

SRG

Angular Contact Ball Bearings



SRG BEARINGS

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About us 公司简介

SRG Bearings is an internationally renowned bearing brand belonging to SRG GROUP LIMITED. It is a bearing factory that integrates bearing production, research and development, and export. We mainly provide roller and ball bearings.

SRG Bearing Factory was established in 1997 and is located in Liaocheng City, Shandong Province. It is a long-standing bearing production enterprise. We have 120 CNC machine tools, 6 bearing processing production lines, and can independently complete bearing production, assembly, precision grinding, heat treatment, and other processes. The inner bore size range is from 3mm to 6.5m, and the weight range is from 10.5g to 2.6 tons.

Our main products include:

Miniature and medium-sized deep groove ball bearings

Double row self-aligning roller bearings

Four-row heavy-duty cylindrical roller bearings

Self-aligning roller bearings

Thrust ball bearings, thrust ball and roller bearings

Single and double row tapered roller bearings

Needle roller bearings

High-precision spindle bearings

Pillow block bearings, shaft sleeves, steel balls

Technical support

Maintenance and repair

Product training

SRG bearings are widely used in railways, mines, machinery, automobiles, ships, metallurgy, petroleum, electricity, agriculture, textile, and aviation industries.

SRG products have been sold to Europe, Asia, America, and Southeast Asia, which are our most important markets. We have spent a lot of time developing new products while also producing high-quality products. We are popular both domestically and internationally.

We welcome your inquiries and look forward to future cooperation.

Product display



ANGULAR CONTACT BALL BEARINGS

SINGLE-ROW AND MATCHED ANGULAR CONTACT BALL BEARINGS

Bore Diameter 10 – 65mm B50

Bore Diameter 70 – 120mm B60

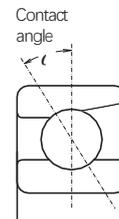
Bore Diameter 130 – 200mm B66

DOUBLE-ROW ANGULAR CONTACT Bore Diameter 10 – 85mm B70

BALL BEARINGS

FOUR-POINT CONTACT BALL BEARINGS

Bore Diameter 30 – 200mm B72



DESIGN, TYPES, AND FEATURES

SINGLE-ROW ANGULAR CONTACT BALL BEARINGS

Since these bearings have a contact angle, they can sustain significant axial loads in one direction together with radial loads. Because of their design, when a radial load is applied, an axial force component is produced; therefore, two opposed bearings or a combination of more than two must be used.

Since the rigidity of single-row angular contact ball bearings can be increased by preloading, they are often used in the main spindles of machine tools, for which high running accuracy is required.

Usually, the cages for angular contact ball bearings with a contact angle of 30° (Symbol A) or 40° (Symbol B) are in accordance with Table 1, but depending on the application, machined synthetic resin cages or molded polyamide resin cages are also used. The basic load ratings given in the bearing tables are based on the cage classification listed in Table 1.

Though the figures in the bearing tables show bearings with single-shoulder-type inner rings, both-shoulder-type bearings are also available. Please consult SRG for more detailed information.

Table 1 Standard Cages for Angular Contact Ball Bearings

Series	Pressed Steel Cages	Machined Brass Cages
79A5, C	—	7900 – 7940
70A	7000 – 7018	7019 – 7040
70C	—	7000 – 7022
72A, B	7200 – 7222	7224 – 7240
72C	—	7200 – 7240
73A, B	7300 – 7320	7321 – 7340

In addition, for bearings with the same serial number, if the type of cages are different, the number of balls may also be different. In such a case, the load rating will differ from the one listed in the bearing tables.

Angular Contact Ball Bearings with contact angles of 15° (Symbol C) and 25° (Symbol A5) are primarily for high precision or high speed applications, and machined brass or synthetic resin cages or molded polyamide cages are used.

The maximum operating temperature of molded polyamide cages is 120°C.

MATCHED ANGULAR CONTACT BALL BEARINGS

The types and features of matched angular contact ball bearings are shown in Table 2.

Table 2 Types and Features of Matched Angular Contact Ball Bearings

Figure	Arrangement	Features
	Back-to-back (DB) (Example) 7208 A DB	Radial loads and axial loads in both directions can be sustained. Since the distance between the effective load centers a_0 is big, this type is suitable if moments are applied.
	Face-to-face (DF) (Example) 7208 B DF	Radial loads and axial loads in both directions can be sustained. Compared with the DB Type, the distance between the effective load centers is small, so the capacity to sustain moments is inferior to the DB Type.
	Tandem (DT) (Example) 7208 A DT	Radial loads and axial loads in one direction can be sustained. Since two bearings share the axial load, this arrangement is used when the load in one direction is heavy.

SRG ANGULAR CONTACT BALL BEARINGS

In comparison with standard angular contact ball bearings, these bearings have high capacity, high limiting speed, and highly accurate universal matching as the features. The molded polyamide cages are standard specification for the HPS type.

DOUBLE-ROW ANGULAR CONTACT BALL BEARINGS

This is basically a back-to-back mounting of two single-row angular contact ball bearings, but their inner and outer rings are each integrated into one. Axial loads in both directions can be sustained, and the capacity to sustain moments is good. This type is used as fixed-end bearings.

Their cages are pressed steel.

FOUR-POINT CONTACT BALL BEARINGS

The inner ring is split radially into two pieces. Their design allows one bearing to sustain significant axial loads in either direction.

The contact angle is 35° , so the axial load capacity is high. This type is suitable for carrying pure axial loads or combined loads where the axial loads are high.

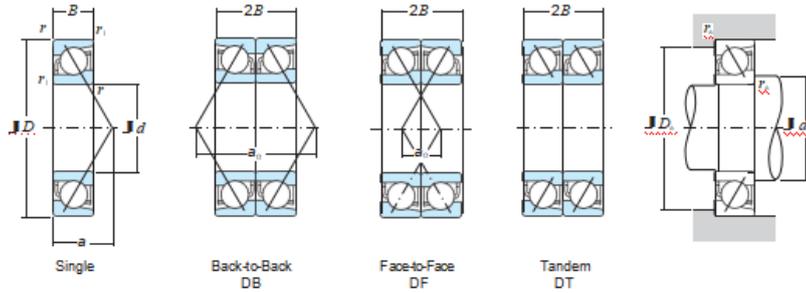
The cages are made of machined brass.

PRECAUTIONS FOR USE OF ANGULAR CONTACT BALL BEARINGS

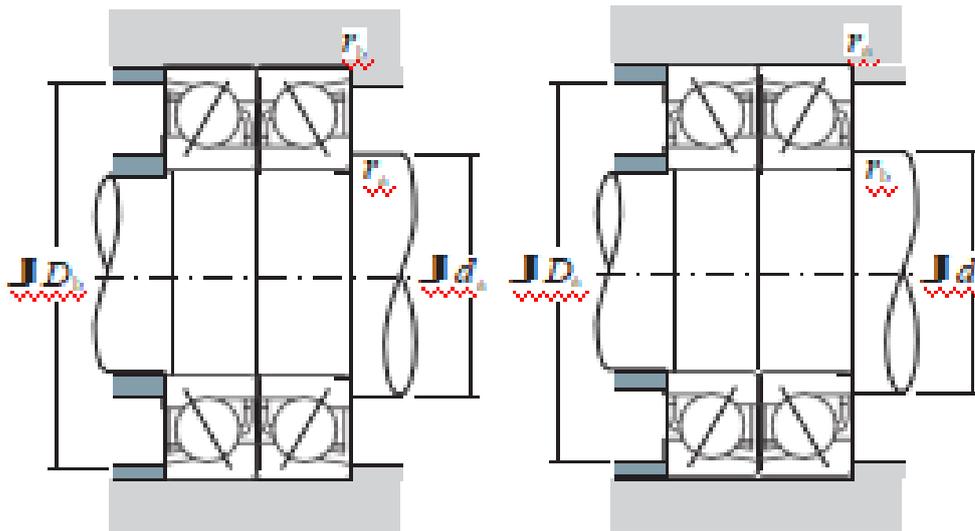
Under severe operating conditions where the speed and temperature are close to their limits, lubrication is marginal, vibration and moment loads are heavy, they may not be suitable, particularly for certain types of cages. In such a case, please consult with SRG beforehand.

And if the load on angular contact ball bearings becomes too small, or if the ratio of the axial and radial loads for matched bearings exceeds 'e' (e is listed

in the bearings tables) during operation, slippage occurs between the balls and raceways, which may result in smearing. Especially with large bearings since the weight of the balls and cage is high. If such load conditions are expected, please consult with SRG for selection of the bearings.



