35	102	22	130	146	194	64	42	119	65.1	25.4	UC 212	T 212	4.79
2-1/4	UCT 212-36	1-17/64	3/4	4-1/64	2-3/64	1-3/8	4-1/64	55/64	5-1/8	5-3/4	7-41/64	2-3/64	1-21/32	4-11/16	2.5630	1.0000	UC 212-36		4.93
65	UCT 213	32	21	111	70	41	121	26	151	167	224	70	44	137	65.1	25.4	UC 213	T 213	6.66
2-1/2	UCT 213-40	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	8-13/16	2-3/4	1-47/64	5-25/64	2.5630	1.0000	UC 213-40		6.74
70	UCT 214	32	21	111	70	41	121	26	151	167	224	70	46	137	74.6	30.2	UC 214	T 214	6.75
2-3/4	UCT 214-44	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	8-13/16	2-3/4	1-13/16	5-25/64	2.9370	1.1890	UC 214-44		6.76





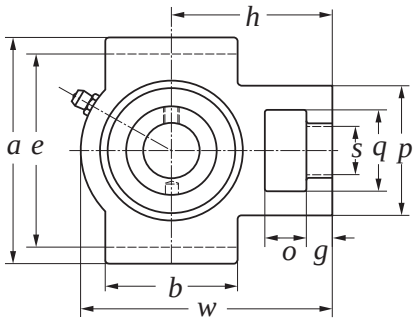


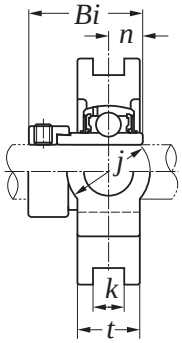
(Singel Lips)



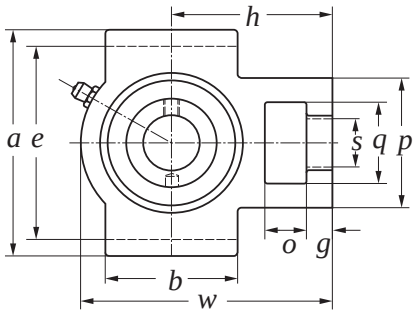
(Double Lips DL)

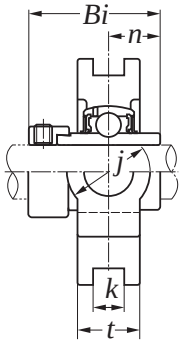
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch o	g	p	q	s	b	k	e	a	w	j	t	h	Bi	n	Bearing number	Housing number	Mass of unit Kg
75	UCT 215	32	21	111	70	41	121	26	151	167	232	70	48	140	77.8	33.3	UC 215	T 215	7.11
3	UCT 215-48	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	9-9/64	2-3/4	1-57/64	5-3/64	3.0630	1.3110	UC 215-48		7.03
80	UCT 216	32	21	111	70	41	121	26	165	184	235	70	51	140	82.6	33.3	UC 216	T 216	8.19
3-1/8	UCT 216-50	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	6-1/2	7-1/4	9-1/4	2-3/4	2-1/64	5-3/64	3.2520	1.3110	UC 216-50		8.24
85	UCT 217	38	29	124	73	48	157	30	173	198	260	73	54	162	85.7	34.1	UC 217	T 217	10.58
3-1/4	UCT 217-52	1-1/2	1-9/64	4-7/8	2-7/8	1-57/64	6-3/16	1-3/16	6-13/16	7-51/64	10-15/64	2-7/8	2-1/8	6-3/8	3.3740	1.3425	UC 217-52		10.80



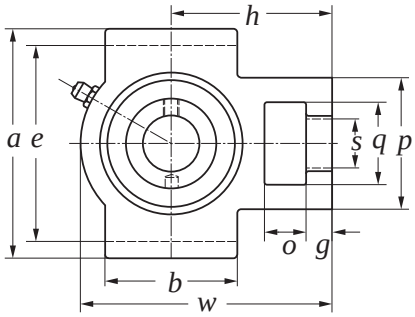


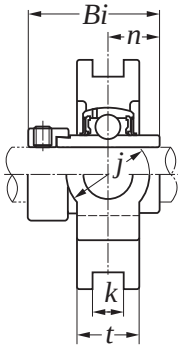
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch o	g	p	q	s	b	k	e	a	w	j	t	h	Bi	n	Bearing number	Housing number	Mass of unit Kg
20	SAT 204	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	7.5	SA 204	T 204	0.74
3/4	SAT 204-12	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.2205	0.2953	SA 204-12		0.75
25	SAT 205	16	10	51	32	19	51	12	76	89	97	32	24	62	31.0	7.5	SA 205	T 205	0.82
1	SAT 205-16	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-13/16	1-17/64	15/16	2-7/16	1.2205	0.2953	SA 205-16		0.80
30	SAT 206	16	10	56	37	22	57	12	89	102	113	37	28	70	35.7	9.0	SA 206		1.27
1-1/8	SAT 206-18	5/8	25/64	2-13/64	1-29/64	55/64	2-1/4	15/32	3-1/2	4-1/64	4-29/64	1-29/64	1-7/64	2-3/4	1.4055	0.3543	SA 206-18	T 206	1.29
1-1/4	SAT 206-20																SA 206-20		1.22
35	SAT 207	16	13	64	37	22	64	12	89	102	129	37	30	78	38.9	9.5	SA 207		1.61
1-1/4	SAT 207-20	5/8	3/64	2-3/64	1-29/64	55/64	2-3/64	15/32	3-1/2	4-1/64	5-5/64	1-29/64	1-3/16	3-5/64	1.5315	0.3740	SA 207-20	T 207	1.67
1-3/8	SAT 207-22																SA 207-22		1.62
40	SAT 208	19	16	83	49	29	83	16	102	114	144	49	33	88	43.7	11.0	SA 208	T 208	2.32
1-1/2	SAT 208-24	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-31/64	5-43/64	1-59/64	1-19/64	3-15/32	1.7205	0.4331	SA 208-24		2.35
45	SAT 209	19	16	83	49	29	83	16	102	117	144	49	35	87	43.7	11.0	SA 209		2.29
1-5/8	SAT 209-26	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-39/64	5-43/64	1-59/64	1-3/8	3-27/64	1.7205	0.4331	SA 209-26	T 209	2.42
1-3/4	SAT 209-28																SA 209-28		2.33
50	SAT 210	19	16	83	49	29	86	16	102	117	149	49	37	90	43.7	11.0	SA 210	T 210	2.50
1-7/8	SAT 210-30	3/4	5/8	3-17/64	1-59/64	1-9/64	3-25/64	5/8	4-1/64	4-39/64	5-55/64	1-59/64	1-29/64	3-35/64	1.7205	0.4331	SA 210-30		2.55
55	SAT 211	25	19	102	64	35	95	22	130	146	171	64	38	106	48.4	12.0	SA 211	T 211	3.54
2	SAT 211-32	63/64	3/4	4-1/64	2-3/64	1-3/8	3-47/64	55/64	5-1/8	5-3/4	6-47/64	2-3/64	1-1/2	4-11/64	1.9055	0.4724	SA 211-32		3.85



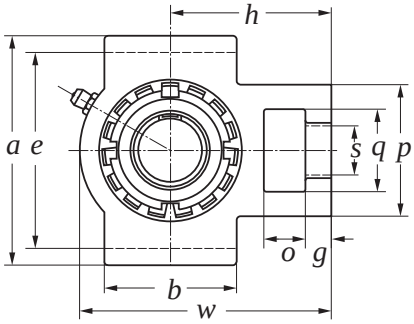


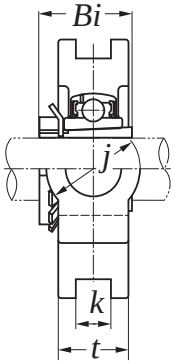
Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch o	g	p	q	s	b	k	e	a	w	j	t	h	Bi	n	Bearing number	Housing number	Mass of unit Kg
12	UELT 201	16	12	51	32	19	51	12	76	89	94	32	21	61	43.5	17.0	UEL 201	T 204	0.83
1/2	UELT 201-8	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.7126	0.6693	UEL 201-8		0.83
15	UELT 202	16	12	51	32	19	51	12	76	89	94	32	21	61	43.5	17.0	UEL 202	T 204	0.81
5/8	UELT 202-10	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.7126	0.6693	UEL 202-10		0.81
17	UELT 203	16	12	51	32	19	51	12	76	89	94	32	21	61	43.5	17.0	UEL 203	T 204	0.80
11/16	UELT 203-11	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.7126	0.6693	UEL 203-11		0.80
20	UELT 204	16	12	51	32	19	51	12	76	89	94	32	21	61	43.5	17.0	UEL 204	T 204	0.78
3/4	UELT 204-12	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-45/64	1-17/64	53/64	2-13/32	1.7126	0.6693	UEL 204-12		0.79
25	UELT 205	16	12	51	32	19	51	12	76	89	97	32	24	62	44.3	17.4	UEL 205	T 205	0.87
1	UELT 205-16	5/8	25/64	2-1/64	1-17/64	3/4	2-1/64	15/32	2-63/64	3-1/2	3-13/16	1-17/64	15/16	2-7/16	1.7441	0.6850	UEL 205-16		0.86
30	UELT 206	16	12	56	37	22	57	12	89	102	113	37	28	70	48.3	18.2	UEL 206		1.35
1-1/8	UELT 206-18	5/8	25/64	2-13/64	1-29/64	55/64	2-1/4	15/32	3-1/2	4-1/64	4-29/64	1-29/64	1-7/64	2-3/4	1.9016	0.7165	UEL 206-18	T 206	1.37
1-1/4	UELT 206-20																UEL 206-20		1.32
35	UELT 207	16	15	64	37	22	64	12	89	102	129	37	30	78	51.1	18.8	UEL 207		1.71
1-1/4	UELT 207-20	5/8	3/64	2-3/64	1-29/64	55/64	2-3/64	15/32	3-1/2	4-1/64	5-5/64	1-29/64	1-3/16	3-5/64	2.0118	0.7402	UEL 207-20	T 207	1.79
1-3/8	UELT 207-22																UEL 207-22		1.72
40	UELT 208	19	18	83	49	29	83	16	102	114	144	49	33	88	56.3	21.4	UEL 208	T 208	2.45
1-1/2	UELT 208-24	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-31/64	5-43/64	1-59/64	1-19/64	3-15/32	2.2165	0.8425	UEL 208-24		2.50
45	UELT 209	19	18	83	49	29	83	16	102	117	144	49	35	87	56.3	21.4	UEL 209		2.45
1-5/8	UELT 209-26	3/4	5/8	3-17/64	1-59/64	1-9/64	3-17/64	5/8	4-1/64	4-39/64	5-43/64	1-59/64	1-3/8	3-27/64	2.2165	0.8425	UEL 209-26	T 209	2.56
1-3/4	UELT 209-28																UEL 209-28		2.47
50	UELT 210	19	18	83	49	29	86	16	102	117	149	49	37	90	62.7	24.6	UEL 210	T 210	2.71
1-7/8	UELT 210-30	3/4	5/8	3-17/64	1-59/64	1-9/64	3-25/64	5/8	4-1/64	4-39/64	5-55/64	1-59/64	1-29/64	3-35/64	2.4685	0.9685	UEL 210-30		2.80
55	UELT 211	25	21	102	64	35	95	22	130	146	171	64	38	106	71.4	27.7	UEL 211	T 211	4.06
2	UELT 211-32	63/64	3/4	4-1/64	2-3/64	1-3/8	3-47/64	55/64	5-1/8	5-3/4	6-47/64	2-3/64	1-1/2	4-11/64	2.8110	1.0906	UEL 211-32		4.25
60	UELT 212	32	21	102	64	35	102	22	130	146	194	64	42	119	77.8	30.9	UEL 212	T 212	5.13
2-1/4	UELT 212-36	1-17/64	3/4	4-1/64	2-3/64	1-3/8	4-1/64	55/64	5-1/8	5-3/4	7-41/64	2-3/64	1-21/32	4-11/16	3.0630	1.2165	UEL 212-36		5.29
65	UELT 213	32	23	111	70	41	121	26	151	167	224	70	44	137	85.7	34.1	UEL 213	T 213	7.21
2-1/2	UELT 213-40	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	8-13/16	2-3/4	1-47/64	5-25/64	3.3740	1.3425	UEL 213-40		7.31
70	UELT 214	32	23	111	70	41	121	26	151	167	224	70	46	137	85.7	34.1	UEL 214	T 214	7.27
2-3/4	UELT 214-44	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	8-13/16	2-3/4	1-13/16	5-25/64	3.3740	1.3425	UEL 214-44		7.28

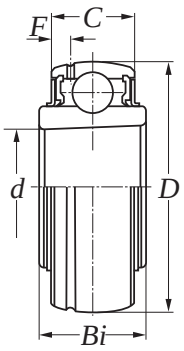




Shaft dia. mm / inch	Unit number	Nominal dimensions mm / inch o	g	p	q	s	b	k	e	a	w	j	t	h	Bi	n	Bearing number	Housing number	Mass of unit Kg
75	UELT 215	32	23	111	70	41	121	26	151	167	232	70	48	140	92.1	37.3	UEL 215	T 215	7.74
3	UELT 215-48	1-17/64	53/64	4-3/8	2-3/4	1-39/64	4-49/64	1-1/64	5-15/16	6-37/64	9-9/64	2-3/4	1-57/64	5-3/64	3.6260	1.4685	UEL 215-48		7.64

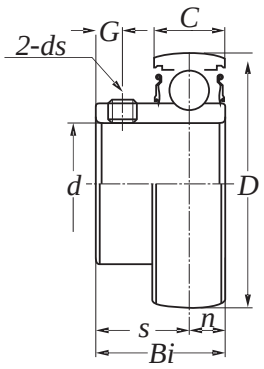






Taper 1:12

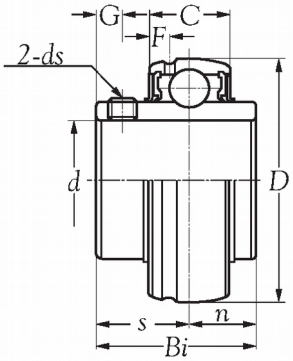
Shaft dia. mm	Unit number	Nominal dimensions mm														Bearing number	Housing number	Mass of unit Kg
		o	*g*	*p*	*q*	*s*	*b*	*k*	*e*	*a*	*w*	*j*	*t*	*h*	*Bi*			
20	UKT 205	16	12	51	32	19	51	12	76	89	97	32	24	62	35	UK 205	T 205	0.77
25	UKT 206	16	12	56	37	22	57	12	89	102	113	37	28	70	38	UK 206	T 206	1.19
30	UKT 207	16	15	64	37	22	64	12	89	102	129	37	30	78	43	UK 207	T 207	1.48
35	UKT 208	19	18	83	49	29	83	16	102	114	144	49	33	88	46	UK 208	T 208	2.15
40	UKT 209	19	18	83	49	29	83	16	102	117	144	49	35	87	50	UK 209	T 209	2.13
45	UKT 210	19	18	83	49	29	86	16	102	117	149	49	37	90	55	UK 210	T 210	2.29
50	UKT 211	25	21	102	64	35	95	22	130	146	171	64	38	106	59	UK 211	T 211	3.44
55	UKT 212	32	21	102	64	35	102	22	130	146	194	64	42	119	62	UK 212	T 212	4.29
60	UKT 213	32	23	111	70	41	121	26	151	167	224	70	44	137	65	UK 213	T 213	6.16



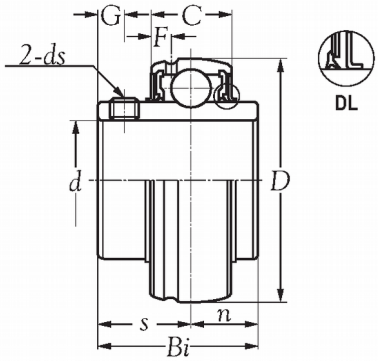
Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	s	G	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
12	SB 201	12	40	22	12	6.0	16.0	4.0	M 5X0.8	9,600	4,600	0.10
1/2	SB 201-8	0.5000	1.5748	0.8661	0.4724	0.2362	0.6299	0.1575	10#-32 UNF			0.10
15	SB 202	15	40	22	12	6.0	16.0	4.0	M 5X0.8	9,600	4,600	0.09
5/8	SB 202-10	0.6250	1.5748	0.8661	0.4724	0.2362	0.6299	0.1575	10#-32 UNF			0.09
17	SB 203	17	40	22	12	6.0	16.0	4.0	M 5X0.8	9,600	4,600	0.08
11/16	SB 203-11	0.6875	1.5748	0.8661	0.4724	0.2362	0.6299	0.1575	10#-32 UNF			0.08
20	SB 204	20	47	25	14	7.0	18.0	5.0	M 6X0.75	12,800	6,650	0.13
3/4	SB 204-12	0.7500	1.8504	0.9842	0.5512	0.2756	0.7086	0.1968	1/4-28 UNF			0.15
25	SB 205	25	52	27	15	7.5	19.5	5.5	M 6X0.75	14,000	7,850	0.17
1	SB 205-16	1.0000	2.0472	1.0630	0.5906	0.2953	0.7677	0.2165	1/4-28 UNF			0.16
30	SB 206	30	62	30	18	9.0	21.0	6.0	M 6X0.75	19,500	11,300	0.26
1-1/8	SB 206-18	1.1250	2.4409	1.1811	0.7087	0.3543	0.8268	0.2362	1/4-28 UNF			0.27
1-1/4	SB 206-20	1.2500										0.24
35	SB 207	35	72	33	19	9.5	23.5	6.5	M 8X1	25,700	15,300	0.38
1-1/4	SB 207-20	1.2500	2.8346	1.2992	0.7480	0.3740	0.9252	0.2559	5/16-24 UNF			0.43
1-3/8	SB 207-22	1.3750										0.41
40	SB 208	40	80	36	22	11.0	25.0	8.0	M 8X1	29,100	17,800	0.50
1-1/2	SB 208-24	1.5000	3.1496	1.4173	0.8661	0.4330	0.9843	0.3150	5/16-24 UNF			0.54

Technical supplement

Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30 ~ +120



(Single Lips)

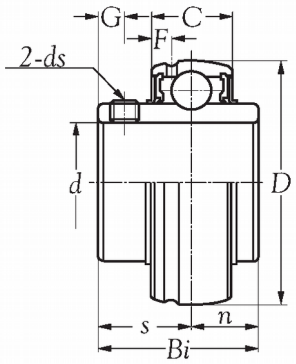


(Double Lips DL)

Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	s	G	F	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
12	UC 201 D1	12	47	31.0	16	12.7	18.3	5.0	4.0	M 6X0.75	12,800	6,650	0.21
1/2	UC 201-8 D1	0.5000	1.8504	1.2205	0.6299	0.5000	0.7205	0.1968	0.1575	1/4-28 UNF			0.21
15	UC 202 D1	15	47	31.0	16	12.7	18.3	5.0	4.0	M 6X0.75	12,800	6,650	0.20
5/8	UC 202-10 D1	0.6250	1.8504	1.2205	0.6299	0.5000	0.7205	0.1968	0.1575	1/4-28 UNF			0.20
17	UC 203 D1	17	47	31.0	16	12.7	18.3	5.0	4.0	M 6X0.75	12,800	6,650	0.19
11/16	UC 203-11 D1	0.6875	1.8504	1.2205	0.6299	0.5000	0.7205	0.1968	0.1575	1/4-28 UNF			0.19
20	UC 204 D1 DL	20	47	31.0	16	12.7	18.3	5.0	4.0	M 6X0.75	12,800	6,650	0.17
3/4	UC 204-12 D1	0.7500	1.8504	1.2205	0.6299	0.5000	0.7205	0.1968	0.1575	1/4-28 UNF			0.18
25	UC 205 D1 DL	25	52	34.1	17	14.3	19.8	5.5	4.3	M 6X0.75	14,000	7,850	0.21
1	UC 205-16 D1	1.0000	2.0472	1.3425	0.6693	0.5630	0.7795	0.2165	0.1702	1/4-28 UNF			0.20
30	UC 206 D1 DL	30	62	38.1	19	15.9	22.2	6.0	4.7	M 6X0.75	19,500	11,300	0.32
1-1/8	UC 206-18 D1	1.1250	2.4409	1.5000	0.7480	0.6260	0.8740	0.2362	0.1850	1/4-28 UNF			0.34
1-1/4	UC 206-20 D1	1.2500											0.30
35	UC 207 D1 DL	35	72	42.9	20	17.5	25.4	6.5	4.6	M 8X1	25,700	15,300	0.47
1-1/4	UC 207-20 D1	1.2500	2.8346	1.6890	0.7874	0.6890	1.0000	0.2559	0.1811	5/16-24 UNF			0.53
1-3/8	UC 207-22 D1	1.3750											0.48
40	UC 208 D1 DL	40	80	49.2	21	19.0	30.2	8.0	4.6	M 8X1	29,100	17,800	0.64
1-1/2	UC 208-24 D1	1.5000	3.1496	1.9370	0.8268	0.7480	1.1890	0.3150	0.1811	5/16-24 UNF			0.68
45	UC 209 D1 DL	45	85	49.2	22	19.0	30.2	8.0	4.9	M 8X1	32,500	20,400	0.68
1-5/8	UC 209-26 D1	1.6250	3.3464	1.9370	0.8661	0.7480	1.1890	0.3150	0.1929	5/16-24 UNF			0.78
1-3/4	UC 209-28 D1	1.7500											0.70
50	UC 210 D1	50	90	51.6	24	19.0	32.6	9.0	5.5	M 10X1.25	35,000	23,200	0.80
1-7/8	UC 210-30 D1	1.8750	3.5433	2.0315	0.9449	0.7480	1.2835	0.3543	0.2166	3/8-24 UNF			0.87
55	UC 211 D1	55	100	55.6	25	22.2	33.4	9.0	5.4	M 10X1.25	43,500	29,200	1.12
2	UC 211-32 D1	2.0000	3.9370	2.1890	0.9842	0.8740	1.3150	0.3543	0.2126	3/8-24 UNF			1.27

Technical supplement

Cage	Slingers	Precision	Grease
Steel	Steel	PO	MULTEMP SRL -50℃ ~ +150℃ / Gadus S2 V100 2 -30℃ ~ +120℃

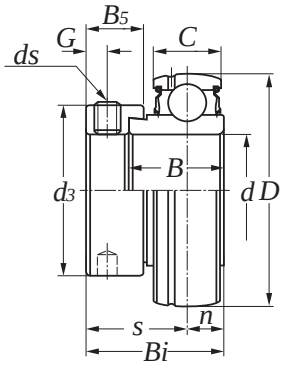


(Single Lips)

Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	s	G	F	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
60	UC 212 D1	60	110	65.1	27	25.4	39.7	10.5	5.9	M 10X1.25	52,500	36,000	1.53
2-1/4	UC 212-36 D1	2.2500	4.3307	2.5630	1.0630	1.0000	1.5630	0.4134	0.2323	3/8-24 UNF			1.67
65	UC 213 D1	65	120	65.1	28	25.4	39.7	12.0	5.5	M 12X1.5	57,500	40,000	1.86
2-1/2	UC 213-40 D1	2.5000	4.7244	2.5630	1.1024	1.0000	1.5630	0.4724	0.2166	1/2-20 UNF			1.94
70	UC 214 D1	70	125	74.6	30	30.2	44.4	12.0	6.1	M 12X1.5	62,000	44,000	2.05
2-3/4	UC 214-44 D1	2.7500	4.9212	2.9370	1.1811	1.1890	1.7480	0.4724	0.2402	1/2-20 UNF			2.06
75	UC 215 D1	75	130	77.8	32	33.3	44.5	12.0	7.0	M 12X1.5	66,000	49,500	2.21
3	UC 215-48 D1	3.0000	5.1181	3.0630	1.2598	1.3110	1.7520	0.4724	0.2756	1/2-20 UNF			2.13
80	UC 216 D1	80	140	82.6	33	33.3	49.3	14.0	7.5	M 12X1.5	72,500	53,000	2.79
3-1/8	UC 216-50 D1	3.1250	5.5118	3.2520	1.2992	1.3110	1.9409	0.5512	0.2953	1/2-20 UNF			2.84
85	UC 217 D1	85	150	85.7	35	34.1	51.6	14.0	7.5	M 12X1.5	83,500	64,000	3.38
3-1/4	UC 217-52 D1	3.2500	5.9055	3.3740	1.3780	1.3425	2.0315	0.5512	0.2953	1/2-20 UNF			3.60
90	UC 218 D1	90	160	96.0	37	39.7	56.3	15.0	8.0	M 12X1.5	96,000	71,500	4.45
3-1/2	UC 218-56 D1	3.5000	6.2992	3.7795	1.4567	1.5630	2.2165	0.5906	0.3150	1/2-20 UNF			4.56

Technical supplement

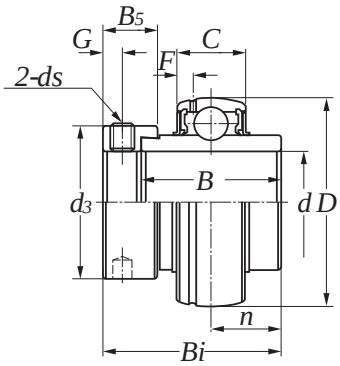
Cage	Slingers	Precision	Grease	
Steel	Steel	PO	MULTEMP SRL -50℃ ~ +150℃	Gadus S2 V100 2 -30℃ ~ +120℃



Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	B	C	n	s	G	ds	d3	B5	Basic load ratings N dynamic Cr	static Cor	Weight Kg
12	SA 201 D1	12	40	28.6	19.1	13	6.5	22.1	5.0	M 6X0.75	28.6	13.5	9,600	4,600	0.14
1/2	SA 201-8 D1	0.5000	1.5748	1.1260	0.7520	0.5118	0.2559	0.8701	0.1968	1/4-28 UNF	1.1260	0.5315			0.14
15	SA 202 D1	15	40	28.6	19.1	13	6.5	22.1	5.0	M 6X0.75	28.6	13.5	9,600	4,600	0.13
5/8	SA 202-10 D1	0.6250	1.5748	1.1260	0.7520	0.5118	0.2559	0.8701	0.1968	1/4-28 UNF	1.1260	0.5315			0.13
17	SA 203 D1	17	40	28.6	19.1	13	6.5	22.1	5.0	M 6X0.75	28.6	13.5	9,600	4,600	0.12
11/16	SA 203-11 D1	0.6875	1.5748	1.1260	0.7520	0.5118	0.2559	0.8701	0.1968	1/4-28 UNF	1.1260	0.5315			0.12
20	SA 204 D1	20	47	31.0	21.5	15	7.5	23.5	5.0	M 6X0.75	33.3	13.5	12,800	6,650	0.18
3/4	SA 204-12 D1	0.7500	1.8504	1.2205	0.8464	0.5906	0.2953	0.9252	0.1968	1/4-28 UNF	1.3110	0.5315			0.19
25	SA 205 D1	25	52	31.0	21.5	15	7.5	23.5	5.0	M 6X0.75	38.1	13.5	14,000	7,850	0.20
1	SA 205-16 D1	1.0000	2.0472	1.2205	0.8464	0.5906	0.2953	0.9252	0.1968	1/4-28 UNF	1.5000	0.5315			0.18
30	SA 206 D1	30	62	35.7	23.8	18	9.0	26.7	6.0	M 8X1	44.5	15.9			0.33
1-1/8	SA 206-18 D1	1.1250	2.4409	1.4055	0.9370	0.7087	0.3543	1.0512	0.2362	5/16-24 UNF	1.7520	0.6260	19,500	11,300	0.35
1-1/4	SA 206-20 D1	1.2500													0.28
35	SA 207 D1	35	72	38.9	25.4	19	9.5	29.4	6.5	M 8X1	55.6	17.5			0.50
1-1/4	SA 207-20 D1	1.2500	2.8346	1.5315	1.0000	0.7480	0.3740	1.1575	0.2559	5/16-24 UNF	2.1890	0.6890	25,700	15,300	0.56
1-3/8	SA 207-22 D1	1.3750													0.51
40	SA 208 D1	40	80	43.7	30.2	22	11.0	32.7	6.5	M 10X1.25	60.3	18.3	29,100	17,800	0.65
1-1/2	SA 208-24 D1	1.5000	3.1496	1.7205	1.1890	0.8661	0.4331	1.2874	0.2559	3/8-24 UNF	2.3740	0.7205			0.68
45	SA 209 D1	45	85	43.7	30.2	22	11.0	32.7	6.5	M 10X1.25	63.5	18.3			0.69
1-5/8	SA 209-26 D1	1.6250	3.3464	1.7205	1.1890	0.8661	0.4331	1.2874	0.2559	3/8-24 UNF	2.5000	0.7205	32,500	20,400	0.82
1-3/4	SA 209-28 D1	1.7500													0.73
50	SA 210 D1	50	90	43.7	30.2	22	11.0	32.7	6.5	M 10X1.25	69.9	18.3	35,000	23,200	0.80
1-7/8	SA 210-30 D1	1.8750	3.5433	1.7205	1.1890	0.8661	0.4331	1.2874	0.2559	3/8-24 UNF	2.7520	0.7205			0.85
55	SA 211 D1	55	100	48.4	32.4	24	12.0	36.4	8.0	M 10X1.25	76.2	20.7	43,500	29,200	0.87
2	SA 211-32 D1	2.0000	3.9370	1.9055	1.2756	0.9449	0.4724	1.4331	0.3150	3/8-24 UNF	3.0000	0.8150			1.18

Technical supplement

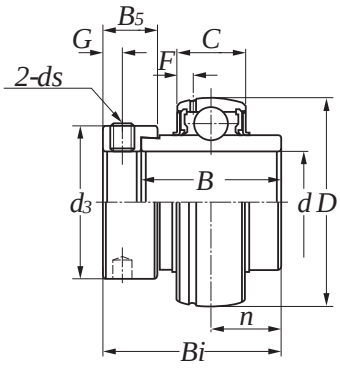
Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30 °C ~ +120 °C



Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	B	G	d3	B5	F	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
12	UEL 201 D1	12	47	43.5	16	17.0	34.0	5.0	33.3	13.5	4.0	M 6X0.75	12,800	6,650	0.27
1/2	UEL 201-8 D1	0.5000	1.8504	1.7126	0.6299	0.6693	1.3386	0.1968	1.3110	0.5315	0.1575	1/4-28 UNF			0.27
15	UEL 202 D1	15	47	43.5	16	17.0	34.0	5.0	33.3	13.5	4.0	M 6X0.75	12,800	6,650	0.25
5/8	UEL 202-10 D1	0.6250	1.8504	1.7126	0.6299	0.6693	1.3386	0.1968	1.3110	0.5315	0.1575	1/4-28 UNF			0.25
17	UEL 203 D1	17	47	43.5	16	17.0	34.0	5.0	33.3	13.5	4.0	M 6X0.75	12,800	6,650	0.24
11/16	UEL 203-11 D1	0.6875	1.8504	1.7126	0.6299	0.6693	1.3386	0.1968	1.3110	0.5315	0.1575	1/4-28 UNF			0.24
20	UEL 204 D1	20	47	43.5	16	17.0	34.0	5.0	33.3	13.5	4.0	M 6X0.75	12,800	6,650	0.22
3/4	UEL 204-12 D1	0.7500	1.8504	1.7126	0.6299	0.6693	1.3386	0.1968	1.3110	0.5315	0.1575	1/4-28 UNF			0.23
25	UEL 205 D1	25	52	44.3	17	17.4	34.8	5.0	38.1	13.5	4.3	M 6X0.75	14,000	7,850	0.25
	UEL 205-16 D1	1.0000	2.0472	1.7441	0.6693	0.6850	1.3701	0.1968	1.5000	0.5315	0.1693	1/4-28 UNF			0.24
30	UEL 206 D1	30	62	48.3	19	18.2	36.4	6.0	44.5	15.9	4.7	M 8X1	19,500	11,300	0.41
1-1/8	UEL 206-18 D1	1.1250	2.4409	1.9016	0.7480	0.7165	1.4331	0.2362	1.7520	0.6260	0.1850	5/16-24 UNF			0.43
1-1/4	UEL 206-20 D1	1.2500													0.38
35	UEL 207 D1	35	72	51.1	20	18.8	37.6	6.5	55.6	17.5	4.6	M 8X1	25,700	15,300	0.60
1-1/4	UEL 207-20 D1	1.2500	2.8346	2.0118	0.7874	0.7402	1.4803	0.2559	2.1890	0.6890	0.1811	5/16-24 UNF			0.68
1-3/8	UEL 207-22 D1	1.3750													0.61
40	UEL 208 D1	40	80	56.3	21	21.4	42.8	6.5	60.3	18.3	4.6	M 10X1.25	29,100	17,800	0.78
1-1/2	UEL 208-24 D1	1.5000	3.1496	2.2165	0.8268	0.8425	1.6850	0.2559	2.3740	0.7205	0.1811	3/8-24 UNF			0.83
45	UEL 209 D1	45	85	56.3	22	21.4	42.8	6.5	63.5	18.3	4.9	M 10X1.25	32,500	20,400	0.85
1-5/8	UEL 209-26 D1	1.6250	3.3464	2.2165	0.8661	0.8425	1.6850	0.2559	2.5000	0.7205	0.1929	3/8-24 UNF			0.96
1-3/4	UEL 209-28 D1	1.7500													0.87
50	UEL 210 D1	50	90	62.7	24	24.6	49.2	6.5	69.9	18.3	5.5	M 10X1.25	35,000	23,200	1.01
1-7/8	UEL 210-30 D1	1.8750	3.5433	2.4685	0.9449	0.9685	1.9370	0.2559	2.7520	0.7205	0.2166	3/8-24 UNF			1.10
55	UEL 211 D1	55	100	71.4	25	27.7	55.4	8.0	76.2	20.7	5.4	M 10X1.25	43,500	29,200	1.39
	UEL 211-32 D1	2.0000	3.9370	2.8110	0.9842	1.0906	2.1811	0.3150	3.0000	0.8150	0.2126	3/8-24 UNF			1.58

Technical supplement

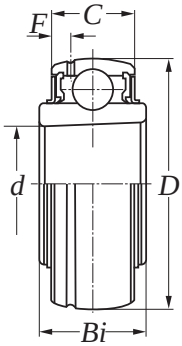
Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30 °C ~ +120 °C



Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch											Basic load ratings N		Weight
		d	*D*	*Bi*	*C*	*n*	*B*	*G*	*d3*	*B5*	*F*	*ds*	dynamic Cr	static Cor	Kg
60	UEL 212 D1	60	110	77.8	27	30.9	61.9	8.0	84.2	22.3	5.9	M 10X1.25	52,500	36,000	1.87
2-1/4	UEL 212-36 D1	2.2500	4.3307	3.0630	1.0630	1.2165	2.4370	0.3150	3.3150	0.8780	0.2323	3/8-24 UNF			2.03
65	UEL 213 D1	65	120	85.7	28	34.1	68.6	8.5	86.0	23.5	5.5	M 10X1.25	57,500	40,000	2.41
2-1/2	UEL 213-40 D1	2.5000	4.7244	3.3740	1.1024	1.3425	2.7008	0.3346	3.3858	0.9252	0.2166	3/8-24 UNF			2.51
70	UEL 214 D1	70	125	85.7	30	34.1	68.6	8.5	90.0	23.5	6.1	M 10X1.25	62,000	44,000	2.57
2-3/4	UEL 214-44 D1	2.7500	4.9212	3.3740	1.1811	1.3425	2.7008	0.3346	3.5433	0.9252	0.2402	3/8-24 UNF			2.58
75	UEL 215 D1	75	130	92.1	32	37.3	75.0	8.5	102.0	23.5	6.8	M 10X1.25	66,000	49,500	2.84
3	UEL 215-48 D1	3.0000	5.1181	3.6260	1.2598	1.4685	2.9528	0.3346	4.0157	0.9252	0.2677	3/8-24 UNF			2.74

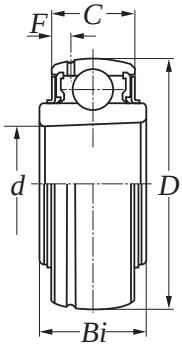
Technical supplement

Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30°C ~ +120°C



Taper 1:12

(Single Lips)



DL

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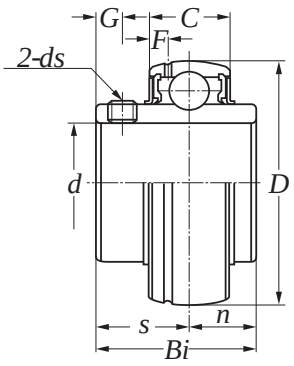
(Double Lips DL)

Shaft dia. mm	Bearing number	Nominal dimensions mm					Basic load ratings N		Weight
		d	*D*	*Bi*	*C*	*F*	dynamic Cr	static Cor	Kg
20	UK 205 D1 DL	25	52	23	17	4.3	14,000	7,850	0.15
25	UK 206 D1 DL	30	62	26	19	4.7	19,500	11,300	0.25
30	UK 207 D1 DL	35	72	27	20	4.6	25,700	15,300	0.37
35	UK 208 D1 DL	40	80	29	21	4.6	29,100	17,800	0.48
40	UK 209 D1 DL	45	85	30	22	4.9	32,500	20,400	0.53
45	UK 210 D1	50	90	31	24	5.5	35,000	23,200	0.59
50	UK 211 D1	55	100	33	25	5.4	43,500	29,200	0.77
55	UK 212 D1	60	110	36	27	5.9	52,500	36,000	1.03
60	UK 213 D1	65	120	38	28	5.5	57,500	40,000	1.36

Technical supplement

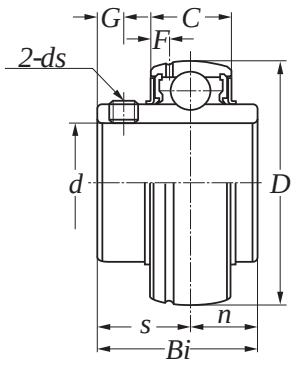
Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	MULTEMP SRL -50 °C ~ +150 °C



Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	s	G	F	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
25	UC X05 D1	25	62	38.1	19	15.9	22.2	6.0	4.7	M 6X0.75			0.39
13/16	UC X05-13 D1	0.8125											0.44
7/8	UC X05-14 D1	0.8750	2.4409	1.5000	0.7480	0.6260	0.8740	0.2362	0.1850	1/4-28 UNF	19,500	11,300	0.42
15/16	UC X05-15 D1	0.9375											0.40
1	UC X05-16 D1	1.0000											0.38
30	UC X06 D1	30	72	42.9	20	17.5	25.4	6.5	4.6	M 8X1			0.58
1-1/16	UC X06-17 D1	1.0625											0.60
1-1/8	UC X06-18 D1	1.1250	2.8346	1.6890	0.7874	0.6890	1.0000	0.2559	0.1811	5/16-24 UNF	25,700	15,300	0.59
1-3/16	UC X06-19 D1	1.1875											0.56
1-1/4	UC X06-20 D1	1.2500											0.55
35	UC X07 D1	35	80	49.2	21	19.0	30.2	8.0	4.6	M 8X1			0.74
1-1/4	UC X07-20 D1	1.2500											0.78
1-5/16	UC X07-21 D1	1.3125	3.1496	1.9370	0.8268	0.7480	1.1890	0.3150	0.1811	5/16-24 UNF	29,100	17,800	0.77
1-3/8	UC X07-22 D1	1.3750											0.76
1-7/16	UC X07-23 D1	1.4375											0.72
40	UC X08 D1	40	85	49.2	22	19.0	30.2	8.0	4.9	M 8X1	32,500	20,400	0.83
1-1/2	UC X08-24 D1	1.5000	3.3464	1.9370	0.8661	0.7480	1.1890	0.3150	0.1929	5/16-24 UNF			0.87
45	UC X09 D1	45	90	51.6	24	19.0	32.6	9.0	5.5	M 10X1.25			0.95
1-5/8	UC X09-26 D1	1.6250											1.10
1-11/16	UC X09-27 D1	1.6875	3.5433	2.0315	0.9449	0.7480	1.2835	0.3543	0.2166	3/8-24 UNF	35,000	23,200	1.01
1-3/4	UC X09-28 D1	1.7500											0.97
50	UC X10 D1	50	100	55.6	25	22.2	33.4	9.0	5.4	M 10X1.25			1.29
1-7/8	UC X10-30 D1	1.8750											1.43
1-15/16	UC X10-31 D1	1.9375	3.9370	2.1890	0.9842	0.8740	1.3150	0.3543	0.2126	3/8-24 UNF	43,500	29,200	1.32
2	UC X10-32 D1	2.0000											1.26

Technical supplement

Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30 °C ~ +120 °C



Shaft dia. mm / inch	Bearing number	Nominal dimensions mm / inch d	D	Bi	C	n	s	G	F	ds	Basic load ratings N dynamic Cr	static Cor	Weight Kg
55	UC X11 D1	55	110	65.1	27	25.4	39.7	10.5	5.9	M 10X1.25			1.80
2	UC X11-32 D1	2.0000											2.01
2-1/16	UC X11-33 D1	2.0625	4.3307	2.5630	1.0630	1.0000	1.5630	0.4134	0.2323	3/8-24 UNF	52,500	36,000	1.98
2-1/8	UC X11-34 D1	2.1250											1.95
2-3/16	UC X11-35 D1	2.1875											1.78
60	UC X12 D1	60	120	65.1	28	25.4	39.7	12	5.5	M 12X1.5			2.05
2-1/4	UC X12-36 D1	2.2500											2.11
2-5/16	UC X12-37 D1	2.3125	4.7244	2.5630	1.1024	1.0000	1.5630	0.4724	0.2166	1/2-20 UNF	57,500	40,000	2.08
2-3/8	UC X12-38 D1	2.3750											2.03
2-7/16	UC X12-39 D1	2.4375											1.95
65	UC X13 D1	65	125	74.6	30	30.2	44.4	12	6.1	M 12X1.5			2.52
2-1/2	UC X13-40 D1	2.5000	4.9212	2.9370	1.1811	1.1890	1.7480	0.4724	0.2402	1/2-20 UNF	62,000	44,000	2.61
2-9/16	UC X13-41 D1	2.5625											2.47
70	UC X14 D1	70	130	77.8	32	33.3	44.5	12	7.0	M 12X1.5			2.74
2-5/8	UC X14-42 D1	2.6250											2.78
2-11/16	UC X14-43 D1	2.6875	5.1181	3.0630	1.2598	1.3110	1.7520	0.4724	0.2756	1/2-20 UNF	66,000	49,500	2.76
2-3/4	UC X14-44 D1	2.7500											2.75
75	UC X15 D1	75	140	82.6	33	33.3	49.3	14	7.5	M 12X1.5			3.41
2-13/16	UC X15-45 D1	2.8125											3.50
2-7/8	UC X15-46 D1	2.8750	5.5118	3.2520	1.2992	1.3110	1.9409	0.5512	0.2953	1/2-20 UNF	72,500	53,000	3.47
2-15/16	UC X15-47 D1	2.9375											3.44
3	UC X15-48 D1	3.0000											3.32
80	UC X16 D1	80	150	85.7	35	34.1	51.6	14	7.5	M 12X1.5			3.87
3-1/16	UC X16-49 D1	3.0625	5.9055	3.3740	1.3780	1.3425	2.0315	0.5512	0.2953	1/2-20 UNF	83,200	63,800	3.93
3-1/8	UC X16-50 D1	3.1250											3.90

Technical supplement

Cage	*Slingers*	*Precision*	*Grease*
Steel	Steel	PO	Gadus S2 V100 2 -30°C ~ +120°C

3.2 Dimension of housings: A, F, d1,d2

Please refer to Table 3.2.