Boundary Dimensions (mm)					Basic Load Ratings (Single) (N)				Factor	Limiting Speeds (°) (min ⁻¹)		Eff. Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass
d	D	B	r	r1	Cr	C0r	Cr	C0r	f ₀	Grease	Oil	a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
10	22	6	0.3	0.15	2 880	1 450	294	148	—	40 000	56 000	6.7	12.5	19.5	0.3	0.009
	22	6	0.3	0.15	3 0	1 520	305	155	14.1	48 000	63 000	5.1	12.5	19.5	0.3	0.009
	26	8	0.3	0.15	5 350	2 600	550	266	—	32 000	43 000	9.2	12.5	23.5	0.3	0.019
	26	8	0.3	0.15	5 300	2 490	540	254	12.6	45 000	63 000	6.4	12.5	23.5	0.3	0.021
	30	9	0.6	0.3	5 400	2 710	555	276	—	28 000	38 000	10.3	15	25	0.6	0.032
	30	9	0.6	0.3	5 0	2 500	510	255	—	20 000	28 000	12.9	15	25	0.6	0.032
	30	9	0.6	0.3	5 400	2 610	550	266	13.2	40 000	56 000	7.2	15	25	0.6	0.036
	35	11	0.6	0.3	9 300	4 300	950	440	—	20 000	26 000	12.0	15	30	0.6	0.053
	35	11	0.6	0.3	8 750	4 50	890	410	—	18 000	24 000	14.9	15	30	0.6	0.054
12	24	6	0.3	0.15	3 200	1 770	325	181	—	38 000	53 000	7.2	14.5	21.5	0.3	0.011
	24	6	0.3	0.15	3 350	1 860	340	189	14.7	45 000	63 000	5.4	14.5	21.5	0.3	0.011
	28	8	0.3	0.15	5 800	2 980	590	305	—	28 000	38 000	9.8	14.5	25.5	0.3	0.021
	28	8	0.3	0.15	5 800	2 900	590	296	13.2	40 000	56 000	6.7	14.5	25.5	0.3	0.024
	32	10	0.6	0.3	8 0	4 50	815	410	—	26 000	34 000	11.4	17	27	0.6	0.037
	32	10	0.6	0.3	7 450	3 750	760	380	—	18 000	26 000	14.2	17	27	0.6	0.038
	32	10	0.6	0.3	8 150	3 750	830	380	—	20 000	30 000	14.2	17	27	0.6	0.036
	32	10	0.6	0.3	7 900	3 850	805	395	12.5	36 000	50 000	7.9	17	27	0.6	0.041
	37	12	1	0.6	9 450	4 500	965	460	—	18 000	24 000	13.1	18	31	1	0.060
	37	12	1	0.6	8 850	4 200	900	425	—	16 000	22 000	16.3	18	31	1	0.062
15	28	7	0.3	0.15	4 550	2 530	465	258	—	32 000	43 000	8.5	17.5	25.5	0.3	0.015
	28	7	0.3	0.15	4 750	2 640	485	270	14.5	38 000	53 000	6.4	17.5	25.5	0.3	0.015
	32	9	0.3	0.15	6 100	3 450	625	350	—	24 000	32 000	11.3	17.5	29.5	0.3	0.030
	32	9	0.3	0.15	6 250	3 400	635	345	14.1	34 000	48 000	7.6	17.5	29.5	0.3	0.034
	35	11	0.6	0.3	8 650	4 650	880	475	—	22 000	30 000	12.7	20	30	0.6	0.045
	35	11	0.6	0.3	7 950	4 300	810	440	—	16 000	22 000	16.0	20	30	0.6	0.046
	35	11	0.6	0.3	9 800	4 800	995	490	—	18 000	26 000	16.0	20	30	0.6	0.044
	35	11	0.6	0.3	8 650	4 550	885	460	13.2	32 000	45 000	8.8	20	30	0.6	0.052
	42	13	1	0.6	13 400	7 100	370	720	—	16 000	22 000	14.7	21	36	1	0.084
	42	13	1	0.6	12 500	6 600	270	670	—	14 000	19 000	18.5	21	36	1	0.086
	42	13	1	0.6	14 300	6 900	460	705	—	16 000	22 000	18.5	21	36	1	0.084



Dynamic Equivalent Load $P = X F_r + Y F_a$

Contact Angle	$\frac{f_0 F_a^*}{C_{or}}$	e	Single, DT				DB or DF			
			$F_a/F_r \leq e$		$F_a/F_r > e$		$F_a/F_r \leq e$		$F_a/F_r > e$	
			X	Y	X	Y	X	Y	X	Y
	0.178	0.38	1	0	0.44	1.47	1	1.65	0.72	2.39
	0.357	0.40	1	0	0.44	1.40	1	1.57	0.72	2.28
	0.714	0.43	1	0	0.44	1.30	1	1.46	0.72	2.11
15°	1.07	0.46	1	0	0.44	1.23	1	1.38	0.72	2.00
	1.43	0.47	1	0	0.44	1.19	1	1.34	0.72	1.93
	2.14	0.50	1	0	0.44	1.12	1	1.26	0.72	1.82
	3.57	0.55	1	0	0.44	1.02	1	1.14	0.72	1.66
	5.35	0.56	1	0	0.44	1.00	1	1.12	0.72	1.63
25°	—	0.68	1	0	0.41	0.87	1	0.92	0.67	1.41
30°	—	0.80	1	0	0.39	0.76	1	0.78	0.63	1.24
40°	—	1.14	1	0	0.35	0.57	1	0.55	0.57	0.93

*For i , use 2 for DB, DF and 1 for DT

Static Equivalent Load $P_0 = X_0 F_r + Y_0 F_a$

Contact Angle	Single, DT		DB or DF	
	X_0	Y_0	X_0	Y_0
15°	0.5	0.46	1	0.92
25°	0.5	0.38	1	0.76
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

Single or DT mounting
When $F_r > 0.5 F_r + 1.0 F_a$
use $P_0 = F_r$

Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center		Abutment and Fillet		
			(N) {kgf}				(Matched) (min ⁻¹)		Spacings (mm) _{a0}		Dimensions (mm)		
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db(3)	Db	rb (3)
										min	max	max	
7900A5DB	DF	DT	4 700	2 900	475	296	32 0 0 0	43 0 0 0	13.5	1.5	—	20.8	0.15
7900CDB	DF	DT	4 900	3 50	500	310	38 0 0 0	53 0 0 0	10.3	1.7	—	20.8	0.15
7000ADB	DF	DT	8 750	5 200	890	530	24 0 0 0	34 0 0 0	18.4	2.4	11.2	24.8	0.15
7000CDB	DF	DT	8 650	5 0	880	510	36 0 0 0	50 0 0 0	12.8	3.2	—	24.8	0.15
7200ADB	DF	DT	8 800	5 400	900	555	22 0 0 0	30 0 0 0	20.5	2.5	12.5	27.5	0.3
7200BDB	DF	DT	8 100	5 0	825	510	16 0 0 0	22 0 0 0	25.8	7.8	12.5	27.5	0.3
7200CDB	DF	DT	8 800	5 200	895	530	32 0 0 0	45 0 0 0	14.4	3.6	—	27.5	0.3
7300ADB	DF	DT	15 100	8 600	1 540	880	16 0 0 0	22 0 0 0	24.0	2.0	12.5	32.5	0.3
7300BDB	DF	DT	14 200	8 100	1 450	825	14 0 0 0	20 0 0 0	29.9	7.9	12.5	32.5	0.3
7901A5DB	DF	DT	5 200	3 550	530	360	30 0 0 0	43 0 0 0	14.4	2.4	—	22.8	0.15
7901CDB	DF	DT	5 450	3 700	555	380	36 0 0 0	50 0 0 0	10.8	1.2	—	22.8	0.15
7001ADB	DF	DT	9 400	5 950	955	610	22 0 0 0	30 0 0 0	19.5	3.5	13.2	26.8	0.15
7001CDB	DF	DT	9 400	5 800	960	590	32 0 0 0	45 0 0 0	13.4	2.6	—	26.8	0.15
7201ADB	DF	DT	13 0	8 50	1 330	820	20 0 0 0	28 0 0 0	22.7	2.7	14.5	29.5	0.3
7201BDB	DF	DT	12 100	7 500	1 230	765	15 0 0 0	20 0 0 0	28.5	8.5	14.5	29.5	0.3
*7201BEA			—	—	—	—	16 0 0 0	24 0 0 0	28.5	8.5	14.5	29.5	0.3
7201CDB	DF	DT	12 800	7 700	1 310	785	30 0 0 0	40 0 0 0	15.9	4.1	—	29.5	0.3
7301ADB	DF	DT	15 400	9 0	1 570	915	15 0 0 0	20 0 0 0	26.1	2.1	17	32	0.6
7301BDB	DF	DT	14 400	8 400	1 460	855	13 0 0 0	18 0 0 0	32.6	8.6	17	32	0.6
*7301BEA			—	—	—	—	15 0 0 0	22 0 0 0	32.6	8.6	17	32	0.6
7902A5DB	DF	DT	7 400	5 50	755	515	26 0 0 0	34 0 0 0	17.0	3.0	—	26.8	0.15
7902CDB	DF	DT	7 750	5 300	790	540	30 0 0 0	43 0 0 0	12.8	1.2	—	26.8	0.15
7002ADB	DF	DT	9 950	6 850	1 010	700	19 0 0 0	26 0 0 0	22.6	4.6	16.2	30.8	0.15
7002CDB	DF	DT	10 100	6 750	1 030	690	28 0 0 0	38 0 0 0	15.3	2.7	—	30.8	0.15
7202ADB	DF	DT	14 0	9 300	1 430	950	18 0 0 0	24 0 0 0	25.4	3.4	17.5	32.5	0.3
7202BDB	DF	DT	12 900	8 600	1 310	875	13 0 0 0	18 0 0 0	32.0	10.0	17.5	32.5	0.3
*7202BEA			—	—	—	—	14 0 0 0	20 0 0 0	32.0	10.0	17.5	32.5	0.3
7202CDB	DF	DT	14 100	9 50	1 440	925	26 0 0 0	36 0 0 0	17.7	4.3	—	32.5	0.3
7302ADB	DF	DT	21 800	14 200	2 220	440	13 0 0 0	17 0 0 0	29.5	3.5	20	37	0.6
7302BDB	DF	DT	20 200	13 200	2 060	340	11 0 0 0	15 0 0 0	36.9	10.9	20	37	0.6
*7302BEA			—	—	—	—	13 0 0 0	18 0 0 0	36.9	10.9	20	37	0.6

Bearing Numbers (°)			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center Spacings(mm) a_0		Abutment and Fillet Dimensions (mm)		
Single	Duplex		(N) {kgf}				(Matched)(min ⁻¹)		DB	DF	db(3)	Db	rb (3)
			Cr	C0r	Cr	C0r	Grease	Oil			min	max	max
7903A5DB	DF	DT	7 750	5 600	790	570	24 000	32 000	18.0	4.0	—	28.8	0.15
7903CDB	DF	DT	8 150	5 850	830	600	28 000	38 000	13.3	0.7	—	28.8	0.15
7003ADB	DF	DT	10 400	7 650	1 600	780	17 000	24 000	25.0	5.0	18.2	33.8	0.15
7003CDB	DF	DT	10 700	7 600	1 100	775	26 000	34 000	17.0	3.0	—	33.8	0.15
7203ADB	DF	DT	17 600	12 000	1 790	1 220	16 000	22 000	28.5	4.5	19.5	37.5	0.3
7203BDB	DF	DT	16 100	11 000	1 650	1 130	11 000	15 000	35.9	11.9	19.5	37.5	0.3
*7203BEA			—	—	—	—	13 000	18 000	36.3	12.3	19.5	37.5	0.3
7203CDB	DF	DT	17 600	11 700	1 800	1 190	22 000	32 000	19.6	4.4	—	37.5	0.3
7303ADB	DF	DT	25 900	17 300	2 640	1 760	11 000	15 000	32.5	4.5	22	42	0.6
7303BDB	DF	DT	24 000	16 000	2 450	1 640	10 000	14 000	40.9	12.9	22	42	0.6
*7303BEA			—	—	—	—	11 000	16 000	40.9	12.9	22	42	0.6
7904A5DB	DF	DT	10 700	8 100	1 900	825	19 000	26 000	22.3	4.3	—	35.8	0.15
7904CDB	DF	DT	11 300	8 500	1 150	865	22 000	32 000	16.6	1.4	—	35.8	0.15
7004ADB	DF	DT	17 600	13 200	1 800	1 340	15 000	20 000	29.9	5.9	22.5	39.5	0.3
7004CDB	DF	DT	18 000	13 100	1 840	1 330	20 000	30 000	20.3	3.7	—	39.5	0.3
7204ADB	DF	DT	23 500	16 600	2 400	1 690	13 000	19 000	33.3	5.3	25	42	0.6
7204BDB	DF	DT	21 600	15 300	2 210	1 560	9 500	13 000	42.1	14.1	25	42	0.6
*7204BEA			—	—	—	—	11 000	16 000	42.1	14.1	25	42	0.6
7204CDB	DF	DT	23 600	16 100	2 410	1 650	19 000	26 000	23.0	5.0	—	42	0.6
7304ADB	DF	DT	30 500	20 800	3 100	2 130	10 000	13 000	35.8	5.8	25	47	0.6
7304BDB	DF	DT	28 200	19 300	2 870	1 970	9 000	12 000	45.2	15.2	25	47	0.6
*7304BEA			—	—	—	—	10 000	14 000	45.2	15.2	25	47	0.6
7905A5DB	DF	DT	12 100	10 300	1 230	1 050	16 000	22 000	24.6	6.6	—	40.8	0.15
7905CDB	DF	DT	12 700	10 800	1 300	1 110	19 000	26 000	18.0	0.0	—	40.8	0.15
7005ADB	DF	DT	18 300	14 800	1 870	1 510	13 000	17 000	32.8	8.8	27.5	44.5	0.3
7005CDB	DF	DT	19 000	14 800	1 940	1 510	18 000	26 000	21.6	2.4	—	44.5	0.3
7205ADB	DF	DT	26 300	20 500	2 690	2 090	12 000	16 000	37.2	7.2	30	47	0.6
7205BDB	DF	DT	24 000	18 800	2 450	1 920	8 500	11 000	47.3	17.3	30	47	0.6
*7205BEA			—	—	—	—	9 500	14 000	47.3	17.3	30	47	0.6
7205CDB	DF	DT	27 000	20 400	2 750	2 800	17 000	24 000	25.3	4.7	—	47	0.6
7305ADB	DF	DT	43 000	31 500	4 400	3 250	8 500	11 000	42.1	8.1	30	57	0.6

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (') (min ⁻¹) Grease Oil		Eff.Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
25	62	17	1.1	0.6	24 400	14 600	2 490	1 490	—	9 000	13 000	26.7	32	55	1	0.241
	62	17	1.1	0.6	27 200	14 900	2 770	1 520	—	10 000	15 000	26.8	32	55	1	0.229
30	47	9	0.3	0.15	7 850	5 950	800	605	—	18 000	24 000	13.5	32.5	44.5	0.3	0.049
	47	9	0.3	0.15	8 300	6 250	845	640	15.9	22 000	28 000	9.7	32.5	44.5	0.3	0.049
	55	13	1	0.6	14 500	10 100	1 480	1 030	—	13 000	18 000	18.8	36	49	1	0.116
	55	13	1	0.6	15 100	10 300	1 540	1 050	14.9	19 000	26 000	12.2	36	49	1	0.134
	62	16	1	0.6	22 500	14 800	2 300	1 510	—	12 000	17 000	21.3	36	56	1	0.197
	62	16	1	0.6	20 500	13 500	2 090	1 380	—	8 500	12 000	27.3	36	56	1	0.202
	62	16	1	0.6	23 700	14 300	2 420	1 460	—	10 000	14 000	27.3	36	56	1	0.194
	62	16	1	0.6	23 000	14 700	2 350	1 500	13.9	18 000	24 000	14.2	36	56	1	0.222
	72	19	1.1	0.6	33 500	20 900	3 450	2 130	—	9 000	12 000	24.2	37	65	1	0.346
	72	19	1.1	0.6	31 000	19 300	3 150	1 960	—	8 000	11 000	30.9	37	65	1	0.354
	72	19	1.1	0.6	36 500	20 600	3 700	2 100	—	9 000	13 000	30.9	37	65	1	0.336
35	55	10	0.6	0.3	11 400	8 700	1 170	885	—	15 000	20 000	15.5	40	50	0.6	0.074
	55	10	0.6	0.3	12 100	9 150	1 230	930	15.7	18 000	24 000	11.0	40	50	0.6	0.074
	62	14	1	0.6	18 300	13 400	1 870	1 370	—	12 000	16 000	21.0	41	56	1	0.153
	62	14	1	0.6	19 100	13 700	1 950	1 390	15.0	17 000	22 000	13.5	41	56	1	0.173
	72	17	1.1	0.6	29 700	20 100	3 050	2 050	—	10 000	14 000	23.9	42	65	1	0.287
	72	17	1.1	0.6	27 100	18 400	2 760	1 870	—	7 500	10 000	30.9	42	65	1	0.294
	72	17	1.1	0.6	32 500	19 600	3 300	1 990	—	8 500	12 000	30.9	42	65	1	0.271
	72	17	1.1	0.6	30 500	19 900	3 100	2 030	13.9	15 000	20 000	15.7	42	65	1	0.32
	80	21	1.5	1	40 000	26 300	4 050	2 680	—	8 000	10 000	27.1	44	71	1.5	0.464
	80	21	1.5	1	36 500	24 200	3 750	2 460	—	7 100	9 500	34.6	44	71	1.5	0.474
	80	21	1.5	1	40 500	24 400	4 100	2 490	—	8 000	11 000	34.6	44	71	1.5	0.451
40	62	12	0.6	0.3	14 300	11 200	1 460	1 140	—	14 000	18 000	17.9	45	57	0.6	0.11
	62	12	0.6	0.3	15 100	11 700	1 540	1 200	15.7	16 000	22 000	12.8	45	57	0.6	0.109
	68	15	1	0.6	19 500	15 400	1 990	1 570	—	10 000	14 000	23.1	46	62	1	0.19
	68	15	1	0.6	20 600	15 900	2 100	1 620	15.4	15 000	20 000	14.7	46	62	1	0.213
	80	18	1.1	0.6	35 500	25 100	3 600	2 560	—	9 500	13 000	26.3	47	73	1	0.375
	80	18	1.1	0.6	32 000	23 000	3 250	2 340	—	6 700	9 000	34.2	47	73	1	0.383

Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center Spacings(mm) a_0		Abutment and Fillet Dimensions (mm)		
			(N)	{kgf}			(Matched)(min ⁻¹)		DB	DF	db(3)	Db	rb (3)
			Cr	C0r	Cr	C0r	Grease	Oil			min	max	max
7305BDB	DF	DT	39 500	29 300	4 050	2 980	7 500	10 000	53.5	19.5	30	57	0.6
*7305BEA			—	—	—	—	8 500	12 000	53.5	19.5	30	57	0.6
7906A5DB	DF	DT	12 800	11 900	1 300	1 210	14 000	19 000	27.0	9.0	—	45.8	0.15
7906CDB	DF	DT	13 500	12 500	1 380	1 280	17 000	24 000	19.3	1.3	—	45.8	0.15
7006ADB	DF	DT	23 600	20 200	2 410	2 60	11 000	15 000	37.5	11.5	35	50	0.6
7006CDB	DF	DT	24 600	20 500	2 510	2 90	15 000	22 000	24.4	1.6	—	50	0.6
7206ADB	DF	DT	36 500	29 500	3 750	3 000	10 000	13 000	42.6	10.6	35	57	0.6
7206BDB	DF	DT	33 500	27 000	3 400	2 760	7 100	9 500	54.6	22.6	35	57	0.6
*7206BEA			—	—	—	—	8 000	11 000	54.6	22.6	35	57	0.6
7206CDB	DF	DT	37 500	29 300	3 800	2 990	14 000	20 000	28.3	3.7	—	57	0.6
7306ADB	DF	DT	54 500	41 500	5 600	4 250	7 100	9 500	48.4	10.4	35	67	0.6
7306BDB	DF	DT	50 500	38 500	5 150	3 950	6 300	8 500	61.8	23.8	35	67	0.6
*7306BEA			—	—	—	—	7 100	10 000	61.8	23.8	35	67	0.6
7907A5DB	DF	DT	18 600	17 400	1 890	1 770	12 000	17 000	31.0	11.0	—	52.5	0.3
7907CDB	DF	DT	19 600	18 300	2 000	1 860	14 000	20 000	22.1	2.1	—	52.5	0.3
7007ADB	DF	DT	29 700	26 800	3 050	2 740	9 500	13 000	42.0	14.0	40	57	0.6
7007CDB	DF	DT	31 000	27 300	3 150	2 790	13 000	19 000	27.0	1.0	—	57	0.6
7207ADB	DF	DT	48 500	40 000	4 900	4 100	8 500	12 000	47.9	13.9	40	67	0.6
7207BDB	DF	DT	44 000	36 500	4 500	3 750	6 000	8 000	61.9	27.9	40	67	0.6
*7207BEA			—	—	—	—	6 700	9 500	61.9	27.9	40	67	0.6
7207CDB	DF	DT	49 500	40 000	5 050	4 050	12 000	17 000	31.3	2.7	—	67	0.6
7307ADB	DF	DT	65 000	52 500	6 600	5 350	6 300	8 500	54.2	12.2	41	74	1
7307BDB	DF	DT	59 500	48 500	6 100	4 950	5 600	7 500	69.2	27.2	41	74	1
*7307BEA			—	—	—	—	6 300	9 000	69.2	27.2	41	74	1
7908A5DB	DF	DT	23 300	22 300	2 370	2 270	11 000	15 000	35.8	11.8	—	59.5	0.3
7908CDB	DF	DT	24 600	23 500	2 510	2 390	13 000	18 000	25.7	1.7	—	59.5	0.3
7008ADB	DF	DT	31 500	31 000	3 250	3 150	8 500	11 000	46.2	16.2	45	63	0.6
7008CDB	DF	DT	33 500	32 000	3 400	3 250	12 000	17 000	29.5	0.5	—	63	0.6
7208ADB	DF	DT	57 500	50 500	5 850	5 150	7 500	10 000	52.6	16.6	45	75	0.6
7208BDB	DF	DT	52 000	46 000	5 300	4 700	5 300	7 500	68.3	32.3	45	75	0.6

Bearing Numbers (°)			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center Spacings(mm) a_0		Abutment and Fillet Dimensions (mm)		
Single	Duplex		(N)	(kgf)			(Matched)(min ⁻¹)						
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db(3)	Db	rb(3)
											min	max	max
*7208BEA			—	—	—	—	6 0 0 0	8 500	68.3	32.3	45	75	0.6
7208CDB	DF	DT	59 000	50 500	6 000	5 150	11 0 0 0	15 000	34.1	1.9	—	75	0.6
7308ADB	DF	DT	79 500	66 000	8 100	6 700	5 600	7 500	60.5	14.5	46	84	1
7308BDB	DF	DT	73 000	60 500	7 400	6 200	5 0 0 0	6 700	77.5	31.5	46	84	1
*7308BEA			—	—	—	—	5 600	8 000	77.5	31.5	46	84	1
7909A5DB	DF	DT	24 600	25 400	2 510	2 590	9 500	13 000	38.4	14.4	—	65.5	0.3
7909CDB	DF	DT	26 000	26 800	2 660	2 730	12 0 0 0	16 000	27.1	3.1	—	65.5	0.3
7009ADB	DF	DT	37 500	37 500	3 850	3 800	7 500	10 000	50.6	18.6	50	70	0.6
7009CDB	DF	DT	39 500	38 500	4 050	3 950	11 0 0 0	15 000	32.1	0.1	—	70	0.6
7209ADB	DF	DT	64 500	57 500	6 550	5 850	7 100	9 500	56.5	18.5	50	80	0.6
7209BDB	DF	DT	58 500	52 500	5 950	5 350	5 0 0 0	6 700	73.5	35.5	50	80	0.6
*7209BEA			—	—	—	—	5 600	8 000	73.5	35.5	50	80	0.6
7209CDB	DF	DT	66 500	57 500	6 750	5 850	10 0 0 0	14 000	36.4	1.6	—	80	0.6
7309ADB	DF	DT	103 000	87 000	10 500	8 900	5 0 0 0	6 700	66.9	16.9	51	94	1
7309BDB	DF	DT	95 000	80 500	9 650	8 200	4 500	6 000	85.8	35.8	51	94	1
*7309BEA			—	—	—	—	5 0 0 0	7 100	85.8	35.8	51	94	1
7910A5DB	DF	DT	25 900	28 400	2 640	2 900	9 0 0 0	12 000	40.5	16.5	—	69.5	0.3
7910CDB	DF	DT	27 400	30 000	2 800	3 50	11 0 0 0	15 000	28.3	4.3	—	69.5	0.3
7010ADB	DF	DT	40 000	42 000	4 050	4 300	7 100	9 500	53.5	21.5	55	75	0.6
7010CDB	DF	DT	42 000	44 000	4 300	4 450	10 0 0 0	14 000	33.4	1.4	—	75	0.6
7210ADB	DF	DT	67 000	63 000	6 850	6 400	6 300	9 000	60.4	20.4	55	85	0.6
7210BDB	DF	DT	60 500	57 000	6 200	5 850	4 500	6 300	78.7	38.7	55	85	0.6
*7210BEA			—	—	—	—	5 0 0 0	7 500	78.7	38.7	55	85	0.6
7210CDB	DF	DT	69 500	63 500	7 100	6 450	9 500	13 000	38.7	1.3	—	85	0.6
7310ADB	DF	DT	121 000	104 000	12 300	10 600	4 500	6 000	73.2	19.2	56	104	1
7310BDB	DF	DT	111 000	96 000	11 300	9 800	4 0 0 0	5 600	94.1	40.1	56	104	1
*7310BEA			—	—	—	—	4 500	6 700	94.1	40.1	56	104	1
7911A5DB	DF	DT	29 300	33 500	2 990	3 400	8 0 0 0	11 000	44.5	18.5	—	75	0.6
7911CDB	DF	DT	31 000	35 500	3 150	3 600	9 500	13 000	31.1	5.1	—	75	0.6
7011ADB	DF	DT	52 500	55 500	5 350	5 650	6 300	8 500	59.9	23.9	60	85	0.6

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds ($^{\circ}$) (min^{-1}) Grease Oil		Eff.Load Centers (mm) a	Abutment and Fillet Dimensions (mm)			Mass (kg) approx.
d	D	B	r	r ₁	C _r	C _{0r}	C _r	C _{0r}		Grease	Oil		da	Da	ra	
			min	min								min.	max	max.		
55	90	18	1.1	0.6	34 000	28 600	3 500	2 920	15.5	11 000	15 000	18.7	62	83	1	0.43
	100	21	1.5	1	51 000	39 500	5 200	4 050	—	7 100	10 000	32.9	64	91	1.5	0.613
	100	21	1.5	1	46 500	36 000	4 700	3 700	—	5 300	7 100	43.0	64	91	1.5	0.627
	100	21	1.5	1	51 500	37 000	5 250	3 800	—	6 000	8 500	43.0	64	91	1.5	0.596
	100	21	1.5	1	53 000	40 000	5 400	4 100	14.5	10 000	14 000	20.9	64	91	1.5	0.688
	120	29	2	1	86 000	61 500	8 750	6 250	—	5 000	6 700	39.8	65	110	2	1.41
	120	29	2	1	79 000	56 500	8 050	5 750	—	4 500	6 300	51.2	65	110	2	1.45
	120	29	2	1	89 000	58 500	9 100	6 000	—	5 000	7 500	51.2	65	110	2	1.36
60	85	13	1	0.6	18 300	17 700	1 870	1 810	—	9 500	13 000	23.4	66	79	1	0.197
	85	13	1	0.6	19 400	18 700	1 980	1 910	16.5	11 000	15 000	16.2	66	79	1	0.194
	95	18	1.1	0.6	33 000	29 500	3 350	3 000	—	7 100	10 000	31.4	67	88	1	0.417
	95	18	1.1	0.6	35 000	30 500	3 600	3 150	15.7	10 000	14 000	19.4	67	88	1	0.46
	110	22	1.5	1	62 000	48 500	6 300	4 950	—	6 700	9 000	35.5	69	101	1.5	0.798
	110	22	1.5	1	56 000	44 500	5 700	4 550	—	4 800	6 300	46.7	69	101	1.5	0.815
	110	22	1.5	1	61 500	45 000	6 300	4 600	—	5 300	7 500	46.7	69	101	1.5	0.791
	110	22	1.5	1	64 000	49 000	6 550	5 000	14.4	9 500	13 000	22.4	69	101	1.5	0.889
	130	31	2.1	1.1	98 000	71 500	10 000	7 250	—	4 800	6 300	42.9	72	118	2	1.74
	130	31	2.1	1.1	90 000	65 500	9 200	6 700	—	4 300	5 600	55.4	72	118	2	1.78
130	31	2.1	1.1	102 000	68 500	10 500	7 000	—	4 800	6 700	55.4	72	118	2	1.7	
65	90	13	1	0.6	19 100	19 400	1 940	1 980	—	9 000	12 000	24.6	71	84	1	0.211
	90	13	1	0.6	20 200	20 500	2 060	2 090	16.7	10 000	14 000	16.9	71	84	1	0.208
	100	18	1.1	0.6	35 000	33 000	3 550	3 350	—	6 700	9 500	32.8	72	93	1	0.455
	100	18	1.1	0.6	37 000	34 500	3 800	3 500	15.9	10 000	13 000	20.0	72	93	1	0.493
	120	23	1.5	1	70 500	58 000	7 150	5 900	—	6 000	8 500	38.2	74	111	1.5	1.03
	120	23	1.5	1	63 500	52 500	6 500	5 350	—	4 300	6 000	50.3	74	111	1.5	1.05
	120	23	1.5	1	70 000	53 500	7 150	5 450	—	4 800	7 100	50.3	74	111	1.5	1.01
	120	23	1.5	1	73 000	58 500	7 450	6 000	14.6	9 000	12 000	23.9	74	111	1.5	1.14
	140	33	2.1	1.1	111 0	82 000	11 300	8 350	—	4 300	6 000	46.1	77	128	2	2.12
	140	33	2.1	1.1	102 0	75 500	10 400	7 700	—	3 800	5 300	59.5	77	128	2	2.17
140	33	2.1	1.1	114 0	77 000	11 600	7 850	—	4 300	6 300	59.5	77	128	2	2.09	