Table 3.2 **unit: mm**

Over	Incl.	A (h13)	F (H13)	d1 (H12)	d2 (H13)
		0	+0.33	+0.21	+0.33
18	30	-0.33	0	0	0
		0	+0.39	+0.25	+0.39
30	50	-0.39	0	0	0
		0	+0.46	+0.3	+0.46
50	80	-0.46	0	0	0
		0	+0.54	+0.35	+0.54
80	120	-0.54	0	0	0
		0	+0.63	+0.4	+0.63
120	180	-0.63	0	0	0
		0	+0.72	+0.46	+0.72
180	250	-0.72	0	0	0

3.3 Tolerances of other dimensions of housings

Please refer to Table 3.3.1 and Table 3.3.2.

Table 3.3.1 **unit: mm**

One side machining		
Over	Incl.	
5	100	±1.5
10	200	±2.0

Table 3.3.2 **unit: mm**

General tolerances for casting					
Length			Thickness		
Over	Incl.		Over	Incl.	
up	120	±1.5	up	10	±1.5
120	250	±2.0	10	18	±2.0
250	400	±3.0	18	30	±3.0
400	800	±4.0	30	50	±3.5

4. LUBRICATION

SN and SNU Plummer Block Housings usually uses grease for lubrication. During installation or periodic maintenance, the lubricating grease added is able to ensure that before next maintenance a good lubricating condition could be maintained. Lubricating grease usually uses lithium grease. The suitable temperature range is -30 C to +120 C. The filling quantity is 1/3 of the inner body of the housing base after the installation of the bearing. The normal usage life of the lubricating grease is 6 months. Upon expiry all the lubricating grease should be replaced.

When the Plummer Block Housing is under high temperature, great speed or heavy loading working environment, constant replacement of the lubricating grease is necessary. At this time, grease nipple is required at the housing cap.

5. THE PERMITTED LOADING CAPACITY (SN,SNU)

The permitted loading capacity of SN, SNU Plummer Block Housings are related to the loading capacity and the strength of the bolt-screws. Under normal circumstances, Plummer Block Housing is applicable to axial load. When the loading is from other directions, apart from axial, a check should be carried out to see the bolt-screws between the housing cap and the housing base, between the frame.

When working out the permitted loading capacity, the safety factor should be considered. In normal engineering, the safety factor of bolt-screw is 3. The safety factor of breaking loading capacity of the housing is 6.

The reference value of the breaking loading capacity of housing in different directions and the maximum loading capacity of bolt-screw is set out in below Fig. 5.1. The maximum loading capacity of Plummer Block Housing could select P180 direction 2/3 of the breaking loading capacity. When the loading direction exceeds 90 , bolt screws should be fastened evenly with the housing set out in the Table 5.1.

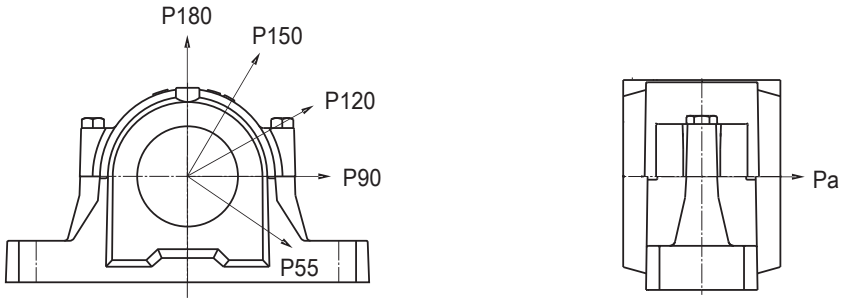


Fig. 5.1

Table 5.1

Housing size	Breaking loads for load direction (KN)						Maximum load of 2 cap bolts for load direction (KN)			Cap bolts size	Suggest tightening torque (N.m)
	Pa	P55	P90	P120	P150	P180	P120	P150	P180		
SNU 505	48	145	90	65	60	75	40	23	20	M 8X40	25
SNU 506-605, SN 206, 506	55	165	100	75	65	85	40	23	20	M 8X40	25
SNU 507-606, SN 207, 507, 606	60	180	110	80	75	90	60	35	30	M 10X50	50
SNU 508-607, SN 208, 508, 607	67	200	120	90	80	100	60	35	30	M 10X50	50
SNU 509, SN 209, 509	70	210	130	95	85	105	60	35	30	M 10X50	50
SNU 510-608, SN 210, 510	80	240	145	110	95	120	60	35	30	M 10X50	50
SN 608							90	52	45	M 12X60	80
SNU 511-609, SN 211, 511, 609	87	260	155	120	105	130	90	52	45	M 12X60	80
SNU 512-610, SN 212, 512, 610	93	280	170	125	110	140	90	52	45	M 12X60	80
SNU 513-611, SN 213, 513, 611	103	310	185	140	125	155	90	52	45	M 12X65	80
SNU 515-612, SN 215, 515, 612	123	370	220	165	150	185	90	52	45	M 12X65	80
SNU 516-613	130	390	235	175	155	195	90	52	45	M 12X70	80
SN 216, 516, 613							170	98	85	M 16X70	160
SNU 517	147	440	270	200	175	220	90	52	45	M 12X70	80
SN 217, SN 517							170	98	85	M 16X80	160
SNU 518-615, SN 218, 518, 615	173	520	310	235	210	260	170	98	85	M 16X80	160
SNU 519-616, SN 219, 519, 616	180	540	330	245	215	270	170	98	85	M 16X80	160
SNU 520-617, SN 220, 520, 617	190	570	340	255	230	285	260	150	130	M 20X100	200
SNU 522-619, SN 222, 522, 618, 619	207	620	370	280	250	310	260	150	130	M 20X100	200
SNU 524-620, SN 224, 524, 620	243	730	440	330	295	365	260	150	130	M 20X100	200
SNU 526, SN 226, 526	277	830	500	375	330	415	380	220	190	M 24X120	200
SNU 528, SN 228, 528	327	980	590	440	390	490	380	220	190	M 24X120	350
SNU 530, SN 230, 530	370	1110	670	500	445	555	380	220	190	M 24X130	350
SNU 532, SN 232, 532	450	1350	810	610	540	675	380	220	190	M 24X130	350

When the loading capacity direction is between 55 to 120 and face the axial load, the Plummer Block Housing should be installed end-cover follow the axial direction or p in s hould b e a dded between the housing base and frame.

6. SPECIFICATION OF ACCESORIES (SN,SNU)

6.1 Locating ring

The bearing seating in the housing bore is machined to a tolerance H8 so that in most cases a loose fit of the bearing outer ring is assured and generally the seating width is such that the bearings has axial freedom.

Installation of the locating rings: in case of two rings to be fixed on both sides of the bearing; in case of one ring to be fixed on the side with the sleeve nut.

The symbol of the locating ring is SR. When customer place orders for it should state clearly the specification, size and quantity of the required locating ring.

Please refer to below drawing Fig. 6.1 and Table 6.1

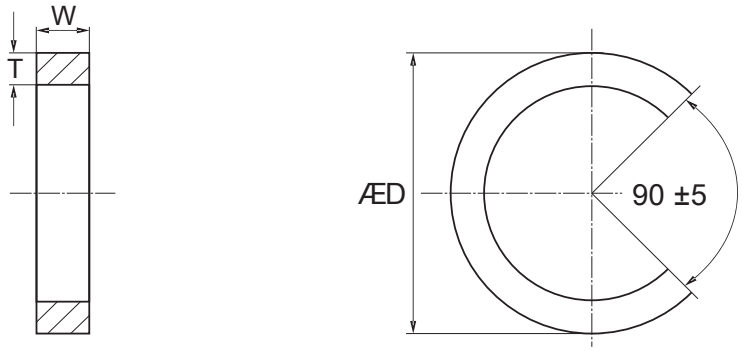


Fig. 6.1

Table 6.1 Selection of locating rings **Unit: mm**

Housing number	T	D	$W^{0}_{-0.2}$
SN 206 - SN 210			
SN 506 - SN 510			
SN 606 - SN 608	3.5		
SNU 505 - SNU 510			
SN 211 - SN 230		Please refer	
SN 511 - SN 230		to	
SN 609 - SN 620	5.0	pages 80 - 89	
SNU 511 - SNU 530			
SN 232			
SN 532	7.5		
SNU 532			

FEATURE

The majority of VKE Plummer Block Housing is made of Gray Cast Iron and is of the models of 'SN', 'SNU' and 'SAF'. Its basic size conforms with 'ISO' standard and could meet the requirement of bearing with inner ring of 20 mm -160 mm. It could not be interchangeable with the other parts of the housing cap or the housing base. Two parts through the fixing "pins" to ensure their correct assembly.

1. MATERIALS

1.1 Housing:

Grade 200 (FC 200), it is equivalents to U.S.A. standard ASTM A-48 (Grade 35)

1.2 Accessories:

Please refer to Table 1.2.

Table 1.2

Description	Part number	Materials
Felt Seal	FS	Wool + Rayon
Locating Ring	SR	Aluminum
Hexagon Bolt	M	Mild Steel
U-Ring	U-500 / U-600	NBR + Mild Steel Plate
Labyrinth Seal	LER / LOR	Aluminum + NBR
End Cover	500 NA / 500 UA	NBR + Mild Steel Plate
Eye-Bolt		Mild Steel
Cap		Plastic

2. APPLICABLE BEARINGS

All VKE Plummer Block Housingsapplicable to the appropriate self-aligning ball bearings and spherical roller bearings, they are economic bearing units and normally require little maintenance.

3. TOLERANCES

3.1 Tolerance of housings bore-D

Please refer to table 3.1.

Table 3.1 **Unit: 0.001 mm**

Bore (mm)	G7	H7	H8	J7
50 - 80	+40	+30	+46	+18
	+10	0	0	-12
80 - 120	+42	+35	+54	+22
	+12	0	0	-13
120 - 180	+54	+40	+63	+26
	+14	0	0	-14
180 - 250	+61	+46	+72	+30
	+15	0	0	-16
250 - 315	+69	+52	+81	+36
	+17	0	0	-16

6.2 Nipple hole

SN, SNU Plummer Block Housings will not supply grease nipple upon delivery under usual circumstances. If customer requests, we could supply according to the size / specification and please refer to Table 6.2.

Table 6.2 Selection of nipple holes

Housing number	Nipple holes	Remarks
SN 206 - SN 210		
SN 506 - SN 510		
SN 606 - SN 608	M 6	
SNU 505 - SNU 510		
SN 211 - SN 230		
SN 511 - SN 520		Or base on the request
SN 609 - SN 617	1/8 - 27 NPT	of client
SNU 511 - SNU 520		
SN 222 - SN 232		
SN 522 - SN 532		
SN 618 - SN 622	1/4 - 18 NPT	
SNU 522 - SNU 532		

6.3 Seals

ITJ will usually provide customers with 2 kinds of standards of seals. SN Plummer Block Housing uses felt seal. SNU Plummer Block Housing uses U-Ring seal.

SN Plummer Block Housing using felt seal is a simple but reliable one. It is of a contact / brushing type. It is suitable for - 30 C to +100 C temperature. The perimeter contact rate is less than 4m/sec applicable situation. It can also be used in situation of greater speed. But in such situation there will be space between felt seal and machine shaft.

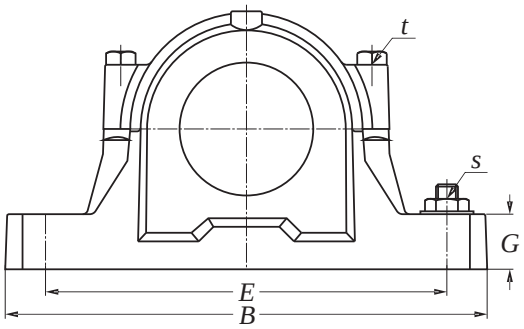
To ensure the function of felt seal, the coarse degree of the surface of the contact area between felt seal and machine shaft should be less than Ra1¼6m. Before the fixing of oil seal, it should be soaked in hot oil for several minutes.

SNU Plummer Block Housing uses U-Ring seal is made of VKE plus mild steel plate. Complete U-Ring is made of two equal halves. U-Ring seal has 2 thin lips having close contact with the machine shaft surface. It is suitable for temperature between -30 C to +100 C. The perimeter contact speed is less than 8 m/sec applicable situation. During installation, lubricating grease should be added into the space between the two rings. Besides, the contact surface between machine shaft and two lips should be polished before hand.

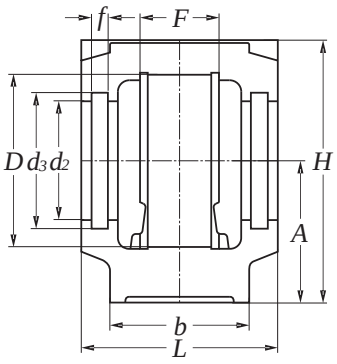
To avoid oil leakage, during installation one layer of very thin silicon should be placed on the two surfaces.

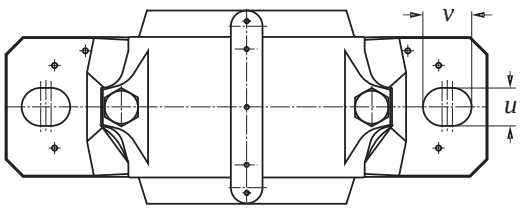
6.4 Eye bolts

Only available for sizes of SN224-SN232,SN524-SN532,SN618-SN620,SNU524-SNU532.

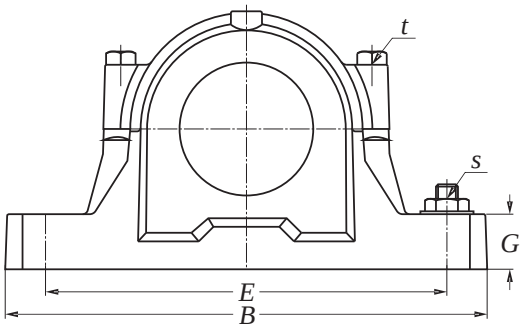


HOUSING SIZE	SHAFT DIAMETER	PLUMMER BLOCK HOUSING	PLUMMER BLOCK HOUSING DIMENSIONS (mm)										
	d (mm)		*D* (H8)	*B*	*b*	*G*	*F* (H13)	*A* (h13)	*L*	*H*	*E*	d_2 (H12)	d_3 (H13)
SNU 505	20	SNU 505	52	165	46	19	25	40	67	73	130	31.5	39.5
SNU 605	20	SNU 506-605	62	185	52	22	32	50	77	88	150	36.5	44.5
SNU 506	25	SNU 506-605	62	185	52	22	32	50	77	88	150	36.5	44.5
SNU 606	25	SNU 507-606	72	185	52	22	34	50	82	93	150	46.5	54.5
SNU 507	30	SNU 507-606	72	185	52	22	34	50	82	93	150	46.5	54.5
SNU 607	30	SNU 508-607	80	205	60	25	39	60	85	107	170	51.5	59.5
SNU 508	35	SNU 508-607	80	205	60	25	39	60	85	107	170	51.5	59.5
SNU 608	35	SNU 510-608	90	205	60	25	41	60	90	112	170	62.0	70.5
SNU 509	40	SNU 509	85	205	60	25	30	60	85	109	170	56.5	64.5
SNU 609	40	SNU 511-609	100	255	70	28	44	70	95	127	210	67.0	75.5
SNU 510	45	SNU 510-608	90	205	60	25	41	60	90	112	170	62.0	70.5
SNU 610	45	SNU 512-610	110	255	70	30	48	70	105	133	210	72.0	80.5
SNU 511	50	SNU 511-609	100	255	70	28	44	70	95	127	210	67.0	75.5
SNU 611	50	SNU 513-611	120	275	80	30	51	80	110	148	230	77.0	85.5
SNU 512	55	SNU 512-610	110	255	70	30	48	70	105	133	210	72.0	80.5
SNU 612	55	SNU 515-612	130	280	80	30	56	80	115	154	230	87.0	95.5
SNU 513	60	SNU 513-611	120	275	80	30	51	80	110	148	230	77.0	85.5
SNU 613	60	SNU 516-613	140	315	90	32	58	95	120	175	260	92.5	101.0
SNU 515	65	SNU 515-612	130	280	80	30	56	80	115	154	230	87.0	95.5
SNU 615	65	SNU 518-615	160	345	100	35	65	100	140	191	290	102.5	111.0

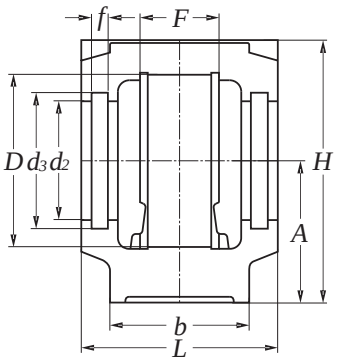


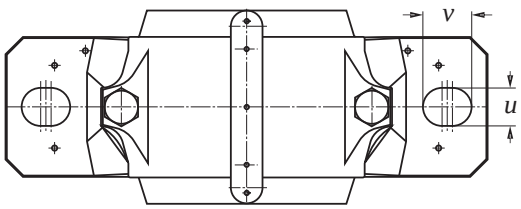


PLUMMER BLOCK HOUSING DIMENSIONS (mm)						APPROPRIATE APARTMENT					
f	u	v	s	t	WEIGHT Kg	BEARING NUMBER	ADAPTER SLEEVE	LOCATING RING NUMBER	LOCATING RING QTY	SEAL NUMBER	END COVER
5	15	20	M 12	M 8	1.4	**1205 K** **2205 K** **22205 K**	H 205 H 305	SR 52X5 SR 52X7	2 1	U 505	505 UA
5	15	20	M 12	M 8	1.9	**1305 K** **2305 K**	H 305 H 2305	SR 62X7.5 SR 62X8	2 1	U 605	506 UA
5	15	20	M 12	M 8	1.9	**1206 K** **2206 K** **22206 K**	H 206 H 306	SR 62X8 SR 62X6	2 2	U 506	506 UA
5	15	20	M 12	M 10	2.0	**1306 K** **2306 K**	H 306 H 2306	SR 72X7.5 SR 72X7	2 1	U 606	507 UA
5	15	20	M 12	M 10	2.0	**1207 K** **2207 K** **22207 K**	H 207 H 307	SR 72X8.5 SR 72X5.5	2 2	U 507	507 UA
5	15	20	M 12	M 10	2.7	**1307 K** **2307 K**	H 307 H 2307	SR 80X9 SR 80X8	2 1	U 607	508 UA
5	15	20	M 12	M 10	2.7	**1208 K** **2208 K** **22208 K**	H 208 H 308	SR 80X10.5 SR 80X8	2 2	U 508	508 UA
5	15	20	M 12	M 10	2.9	**1308 K** **21308 K** **2308 K** **22308 K**	H 308 H 2308	SR 90X9 SR 90X8	2 1	U 608	511 NA-510 UA
5	15	20	M 12	M 10	2.8	**1209 K** **2209 K** **22209 K**	H 209 H 309	SR 85X5.5 SR 85X7	2 1	U 509	509 UA
5	18	24	M 16	M 12	4.5	**1309 K** **21309 K** **2309 K** **22309 K**	H 309 H 2309	SR 100X9.5 SR 100X8	2 1	U 609	512 NA-511 UA
5	15	20	M 12	M 10	2.9	**1210 K** **2210 K** **22210 K**	H 210 H 310	SR 90X10.5 SR 90X9	2 2	U 510	511 NA-510 UA
5	18	24	M 16	M 12	5.0	**1310 K** **21310 K** **2310 K** **22310 K**	H 310 H 2310	SR 110X10.5 SR 110X8	2 1	U 610	513 NA-512 UA
5	18	24	M 16	M 12	4.5	**1211 K** **2211 K** **22211 K**	H 211 H 311	SR 100X11.5 SR 100X9.5	2 2	U 511	512 NA-511 UA
5	18	24	M 16	M 12	6.3	**1311 K** **21311 K** **2311 K** **22311 K**	H 311 H 2311	SR 120X11 SR 120X8	2 1	U 611	515 NA-513 UA
5	18	24	M 16	M 12	5.0	**1212 K** **2212 K** **22212 K**	H 212 H 312	SR 110X13 SR 110X10	2 2	U 512	513 NA-512 UA
5	18	24	M 16	M 12	6.6	**1312 K** **21312 K** **2312 K** **22312 K**	H 312 H 2312	SR 130X12.5 SR 130X10	2 1	U 612	517 NA-515 UA
5	18	24	M 16	M 12	6.3	**1213 K** **2213 K** **22213 K**	H 213 H 313	SR 120X14 SR 120X10	2 2	U 513	515 NA-513 UA
5	22	28	M 20	M 16	9.4	**1313 K** **21313 K** **2313 K** **22313 K**	H 313 H 2313	SR 140X12.5 SR 140X10	2 1	U 613	518 NA-516 UA
5	18	24	M 16	M 12	6.6	**1215 K** **2215 K** **22215 K**	H 215 H 315	SR 130X15.5 SR 130X12.5	2 2	U 515	517 NA-515 UA
5	22	28	M 20	M 16	12.3	**1315 K** **21315 K** **2315 K** **22315 K**	H 315 H 2315	SR 160X14 SR 160X10	2 1	U 615	520 NA-518 UA

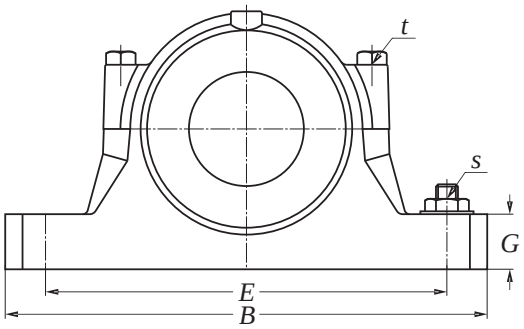


HOUSING SIZE	SHAFT DIAMETER	PLUMMER BLOCK HOUSING	PLUMMER BLOCK HOUSING DIMENSIONS (mm)										
	d (mm)		*D* (H8)	*B*	*b*	*G*	*F* (H13)	*A* (h13)	*L*	*H*	*E*	d_2 (H12)	d_3 (H13)
SNU 516	70	SNU 516-613	140	315	90	32	58	95	120	175	260	92.5	101.0
SNU 616	70	SNU 519-616	170	345	100	35	68	112	145	208	290	131.0	141.0
SNU 517	75	SNU 517	150	320	90	32	61	95	125	181	260	97.5	106.0
SNU 617	75	SNU 520-617	180	380	110	40	70	112	160	214	320	137.5	147.5
SNU 518	80	SNU 518-615	160	345	100	35	65	100	140	191	290	102.5	111.0
SNU 519	85	SNU 519-616	170	345	100	35	68	112	145	208	290	131.0	141.0
SNU 619	85	SNU 522-619	200	410	120	45	80	125	175	237	350	147.5	157.5
SNU 520	90	SNU 520-617	180	380	110	40	70	112	160	214	320	137.5	147.5
SNU 620	90	SNU 524-620	215	410	120	45	86	140	185	271	350	157.5	167.5
SNU 522	100	SNU 522-619	200	410	120	45	80	125	175	237	350	147.5	157.5
SNU 524	110	SNU 524-620	215	410	120	45	86	140	185	271	350	157.5	167.5
SNU 526	115	SNU 526	230	445	130	50	90	150	190	290	380	167.5	177.5
SNU 528	125	SNU 528	250	500	150	50	98	150	205	302	420	177.5	187.5
SNU 530	135	SNU 530	270	530	160	60	106	160	220	323	450	192.5	202.5
SNU 532	140	SNU 532	290	550	160	60	114	170	235	344	470	202.5	212.5

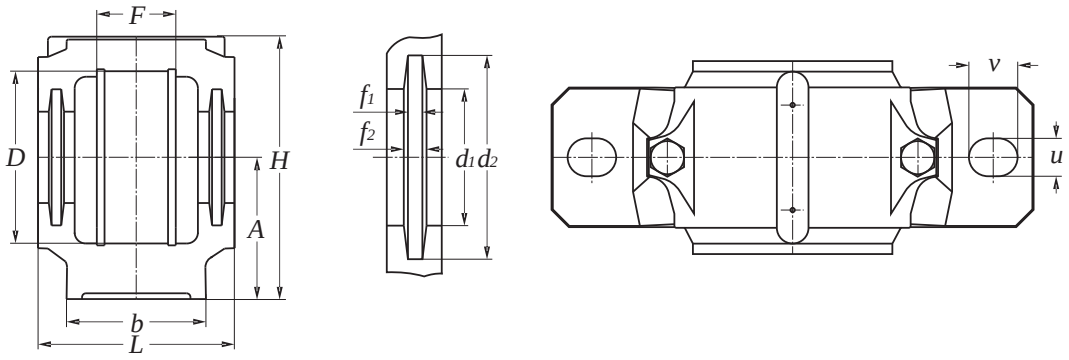




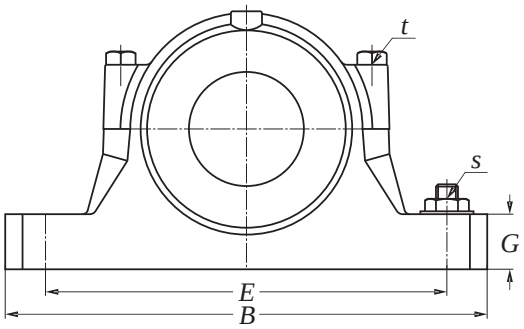
PLUMMER BLOCK HOUSING DIMENSIONS (mm)						APPROPRIATE APARTMENT					
f	*u*	*v*	*s*	*t*	WEIGHT Kg	BEARING NUMBER	ADAPTER SLEEVE	LOCATING RING NUMBER	LOCATING RING QTY	SEAL NUMBER	END COVER
5	22	28	M 20	M 16	9.4	**1216 K** **2216 K** **22216 K**	H 216 H 316	SR 140X16 SR 140X12.5	2 2	U 516	518 NA-516 UA
6	22	28	M 20	M 16	13.5	**1316 K** **21316 K** **2316 K** **22316 K**	H 316 H 2316	SR 170X14.5 SR 170X10	2 1	U 616	526 NA-519 UA
5	22	28	M 20	M 16	9.8	**1217 K** **2217 K** **22217 K**	H 217 H 317	SR 150X16.5 SR 150X12.5	2 2	U 517	519 NA-517 UA
6	26	32	M 24	M 20	16.6	**1317 K** **21317 K** **2317 K** **22317 K**	H 317 H 2317	SR 180X14.5 SR 180X10	2 1	U 617	520 UA
5	22	28	M 20	M 16	12.3	**1218 K** **2218 K** **22218 K** **23218 K**	H 218 H 318 H 2318	SR 160X17.5 SR 160X12.5 SR 160X12.5	2 2 1	U 518	520 NA-518 UA
6	22	28	M 20	M 16	13.5	**1219 K** **2219 K** **22219 K**	H 219 H 319	SR 170X18 SR 170X12.5	2 2	U 519	526 NA-519 UA
6	26	32	M 24	M 20	20.4	**1319 K** **21319 K** **2319 K** **22319 K**	H 319 H 2319	SR 200X17.5 SR 200X13	2 1	U 619	528 NA-522 UA
6	26	32	M 24	M 20	16.6	**1220 K** **2220 K** **22220 K** **23220 K**	H 220 H 320 H 2320	SR 180X18 SR 180X12 SR 180X9.7	2 2 1	U 520	520 UA
6	26	32	M 24	M 20	25.0	**1320 K** **21320 K** **2320 K** **22320 K**	H 320 H 2320	SR 215X19.5 SR 215X13	2 1	U 620	530 NA-524 UA
6	26	32	M 24	M 20	20.4	**1222 K** **2222 K** **22222 K** **23222 K**	H 222 H 322 H 2322	SR 200X21 SR 200X13.5 SR 200X10.2	2 2 1	U 522	528 NA-522 UA
6	26	32	M 24	M 20	25.0	**22224 K** **23224 K**	H 3124 H 2324	SR 215X14 SR 215X10	2 1	U 524	530 NA-524 UA
6	28	35	M 24	M 24	29.8	**22226 K** **23226 K**	H 3126 H 2326	SR 230X13 SR 230X10	2 1	U 526	532 NA-526 UA
6	35	42	M 30	M 24	37.5	**22228 K** **23228 K**	H 3128 H 2328	SR 250X15 SR 250X10	2 1	U 528	528 UA
6	35	42	M 30	M 24	46.0	**22230 K** **23230 K**	H 3130 H 2330	SR 270X16.5 SR 270X10	2 1	U 530	530 UA
6	35	42	M 30	M 24	51.0	**22232 K** **23232 K**	H 3132 H 2332	SR 290X17 SR 290X10	2 1	U 532	532 UA



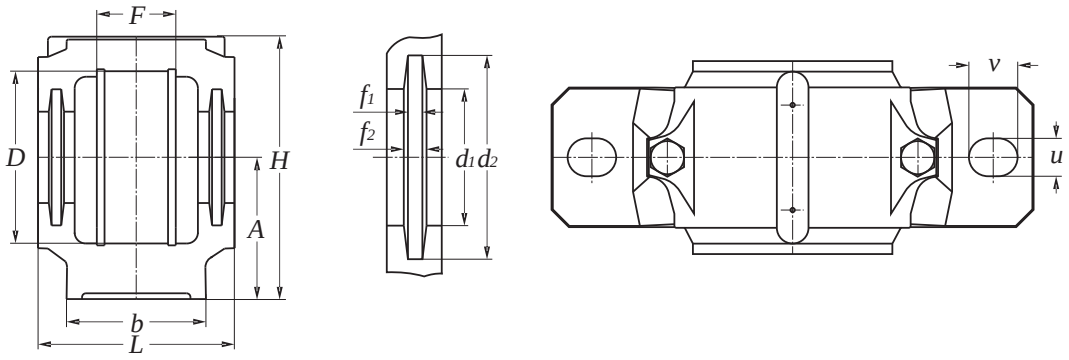
HOUSING SIZE	SHAFT DIAMETER	PLUMMER BLOCK HOUSING	PLUMMER BLOCK HOUSING DIMENSIONS (mm)										
	d (mm)		*D* (H8)	*B*	*b*	*G*	*F* (H13)	*A* (h13)	*L*	*H*	*E*	d_1 (H12)	d_2 (H13)
SN 506	25	SN 506	62	185	52	22	30.0	50	77	90	150	26.5	38
SN 507	30	SN 507	72	185	52	22	33.0	50	82	95	150	31.5	43
SN 508	35	SN 508	80	205	60	25	33.0	60	85	112	170	36.5	48
SN 509	40	SN 509	85	205	60	25	31.0	60	85	112	170	41.5	53
SN 510	45	SN 510	90	205	60	25	33.0	60	90	115	170	46.5	58
SN 511	50	SN 511	100	255	70	28	33.0	70	95	130	210	51.5	67
SN 512	55	SN 512	110	255	70	30	38.0	70	105	135	210	56.5	72
SN 513	60	SN 513	120	275	80	30	43.0	80	110	150	230	62.0	77
SN 515	65	SN 515	130	280	80	30	41.0	80	115	155	230	67.0	82
SN 516	70	SN 516	140	315	90	32	43.0	95	120	175	260	72.0	89
SN 517	75	SN 517	150	320	90	32	46.0	95	125	185	260	77.0	94
SN 518	80	SN 518	160	345	100	35	62.4	100	145	195	290	82.0	99
SN 519	85	SN 519	170	345	100	35	53.0	112	140	210	290	87.0	104
SN 520	90	SN 520	180	380	110	40	70.3	112	160	215	320	92.0	111
SN 522	100	SN 522	200	410	120	45	80.0	125	175	239	350	102.0	125
SN 524	110	SN 524	215	410	120	45	86.0	140	185	270	350	113.0	135
SN 526	115	SN 526	230	445	130	50	90.0	150	190	290	380	118.0	140
SN 528	125	SN 528	250	500	150	50	98.0	150	205	305	420	128.0	154
SN 530	135	SN 530	270	530	160	60	106.0	160	220	325	450	138.0	164
SN 532	140	SN 532	290	550	160	60	114.0	170	235	340	470	143.0	173



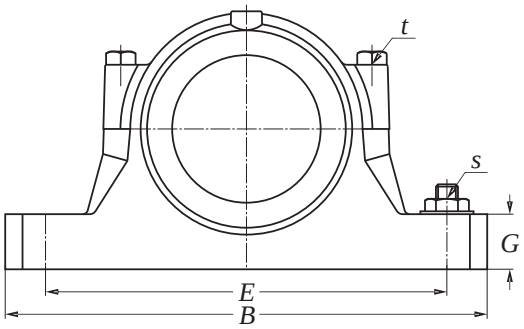
PLUMMER BLOCK HOUSING DIMENSIONS (mm)							APPROPRIATE APARTMENT				
f_1	f_2	u	v	s	t	WEIGHT Kg	BEARING NUMBER	ADAPTER SLEEVE	LOCATING RING NUMBER	LOCATING RING QTY	FELT SEAL	END COVER
4	5.4	15	20	M 12	M 8	2.3	**1206 K** **2206 K** **22206 K**	H 206 H 306	SR 62X7 SR 62X10	2 1	FS 6X6X105	506 NA
4	5.4	15	20	M 12	M 10	2.5	**1207 K** **2207 K** **22207 K**	H 207 H 307	SR 72X8 SR 72X10	2 1	FS 6X6X120	507 NA
4	5.4	15	20	M 12	M 10	3.4	**1208 K** **2208 K** **22208 K**	H 208 H 308	SR 80X7.5 SR 80X10	2 1	FS 6X6X135	508 NA
4	5.4	15	20	M 12	M 10	3.4	**1209 K** **2209 K** **22209 K**	H 209 H 309	SR 85X6 SR 85X8	2 1	FS 6X6X150	509 NA
4	5.4	15	20	M 12	M 10	3.6	**1210 K** **2210 K** **22210 K**	H 210 H 310	SR 90X6.5 SR 90X10	2 1	FS 6X6X165	510 NA
5	6.9	18	23	M 16	M 12	4.8	**1211 K** **2211 K** **22211 K**	H 211 H 311	SR 100X6 SR 100X8	2 1	FS 6X9X190	511 NA-510 UA
5	6.9	18	23	M 16	M 12	5.4	**1212 K** **2212 K** **22212 K**	H 212 H 312	SR 110X8 SR 110X10	2 1	FS 6X9X205	512 NA-511 UA
5	6.8	18	23	M 16	M 12	6.3	**1213 K** **2213 K** **22213 K**	H 213 H 313	SR 120X10 SR 120X12	2 1	FS 6X9X220	513 NA-512 UA
5	6.8	18	23	M 16	M 12	7.4	**1215 K** **2215 K** **22215 K**	H 215 H 315	SR 130X8 SR 130X10	2 1	FS 6X9X235	515 NA-513 UA
6	8.1	22	27	M 20	M 16	9.6	**1216 K** **2216 K** **22216 K**	H 216 H 316	SR 140X8.5 SR 140X10	2 1	FS 8X10X255	516 NA
6	8.1	22	27	M 20	M 16	9.8	**1217 K** **2217 K** **22217 K**	H 217 H 317	SR 150X9 SR 150X10	2 1	FS 8X10X270	517 NA-515 UA
6	8.1	22	27	M 20	M 16	14.2	**1218 K** **2218 K** **22218 K** **23218 K**	H 218 H 318 H 2318	SR 160X16.2 SR 160X11.2 SR 160X10	2 2 1	FS 8X10X285	518 NA-516 UA
6	8.1	22	27	M 20	M 16	15.2	**1219 K** **22219 K**	H 219 H 319	SR 170X10.5 SR 170X10	2 1	FS 8X10X300	519 NA-517 UA
7	9.3	26	32	M 24	M 20	19.0	**2220 K** **22220 K** **23220 K**	H 320 H 2320	SR 180X12.1 SR 180X10	2 1	FS 9X10X320	520 NA-518 UA
8	10.8	26	32	M 24	M 20	23.1	**2222 K** **22222 K** **23222 K**	H 322 H 2322	SR 200X13.5 SR 200X10	2 1	FS 10X13X360	522 NA
8	10.7	26	32	M 24	M 20	26.0	**22224 K** **23224 K**	H 3124 H 2324	SR 215X14 SR 215X10	2 1	FS 10X13X390	524 NA
8	10.7	28	36	M 24	M 24	32.7	**22226 K** **23226 K**	H 3126 H 2326	SR 230X13 SR 230X10	2 1	FS 10X13X410	526 NA-519 UA
9	12.2	33	42	M 30	M 24	43.5	**22228 K** **23228 K**	H 3128 H 2328	SR 250X15 SR 250X10	2 1	FS 12X14X445	528 NA-522 UA
9	12.2	33	42	M 30	M 24	48.7	**22230 K** **23230 K**	H 3130 H 2330	SR 270X16.5 SR 270X10	2 1	FS 12X14X475	530 NA-524 UA
10	13.7	33	42	M 30	M 24	60.7	**22232 K** **23232 K**	H 3132 H 2332	SR 290X17 SR 290X10	2 1	FS 12X17X500	532 NA-526 UA