Bearing Numbers (°)			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center		Abutment and Fillet		
			(N)		(kgf)		(Matched)(min ⁻¹)		Spacings(mm) _{a0}		Dimensions (mm)		
Single	Duplex		Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db(3)	Db	rb (3)
											min	max	max
7011CDB	DF	DT	55 500	57 500	5 650	5 850	9 000	12 000	37.4	1.4	—	85	0.6
7211ADB	DF	DT	83 000	79 000	8 450	8 050	6 000	8 000	65.7	23.7	61	94	1
7211BDB	DF	DT	75 000	72 000	7 650	7 350	4 000	5 600	86.0	44.0	61	94	1
*7211BEA			—	—	—	—	4 500	6 700	86.0	44.0	61	94	1
7211CDB	DF	DT	86 000	80 000	8 800	8 150	8 500	12 000	41.7	0.3	—	94	1
7311ADB	DF	DT	139 000	123 000	14 200	12 500	4 000	5 600	79.5	21.5	61	114	1
7311BDB	DF	DT	128 000	113 000	13 100	11 500	3 600	5 000	102.4	44.4	61	114	1
*7311BEA			—	—	—	—	4 000	6 000	102.4	44.4	61	114	1
7912ASDB	DF	DT	29 800	35 500	3 050	3 600	7 500	10 000	46.8	20.8	—	80	0.6
7912CDB	DF	DT	31 500	37 500	3 200	3 800	9 000	12 000	32.4	6.4	—	80	0.6
7012ADB	DF	DT	53 500	59 000	5 450	6 000	6 000	8 000	62.7	26.7	65	90	0.6
7012CDB	DF	DT	57 000	61 500	5 800	6 250	8 500	12 000	38.8	2.8	—	90	0.6
7212ADB	DF	DT	100 000	97 500	10 200	9 950	5 300	7 100	71.1	27.1	66	104	1
7212BDB	DF	DT	91 000	89 000	9 300	9 500	3 800	5 300	93.3	49.3	66	104	1
*7212BEA			—	—	—	—	4 300	6 000	93.3	49.3	66	104	1
7212CDB	DF	DT	104 000	98 500	10 600	10 000	7 500	11 000	44.8	0.8	—	104	1
7312ADB	DF	DT	159 000	143 000	16 200	14 500	3 800	5 000	85.9	23.9	67	123	1
7312BDB	DF	DT	146 000	131 000	14 900	13 400	3 400	4 500	110.7	48.7	67	123	1
*7312BEA			—	—	—	—	3 800	5 600	110.7	48.7	67	123	1
7913ASDB	DF	DT	31 000	39 000	3 150	3 950	7 100	9 500	49.1	23.1	—	85	0.6
7913CDB	DF	DT	33 000	41 000	3 350	4 200	8 500	12 000	33.8	7.8	—	85	0.6
7013ADB	DF	DT	56 500	65 500	5 750	6 700	5 600	7 500	65.6	29.6	70	95	0.6
7013CDB	DF	DT	60 500	68 500	6 150	7 000	8 000	11 000	40.1	4.1	—	95	0.6
7213ADB	DF	DT	114 000	116 000	11 600	11 800	4 800	6 700	76.4	30.4	71	114	1
7213BDB	DF	DT	103 000	105 000	10 500	10 700	3 400	4 800	100.6	54.6	71	114	1
*7213BEA			—	—	—	—	3 800	5 600	100.6	54.6	71	114	1
7213CDB	DF	DT	119 000	117 000	12 100	12 000	7 100	9 500	47.8	1.8	—	114	1
7313ADB	DF	DT	180 000	164 000	18 400	16 700	3 600	4 800	92.2	26.2	72	133	1
7313BDB	DF	DT	166 000	151 000	16 900	15 400	3 200	4 300	119.0	53.0	72	133	1

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (') (min ⁻¹) Grease Oil		Eff.Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
70	100	16	1	0.6	26 500	26 300	2 710	2 680	—	8 000	11 000	27.8	76	94	1	0.341
	100	16	1	0.6	28 100	27 800	2 870	2 830	16.4	9 500	13 000	19.4	76	94	1	0.338
	110	20	1.1	0.6	44 000	41 500	4 500	4 200	—	6 300	8 500	36.0	77	103	1	0.625
	110	20	1.1	0.6	47 000	43 000	4 800	4 400	15.7	9 000	12 000	22.1	77	103	1	0.698
	125	24	1.5	1	76 500	63 500	7 800	6 500	—	5 600	8 000	40.1	79	116	1.5	1.11
	125	24	1.5	1	69 000	58 000	7 050	5 900	—	4 000	5 600	52.9	79	116	1.5	1.14
	125	24	1.5	1	75 500	58 500	7 700	6 000	—	4 500	6 700	52.9	79	116	1.5	1.08
	125	24	1.5	1	79 500	64 500	8 100	6 600	14.6	8 500	11 000	25.1	79	116	1.5	1.24
	150	35	2.1	1.1	125 000	93 500	12 700	9 550	—	4 000	5 300	49.3	82	138	2	2.6
	150	35	2.1	1.1	114 000	86 000	11 700	8 750	—	3 600	5 000	63.6	82	138	2	2.65
150	35	2.1	1.1	124 000	87 500	12 600	8 900	—	4 000	6 000	63.7	82	138	2	2.53	
75	105	16	1	0.6	26 900	27 700	2 750	2 820	—	7 500	10 000	29.0	81	99	1	0.355
	105	16	1	0.6	28 600	29 300	2 910	2 980	16.6	9 000	12 000	20.1	81	99	1	0.357
	115	20	1.1	0.6	45 000	43 500	4 600	4 450	—	6 000	8 000	37.4	82	108	1	0.661
	115	20	1.1	0.6	48 000	45 500	4 900	4 650	15.9	8 500	12 000	22.7	82	108	1	0.748
	130	25	1.5	1	76 000	64 500	7 750	6 550	—	5 600	7 500	42.1	84	121	1.5	1.19
	130	25	1.5	1	68 500	58 500	7 000	5 950	—	3 800	5 300	55.5	84	121	1.5	1.22
	130	25	1.5	1	78 500	63 500	8 000	6 450	—	4 300	6 300	55.5	84	121	1.5	1.18
	130	25	1.5	1	83 000	70 000	8 450	7 100	14.8	8 000	11 000	26.2	84	121	1.5	1.36
	160	37	2.1	1.1	136 000	106 000	13 800	10 800	—	3 800	5 000	52.4	87	148	2	3.13
	160	37	2.1	1.1	125 000	97 500	12 700	9 900	—	3 400	4 800	67.8	87	148	2	3.19
80	110	16	1	0.6	27 300	29 000	2 790	2 960	—	7 100	10 000	30.2	86	104	1	0.38
	110	16	1	0.6	29 000	30 500	2 960	3 150	16.7	8 500	12 000	20.7	86	104	1	0.376
	125	22	1.1	0.6	55 000	53 000	5 650	5 400	—	5 600	7 500	40.6	87	118	1	0.88
	125	22	1.1	0.6	58 500	55 500	6 000	5 650	15.7	8 000	11 000	24.7	87	118	1	0.966
	140	26	2	1	89 000	76 000	9 100	7 750	—	5 000	7 100	44.8	90	130	2	1.46
	140	26	2	1	80 500	69 500	8 200	7 050	—	3 600	5 000	59.1	90	130	2	1.49
	140	26	2	1	87 500	70 000	8 950	7 150	—	4 000	6 000	59.2	90	130	2	1.42
	140	26	2	1	93 000	77 500	9 450	7 900	14.7	7 500	10 000	27.7	90	130	2	1.63
	170	39	2.1	1.1	147 000	119 000	15 000	12 100	—	3 600	4 800	55.6	92	158	2	3.71
	170	39	2.1	1.1	135 000	109 000	13 800	11 100	—	3 200	4 300	71.9	92	158	2	3.79