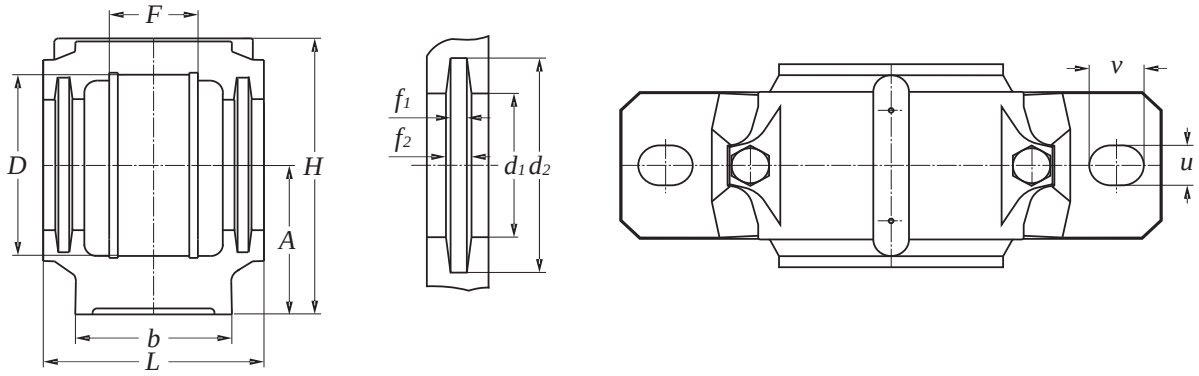
HOUSING SIZE	SHAFT DIAMETER	PLUMMER BLOCK HOUSING	PLUMMER BLOCK HOUSING DIMENSIONS (mm)										
	d (mm)		*D* (H8)	*B*	*b*	*G*	*F* (H13)	*A* (h13)	*L*	*H*	*E*	d_1 (H12)	d_2 (H13)
SN 606	25	SN 606	72	185	52	22	37	50	82	95	150	26.5	38
SN 607	30	SN 607	80	205	60	25	41	60	90	110	170	31.5	43
SN 608	35	SN 608	90	205	60	25	43	60	95	115	170	36.5	48
SN 609	40	SN 609	100	255	70	28	46	70	105	130	210	41.5	53
SN 610	45	SN 610	110	255	70	30	50	70	115	135	210	46.5	58
SN 611	50	SN 611	120	275	80	30	53	80	120	150	230	51.5	67
SN 612	55	SN 612	130	280	80	30	56	80	125	155	230	56.5	72
SN 613	60	SN 613	140	315	90	32	58	95	130	175	260	62.0	77
SN 615	65	SN 615	160	345	100	35	65	100	140	195	290	67.0	82
SN 616	70	SN 616	170	345	100	35	68	112	145	215	290	72.0	89
SN 617	75	SN 617	180	380	110	40	70	112	155	218	320	77.0	94
SN 618	80	SN 618	190	400	110	33	74	112	160	230	320	82.0	99
SN 619	85	SN 619	200	420	120	36	77	125	170	245	350	87.0	104
SN 620	90	SN 620	215	420	120	38	83	140	175	280	350	92.0	111



PLUMMER BLOCK HOUSING DIMENSIONS (mm)							APPROPRIATE APARTMENT					
f_1	f_2	u	v	s	t	WEIGHT Kg	BEARING NUMBER	ADAPTER SLEEVE	LOCATING RING NUMBER	LOCATING RING QTY	FELT SEAL	END COVER
4	5.4	15	20	M 12	M 10	2.2	**1306 K** **2306 K**	H 306 H 2306	SR 72X9 SR 72X10	2 1	FS 6X6X105	506 NA
4	5.4	15	20	M 12	M 10	3.4	**1307 K** **2307 K**	H 307 H 2307	SR 80X10 SR 80X10	2 1	FS 6X6X120	507 NA
4	5.4	15	20	M 12	M 12	3.4	**1308 K** **21308 K** **2308 K** **22308 K**	H 308 H 2308	SR 90X10 SR 90X10	2 1	FS 6X6X135	508 NA
4	5.4	18	23	M 16	M 12	5.0	**1309 K** **21309 K** **2309 K** **22309 K**	H 309 H 2309	SR 100X10.5 SR 100X10	2 1	FS 6X6X150	509 NA
4	5.4	18	23	M 16	M 12	5.4	**1310 K** **21310 K** **2310 K** **22310 K**	H 310 H 2310	SR 110X11.5 SR 110X10	2 1	FS 6X6X165	510 NA
5	6.9	18	23	M 16	M 12	6.8	**1311 K** **21311 K** **2311 K** **22311 K**	H 311 H 2311	SR 120X12 SR 120X10	2 1	FS 6X9X190	511 NA-510 UA
5	6.9	18	23	M 16	M 12	7.1	**1312 K** **21312 K** **2312 K** **22312 K**	H 312 H 2312	SR 130X12.5 SR 130X10	2 1	FS 6X9X205	512 NA-511 UA
5	6.8	22	27	M 20	M 16	10.0	**1313 K** **21313 K** **2313 K** **22313 K**	H 313 H 2313	SR 140X12.5 SR 140X10	2 1	FS 6X9X220	513 NA-512 UA
5	6.8	22	27	M 20	M 16	13.8	**1315 K** **21315 K** **2315 K** **22315 K**	H 315 H 2315	SR 160X14 SR 160X10	2 1	FS 6X9X235	515 NA-513 UA
6	8.1	22	27	M 20	M 16	16.9	**1316 K** **21316 K** **2316 K** **22316 K**	H 316 H 2316	SR 170X14.5 SR 170X10	2 1	FS 8X10X255	516 NA
6	8.1	26	32	M 24	M 20	18.9	**1317 K** **21317 K** **2317 K** **22317 K**	H 317 H 2317	SR 180X14.5 SR 180X10	2 1	FS 8X10X270	517 NA-515 UA
6	8.1	26	35	M 24	M 20	19.8	**1318 K** **2318 K** **22318 K**	H 318 H 2318	SR 190X15.5 SR 190X10	2 1	FS 8X10X285	518 NA-516 UA
6	8.1	26	35	M 24	M 20	24.7	**1319 K** **2319 K** **22319 K**	H 319 H 2319	SR 200X16 SR 200X10	2 1	FS 8X10X300	519 NA-517 UA
7	9.3	26	35	M 24	M 20	27.0	**1320 K** **2320 K** **22320 K**	H 320 H 2320	SR 215X18 SR 215X10	2 1	FS 9X10X320	520 NA-518 UA



HOUSING SIZE	SHAFT DIAMETER	PLUMMER BLOCK HOUSING	PLUMMER BLOCK HOUSING DIMENSIONS (mm)										
	d (mm)		*D* (H8)	*B*	*b*	*G*	*F* (H13)	*A* (h13)	*L*	*H*	*E*	d_1 (H12)	d_2 (H13)
SN 206	30	SN 206	62	185	52	22	30.0	50	77	90	150	36.5	48
SN 207	35	SN 207	72	185	52	22	33.0	50	82	95	150	46.5	58
SN 208	40	SN 208	80	205	60	25	33.0	60	85	112	170	51.5	67
SN 209	45	SN 209	85	205	60	25	31.0	60	85	112	170	56.5	72
SN 210	50	SN 210	90	205	60	25	33.0	60	90	115	170	62.0	77
SN 211	55	SN 211	100	255	70	28	33.0	70	95	130	210	67.0	82
SN 212	60	SN 212	110	255	70	30	38.0	70	105	135	210	72.0	89
SN 213	65	SN 213	120	275	80	30	43.0	80	110	150	230	77.0	94
SN 215	75	SN 215	130	280	80	30	41.0	80	115	155	230	87.0	104
SN 216	80	SN 216	140	315	90	32	43.0	95	120	175	260	92.0	111
SN 217	85	SN 217	150	320	90	32	46.0	95	125	185	260	97.0	120
SN 218	90	SN 218	160	345	100	35	62.4	100	145	195	290	102.0	125
SN 220	100	SN 220	180	380	110	40	70.3	112	160	215	320	118.0	140
SN 222	110	SN 222	200	410	120	45	80.0	125	175	239	350	128.0	154
SN 224	120	SN 224	215	410	120	45	86.0	140	185	270	350	138.0	164
SN 226	130	SN 226	230	445	130	50	90.0	150	190	290	380	148.0	178
SN 228	140	SN 228	250	500	150	50	98.0	150	205	305	420	158.0	188
SN 230	150	SN 230	270	530	160	60	106.0	160	220	325	450	168.0	198
SN 232	160	SN 232	290	550	160	60	114.0	170	235	340	470	178.0	208



PLUMMER BLOCK HOUSING DIMENSIONS (mm)							APPROPRIATE APARTMENT				
f_1	f_2	u	v	s	t	WEIGHT Kg	BEARING NUMBER	LOCATING RING NUMBER	LOCATING RING QTY	FELT SEAL	END COVER
4	5.4	15	20	M 12	M 8	2.3	**1206** **2206 22206**	SR 62X7 SR 62X10	2 1	FS 6X6X135	508 NA
4	5.4	15	20	M 12	M 10	2.3	**1207** **2207 22207**	SR 72X8 SR 72X10	2 1	FS 6X6X165	510 NA
5	6.9	15	20	M 12	M 10	3.2	**1208** **2208 22208**	SR 80X7.5 SR 80X10	2 1	FS 6X9X190	511 NA-510 UA
5	6.9	15	20	M 12	M 10	3.2	**1209** **2209 22209**	SR 85X6 SR 85X8	2 1	FS 6X9X205	512 NA-511 UA
5	6.8	15	20	M 12	M 10	3.3	**1210** **2210 22210**	SR 90X6.5 SR 90X10	2 1	FS 6X9X220	513 NA-512 UA
5	6.8	18	23	M 16	M 12	4.4	**1211** **2211 22211**	SR 100X6 SR 100X8	2 1	FS 6X9X235	515 NA-513 UA
6	8.1	18	23	M 16	M 12	5.0	**1212** **2212 22212**	SR 110X8 SR 110X10	2 1	FS 8X10X255	516 NA
6	8.1	18	23	M 16	M 12	5.9	**1213** **2213 22213**	SR 120X10 SR 120X12	2 1	FS 8X10X270	517 NA-515 UA
6	8.1	18	23	M 16	M 12	7.0	**1215** **2215 22215**	SR 130X8 SR 130X10	2 1	FS 8X10X300	519 NA-517 UA
7	9.3	22	27	M 20	M 16	8.9	**1216** **2216 22216**	SR 140X8.5 SR 140X10	2 1	FS 9X10X320	520 NA-518 UA
8	10.8	22	27	M 20	M 16	9.1	**1217** **2217 22217**	SR 150X9 SR 150X10	2 1	FS 10X13X340	217 NA
8	10.8	22	27	M 20	M 16	13.1	**1218** **2218 22218** **23218**	SR 160X16.2 SR 160X11.2 SR 160X10	2 2 1	FS 10X13X360	522 NA
8	10.7	26	32	M 24	M 20	17.5	**2220 22220** **22320**	SR 180X12.1 SR 180X10	2 1	FS 10X13X410	526 NA-519 UA
9	12.2	26	32	M 24	M 20	21.6	**2222 22222** **23222**	SR 200X13.5 SR 200X10	2 1	FS 12X14X445	528 NA-522 UA
9	12.2	26	32	M 24	M 20	24.2	**22224** **23224**	SR 215X14 SR 215X10	2 1	FS 12X14X475	530 NA-524 UA
10	13.7	28	36	M 24	M 24	30.2	**22226** **23226**	SR 230X13 SR 230X10	2 1	FS 12X17X515	226 NA
10	13.7	33	42	M 30	M 24	41.0	**22228** **23228**	SR 250X15 SR 250X10	2 1	FS 12X17X545	228 NA
10	13.7	33	42	M 30	M 24	46.0	**22230** **23230**	SR 270X16.5 SR 270X10	2 1	FS 12X17X580	230 NA
10	13.7	33	42	M 30	M 24	57.5	**22232** **23232**	SR 290X17 SR 290X10	2 1	FS 12X17X610	232 NA

Pillow Blocks Type

SBPP 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SBPP 201	0.17
15	SBPP 202	0.16
17	SBPP 203	0.15
20	SBPP 204	0.22
25	SBPP 205	0.31
30	SBPP 206	0.45
35	SBPP 207	0.61

SBAK 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBAK 204	0.70
25	SBAK 205	0.81
30	SBAK 206	1.18
35	SBAK 207	1.61
40	SBAK 208	1.99

SBP 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBP 204	0.62
25	SBP 205	0.73
30	SBP 206	1.16
35	SBP 207	1.46
40	SBP 208	1.74

UCAK 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UCAK 204	0.74
25	UCAK 205	0.85
30	UCAK 206	1.24
35	UCAK 207	1.70
40	UCAK 208	2.13
45	UCAK 209	2.39
50	UCAK 210	2.83
55	UCAK 211	3.85
60	UCAK 212	4.92
65	UCAK 213	6.13
70	UCAK 214	6.90
75	UCAK 215	8.56

SAPP 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SAPP 201	0.21
15	SAPP 202	0.20
17	SAPP 203	0.19
20	SAPP 204	0.27
25	SAPP 205	0.34
30	SAPP 206	0.52
35	SAPP 207	0.73

SAAK 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAAK 204	0.75
25	SAAK 205	0.84
30	SAAK 206	1.25
35	SAAK 207	1.73
40	SAAK 208	2.14
45	SAAK 209	2.40
50	SAAK 210	2.83
55	SAAK 211	3.60

SAP 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAP 204	0.67
25	SAP 205	0.76
30	SAP 206	1.23
35	SAP 207	1.58
40	SAP 208	1.89
45	SAP 209	2.20
50	SAP 210	2.73
55	SAP 211	3.13

UELAK 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UELAK 204	0.79
25	UELAK 205	0.89
30	UELAK 206	1.33
35	UELAK 207	1.83
40	UELAK 208	2.27
45	UELAK 209	2.56
50	UELAK 210	3.04

UELAK 200

Shaft dia. mm	Unit number	Mass of unit Kg
55	UELAK 211	4.12
60	UELAK 212	5.26
65	UELAK 213	6.68
70	UELAK 214	7.42
75	UELAK 215	9.19

SBFS 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBFS 204	0.59
25	SBFS 205	0.72
30	SBFS 206	0.95
35	SBFS 207	1.25
40	SBFS 208	1.60

SBF 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBF 204	0.49
25	SBF 205	0.70
30	SBF 206	0.99
35	SBF 207	1.25
40	SBF 208	1.63

UCFS 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UCFS 204	0.63
25	UCFS 205	0.76
30	UCFS 206	1.01
35	UCFS 207	1.34
40	UCFS 208	1.74
45	UCFS 209	1.98
50	UCFS 210	2.43
55	UCFS 211	3.43
60	UCFS 212	4.24
65	UCFS 213	5.11
70	UCFS 214	5.30
75	UCFS 215	6.38

SAFS 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAFS 204	0.64
25	SAFS 205	0.75
30	SAFS 206	1.02
35	SAFS 207	1.37
40	SAFS 208	1.75
45	SAFS 209	1.99
50	SAFS 210	2.43
55	SAFS 211	3.18

UELFS 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UELFS 204	0.68
25	UELFS 205	0.80
30	UELFS 206	1.10
35	UELFS 207	1.47
40	UELFS 208	1.88
45	UELFS 209	2.15
50	UELFS 210	2.64
55	UELFS 211	3.70
60	UELFS 212	4.58
65	UELFS 213	5.66
70	UELFS 214	5.82
75	UELFS 215	7.01

SBPFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SBPFL 201	0.18
15	SBPFL 202	0.17
17	SBPFL 203	0.16
20	SBPFL 204	0.22
25	SBPFL 205	0.27
30	SBPFL 206	0.44
35	SBPFL 207	0.58

SBFT 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBFT 204	0.47
25	SBFT 205	0.56
30	SBFT 206	0.79
35	SBFT 207	1.18
40	SBFT 208	1.35

SBFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBFL 204	0.39
25	SBFL 205	0.56
30	SBFL 206	0.85
35	SBFL 207	1.05
40	SBFL 208	1.29

UCFT 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UCFT 204	0.51
25	UCFT 205	0.60
30	UCFT 206	0.85
35	UCFT 207	1.27
40	UCFT 208	1.49
45	UCFT 209	1.71
50	UCFT 210	1.97
55	UCFT 211	2.79
60	UCFT 212	3.62
65	UCFT 213	4.51
70	UCFT 214	4.81

SAPFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SAPFL 201	0.22
15	SAPFL 202	0.21
17	SAPFL 203	0.20
20	SAPFL 204	0.27
25	SAPFL 205	0.30
30	SAPFL 206	0.51
35	SAPFL 207	0.70

SAFT 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAFT 204	0.52
25	SAFT 205	0.59
30	SAFT 206	0.86
35	SAFT 207	1.30
40	SAFT 208	1.50
45	SAFT 209	1.72
50	SAFT 210	1.97
55	SAFT 211	2.54

SAFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAFL 204	0.44
25	SAFL 205	0.59
30	SAFL 206	0.92

SAFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
35	SAFL 207	1.17
40	SAFL 208	1.44
45	SAFL 209	1.81
50	SAFL 210	2.13
55	SAFL 211	2.61

UELFT 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UELFT 204	0.56
25	UELFT 205	0.64
30	UELFT 206	0.94
35	UELFT 207	1.40
40	UELFT 208	1.63
45	UELFT 209	1.88
50	UELFT 210	2.18
55	UELFT 211	3.06
60	UELFT 212	3.96
65	UELFT 213	5.06
70	UELFT 214	5.33

SBPF 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SBPF 201	0.23
15	SBPF 202	0.22
17	SBPF 203	0.21
20	SBPF 204	0.29
25	SBPF 205	0.37
30	SBPF 206	0.58
35	SBPF 207	0.74

SBFC 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SBFC 204	0.65
25	SBFC 205	0.95
30	SBFC 206	1.19
35	SBFC 207	1.55
40	SBFC 208	1.87

SAPF 200

Shaft dia. mm	Unit number	Mass of unit Kg
12	SAPF 201	0.27
15	SAPF 202	0.26
17	SAPF 203	0.25
20	SAPF 204	0.34
25	SAPF 205	0.40
30	SAPF 206	0.65
35	SAPF 207	0.86

SAFC 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAFC 204	0.70
25	SAFC 205	0.98
30	SAFC 206	1.26
35	SAFC 207	1.67
40	SAFC 208	2.02
45	SAFC 209	2.58
50	SAFC 210	2.85
55	SAFC 211	3.67

SAHA 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAHA 204	0.63
25	SAHA 205	0.82
30	SAHA 206	0.79
35	SAHA 207	1.14
40	SAHA 208	1.26
45	SAHA 209	1.66
50	SAHA 210	1.95
55	SAHA 211	2.23

SAC 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAC 204	0.50
25	SAC 205	0.64
30	SAC 206	0.82
35	SAC 207	0.93
40	SAC 208	1.20
45	SAC 209	1.50
50	SAC 210	1.92
55	SAC 211	1.96

UKC 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UKC 205	0.59
25	UKC 206	0.74
30	UKC 207	0.80
35	UKC 208	1.03
40	UKC 209	1.34
45	UKC 210	1.71
50	UKC 211	1.86
55	UKC 212	1.98
60	UKC 213	2.47

UCST 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UCST 204	0.73
25	UCST 205	0.83
30	UCST 206	1.26
35	UCST 207	1.58
40	UCST 208	2.30
45	UCST 209	2.27
50	UCST 210	2.49
55	UCST 211	3.77

UCST 200

Shaft dia. mm	Unit number	Mass of unit Kg
60	UCST 212	4.77
65	UCST 213	6.65
70	UCST 214	6.74
75	UCST 215	7.10

SAST 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SAST 204	0.74
25	SAST 205	0.82
30	SAST 206	1.27
35	SAST 207	1.61
40	SAST 208	2.31
45	SAST 209	2.28
50	SAST 210	2.49
55	SAST 211	3.52

UELST 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	UELST 204	0.78
25	UELST 205	0.87
30	UELST 206	1.35
35	UELST 207	1.71
40	UELST 208	2.44
45	UELST 209	2.44
50	UELST 210	2.70
55	UELST 211	4.04
60	UELST 212	5.11
65	UELST 213	7.20
70	UELST 214	7.26
75	UELST 215	7.73

PL-P 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-P 204	0.13
52	PL-P 205	0.14
62	PL-P 206	0.24
72	PL-P 207	0.27
80	PL-P 208	0.35
85	PL-P 209	0.45
90	PL-P 210	0.50

PL-PA 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-PA 204	0.13
52	PL-PA 205	0.15
62	PL-PA 206	0.26
72	PL-PA 207	0.30
80	PL-PA 208	0.36
85	PL-PA 209	0.39
90	PL-PA 210	0.50

PL-F 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-F 204	0.12
52	PL-F 205	0.15
62	PL-F 206	0.18
72	PL-F 207	0.25
80	PL-F 208	0.36
85	PL-F 209	0.46
90	PL-F 210	0.52

PL-FL 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-FL 204	0.08
52	PL-FL 205	0.11
62	PL-FL 206	0.13
72	PL-FL 207	0.16
80	PL-FL 208	0.22
85	PL-FL 209	0.30
90	PL-FL 210	0.36

PL-FC 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-FC 204	0.16
52	PL-FC 205	0.21
62	PL-FC 206	0.29
72	PL-FC 207	0.39
80	PL-FC 208	0.44
85	PL-FC 209	0.62
90	PL-FC 210	0.65

PL-T 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	PL-T 204	0.10
52	PL-T 205	0.13
62	PL-T 206	0.14
72	PL-T 207	0.17
80	PL-T 208	0.25
85	PL-T 209	0.35
90	PL-T 210	0.46

PL-SS UCP 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	PL-SS UCP 204	0.29
25	PL-SS UCP 205	0.35
30	PL-SS UCP 206	0.55
35	PL-SS UCP 207	0.74
40	PL-SS UCP 208	0.95
45	PL-SS UCP 209	1.13
50	PL-SS UCP 210	1.30

PL-SS UCF 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	PL-SS UCF 204	0.26
25	PL-SS UCF 205	0.34
30	PL-SS UCF 206	0.50
35	PL-SS UCF 207	0.69
40	PL-SS UCF 208	0.92
45	PL-SS UCF 209	1.14
50	PL-SS UCF 210	1.32

PL-SS UCFL 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	PL-SS UCFL 204	0.24
25	PL-SS UCFL 205	0.31
30	PL-SS UCFL 206	0.47
35	PL-SS UCFL 207	0.64
40	PL-SS UCFL 208	0.84
45	PL-SS UCFL 209	0.98
50	PL-SS UCFL 210	1.16

SS P 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS P 204	0.69
52	SS P 205	0.74
62	SS P 206	1.29
72	SS P 207	1.42
80	SS P 208	1.82
85	SS P 209	2.09
90	SS P 210	2.38
100	SS P 211	2.96
110	SS P 212	4.36

SS PA 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS PA 204	0.52
52	SS PA 205	0.65
62	SS PA 206	0.78
72	SS PA 207	0.95
80	SS PA 208	1.16
85	SS PA 209	1.82
90	SS PA 210	2.30

SS F 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS F 204	0.47
52	SS F 205	0.65
62	SS F 206	0.85
72	SS F 207	1.03
80	SS F 208	1.38
85	SS F 209	1.50
90	SS F 210	1.63
100	SS F 211	3.80
110	SS F 212	4.36

SS FL 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS FL 204	0.32
52	SS FL 205	0.44
62	SS FL 206	0.58
72	SS FL 207	0.74
80	SS FL 208	0.99
85	SS FL 209	1.16
90	SS FL 210	1.36
100	SS FL 211	2.64
110	SS FL 212	3.20

SS FB 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS FB 204	0.39
52	SS FB 205	0.54
62	SS FB 206	0.77
72	SS FB 207	1.16
80	SS FB 208	1.65
85	SS FB 209	1.91
90	SS FB 210	2.34

SS FC 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS FC 204	0.84
52	SS FC 205	1.10
62	SS FC 206	1.45
72	SS FC 207	1.71
80	SS FC 208	1.87
85	SS FC 209	2.86
90	SS FC 210	3.08

SS T 200

Shaft dia. mm	Unit number	Mass of unit Kg
47	SS T 204	0.70
52	SS T 205	0.81
62	SS T 206	1.16
72	SS T 207	1.38
80	SS T 208	2.09
85	SS T 209	2.23
90	SS T 210	2.42

SS UC 200

Shaft dia. mm	Unit number	Mass of unit Kg
20	SS UC 204	0.17
25	SS UC 205	0.21
30	SS UC 206	0.32
35	SS UC 207	0.47
40	SS UC 208	0.64
45	SS UC 209	0.68
50	SS UC 210	0.80
55	SS UC 211	1.12
60	SS UC 212	1.53

SBPP 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SBPP 201-8	0.17
9/16	SBPP 202-9	0.16
5/8	SBPP 202-10	0.16
11/16	SBPP 203-11	0.15
3/4	SBPP 204-12	0.24
13/16	SBPP 205-13	0.34
7/8	SBPP 205-14	0.33
15/16	SBPP 205-15	0.32
1	SBPP 205-16	0.30
1-1/16	SBPP 206-17	0.47
1-1/8	SBPP 206-18	0.46
1-3/16	SBPP 206-19	0.44
1-1/4	SBPP 206-20	0.43
1-1/4	SBPP 207-20	0.66
1-5/16	SBPP 207-21	0.65
1-3/8	SBPP 207-22	0.64
1-7/16	SBPP 207-23	0.60

SBAK 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBAK 204-12	0.72
13/16	SBAK 205-13	0.84
7/8	SBAK 205-14	0.83
15/16	SBAK 205-15	0.82
1	SBAK 205-16	0.80
1-1/16	SBAK 206-17	1.20
1-1/8	SBAK 206-18	1.19
1-3/16	SBAK 206-19	1.17
1-1/4	SBAK 206-20	1.16
1-1/4	SBAK 207-20	1.66
1-5/16	SBAK 207-21	1.65
1-3/8	SBAK 207-22	1.64
1-7/16	SBAK 207-23	1.60
1-1/2	SBAK 208-24	2.03

SBP 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBP 204-12	0.64
13/16	SBP 205-13	0.76
7/8	SBP 205-14	0.75
15/16	SBP 205-15	0.74
1	SBP 205-16	0.72
1-1/16	SBP 206-17	1.18
1-1/8	SBP 206-18	1.17
1-3/16	SBP 206-19	1.15

SBP 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1-1/4	SBP 206-20	1.14
1-1/4	SBP 207-20	1.51
1-5/16	SBP 207-21	1.50
1-3/8	SBP 207-22	1.49
1-7/16	SBP 207-23	1.45
1-1/2	SBP 208-24	1.78

UCAK 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UCAK 204-12	0.75
13/16	UCAK 205-13	0.89
7/8	UCAK 205-14	0.87
15/16	UCAK 205-15	0.86
1	UCAK 205-16	0.84
1-1/16	UCAK 206-17	1.28
1-1/8	UCAK 206-18	1.26
1-3/16	UCAK 206-19	1.23
1-1/4	UCAK 206-20	1.22
1-1/4	UCAK 207-20	1.76
1-5/16	UCAK 207-21	1.74
1-3/8	UCAK 207-22	1.71
1-7/16	UCAK 207-23	1.68
1-1/2	UCAK 208-24	2.17
1-5/8	UCAK 209-26	2.49
1-11/16	UCAK 209-27	2.45
1-3/4	UCAK 209-28	2.41
1-7/8	UCAK 210-30	2.90
1-15/16	UCAK 210-31	2.85
2	UCAK 210-32	2.81
2	UCAK 211-32	4.00
2-1/16	UCAK 211-33	3.95
2-1/8	UCAK 211-34	3.90
2-3/16	UCAK 211-35	3.83
2-1/4	UCAK 212-36	5.06
2-5/16	UCAK 212-37	4.99
2-3/8	UCAK 212-38	4.90
2-7/16	UCAK 212-39	4.84
2-1/2	UCAK 213-40	6.21
2-9/16	UCAK 213-41	6.05
2-5/8	UCAK 214-42	6.93
2-11/16	UCAK 214-43	6.92
2-3/4	UCAK 214-44	6.91
2-13/16	UCAK 215-45	8.65
2-7/8	UCAK 215-46	8.61
2-15/16	UCAK 215-47	8.59
3	UCAK 215-48	8.48

SAPP 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SAPP 201-8	0.21
9/16	SAPP 202-9	0.20
5/8	SAPP 202-10	0.20
11/16	SAPP 203-11	0.19
3/4	SAPP 204-12	0.28
13/16	SAPP 205-13	0.37
7/8	SAPP 205-14	0.36
15/16	SAPP 205-15	0.35
1	SAPP 205-16	0.32
1-1/16	SAPP 206-17	0.56
1-1/8	SAPP 206-18	0.54
1-3/16	SAPP 206-19	0.50
1-1/4	SAPP 206-20	0.47
1-1/4	SAPP 207-20	0.79
1-5/16	SAPP 207-21	0.76
1-3/8	SAPP 207-22	0.74
1-7/16	SAPP 207-23	0.71

SAAK 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAAK 204-12	0.76
13/16	SAAK 205-13	0.87
7/8	SAAK 205-14	0.86
15/16	SAAK 205-15	0.85
1	SAAK 205-16	0.82
1-1/16	SAAK 206-17	1.29
1-1/8	SAAK 206-18	1.27
1-3/16	SAAK 206-19	1.23
1-1/4	SAAK 206-20	1.20
1-1/4	SAAK 207-20	1.79
1-5/16	SAAK 207-21	1.76
1-3/8	SAAK 207-22	1.74
1-7/16	SAAK 207-23	1.71
1-1/2	SAAK 208-24	2.17
1-5/8	SAAK 209-26	2.53
1-11/16	SAAK 209-27	2.47
1-3/4	SAAK 209-28	2.44
1-7/8	SAAK 210-30	2.88
1-15/16	SAAK 210-31	2.86
2	SAAK 210-32	2.80
2	SAAK 211-32	3.91
2-1/16	SAAK 211-33	3.86
2-1/8	SAAK 211-34	3.69
2-3/16	SAAK 211-35	3.54

SAP 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAP 204-12	0.68
13/16	SAP 205-13	0.79
7/8	SAP 205-14	0.78
15/16	SAP 205-15	0.77
1	SAP 205-16	0.74
1-1/16	SAP 206-17	1.27
1-1/8	SAP 206-18	1.25
1-3/16	SAP 206-19	1.21
1-1/4	SAP 206-20	1.18
1-1/4	SAP 207-20	1.64
1-5/16	SAP 207-21	1.61
1-3/8	SAP 207-22	1.59
1-7/16	SAP 207-23	1.56
1-1/2	SAP 208-24	1.92
1-5/8	SAP 209-26	2.33
1-11/16	SAP 209-27	2.27
1-3/4	SAP 209-28	2.24
1-7/8	SAP 210-30	2.78
1-15/16	SAP 210-31	2.76
2	SAP 210-32	2.70
2	SAP 211-32	3.44
2-1/16	SAP 211-33	3.39
2-1/8	SAP 211-34	3.22
2-3/16	SAP 211-35	3.07

UELAK 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UELAK 204-12	0.80
13/16	UELAK 205-13	0.95
7/8	UELAK 205-14	0.93
15/16	UELAK 205-15	0.91
1	UELAK 205-16	0.88
1-1/16	UELAK 206-17	1.38
1-1/8	UELAK 206-18	1.35
1-3/16	UELAK 206-19	1.32
1-1/4	UELAK 206-20	1.30
1-1/4	UELAK 207-20	1.91
1-5/16	UELAK 207-21	1.88
1-3/8	UELAK 207-22	1.84
1-7/16	UELAK 207-23	1.81
1-1/2	UELAK 208-24	2.32
1-5/8	UELAK 209-26	2.67
1-11/16	UELAK 209-27	2.62
1-3/4	UELAK 209-28	2.58
1-7/8	UELAK 210-30	3.13
1-15/16	UELAK 210-31	3.07
2	UELAK 210-32	3.01

UELAK 200

Shaft dia. Inch	Unit number	Mass of unit Kg
2	UELAK 211-32	4.31
2-1/16	UELAK 211-33	4.25
2-1/8	UELAK 211-34	4.17
2-3/16	UELAK 211-35	4.09
2-1/4	UELAK 212-36	5.42
2-5/16	UELAK 212-37	5.33
2-3/8	UELAK 212-38	5.24
2-7/16	UELAK 212-39	5.15
2-1/2	UELAK 213-40	6.78
2-9/16	UELAK 213-41	6.67
2-5/8	UELAK 214-42	7.66
2-11/16	UELAK 214-43	7.55
2-3/4	UELAK 214-44	7.43
2-13/16	UELAK 215-45	9.48
2-7/8	UELAK 215-46	9.35
2-15/16	UELAK 215-47	9.22
3	UELAK 215-48	9.09

SBFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBFS 204-12	0.61
13/16	SBFS 205-13	0.75
7/8	SBFS 205-14	0.74
15/16	SBFS 205-15	0.73
1	SBFS 205-16	0.71
1-1/16	SBFS 206-17	0.97
1-1/8	SBFS 206-18	0.96
1-3/16	SBFS 206-19	0.94
1-1/4	SBFS 206-20	0.93
1-1/4	SBFS 207-20	1.30
1-5/16	SBFS 207-21	1.29
1-3/8	SBFS 207-22	1.28
1-7/16	SBFS 207-23	1.24
1-1/2	SBFS 208-24	1.64

SBF 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBF 204-12	0.51
13/16	SBF 205-13	0.73
7/8	SBF 205-14	0.72
15/16	SBF 205-15	0.71
1	SBF 205-16	0.69
1-1/16	SBF 206-17	1.01
1-1/8	SBF 206-18	1.00
1-3/16	SBF 206-19	0.98
1-1/4	SBF 206-20	0.97
1-1/4	SBF 207-20	1.30
1-5/16	SBF 207-21	1.29
1-3/8	SBF 207-22	1.28
1-7/16	SBF 207-23	1.24
1-1/2	SBF 208-24	1.67

UCFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UCFS 204-12	0.64
13/16	UCFS 205-13	0.80
7/8	UCFS 205-14	0.78
15/16	UCFS 205-15	0.77
1	UCFS 205-16	0.75
1-1/16	UCFS 206-17	1.05
1-1/8	UCFS 206-18	1.03
1-3/16	UCFS 206-19	1.00
1-1/4	UCFS 206-20	0.99
1-1/4	UCFS 207-20	1.40

UCFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1-5/16	UCFS 207-21	1.38
1-3/8	UCFS 207-22	1.35
1-7/16	UCFS 207-23	1.32
1-1/2	UCFS 208-24	1.78
1-5/8	UCFS 209-26	2.08
1-11/16	UCFS 209-27	2.04
1-3/4	UCFS 209-28	2.00
1-7/8	UCFS 210-30	2.50
1-15/16	UCFS 210-31	2.45
2	UCFS 210-32	2.41
2	UCFS 211-32	3.58
2-1/16	UCFS 211-33	3.53
2-1/8	UCFS 211-34	3.48
2-3/16	UCFS 211-35	3.41
2-1/4	UCFS 212-36	4.38
2-5/16	UCFS 212-37	4.31
2-3/8	UCFS 212-38	4.22
2-7/16	UCFS 212-39	4.16
2-1/2	UCFS 213-40	5.19
2-9/16	UCFS 213-41	5.03
2-5/8	UCFS 214-42	5.33
2-11/16	UCFS 214-43	5.32
2-3/4	UCFS 214-44	5.31
2-13/16	UCFS 215-45	6.47
2-7/8	UCFS 215-46	6.43
2-15/16	UCFS 215-47	6.41
3	UCFS 215-48	6.30

SAFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAFS 204-12	0.65
13/16	SAFS 205-13	0.78
7/8	SAFS 205-14	0.77
15/16	SAFS 205-15	0.76
1	SAFS 205-16	0.73
1-1/16	SAFS 206-17	1.06
1-1/8	SAFS 206-18	1.04
1-3/16	SAFS 206-19	1.00
1-1/4	SAFS 206-20	0.97
1-1/4	SAFS 207-20	1.43
1-5/16	SAFS 207-21	1.40
1-3/8	SAFS 207-22	1.38
1-7/16	SAFS 207-23	1.35
1-1/2	SAFS 208-24	1.78
1-5/8	SAFS 209-26	2.12
1-11/16	SAFS 209-27	2.06
1-3/4	SAFS 209-28	2.03

SAFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1-7/8	SAFS 210-30	2.48
1-15/16	SAFS 210-31	2.46
2	SAFS 210-32	2.40
2	SAFS 211-32	3.49
2-1/16	SAFS 211-33	3.44
2-1/8	SAFS 211-34	3.27
2-3/16	SAFS 211-35	3.12

UELFS 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UELFS 204-12	0.69
13/16	UELFS 205-13	0.86
7/8	UELFS 205-14	0.84
15/16	UELFS 205-15	0.82
1	UELFS 205-16	0.79
1-1/16	UELFS 206-17	1.15
1-1/8	UELFS 206-18	1.12
1-3/16	UELFS 206-19	1.09
1-1/4	UELFS 206-20	1.07
1-1/4	UELFS 207-20	1.55
1-5/16	UELFS 207-21	1.52
1-3/8	UELFS 207-22	1.48
1-7/16	UELFS 207-23	1.45
1-1/2	UELFS 208-24	1.93
1-5/8	UELFS 209-26	2.26
1-11/16	UELFS 209-27	2.21
1-3/4	UELFS 209-28	2.17
1-7/8	UELFS 210-30	2.73
1-15/16	UELFS 210-31	2.67
2	UELFS 210-32	2.61
2	UELFS 211-32	3.89
2-1/16	UELFS 211-33	3.83
2-1/8	UELFS 211-34	3.75
2-3/16	UELFS 211-35	3.67
2-1/4	UELFS 212-36	4.74
2-5/16	UELFS 212-37	4.65
2-3/8	UELFS 212-38	4.56
2-7/16	UELFS 212-39	4.47
2-1/2	UELFS 213-40	5.76
2-9/16	UELFS 213-41	5.65
2-5/8	UELFS 214-42	6.06
2-11/16	UELFS 214-43	5.95
2-3/4	UELFS 214-44	5.83
2-13/16	UELFS 215-45	7.30
2-7/8	UELFS 215-46	7.17
2-15/16	UELFS 215-47	7.04
3	UELFS 215-48	6.91

SBPFL 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SBPFL 201-8	0.18
9/16	SBPFL 202-9	0.17
5/8	SBPFL 202-10	0.17
11/16	SBPFL 203-11	0.16
3/4	SBPFL 204-12	0.24
13/16	SBPFL 205-13	0.30
7/8	SBPFL 205-14	0.29
15/16	SBPFL 205-15	0.28
1	SBPFL 205-16	0.26
1-1/16	SBPFL 206-17	0.46
1-1/8	SBPFL 206-18	0.45
1-3/16	SBPFL 206-19	0.43
1-1/4	SBPFL 206-20	0.42
1-1/4	SBPFL 207-20	0.63
1-5/16	SBPFL 207-21	0.62
1-3/8	SBPFL 207-22	0.61
1-7/16	SBPFL 207-23	0.57

SBFT 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBFT 204-12	0.49
13/16	SBFT 205-13	0.59
7/8	SBFT 205-14	0.58
15/16	SBFT 205-15	0.57
1	SBFT 205-16	0.55
1-1/16	SBFT 206-17	0.81
1-1/8	SBFT 206-18	0.80
1-3/16	SBFT 206-19	0.78
1-1/4	SBFT 206-20	0.77
1-1/4	SBFT 207-20	1.23
1-5/16	SBFT 207-21	1.22
1-3/8	SBFT 207-22	1.21
1-7/16	SBFT 207-23	1.17
1-1/2	SBFT 208-24	1.39

SBFL 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBFL 204-12	0.41
13/16	SBFL 205-13	0.59
7/8	SBFL 205-14	0.58
15/16	SBFL 205-15	0.57
1	SBFL 205-16	0.55
1-1/16	SBFL 206-17	0.87

SBFL 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1-1/8	SBFL 206-18	0.86
1-3/16	SBFL 206-19	0.84
1-1/4	SBFL 206-20	0.83
1-1/4	SBFL 207-20	1.10
1-5/16	SBFL 207-21	1.09
1-3/8	SBFL 207-22	1.08
1-7/16	SBFL 207-23	1.04
1-1/2	SBFL 208-24	1.33

UCFT 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UCFT 204-12	0.52
13/16	UCFT 205-13	0.64
7/8	UCFT 205-14	0.62
15/16	UCFT 205-15	0.61
1	UCFT 205-16	0.59
1-1/16	UCFT 206-17	0.89
1-1/8	UCFT 206-18	0.87
1-3/16	UCFT 206-19	0.84
1-1/4	UCFT 206-20	0.83
1-1/4	UCFT 207-20	1.33
1-5/16	UCFT 207-21	1.31
1-3/8	UCFT 207-22	1.28
1-7/16	UCFT 207-23	1.25
1-1/2	UCFT 208-24	1.53
1-5/8	UCFT 209-26	1.81
1-11/16	UCFT 209-27	1.77
1-3/4	UCFT 209-28	1.73
1-7/8	UCFT 210-30	2.04
1-15/16	UCFT 210-31	1.99
2	UCFT 210-32	1.95
2	UCFT 211-32	2.94
2-1/16	UCFT 211-33	2.89
2-1/8	UCFT 211-34	2.84
2-3/16	UCFT 211-35	2.77
2-1/4	UCFT 212-36	3.76
2-5/16	UCFT 212-37	3.69
2-3/8	UCFT 212-38	3.60
2-7/16	UCFT 212-39	3.54
2-1/2	UCFT 213-40	4.59
2-9/16	UCFT 213-41	4.43
2-5/8	UCFT 214-42	4.84
2-11/16	UCFT 214-43	4.83
2-3/4	UCFT 214-44	4.82

SAPFL 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SAPFL 201-8	0.22
9/16	SAPFL 202-9	0.21
5/8	SAPFL 202-10	0.21
11/16	SAPFL 203-11	0.20
3/4	SAPFL 204-12	0.28
13/16	SAPFL 205-13	0.33
7/8	SAPFL 205-14	0.32
15/16	SAPFL 205-15	0.31
1	SAPFL 205-16	0.28
1-1/16	SAPFL 206-17	0.55
1-1/8	SAPFL 206-18	0.53
1-3/16	SAPFL 206-19	0.49
1-1/4	SAPFL 206-20	0.46
1-1/4	SAPFL 207-20	0.76
1-5/16	SAPFL 207-21	0.73
1-3/8	SAPFL 207-22	0.71
1-7/16	SAPFL 207-23	0.68