Bearing Numbers (*) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (*)		Load Center		Abutment and Fillet		
			(N)		(kgf)		(Matched)(min ⁻¹)		Spacings(mm) _{a0}		Dimensions (mm)		
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db(3)	Db	rb (3)
									min	max	max		
7914A5DB	DF	DT	43 000	52 500	4 400	5 350	6 300	9 000	55.6	23.6	—	95	0.6
7914CDB	DF	DT	45 500	55 500	4 650	5 650	7 500	11 0	38.8	6.8	—	95	0.6
7014ADB	DF	DT	71 500	82 500	7 300	8 450	5 000	6 700	72.0	32.0	75	105	0.6
7014CDB	DF	DT	76 000	86 000	7 750	8 750	7 100	10 000	44.1	4.1	—	105	0.6
7214ADB	DF	DT	124 000	127 000	12 600	13 0	4 500	6 300	80.3	32.3	76	119	1
7214BDB	DF	DT	112 000	116 000	11 500	11 800	3 200	4 500	105.8	57.8	76	119	1
*7214BEA			—	—	—	—	3 600	5 300	105.8	57.8	76	119	1
7214CDB	DF	DT	129 000	129 000	13 200	13 200	6 700	9 000	50.1	2.1	—	119	1
7314ADB	DF	DT	203 000	187 000	20 700	19 100	3 200	4 300	98.5	28.5	77	143	1
7314BDB	DF	DT	186 000	172 000	19 000	17 500	2 800	4 000	127.3	57.3	77	143	1
*7314BEA			—	—	—	—	3 200	4 800	127.3	57.3	77	143	1
7915A5DB	DF	DT	44 000	55 500	4 450	5 650	6 000	8 500	58.0	26.0	—	100	0.6
7915CDB	DF	DT	46 500	58 500	4 750	5 950	7 100	10 000	40.1	8.1	—	100	0.6
7015ADB	DF	DT	73 000	87 500	7 450	8 900	4 800	6 700	74.8	34.8	80	110	0.6
7015CDB	DF	DT	78 000	91 500	7 950	9 300	6 700	9 500	45.4	5.4	—	110	0.6
7215ADB	DF	DT	123 000	129 000	12 600	13 100	4 300	6 000	84.2	34.2	81	124	1
7215BDB	DF	DT	112 000	117 000	11 400	11 900	3 200	4 300	111.0	61.0	81	124	1
*7215BEA			—	—	—	—	3 600	5 000	111.0	61.0	81	124	1
7215CDB	DF	DT	134 000	140 000	13 700	14 200	6 300	9 000	52.4	2.4	—	124	1
7315ADB	DF	DT	221 000	212 000	22 500	21 600	3 000	4 000	104.8	30.8	82	153	1
7315BDB	DF	DT	202 000	195 000	20 600	19 800	2 800	3 800	135.6	61.6	82	153	1
7916A5DB	DF	DT	44 500	58 000	4 550	5 900	5 600	8 000	60.3	28.3	—	105	0.6
7916CDB	DF	DT	47 000	61 500	4 800	6 250	6 700	9 500	41.5	9.5	—	105	0.6
7016ADB	DF	DT	89 500	106 000	9 150	10 800	4 300	6 000	81.2	37.2	85	120	0.6
7016CDB	DF	DT	95 500	111 000	9 700	11 300	6 300	9 000	49.4	5.4	—	120	0.6
7216ADB	DF	DT	145 000	152 000	14 700	15 600	4 000	5 600	89.5	37.5	86	134	1
7216BDB	DF	DT	131 000	139 000	13 300	14 100	2 800	4 000	118.3	66.3	86	134	1
*7216BEA			—	—	—	—	3 200	4 800	118.3	66.3	86	134	1
7216CDB	DF	DT	151 000	155 000	15 400	15 800	6 000	8 000	55.5	3.5	—	134	1
7316ADB	DF	DT	239 000	238 000	24 400	24 200	2 800	3 800	111.2	33.2	87	163	1
7316BDB	DF	DT	219 000	218 000	22 400	22 300	2 600	3 400	143.9	65.9	87	163	1

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (') (min ⁻¹) Grease Oil		Eff. Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass (kg)
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
85	120	18	1.1	0.6	36 500	38 500	3 750	3 900	—	6 700	9 000	32.9	92	113	1	0.541
	120	18	1.1	0.6	39 000	40 500	3 950	4 150	16.5	8 000	11 000	22.7	92	113	1	0.534
	130	22	1.1	0.6	56 500	56 000	5 750	5 700	—	5 300	7 100	42.0	92	123	1	0.913
	130	22	1.1	0.6	60 000	58 500	6 150	6 000	15.9	7 500	10 000	25.4	92	123	1	1.01
	150	28	2	1	103 000	89 000	10 500	9 100	—	4 800	6 700	47.9	95	140	2	1.83
	150	28	2	1	93 000	81 000	9 500	8 250	—	3 400	4 800	63.3	95	140	2	1.87
	150	28	2	1	107 000	90 500	10 900	9 250	14.7	6 700	9 500	29.7	95	140	2	2.04
	180	41	3	1.1	159 000	133 000	16 200	13 500	—	3 400	4 500	58.8	99	166	2.5	4.33
180	41	3	1.1	146 000	122 000	14 800	12 400	—	3 000	4 000	76.1	99	166	2.5	4.42	
90	125	18	1.1	0.6	39 500	43 500	4 000	4 450	—	6 300	8 500	34.1	97	118	1	0.56
	125	18	1.1	0.6	41 500	46 000	4 250	4 700	16.6	7 500	10 000	23.4	97	118	1	0.563
	140	24	1.5	1	67 500	66 500	6 850	6 750	—	4 800	6 700	45.2	99	131	1.5	1.19
	140	24	1.5	1	71 500	69 000	7 300	7 050	15.7	7 100	9 500	27.4	99	131	1.5	1.34
	160	30	2	1	118 000	103 000	12 000	10 500	—	4 500	6 000	51.1	100	150	2	2.25
	160	30	2	1	107 000	94 000	10 900	9 550	—	3 200	4 300	67.4	100	150	2	2.29
	160	30	2	1	123 000	105 000	12 500	10 700	14.6	6 300	9 000	31.7	100	150	2	2.51
	190	43	3	1.1	171 000	147 000	17 400	15 000	—	3 200	4 300	61.9	104	176	2.5	5.06
190	43	3	1.1	156 000	135 000	15 900	13 800	—	2 800	3 800	80.2	104	176	2.5	5.17	
95	130	18	1.1	0.6	40 000	45 500	4 050	4 650	—	6 000	8 500	35.2	102	123	1	0.597
	130	18	1.1	0.6	42 500	48 000	4 300	4 900	16.7	7 100	10 000	24.1	102	123	1	0.591
	145	24	1.5	1	67 000	67 000	6 800	6 800	—	4 500	6 300	46.6	104	136	1.5	1.43
	145	24	1.5	1	73 500	73 000	7 500	7 450	15.9	6 700	9 000	28.1	104	136	1.5	1.42
	170	32	2.1	1.1	128 000	111 000	13 000	11 300	—	4 300	5 600	54.2	107	158	2	2.68
	170	32	2.1	1.1	116 000	101 000	11 800	10 300	—	3 000	4 000	71.6	107	158	2	2.74
	170	32	2.1	1.1	133 000	112 000	13 500	11 400	14.6	6 000	8 500	33.7	107	158	2	3.05
	200	45	3	1.1	183 000	162 000	18 600	16 600	—	3 000	4 000	65.1	109	186	2.5	5.83
200	45	3	1.1	167 000	149 000	17 100	15 200	—	2 600	3 600	84.3	109	186	2.5	5.98	
100	140	20	1.1	0.6	47 500	51 500	4 850	5 250	—	5 600	8 000	38.0	107	133	1	0.804
	140	20	1.1	0.6	50 000	54 000	5 100	5 550	16.5	6 700	9 000	26.1	107	133	1	0.794
	150	24	1.5	1	68 500	70 500	6 950	7 200	—	4 500	6 000	48.1	109	141	1.5	1.48

Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center Spacings(mm) _{a0}		Abutment and Fillet Dimensions (mm)		
			(N)		(kgf)		(Matched)(min ⁻¹)						
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db(3)	Db	rb(3)
										min	max	max	
7917A5DB	DF	DT	59 500	77 000	6 100	7 850	5 300	7 500	65.8	29.8	—	115	0.6
7917CDB	DF	DT	63 000	81 500	6 450	8 300	6 300	9 000	45.5	9.5	—	115	0.6
7017ADB	DF	DT	91 500	112 000	9 350	11 400	4 300	5 600	84.1	40.1	90	125	0.6
7017CDB	DF	DT	98 000	117 000	9 950	12 000	6 000	8 500	50.8	6.8	—	125	0.6
7217ADB	DF	DT	167 000	178 000	17 100	18 200	3 800	5 300	95.8	39.8	91	144	1
7217BDB	DF	DT	151 000	162 000	15 400	16 500	2 800	3 800	126.6	70.6	91	144	1
7217CDB	DF	DT	174 000	181 000	17 800	18 500	5 600	7 500	59.5	3.5	—	144	1
7317ADB	DF	DT	258 000	265 000	26 300	27 000	2 600	3 600	117.5	35.5	92	173	1
7317BDB	DF	DT	236 000	244 000	24 100	24 800	2 400	3 200	152.2	70.2	92	173	1
7918A5DB	DF	DT	64 000	87 000	6 500	8 900	5 000	7 100	68.1	32.1	—	120	0.6
7918CDB	DF	DT	67 500	92 000	6 900	9 400	6 000	8 500	46.8	10.8	—	120	0.6
7018ADB	DF	DT	109 000	133 000	11 200	13 500	3 800	5 300	90.4	42.4	96	134	1
7018CDB	DF	DT	116 000	138 000	11 900	14 100	5 600	8 000	54.8	6.8	—	134	1
7218ADB	DF	DT	191 000	206 000	19 500	21 000	3 600	5 000	102.2	42.2	96	154	1
7218BDB	DF	DT	173 000	188 000	17 700	19 100	2 600	3 400	134.9	74.9	96	154	1
7218CDB	DF	DT	199 000	209 000	20 300	21 400	5 300	7 100	63.5	3.5	—	154	1
7318ADB	DF	DT	277 000	294 000	28 300	30 000	2 600	3 400	123.8	37.8	97	183	1
7318BDB	DF	DT	254 000	270 000	25 900	27 600	2 200	3 000	160.5	74.5	97	183	1
7919A5DB	DF	DT	64 500	91 000	6 600	9 250	4 800	6 700	70.5	34.5	—	125	0.6
7919CDB	DF	DT	68 500	96 000	7 000	9 800	5 600	8 000	48.1	12.1	—	125	0.6
7019ADB	DF	DT	10009 000	134 000	11 100	13 600	3 800	5 000	93.3	45.3	—	139	1
7019CDB	DF	DT	119 000	146 000	12 200	14 900	5 300	7 500	56.1	8.1	—	139	1
7219ADB	DF	DT	20008 000	221 000	21 200	22 600	3 400	4 500	108.5	44.5	102	163	1
7219BDB	DF	DT	188 000	202 000	19 200	20 500	2 400	3 200	143.2	79.2	102	163	1
7219CDB	DF	DT	216 000	224 000	22 000	22 800	4 800	6 700	67.5	3.5	—	163	1
7319ADB	DF	DT	297 000	325 000	30 500	33 000	2 400	3 200	130.2	40.2	102	193	1
7319BDB	DF	DT	272 000	298 000	27 700	30 500	2 200	3 000	168.7	78.7	102	193	1
7920A5DB	DF	DT	77 000	103 000	7 850	10 500	4 500	6 300	76.0	36.0	—	135	0.6
7920CDB	DF	DT	81 500	108 000	8 300	11 100	5 300	7 500	52.2	12.2	—	135	0.6
7020ADB	DF	DT	111 000	141 000	11 300	14 400	3 600	5 000	96.2	48.2	—	144	1

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (') (min ⁻¹) Grease Oil		Eff. Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
100	150	24	1.5	1	75 500	77 000	7 700	7 900	16.0	6 300	9 000	28.7	109	141	1.5	1.46
	180	34	2.1	1.1	144 000	126 000	14 700	12 800	—	4 000	5 300	57.4	112	168	2	3.22
	180	34	2.1	1.1	130 000	114 000	13 300	11 700	—	2 800	3 800	75.7	112	168	2	3.28
	180	34	2.1	1.1	149 000	127 000	15 200	12 900	14.5	5 600	8 000	35.7	112	168	2	3.65
	215	47	3	1.1	207 000	193 000	21 100	19 700	—	2 800	3 800	69.0	114	201	2.5	7.29
	215	47	3	1.1	190 000	178 000	19 400	18 100	—	2 400	3 400	89.6	114	201	2.5	7.43
105	145	20	1.1	0.6	48 000	54 000	4 900	5 500	—	5 600	7 500	39.2	112	138	1	0.82
	145	20	1.1	0.6	51 000	57 000	5 200	5 800	16.6	6 300	9 000	26.7	112	138	1	0.826
	160	26	2	1	80 000	81 500	8 150	8 350	—	4 300	5 600	51.2	115	150	2	1.84
	160	26	2	1	88 000	89 500	9 000	9 100	15.9	6 000	8 500	30.7	115	150	2	1.82
	190	36	2.1	1.1	157 000	142 000	16 000	14 400	—	3 800	5 000	60.6	117	178	2	3.84
	190	36	2.1	1.1	142 000	129 000	14 500	13 100	—	2 600	3 600	79.9	117	178	2	3.92
	190	36	2.1	1.1	162 000	143 000	16 600	14 600	14.5	5 300	7 500	37.7	117	178	2	4.33
	225	49	3	1.1	208 000	193 000	21 200	19 700	—	2 600	3 600	72.1	119	211	2.5	9.34
225	49	3	1.1	191 000	177 000	19 400	18 100	—	2 400	3 200	93.7	119	211	2.5	9.43	
110	150	20	1.1	0.6	49 000	56 000	5 000	5 750	—	5 300	7 100	40.3	117	143	1	0.877
	150	20	1.1	0.6	52 000	59 500	5 300	6 050	16.7	6 300	8 500	27.4	117	143	1	0.867
	170	28	2	1	96 500	95 500	9 850	9 700	—	4 000	5 300	54.4	120	160	2	2.28
	170	28	2	1	106 000	104 000	10 800	10 600	15.6	5 600	8 000	32.7	120	160	2	2.26
	200	38	2.1	1.1	170 000	158 000	17 300	16 100	—	3 600	4 800	63.7	122	188	2	4.49
	200	38	2.1	1.1	154 000	144 000	15 700	14 700	—	2 600	3 400	84.0	122	188	2	4.58
	200	38	2.1	1.1	176 000	160 000	17 900	16 300	14.5	5 000	7 100	39.8	122	188	2	5.1
	240	50	3	1.1	220 000	215 000	22 500	21 900	—	2 600	3 400	75.5	124	226	2.5	11.1
	240	50	3	1.1	201 000	197 000	20 500	20 100	—	2 200	3 000	98.4	124	226	2.5	11.2
120	165	22	1.1	0.6	67 500	77 000	6 900	7 850	—	4 800	6 300	44.2	127	158	1	1.15
	165	22	1.1	0.6	72 000	81 000	7 300	8 300	16.5	5 600	7 500	30.1	127	158	1	1.15
	180	28	2	1	102 000	107 000	10 400	10 900	—	3 600	5 000	57.3	130	170	2	2.45
	215	40	2.1	1.1	183 000	177 000	18 600	18 100	—	3 200	4 500	68.3	132	203	2	6.22
	215	40	2.1	1.1	165 000	162 000	16 900	16 500	—	2 400	3 200	90.3	132	203	2	6.26
	260	55	3	1.1	246 000	252 000	25 100	25 700	—	2 200	3 000	82.3	134	246	2.5	14.5

	260	55	3	1.1	225000	231 000	23 000	23 600	—	2 000	2 800	107.2	134	246	2.5	14.4
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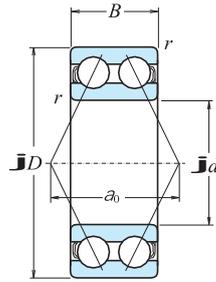
Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center		Abutment and Fillet		
			(N)		(kgf)		(Matched)		Spacings (mm)		Dimensions (mm)		
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db (3)	Db	rb (3)
										min	max	max	
7020CDB	DF	DT	122 000	154 000	12 500	15 800	5 300	7 100	58	9.5	—	144	1
7220ADB	DF	DT	233 000	251 000	23 800	25 600	3 200	4 300	115	46.8	107.0	173	1
7220BDB	DF	DT	212 000	229 000	21 600	23 300	2 200	3 000	152	83.5	107.0	173	1
7220CDB	DF	DT	242 000	254 000	24 700	25 900	4 500	6 300	72	3.5	—	173	1
7320ADB	DF	DT	335 000	385 000	34 500	39 500	2 200	3 000	138	43.9	107.0	208	1
7320BDB	DF	DT	310 000	355 000	31 500	36 000	2 000	2 800	179	85.2	107.0	208	1
7921A5DB	DF	DT	78 500	108 000	8 000	11 000	4 300	6 000	78	38.3	—	140	1
7921CDB	DF	DT	83 000	114 000	8 450	11 600	5 300	7 100	54	13.5	—	140	1
7021ADB	DF	DT	130 000	163 000	13 300	16 700	3 400	4 500	103	50.5	—	154	1
7021CDB	DF	DT	143 000	179 000	14 600	18 200	4 800	6 700	62	9.5	—	154	1
7221ADB	DF	DT	254 000	283 000	25 900	28 900	3 000	4 000	121	49.2	112.0	183	1
7221BDB	DF	DT	231 000	258 000	23 500	26 300	2 200	3 000	160	87.8	112.0	183	1
7221CDB	DF	DT	264 000	286 000	26 900	29 100	4 300	6 000	76	3.5	—	183	1
7321ADB	DF	DT	335 000	385 000	34 500	39 500	2 200	2 800	144	46.3	—	218	1
7321BDB	DF	DT	310 000	355 000	31 500	36 000	1 900	2 600	187	89.4	—	218	1
7922A5DB	DF	DT	79 500	112 000	8 100	11 500	4 300	5 600	81	40.6	—	145	1
7922CDB	DF	DT	84 500	119 000	8 600	12 100	5 000	6 700	55	14.8	—	145	1
7022ADB	DF	DT	157 000	191 000	16 000	19 400	3 200	4 300	109	52.8	—	164	1
7022CDB	DF	DT	172 000	208 000	17 600	21 200	4 500	6 300	66	9.5	—	164	1
7222ADB	DF	DT	276 000	315 000	28 100	32 500	2 800	4 000	128	51.5	117.0	193	1
7222BDB	DF	DT	250 000	289 000	25 500	29 400	2 000	2 800	168	92.1	117.0	193	1
7222CDB	DF	DT	286 000	320 000	29 200	32 500	4 000	5 600	80	3.5	—	193	1
7322ADB	DF	DT	360 000	430 000	36 500	44 000	2 000	2 600	151	51.0	—	233	1
7322BDB	DF	DT	325 000	395 000	33 500	40 000	1 800	2 400	197	96.8	—	233	1
7924A5DB	DF	DT	110 000	154 000	11 200	15 700	3 800	5 300	89	44.5	—	160	1
7924CDB	DF	DT	117 000	162 000	11 900	16 600	4 500	6 300	60	16.2	—	160	1
7024ADB	DF	DT	166 000	213 000	16 900	21 700	3 000	4 000	115	58.6	—	174	1
7224ADB	DF	DT	297 000	355 000	30 500	36 000	2 600	3 600	137	56.7	—	208	1
7224BDB	DF	DT	269 000	325 000	27 400	33 000	1 900	2 600	181	100.5	—	208	1
7324ADB	DF	DT	400 000	505 000	41 000	51 500	1 800	2 400	165	54.7	—	253	1
7324BDB	DF	DT	365 000	460 000	37 500	47 000	1 600	2 200	214	104.4	—	253	1