SAFT 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAFT 204-12	0.53
13/16	SAFT 205-13	0.62
7/8	SAFT 205-14	0.61
15/16	SAFT 205-15	0.60
1	SAFT 205-16	0.57
1-1/16	SAFT 206-17	0.90
1-1/8	SAFT 206-18	0.88
1-3/16	SAFT 206-19	0.84
1-1/4	SAFT 206-20	0.81
1-1/4	SAFT 207-20	1.36
1-5/16	SAFT 207-21	1.33
1-3/8	SAFT 207-22	1.31
1-7/16	SAFT 207-23	1.28
1-1/2	SAFT 208-24	1.53
1-5/8	SAFT 209-26	1.85
1-11/16	SAFT 209-27	1.79
1-3/4	SAFT 209-28	1.76
1-7/8	SAFT 210-30	2.02
1-15/16	SAFT 210-31	2.00
2	SAFT 210-32	1.94
2	SAFT 211-32	2.85
2-1/16	SAFT 211-33	2.80
2-1/8	SAFT 211-34	2.63
2-3/16	SAFT 211-35	2.48

SAFL 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAFL 204-12	0.45
13/16	SAFL 205-13	0.62
7/8	SAFL 205-14	0.61
15/16	SAFL 205-15	0.60
1	SAFL 205-16	0.57
1-1/16	SAFL 206-17	0.96
1-1/8	SAFL 206-18	0.94
1-3/16	SAFL 206-19	0.90
1-1/4	SAFL 206-20	0.87
1-1/4	SAFL 207-20	1.23
1-5/16	SAFL 207-21	1.20
1-3/8	SAFL 207-22	1.18
1-7/16	SAFL 207-23	1.15
1-1/2	SAFL 208-24	1.47
1-5/8	SAFL 209-26	1.94
1-11/16	SAFL 209-27	1.88
1-3/4	SAFL 209-28	1.85
1-7/8	SAFL 210-30	2.18
1-15/16	SAFL 210-31	2.16
2	SAFL 210-32	2.10
2	SAFL 211-32	2.92
2-1/16	SAFL 211-33	2.87
2-1/8	SAFL 211-34	2.70
2-3/16	SAFL 211-35	2.55

UELFT 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UELFT 204-12	0.57
13/16	UELFT 205-13	0.70
7/8	UELFT 205-14	0.68
15/16	UELFT 205-15	0.66
1	UELFT 205-16	0.63
1-1/16	UELFT 206-17	0.99
1-1/8	UELFT 206-18	0.96
1-3/16	UELFT 206-19	0.93
1-1/4	UELFT 206-20	0.91
1-1/4	UELFT 207-20	1.48
1-5/16	UELFT 207-21	1.45
1-3/8	UELFT 207-22	1.41
1-7/16	UELFT 207-23	1.38
1-1/2	UELFT 208-24	1.68
1-5/8	UELFT 209-26	1.99
1-11/16	UELFT 209-27	1.94
1-3/4	UELFT 209-28	1.90
1-7/8	UELFT 210-30	2.27
1-15/16	UELFT 210-31	2.21
2	UELFT 210-32	2.15
2	UELFT 211-32	3.25
2-1/16	UELFT 211-33	3.19
2-1/8	UELFT 211-34	3.11
2-3/16	UELFT 211-35	3.03

UELFT 200

Shaft dia. Inch	Unit number	Mass of unit Kg
2-1/4	UELFT 212-36	4.12
2-5/16	UELFT 212-37	4.03
2-3/8	UELFT 212-38	3.94
2-7/16	UELFT 212-39	3.85
2-1/2	UELFT 213-40	5.16
2-9/16	UELFT 213-41	5.05
2-5/8	UELFT 214-42	5.57
2-11/16	UELFT 214-43	5.46
2-3/4	UELFT 214-44	5.34

SBPF 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SBPF 201-8	0.23
9/16	SBPF 202-9	0.22
5/8	SBPF 202-10	0.22
11/16	SBPF 203-11	0.21
3/4	SBPF 204-12	0.31
13/16	SBPF 205-13	0.40
7/8	SBPF 205-14	0.39
15/16	SBPF 205-15	0.38
1	SBPF 205-16	0.36
1-1/16	SBPF 206-17	0.60
1-1/8	SBPF 206-18	0.59
1-3/16	SBPF 206-19	0.57
1-1/4	SBPF 206-20	0.56
1-1/4	SBPF 207-20	0.79
1-5/16	SBPF 207-21	0.78
1-3/8	SBPF 207-22	0.77
1-7/16	SBPF 207-23	0.73

SBFC 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SBFC 204-12	0.67
13/16	SBFC 205-13	0.98
7/8	SBFC 205-14	0.97
15/16	SBFC 205-15	0.96
1	SBFC 205-16	0.94
1-1/16	SBFC 206-17	1.21
1-1/8	SBFC 206-18	1.20
1-3/16	SBFC 206-19	1.18
1-1/4	SBFC 206-20	1.17
1-1/4	SBFC 207-20	1.60
1-5/16	SBFC 207-21	1.59
1-3/8	SBFC 207-22	1.58
1-7/16	SBFC 207-23	1.54
1-1/2	SBFC 208-24	1.91

SAPF 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1/2	SAPF 201-8	0.27
9/16	SAPF 202-9	0.26
5/8	SAPF 202-10	0.26
11/16	SAPF 203-11	0.25
3/4	SAPF 204-12	0.35
13/16	SAPF 205-13	0.43
7/8	SAPF 205-14	0.42
15/16	SAPF 205-15	0.41
1	SAPF 205-16	0.38
1-1/16	SAPF 206-17	0.69
1-1/8	SAPF 206-18	0.67
1-3/16	SAPF 206-19	0.63
1-1/4	SAPF 206-20	0.60
1-1/4	SAPF 207-20	0.92
1-5/16	SAPF 207-21	0.89
1-3/8	SAPF 207-22	0.87
1-7/16	SAPF 207-23	0.84

SAFC 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAFC 204-12	0.71
13/16	SAFC 205-13	1.01
7/8	SAFC 205-14	1.00
15/16	SAFC 205-15	0.99
1	SAFC 205-16	0.96
1-1/16	SAFC 206-17	1.30
1-1/8	SAFC 206-18	1.28
1-3/16	SAFC 206-19	1.24
1-1/4	SAFC 206-20	1.21
1-1/4	SAFC 207-20	1.73
1-5/16	SAFC 207-21	1.70
1-3/8	SAFC 207-22	1.68
1-7/16	SAFC 207-23	1.65
1-1/2	SAFC 208-24	2.05
1-5/8	SAFC 209-26	2.71
1-11/16	SAFC 209-27	2.65
1-3/4	SAFC 209-28	2.62
1-7/8	SAFC 210-30	2.90
1-15/16	SAFC 210-31	2.88
2	SAFC 210-32	2.82
2	SAFC 211-32	3.98
2-1/16	SAFC 211-33	3.93
2-1/8	SAFC 211-34	3.76
2-3/16	SAFC 211-35	3.61

SAHA 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAHA 204-12	0.64
13/16	SAHA 205-13	0.85
7/8	SAHA 205-14	0.84
15/16	SAHA 205-15	0.83
1	SAHA 205-16	0.80
1-1/16	SAHA 206-17	0.83
1-1/8	SAHA 206-18	0.81
1-3/16	SAHA 206-19	0.77
1-1/4	SAHA 206-20	0.74
1-1/4	SAHA 207-20	1.20
1-5/16	SAHA 207-21	1.17
1-3/8	SAHA 207-22	1.15
1-7/16	SAHA 207-23	1.12
1-1/2	SAHA 208-24	1.29
1-5/8	SAHA 209-26	1.79
1-11/16	SAHA 209-27	1.73
1-3/4	SAHA 209-28	1.70
1-7/8	SAHA 210-30	2.00
1-15/16	SAHA 210-31	1.98
2	SAHA 210-32	1.92
2	SAHA 211-32	2.54
2-1/16	SAHA 211-33	2.49
2-1/8	SAHA 211-34	2.32
2-3/16	SAHA 211-35	2.17

SAC 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAC 204-12	0.51
13/16	SAC 205-13	0.67
7/8	SAC 205-14	0.66
15/16	SAC 205-15	0.65
1	SAC 205-16	0.62
1-1/16	SAC 206-17	0.86
1-1/8	SAC 206-18	0.84
1-3/16	SAC 206-19	0.80
1-1/4	SAC 206-20	0.77
1-1/4	SAC 207-20	0.99
1-5/16	SAC 207-21	0.96
1-3/8	SAC 207-22	0.94
1-7/16	SAC 207-23	0.91
1-1/2	SAC 208-24	1.23
1-5/8	SAC 209-26	1.63
1-11/16	SAC 209-27	1.57
1-3/4	SAC 209-28	1.54
1-7/8	SAC 210-30	1.97
1-15/16	SAC 210-31	1.95
2	SAC 210-32	1.89
2	SAC 211-32	2.27
2-1/16	SAC 211-33	2.22
2-1/8	SAC 211-34	2.05
2-3/16	SAC 211-35	1.90

UCST 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UCST 204-12	0.74
13/16	UCST 205-13	0.87
7/8	UCST 205-14	0.85
15/16	UCST 205-15	0.84
1	UCST 205-16	0.82
1-1/16	UCST 206-17	1.30
1-1/8	UCST 206-18	1.28
1-3/16	UCST 206-19	1.25
1-1/4	UCST 206-20	1.24
1-1/4	UCST 207-20	1.64
1-5/16	UCST 207-21	1.62
1-3/8	UCST 207-22	1.59
1-7/16	UCST 207-23	1.56
1-1/2	UCST 208-24	2.34
1-5/8	UCST 209-26	2.37
1-11/16	UCST 209-27	2.33
1-3/4	UCST 209-28	2.29
1-7/8	UCST 210-30	2.56
1-15/16	UCST 210-31	2.51
2	UCST 210-32	2.47
2	UCST 211-32	3.92
2-1/16	UCST 211-33	3.87
2-1/8	UCST 211-34	3.82
2-3/16	UCST 211-35	3.75
2-1/4	UCST 212-36	4.91
2-5/16	UCST 212-37	4.84
2-3/8	UCST 212-38	4.75
2-7/16	UCST 212-39	4.69
2-1/2	UCST 213-40	6.73
2-9/16	UCST 213-41	6.57
2-5/8	UCST 214-42	6.77
2-11/16	UCST 214-43	6.76
2-3/4	UCST 214-44	6.75
2-13/16	UCST 215-45	7.19
2-7/8	UCST 215-46	7.15
2-15/16	UCST 215-47	7.13
1-7/16	UCST 215-48	7.02

SAST 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	SAST 204-12	0.75
13/16	SAST 205-13	0.85
7/8	SAST 205-14	0.84
15/16	SAST 205-15	0.83
1	SAST 205-16	0.80
1-1/16	SAST 206-17	1.31
1-1/8	SAST 206-18	1.29
1-3/16	SAST 206-19	1.25
1-1/4	SAST 206-20	1.22
1-1/4	SAST 207-20	1.67
1-5/16	SAST 207-21	1.64
1-3/8	SAST 207-22	1.62

SAST 200

Shaft dia. Inch	Unit number	Mass of unit Kg
1-7/16	SAST 207-23	1.59
1-1/2	SAST 208-24	2.34
1-5/8	SAST 209-26	2.41
1-11/16	SAST 209-27	2.35
1-3/4	SAST 209-28	2.32
1-7/8	SAST 210-30	2.54
1-15/16	SAST 210-31	2.52
2	SAST 210-32	2.46
2	SAST 211-32	3.83
2-1/16	SAST 211-33	3.78
2-1/8	SAST 211-34	3.61
2-3/16	SAST 211-35	3.46

UELST 200

Shaft dia. Inch	Unit number	Mass of unit Kg
3/4	UELST 204-12	0.79
13/16	UELST 205-13	0.93
7/8	UELST 205-14	0.91
15/16	UELST 205-15	0.89
1	UELST 205-16	0.86
1-1/16	UELST 206-17	1.40
1-1/8	UELST 206-18	1.37
1-3/16	UELST 206-19	1.34
1-1/4	UELST 206-20	1.32
1-1/4	UELST 207-20	1.79
1-5/16	UELST 207-21	1.76
1-3/8	UELST 207-22	1.72
1-7/16	UELST 207-23	1.69
1-1/2	UELST 208-24	2.49
1-5/8	UELST 209-26	2.55
1-11/16	UELST 209-27	2.50
1-3/4	UELST 209-28	2.46
1-7/8	UELST 210-30	2.79
1-15/16	UELST 210-31	2.73
2	UELST 210-32	2.67
2	UELST 211-32	4.23
2-1/16	UELST 211-33	4.17
2-1/8	UELST 211-34	4.09
2-3/16	UELST 211-35	4.01
2-1/4	UELST 212-36	5.27
2-5/16	UELST 212-37	5.18
2-3/8	UELST 212-38	5.09
2-7/16	UELST 212-39	5.00
2-1/2	UELST 213-40	7.30
2-9/16	UELST 213-41	7.19
2-5/8	UELST 214-42	7.50
2-11/16	UELST 214-43	7.39
2-3/4	UELST 214-44	7.27
2-13/16	UELST 215-45	8.02
2-7/8	UELST 215-46	7.89
2-15/16	UELST 215-47	7.76
1-7/16	UELST 215-48	7.63

SBPP 200

	ASAHI	FYH	INA	NTN	SKF
SBPP 201	BPP 1	SBPP 201 F	PBY 12	ASPP 201	-
SBPP 202	BPP 2	SBPP 202 F	PBY 15	ASPP 202	-
SBPP 203	BPP 3	SBPP 203 F	PBY 17	ASPP 203	-
SBPP 204	BPP 4	SBPP 204 F	PBY 20	ASPP 204	-
SBPP 205	BPP 5	SBPP 205 F	PBY 25	ASPP 205	-
SBPP 206	BPP 6	SBPP 206 F	PBY 30	ASPP 206	-
SBPP 207	BPP 7	-	-	ASPP 207	-

SBAK 200

	ASAHI	FYH	INA	NTN	SKF
SBAK 204	-	-	-	ASPL 204	-
SBAK 205	-	-	-	ASPL 205	-
SBAK 206	-	-	-	ASPL 206	-
SBAK 207	-	-	-	ASPL 207	-
SBAK 208	-	-	-	-	-

SBP 200

	ASAHI	FYH	INA	NTN	SKF
SBP 204	BP 204	-	PASEY 20	-	-
SBP 205	BP 205	-	PASEY 25	-	-
SBP 206	BP 206	-	PASEY 30	-	-
SBP 207	BP 207	-	PASEY 35	-	-
SBP 208	-	-	PASEY 40	-	-

UCAK 200

	ASAHI	FYH	INA	NTN	SKF
UCAK 204	UCLP 204	SL 204	RAKY 20	UCPL 204 D1	-
UCAK 205	UCLP 205	SL 205	RAKY 25	UCPL 205 D1	-
UCAK 206	UCLP 206	SL 206	RAKY 30	UCPL 206 D1	-
UCAK 207	UCLP 207	SL 207	RAKY 35	UCPL 207 D1	-
UCAK 208	UCLP 208	SL 208	RAKY 40	UCPL 208 D1	-
UCAK 209	UCLP 209	SL 209	RAKY 45	UCPL 209 D1	-
UCAK 210	UCLP 210	SL 210	RAKY 50	UCPL 210 D1	-
UCAK 211	UCLP 211	SL 211	RAKY 55	UCPL 211 D1	-
UCAK 212	UCLP 212	SL 212	RAKY 60	UCPL 212 D1	-
UCAK 213	UCLP 213	-	-	-	-
UCAK 214	-	-	-	-	-
UCAK 215	-	SL 215	RAKY 75	-	-

UCP 200

	ASAHI	FYH	INA	NTN	SKF
UCP 201	UCP 201	UCP 201	RASEY 12	UCP 201 D1	-
UCP 202	UCP 202	UCP 202	RASEY 15	UCP 202 D1	-
UCP 203	UCP 203	UCP 203	RASEY 17	UCP 203 D1	-
UCP 204	UCP 204	UCP 204	RASEY 20	UCP 204 D1	SY 20 TM
UCP 205	UCP 205	UCP 205	RASEY 25	UCP 205 D1	SY 25 TM
UCP 206	UCP 206	UCP 206	RASEY 30	UCP 206 D1	SY 30 TM
UCP 207	UCP 207	UCP 207	RASEY 35	UCP 207 D1	SY 35 TM
UCP 208	UCP 208	UCP 208	RASEY 40	UCP 208 D1	SY 40 TM
UCP 209	UCP 209	UCP 209	RASEY 45	UCP 209 D1	SY 45 TM
UCP 210	UCP 210	UCP 210	RASEY 50	UCP 210 D1	SY 50 TM
UCP 211	UCP 211	UCP 211	RASEY 55	UCP 211 D1	SY 55 TM
UCP 212	UCP 212	UCP 212	RASEY 60	UCP 212 D1	SY 60 TM
UCP 213	UCP 213	UCP 213	RASEY 65	UCP 213 D1	SY 65 TM
UCP 214	UCP 214	UCP 214	RASEY 70	UCP 214 D1	SY 70 TM
UCP 215	UCP 215	UCP 215	RASEY 75	UCP 215 D1	SY 75 TM
UCP 216	UCP 216	UCP 216	RASEY 80	UCP 216 D1	SY 80 TM
UCP 217	UCP 217	UCP 217	-	UCP 217 D1	SY 85 TM
UCP 218	UCP 218	UCP 218	RASEY 90	UCP 218 D1	SY 90 TM

UCPA 200

	ASAHI	FYH	INA	NTN	SKF
UCPA 201	UCPA 201	UCPA 201	RSHEY 12	UCUP 201 D1	-
UCPA 202	UCPA 202	UCPA 202	RSHEY 15	UCUP 202 D1	-
UCPA 203	UCPA 203	UCPA 203	RSHEY 17	UCUP 203 D1	-
UCPA 204	UCPA 204	UCPA 204	RSHEY 20	UCUP 204 D1	SYF 20 TM
UCPA 205	UCPA 205	UCPA 205	RSHEY 25	UCUP 205 D1	SYF 25 TM
UCPA 206	UCPA 206	UCPA 206	RSHEY 30	UCUP 206 D1	SYF 30 TM
UCPA 207	UCPA 207	UCPA 207	RSHEY 35	UCUP 207 D1	SYF 35 TM
UCPA 208	UCPA 208	UCPA 208	RSHEY 40	UCUP 208 D1	SYF 40 TM
UCPA 209	UCPA 209	UCPA 209	RSHEY 45	UCUP 209 D1	SYF 45 TM
UCPA 210	UCPA 210	UCPA 210	RSHEY 50	UCUP 210 D1	SYF 50 TM
UCPA 211	-	-	-	-	SYF 55 TM
UCPA 212	-	-	-	-	SYF 60 TM
UCPA 213	-	-	-	-	-
UCPA 214	-	-	-	-	-
UCPA 215	-	-	-	-	-
UCPA 216	-	-	-	-	-
UCPA 217	-	-	-	-	-
UCPA 218	-	-	-	-	-

SAPP 200

	ASAHI	FYH	INA	NTN	SKF
SAPP 201	-	SAPP 201 F	PB 12	AELPP 201 W3	S 12 FM
SAPP 202	-	SAPP 202 F	PB 15	AELPP 202 W3	S 15 FM
SAPP 203	-	SAPP 203 F	PB 17	AELPP 203 W3	S 17 FM
SAPP 204	-	SAPP 204 F	PB 20	AELPP 204 W3	S 20 FM
SAPP 205	-	SAPP 205 F	PB 25	AELPP 205 W3	S 25 FM
SAPP 206	-	SAPP 206 F	PB 30	AELPP 206 W3	S 30 FM
SAPP 207	-	-	-	AELPP 207 W3	S 35 FM

SAAK 200

	ASAHI	FYH	INA	NTN	SKF
SAAK 204	-	-	PAK 20	AELPL 204 W3	-
SAAK 205	-	-	PAK 25	AELPL 205 W3	-
SAAK 206	-	-	PAK 30	AELPL 206 W3	-
SAAK 207	-	-	PAK 35	AELPL 207 W3	-
SAAK 208	-	-	PAK 40	-	-
SAAK 209	-	-	PAK 45	-	-
SAAK 210	-	-	PAK 50	-	-
SAAK 211	-	-	PAK 55	-	-

SAP 200

	ASAHI	FYH	INA	NTN	SKF
SAP 204	-	-	PASE 20	-	SY 20 FM
SAP 205	-	-	PASE 25	-	SY 25 FM
SAP 206	-	-	PASE 30	-	SY 30 FM
SAP 207	-	-	PASE 35	-	SY 35 FM
SAP 208	-	-	PASE 40	-	SY 40 FM
SAP 209	-	-	PASE 45	-	SY 45 FM
SAP 210	-	-	PASE 50	-	SY 50 FM
SAP 211	-	-	PASE 55	-	SY 55 FM

UELAK 200

	ASAHI	FYH	INA	NTN	SKF
UELAK 204	-	-	RAK 20	UELPL 204 D1 W3	-
UELAK 205	-	-	RAK 25	UELPL 205 D1 W3	-
UELAK 206	-	-	RAK 30	UELPL 206 D1 W3	-
UELAK 207	-	-	RAK 35	UELPL 207 D1 W3	-
UELAK 208	-	-	RAK 40	UELPL 208 D1 W3	-
UELAK 209	-	-	RAK 45	UELPL 209 D1 W3	-
UELAK 210	-	-	RAK 50	UELPL 210 D1 W3	-
UELAK 211	-	-	RAK 55	UELPL 211 D1 W3	-
UELAK 212	-	-	RAK 60	UELPL 212 D1 W3	-
UELAK 213	-	-	-	-	-
UELAK 214	-	-	-	-	-
UELAK 215	-	-	RAK 75 S	-	-

UELP 200

	ASAHI	FYH	INA	NTN	SKF
UELP 201	-	NAP 201	-	-	-
UELP 202	-	NAP 202	RASE 15	-	-
UELP 203	-	NAP 203	RASE 17	-	-
UELP 204	-	NAP 204	RASE 20	UELP 204 D1 W3	SY 20 WM
UELP 205	-	NAP 205	RASE 25	UELP 205 D1 W3	SY 25 WM
UELP 206	-	NAP 206	RASE 30	UELP 206 D1 W3	SY 30 WM
UELP 207	-	NAP 207	RASE 35	UELP 207 D1 W3	SY 35 WM
UELP 208	-	NAP 208	RASE 40	UELP 208 D1 W3	SY 40 WM
UELP 209	-	NAP 209	RASE 45	UELP 209 D1 W3	SY 45 WM
UELP 210	-	NAP 210	RASE 50	UELP 210 D1 W3	SY 50 WM
UELP 211	-	NAP 211	RASE 55	UELP 211 D1 W3	SY 55 WM
UELP 212	-	NAP 212	RASE 60	UELP 212 D1 W3	SY 60 WM
UELP 213	-	NAP 213	-	UELP 213 D1 W3	-

UELP 200

	ASAHI	FYH	INA	NTN	SKF
UELP 214	-	-	RASE 70 S	UELP 214 D1 W3	-
UELP 215	-	NAP 215	RASE 75 S	UELP 215 D1 W3	-

UKP 200

	ASAHI	FYH	INA	NTN	SKF
UKP 205	UKP 205	UKP 205	RASEA 20	UKP 205 D1	-
UKP 206	UKP 206	UKP 206	RASEA 25	UKP 206 D1	-
UKP 207	UKP 207	UKP 207	RASEA 30	UKP 207 D1	-
UKP 208	UKP 208	UKP 208	RASEA 35	UKP 208 D1	-
UKP 209	-	UKP 209	RASEA 40	UKP 209 D1	-
UKP 210	-	UKP 210	RASEA 45	UKP 210 D1	-
UKP 211	UKP 211	UKP 211	RASEA 50	UKP 211 D1	-
UKP 212	UKP 212	UKP 212	RASEA 55	UKP 212 D1	-
UKP 213	UKP 213	UKP 213	RASEA 60	UKP 213 D1	-

UCP X00

	ASAHI	FYH	INA	NTN	SKF
UCP X05	UCP X05	UCP X05	-	UCP X05 D1	-
UCP X06	UCP X06	UCP X06	-	UCP X06 D1	-
UCP X07	UCP X07	UCP X07	-	UCP X07 D1	-
UCP X08	UCP X08	UCP X08	RASEY 40-MP	UCP X08 D1	-
UCP X09	UCP X09	UCP X09	RASEY 45-MP	UCP X09 D1	-
UCP X10	UCP X10	UCP X10	RASEY 50-MP	UCP X10 D1	-
UCP X11	UCP X11	UCP X11	-	UCP X11 D1	-
UCP X12	UCP X12	UCP X12	RASEY 60-MP	UCP X12 D1	-
UCP X13	UCP X13	UCP X13	-	UCP X13 D1	-
UCP X14	UCP X14	UCP X14	-	UCP X14 D1	-
UCP X15	UCP X15	UCP X15	-	UCP X15 D1	-
UCP X16	UCP X16	UCP X16	-	UCP X16 D1	-

UCP 300

	ASAHI	FYH	INA	NTN	SKF
UCP 305	UCP 305	UCP 305	-	UCP 305 D1	-
UCP 306	UCP 306	UCP 306	RSAOY 30	UCP 306 D1	-
UCP 307	UCP 307	UCP 307	-	UCP 307 D1	-
UCP 308	UCP 308	UCP 308	RSAOY 40	UCP 308 D1	-
UCP 309	UCP 309	UCP 309	-	UCP 309 D1	-
UCP 310	UCP 310	UCP 310	RSAOY 50	UCP 310 D1	-
UCP 311	UCP 311	UCP 311	-	UCP 311 D1	-
UCP 312	UCP 312	UCP 312	RSAOY 60	UCP 312 D1	-
UCP 313	UCP 313	UCP 313	-	UCP 313 D1	-
UCP 314	UCP 314	UCP 314	-	UCP 314 D1	-
UCP 315	UCP 315	UCP 315	-	UCP 315 D1	-
UCP 316	UCP 316	UCP 316	-	UCP 316 D1	-

SBF 200

	ASAHI	FYH	INA	NTN	SKF
SBF 204	BF 204	-	PCJY 20	-	-
SBF 205	BF 205	-	PCJY 25	-	-
SBF 206	BF 206	-	PCJY 30	-	-
SBF 207	BF 207	-	PCJY 35	-	-
SBF 208	-	-	PCJY 40	-	-

UCFS 200

	ASAHI	FYH	INA	NTN	SKF
UCFS 204	UCLF 204	SLF 204	RCJY 20-N	-	-
UCFS 205	UCLF 205	SLF 205	RCJY 25-N	-	-
UCFS 206	UCLF 206	SLF 206	RCJY 30-N	-	-
UCFS 207	UCLF 207	SLF 207	RCJY 35-N	-	-
UCFS 208	UCLF 208	SLF 208	RCJY 40-N	-	-
UCFS 209	UCLF 209	SLF 209	RCJY 45-N	-	-
UCFS 210	UCLF 210	SLF 210	RCJY 50-N	-	-
UCFS 211	UCLF 211	SLF 211	RCJY 55-N	-	-
UCFS 212	UCLF 212	SLF 212	RCJY 60-N	-	-
UCFS 213	-	-	RCJY 65-N	-	-
UCFS 214	-	SLF 214	RCJY 70-N	-	-
UCFS 215	-	SLF 215	RCJY 75-N	-	-

UCF 200

	ASAHI	FYH	INA	NTN	SKF
UCF 201	UCF 201	UCF 201	RCJY 12	UCF 201 D1	-
UCF 202	UCF 202	UCF 202	RCJY 15	UCF 202 D1	-
UCF 203	UCF 203	UCF 203	RCJY 17	UCF 203 D1	-
UCF 204	UCF 204	UCF 204	RCJY 20	UCF 204 D1	FY 20 TM
UCF 205	UCF 205	UCF 205	RCJY 25	UCF 205 D1	FY 25 TM
UCF 206	UCF 206	UCF 206	RCJY 30	UCF 206 D1	FY 30 TM
UCF 207	UCF 207	UCF 207	RCJY 35	UCF 207 D1	FY 35 TM
UCF 208	UCF 208	UCF 208	RCJY 40	UCF 208 D1	FY 40 TM
UCF 209	UCF 209	UCF 209	RCJY 45	UCF 209 D1	FY 45 TM
UCF 210	UCF 210	UCF 210	RCJY 50	UCF 210 D1	FY 50 TM
UCF 211	UCF 211	UCF 211	RCJY 55	UCF 211 D1	FY 55 TM
UCF 212	UCF 212	UCF 212	RCJY 60	UCF 212 D1	FY 60 TM
UCF 213	UCF 213	UCF 213	RCJY 65	UCF 213 D1	FY 65 TM
UCF 214	UCF 214	UCF 214	RCJY 70	UCF 214 D1	FY 70 TM
UCF 215	UCF 215	UCF 215	RCJY 75	UCF 215 D1	FY 75 TM
UCF 216	UCF 216	UCF 216	RCJY 80	UCF 216 D1	FY 80 TM
UCF 217	UCF 217	UCF 217	-	UCF 217 D1	-
UCF 218	UCF 218	UCF 218	RCJY 90	UCF 218 D1	FY 90 TM

SAF 200

	ASAHI	FYH	INA	NTN	SKF
SAF 204	-	-	PCJ 20	-	FY 20 FM
SAF 205	-	-	PCJ 25	-	FY 25 FM
SAF 206	-	-	PCJ 30	-	FY 30 FM
SAF 207	-	-	PCJ 35	-	FY 35 FM
SAF 208	-	-	PCJ 40	-	FY 40 FM
SAF 209	-	-	PCJ 45	-	FY 45 FM
SAF 210	-	-	PCJ 50	-	FY 50 FM
SAF 211	-	-	PCJ 55	-	FY 55 FM

UELFS 200

	ASAHI	FYH	INA	NTN	SKF
UELFS 204	-	-	RCJ 20-N	UELFU 204 D1 W3	-
UELFS 205	-	-	RCJ 25-N	UELFU 205 D1 W3	-
UELFS 206	-	-	RCJ 30-N	UELFU 206 D1 W3	-
UELFS 207	-	-	RCJ 35-N	UELFU 207 D1 W3	-
UELFS 208	-	-	RCJ 40-N	UELFU 208 D1 W3	-
UELFS 209	-	-	RCJ 45-N	UELFU 209 D1 W3	-
UELFS 210	-	-	RCJ 50-N	UELFU 210 D1 W3	-
UELFS 211	-	-	RCJ 55-N	UELFU 211 D1 W3	-
UELFS 212	-	-	RCJ 60-N	UELFU 212 D1 W3	-
UELFS 213	-	-	RCJ 65-N	UELFU 213 D1 W3	-
UELFS 214	-	-	RCJ 70-N	UELFU 214 D1 W3	-
UELFS 215	-	-	RCJ 75-N	-	-

UELF 200

	ASAHI	FYH	INA	NTN	SKF
UELF 201	-	-	-	-	-
UELF 202	-	-	RCJ 15	-	-
UELF 203	-	-	RCJ 17	-	-
UELF 204	-	-	RCJ 20	UELF 204 D1 W3	FY 20 WM
UELF 205	-	-	RCJ 25	UELF 205 D1 W3	FY 25 WM
UELF 206	-	-	RCJ 30	UELF 206 D1 W3	FY 30 WM
UELF 207	-	-	RCJ 35	UELF 207 D1 W3	FY 35 WM
UELF 208	-	-	RCJ 40	UELF 208 D1 W3	FY 40 WM
UELF 209	-	-	RCJ 45	UELF 209 D1 W3	FY 45 WM
UELF 210	-	-	RCJ 50	UELF 210 D1 W3	FY 50 WM
UELF 211	-	-	RCJ 55	UELF 211 D1 W3	FY 55 WM
UELF 212	-	-	RCJ 60	UELF 212 D1 W3	FY 60 WM
UELF 213	-	-	-	UELF 213 D1 W3	-
UELF 214	-	-	RCJ 70 S	UELF 214 D1 W3	-
UELF 215	-	-	RCJ 75 S	UELF 215 D1 W3	-

UKF 200

	ASAHI	FYH	INA	NTN	SKF
UKF 205	UKF 205	UKF 205	-	UKF 205 D1	-
UKF 206	UKF 206	UKF 206	-	UKF 206 D1	-
UKF 207	UKF 207	UKF 207	-	UKF 207 D1	-
UKF 208	UKF 208	UKF 208	-	UKF 208 D1	-
UKF 209	UKF 209	UKF 209	-	UKF 209 D1	-
UKF 210	UKF 210	UKF 210	-	UKF 210 D1	-
UKF 211	UKF 211	UKF 211	-	UKF 211 D1	-
UKF 212	UKF 212	UKF 212	-	UKF 212 D1	-
UKF 213	UKF 213	UKF 213	-	UKF 213 D1	-

UCF X00

	ASAHI	FYH	INA	NTN	SKF
UCF X 05	UCF X05	UCF X05	-	UCF X05 D1	-
UCF X06	UCF X06	UCF X06	-	UCF X06 D1	-
UCF X07	UCF X07	UCF X07	-	UCF X07 D1	-
UCF X08	UCF X08	UCF X08	RCJY 40-MP	UCF X08 D1	-
UCF X09	UCF X09	UCF X09	RCJY 45-MP	UCF X09 D1	-
UCF X10	UCF X10	UCF X10	RCJY 50-MP	UCF X10 D1	-
UCF X11	UCF X11	UCF X11	-	UCF X11 D1	-
UCF X12	UCF X12	UCF X12	RCJY 60-MP	UCF X12 D1	-
UCF X13	UCF X13	UCF X13	-	UCF X13 D1	-
UCF X14	UCF X14	UCF X14	-	UCF X14 D1	-
UCF X15	UCF X15	UCF X15	-	UCF X15 D1	-
UCF X16	UCF X16	UCF X16	-	UCF X16 D1	-

UCF 300

	ASAHI	FYH	INA	NTN	SKF
UCF 3 05	UCF 305	UCF 305	-	UCF 305 D1	-
UCF 306	UCF 306	UCF 306	RCJOY 30	UCF 306 D1	-
UCF 307	UCF 307	UCF 307	-	UCF 307 D1	-
UCF 308	UCF 308	UCF 308	RCJOY 40	UCF 308 D1	-
UCF 309	UCF 309	UCF 309	-	UCF 309 D1	-
UCF 310	UCF 310	UCF 310	RCJOY 50	UCF 310 D1	-
UCF 311	UCF 311	UCF 311	-	UCF 311 D1	-
UCF 312	UCF 312	UCF 312	RCJOY 60	UCF 312 D1	-
UCF 313	UCF 313	UCF 313	-	UCF 313 D1	-
UCF 314	UCF 314	UCF 314	-	UCF 314 D1	-
UCF 315	UCF 315	UCF 315	-	UCF 315 D1	-
UCF 316	UCF 316	UCF 316	-	UCF 316 D1	-

SBPFL 200

	ASAHI	FYH	INA	NTN	SKF
SBPFL 201	BPFL 1	SBPFL 201	RATY 12	ASPFL 201	-
SBPFL 202	BPFL 2	SBPFL 202	RATY 15	ASPFL 202	-
SBPFL 203	BPFL 3	SBPFL 203	RATY 17	ASPFL 203	-
SBPFL 204	BPFL 4	SBPFL 204	RATY 20	ASPFL 204	-
SBPFL 205	BPFL 5	SBPFL 205	RATY 25	ASPFL 205	-
SBPFL 206	BPFL 6	SBPFL 206	RATY 30	ASPFL 206	-
SBPFL 207	BPFL 7	-	RATY 35	ASPFL 207	-

SBFL 200

	ASAHI	FYH	INA	NTN	SKF
SBFL 204	BFL 204	-	PCJTY 20	-	-
SBFL 205	BFL 205	-	PCJTY 25	-	-
SBFL 206	BFL 206	-	PCJTY 30	-	-
SBFL 207	BFL 207	-	PCJTY 35	-	-
SBFL 208	-	-	PCJTY 40	-	-

UCFT 200

	ASAHI	FYH	INA	NTN	SKF
UCFT 204	UCFT 204	-	RCJTY 20-N	-	-
UCFT 205	UCFT 205	-	RCJTY 25-N	-	-
UCFT 206	UCFT 206	-	RCJTY 30-N	-	-
UCFT 207	UCFT 207	-	RCJTY 35-N	-	-
UCFT 208	UCFT 208	-	RCJTY 40-N	-	-
UCFT 209	UCFT 209	-	RCJTY 45-N	-	-
UCFT 210	UCFT 210	-	RCJTY 50-N	-	-
UCFT 211	UCFT 211	-	RCJTY 55-N	-	-
UCFT 212	-	-	RCJTY 60-N	-	-
UCFT 213	-	-	RCJTY 65-N	-	-
UCFT 214	-	-	RCJTY 70-N	-	-

UCFL 200

	ASAHI	FYH	INA	NTN	SKF
UCFL 201	UCFL 201	UCFL 201	RCJTY 12-JIS	UCFL 201 D1	-
UCFL 202	UCFL 202	UCFL 202	RCJTY 15-JIS	UCFL 202 D1	-
UCFL 203	UCFL 203	UCFL 203	RCJTY 17-JIS	UCFL 203 D1	-
UCFL 204	UCFL 204	UCFL 204	RCJTY 20-JIS	UCFL 204 D1	FYT 20 TM
UCFL 205	UCFL 205	UCFL 205	RCJTY 25-JIS	UCFL 205 D1	FYT 25 TM
UCFL 206	UCFL 206	UCFL 206	RCJTY 30-JIS	UCFL 206 D1	FYT 30 TM
UCFL 207	UCFL 207	UCFL 207	RCJTY 35-JIS	UCFL 207 D1	FYT 35 TM
UCFL 208	UCFL 208	UCFL 208	RCJTY 40-JIS	UCFL 208 D1	FYT 40 TM
UCFL 209	UCFL 209	UCFL 209	RCJTY 45-JIS	UCFL 209 D1	FYT 45 TM
UCFL 210	UCFL 210	UCFL 210	RCJTY 50-JIS	UCFL 210 D1	FYT 50 TM
UCFL 211	UCFL 211	UCFL 211	RCJTY 55-JIS	UCFL 211 D1	FYT 55 TM
UCFL 212	UCFL 212	UCFL 212	RCJTY 60-JIS	UCFL 212 D1	-
UCFL 213	UCFL 213	UCFL 213	-	UCFL 213 D1	-
UCFL 214	UCFL 214	UCFL 214	RCJTY 70-JIS	UCFL 214 D1	-
UCFL 215	UCFL 215	UCFL 215	RCJTY 75-JIS	UCFL 215 D1	-
UCFL 216	UCFL 216	UCFL 216	-	UCFL 216 D1	-
UCFL 217	UCFL 217	UCFL 217	-	UCFL 217 D1	-
UCFL 218	UCFL 218	UCFL 218	-	UCFL 218 D1	-

SAPFL 200

	ASAHI	FYH	INA	NTN	SKF
SAPFL 201	-	SAPFL 201	RAT 12	AELPFL 201 W3	-
SAPFL 202	-	SAPFL 202	RAT 15	AELPFL 202 W3	FT 15 FM
SAPFL 203	-	SAPFL 203	RAT 17	AELPFL 203 W3	FT 17 FM
SAPFL 204	-	SAPFL 204	RAT 20	AELPFL 204 W3	FT 20 FM
SAPFL 205	-	SAPFL 205	RAT 25	AELPFL 205 W3	FT 25 FM
SAPFL 206	-	SAPFL 206	RAT 30	AELPFL 206 W3	FT 30 FM
SAPFL 207	-	-	RAT 35	AELPFL 207 W3	FT 35 FM

SAFL 200

	ASAHI	FYH	INA	NTN	SKF
SAFL 204	-	-	PCJT 20	-	FYT 20 FM
SAFL 205	-	-	PCJT 25	-	FYT 25 FM
SAFL 206	-	-	PCJT 30	-	FYT 30 FM
SAFL 207	-	-	PCJT 35	-	FYT 35 FM
SAFL 208	-	-	PCJT 40	-	FYT 40 FM
SAFL 209	-	-	PCJT 45	-	FYT 45 FM
SAFL 210	-	-	PCJT 50	-	FYT 50 FM
SAFL 211	-	-	PCJT 55	-	FYT 55 FM

UELFT 200

	ASAHI	FYH	INA	NTN	SKF
UELFT 204	-	-	RCJT 20-N	UELFLU 204 D1 W3	-
UELFT 205	-	-	RCJT 25-N	UELFLU 205 D1 W3	-
UELFT 206	-	-	RCJT 30-N	UELFLU 206 D1 W3	-
UELFT 207	-	-	RCJT 35-N	UELFLU 207 D1 W3	-
UELFT 208	-	-	RCJT 40-N	UELFLU 208 D1 W3	-
UELFT 209	-	-	RCJT 45-N	UELFLU 209 D1 W3	-
UELFT 210	-	-	RCJT 50-N	UELFLU 210 D1 W3	-
UELFT 211	-	-	RCJT 55-N	UELFLU 211 D1 W3	-
UELFT 212	-	-	RCJT 60-N	UELFLU 212 D1 W3	-
UELFT 213	-	-	RCJT 65-N	UELFLU 213 D1 W3	-
UELFT 214	-	-	RCJT 70-N	UELFLU 214 D1 W3	-

UELFL 200

	ASAHI	FYH	INA	NTN	SKF
UELFL 201	-	-	-	-	-
UELFL 202	-	-	RCJT 15	-	-
UELFL 203	-	-	RCJT 17	-	-
UELFL 204	-	-	RCJT 20	UELFL 204 D1 W3	FYT 20 WM
UELFL 205	-	-	RCJT 25	UELFL 205 D1 W3	FYT 25 WM
UELFL 206	-	-	RCJT 30	UELFL 206 D1 W3	FYT 30 WM
UELFL 207	-	-	RCJT 35	UELFL 207 D1 W3	FYT 35 WM
UELFL 208	-	-	RCJT 40	UELFL 208 D1 W3	FYT 40 WM
UELFL 209	-	-	RCJT 45	UELFL 209 D1 W3	FYT 45 WM
UELFL 210	-	-	RCJT 50	UELFL 210 D1 W3	FYT 50 WM
UELFL 211	-	-	RCJT 55	UELFL 211 D1 W3	FYT 55 WM
UELFL 212	-	-	RCJT 60	UELFL 212 D1 W3	-
UELFL 213	-	-	-	UELFL 213 D1 W3	-
UELFL 214	-	-	RCJT 70 S	UELFL 214 D1 W3	-
UELFL 215	-	-	RCJT 75 S	UELFL 215 D1 W3	-

UKFL 200

	ASAHI	FYH	INA	NTN	SKF
UKFL 205	-	UKFL 205	RCJTA 20	UKFL 205 D1	-
UKFL 206	-	UKFL 206	RCJTA 25	UKFL 206 D1	-
UKFL 207	-	UKFL 207	RCJTA 30	UKFL 207 D1	-
UKFL 208	-	UKFL 208	RCJTA 35	UKFL 208 D1	-
UKFL 209	-	UKFL 209	RCJTA 40	UKFL 209 D1	-
UKFL 210	-	UKFL 210	RCJTA 45	UKFL 210 D1	-
UKFL 211	-	UKFL 211	RCJTA 50	UKFL 211 D1	-
UKFL 212	-	UKFL 212	RCJTA 55	UKFL 212 D1	-
UKFL 213	-	UKFL 213	RCJTA 60	UKFL 213 D1	-

UCFL X00

	ASAHI	FYH	INA	NTN	SKF
UCFL X05	UCFL X05	UCFL X05	-	UCFL X05 D1	-
UCFL X06	UCFL X06	UCFL X06	-	UCFL X06 D1	-
UCFL X07	UCFL X07	UCFL X07	-	UCFL X07 D1	-
UCFL X08	UCFL X08	UCFL X08	-	UCFL X08 D1	-
UCFL X09	UCFL X09	UCFL X09	-	UCFL X09 D1	-
UCFL X10	UCFL X10	UCFL X10	-	UCFL X10 D1	-

UCFL 300

	ASAHI	FYH	INA	NTN	SKF
UCFL 305	UCFL 305	UCFL 305	-	UCFL 305 D1	-
UCFL 306	UCFL 306	UCFL 306	-	UCFL 306 D1	-
UCFL 307	UCFL 307	UCFL 307	-	UCFL 307 D1	-
UCFL 308	UCFL 308	UCFL 308	-	UCFL 308 D1	-
UCFL 309	UCFL 309	UCFL 309	-	UCFL 309 D1	-
UCFL 310	UCFL 310	UCFL 310	-	UCFL 310 D1	-
UCFL 311	UCFL 311	UCFL 311	-	UCFL 311 D1	-
UCFL 312	UCFL 312	UCFL 312	-	UCFL 312 D1	-
UCFL 313	UCFL 313	UCFL 313	-	UCFL 313 D1	-
UCFL 314	UCFL 314	UCFL 314	-	UCFL 314 D1	-
UCFL 315	UCFL 315	UCFL 315	-	UCFL 315 D1	-
UCFL 316	UCFL 316	UCFL 316	-	UCFL 316 D1	-

SBPF 200

	ASAHI	FYH	INA	NTN	SKF
SBPF 201	BPF 1	SBPF 201	RAY 12	ASPF 201	-
SBPF 202	BPF 2	SBPF 202	RAY 15	ASPF 202	-
SBPF 203	BPF 3	SBPF 203	RAY 17	ASPF 203	-
SBPF 204	BPF 4	SBPF 204	RAY 20	ASPF 204	-
SBPF 205	BPF 5	SBPF 205	RAY 25	ASPF 205	-
SBPF 206	BPF 6	SBPF 206	RAY 30	ASPF 206	-
SBPF 207	BPF 7	SBPF 207	RAY 35	ASPF 207	-

UCFC 200

	ASAHI	FYH	INA	NTN	SKF
UCFC 201	UCFC 201	UCFC 201	RMEY 12	UCFC 201 D1	-
UCFC 202	UCFC 202	UCFC 202	RMEY 15	UCFC 202 D1	-
UCFC 203	UCFC 203	UCFC 203	RMEY 17	UCFC 203 D1	-
UCFC 204	UCFC 204	UCFC 204	RMEY 20	UCFC 204 D1	-
UCFC 205	UCFC 205	UCFC 205	RMEY 25	UCFC 205 D1	-
UCFC 206	UCFC 206	UCFC 206	RMEY 30	UCFC 206 D1	-
UCFC 207	UCFC 207	UCFC 207	RMEY 35	UCFC 207 D1	-
UCFC 208	UCFC 208	UCFC 208	RMEY 40	UCFC 208 D1	-
UCFC 209	UCFC 209	UCFC 209	RMEY 45	UCFC 209 D1	-
UCFC 210	UCFC 210	UCFC 210	RMEY 50	UCFC 210 D1	-
UCFC 211	UCFC 211	UCFC 211	RMEY 55	UCFC 211 D1	-
UCFC 212	UCFC 212	UCFC 212	RMEY 60	UCFC 212 D1	-
UCFC 213	UCFC 213	UCFC 213	RMEY 65	UCFC 213 D1	-
UCFC 214	UCFC 214	UCFC 214	RMEY 70	UCFC 214 D1	-
UCFC 215	UCFC 215	UCFC 215	RMEY 75	UCFC 215 D1	-
UCFC 216	UCFC 216	UCFC 216	RMEY 80	UCFC 216 D1	-
UCFC 217	UCFC 217	UCFC 217	-	UCFC 217 D1	-
UCFC 218	UCFC 218	UCFC 218	RMEY 90	UCFC 218 D1	-

SAPF 200

	ASAHI	FYH	INA	NTN	SKF
SAPF 201	-	SAPF 201	RA 12	AELPF 201 W3	-
SAPF 202	-	SAPF 202	RA 15	AELPF 202 W3	F 15 FM
SAPF 203	-	SAPF 203	RA 17	AELPF 203 W3	F 17 FM
SAPF 204	-	SAPF 204	RA 20	AELPF 204 W3	F 20 FM
SAPF 205	-	SAPF 205	RA 25	AELPF 205 W3	F 25 FM
SAPF 206	-	SAPF 206	RA 30	AELPF 206 W3	F 30 FM
SAPF 207	-	SAPF 207	RA 35	AELPF 207 W3	F 35 FM

SAFC 200

	ASAHI	FYH	INA	NTN	SKF
SAFC 204	-	-	PME 20	-	-
SAFC 205	-	-	PME 25	-	-
SAFC 206	-	-	PME 30	-	-
SAFC 207	-	-	PME 35	-	-
SAFC 208	-	-	PME 40	-	-
SAFC 209	-	-	PME 45	-	-
SAFC 210	-	-	PME 50	-	-
SAFC 211	-	-	PME 55	-	-

UELFC 200

	ASAHI	FYH	INA	NTN	SKF
UELFC 201	-	-	-	-	-
UELFC 202	-	-	RME 15	-	-
UELFC 203	-	-	RME 17	-	-
UELFC 204	-	-	RME 20	UELFC 204 D1 W3	-
UELFC 205	-	-	RME 25	UELFC 205 D1 W3	-
UELFC 206	-	-	RME 30	UELFC 206 D1 W3	-
UELFC 207	-	-	RME 35	UELFC 207 D1 W3	-
UELFC 208	-	-	RME 40	UELFC 208 D1 W3	-
UELFC 209	-	-	RME 45	UELFC 209 D1 W3	-
UELFC 210	-	-	RME 50	UELFC 210 D1 W3	-
UELFC 211	-	-	RME 55	UELFC 211 D1 W3	-
UELFC 212	-	-	RME 60	UELFC 212 D1 W3	-
UELFC 213	-	-	-	UELFC 213 D1 W3	-
UELFC 214	-	-	RME 70 S	UELFC 214 D1 W3	-
UELFC 215	-	-	RME 75 S	UELFC 215 D1 W3	-

UKFC 200

	ASAHI	FYH	INA	NTN	SKF
UKFC 205	-	UKFC 205	-	UKFC 205 D1	-
UKFC 206	-	UKFC 206	-	UKFC 206 D1	-
UKFC 207	-	UKFC 207	-	UKFC 207 D1	-
UKFC 208	-	UKFC 208	-	UKFC 208 D1	-
UKFC 209	-	UKFC 209	-	UKFC 209 D1	-
UKFC 210	-	UKFC 210	-	UKFC 210 D1	-
UKFC 211	-	UKFC 211	-	UKFC 211 D1	-
UKFC 212	-	UKFC 212	-	UKFC 212 D1	-
UKFC 213	-	UKFC 213	-	UKFC 213 D1	-

UCHA 200

	ASAHI	FYH	INA	NTN	SKF
UCHA 201	-	UCHA 201	-	UCHB 201 D1	-
UCHA 202	-	UCHA 202	-	UCHB 202 D1	-
UCHA 203	-	UCHA 203	-	UCHB 203 D1	-
UCHA 204	-	UCHA 204	-	UCHB 204 D1	-
UCHA 205	UCECH 205	UCHA 205	-	UCHB 205 D1	-
UCHA 206	UCECH 206	UCHA 206	-	UCHB 206 D1	-
UCHA 207	UCECH 207	UCHA 207	-	UCHB 207 D1	-
UCHA 208	UCECH 208	UCHA 208	-	UCHB 208 D1	-
UCHA 209	UCECH 209	UCHA 209	-	UCHB 209 D1	-
UCHA 210	UCECH 210	UCHA 210	-	UCHB 210 D1	-
UCHA 211	-	UCHA 211	-	-	-
UCHA 212	-	UCHA 212	-	UCHB 212 D1	-
UCHA 213	-	UCHA 213	-	UCHB 213 D1	-
UCHA 214	-	UCHA 214	-	-	-
UCHA 215	-	UCHA 215	-	-	-

SAHA 200

	ASAHI	FYH	INA	NTN	SKF
SAHA 204	-	-	PHE 20	-	-
SAHA 205	-	-	PHE 25	-	-
SAHA 206	-	-	PHE 30	-	-
SAHA 207	-	-	PHE 35	-	-
SAHA 208	-	-	PHE 40	-	-
SAHA 209	-	-	PHE 45	-	-
SAHA 210	-	-	PHE 50	-	-
SAHA 211	-	-	-	-	-

UCC 200

	ASAHI	FYH	INA	NTN	SKF
UCC 201	UCC 201	UCC 201	-	UCC 201 D1	-
UCC 202	UCC 202	UCC 202	-	UCC 202 D1	-
UCC 203	UCC 203	UCC 203	-	UCC 203 D1	-
UCC 204	UCC 204	UCC 204	-	UCC 204 D1	-
UCC 205	UCC 205	UCC 205	-	UCC 205 D1	-
UCC 206	UCC 206	UCC 206	-	UCC 206 D1	-
UCC 207	UCC 207	UCC 207	-	UCC 207 D1	-
UCC 208	UCC 208	UCC 208	-	UCC 208 D1	-
UCC 209	UCC 209	UCC 209	-	UCC 209 D1	-
UCC 210	UCC 210	UCC 210	-	UCC 210 D1	-
UCC 211	UCC 211	UCC 211	-	UCC 211 D1	-
UCC 212	UCC 212	UCC 212	-	UCC 212 D1	-
UCC 213	UCC 213	UCC 213	-	UCC 213 D1	-

UKC 200

	ASAHI	FYH	INA	NTN	SKF
UKC 205	-	UKC 205	-	UKC 205 D1	-
UKC 206	-	UKC 206	-	UKC 206 D1	-
UKC 207	-	UKC 207	-	UKC 207 D1	-
UKC 208	-	UKC 208	-	UKC 208 D1	-
UKC 209	-	UKC 209	-	UKC 209 D1	-
UKC 210	-	UKC 210	-	UKC 210 D1	-
UKC 211	-	UKC 211	-	UKC 211 D1	-
UKC 212	-	UKC 212	-	UKC 212 D1	-
UKC 213	-	UKC 213	-	UKC 213 D1	-

UCST 200

	ASAHI	FYH	INA	NTN	SKF
UCST 204	UCST 204	-	-	-	-
UCST 205	UCST 205	-	-	-	-
UCST 206	UCST 206	-	-	-	-
UCST 207	UCST 207	-	-	-	-
UCST 208	UCST 208	-	-	-	-
UCST 209	UCST 209	-	-	-	-
UCST 210	UCST 210	-	-	-	-
UCST 211	UCST 211	-	-	-	-
UCST 212	UCST 212	-	-	-	-
UCST 213	UCST 213	-	-	-	-
UCST 214	-	-	-	-	-
UCST 215	-	-	-	-	-

UCT 200

	ASAHI	FYH	INA	NTN	SKF
UCT 201	UCT 201	UCT 201	-	UCT 201 D1	-
UCT 202	UCT 202	UCT 202	-	UCT 202 D1	-
UCT 203	UCT 203	UCT 203	-	UCT 203 D1	-
UCT 204	UCT 204	UCT 204	RTUEY 20	UCT 204 D1	TBY 20 TM
UCT 205	UCT 205	UCT 205	RTUEY 25	UCT 205 D1	TBY 25 TM
UCT 206	UCT 206	UCT 206	RTUEY 30	UCT 206 D1	TBY 30 TM
UCT 207	UCT 207	UCT 207	RTUEY 35	UCT 207 D1	TBY 35 TM
UCT 208	UCT 208	UCT 208	RTUEY 40	UCT 208 D1	TBY 40 TM
UCT 209	UCT 209	UCT 209	RTUEY 45	UCT 209 D1	TBY 45 TM
UCT 210	UCT 210	UCT 210	RTUEY 50	UCT 210 D1	TBY 50 TM
UCT 211	UCT 211	UCT 211	RTUEY 55	UCT 211 D1	TBY 55 TM
UCT 212	UCT 212	UCT 212	RTUEY 60	UCT 212 D1	-
UCT 213	UCT 213	UCT 213	-	UCT 213 D1	-
UCT 214	UCT 214	UCT 214	RTUEY 70	UCT 214 D1	-
UCT 215	UCT 215	UCT 215	RTUEY 75	UCT 215 D1	-
UCT 216	UCT 216	UCT 216	-	UCT 216 D1	-
UCT 217	UCT 217	UCT 217	-	UCT 217 D1	-

SAST 200

	ASAHI	FYH	INA	NTN	SKF
SAST 204	-	-	PTUE 20 AH 01	-	-
SAST 205	-	-	PTUE 25 AH 01	-	-
SAST 206	-	-	PTUE 30 AH 01	-	-
SAST 207	-	-	PTUE 35 AH 01	-	-
SAST 208	-	-	PTUE 40 AH 01	-	-
SAST 209	-	-	PTUE 45 AH 01	-	-
SAST 210	-	-	PTUE 50 AH 01	-	-
SAST 211	-	-	PTUE 55 AH 01	-	-

SAT 200

	ASAHI	FYH	INA	NTN	SKF
SAT 204	-	-	PTUE 20	-	TBY 20 FM
SAT 205	-	-	PTUE 25	-	TBY 25 FM
SAT 206	-	-	PTUE 30	-	TBY 30 FM
SAT 207	-	-	PTUE 35	-	TBY 35 FM
SAT 208	-	-	PTUE 40	-	TBY 40 FM
SAT 209	-	-	PTUE 45	-	TBY 45 FM
SAT 210	-	-	PTUE 50	-	TBY 50 FM
SAT 211	-	-	PTUE 55	-	TBY 55 FM

UELT 200

	ASAHI	FYH	INA	NTN	SKF
UELT 201	-	-	-	-	-
UELT 202	-	-	-	-	-
UELT 203	-	-	-	-	-
UELT 204	-	-	RTUE 20 AH 01	UELT 204 D1 W3	TBY 20 WM
UELT 205	-	-	RTUE 25 AH 01	UELT 205 D1 W3	TBY 25 WM
UELT 206	-	-	RTUE 30 AH 01	UELT 206 D1 W3	TBY 30 WM
UELT 207	-	-	RTUE 35 AH 01	UELT 207 D1 W3	TBY 35 WM
UELT 208	-	-	RTUE 40 AH 01	UELT 208 D1 W3	TBY 40 WM
UELT 209	-	-	RTUE 45 AH 01	UELT 209 D1 W3	TBY 45 WM
UELT 210	-	-	RTUE 50 AH 01	UELT 210 D1 W3	TBY 50 WM
UELT 211	-	-	RTUE 55 AH 01	UELT 211 D1 W3	TBY 55 WM
UELT 212	-	-	RTUE 60 AH 01	UELT 212 D1 W3	-
UELT 213	-	-	-	UELT 213 D1 W3	-
UELT 214	-	-	RTUE 70 S AH 01	UELT 214 D1 W3	-
UELT 215	-	-	RTUE 75 S AH 01	UELT 215 D1 W3	-

UKT 200

	ASAHI	FYH	INA	NTN	SKF
UKT 205	-	UKT 205	-	UKT 205 D1	-
UKT 206	-	UKT 206	-	UKT 206 D1	-
UKT 207	-	UKT 207	-	UKT 207 D1	-
UKT 208	-	UKT 208	-	UKT 208 D1	-
UKT 209	-	UKT 209	-	UKT 209 D1	-
UKT 210	-	UKT 210	-	UKT 210 D1	-
UKT 211	-	UKT 211	-	UKT 211 D1	-
UKT 212	-	UKT 212	-	UKT 212 D1	-
UKT 213	-	UKT 213	-	UKT 213 D1	-

SB 200

	ASAHI	FYH	INA	NTN	SKF
SB 201	B 1	SB 201	GAY 12 NPPB	AS 201	-
SB 202	B 2	SB 202	GAY 15 NPPB	AS 202	-
SB 203	B 3	SB 203	GAY 17 NPPB	AS 203	-
SB 204	B 4	SB 204	GAY 20 NPPB	AS 204	-
SB 205	B 5	SB 205	GAY 25 NPPB	AS 205	-
SB 206	B 6	SB 206	GAY 30 NPPB	AS 206	-
SB 207	B 7	SB 207	GAY 35 NPPB	-	-
SB 208	-	SB 208	GAY 40 NPPB	-	-

UC 200

	ASAHI	FYH	INA	NTN	SKF
UC 201	UC 201	UC 201	-	UC 201 D1	-
UC 202	UC 202	UC 202	-	UC 202 D1	-
UC 203	UC 203	UC 203	-	UC 203 D1	-
UC 204	UC 204	UC 204	GYE 20 KRRB	UC 204 D1	YAR 204
UC 205	UC 205	UC 205	GYE 25 KRRB	UC 205 D1	YAR 205
UC 206	UC 206	UC 206	GYE 30 KRRB	UC 206 D1	YAR 206
UC 207	UC 207	UC 207	GYE 35 KRRB	UC 207 D1	YAR 207
UC 208	UC 208	UC 208	GYE 40 KRRB	UC 208 D1	YAR 208
UC 209	UC 209	UC 209	GYE 45 KRRB	UC 209 D1	YAR 209
UC 210	UC 210	UC 210	GYE 50 KRRB	UC 210 D1	YAR 210
UC 211	UC 211	UC 211	GYE 55 KRRB	UC 211 D1	YAR 211
UC 212	UC 212	UC 212	GYE 60 KRRB	UC 212 D1	YAR 212
UC 213	UC 213	UC 213	GYE 65 KRRB	UC 213 D1	YAR 213
UC 214	UC 214	UC 214	GYE 70 KRRB	UC 214 D1	YAR 214
UC 215	UC 215	UC 215	GYE 75 KRRB	UC 215 D1	YAR 215
UC 216	UC 216	UC 216	GYE 80 KRRB	UC 216 D1	YAR 216
UC 217	UC 217	UC 217	-	UC 217 D1	YAR 217
UC 218	UC 218	UC 218	GYE 90 KRRB	UC 218 D1	YAR 218

SA 200

	ASAHI	FYH	INA	NTN	SKF
SA 201	KH 201 AE	SA 201	GRAE 12 NPPB	AEL 201 W3	YET 203/12
SA 202	KH 202 AE	SA 202	GRAE 15 NPPB	AEL 202 W3	YET 203/15
SA 203	KH 203 AE	SA 203	GRAE 17 NPPB	AEL 203 W3	YET 203
SA 204	KH 204 AE	SA 204	GRAE 20 NPPB	AEL 204 W3	YET 204
SA 205	KH 205 AE	SA 205	GRAE 25 NPPB	AEL 205 W3	YET 205
SA 206	-	SA 206	GRAE 30 NPPB	-	YET 206
SA 207	KH 207 AE	SA 207	GRAE 35 NPPB	AEL 207 W3	YET 207
SA 208	-	SA 208	GRAE 40 NPPB	-	YET 208
SA 209	KH 209 BE	-	GRAE 45 NPPB	-	YET 209
SA 210	KH 210 BE	-	GRAE 50 NPPB	-	YET 210
SA 211	KH 211 BE	-	GRAE 55 NPPB	-	YET 211

UEL 200

	ASAHI	FYH	INA	NTN	SKF
UEL 201	-	NA 201	-	-	-
UEL 202	-	NA 202	-	-	-
UEL 203	-	NA 203	-	-	-
UEL 204	UG 204 + ER	NA 204	GE 20 KRRB	UEL 204 D1 W3	YEL 204
UEL 205	UG 205 + ER	NA 205	GE 25 KRRB	UEL 205 D1 W3	YEL 205
UEL 206	UG 206 + ER	NA 206	GE 30 KRRB	UEL 206 D1 W3	YEL 206
UEL 207	UG 207 + ER	NA 207	GE 35 KRRB	UEL 207 D1 W3	YEL 207
UEL 208	UG 208 + ER	NA 208	GE 40 KRRB	UEL 208 D1 W3	YEL 208
UEL 209	UG 209 + ER	NA 209	GE 45 KRRB	UEL 209 D1 W3	YEL 209
UEL 210	UG 210 + ER	NA 210	GE 50 KRRB	UEL 210 D1 W3	YEL 210
UEL 211	UG 211 + ER	NA 211	GE 55 KRRB	UEL 211 D1 W3	YEL 211
UEL 212	UG 212 + ER	NA 212	GE 60 KRRB	UEL 212 D1 W3	YEL 212
UEL 213	-	-	-	UEL 213 D1 W3	-
UEL 214	-	-	GE 70 KRRB S	UEL 214 D1 W3	-
UEL 215	-	-	GE 75 KRRB S	UEL 215 D1 W3	-

UK 200

	ASAHI	FYH	INA	NTN	SKF
UK 205	UK 205	UK 205	GSH 20	UK 205 D1	-
UK 206	UK 206	UK 206	GSH 25	UK 206 D1	-
UK 207	UK 207	UK 207	GSH 30	UK 207 D1	-
UK 208	UK 208	UK 208	GSH 35	UK 208 D1	-
UK 209	UK 209	UK 209	GSH 40	UK 209 D1	-
UK 210	UK 210	UK 210	GSH 45	UK 210 D1	-
UK 211	UK 211	UK 211	GSH 50	UK 211 D1	-
UK 212	UK 212	UK 212	GSH 55	UK 212 D1	-
UK 213	UK 213	UK 213	GSH 60	UK 213 D1	-

UC X00

	ASAHI	FYH	INA	NTN	SKF
UC X05	UC X05	UC X05	-	UC X05 D1	-
UC X06	UC X06	UC X06	-	UC X06 D1	-
UC X07	UC X07	UC X07	-	UC X07 D1	-
UC X08	UC X08	UC X08	GYE 40 KRRB	UC X08 D1	-
UC X09	UC X09	UC X09	GYE 45 KRRB	UC X09 D1	-
UC X10	UC X10	UC X10	GYE 50 KRRB	UC X10 D1	-
UC X11	UC X11	UC X11	-	UC X11 D1	-
UC X12	UC X12	UC X12	-	UC X12 D1	-
UC X13	UC X13	UC X13	GYE 65 KRRB	UC X13 D1	-
UC X14	UC X14	UC X14	-	UC X14 D1	-
UC X15	UC X15	UC X15	-	UC X15 D1	-
UC X16	UC X16	UC X16	-	UC X16 D1	-

UC 300

	ASAHI	FYH	INA	NTN	SKF
UC 305	UC 305	UC 305	-	UC 305 D1	-
UC 306	UC 306	UC 306	GNYE 30 KRRB	UC 306 D1	-
UC 307	UC 307	UC 307	-	UC 307 D1	-
UC 308	UC 308	UC 308	GNYE 40 KRRB	UC 308 D1	-
UC 309	UC 309	UC 309	-	UC 309 D1	-
UC 310	UC 310	UC 310	GNYE 50 KRRB	UC 310 D1	-
UC 311	UC 311	UC 311	-	UC 311 D1	-
UC 312	UC 312	UC 312	GNYE 60 KRRB	UC 312 D1	-
UC 313	UC 313	UC 313	-	UC 313 D1	-
UC 314	UC 314	UC 314	-	UC 314 D1	-
UC 315	UC 315	UC 315	-	UC 315 D1	-
UC 316	UC 316	UC 316	-	UC 316 D1	-

SBPP 200

	ASAHI	FYH	INA	NTN	SKF
SBPP 201-8	BPP 1-8	SBPP 201-8F	-	ASPP 201-008	-
SBPP 202-9	BPP 2-9	-	-	ASPP 202-009	-
SBPP 202-10	BPP 2-10	SBPP 202-10F	-	ASPP 202-010	-
SBPP 203-11	BPP 3-11	-	-	ASPP 203-011	-
SBPP 204-12	BPP 4-12	SBPP 204-12F	-	ASPP 204-012	-
SBPP 205-13	-	-	-	ASPP 205-013	-
SBPP 205-14	BPP 5-14	SBPP 205-14F	-	ASPP 205-014	-
SBPP 205-15	BPP 5-15	-	-	ASPP 205-015	-
SBPP 205-16	BPP 5-16	SBPP 205-16F	-	ASPP 205-100	-
SBPP 206-17	-	-	-	ASPP 206-101	-
SBPP 206-18	BPP 6-18	SBPP 206-18F	-	ASPP 206-102	-
SBPP 206-19	BPP 6-19	SBPP 206-19F	-	ASPP 206-103	-
SBPP 206-20	-	-	-	ASPP 206-104	-
SBPP 207-20	BPP 7-20	-	-	ASPP 207-104	-
SBPP 207-21	BPP 7-21	-	-	ASPP 207-105	-
SBPP 207-22	BPP 7-22	-	-	ASPP 207-106	-
SBPP 207-23	BPP 7-23	-	-	ASPP 207-107	-

SBAK 200

	ASAHI	FYH	INA	NTN	SKF
SBAK 204-12	-	-	-	ASPL 204-012	-
SBAK 205-13	-	-	-	ASPL 205-013	-
SBAK 205-14	-	-	-	ASPL 205-014	-
SBAK 205-15	-	-	-	ASPL 205-015	-
SBAK 205-16	-	-	-	ASPL 205-100	-
SBAK 206-17	-	-	-	ASPL 206-101	-
SBAK 206-18	-	-	-	ASPL 206-102	-
SBAK 206-19	-	-	-	ASPL 206-103	-
SBAK 206-20	-	-	-	ASPL 206-104	-
SBAK 207-20	-	-	-	ASPL 207-104	-
SBAK 207-21	-	-	-	ASPL 207-105	-
SBAK 207-22	-	-	-	ASPL 207-106	-
SBAK 207-23	-	-	-	ASPL 207-107	-
SBAK 208-24	-	-	-	-	-

SBP 200

	ASAHI	FYH	INA	NTN	SKF
SBP 204-12	BP 204-12	-	-	-	-
SBP 205-13	-	-	-	-	-
SBP 205-14	BP 205-14	-	-	-	-
SBP 205-15	BP 205-15	-	-	-	-
SBP 205-16	BP 205-16	-	-	-	-
SBP 206-17	-	-	-	-	-
SBP 206-18	BP 206-18	-	-	-	-
SBP 206-19	BP 206-19	-	-	-	-
SBP 206-20	-	-	-	-	-
SBP 207-20	BP 207-20	-	-	-	-
SBP 207-21	BP 207-21	-	-	-	-
SBP 207-22	BP 207-22	-	-	-	-
SBP 207-23	BP 207-23	-	-	-	-
SBP 208-24	-	-	-	-	-

UCAK 200

	ASAHI	FYH	INA	NTN	SKF
UCAK 204-12	UCLP 204-12	SL 204-12	RAKY 3/4"	UCPL 204-012 D1	SYH 3/4 TM
UCAK 205-13	-	-	-	UCPL 205-013 D1	SYH 13/16 TM
UCAK 205-14	UCLP 205-14	SL 205-14	RAKY 7/8"	UCPL 205-014 D1	SYH 7/8 TM
UCAK 205-15	UCLP 205-15	SL 205-15	-	UCPL 205-015 D1	SYH 15/16 TM
UCAK 205-16	UCLP 205-16	SL 205-16	RAKY 1"	UCPL 205-100 D1	SYH 1 TM
UCAK 206-17	UCLP 206-17	-	-	UCPL 206-101 D1	SYH 1-1/16 TM
UCAK 206-18	UCLP 206-18	SL 206-18	RAKY 1 1/8"	UCPL 206-102 D1	SYH 1-1/8 TM
UCAK 206-19	UCLP 206-19	SL 206-19	RAKY 1 1/4"-206	UCPL 206-103 D1	SYH 1-3/16 TM
UCAK 206-20	-	-	-	UCPL 206-104 D1	SYH 1-1/4 ATM
UCAK 207-20	UCLP 207-20	SL 207-20	RAKY 1 1/4"	UCPL 207-104 D1	SYH 1-1/4 TM
UCAK 207-21	UCLP 207-21	SL 207-21	-	UCPL 207-105 D1	SYH 1-5/16 TM
UCAK 207-22	UCLP 207-22	SL 207-22	RAKY 1 3/8"	UCPL 207-106 D1	SYH 1-3/8 TM
UCAK 207-23	UCLP 207-23	SL 207-23	-	UCPL 207-107 D1	SYH 1-7/16 TM
UCAK 208-24	UCLP 208-24	SL 208-24	RAKY 1 1/ 2	UCPL 208-108 D1	SYH 1-1/2 TM
UCAK 209-26	UCLP 209-26	SL 209-26	-	UCPL 209-110 D1	SYH 1-5/8 TM
UCAK 209-27	UCLP 209-27	SL 209-27	-	UCPL 209-111 D1	SYH 1-11/16 TM
UCAK 209-28	UCLP 209-28	SL 209-28	RAKY 1 3/4"	UCPL 209-112 D1	-
UCAK 210-30	UCLP 210-30	SL 210-30	-	UCPL 210-114 D1	-
UCAK 210-31	UCLP 210-31	SL 210-31	RAKY 1 15/16"	UCPL 210-115 D1	SYH 1-15/16 TM
UCAK 210-32	-	-	-	UCPL 210-200 D1	-
UCAK 211-32	UCLP 211-32	SL 211-32	RAKY 2"	UCPL 211-200 D1	SYH 2 TM
UCAK 211-33	-	-	-	UCPL 211-201 D1	-
UCAK 211-34	UCLP 211-34	SL 211-34	-	UCPL 211-202 D1	-
UCAK 211-35	UCLP 211-35	SL 211-35	-	UCPL 211-203 D1	SYH 2-3/16 TM
UCAK 212-36	UCLP 212-36	SL 212-36	-	UCPL 212-204 D1	SYH 2-1/4 TM
UCAK 212-37	-	-	-	UCPL 212-205 D1	-
UCAK 212-38	UCLP 212-38	SL 212-38	-	UCPL 212-206 D1	-
UCAK 212-39	UCLP 212-39	SL 212-39	RAKY 2 7/16"	UCPL 212-207 D1	SYH 2-7/16 TM
UCAK 213-40	UCLP 213-40	-	-	-	-
UCAK 213-41	-	-	-	-	-
UCAK 214-42	-	-	-	-	-
UCAK 214-43	-	-	-	-	-
UCAK 214-44	-	-	-	-	-
UCAK 215-45	-	-	-	-	-
UCAK 215-46	-	-	-	-	-
UCAK 215-47	-	-	RAKY 2 15/16"	-	-
UCAK 215-48	-	SL 215-48	-	-	-

UCP 200

	ASAHI	FYH	INA	NTN	SKF
UCP 201-8	UCP 201-8	UCP 201-8	RASEY 1/2"	UCP 201-008 D1	-
UCP 202-9	UCP 202-9	-	-	UCP 202-009 D1	-
UCP 202-10	UCP 202-10	UCP 202-10	RASEY 5/8"	UCP 202-010 D1	-
UCP 203-11	UCP 203-11	-	-	UCP 203-011 D1	-
UCP 204-12	UCP 204-12	UCP 204-12	RASEY 3/4"	UCP 204-012 D1	SY 3/4 TM
UCP 205-13	-	-	-	UCP 205-013 D1	SY 13/16 TM
UCP 205-14	UCP 205-14	UCP 205-14	RASEY 7/8"	UCP 205-014 D1	SY 7/8 TM
UCP 205-15	UCP 205-15	UCP 205-15	-	UCP 205-015 D1	SY 15/16 TM
UCP 205-16	UCP 205-16	UCP 205-16	RASEY 1"	UCP 205-100 D1	SY 1 TM
UCP 206-17	UCP 206-17	-	-	UCP 206-101 D1	SY 1-1/16 TM
UCP 206-18	UCP 206-18	UCP 206-18	RASEY 1 1/8"	UCP 206-102 D1	SY 1-1/8 TM
UCP 206-19	UCP 206-19	UCP 206-19	-	UCP 206-103 D1	SY 1-3/16 TM
UCP 206-20	-	-	RASEY 1 1/4"-206	UCP 206-104 D1	SY 1-1/4 ATM
UCP 207-20	UCP 207-20	UCP 207-20	RASEY 1 1/4"	UCP 207-104 D1	SY 1-1/4 TM
UCP 207-21	UCP 207-21	UCP 207-21	-	UCP 207-105 D1	SY 1-5/16 TM
UCP 207-22	UCP 207-22	UCP 207-22	RASEY 1 3/8"	UCP 207-106 D1	SY 1-3/8 TM
UCP 207-23	UCP 207-23	UCP 207-23	-	UCP 207-107 D1	SY 1-7/16 TM
UCP 208-24	UCP 208-24	UCP 208-24	RASEY 1 1/2"	UCP 208-108 D1	SY 1-1/2 TM
UCP 209-26	UCP 209-26	UCP 209-26	-	UCP 209-110 D1	SY 1-5/8 TM
UCP 209-27	UCP 209-27	UCP 209-27	-	UCP 209-111 D1	SY 1-11/16 TM
UCP 209-28	UCP 209-28	UCP 209-28	RASEY 1 3/4"	UCP 209-112 D1	SY 1-3/4 TM
UCP 210-30	UCP 210-30	UCP 210-30	-	UCP 210-114 D1	SY 1-7/8 TM
UCP 210-31	UCP 210-31	UCP 210-31	RASEY 1 15/16"	UCP 210-115 D1	SY 1-15/16 TM
UCP 210-32	-	-	-	UCP 210-200 D1	-
UCP 211-32	UCP 211-32	UCP 211-32	RASEY 2"	UCP 211-200 D1	SY 2 TM
UCP 211-33	-	-	-	UCP 211-201 D1	-
UCP 211-34	UCP 211-34	UCP 211-34	-	UCP 211-202 D1	-
UCP 211-35	UCP 211-35	UCP 211-35	-	UCP 211-203 D1	SY 2-3/16 TM
UCP 212-36	UCP 212-36	UCP 212-36	-	UCP 212-204 D1	SY 2-1/4 TM
UCP 212-37	-	-	-	UCP 212-205 D1	-
UCP 212-38	UCP 212-38	UCP 212-38	-	UCP 212-206 D1	-
UCP 212-39	UCP 212-39	UCP 212-39	RASEY 2 7/16"	UCP 212-207 D1	SY 2-7/16 TM
UCP 213-40	UCP 213-40	UCP 213-40	RASEY 2 1/2"-213	UCP 213-208 D1	SY 2-1/2 TM
UCP 213-41	-	-	-	UCP 213-209 D1	-
UCP 214-42	-	-	-	UCP 214-210 D1	-
UCP 214-43	-	-	-	UCP 214-211 D1	-
UCP 214-44	UCP 214-44	UCP 214-44	-	UCP 214-212 D1	-
UCP 215-45	-	-	-	UCP 215-213 D1	-
UCP 215-46	-	-	-	UCP 215-214 D1	-
UCP 215-47	-	-	RASEY 2 15/16"	UCP 215-215 D1	SY 2-15/16 TM
UCP 215-48	UCP 215-48	UCP 215-48	-	UCP 215-300 D1	-
UCP 216-49	-	-	-	UCP 216-301 D1	-
UCP 216-50	UCP 216-50	UCP 216-50	-	UCP 216-302 D1	-
UCP 216-51	-	-	-	UCP 216-303 D1	-
UCP 217-52	UCP 217-52	UCP 217-52	-	UCP 217-304 D1	-
UCP 217-53	-	-	-	UCP 217-305 D1	-
UCP 217-55	-	-	-	UCP 217-307 D1	-
UCP 218-56	UCP 218-56	UCP 218-56	-	UCP 218-308 D1	SY 3-1/2 TM

UCPA 200

	ASAHI	FYH	INA	NTN	SKF
UCPA 201-8	UCPA 201-8	UCPA 201-8	RSHEY 1/2"	UCUP 201-008 D1	-
UCPA 202-9	UCPA 202-9	-	-	UCUP 202-009 D1	-
UCPA 202-10	UCPA 202-10	UCPA 202-10	RSHEY 5/8"	UCUP 202-010 D1	-
UCPA 203-11	UCPA 203-11	-	-	UCUP 203-011 D1	-
UCPA 204-12	UCPA 204-12	UCPA 204-12	-	UCUP 204-012 D1	SYF 3/4 TM
UCPA 205-13	-	-	-	UCUP 205-013 D1	-
UCPA 205-14	UCPA 205-14	UCPA 205-14	RSHEY 7/8"	UCUP 205-014 D1	SYF 7/8 TM
UCPA 205-15	UCPA 205-15	UCPA 205-15	-	UCUP 205-015 D1	SYF 15/16 TM
UCPA 205-16	UCPA 205-16	UCPA 205-16	RSHEY 1"	UCUP 205-100 D1	SYF 1 TM
UCPA 206-17	UCPA 206-17	-	-	UCUP 206-101 D1	-
UCPA 206-18	UCPA 206-18	UCPA 206-18	RSHEY 1 1/8"	UCUP 206-102 D1	SYF 1-1/8 TM
UCPA 206-19	UCPA 206-19	UCPA 206-19	-	UCUP 206-103 D1	SYF 1-3/16 TM
UCPA 206-20	-	-	RSHEY 1 1/4"-206	UCUP 206-104 D1	SYF 1-1/4 ATM
UCPA 207-20	UCPA 207-20	UCPA 207-20	RSHEY 1 1/4"	UCUP 207-104 D1	SYF 1-1/4 TM
UCPA 207-21	UCPA 207-21	UCPA 207-21	-	UCUP 207-105 D1	-
UCPA 207-22	UCPA 207-22	UCPA 207-22	RSHEY 1 3/8"	UCUP 207-106 D1	SYF 1-3/8 TM
UCPA 207-23	UCPA 207-23	UCPA 207-23	-	UCUP 207-107 D1	SYF 1-7/16 TM
UCPA 208-24	UCPA 208-24	UCPA 208-24	RSHEY 1 1/2"	UCUP 208-108 D1	SYF 1-1/2 TM
UCPA 209-26	UCPA 209-26	UCPA 209-26	-	UCUP 209-110 D1	SYF 1-5/8 TM
UCPA 209-27	UCPA 209-27	UCPA 209-27	-	UCUP 209-111 D1	SYF 1-11/16 TM
UCPA 209-28	UCPA 209-28	UCPA 209-28	RSHEY 1 3/4"	UCUP 209-112 D1	SYF 1-3/4 TM
UCPA 210-30	UCPA 210-30	UCPA 210-30	-	UCUP 210-114 D1	-
UCPA 210-31	UCPA 210-31	UCPA 210-31	RSHEY 1 15/16"	UCUP 210-115 D1	SYF 1-15/16 TM
UCPA 210-32	-	-	-	UCUP 210-200 D1	-
UCPA 211-32	-	-	RSHEY 2"	-	SYF 2 TM
UCPA 211-33	-	-	-	-	-
UCPA 211-34	-	-	-	-	-
UCPA 211-35	-	-	-	-	SYF 2-3/16 TM
UCPA 212-36	-	-	-	-	SYF 2-1/4 TM
UCPA 212-37	-	-	-	-	-
UCPA 212-38	-	-	-	-	-
UCPA 212-39	-	-	RSHEY 2 7/16"	-	SYF 2-7/16 TM
UCPA 213-40	-	-	-	-	-
UCPA 213-41	-	-	-	-	-

SAPP 200

	ASAHI	FYH	INA	NTN	SKF
SAPP 201-8	-	SAPP 201-8F	PB 1/2"	AELPP 201-008 W3	S 1/2 FM
SAPP 202-9	-	-	-	AELPP 202-009 W3	-
SAPP 202-10	-	SAPP 202-10F	PB 5/8"	AELPP 202-010 W3	S 5/8 FM
SAPP 203-11	-	-	-	AELPP 203-011 W3	S 11/16 FM
SAPP 204-12	-	SAPP 204-12F	PB 3/4"	AELPP 204-012 W3	S 3/4 FM
SAPP 205-13	-	-	-	AELPP 205-013 W3	S 13/16 FM
SAPP 205-14	-	SAPP 205-14F	PB 7/8"	AELPP 205-014 W3	S 7/8 FM
SAPP 205-15	-	-	-	AELPP 205-015 W3	S 15/16 FM
SAPP 205-16	-	SAPP 205-16F	PB 1"	AELPP 205-100 W3	S 1 FM
SAPP 206-17	-	-	PB 1 1/16"	AELPP 206-101 W3	S 1-1/16 FM
SAPP 206-18	-	SAPP 206-18F	PB 1 1/8"	AELPP 206-102 W3	S 1-1/8 FM
SAPP 206-19	-	SAPP 206-19F	PB 1 3/16"	AELPP 206-103 W3	S 1-3/16 FM
SAPP 206-20	-	SAPP 206-20F	PB 1 1/4"-206	AELPP 206-104 W3	S 1-1/4 AFM
SAPP 207-20	-	-	-	AELPP 207-104 W3	S 1-1/4 FM
SAPP 207-21	-	-	-	AELPP 207-105 W3	S 1-5/16 FM
SAPP 207-22	-	-	-	AELPP 207-106 W3	S 1-3/8 FM
SAPP 207-23	-	-	-	AELPP 207-107 W3	S 1-7/16 FM

SAAK 200

	ASAHI	FYH	INA	NTN	SKF
SAAK 204-12	-	-	PAK 3/4"	AELPL 204-012 W3	SYH 3/4 FM
SAAK 205-13	-	-	-	AELPL 205-013 W3	SYH 13/16 FM
SAAK 205-14	-	-	PAK 7/8"	AELPL 205-014 W3	SYH 7/8 FM
SAAK 205-15	-	-	-	AELPL 205-015 W3	SYH 15/16 FM
SAAK 205-16	-	-	PAK 1"	AELPL 205-100 W3	SYH 1 FM
SAAK 206-17	-	-	PAK 1 1/16"	AELPL 206-101 W3	SYH 1-1/16 FM
SAAK 206-18	-	-	PAK 1 1/8"	AELPL 206-102 W3	SYH 1-1/8 FM
SAAK 206-19	-	-	PAK 1 3/16"	AELPL 206-103 W3	SYH 1-3/16 FM
SAAK 206-20	-	-	PAK 1 1/4"-206	AELPL 206-104 W3	SYH 1-1/4 AFM
SAAK 207-20	-	-	PAK 1 1/4"	AELPL 207-104 W3	SYH 1-1/4 FM
SAAK 207-21	-	-	-	AELPL 207-105 W3	SYH 1-5/16 FM
SAAK 207-22	-	-	PAK 1 3/8"	AELPL 207-106 W3	SYH 1-3/8 FM
SAAK 207-23	-	-	PAK 1 7/16"	AELPL 207-107 W3	SYH 1-7/16 FM
SAAK 208-24	-	-	PAK 1 1/2"	-	SYH 1-1/2 FM
SAAK 209-26	-	-	-	-	SYH 1-5/8 FM
SAAK 209-27	-	-	-	-	SYH 1-11/16 FM
SAAK 209-28	-	-	PAK 1 3/4"	-	SYH 1-3/4 FM
SAAK 210-30	-	-	-	-	-
SAAK 210-31	-	-	PAK 1 15/16"	-	SYH 1-15/16 FM
SAAK 210-32	-	-	-	-	-
SAAK 211-32	-	-	PAK 2"	-	SYH 2 FM
SAAK 211-33	-	-	-	-	-
SAAK 211-34	-	-	-	-	-
SAAK 211-35	-	-	PAK 2 3/16"	-	SYH 2-3/16 FM

SAP 200

	ASAHI	FYH	INA	NTN	SKF
SAP 204-12	-	-	PASE 3/4"	-	SY 3/4 FM
SAP 205-13	-	-	-	-	SY 13/16 FM
SAP 205-14	-	-	PASE 7/8"	-	SY 7/8 FM
SAP 205-15	-	-	-	-	SY 15/16 FM
SAP 205-16	-	-	PASE 1"	-	SY 1 FM
SAP 206-17	-	-	PASE 1 1/16"	-	SY 1-1/16 FM
SAP 206-18	-	-	PASE 1 1/8"	-	SY 1-1/8 FM
SAP 206-19	-	-	PASE 1 3/16"	-	SY 1-3/16 FM
SAP 206-20	-	-	PASE 1 1/4"-206	-	SY 1-1/4 AFM
SAP 207-20	-	-	PASE 1 1/4"	-	SY 1-1/4 FM
SAP 207-21	-	-	-	-	SY 1-5/16 FM
SAP 207-22	-	-	PASE 1 3/8"	-	SY 1-3/8 FM
SAP 207-23	-	-	PASE 1 7/16"	-	SY 1-7/16 FM
SAP 208-24	-	-	PASE 1 1/2"	-	SY 1-1/2 FM
SAP 209-26	-	-	-	-	SY 1-5/8 FM
SAP 209-27	-	-	-	-	SY 1-11/16 FM
SAP 209-28	-	-	PASE 1 3/4"	-	SY 1-3/4 FM
SAP 210-30	-	-	-	-	SY 1-7/8 FM
SAP 210-31	-	-	PASE 1 15/16"	-	SY 1-15/16 FM
SAP 210-32	-	-	-	-	-
SAP 211-32	-	-	PASE 2"	-	SY 2 FM
SAP 211-33	-	-	-	-	-
SAP 211-34	-	-	-	-	-
SAP 211-35	-	-	PASE 2 3/16"	-	SY 2-3/16 FM

UELAK 200

	ASAHI	FYH	INA	NTN	SKF
UELAK 204-12	-	-	RAK 3/4"	UELPL 204-012 D1 W3	SYH 3/4 WM
UELAK 205-13	-	-	-	UELPL 205-013 D1 W3	SYH 13/16 WM
UELAK 205-14	-	-	RAK 7/8"	UELPL 205-014 D1 W3	SYH 7/8 WM
UELAK 205-15	-	-	RAK 15/16"	UELPL 205-015 D1 W3	SYH 15/16 WM
UELAK 205-16	-	-	RAK 1"	UELPL 205-100 D1 W3	SYH 1 WM
UELAK 206-17	-	-	-	UELPL 206-101 D1 W3	SYH 1-1/16 WM
UELAK 206-18	-	-	RAK 1 1/8"	UELPL 206-102 D1 W3	SYH 1-1/8 WM
UELAK 206-19	-	-	RAK 1 3/16"	UELPL 206-103 D1 W3	SYH 1-3/16 WM
UELAK 206-20	-	-	RAK 1 1/4"-206	UELPL 206-104 D1 W3	-
UELAK 207-20	-	-	RAK 1 1/4"	UELPL 207-104 D1 W3	SYH 1-1/4 WM
UELAK 207-21	-	-	-	UELPL 207-105 D1 W3	SYH 1-5/16 WM
UELAK 207-22	-	-	RAK 1 3/8"	UELPL 207-106 D1 W3	SYH 1-3/8 WM
UELAK 207-23	-	-	RAK 1 7/16"	UELPL 207-107 D1 W3	SYH 1-7/16 WM
UELAK 208-24	-	-	RAK 1 1/2"	UELPL 208-108 D1 W3	SYH 1-1/2 WM
UELAK 209-26	-	-	RAK 1 5/8"	UELPL 209-110 D1 W3	SYH 1-5/8 WM
UELAK 209-27	-	-	RAK 1 11/16"	UELPL 209-111 D1 W3	SYH 1-11/16 WM
UELAK 209-28	-	-	RAK 1 3/4"	UELPL 209-112 D1 W3	SYH 1-3/4 WM
UELAK 210-30	-	-	-	UELPL 210-114 D1 W3	-
UELAK 210-31	-	-	RAK 1 15/16"	UELPL 210-115 D1 W3	SYH 1-15/16 WM
UELAK 210-32	-	-	-	UELPL 210-200 D1 W3	-
UELAK 211-32	-	-	-	UELPL 211-200 D1 W3	SYH 2 WM
UELAK 211-33	-	-	-	UELPL 211-201 D1 W3	-
UELAK 211-34	-	-	-	UELPL 211-202 D1 W3	-
UELAK 211-35	-	-	RAK 2 3/16"	UELPL 211-203 D1 W3	SYH 2-3/16 WM
UELAK 212-36	-	-	-	UELPL 212-204 D1 W3	SYH 2-1/4 WM
UELAK 212-37	-	-	-	UELPL 212-205 D1 W3	-
UELAK 212-38	-	-	-	UELPL 212-206 D1 W3	-
UELAK 212-39	-	-	RAK 2 7/16"	UELPL 212-207 D1 W3	SYH 2-7/16 WM
UELAK 213-40	-	-	-	-	-
UELAK 213-41	-	-	-	-	-
UELAK 214-42	-	-	-	-	-
UELAK 214-43	-	-	-	-	-
UELAK 214-44	-	-	-	-	-
UELAK 215-45	-	-	-	-	-
UELAK 215-46	-	-	-	-	-
UELAK 215-47	-	-	RAK 2 15/16" S	-	-
UELAK 215-48	-	-	-	-	-

UELP 200

	ASAHI	FYH	INA	NTN	SKF
UELP 201-8	-	NAP 201-8	-	-	-
UELP 202-9	-	-	-	-	-
UELP 202-10	-	NAP 202-10	RASE 5/8"	-	-
UELP 203-11	-	-	-	-	-
UELP 204-12	-	NAP 204-12	RASE 3/4"	UELP 204-012 D1 W3	SY 3/4 WM
UELP 205-13	-	-	-	UELP 205-013 D1 W3	SY 13/16 WM
UELP 205-14	-	NAP 205-14	RASE 7/8"	UELP 205-014 D1 W3	SY 7/8 WM
UELP 205-15	-	NAP 205-15	RASE 15/16"	UELP 205-015 D1 W3	SY 15/16 WM
UELP 205-16	-	NAP 205-16	RASE 1"	UELP 205-100 D1 W3	SY 1 WM
UELP 206-17	-	-	-	UELP 206-101 D1 W3	SY 1-1/16 WM
UELP 206-18	-	NAP 206-18	RASE 1 1/8"	UELP 206-102 D1 W3	SY 1-1/8 WM
UELP 206-19	-	NAP 206-19	RASE 1 3/16"	UELP 206-103 D1 W3	SY 1-3/16 WM
UELP 206-20	-	NAP 206-20	RASE 1 1/4"-206	UELP 206-104 D1 W3	SY 1-1/4 AWM
UELP 207-20	-	NAP 207-20	RASE 1 1/4"	UELP 207-104 D1 W3	SY 1-1/4 WM
UELP 207-21	-	-	-	UELP 207-105 D1 W3	SY 1-5/16 WM
UELP 207-22	-	NAP 207-22	RASE 1 3/8"	UELP 207-106 D1 W3	SY 1-3/8 WM

UELP 200

	ASAHI	FYH	INA	NTN	SKF
UELP 207-23	-	NAP 207-23	RASE 1 7/16"	UELP 207-107 D1 W3	SY 1-7/16 WM
UELP 208-24	-	NAP 208-24	RASE 1 1/2"	UELP 208-108 D1 W3	SY 1-1/2 WM
UELP 209-26	-	NAP 209-26	RASE 1 5/8"	UELP 209-110 D1 W3	SY 1-5/8 WM
UELP 209-27	-	NAP 209-27	RASE 1 11/16"	UELP 209-111 D1 W3	SY 1-11/16 WM
UELP 209-28	-	NAP 209-28	RASE 1 3/4"	UELP 209-112 D1 W3	SY 1-3/4 WM
UELP 210-30	-	-	-	UELP 210-114 D1 W3	SY 1-7/8 WM
UELP 210-31	-	NAP 210-31	RASE 1 15/16"	UELP 210-115 D1 W3	SY 1-15/16 WM
UELP 210-32	-	-	-	UELP 210-200 D1 W3	-
UELP 211-32	-	NAP 211-32	-	UELP 211-200 D1 W3	SY 2 WM
UELP 211-33	-	-	-	UELP 211-201 D1 W3	-
UELP 211-34	-	-	-	UELP 211-202 D1 W3	-
UELP 211-35	-	NAP 211-35	RASE 2 3/16"	UELP 211-203 D1 W3	SY 2-3/16 WM
UELP 212-36	-	NAP 212-36	RASE 1-1/4"-206	UELP 212-204 D1 W3	SY 2-1/4 WM
UELP 212-37	-	-	-	UELP 212-205 D1 W3	-
UELP 212-38	-	-	-	UELP 212-206 D1 W3	-
UELP 212-39	-	NAP 212-39	RASE 2 7/16"	UELP 212-207 D1 W3	SY 2-7/16 WM
UELP 213-40	-	NAP 213-40	-	UELP 213-208 D1 W3	-
UELP 213-41	-	-	-	UELP 213-209 D1 W3	-
UELP 214-42	-	-	-	UELP 214-210 D1 W3	-
UELP 214-43	-	-	-	UELP 214-211 D1 W3	-
UELP 214-44	-	-	-	UELP 214-212 D1 W3	-
UELP 215-45	-	-	-	UELP 215-213 D1 W3	-
UELP 215-46	-	-	-	UELP 215-214 D1 W3	-
UELP 215-47	-	NAP 215-47	RASE 2 15/16" S	UELP 215-215 D1 W3	-
UELP 215-48	-	NAP 215-48	-	UELP 215-300 D1 W3	-

UCP X00

	ASAHI	FYH	INA	NTN	SKF
UCP X05-13	-	-	-	UCP X05-013 D1	-
UCP X05-14	UCP X05-14	-	-	UCP X05-014 D1	-
UCP X05-15	UCP X05-15	-	-	UCP X05-015 D1	-
UCP X05-16	UCP X05-16	UCP X05-16	-	UCP X05-100 D1	-
UCP X06-17	-	-	-	UCP X06-101 D1	-
UCP X06-18	UCP X06-18	-	-	UCP X06-102 D1	-
UCP X06-19	UCP X06-19	UCP X06-19	-	UCP X06-103 D1	-
UCP X06-20	UCP X06-20	UCP X06-20	-	UCP X06-104 D1	-
UCP X07-20	-	-	-	-	-
UCP X07-21	-	-	-	UCP X07-105 D1	-
UCP X07-22	UCP X07-22	UCP X07-22	-	UCP X07-106 D1	-
UCP X07-23	UCP X07-23	UCP X07-23	-	UCP X07-107 D1	SYM 1-7/16 TM
UCP X08-24	UCP X08-24	UCP X08-24	RASEY 1 1/2"-MP	UCP X08-108 D1	SYM 1-1/2 TM
UCP X09-26	UCP X09-26	-	-	UCP X09-110 D1	-
UCP X09-27	UCP X09-27	UCP X09-27	-	UCP X09-111 D1	SYM 1-11/16 TM
UCP X09-28	UCP X09-28	UCP X09-28	RASEY 1 3/4"-MP	UCP X09-112 D1	SYM 1-3/4 TM
UCP X10-30	UCP X10-30	-	-	UCP X10-114 D1	-
UCP X10-31	UCP X10-31	UCP X10-31	-	UCP X10-115 D1	SYM 1-15/16 TM
UCP X10-32	UCP X10-32	UCP X10-32	RASEY 2"-MP	UCP X10-200 D1	-
UCP X11-32	-	-	-	-	-
UCP X11-33	-	-	-	UCP X11-201 D1	-
UCP X11-34	UCP X11-34	-	-	UCP X11-202 D1	-
UCP X11-35	UCP X11-35	UCP X11-35	-	UCP X11-203 D1	SYM 2-3/16 TM
UCP X12-36	UCP X12-36	UCP X12-36	-	-	-
UCP X12-37	-	-	-	-	-
UCP X12-38	UCP X12-38	UCP X12-38	-	UCP X12-206 D1	-
UCP X12-39	UCP X12-39	UCP X12-39	-	UCP X12-207 D1	-
UCP X13-40	UCP X13-40	UCP X13-40	RASEY 2 1/2"-MP	UCP X13-208 D1	SYM 2-1/2 TM

UCP X00

	ASAHI	FYH	INA	NTN	SKF
UCP X13-41	-	-	-	UCP X13-209 D1	-
UCP X14-42	-	-	-	UCP X14-210 D1	-
UCP X14-43	UCP X14-43	-	-	UCP X14-211 D1	SYM 2-11/16 TM
UCP X14-44	UCP X14-44	UCP X14-44	-	UCP X14-212 D1	-
UCP X15-45	-	-	-	UCP X15-213 D1	-
UCP X15-46	-	-	-	UCP X15-214 D1	-
UCP X15-47	UCP X15-47	-	-	UCP X15-215 D1	SYM 2-15/16 TM
UCP X15-48	UCP X15-48	UCP X15-48	-	UCP X15-300 D1	SYM 3 TM
UCP X16-49	-	-	-	UCP X16-301 D1	-
UCP X16-50	UCP X16-50	-	-	UCP X16-302 D1	-
UCP X16-51	-	-	-	-	-

UCP 300

	ASAHI	FYH	INA	NTN	SKF
UCP 305-13	-	-	-	UCP 305-013 D1	-
UCP 305-14	UCP 305-14	-	-	UCP 305-014 D1	-
UCP 305-15	-	-	-	UCP 305-015 D1	-
UCP 305-16	-	UCP 305-16	-	UCP 305-100 D1	-
UCP 306-17	-	-	-	UCP 306-101 D1	-
UCP 306-18	UCP 306-18	UCP 306-18	-	UCP 306-102 D1	-
UCP 306-19	-	-	-	UCP 306-103 D1	-
UCP 306-20	-	-	-	-	-
UCP 307-20	UCP 307-20	UCP 307-20	-	UCP 307-104 D1	-
UCP 307-21	-	-	-	UCP 307-105 D1	-
UCP 307-22	UCP 307-22	UCP 307-22	-	UCP 307-106 D1	-
UCP 307-23	-	UCP 307-23	-	UCP 307-107 D1	-
UCP 308-24	UCP 308-24	UCP 308-24	-	UCP 308-108 D1	-
UCP 309-26	UCP 309-26	-	-	UCP 309-110 D1	-
UCP 309-27	-	-	-	UCP 309-111 D1	-
UCP 309-28	UCP 309-28	UCP 309-28	-	UCP 309-112 D1	-
UCP 310-30	UCP 310- 30	-	-	UCP 310-114 D1	-
UCP 310-31	-	UCP 310-31	-	UCP 310-115 D1	-
UCP 310-32	-	-	-	-	-
UCP 311-32	UCP 311- 32	UCP 311-32	-	UCP 311-200 D1	-
UCP 311-33	-	-	-	UCP 311-201 D1	-
UCP 311-34	UCP 311- 34	-	-	UCP 311-202 D1	-
UCP 311-35	-	-	-	UCP 311-203 D1	-
UCP 312-36	UCP 312- 36	-	-	UCP 312-204 D1	-
UCP 312-37	-	-	-	UCP 312-205 D1	-
UCP 312-38	UCP 312- 38	-	-	UCP 312-206 D1	-
UCP 312-39	-	-	-	UCP 312-207 D1	-
UCP 313-40	UCP 31 3-40	UCP 313-40	-	UCP 313-208 D1	-
UCP 313-41	-	-	-	UCP 313-209 D1	-
UCP 314-42	-	-	-	UCP 314-210 D1	-
UCP 314-43	-	-	-	UCP 314-211 D1	-
UCP 314-44	UCP 314-44	UCP 314-44	-	UCP 314-212 D1	-
UCP 315-45	-	-	-	UCP 315-213 D1	-
UCP 315-46	-	-	-	UCP 315-214 D1	-
UCP 315-47	-	-	-	UCP 315-215 D1	-
UCP 315-48	UCP 315-48	UCP 315-48	-	UCP 315-300 D1	-
UCP 316-49	-	-	-	UCP 316-301 D1	-
UCP 316-50	UCP 316-50	-	-	UCP 316-302 D1	-
UCP 316-51	-	-	-	-	-

SBF 200

	ASAHI	FYH	INA	NTN	SKF
SBF 204-12	BF 204-12	-	-	-	-
SBF 205-13	-	-	-	-	-
SBF 205-14	BF 205-14	-	-	-	-
SBF 205-15	BF 205-15	-	-	-	-
SBF 205-16	BF 205-16	-	-	-	-
SBF 206-17	-	-	-	-	-
SBF 206-18	BF 206-18	-	-	-	-
SBF 206-19	BF 206-19	-	-	-	-
SBF 206-20	-	-	-	-	-
SBF 207-20	BF 207-20	-	-	-	-
SBF 207-21	BF 207-21	-	-	-	-
SBF 207-22	BF 207-22	-	-	-	-
SBF 207-23	BF 207-23	-	-	-	-
SBF 208-24	-	-	-	-	-

UCFS 200

	ASAHI	FYH	INA	NTN	SKF
UCFS 204-12	UCLF 204-12	SLF 204-12	-	-	-
UCFS 205-13	-	-	-	-	-
UCFS 205-14	UCLF 205-14	SLF 205-14	-	-	-
UCFS 205-15	UCLF 205-15	SLF 205-15	-	-	-
UCFS 205-16	UCLF 205-16	SLF 205-16	-	-	-
UCFS 206-17	UCLF 206-17	-	-	-	-
UCFS 206-18	UCLF 206-18	SLF 206-18	-	-	-
UCFS 206-19	UCLF 206-19	SLF 206-19	-	-	-
UCFS 206-20	-	-	-	-	-
UCFS 207-20	UCLF 207-20	SLF 207-20	-	-	-
UCFS 207-21	UCLF 207-21	SLF 207-21	-	-	-
UCFS 207-22	UCLF 207-22	SLF 207-22	-	-	-
UCFS 207-23	UCLF 207-23	SLF 207-23	-	-	-
UCFS 208-24	UCLF 208-24	SLF 208-24	-	-	-
UCFS 209-26	UCLF 209-26	SLF 209-26	-	-	-
UCFS 209-27	UCLF 209-27	SLF 209-27	-	-	-
UCFS 209-28	UCLF 209-28	SLF 209-28	-	-	-
UCFS 210-30	UCLF 210-30	SLF 210-30	-	-	-
UCFS 210-31	UCLF 210-31	SLF 210-31	-	-	-
UCFS 210-32	-	-	-	-	-
UCFS 211-32	UCLF 211-32	SLF 211-32	-	-	-
UCFS 211-33	UCLF 211-33	-	-	-	-
UCFS 211-34	UCLF 211-34	SLF 211-34	-	-	-
UCFS 211-35	UCLF 211-35	SLF 211-35	-	-	-
UCFS 212-36	UCLF 212-36	SLF 212-36	-	-	-
UCFS 212-37	-	-	-	-	-
UCFS 212-38	UCLF 212-38	SLF 212-38	-	-	-
UCFS 212-39	UCLF 212-39	SLF 212-39	-	-	-
UCFS 213-40	-	-	-	-	-
UCFS 213-41	-	-	-	-	-
UCFS 214-42	-	-	-	-	-
UCFS 214-43	-	-	-	-	-
UCFS 214-44	-	SLF 214-44	-	-	-
UCFS 215-45	-	-	-	-	-
UCFS 215-46	-	-	-	-	-
UCFS 215-47	-	-	-	-	-
UCFS 215-48	-	SLF 215-48	-	-	-

UCF 200

	ASAHI	FYH	INA	NTN	SKF
UCF 201-8	UCF 201-8	UCF 201-8	RCJY 1/2"	UCF 201-008 D1	-
UCF 202-9	UCF 202-9	-	-	UCF 202-009 D1	-
UCF 202-10	UCF 202-10	UCF 202-10	RCJY 5/8"	UCF 202-010 D1	-
UCF 203-11	UCF 203-11	-	-	UCF 203-011 D1	-
UCF 204-12	UCF 204-12	UCF 204-12	RCJY 3/4"	UCF 204-012 D1	FY 3/4 TM
UCF 205-13	-	-	-	UCF 205-013 D1	FY 13/16 TM
UCF 205-14	UCF 205-14	UCF 205-14	RCJY 7/8"	UCF 205-014 D1	FY 7/8 TM
UCF 205-15	UCF 205-15	UCF 205-15	-	UCF 205-015 D1	FY 15/16 TM
UCF 205-16	UCF 205-16	UCF 205-16	RCJY 1"	UCF 205-100 D1	FY 1 TM
UCF 206-17	UCF 206-17	-	-	UCF 206-101 D1	FY 1-1/16 TM
UCF 206-18	UCF 206-18	UCF 206-18	RCJY 1 1/8"	UCF 206-102 D1	FY 1-1/8 TM
UCF 206-19	UCF 206-19	UCF 206-19	-	UCF 206-103 D1	FY 1-3/16 TM
UCF 206-20	-	-	RCJY 1 1/4"-206	UCF 206-104 D1	FY 1-1/4 ATM
UCF 207-20	UCF 207-20	UCF 207-20	RCJY 1 1/4"	UCF 207-104 D1	FY 1-1/4 TM
UCF 207-21	UCF 207-21	UCF 207-21	-	UCF 207-105 D1	FY 1-5/16 TM
UCF 207-22	UCF 207-22	UCF 207-22	RCJY 1 3/8"	UCF 207-106 D1	FY 1-3/8 TM
UCF 207-23	UCF 207-23	UCF 207-23	-	UCF 207-107 D1	FY 1-7/16 TM
UCF 208-24	UCF 208-24	UCF 208-24	RCJY 1 1/2"	UCF 208-108 D1	FY 1-1/2 TM
UCF 209-26	UCF 209-26	UCF 209-26	-	UCF 209-110 D1	FY 1-5/8 TM
UCF 209-27	UCF 209-27	UCF 209-27	-	UCF 209-111 D1	FY 1-11/16 TM
UCF 209-28	UCF 209-28	UCF 209-28	RCJY 1 3/4"	UCF 209-112 D1	FY 1-3/4 TM
UCF 210-30	UCF 210-30	UCF 210-30	-	UCF 210-114 D1	FY 1-7/8 TM
UCF 210-31	UCF 210-31	UCF 210-31	RCJY 1 15/16"	UCF 210-115 D1	FY 1-15/16 TM
UCF 210-32	-	-	-	UCF 210-200 D1	-
UCF 211-32	UCF 211-32	UCF 211-32	RCJY 2"	UCF 211-200 D1	FY 2 TM
UCF 211-33	UCF 211-33	-	-	UCF 211-201 D1	-
UCF 211-34	UCF 211-34	UCF 211-34	-	UCF 211-202 D1	-
UCF 211-35	UCF 211-35	UCF 211-35	-	UCF 211-203 D1	FY 2-3/16 TM
UCF 212-36	UCF 212-36	UCF 212-36	-	UCF 212-204 D1	FY 2-1/4 TM
UCF 212-37	-	-	-	UCF 212-205 D1	-
UCF 212-38	UCF 212-38	UCF 212-38	-	UCF 212-206 D1	-
UCF 212-39	UCF 212-39	UCF 212-39	RCJY 2 7/16"	UCF 212-207 D1	FY 2-7/16 TM
UCF 213-40	UCF 213-40	UCF 213-40	RCJY 2 1/2"-213	UCF 213-208 D1	FY 2-1/2 TM
UCF 213-41	-	-	-	UCF 213-209 D1	-
UCF 214-42	-	-	-	UCF 214-210 D1	-
UCF 214-43	-	-	-	UCF 214-211 D1	-
UCF 214-44	UCF 214-44	UCF 214-44	-	UCF 214-212 D1	-
UCF 215-45	-	-	-	UCF 215-213 D1	-
UCF 215-46	-	-	-	UCF 215-214 D1	-
UCF 215-47	-	-	RCJY 2 15/16"	UCF 215-215 D1	FY 2-15/16 TM
UCF 215-48	UCF 215-48	UCF 215-48	-	UCF 215-300 D1	-
UCF 216-49	-	-	-	UCF 216-301 D1	-
UCF 216-50	UCF 216-50	-	-	UCF 216-302 D1	-
UCF 216-51	-	-	-	UCF 216-303 D1	-
UCF 217-52	UCF 217-52	UCF 217-52	-	UCF 217-304 D1	-
UCF 217-53	-	-	-	UCF 217-305 D1	-
UCF 217-55	-	-	-	UCF 217-307 D1	-
UCF 218-56	UCF 218-56	UCF 218-56	-	UCF 218-308 D1	FY 3-1/2 TM

SAF 200

	ASAHI	FYH	INA	NTN	SKF
SAF 204-12	-	-	PCJ 3/4"	-	FY 3/4 FM
SAF 205-13	-	-	-	-	FY 13/16 FM
SAF 205-14	-	-	PCJ 7/8"	-	FY 7/8 FM
SAF 205-15	-	-	-	-	FY 15/16 FM
SAF 205-16	-	-	PCJ 1"	-	FY 1 FM
SAF 206-17	-	-	PCJ 1 1/16"	-	FY 1-1/16 FM
SAF 206-18	-	-	PCJ 1 1/8"	-	FY 1-1/8 FM
SAF 206-19	-	-	PCJ 1 3/16"	-	FY 1-3/16 FM
SAF 206-20	-	-	PCJ 1 1/4"-206	-	FY 1-1/4 AFM
SAF 207-20	-	-	PCJ 1 1/4"	-	FY 1-1/4 FM
SAF 207-21	-	-	-	-	FY 1-5/16 FM
SAF 207-22	-	-	PCJ 1 3/8"	-	FY 1-3/8 FM
SAF 207-23	-	-	PCJ 1 7/16"	-	FY 1-7/16 FM
SAF 208-24	-	-	PCJ 1 1/2"	-	FY 1-1/2 FM
SAF 209-26	-	-	-	-	FY 1-5/8 FM
SAF 209-27	-	-	-	-	FY 1-11/16 FM
SAF 209-28	-	-	PCJ 1 3/4"	-	FY 1-3/4 FM
SAF 210-30	-	-	-	-	FY 1-7/8 FM
SAF 210-31	-	-	PCJ 1 15/16"	-	FY 1-15/16 FM
SAF 210-32	-	-	-	-	-
SAF 211-32	-	-	PCJ 2"	-	FY 2 FM
SAF 211-33	-	-	-	-	-
SAF 211-34	-	-	-	-	-
SAF 211-35	-	-	PCJ 2 3/16"	-	FY 2-3/16 FM

UELFS 200

	ASAHI	FYH	INA	NTN	SKF
UELFS 204-12	-	-	-	UELFU 204-012 D1 W3	-
UELFS 205-13	-	-	-	UELFU 205-013 D1 W3	-
UELFS 205-14	-	-	-	UELFU 205-014 D1 W3	-
UELFS 205-15	-	-	-	UELFU 205-015 D1 W3	-
UELFS 205-16	-	-	-	UELFU 205-100 D1 W3	-
UELFS 206-17	-	-	-	UELFU 206-101 D1 W3	-
UELFS 206-18	-	-	-	UELFU 206-102 D1 W3	-
UELFS 206-19	-	-	-	UELFU 206-103 D1 W3	-
UELFS 206-20	-	-	-	UELFU 206-104 D1 W3	-
UELFS 207-20	-	-	-	UELFU 207-104 D1 W3	-
UELFS 207-21	-	-	-	UELFU 207-105 D1 W3	-
UELFS 207-22	-	-	-	UELFU 207-106 D1 W3	-
UELFS 207-23	-	-	-	UELFU 207-107 D1 W3	-
UELFS 208-24	-	-	-	UELFU 208-108 D1 W3	-
UELFS 209-26	-	-	-	UELFU 209-110 D1 W3	-
UELFS 209-27	-	-	-	UELFU 209-111 D1 W3	-
UELFS 209-28	-	-	-	UELFU 209-112 D1 W3	-
UELFS 210-30	-	-	-	UELFU 210-114 D1 W3	-
UELFS 210-31	-	-	-	UELFU 210-115 D1 W3	-
UELFS 210-32	-	-	-	UELFU 210-200 D1 W3	-
UELFS 211-32	-	-	-	UELFU 211-200 D1 W3	-
UELFS 211-33	-	-	-	UELFU 211-201 D1 W3	-
UELFS 211-34	-	-	-	UELFU 211-202 D1 W3	-
UELFS 211-35	-	-	-	UELFU 211-203 D1 W3	-
UELFS 212-36	-	-	-	UELFU 212-204 D1 W3	-
UELFS 212-37	-	-	-	UELFU 212-205 D1 W3	-
UELFS 212-38	-	-	-	UELFU 212-206 D1 W3	-
UELFS 212-39	-	-	-	UELFU 212-207 D1 W3	-

UELFS 200

	ASAHI	FYH	INA	NTN	SKF
UELFS 213-40	-	-	-	UELFU 213-208 D1 W3	-
UELFS 213-41	-	-	-	UELFU 213-209 D1 W3	-
UELFS 214-42	-	-	-	UELFU 214-210 D1 W3	-
UELFS 214-43	-	-	-	UELFU 214-211 D1 W3	-
UELFS 214-44	-	-	-	UELFU 214-212 D1 W3	-
UELFS 215-45	-	-	-	-	-
UELFS 215-46	-	-	-	-	-
UELFS 215-47	-	-	-	-	-
UELFS 215-48	-	-	-	-	-

UELF 200

	ASAHI	FYH	INA	NTN	SKF
UELF 201-8	-	-	-	-	-
UELF 202-9	-	-	-	-	-
UELF 202-10	-	-	RCJ 5/8"	-	-
UELF 203-11	-	-	-	-	-
UELF 204-12	-	-	RCJ 3/4"	UELF 204-012 D1 W3	FY 3/4 WM
UELF 205-13	-	-	-	UELF 205-013 D1 W3	FY 13/16 WM
UELF 205-14	-	-	RCJ 7/8"	UELF 205-014 D1 W3	FY 7/8 WM
UELF 205-15	-	-	RCJ 15/16"	UELF 205-015 D1 W3	FY 15/16 WM
UELF 205-16	-	-	RCJ 1"	UELF 205-100 D1 W3	FY 1 WM
UELF 206-17	-	-	-	UELF 206-101 D1 W3	FY 1-1/16 WM
UELF 206-18	-	-	RCJ 1 1/8"	UELF 206-102 D1 W3	FY 1-1/8 WM
UELF 206-19	-	-	RCJ 1 3/16"	UELF 206-103 D1 W3	FY 1-3/16 WM
UELF 206-20	-	-	RCJ 1 1/4"-206	UELF 206-104 D1 W3	FY 1-1/4 AWM
UELF 207-20	-	-	RCJ 1 1/4"	UELF 207-104 D1 W3	FY 1-1/4 WM
UELF 207-21	-	-	-	UELF 207-105 D1 W3	FY 1-5/16 WM
UELF 207-22	-	-	RCJ 1 3/8"	UELF 207-106 D1 W3	FY 1-3/8 WM
UELF 207-23	-	-	RCJ 1 7/16"	UELF 207-107 D1 W3	FY 1-7/16 WM
UELF 208-24	-	-	RCJ 1 1/2"	UELF 208-108 D1 W3	FY 1-1/2 WM
UELF 209-26	-	-	-	UELF 209-110 D1 W3	FY 1-5/8 WM
UELF 209-27	-	-	RCJ 1 5/8"	UELF 209-111 D1 W3	FY 1-11/16 WM
UELF 209-28	-	-	RCJ 1 11/16"	UELF 209-112 D1 W3	FY 1-3/4 WM
UELF 210-30	-	-	RCJ 1 3/4"	UELF 210-114 D1 W3	FY 1-7/8 WM
UELF 210-31	-	-	-	UELF 210-115 D1 W3	FY 1-15/16 WM
UELF 210-32	-	-	-	UELF 210-200 D1 W3	-
UELF 211-32	-	-	RCJ 1 15/16"	UELF 211-200 D1 W3	FY 2 WM
UELF 211-33	-	-	-	UELF 211-201 D1 W3	-
UELF 211-34	-	-	-	UELF 211-202 D1 W3	-
UELF 211-35	-	-	-	UELF 211-203 D1 W3	FY 2-3/16 WM
UELF 212-36	-	-	-	UELF 212-204 D1 W3	FY 2-1/4 WM
UELF 212-37	-	-	RCJ 2 3/16"	UELF 212-205 D1 W3	-
UELF 212-38	-	-	-	UELF 212-206 D1 W3	-
UELF 212-39	-	-	-	UELF 212-207 D1 W3	FY 2-7/16 WM
UELF 213-40	-	-	-	UELF 213-208 D1 W3	-
UELF 213-41	-	-	RCJ 2 7/16"	UELF 213-209 D1 W3	-
UELF 214-42	-	-	-	UELF 214-210 D1 W3	-
UELF 214-43	-	-	-	UELF 214-211 D1 W3	-
UELF 214-44	-	-	-	UELF 214-212 D1 W3	-
UELF 215-45	-	-	-	UELF 215-213 D1 W3	-
UELF 215-46	-	-	-	UELF 215-214 D1 W3	-
UELF 215-47	-	-	-	UELF 215-215 D1 W3	-
UELF 215-48	-	-	-	UELF 215-300 D1 W3	-

UCF X00

	ASAHI	FYH	INA	NTN	SKF
UCF X05-13	-	-	-	UCF X05-013 D1	-
UCF X05-14	UCF X05-14	-	-	UCF X05-014 D1	-
UCF X05-15	UCF X05-15	-	-	UCF X05-015 D1	-
UCF X05-16	UCF X05-16	UCF X05-16	-	UCF X05-100 D1	-
UCF X06-17		-	-	UCF X06-101 D1	-
UCF X06-18	UCF X06-18	-	-	UCF X06-102 D1	-
UCF X06-19	UCF X06-19	UCF X06-19	-	UCF X06-103 D1	-
UCF X06-20	UCF X06-20	UCF X06-20	-	UCF X06-104 D1	-
UCF X07-20	-	-	-	-	-
UCF X07-21	-	-	-	UCF X07-105 D1	-
UCF X07-22	UCF X07-22	UCF X07-22	-	UCF X07-106 D1	-
UCF X07-23	UCF X07-23	UCF X07-23	-	UCF X07-107 D1	FYM 1-7/16 TM
UCF X08-24	UCF X08-24	UCF X08-24	RCJY 1 1/2"-MP	UCF X08-108 D1	FYM 1-1/2 TM
UCF X09-26	UCF X09-26	-	-	UCF X09-110 D1	-
UCF X09-27	UCF X09-27	UCF X09-27	-	UCF X09-111 D1	FYM 1-11/16 TM
UCF X09-28	UCF X09-28	UCF X09-28	RCJY 1 3/4"-MP	UCF X09-112 D1	FYM 1-3/4 TM
UCF X10-30	UCF X10-30	-	-	UCF X10-114 D1	-
UCF X10-31	UCF X10-31	UCF X10-31	-	UCF X10-115 D1	FYM 1-15/16 TM
UCF X10-32	UCF X10-32	UCF X10-32	RCJY 2"-MP	UCF X10-200 D1	-
UCF X11-32	-	-	-	-	-
UCF X11-33	-	-	-	UCF X11-201 D1	-
UCF X11-34	UCF X11-34	-	-	UCF X11-202 D1	-
UCF X11-35	UCF X11-35	UCF X11-35	-	UCF X11-203 D1	FYM 2-3/16 TM
UCF X12-36	UCF X12-36	UCF X12-36	-	-	-
UCF X12-37	-	-	-	-	-
UCF X12-38	UCF X12-38	UCF X12-38	-	UCF X12-206 D1	-
UCF X12-39	UCF X12-39	UCF X12-39	-	UCF X12-207 D1	-
UCF X13-40	UCF X13-40	UCF X13-40	RCJY 2 1/2"-MP	UCF X13-208 D1	FYM 2-1/2 TM
UCF X13-41	-	-	-	UCF X13-209 D1	-
UCF X14-42	-	-	-	UCF X14-210 D1	-
UCF X14-43	UCF X14-43	-	-	UCF X14-211 D1	FYM 2-11/16 TM
UCF X14-44	UCF X14-44	UCF X14-44	-	UCF X14-212 D1	-
UCF X15-45	-	-	-	UCF X15-213 D1	-
UCF X15-46	-	-	-	UCF X15-214 D1	-
UCF X15-47	UCF X15-47	-	-	UCF X15-215 D1	FYM 2-15/16 TM
UCF X15-48	UCF X15-48	UCF X15-48	-	UCF X15-300 D1	FYM 3 TM
UCF X16-49	-	-	-	UCF X16-301 D1	-
UCF X16-50	-	-	-	UCF X16-302 D1	-

UCF 300

	ASAHI	FYH	INA	NTN	SKF
UCF 305-13	-	-	-	UCF 305-013 D1	-
UCF 305-14	UCF 305-14	-	-	UCF 305-014 D1	-
UCF 305-15	-	-	-	UCF 305-015 D1	-
UCF 305-16	UCF 305-16	UCF 305-16	-	UCF 305-100 D1	-
UCF 306-17	-	-	-	UCF 306-101 D1	-
UCF 306-18	UCF 306-18	UCF 306-18	-	UCF 306-102 D1	-
UCF 306-19	-	-	-	UCF 306-103 D1	-
UCF 306-20	-	-	-	-	-
UCF 307-20	UCF 307-20	UCF 307-20	-	UCF 307-104 D1	-
UCF 307-21	-	-	-	UCF 307-105 D1	-
UCF 307-22	UCF 307-22	UCF 307-22	-	UCF 307-106 D1	-
UCF 307-23	-	-	-	UCF 307-107 D1	-
UCF 308-24	UCF 308-24	UCF 308-24	-	UCF 308-108 D1	-
UCF 309-26	UCF 309-26	-	-	UCF 309-110 D1	-
UCF 309-27	-	-	-	UCF 309-111 D1	-
UCF 309-28	UCF 309-28	UCF 309-28	-	UCF 309-112 D1	-
UCF 310-30	UCF 310-30	-	-	UCF 310-114 D1	-
UCF 310-31	-	UCF 310-31	-	UCF 310-115 D1	-
UCF 310-32	-	-	-	-	-
UCF 311-32	UCF 311-32	UCF 311-32	-	UCF 311-200 D1	-
UCF 311-33	-	-	-	UCF 311-201 D1	-
UCF 311-34	UCF 311-34	-	-	UCF 311-202 D1	-
UCF 311-35	-	-	-	UCF 311-203 D1	-
UCF 312-36	UCF 312-36	-	-	UCF 312-204 D1	-
UCF 312-37	-	-	-	UCF 312-205 D1	-
UCF 312-38	UCF 312-38	-	-	UCF 312-206 D1	-
UCF 312-39	-	-	-	UCF 312-207 D1	-
UCF 313-40	UCF 313-40	UCF 313-40	-	UCF 313-208 D1	-
UCF 313-41	-	-	-	UCF 313-209 D1	-
UCF 314-42	-	-	-	UCF 314-210 D1	-
UCF 314-43	-	-	-	UCF 314-211 D1	-
UCF 314-44	UCF 314-44	UCF 314-44	-	UCF 314-212 D1	-
UCF 315-45	-	-	-	UCF 315-213 D1	-
UCF 315-46	-	-	-	UCF 315-214 D1	-
UCF 315-47	-	-	-	UCF 315-215 D1	-
UCF 315-48	UCF 315-48	UCF 315-48	-	UCF 315-300 D1	-
UCF 316-49	-	-	-	UCF 316-301 D1	-
UCF 316-50	UCF 316-50	-	-	UCF 316-302 D1	-

SBPFL 200

	ASAHI	FYH	INA	NTN	SKF
SBPFL 201-8	BPFL 1-8	SBPFL 201-8	-	ASPFL 201-008	-
SBPFL 202-9	BPFL 2-9	-	-	ASPFL 202-009	-
SBPFL 202-10	BPFL 2-10	SBPFL 202-10	-	ASPFL 202-010	-
SBPFL 203-11	BPFL 3-11	-	-	ASPFL 203-011	-
SBPFL 204-12	BPFL 4-12	SBPFL 204-12	-	ASPFL 204-012	-
SBPFL 205-13	-	-	-	ASPFL 205-013	-
SBPFL 205-14	BPFL 5-14	SBPFL 205-14	-	ASPFL 205-014	-
SBPFL 205-15	BPFL 5-15	-	-	ASPFL 205-015	-
SBPFL 205-16	BPFL 5-16	SBPFL 205-16	RATY 1"	ASPFL 205-100	-
SBPFL 206-17	-	-	-	ASPFL 206-101	-
SBPFL 206-18	BPFL 6-18	SBPFL 206-18	-	ASPFL 206-102	-
SBPFL 206-19	BPFL 6-19	SBPFL 206-19	-	ASPFL 206-103	-
SBPFL 206-20	-	-	-	ASPFL 206-104	-
SBPFL 207-20	BPFL 7-20	-	-	ASPFL 207-104	-
SBPFL 207-21	BPFL 7-21	-	-	ASPFL 207-105	-
SBPFL 207-22	BPFL 7-22	-	-	ASPFL 207-106	-
SBPFL 207-23	BPFL 7-23	-	-	ASPFL 207-107	-

SBFL 200

	ASAHI	FYH	INA	NTN	SKF
SBFL 204-12	BFL 204-12	-	-	-	-
SBFL 205-13	-	-	-	-	-
SBFL 205-14	BFL 205-14	-	-	-	-
SBFL 205-15	BFL 205-15	-	-	-	-
SBFL 205-16	BFL 205-16	-	-	-	-
SBFL 206-17	-	-	-	-	-
SBFL 206-18	BFL 206-18	-	-	-	-
SBFL 206-19	BFL 206-19	-	-	-	-
SBFL 206-20	-	-	-	-	-
SBFL 207-20	BFL 207-20	-	-	-	-
SBFL 207-21	BFL 207-21	-	-	-	-
SBFL 207-22	BFL 207-22	-	-	-	-
SBFL 207-23	BFL 207-23	-	-	-	-
SBFL 208-24	-	-	-	-	-

UCFT 200

	ASAHI	FYH	INA	NTN	SKF
UCFT 204-12	UCFT 204-12	-	-	-	-
UCFT 205-13	-	-	-	-	-
UCFT 205-14	UCFT 205-14	-	-	-	-
UCFT 205-15	UCFT 205-15	-	-	-	-
UCFT 205-16	UCFT 205-16	-	-	-	-
UCFT 206-17	UCFT 206-17	-	-	-	-
UCFT 206-18	UCFT 206-18	-	-	-	-
UCFT 206-19	UCFT 206-19	-	-	-	-
UCFT 206-20	-	-	-	-	-
UCFT 207-20	UCFT 207-20	-	-	-	-
UCFT 207-21	UCFT 207-21	-	-	-	-
UCFT 207-22	UCFT 207-22	-	-	-	-
UCFT 207-23	UCFT 207-23	-	-	-	-
UCFT 208-24	UCFT 208-24	-	-	-	-
UCFT 209-26	UCFT 209-26	-	-	-	-
UCFT 209-27	UCFT 209-27	-	-	-	-
UCFT 209-28	UCFT 209-28	-	-	-	-

UCFT 200

	ASAHI	FYH	INA	NTN	SKF
UCFT 210-30	UCFT 210-30	-	-	-	-
UCFT 210-31	UCFT 210-31	-	-	-	-
UCFT 210-32	-	-	-	-	-
UCFT 211-32	UCFT 211-32	-	-	-	-
UCFT 211-33	UCFT 211-33	-	-	-	-
UCFT 211-34	UCFT 211-34	-	-	-	-
UCFT 211-35	UCFT 211-35	-	-	-	-
UCFT 212-36	-	-	-	-	-
UCFT 212-37	-	-	-	-	-
UCFT 212-38	-	-	-	-	-
UCFT 212-39	-	-	-	-	-
UCFT 213-40	-	-	-	-	-
UCFT 213-41	-	-	-	-	-
UCFT 214-42	-	-	-	-	-
UCFT 214-43	-	-	-	-	-
UCFT 214-44	-	-	-	-	-

UCFL 200

	ASAHI	FYH	INA	NTN	SKF
UCFL 201-8	UCFL 201-8	UCFL 201-8	RCJTY 1/2"	UCFL 201-008 D1	-
UCFL 202-9	UCFL 202-9	-	-	UCFL 202-009 D1	-
UCFL 202-10	UCFL 202-10	UCFL 202-10	RCJTY 5/8"	UCFL 202-010 D1	-
UCFL 203-11	UCFL 203-11	-	-	UCFL 203-011 D1	-
UCFL 204-12	UCFL 204-12	UCFL 204-12	RCJTY 3/4"	UCFL 204-012 D1	FYT 3/4 TM
UCFL 205-13	-	-	-	UCFL 205-013 D1	FYT 13/16 TM
UCFL 205-14	UCFL 205-14	UCFL 205-14	RCJTY 7/8"	UCFL 205-014 D1	FYT 7/8 TM
UCFL 205-15	UCFL 205-15	UCFL 205-15	-	UCFL 205-015 D1	FYT 15/16 TM
UCFL 205-16	UCFL 205-16	UCFL 205-16	RCJTY 1"	UCFL 205-100 D1	FYT 1 TM
UCFL 206-17	UCFL 206-17	-	-	UCFL 206-101 D1	FYT 1-1/16 TM
UCFL 206-18	UCFL 206-18	UCFL 206-18	RCJTY 1 1/8"	UCFL 206-102 D1	FYT 1-1/8 TM
UCFL 206-19	UCFL 206-19	UCFL 206-19	-	UCFL 206-103 D1	FYT 1-3/16 TM
UCFL 206-20	-	-	RCJTY 1 1/4"-206	UCFL 206-104 D1	FYT 1-1/4 ATM
UCFL 207-20	UCFL 207-20	UCFL 207-20	RCJTY 1 1/4"	UCFL 207-104 D1	FYT 1-1/4 TM
UCFL 207-21	UCFL 207-21	UCFL 207-21	-	UCFL 207-105 D1	FYT 1-5/16 TM
UCFL 207-22	UCFL 207-22	UCFL 207-22	RCJTY 1 3/8"	UCFL 207-106 D1	FYT 1-3/8 TM
UCFL 207-23	UCFL 207-23	UCFL 207-23	-	UCFL 207-107 D1	FYT 1-7/16 TM
UCFL 208-24	UCFL 208-24	UCFL 208-24	RCJTY 1 1/2"	UCFL 208-108 D1	FYT 1-1/2 TM
UCFL 209-26	UCFL 209-26	UCFL 209-26	-	UCFL 209-110 D1	FYT 1-5/8 TM
UCFL 209-27	UCFL 209-27	UCFL 209-27	-	UCFL 209-111 D1	FYT 1-11/16 TM
UCFL 209-28	UCFL 209-28	UCFL 209-28	RCJTY 1 3/4"	UCFL 209-112 D1	FYT 1-3/4 TM
UCFL 210-30	UCFL 210-30	UCFL 210-30	-	UCFL 210-114 D1	FYT 1-7/8 TM
UCFL 210-31	UCFL 210-31	UCFL 210-31	RCJTY 1 15/16"	UCFL 210-115 D1	FYT 1-15/16 TM
UCFL 210-32	-	-	-	UCFL 210-200 D1	-
UCFL 211-32	UCFL 211-32	UCFL 211-32	RCJTY 2"	UCFL 211-200 D1	FYT 2 TM
UCFL 211-33	UCFL 211-33	-	-	UCFL 211-201 D1	-
UCFL 211-34	UCFL 211-34	UCFL 211-34	-	UCFL 211-202 D1	-
UCFL 211-35	UCFL 211-35	UCFL 211-35	-	UCFL 211-203 D1	FYT 2-3/16 TM
UCFL 212-36	UCFL 212-36	UCFL 212-36	-	UCFL 212-204 D1	-
UCFL 212-37	-	-	-	UCFL 212-205 D1	-
UCFL 212-38	UCFL 212-38	UCFL 212-38	-	UCFL 212-206 D1	-
UCFL 212-39	UCFL 212-39	UCFL 212-39	RCJTY 2 7/16"	UCFL 212-207 D1	-
UCFL 213-40	UCFL 213-40	UCFL 213-40	-	UCFL 213-208 D1	-
UCFL 213-41	-	-	-	UCFL 213-209 D1	-
UCFL 214-42	-	-	-	UCFL 214-210 D1	-
UCFL 214-43	-	-	-	UCFL 214-211 D1	-
UCFL 214-44	UCFL 214-44	UCFL 214-44	-	UCFL 214-212 D1	-

UCFL 200

	ASAHI	FYH	INA	NTN	SKF
UCFL 215-45	-	-	-	UCFL 215-213 D1	-
UCFL 215-46	-	-	-	UCFL 215-214 D1	-
UCFL 215-47	-	-	RCJTY 2 15/16"	UCFL 215-215 D1	-
UCFL 215-48	UCFL 215-48	UCFL 215-48	-	UCFL 215-300 D1	-
UCFL 216-49	-	-	-	UCFL 216-301 D1	-
UCFL 216-50	UCFL 216-50	-	-	UCFL 216-302 D1	-
UCFL 216-51	-	-	-	UCFL 216-303 D1	-
UCFL 217-52	UCFL 217-52	UCFL 217-52	-	UCFL 217-304 D1	-
UCFL 217-53	-	-	-	UCFL 217-305 D1	-
UCFL 217-55	-	-	-	UCFL 217-307 D1	-
UCFL 218-56	UCFL 218-56	UCFL 218-56	-	UCFL 218-308 D1	-

SAPFL 200

	ASAHI	FYH	INA	NTN	SKF
SAPFL 201-8	-	SAPFL 201-8	RAT 1/2"	AELPFL 201-008 W3	FT 1/2 FM
SAPFL 202-9	-	-	-	AELPFL 202-009 W3	-
SAPFL 202-10	-	SAPFL 202-10	RAT 5/8"	AELPFL 202-010 W3	FT 5/8 FM
SAPFL 203-11	-	-	-	AELPFL 203-011 W3	FT 11/16 FM
SAPFL 204-12	-	SAPFL 204-12	RAT 3/4"	AELPFL 204-012 W3	FT 3/4 FM
SAPFL 205-13	-	-	-	AELPFL 205-013 W3	FT 13/16 FM
SAPFL 205-14	-	SAPFL 205-14	RAT 7/8"	AELPFL 205-014 W3	FT 7/8 FM
SAPFL 205-15	-	-	-	AELPFL 205-015 W3	FT 15/16 FM
SAPFL 205-16	-	SAPFL 205-16	RAT 1"	AELPFL 205-100 W3	FT 1 FM
SAPFL 206-17	-	-	RAT 1 1/16"	AELPFL 206-101 W3	FT 1-1/16 FM
SAPFL 206-18	-	SAPFL 206-18	RAT 1 1/8"	AELPFL 206-102 W3	FT 1-1/8 FM
SAPFL 206-19	-	SAPFL 206-19	RAT 1 3/16"	AELPFL 206-103 W3	FT 1-3/16 FM
SAPFL 206-20	-	SAPFL 206-20	RAT 1 1/4"-206	AELPFL 206-104 W3	FT 1-1/4 AFM
SAPFL 207-20	-	-	RAT 1 1/4"	AELPFL 207-104 W3	FT 1-1/4 FM
SAPFL 207-21	-	-	-	AELPFL 207-105 W3	-
SAPFL 207-22	-	-	RAT 1 3/8"	AELPFL 207-106 W3	FT 1-3/8 FM
SAPFL 207-23	-	-	RAT 1 7/16"	AELPFL 207-107 W3	FT 1-7/16 FM

SAFL 200

	ASAHI	FYH	INA	NTN	SKF
SAFL 204-12	-	-	PCJT 3/4"	-	FYT 3/4 FM
SAFL 205-13	-	-	-	-	FYT 13/16 FM
SAFL 205-14	-	-	PCJT 7/8"	-	FYT 7/8 FM
SAFL 205-15	-	-	-	-	FYT 15/16 FM
SAFL 205-16	-	-	PCJT 1"	-	FYT 1 FM
SAFL 206-17	-	-	PCJT 1 1/16"	-	FYT 1-1/16 FM
SAFL 206-18	-	-	PCJT 1 1/8"	-	FYT 1-1/8 FM
SAFL 206-19	-	-	PCJT 1 3/16"	-	FYT 1-3/16 FM
SAFL 206-20	-	-	PCJT 1 1/4"-206	-	FYT 1-1/4 AFM
SAFL 207-20	-	-	PCJT 1 1/4"	-	FYT 1-1/4 FM
SAFL 207-21	-	-	-	-	FYT 1-5/16 FM
SAFL 207-22	-	-	PCJT 1 3/8"	-	FYT 1-3/8 FM
SAFL 207-23	-	-	PCJT 1 7/16"	-	FYT 1-7/16 FM
SAFL 208-24	-	-	PCJT 1 1/2"	-	FYT 1-1/2 FM
SAFL 209-26	-	-	-	-	FYT 1-5/8 FM
SAFL 209-27	-	-	-	-	FYT 1-11/16 FM
SAFL 209-28	-	-	PCJT 1 3/4"	-	FYT 1-3/4 FM
SAFL 210-30	-	-	-	-	FYT 1-7/8 FM
SAFL 210-31	-	-	PCJT 1 15/16"	-	FYT 1-15/16 FM
SAFL 210-32	-	-	-	-	-

SAFL 200

	ASAHI	FYH	INA	NTN	SKF
SAFL 211-32	-	-	PCJT 2"	-	FYT 2 FM
SAFL 211-33	-	-	-	-	-
SAFL 211-34	-	-	-	-	-
SAFL 211-35	-	-	-	-	FYT 2-3/16 FM

UELFT 200

	ASAHI	FYH	INA	NTN	SKF
UELFT 204-12	-	-	-	UELFLU 204-012 D1 W3	-
UELFT 205-13	-	-	-	UELFLU 205-013 D1 W3	-
UELFT 205-14	-	-	-	UELFLU 205-014 D1 W3	-
UELFT 205-15	-	-	-	UELFLU 205-015 D1 W3	-
UELFT 205-16	-	-	-	UELFLU 205-100 D1 W3	-
UELFT 206-17	-	-	-	UELFLU 206-101 D1 W3	-
UELFT 206-18	-	-	-	UELFLU 206-102 D1 W3	-
UELFT 206-19	-	-	-	UELFLU 206-103 D1 W3	-
UELFT 206-20	-	-	-	UELFLU 206-104 D1 W3	-
UELFT 207-20	-	-	-	UELFLU 207-104 D1 W3	-
UELFT 207-21	-	-	-	UELFLU 207-105 D1 W3	-
UELFT 207-22	-	-	-	UELFLU 207-106 D1 W3	-
UELFT 207-23	-	-	-	UELFLU 207-107 D1 W3	-
UELFT 208-24	-	-	-	UELFLU 208-108 D1 W3	-
UELFT 209-26	-	-	-	UELFLU 209-110 D1 W3	-
UELFT 209-27	-	-	-	UELFLU 209-111 D1 W3	-
UELFT 209-28	-	-	-	UELFLU 209-112 D1 W3	-
UELFT 210-30	-	-	-	UELFLU 210-114 D1 W3	-
UELFT 210-31	-	-	-	UELFLU 210-115 D1 W3	-
UELFT 210-32	-	-	-	UELFLU 210-200 D1 W3	-
UELFT 211-32	-	-	-	UELFLU 211-200 D1 W3	-
UELFT 211-33	-	-	-	UELFLU 211-201 D1 W3	-
UELFT 211-34	-	-	-	UELFLU 211-202 D1 W3	-
UELFT 211-35	-	-	-	UELFLU 211-203 D1 W3	-
UELFT 212-36	-	-	-	UELFLU 212-204 D1 W3	-
UELFT 212-37	-	-	-	UELFLU 212-205 D1 W3	-
UELFT 212-38	-	-	-	UELFLU 212-206 D1 W3	-
UELFT 212-39	-	-	-	UELFLU 212-207 D1 W3	-
UELFT 213-40	-	-	-	UELFLU 213-208 D1 W3	-
UELFT 213-41	-	-	-	UELFLU 213-209 D1 W3	-
UELFT 214-42	-	-	-	UELFLU 214-210 D1 W3	-
UELFT 214-43	-	-	-	UELFLU 214-211 D1 W3	-
UELFT 214-44	-	-	-	UELFLU 214-212 D1 W3	-

UELFL 200

	ASAHI	FYH	INA	NTN	SKF
UELFL 201-8	-	-	-	-	-
UELFL 202-9	-	-	-	-	-
UELFL 202-10	-	-	RCJT 5/8"	-	-
UELFL 203-11	-	-	-	-	-
UELFL 204-12	-	-	RCJT 3/4"	UELFL 204-012 D1 W3	FYT 3/4 WM
UELFL 205-13	-	-	-	UELFL 205-013 D1 W3	FYT 13/16 WM
UELFL 205-14	-	-	RCJT 7/8"	UELFL 205-014 D1 W3	FYT 7/8 WM
UELFL 205-15	-	-	RCJT 15/16"	UELFL 205-015 D1 W3	FYT 15/16 WM
UELFL 205-16	-	-	RCJT 1"	UELFL 205-100 D1 W3	FYT 1 WM

UELFL 200

	ASAHI	FYH	INA	NTN	SKF
UELFL 206-17	-	-	-	UELFL 206-101 D1 W3	FYT 1-1/16 WM
UELFL 206-18	-	-	RCJT 1 1/8"	UELFL 206-102 D1 W3	FYT 1-1/8 WM
UELFL 206-19	-	-	RCJT 1 3/16"	UELFL 206-103 D1 W3	FYT 1-3/16 WM
UELFL 206-20	-	-	RCJT 1 1/4"-206	UELFL 206-104 D1 W3	FYT 1-1/4 AWM
UELFL 207-20	-	-	RCJT 1 1/4"	UELFL 207-104 D1 W3	FYT 1-1/4 WM
UELFL 207-21	-	-	-	UELFL 207-105 D1 W3	FYT 1-5/16 WM
UELFL 207-22	-	-	RCJT 1 3/8"	UELFL 207-106 D1 W3	FYT 1-3/8 WM
UELFL 207-23	-	-	RCJT 1 7/16"	UELFL 207-107 D1 W3	FYT 1-7/16 WM
UELFL 208-24	-	-	RCJT 1 1/2"	UELFL 208-108 D1 W3	FYT 1-1/2 WM
UELFL 209-26	-	-	RCJT 1 5/8"	UELFL 209-110 D1 W3	FYT 1-5/8 WM
UELFL 209-27	-	-	RCJT 1 11/16"	UELFL 209-111 D1 W3	FYT 1-11/16 WM
UELFL 209-28	-	-	RCJT 1 3/4"	UELFL 209-112 D1 W3	FYT 1-3/4 WM
UELFL 210-30	-	-	-	UELFL 210-114 D1 W3	FYT 1-7/8 WM
UELFL 210-31	-	-	RCJT 1 15/16"	UELFL 210-115 D1 W3	FYT 1-15/16 WM
UELFL 210-32	-	-	-	UELFL 210-200 D1 W3	-
UELFL 211-32	-	-	-	UELFL 211-200 D1 W3	FYT 2 WM
UELFL 211-33	-	-	-	UELFL 211-201 D1 W3	-
UELFL 211-34	-	-	-	UELFL 211-202 D1 W3	-
UELFL 211-35	-	-	-	UELFL 211-203 D1 W3	FYT 2-3/16 WM
UELFL 212-36	-	-	-	UELFL 212-204 D1 W3	-
UELFL 212-37	-	-	-	UELFL 212-205 D1 W3	-
UELFL 212-38	-	-	-	UELFL 212-206 D1 W3	-
UELFL 212-39	-	-	RCJT 2 7/16"	UELFL 212-207 D1 W3	-
UELFL 213-40	-	-	-	UELFL 213-208 D1 W3	-
UELFL 213-41	-	-	-	UELFL 213-209 D1 W3	-
UELFL 214-42	-	-	-	UELFL 214-210 D1 W3	-
UELFL 214-43	-	-	-	UELFL 214-211 D1 W3	-
UELFL 214-44	-	-	-	UELFL 214-212 D1 W3	-
UELFL 215-45	-	-	-	UELFL 215-213 D1 W3	-
UELFL 215-46	-	-	-	UELFL 215-214 D1 W3	-
UELFL 215-47	-	-	RCJT 2 15/16" S	UELFL 215-215 D1 W3	-
UELFL 215-48	-	-	-	UELFL 215-300 D1 W3	-

UCFL X00

	ASAHI	FYH	INA	NTN	SKF
UCFL X05-13	-	-	-	UCFL X05-013 D1	-
UCFL X05-14	UCFL X05-14	-	-	UCFL X05-014 D1	-
UCFL X05-15	UCFL X05-15	-	-	UCFL X05-015 D1	-
UCFL X05-16	UCFL X05-16	UCFL X05-16	-	UCFL X05-100 D1	-
UCFL X06-17	-	-	-	UCFL X06-101 D1	-
UCFL X06-18	UCFL X06-18	-	-	UCFL X06-102 D1	-
UCFL X06-19	UCFL X06-19	UCFL X06-19	-	UCFL X06-103 D1	-
UCFL X06-20	UCFL X06-20	UCFL X06-20	-	UCFL X06-104 D1	-
UCFL X07-20	-	-	-	-	-
UCFL X07-21	-	-	-	UCFL X07-105 D1	-
UCFL X07-22	UCFL X07-22	UCFL X07-22	-	UCFL X07-106 D1	-
UCFL X07-23	UCFL X07-23	UCFL X07-23	-	UCFL X07-107 D1	FYTM 1-7/16 TM
UCFL X08-24	UCFL X08-24	UCFL X08-24	-	UCFL X08-108 D1	FYTM 1-1/2 TM
UCFL X09-26	UCFL X09-26	-	-	UCFL X09-110 D1	-
UCFL X09-27	UCFL X09-27	UCFL X09-27	-	UCFL X09-111 D1	FYTM 1-11/16 TM
UCFL X09-28	UCFL X09-28	UCFL X09-28	-	UCFL X09-112 D1	FYTM 1-3/4 TM
UCFL X10-30	UCFL X10-30	-	-	UCFL X10-114 D1	-
UCFL X10-31	UCFL X10-31	UCFL X10-31	-	UCFL X10-115 D1	FYTM 1-15/16 TM
UCFL X10-32	UCFL X10-32	UCFL X10-32	-	UCFL X10-200 D1	-

UCFL 300

	ASAHI	FYH	INA	NTN	SKF
UCFL 305-13	-	-	-	UCFL 305-013 D1	-
UCFL 305-14	UCFL 305-14	-	-	UCFL 305-014 D1	-
UCFL 305-15	-	-	-	UCFL 305-015 D1	-
UCFL 305-16	UCFL 305-16	UCFL 305-16	-	UCFL 305-100 D1	-
UCFL 306-17	-	-	-	UCFL 306-101 D1	-
UCFL 306-18	UCFL 306-18	UCFL 306-18	-	UCFL 306-102 D1	-
UCFL 306-19	-	-	-	UCFL 306-103 D1	-
UCFL 306-20	-	-	-	-	-
UCFL 307-20	UCFL 307-20	UCFL 307-20	-	UCFL 307-104 D1	-
UCFL 307-21	-	-	-	UCFL 307-105 D1	-
UCFL 307-22	UCFL 307-22	UCFL 307-22	-	UCFL 307-106 D1	-
UCFL 307-23	-	-	-	UCFL 307-107 D1	-
UCFL 308-24	UCFL 308-24	UCFL 308-24	-	UCFL 308-108 D1	-
UCFL 309-26	UCFL 309-26	-	-	UCFL 309-110 D1	-
UCFL 309-27	-	-	-	UCFL 309-111 D1	-
UCFL 309-28	UCFL 309-28	UCFL 309-28	-	UCFL 309-112 D1	-
UCFL 310-30	UCFL 310-30	-	-	UCFL 310-114 D1	-
UCFL 310-31	-	UCFL 310-31	-	UCFL 310-115 D1	-
UCFL 310-32	-	-	-	-	-
UCFL 311-32	UCFL 311-32	UCFL 311-32	-	UCFL 311-200 D1	-
UCFL 311-33	-	-	-	UCFL 311-201 D1	-
UCFL 311-34	UCFL 311-34	-	-	UCFL 311-202 D1	-
UCFL 311-35	-	-	-	UCFL 311-203 D1	-
UCFL 312-36	UCFL 312-36	-	-	UCFL 312-204 D1	-
UCFL 312-37	-	-	-	UCFL 312-205 D1	-
UCFL 312-38	UCFL 312-38	-	-	UCFL 312-206 D1	-
UCFL 312-39	-	-	-	UCFL 312-207 D1	-
UCFL 313-40	UCFL 313-40	UCFL 313-40	-	UCFL 313-208 D1	-
UCFL 313-41	-	-	-	UCFL 313-209 D1	-
UCFL 314-42	-	-	-	UCFL 314-210 D1	-
UCFL 314-43	-	-	-	UCFL 314-211 D1	-
UCFL 314-44	UCFL 314-44	UCFL 314-44	-	UCFL 314-212 D1	-
UCFL 315-45	-	-	-	UCFL 315-213 D1	-
UCFL 315-46	-	-	-	UCFL 315-214 D1	-
UCFL 315-47	-	-	-	UCFL 315-215 D1	-
UCFL 315-48	UCFL 315-48	UCFL 315-48	-	UCFL 315-300 D1	-
UCFL 316-49	-	-	-	UCFL 316-301 D1	-
UCFL 316-50	UCFL 316-50	-	-	UCFL 316-302 D1	-

SBPF 200

	ASAHI	FYH	INA	NTN	SKF
SBPF 201-8	BPF 1-8	SBPF 201-8	-	ASPF 201-008	-
SBPF 202-9	BPF 2-9	-	-	ASPF 202-009	-
SBPF 202-10	BPF 2-10	SBPF 202-10	-	ASPF 202-010	-
SBPF 203-11	BPF 3-11	-	-	ASPF 203-011	-
SBPF 204-12	BPF 4-12	SBPF 204-12	-	ASPF 204-012	-
SBPF 205-13	-	-	-	ASPF 205-013	-
SBPF 205-14	BPF 5-14	SBPF 205-14	-	ASPF 205-014	-
SBPF 205-15	BPF 5-15	-	-	ASPF 205-015	-
SBPF 205-16	BPF 5-16	SBPF 205-16	RAY 1"	ASPF 205-100	-
SBPF 206-17	-	-	-	ASPF 206-101	-
SBPF 206-18	BPF 6-18	SBPF 206-18	-	ASPF 206-102	-
SBPF 206-19	BPF 6-19	SBPF 206-19	-	ASPF 206-103	-
SBPF 206-20	-	-	-	ASPF 206-104	-
SBPF 207-20	BPF 7-20	SBPF 207-20	-	ASPF 207-104	-
SBPF 207-21	BPF 7-21	-	-	ASPF 207-105	-
SBPF 207-22	BPF 7-22	SBPF 207-22	-	ASPF 207-106	-
SBPF 207-23	BPF 7-23	SBPF 207-23	-	ASPF 207-107	-

SAPF 200

	ASAHI	FYH	INA	NTN	SKF
SAPF 201-8	-	SAPF 201-8	RA 1/2"	AELPF 201-008 W3	F 1/2 FM
SAPF 202-9	-	-	-	AELPF 202-009 W3	-
SAPF 202-10	-	SAPF 202-10	RA 5/8"	AELPF 202-010 W3	F 5/8 FM
SAPF 203-11	-	-	-	AELPF 203-011 W3	F 11/16 FM
SAPF 204-12	-	SAPF 204-12	RA 3/4"	AELPF 204-012 W3	F 3/4 FM
SAPF 205-13	-	-	-	AELPF 205-013 W3	F 13/16 FM
SAPF 205-14	-	SAPF 205-14	RA 7/8"	AELPF 205-014 W3	F 7/8 FM
SAPF 205-15	-	-	-	AELPF 205-015 W3	F 15/16 FM
SAPF 205-16	-	SAPF 205-16	RA 1"	AELPF 205-100 W3	F 1 FM
SAPF 206-17	-	-	RA 1 1/16"	AELPF 206-101 W3	F 1-1/16 FM
SAPF 206-18	-	SAPF 206-18	RA 1 1/8"	AELPF 206-102 W3	F 1-1/8 FM
SAPF 206-19	-	SAPF 206-19	RA 1 3/16"	AELPF 206-103 W3	F 1-3/16 FM
SAPF 206-20	-	SAPF 206-20	RA 1 1/4"-206	AELPF 206-104 W3	F 1-1/4 AFM
SAPF 207-20	-	SAPF 207-20	RA 1 1/4"	AELPF 207-104 W3	F 1-1/4 FM
SAPF 207-21	-	-	-	AELPF 207-105 W3	F 1-5/16 FM
SAPF 207-22	-	SAPF 207-22	RA 1 3/8"	AELPF 207-106 W3	F 1-3/8 FM
SAPF 207-23	-	SAPF 207-23	RA 1 7/16"	AELPF 207-107 W3	F 1-7/16 FM

UCFC 200

	ASAHI	FYH	INA	NTN	SKF
UCFC 201-8	UCFC 201-8	UCFC 201-8	-	UCFC 201-008 D1	-
UCFC 202-9	UCFC 202-9	-	-	UCFC 202-009 D1	-
UCFC 202-10	UCFC 202-10	UCFC 202-10	-	UCFC 202-010 D1	-
UCFC 203-11	UCFC 203-11	-	-	UCFC 203-011 D1	-
UCFC 204-12	UCFC 204-12	UCFC 204-12	RMEY 3/4"	UCFC 204-012 D1	-
UCFC 205-13	-	-	-	UCFC 205-013 D1	-
UCFC 205-14	UCFC 205-14	UCFC 205-14	RMEY 7/8"	UCFC 205-014 D1	-
UCFC 205-15	UCFC 205-15	UCFC 205-15	-	UCFC 205-015 D1	-
UCFC 205-16	UCFC 205-16	UCFC 205-16	RMEY 1"	UCFC 205-100 D1	-
UCFC 206-17	UCFC 206-17	-	-	UCFC 206-101 D1	-
UCFC 206-18	UCFC 206-18	UCFC 206-18	RMEY 1 1/8"	UCFC 206-102 D1	-
UCFC 206-19	UCFC 206-19	UCFC 206-19	-	UCFC 206-103 D1	-
UCFC 206-20	-	-	RMEY 1 1/4"-206	UCFC 206-104 D1	-
UCFC 207-20	UCFC 207-20	UCFC 207-20	RMEY 1 1/4"	UCFC 207-104 D1	-
UCFC 207-21	UCFC 207-21	UCFC 207-21	-	UCFC 207-105 D1	-
UCFC 207-22	UCFC 207-22	UCFC 207-22	RMEY 1 3/8"	UCFC 207-106 D1	-
UCFC 207-23	UCFC 207-23	UCFC 207-23	-	UCFC 207-107 D1	-
UCFC 208-24	UCFC 208-24	UCFC 208-24	RMEY 1 1/2"	UCFC 208-108 D1	-
UCFC 209-26	UCFC 209-26	UCFC 209-26	-	UCFC 209-110 D1	-
UCFC 209-27	UCFC 209-27	UCFC 209-27	-	UCFC 209-111 D1	-
UCFC 209-28	UCFC 209-28	UCFC 209-28	RMEY 1 3/4"	UCFC 209-112 D1	-
UCFC 210-30	UCFC 210-30	UCFC 210-30	-	UCFC 210-114 D1	-
UCFC 210-31	UCFC 210-31	UCFC 210-31	RMEY 1 15/16"	UCFC 210-115 D1	-
UCFC 210-32	-	-	-	UCFC 210-200 D1	-
UCFC 211-32	UCFC 211-32	UCFC 211-32	RMEY 2"	UCFC 211-200 D1	-
UCFC 211-33	UCFC 211-33	-	-	UCFC 211-201 D1	-
UCFC 211-34	UCFC 211-34	UCFC 211-34	-	UCFC 211-202 D1	-
UCFC 211-35	UCFC 211-35	UCFC 211-35	-	UCFC 211-203 D1	-
UCFC 212-36	UCFC 212-36	UCFC 212-36	-	UCFC 212-204 D1	-
UCFC 212-37	-	-	-	UCFC 212-205 D1	-
UCFC 212-38	UCFC 212-38	UCFC 212-38	-	UCFC 212-206 D1	-
UCFC 212-39	UCFC 212-39	UCFC 212-39	RMEY 2 7/16"	UCFC 212-207 D1	-
UCFC 213-40	UCFC 213-40	UCFC 213-40	RMEY 2 1/2"-213	UCFC 213-208 D1	-
UCFC 213-41	-	-	-	UCFC 213-209 D1	-
UCFC 214-42	-	-	-	UCFC 214-210 D1	-
UCFC 214-43	-	-	-	UCFC 214-211 D1	-
UCFC 214-44	UCFC 214-44	UCFC 214-44	-	UCFC 214-212 D1	-
UCFC 215-45	-	-	-	UCFC 215-213 D1	-
UCFC 215-46	-	-	-	UCFC 215-214 D1	-
UCFC 215-47	-	-	RMEY 2 15/16"	UCFC 215-215 D1	-
UCFC 215-48	UCFC 215-48	UCFC 215-48	-	UCFC 215-300 D1	-
UCFC 216-49	-	-	-	UCFC 216-301 D1	-
UCFC 216-50	UCFC 216-50	-	-	UCFC 216-302 D1	-
UCFC 216-51	-	-	-	UCFC 216-303 D1	-
UCFC 217-52	UCFC 217-52	UCFC 217-52	-	UCFC 217-304 D1	-
UCFC 217-53	-	-	-	UCFC 217-305 D1	-
UCFC 217-55	-	-	-	UCFC 217-307 D1	-
UCFC 218-56	UCFC 218-56	UCFC 218-56	-	UCFC 218-308 D1	-

UELFC 200

	ASAHI	FYH	INA	NTN	SKF
UELFC 201-8	-	-	-	-	-
UELFC 202-9	-	-	-	-	-
UELFC 202-10	-	-	-	-	-
UELFC 203-11	-	-	-	-	-
UELFC 204-12	-	-	-	UELFC 204-012 D1 W3	-
UELFC 205-13	-	-	-	UELFC 205-013 D1 W3	-
UELFC 205-14	-	-	-	UELFC 205-014 D1 W3	-
UELFC 205-15	-	-	-	UELFC 205-015 D1 W3	-
UELFC 205-16	-	-	-	UELFC 205-100 D1 W3	-
UELFC 206-17	-	-	-	UELFC 206-101 D1 W3	-
UELFC 206-18	-	-	-	UELFC 206-102 D1 W3	-
UELFC 206-19	-	-	-	UELFC 206-103 D1 W3	-
UELFC 206-20	-	-	-	UELFC 206-104 D1 W3	-
UELFC 207-20	-	-	-	UELFC 207-104 D1 W3	-
UELFC 207-21	-	-	-	UELFC 207-105 D1 W3	-
UELFC 207-22	-	-	-	UELFC 207-106 D1 W3	-
UELFC 207-23	-	-	-	UELFC 207-107 D1 W3	-
UELFC 208-24	-	-	-	UELFC 208-108 D1 W3	-
UELFC 209-26	-	-	-	UELFC 209-110 D1 W3	-
UELFC 209-27	-	-	-	UELFC 209-111 D1 W3	-
UELFC 209-28	-	-	-	UELFC 209-112 D1 W3	-
UELFC 210-30	-	-	-	UELFC 210-114 D1 W3	-
UELFC 210-31	-	-	-	UELFC 210-115 D1 W3	-
UELFC 210-32	-	-	-	UELFC 210-200 D1 W3	-
UELFC 211-32	-	-	-	UELFC 211-200 D1 W3	-
UELFC 211-33	-	-	-	UELFC 211-201 D1 W3	-
UELFC 211-34	-	-	-	UELFC 211-202 D1 W3	-
UELFC 211-35	-	-	-	UELFC 211-203 D1 W3	-
UELFC 212-36	-	-	-	UELFC 212-204 D1 W3	-
UELFC 212-37	-	-	-	UELFC 212-205 D1 W3	-
UELFC 212-38	-	-	-	UELFC 212-206 D1 W3	-
UELFC 212-39	-	-	-	UELFC 212-207 D1 W3	-
UELFC 213-40	-	-	-	UELFC 213-208 D1 W3	-
UELFC 213-41	-	-	-	UELFC 213-209 D1 W3	-
UELFC 214-42	-	-	-	UELFC 214-210 D1 W3	-
UELFC 214-43	-	-	-	UELFC 214-211 D1 W3	-
UELFC 214-44	-	-	-	UELFC 214-212 D1 W3	-
UELFC 215-45	-	-	-	UELFC 215-213 D1 W3	-
UELFC 215-46	-	-	-	UELFC 215-214 D1 W3	-
UELFC 215-47	-	-	-	UELFC 215-215 D1 W3	-
UELFC 215-48	-	-	-	UELFC 215-300 D1 W3	-

UCHA 200

	ASAHI	FYH	INA	NTN	SKF
UCHA 201-8	-	UCHA 201-8	-	UCHB 201-008 D1	-
UCHA 202-9	-	-	-	UCHB 202-009 D1	-
UCHA 202-10	-	UCHA 202-10	-	UCHB 202-010 D1	-
UCHA 203-11	-	-	-	UCHB 203-011 D1	-
UCHA 204-12	-	UCHA 204-12	RHEY 3/4"	UCHB 204-012 D1	-
UCHA 205-13	-	-	-	UCHB 205-013 D1	-
UCHA 205-14	UCECH 205-14	UCHA 205-14	RHEY 7/8"	UCHB 205-014 D1	-
UCHA 205-15	UCECH 205-15	UCHA 205-15	-	UCHB 205-015 D1	-
UCHA 205-16	UCECH 205-16	UCHA 205-16	RHEY 1"	UCHB 205-100 D1	-
UCHA 206-17	UCECH 206-17	-	-	UCHB 206-101 D1	-
UCHA 206-18	UCECH 206-18	UCHA 206-18	RHEY 1 1/8"	UCHB 206-102 D1	-
UCHA 206-19	UCECH 206-19	UCHA 206-19	-	UCHB 206-103 D1	-
UCHA 206-20	-	-	RHEY 1 1/4"-206	UCHB 206-104 D1	-
UCHA 207-20	UCECH 207-20	UCHA 207-20	RHEY 1 1/4"	UCHB 207-104 D1	-
UCHA 207-21	UCECH 207-21	UCHA 207-21	-	UCHB 207-105 D1	-
UCHA 207-22	UCECH 207-22	UCHA 207-22	RHEY 1 3/8"	UCHB 207-106 D1	-
UCHA 207-23	UCECH 207-23	UCHA 207-23	-	UCHB 207-107 D1	-
UCHA 208-24	UCECH 208-24	UCHA 208-24	RHEY 1 1/2"	UCHB 208-108 D1	-
UCHA 209-26	UCECH 209-26	UCHA 209-26	-	UCHB 209-110 D1	-
UCHA 209-27	UCECH 209-27	UCHA 209-27	-	UCHB 209-111 D1	-
UCHA 209-28	UCECH 209-28	UCHA 209-28	RHEY 1 3/4"	UCHB 209-112 D1	-
UCHA 210-30	UCECH 210-30	UCHA 210-30	-	UCHB 210-114 D1	-
UCHA 210-31	UCECH 210-31	UCHA 210-31	RHEY 1 15/16"	UCHB 210-115 D1	-
UCHA 210-32	-	-	-	UCHB 210-200 D1	-
UCHA 211-32	-	UCHA 211-32	-	-	-
UCHA 211-33	-	-	-	-	-
UCHA 211-34	-	UCHA 211-34	-	-	-
UCHA 211-35	-	UCHA 211-35	-	-	-
UCHA 212-36	-	UCHA 212-36	-	UCHB 212-204 D1	-
UCHA 212-37	-	-	-	UCHB 212-205 D1	-
UCHA 212-38	-	UCHA 212-38	-	UCHB 212-206 D1	-
UCHA 212-39	-	UCHA 212-39	-	UCHB 212-207 D1	-
UCHA 213-40	-	UCHA 213-40	-	UCHB 213-208 D1	-
UCHA 213-41	-	-	-	-	-
UCHA 214-42	-	-	-	-	-
UCHA 214-43	-	-	-	-	-
UCHA 214-44	-	UCHA 214-44	-	-	-
UCHA 215-45	-	-	-	-	-
UCHA 215-46	-	-	-	-	-
UCHA 215-47	-	-	-	-	-
UCHA 215-48	-	UCHA 215-48	-	-	-

SAHA 200

	ASAHI	FYH	INA	NTN	SKF
SAHA 204-12	-	-	PHE 3/4"	-	-
SAHA 205-13	-	-	-	-	-
SAHA 205-14	-	-	PHE 7/8"	-	-
SAHA 205-15	-	-	-	-	-
SAHA 205-16	-	-	PHE 1"	-	-
SAHA 206-17	-	-	PHE 1 1/16"	-	-
SAHA 206-18	-	-	PHE 1 1/8"	-	-
SAHA 206-19	-	-	PHE 1 3/16"	-	-
SAHA 206-20	-	-	PHE 1 1/4"-206	-	-
SAHA 207-20	-	-	PHE 1 1/4"	-	-
SAHA 207-21	-	-	-	-	-
SAHA 207-22	-	-	PHE 1 3/8"	-	-

SAHA 200

	ASAHI	FYH	INA	NTN	SKF
SAHA 207-23	-	-	PHE 1 7/16"	-	-
SAHA 208-24	-	-	PHE 1 1/2"	-	-
SAHA 209-26	-	-	-	-	-
SAHA 209-27	-	-	-	-	-
SAHA 209-28	-	-	PHE 1 3/4"	-	-
SAHA 210-30	-	-	-	-	-
SAHA 210-31	-	-	PHE 1 15/16"	-	-
SAHA 210-32	-	-	-	-	-
SAHA 211-32	-	-	-	-	-
SAHA 211-33	-	-	-	-	-
SAHA 211-34	-	-	-	-	-
SAHA 211-35	-	-	-	-	-

UCC 200

	ASAHI	FYH	INA	NTN	SKF
UCC 201-8	UCC 201-8	UCC 201-8	-	UCC 201-008 D1	-
UCC 202-9	UCC 202-9	-	-	UCC 202-009 D1	-
UCC 202-10	UCC 202-10	UCC 202-10	-	UCC 202-010 D1	-
UCC 203-11	UCC 203-11	-	-	UCC 203-011 D1	-
UCC 204-12	UCC 204-12	UCC 204-12	-	UCC 204-012 D1	-
UCC 205-13	-	-	-	UCC 205-013 D1	-
UCC 205-14	UCC 205-14	UCC 205-14	-	UCC 205-014 D1	-
UCC 205-15	UCC 205-15	UCC 205-15	-	UCC 205-015 D1	-
UCC 205-16	UCC 205-16	UCC 205-16	-	UCC 205-100 D1	-
UCC 206-17	UCC 206-17	-	-	UCC 206-101 D1	-
UCC 206-18	UCC 206-18	UCC 206-18	-	UCC 206-102 D1	-
UCC 206-19	UCC 206-19	UCC 206-19	-	UCC 206-103 D1	-
UCC 206-20	-	-	-	UCC 206-104 D1	-
UCC 207-20	UCC 207-20	UCC 207-20	-	UCC 207-104 D1	-
UCC 207-21	UCC 207-21	UCC 207-21	-	UCC 207-105 D1	-
UCC 207-22	UCC 207-22	UCC 207-22	-	UCC 207-106 D1	-
UCC 207-23	UCC 207-23	UCC 207-23	-	UCC 207-107 D1	-
UCC 208-24	UCC 208-24	UCC 208-24	-	UCC 208-108 D1	-
UCC 209-26	UCC 209-26	UCC 209-26	-	UCC 209-110 D1	-
UCC 209-27	UCC 209-27	UCC 209-27	-	UCC 209-111 D1	-
UCC 209-28	UCC 209-28	UCC 209-28	-	UCC 209-112 D1	-
UCC 210-30	UCC 210-30	UCC 210-30	-	UCC 210-114 D1	-
UCC 210-31	UCC 210-31	UCC 210-31	-	UCC 210-115 D1	-
UCC 210-32	-	-	-	UCC 210-200 D1	-
UCC 211-32	UCC 211-32	UCC 211-32	-	UCC 211-200 D1	-
UCC 211-33	UCC 211-33	-	-	UCC 211-201 D1	-
UCC 211-34	UCC 211-34	UCC 211-34	-	UCC 211-202 D1	-
UCC 211-35	UCC 211-35	UCC 211-35	-	UCC 211-203 D1	-
UCC 212-36	UCC 212-36	UCC 212-36	-	UCC 212-204 D1	-
UCC 212-37	-	-	-	UCC 212-205 D1	-
UCC 212-38	UCC 212-38	UCC 212-38	-	UCC 212-206 D1	-
UCC 212-39	UCC 212-39	UCC 212-39	-	UCC 212-207 D1	-
UCC 213-40	UCC 213-40	UCC 213-40	-	UCC 213-208 D1	-
UCC 213-41	-	-	-	UCC 213-209 D1	-

UCST 200

	ASAHI	FYH	INA	NTN	SKF
UCST 204-12	UCST 204-12	-	-	-	-
UCST 205-13	-	-	-	-	-
UCST 205-14	UCST 205-14	-	-	-	-
UCST 205-15	UCST 205-15	-	-	-	-
UCST 205-16	UCST 205-16	-	-	-	-
UCST 206-17	UCST 206-17	-	-	-	-
UCST 206-18	UCST 206-18	-	-	-	-
UCST 206-19	UCST 206-19	-	-	-	-
UCST 206-20	-	-	-	-	-
UCST 207-20	UCST 207-20	-	-	-	-
UCST 207-21	UCST 207-21	-	-	-	-
UCST 207-22	UCST 207-22	-	-	-	-
UCST 207-23	UCST 207-23	-	-	-	-
UCST 208-24	UCST 208-24	-	-	-	-
UCST 209-26	UCST 209-26	-	-	-	-
UCST 209-27	UCST 209-27	-	-	-	-
UCST 209-28	UCST 209-28	-	-	-	-
UCST 210-30	UCST 210-30	-	-	-	-
UCST 210-31	UCST 210-31	-	-	-	-
UCST 210-32	-	-	-	-	-
UCST 211-32	UCST 211-32	-	-	-	-
UCST 211-33	UCST 211-33	-	-	-	-
UCST 211-34	UCST 211-34	-	-	-	-
UCST 211-35	UCST 211-35	-	-	-	-
UCST 212-36	UCST 212-36	-	-	-	-
UCST 212-37	-	-	-	-	-
UCST 212-38	UCST 212-38	-	-	-	-
UCST 212-39	UCST 212-39	-	-	-	-
UCST 213-40	UCST 213-40	-	-	-	-
UCST 213-41	-	-	-	-	-
UCST 214-42	-	-	-	-	-
UCST 214-43	-	-	-	-	-
UCST 214-44	-	-	-	-	-
UCST 215-45	-	-	-	-	-
UCST 215-46	-	-	-	-	-
UCST 215-47	-	-	-	-	-
UCST 215-48	-	-	-	-	-

UCT 200

	ASAHI	FYH	INA	NTN	SKF
UCT 201-8	UCT 201-8	UCT 201-8	-	UCT 201-008 D1	-
UCT 202-9	UCT 202-9	-	-	UCT 202-009 D1	-
UCT 202-10	UCT 202-10	UCT 202-10	-	UCT 202-010 D1	-
UCT 203-11	UCT 203-11	-	-	UCT 203-011 D1	-
UCT 204-12	UCT 204-12	UCT 204-12	RTUY 3 /4"	UCT 204-012 D1	TBY 3/4 TM
UCT 205-13	-	-	-	UCT 205-013 D1	TBY 13/16 TM
UCT 205-14	UCT 205-14	UCT 205-14	RTUY 7/8"	UCT 205-014 D1	TBY 7/8 TM
UCT 205-15	UCT 205-15	UCT 205-15	-	UCT 205-015 D1	TBY 15/16 TM
UCT 205-16	UCT 205-16	UCT 205-16	RTUY 1"	UCT 205-100 D1	TBY 1 TM
UCT 206-17	UCT 206-17	-	-	UCT 206-101 D1	TBY 1-1/16 TM
UCT 206-18	UCT 206-18	UCT 206-18	RTUY 1 1/8"	UCT 206-102 D1	TBY 1-1/8 TM
UCT 206-19	UCT 206-19	UCT 206-19	-	UCT 206-103 D1	TBY 1-3/16 TM
UCT 206-20	-	-	RTUY 1 1/4"-206	UCT 206-104 D1	TBY 1-1/4 ATM
UCT 207-20	UCT 207-20	UCT 207-20	RTUY 1 1/4"	UCT 207-104 D1	TBY 1-1/4 TM
UCT 207-21	UCT 207-21	UCT 207-21	-	UCT 207-105 D1	TBY 1-5/16 TM
UCT 207-22	UCT 207-22	UCT 207-22	-	UCT 207-106 D1	TBY 1-3/8 TM
UCT 207-23	UCT 207-23	UCT 207-23	-	UCT 207-107 D1	TBY 1-7/16 TM
UCT 208-24	UCT 208-24	UCT 208-24	RTUY 1 1/2"	UCT 208-108 D1	TBY 1-1/2 TM
UCT 209-26	UCT 209-26	UCT 209-26	-	UCT 209-110 D1	TBY 1-5/8 TM
UCT 209-27	UCT 209-27	UCT 209-27	-	UCT 209-111 D1	TBY 1-11/16 TM
UCT 209-28	UCT 209-28	UCT 209-28	RTUY 1 3/4"	UCT 209-112 D1	TBY 1-3/4 TM
UCT 210-30	UCT 210-30	UCT 210-30	-	UCT 210-114 D1	TBY 1-7/8 TM
UCT 210-31	UCT 210-31	UCT 210-31	RTUY 1 15/16"	UCT 210-115 D1	TBY 1-15/16 TM
UCT 210-32	-	-	-	UCT 210-200 D1	-
UCT 211-32	UCT 211-32	UCT 211-32	RTUY 2"	UCT 211-200 D1	TBY 2 TM
UCT 211-33	UCT 211-33	-	-	UCT 211-201 D1	-
UCT 211-34	UCT 211-34	UCT 211-34	-	UCT 211-202 D1	-
UCT 211-35	UCT 211-35	UCT 211-35	-	UCT 211-203 D1	TBY 2-3/16 TM
UCT 212-36	UCT 212-36	UCT 212-36	-	UCT 212-204 D1	-
UCT 212-37	-	-	-	UCT 212-205 D1	-
UCT 212-38	UCT 212-38	UCT 212-38	-	UCT 212-206 D1	-
UCT 212-39	UCT 212-39	UCT 212-39	RTUY 2 7/16"	UCT 212-207 D1	-
UCT 213-40	UCT 213-40	UCT 213-40	-	UCT 213-208 D1	-
UCT 213-41	-	-	-	UCT 213-209 D1	-
UCT 214-42	-	-	-	UCT 214-210 D1	-
UCT 214-43	-	-	-	UCT 214-211 D1	-
UCT 214-44	UCT 214-44	UCT 214-44	-	UCT 214-212 D1	-
UCT 215-45	-	-	-	UCT 215-213 D1	-
UCT 215-46	-	-	-	UCT 215-214 D1	-
UCT 215-47	-	-	RTUY 2 15/16"	UCT 215-215 D1	-
UCT 215-48	UCT 215-48	UCT 215-48	-	UCT 215-300 D1	-
UCT 216-49	-	-	-	UCT 216-301 D1	-
UCT 216-50	UCT 216-50	-	-	UCT 216-302 D1	-
UCT 216-51	-	-	-	UCT 216-303 D1	-
UCT 217-52	UCT 217-52	UCT 217-52	-	UCT 217-304 D1	-
UCT 217-53	-	-	-	UCT 217-305 D1	-
UCT 217-55	-	-	-	UCT 217-307 D1	-

SAST 200

	ASAHI	FYH	INA	NTN	SKF
SAST 204-12	-	-	PTUE 3/4" AH01	-	-
SAST 205-13	-	-	-	-	-
SAST 205-14	-	-	PTUE 7/8" AH01	-	-
SAST 205-15	-	-	-	-	-
SAST 205-16	-	-	PTUE 1" AH01	-	-
SAST 206-17	-	-	PTUE 1 1/16" AH01	-	-
SAST 206-18	-	-	PTUE 1 1/8" AH01	-	-
SAST 206-19	-	-	PTUE 1 3/16" AH01	-	-
SAST 206-20	-	-	PTUE 1 1/4"-206 AH01	-	-
SAST 207-20	-	-	PTUE 1 1/4" AH01	-	-
SAST 207-21	-	-	-	-	-
SAST 207-22	-	-	-	-	-
SAST 207-23	-	-	PTUE 1 7/16" AH01	-	-
SAST 208-24	-	-	PTUE 1 1/2" AH01	-	-
SAST 209-26	-	-	-	-	-
SAST 209-27	-	-	-	-	-
SAST 209-28	-	-	PTUE 1 3/4" AH01	-	-
SAST 210-30	-	-	-	-	-
SAST 210-31	-	-	PTUE 1 15/16" AH01	-	-
SAST 210-32	-	-	-	-	-
SAST 211-32	-	-	PTUE 2" AH01	-	-
SAST 211-33	-	-	-	-	-
SAST 211-34	-	-	-	-	-
SAST 211-35	-	-	PTUE 2 3/16" AH01	-	-

SAT 200

	ASAHI	FYH	INA	NTN	SKF
SAT 204-12	-	-	-	-	TBY 3/4 FM
SAT 205-13	-	-	-	-	TBY 13/16 FM
SAT 205-14	-	-	-	-	TBY 7/8 FM
SAT 205-15	-	-	-	-	TBY 15/16 FM
SAT 205-16	-	-	-	-	TBY 1 FM
SAT 206-17	-	-	-	-	TBY 1-1/16 FM
SAT 206-18	-	-	-	-	TBY 1-1/8 FM
SAT 206-19	-	-	-	-	TBY 1-3/16 FM
SAT 206-20	-	-	-	-	TBY 1-1/4 AFM
SAT 207-20	-	-	-	-	TBY 1-1/4 FM
SAT 207-21	-	-	-	-	TBY 1-5/16 FM
SAT 207-22	-	-	-	-	TBY 1-3/8 FM
SAT 207-23	-	-	-	-	TBY 1-7/16 FM
SAT 208-24	-	-	-	-	TBY 1-1/2 FM
SAT 209-26	-	-	-	-	TBY 1-5/8 FM
SAT 209-27	-	-	-	-	TBY 1-11/16 FM
SAT 209-28	-	-	-	-	TBY 1-3/4 FM
SAT 210-30	-	-	-	-	TBY 1-7/8 FM
SAT 210-31	-	-	-	-	TBY 1-15/16 FM
SAT 210-32	-	-	-	-	-
SAT 211-32	-	-	-	-	TBY 2 FM
SAT 211-33	-	-	-	-	-
SAT 211-34	-	-	-	-	-
SAT 211-35	-	-	-	-	TBY 2-3/16 FM

UELT 200

	ASAHI	FYH	INA	NTN	SKF
UELT 201-8	-	-	-	-	-
UELT 202-9	-	-	-	-	-
UELT 202-10	-	-	-	-	-
UELT 203-11	-	-	-	-	-
UELT 204-12	-	-	RTUE 3/4" AH01	UELT 204-012 D1 W3	TBY 3/4 WM
UELT 205-13	-	-	-	UELT 205-013 D1 W3	TBY 13/16 WM
UELT 205-14	-	-	RTUE 7/8" AH01	UELT 205-014 D1 W3	TBY 7/8 WM
UELT 205-15	-	-	RTUE 15/16" AH01	UELT 205-015 D1 W3	TBY 15/16 WM
UELT 205-16	-	-	RTUE 1" AH01	UELT 205-100 D1 W3	TBY 1 WM
UELT 206-17	-	-	-	UELT 206-101 D1 W3	TBY 1-1/16 WM
UELT 206-18	-	-	RTUE 1 1/8" AH01	UELT 206-102 D1 W3	TBY 1-1/8 WM
UELT 206-19	-	-	RTUE 1 3/16" AH01	UELT 206-103 D1 W3	TBY 1-3/16 WM
UELT 206-20	-	-	RTUE 1 1/4"-206 AH01	UELT 206-104 D1 W3	TBY 1-1/4 AWM
UELT 207-20	-	-	RTUE 1 1/4" AH01	UELT 207-104 D1 W3	TBY 1-1/4 WM
UELT 207-21	-	-	-	UELT 207-105 D1 W3	TBY 1-5/16 WM
UELT 207-22	-	-	-	UELT 207-106 D1 W3	TBY 1-3/8 WM
UELT 207-23	-	-	RTUE 1 7/16" AH01	UELT 207-107 D1 W3	TBY 1-7/16 WM
UELT 208-24	-	-	RTUE 1 1/2" AH01	UELT 208-108 D1 W3	TBY 1-1/2 WM
UELT 209-26	-	-	RTUE 1 5/8" AH01	UELT 209-110 D1 W3	TBY 1-5/8 WM
UELT 209-27	-	-	RTUE 1 11/16" AH01	UELT 209-111 D1 W3	TBY 1-11/16 WM
UELT 209-28	-	-	RTUE 1 3/4" AH01	UELT 209-112 D1 W3	TBY 1-3/4 WM
UELT 210-30	-	-	-	UELT 210-114 D1 W3	TBY 1-7/8 WM
UELT 210-31	-	-	RTUE 1 15/16" AH01	UELT 210-115 D1 W3	TBY 1-15/16 WM
UELT 210-32	-	-	-	UELT 210-200 D1 W3	-
UELT 211-32	-	-	-	UELT 211-200 D1 W3	TBY 2 WM
UELT 211-33	-	-	-	UELT 211-201 D1 W3	-
UELT 211-34	-	-	-	UELT 211-202 D1 W3	-
UELT 211-35	-	-	RTUE 2 3/16" AH01	UELT 211-203 D1 W3	TBY 2-3/16 WM
UELT 212-36	-	-	-	UELT 212-204 D1 W3	-
UELT 212-37	-	-	-	UELT 212-205 D1 W3	-
UELT 212-38	-	-	-	UELT 212-206 D1 W3	-
UELT 212-39	-	-	RTUE 2 7/16" AH01	UELT 212-207 D1 W3	-
UELT 213-40	-	-	-	UELT 213-208 D1 W3	-
UELT 213-41	-	-	-	UELT 213-209 D1 W3	-
UELT 214-42	-	-	-	UELT 214-210 D1 W3	-
UELT 214-43	-	-	-	UELT 214-211 D1 W3	-
UELT 214-44	-	-	-	UELT 214-212 D1 W3	-
UELT 215-45	-	-	-	UELT 215-213 D1 W3	-
UELT 215-46	-	-	-	UELT 215-214 D1 W3	-
UELT 215-47	-	-	RTUE 2 15/16" S AH01	UELT 215-215 D1 W3	-
UELT 215-48	-	-	-	UELT 215-300 D1 W3	-

SB 200

	ASAHI	FYH	INA	NTN	SKF
SB 201-8	B 1-8	SB 201-8	GAY 008 NPPB	AS 201-008	-
SB 202-9	B 2-9	-	-	AS 202-009	-
SB 202-10	B 2-10	SB 202-10	GAY 010 NPPB	AS 202-010	-
SB 203-11	B 3-11	-	-	AS 203-011	-
SB 204-12	B 4-12	SB 204-12	GAY 012 NPPB	AS 204-012	-
SB 205-13	-	-	-	AS 205-013	-
SB 205-14	B 5-14	SB 205-14	-	AS 205-014	-
SB 205-15	B 5-15	-	-	AS 205-015	-
SB 205-16	B 5-16	SB 205-16	GAY 100 NPPB	AS 205-100	-
SB 206-17	-	-	-	AS 206-101	-
SB 206-18	B 6-18	SB 206-18	-	AS 206-102	-
SB 206-19	B 6-19	SB 206-19	GAY 103 NPPB	AS 206-103	-
SB 206-20	-	-	-	AS 206-104	-
SB 207-20	B 7-20	SB 207-20	GAY 104 NPPB	-	-
SB 207-21	B 7-21	-	-	-	-
SB 207-22	B 7-22	SB 207-22	-	-	-
SB 207-23	B 7-23	SB 207-23	GAY 107 NPPB	-	-
SB 208-24	-	SB 208-24	GAY 108 NPPB	-	-
SB 208-25	-	-	-	-	-

SA 200

	ASAHI	FYH	INA	NTN	SKF
SA 201-8	KH 201-8 AE	SA 201-8	GRA 008 NPPB	AEL 201-008 W3	YET 203-008
SA 202-9	KH 202-9 AE	-	-	AEL 202-009 W3	-
SA 202-10	KH 202-10 AE	SA 202-10	GRA 010 NPPB	AEL 202-010 W3	YET 203-010
SA 203-11	KH 203-11 AE	-	-	AEL 203-011 W3	YET 203-011
SA 204-12	KH 204-12 AE	SA 204-12	GRA 012 NPPB	AEL 204-012 W3	YET 204-012
SA 205-13	-	-	-	AEL 205-013 W3	YET 205-013
SA 205-14	KH 205-14 AE	SA 205-14	GRA 014 NPPB	AEL 205-014 W3	YET 205-014
SA 205-15	KH 205-15 AE	-	-	AEL 205-015 W3	YET 205-015
SA 205-16	KH 205-16 AE	SA 205-16	GRA 100 NPPB	AEL 205-100 W3	YET 205-100
SA 206-17	-	-	GRA 101 NPPB	-	YET 206-101
SA 206-18	-	SA 206-18	GRA 102 NPPB	-	YET 206-102
SA 206-19	-	SA 206-19	GRA 103 NPPB	-	YET 206-103
SA 206-20	-	SA 206-20	GRA 104 NPPB-206	-	YET 206-104
SA 207-20	KH 207-20 AE	SA 207-20	GRA 104 NPPB	AEL 207-104 W3	YET 207-104
SA 207-21	KH 207-21 AE	-	-	AEL 207-105 W3	YET 207-105
SA 207-22	KH 207-22 AE	SA 207-22	GRA 106 NPPB	AEL 207-106 W3	YET 207-106
SA 207-23	KH 207-23 AE	SA 207-23	GRA 107 NPPB	AEL 207-107 W3	YET 207-107
SA 208-24	-	SA 208-24	GRA 108 NPPB	-	YET 208-108
SA 209-26	KH 209-26 BE	-	-	-	YET 209-110
SA 209-27	KH 209-27 BE	-	-	-	YET 209-111
SA 209-28	KH 209-28 BE	-	GRA 112 NPPB	-	YET 209-112
SA 210-30	KH 210-30 BE	-	-	-	YET 210-114
SA 210-31	KH 210-31 BE	-	GRA 115 NPPB	-	YET 210-115
SA 210-32	-	-	-	-	-
SA 211-32	KH 211-32 BE	-	GRA 200 NPPB	-	YET 211-200
SA 211-33	-	-	-	-	-
SA 211-34	KH 211-34 BE	-	-	-	-
SA 211-35	KH 211-35 BE	-	GRA 203 NPPB	-	YET 211-203

UC 200

	ASAHI	FYH	INA	NTN	SKF
UC 201-8	UC 201-8	UC 201-8	-	UC 201-008 D1	-
UC 202-9	UC 202-9	-	-	UC 202-009 D1	-
UC 202-10	UC 202-10	UC 202-10	-	UC 202-010 D1	-
UC 203-11	UC 203-11	-	-	UC 203-011 D1	-
UC 204-12	UC 204-12	UC 204-12	GY 1012 KRRB	UC 204-012 D1	YAR 204-012
UC 205-13	-	-	-	UC 205-013 D1	YAR 205-013
UC 205-14	UC 205-14	UC 205-14	GY 1014 KRRB	UC 205-014 D1	YAR 205-014
UC 205-15	UC 205-15	UC 205-15	-	UC 205-015 D1	YAR 205-015
UC 205-16	UC 205-16	UC 205-16	GY 1100 KRRB	UC 205-100 D1	YAR 205-100
UC 206-17	UC 206-17	-	-	UC 206-101 D1	YAR 206-101
UC 206-18	UC 206-18	UC 206-18	GY 1102 KRRB	UC 206-102 D1	YAR 206-102
UC 206-19	UC 206-19	UC 206-19	-	UC 206-103 D1	YAR 206-103
UC 206-20	-	-	GY 1104 KRRB-206	UC 206-104 D1	YAR 206-104
UC 207-20	UC 207-20	UC 207-20	GY 1104 KRRB	UC 207-104 D1	YAR 207-104
UC 207-21	UC 207-21	UC 207-21	-	UC 207-105 D1	YAR 207-105
UC 207-22	UC 207-22	UC 207-22	GY 1106 KRRB	UC 207-106 D1	YAR 207-106
UC 207-23	UC 207-23	UC 207-23	-	UC 207-107 D1	YAR 207-107
UC 208-24	UC 208-24	UC 208-24	GY 1108 KRRB	UC 208-108 D1	YAR 208-108
UC 209-26	UC 209-26	UC 209-26	-	UC 209-110 D1	YAR 209-110
UC 209-27	UC 209-27	UC 209-27	-	UC 209-111 D1	YAR 209-111
UC 209-28	UC 209-28	UC 209-28	GY 1112 KRRB	UC 209-112 D1	YAR 209-112
UC 210-30	UC 210-30	UC 210-30	-	UC 210-114 D1	YAR 210-114
UC 210-31	UC 210-31	UC 210-31	GY 1115 KRRB	UC 210-115 D1	YAR 210-115
UC 210-32	-	-	-	UC 210-200 D1	-
UC 211-32	UC 211-32	UC 211-32	GY 1200 KRRB	UC 211-200 D1	YAR 211-200
UC 211-33	UC 211-33	-	-	UC 211-201 D1	-
UC 211-34	UC 211-34	UC 211-34	-	UC 211-202 D1	
UC 211-35	UC 211-35	UC 211-35	-	UC 211-203 D1	YAR 211-203
UC 212-36	UC 212-36	UC 212-36	-	UC 212-204 D1	YAR 212-204
UC 212-37	-	-	-	UC 212-205 D1	-
UC 212-38	UC 212-38	UC 212-38	-	UC 212-206 D1	-
UC 212-39	UC 212-39	UC 212-39	GY 1207 KRRB	UC 212-207 D1	YAR 212-207
UC 213-40	UC 213-40	UC 213-40	GY 1208 KRRB-213	UC 213-208 D1	YAR 213-208
UC 213-41	-	-	-	UC 213-209 D1	-
UC 214-42	-	-	-	UC 214-210 D1	-
UC 214-43	-	-	-	UC 214-211 D1	-
UC 214-44	UC 214-44	UC 214-44	-	UC 214-212 D1	-
UC 215-45	-	-	-	UC 215-213 D1	-
UC 215-46	-	-	-	UC 215-214 D1	-
UC 215-47	-	-	GY 1215 KRRB	UC 215-215 D1	YAR 215-215
UC 215-48	UC 215-48	UC 215-48	-	UC 215-300 D1	-
UC 216-49	-	-	-	UC 216-301 D1	-
UC 216-50	UC 216-50	-	-	UC 216-302 D1	-
UC 216-51	-	-	-	UC 216-303 D1	-
UC 217-52	UC 217-52	UC 217-52	-	UC 217-304 D1	-
UC 217-53	-	-	-	UC 217-305 D1	-
UC 217-55	-	-	-	UC 217-307 D1	-
UC 218-56	UC 218-56	UC 218-56	-	UC 218-308 D1	YAR 218-308

UEL 200

	ASAHI	FYH	INA	NTN	SKF
UEL 201-8	-	NA 201-8	-	-	-
UEL 202-9	-	-	-	-	-
UEL 202-10	-	NA 202-10	-	-	-
UEL 203-11	-	-	-	-	-
UEL 204-12	UG 204-12 + ER	NA 204-12	G 1012 KRRB	UEL 204-012 D1 W3	YEL 204-012
UEL 205-13	-	-	-	UEL 205-013 D1 W3	YEL 205-013
UEL 205-14	UG 205-14 + ER	NA 205-14	G 1014 KRRB	UEL 205-014 D1 W3	YEL 205-014
UEL 205-15	UG 205-15 + ER	NA 205-15	G 1015 KRRB	UEL 205-015 D1 W3	YEL 205-015
UEL 205-16	UG 205-16 + ER	NA 205-16	G 1100 KRRB	UEL 205-100 D1 W3	YEL 205-100
UEL 206-17	-	-	-	UEL 206-101 D1 W3	YEL 206-101
UEL 206-18	UG 206-18 + ER	NA 206-18	G 1102 KRRB	UEL 206-102 D1 W3	YEL 206-102
UEL 206-19	UG 206-19 + ER	NA 206-19	G 1103 KRRB	UEL 206-103 D1 W3	YEL 206-103
UEL 206-20	UG 206-20 + ER	NA 206-20	G 1104 KRRB-206	UEL 206-104 D1 W3	YEL 206-104
UEL 207-20	UG 207-20 + ER	NA 207-20	G 1104 KRRB	UEL 207-104 D1 W3	YEL 207-104
UEL 207-21	UG 207-21 + ER	-	-	UEL 207-105 D1 W3	YEL 207-105
UEL 207-22	UG 207-22 + ER	NA 207-22	G 1106 KRRB	UEL 207-106 D1 W3	YEL 207-106
UEL 207-23	UG 207-23 + ER	NA 207-23	G 1107 KRRB	UEL 207-107 D1 W3	YEL 207-107
UEL 208-24	UG 208-24 + ER	NA 208-24	G 1108 KRRB	UEL 208-108 D1 W3	YEL 208-108
UEL 209-26	UG 209-26 + ER	NA 209-26	G 1110 KRRB	UEL 209-110 D1 W3	YEL 209-110
UEL 209-27	UG 209-27 + ER	NA 209-27	G 1111 KRRB	UEL 209-111 D1 W3	YEL 209-111
UEL 209-28	UG 209-28 + ER	NA 209-28	G 1112 KRRB	UEL 209-112 D1 W3	YEL 209-112
UEL 210-30	UG 210-30 + ER	-	-	UEL 210-114 D1 W3	YEL 210-114
UEL 210-31	UG 210-31 + ER	NA 210-31	G 1115 KRRB	UEL 210-115 D1 W3	YEL 210-115
UEL 210-32	-	-	-	UEL 210-200 D1 W3	-
UEL 211-32	UG 211-32 + ER	NA 211-32	-	UEL 211-200 D1 W3	YEL 211-200
UEL 211-33	-	-	-	UEL 211-201 D1 W3	-
UEL 211-34	UG 211-34 + ER	-	-	UEL 211-202 D1 W3	-
UEL 211-35	UG 211-35 + ER	NA 211-35	G 1203 KRRB	UEL 211-203 D1 W3	YEL 211-203
UEL 212-36	UG 212-36 + ER	NA 212-36	-	UEL 212-204 D1 W3	YEL 212-204
UEL 212-37	-	-	-	UEL 212-205 D1 W3	-
UEL 212-38	UG 212-38 + ER	-	-	UEL 212-206 D1 W3	-
UEL 212-39	UG 212-39 + ER	NA 212-39	G 1207 KRRB	UEL 212-207 D1 W3	YEL 212-207
UEL 213-40	-	NA 213-40	-	UEL 213-208 D1 W3	-
UEL 213-41	-	-	-	UEL 213-209 D1 W3	-
UEL 214-42	-	-	-	UEL 214-210 D1 W3	-
UEL 214-43	-	-	-	UEL 214-211 D1 W3	-
UEL 214-44	-	-	-	UEL 214-212 D1 W3	-
UEL 215-45	-	-	-	UEL 215-213 D1 W3	-
UEL 215-46	-	-	-	UEL 215-214 D1 W3	-
UEL 215-47	-	NA 215-47	G 1215 KRRB S	UEL 215-215 D1 W3	-
UEL 215-48	-	-	-	UEL 215-300 D1 W3	-

UC 300

	ASAHI	FYH	INA	NTN	SKF
UC 305-13	-	-	-	UC 305-013 D1	-
UC 305-14	UC 305-14	-	-	UC 305-014 D1	-
UC 305-15	-	-	-	UC 305-015 D1	-
UC 305-16	UC 305-16	UC 305-16	-	UC 305-100 D1	-
UC 306-17	-	-	-	UC 306-101 D1	-
UC 306-18	UC 306-18	UC 306-18	-	UC 306-102 D1	-
UC 306-19	-	-	-	UC 306-103 D1	-
UC 306-20	-	-	-	-	-
UC 307-20	UC 307-20	UC 307-20	-	UC 307-104 D1	-
UC 307-21	-	-	-	UC 307-105 D1	-
UC 307-22	UC 307-22	UC 307-22	-	UC 307-106 D1	-
UC 307-23	-	-	-	UC 307-107 D1	-
UC 308-24	UC 308-24	UC 308-24	-	UC 308-108 D1	-
UC 309-26	UC 309-26	-	-	UC 309-110 D1	-
UC 309-27	-	-	-	UC 309-111 D1	-
UC 309-28	UC 309-28	UC 309-28	-	UC 309-112 D1	-
UC 310-30	UC 310-30	-	-	UC 310-114 D1	-
UC 310-31	-	UC 310-31	-	UC 310-115 D1	-
UC 310-32	-	-	-	-	-
UC 311-32	UC 311-32	UC 311-32	-	UC 311-200 D1	-
UC 311-33	-	-	-	UC 311-201 D1	-
UC 311-34	UC 311-34	-	-	UC 311-202 D1	-
UC 311-35	-	-	-	UC 311-203 D1	-
UC 312-36	UC 312-36	-	-	UC 312-204 D1	-
UC 312-37	-	-	-	UC 312-205 D1	-
UC 312-38	UC 312-38	-	-	UC 312-206 D1	-
UC 312-39	-	-	-	UC 312-207 D1	-
UC 313-40	UC 313-40	UC 313-40	-	UC 313-208 D1	-
UC 313-41	-	-	-	UC 313-209 D1	-
UC 314-42	-	-	-	UC 314-210 D1	-
UC 314-43	-	-	-	UC 314-211 D1	-
UC 314-44	UC 314-44	UC 314-44	-	UC 314-212 D1	-
UC 315-45	-	-	-	UC 315-213 D1	-
UC 315-46	-	-	-	UC 315-214 D1	-
UC 315-47	-	-	-	UC 315-215 D1	-
UC 315-48	UC 315-48	UC 315-48	-	UC 315-300 D1	-
UC 316-49	-	-	-	UC 316-301 D1	-
UC 316-50	UC 316-50	-	-	UC 316-302 D1	-

UC X00

	ASAHI	FYH	INA	NTN	SKF
UC X05-13	-	-	-	UC X05-013 D1	-
UC X05-14	UC X05-14	-	-	UC X05-014 D1	-
UC X05-15	UC X05-15	-	-	UC X05-015 D1	-
UC X05-16	UC X05-16	UC X05-16	-	UC X05-100 D1	-
UC X06-17	-	-	-	UC X06-101 D1	-
UC X06-18	UC X06-18	-	-	UC X06-102 D1	-
UC X06-19	UC X06-19	UC X06-19	-	UC X06-103 D1	-
UC X06-20	UC X06-20	UC X06-20	GY 1104 KRRB	-	YAR 207-104
UC X07-20	-	-	-	-	-
UC X07-21	-	-	-	UC X07-105 D1	-
UC X07-22	UC X07-22	UC X07-22	-	UC X07-106 D1	-
UC X07-23	UC X07-23	UC X07-23	-	UC X07-107 D1	YAR 208-107
UC X08-24	UC X08-24	UC X08-24	GY 1108 KRRB-209	UC X08-108 D1	YAR 209-108
UC X09-26	UC X09-26	-	-	UC X09-110 D1	-
UC X09-27	UC X09-27	UC X09-27	-	UC X09-111 D1	YAR 210-111
UC X09-28	UC X09-28	UC X09-28	GY 1112 KRRB-210	UC X09-112 D1	YAR 210-112
UC X10-30	UC X10-30	-	-	UC X10-114 D1	-
UC X10-31	UC X10-31	UC X10-31	-	UC X10-115 D1	YAR 211-115
UC X10-32	UC X10-32	UC X10-32	GY 1200 KRRB	-	-
UC X11-32	-	-	-	-	-
UC X11-33	-	-	-	UC X11-201 D1	-
UC X11-34	UC X11-34	-	-	UC X11-202 D1	-
UC X11-35	UC X11-35	UC X11-35	-	UC X11-203 D1	YAR 212-203
UC X12-36	UC X12-36	UC X12-36	-	-	-
UC X12-37	-	-	-	-	-
UC X12-38	UC X12-38	UC X12-38	-	UC X12-206 D1	-
UC X12-39	UC X12-39	UC X12-39	-	UC X12-207 D1	-
UC X13-40	UC X13-40	UC X13-40	GY 1208 KRRB	UC X13-208 D1	YAR 214-208
UC X13-41	-	-	-	UC X13-209 D1	-
UC X14-42	-	-	-	UC X14-210 D1	-
UC X14-43	UC X14-43	-	-	UC X14-211 D1	YAR 215-211
UC X14-44	UC X14-44	UC X14-44	-	UC X14-212 D1	-
UC X15-45	-	-	-	UC X15-213 D1	-
UC X15-46	-	-	-	UC X15-214 D1	-
UC X15-47	UC X15-47	-	-	UC X15-215 D1	YAR 216-215
UC X15-48	UC X15-48	UC X15-48	GY 1300 KRRB	UC X15-300 D1	YAR 216-300
UC X16-49	-	-	-	UC X16-301 D1	-
UC X16-50	-	-	-	UC X16-302 D1	-

VKE

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