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (°) (min ⁻¹) Grease Oil		Eff.Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass (kg)
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
130	180	24	1.5	1	74 000	86 000	7 550	8 750	—	4 300	6 000	48.1	139	171	1.5	1.54
	180	24	1.5	1	78 500	91 000	8 000	9 250	16.5	5 000	7 100	32.8	139	171	1.5	1.5
	200	33	2	1	117 000	125 000	12 000	12 800	—	3 400	4 500	64.1	140	190	2	3.68
	230	40	3	1.1	189 000	193 000	19 300	19 600	—	2 400	3 200	72.0	144	216	2.5	7.06
	230	40	3	1.1	171 000	175 000	17 400	17 800	—	2 200	3 000	95.5	144	216	2.5	7.1
	280	58	4	1.5	273 000	293 000	27 900	29 800	—	2 200	2 800	88.2	148	262	3	17.5
	280	58	4	1.5	250 000	268 000	25 500	27 400	—	1 900	2 600	115.0	148	262	3	17.6
140	190	24	1.5	1	75 000	90 000	7 650	9 200	—	4 000	5 600	50.5	149	181	1.5	1.63
	190	24	1.5	1	79 500	95 500	8 100	9 700	16.7	4 800	6 700	34.1	149	181	1.5	1.63
	210	33	2	1	120 000	133 000	12 200	13 500	—	3 200	4 300	67.0	150	200	2	3.9
	250	42	3	1.1	218 000	234 000	22 300	23 900	—	2 200	3 000	77.3	154	236	2.5	8.92
	250	42	3	1.1	197 000	213 000	20 100	21 700	—	2 000	2 800	102.8	154	236	2.5	8.94
	300	62	4	1.5	300 000	335 000	30 500	34 500	—	2 000	2 600	94.5	158	282	3	21.4
	300	62	4	1.5	275 000	310 000	28 100	31 500	—	1 700	2 400	123.3	158	282	3	21.6
150	210	28	2	1	96 500	115 000	9 850	11 800	—	3 800	5 000	56.0	160	200	2	2.97
	210	28	2	1	102 000	122 000	10 400	12 400	16.6	4 300	6 000	38.1	160	200	2	2.96
	225	35	2.1	1.1	137 000	154 000	14 000	15 700	—	2 400	3 000	71.6	162	213	2	4.75
	270	45	3	1.1	248 000	280 000	25 300	28 500	—	2 000	2 800	83.1	164	256	2.5	11.2
	270	45	3	1.1	225 000	254 000	22 900	25 900	—	1 800	2 600	110.6	164	256	2.5	11.2
	320	65	4	1.5	315 000	370 000	32 500	38 000	—	1 800	2 400	100.3	168	302	3	26
	320	65	4	1.5	289 000	340 000	29 400	34 500	—	1 600	2 200	131.1	168	302	3	25.9
160	220	28	2	1	106 000	133 000	10 800	13 500	16.7	3 800	5 000	39.4	170	210	2	3.1
	240	38	2.1	1.1	155 000	176 000	15 800	18 000	—	2 200	2 800	76.7	172	228	2	5.77
	290	48	3	1.1	263 000	305 000	26 800	31 500	—	1 900	2 600	89.0	174	276	2.5	14.1
	290	48	3	1.1	238 000	279 000	24 200	28 400	—	1 700	2 400	118.4	174	276	2.5	14.2
	340	68	4	1.5	345 000	420 000	35 500	43 000	—	1 700	2 200	106.2	178	322	3	30.7
	340	68	4	1.5	315 000	385 000	32 000	39 500	—	1 500	2 000	138.9	178	322	3	30.8
170	230	28	2	1	113 000	148 000	11 500	15 100	16.8	3 600	4 800	40.8	180	220	2	3.36
	260	42	2.1	1.1	186 000	214 000	19 000	21 900	—	2 000	2 600	83.1	182	248	2	7.9
	310	52	4	1.5	295 000	360 000	30 000	36 500	—	1 800	2 400	95.3	188	292	3	17.3
	310	52	4	1.5	266 000	325 000	27 200	33 000	—	1 600	2 200	126.7	188	292	3	17.6
	360	72	4	1.5	390 000	485 000	39 500	49 500	—	1 600	2 200	112.5	188	342	3	35.8
	360	72	4	1.5	355 000	445 000	36 000	45 500	—	1 400	2 000	147.2	188	342	3	35.6

Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center		Abutment and Fillet		
			(N)		{kgf}		(Matched)		Spacings (mm)		Dimensions (mm)		
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db (3)	Db	rb (3)
										min	max	max	
7926 A5 DB	DF	DT	120 000	172 000	12 300	17 500	3 400	4 800	96.3	48.3	—	174	1
7926CDB	DF	DT	128 000	182 000	13 000	18 500	4 000	5 600	65.5	17.5	—	174	1
7026ADB	DF	DT	191 000	251 000	19 400	25 600	2 600	3 600	128.3	62.3	—	194	1
7226ADB	DF	DT	310 000	385 000	31 500	39 500	1 900	2 600	143.9	63.9	—	223	1
7226BDB	DF	DT	278 000	350 000	28 300	35 500	1 700	2 400	191.0	111.0	—	223	1
7326ADB	DF	DT	445 000	585 000	45 500	59 500	1 700	2 200	176.3	60.3	—	271	1.5
7326BDB	DF	DT	405 000	535 000	41 500	54 500	1 500	2 000	230.0	114.0	—	271	1.5
7928A5DB	DF	DT	122 000	180 000	12 400	18 400	3 200	4 500	100.9	52.9	—	184	1
7928CDB	DF	DT	129 000	191 000	13 200	19 400	3 800	5 300	68.2	20.2	—	184	1
7028ADB	DF	DT	194 000	265 000	19 800	27 000	2 600	3 400	134.0	68.0	—	204	1
7228ADB	DF	DT	355 000	470 000	36 000	48 000	1 800	2 400	154.6	70.6	—	243	1
7228BDB	DF	DT	320 000	425 000	32 500	43 500	1 600	2 200	205.6	121.6	—	243	1
7328ADB	DF	DT	490 000	670 000	50 000	68 500	1 600	2 000	189.0	65.0	—	291	1.5
7328BDB	DF	DT	445 000	615 000	45 500	63 000	1 400	1 900	246.6	122.6	—	291	1.5
7930A5DB	DF	DT	157 000	231 000	16 000	23 500	3 000	4 000	112.0	56.0	—	204	1
7930CDB	DF	DT	166 000	244 000	16 900	24 900	3 600	4 800	76.2	20.2	—	204	1
7030ADB	DF	DT	222 000	305 000	22 700	31 500	1 900	2 400	143.3	73.3	—	218	1
7230ADB	DF	DT	405 000	560 000	41 000	57 000	1 600	2 200	166.3	76.3	—	263	1
7230BDB	DF	DT	365 000	510 000	37 000	52 000	1 500	2 000	221.2	131.2	—	263	1
7330ADB	DF	DT	515 000	745 000	52 500	75 500	1 500	1 900	200.7	70.7	—	311	1.5
7330BDB	DF	DT	470 000	680 000	48 000	69 500	1 300	1 800	262.2	132.2	—	311	1.5
7932CDB	DF	DT	173 000	265 000	17 600	27 000	3 000	4 000	78.9	22.9	—	214	1
7032ADB	DF	DT	252 000	355 000	25 700	36 000	1 700	2 400	153.5	77.5	—	233	1
7232ADB	DF	DT	425 000	615 000	43 500	62 500	1 500	2 000	177.9	81.9	—	283	1
7232BDB	DF	DT	385 000	555 000	39 500	57 000	1 400	1 900	236.8	140.8	—	283	1
7332ADB	DF	DT	565 000	845 000	57 500	86 000	1 400	1 800	212.3	76.3	—	331	1.5
7332BDB	DF	DT	515 000	770 000	52 500	78 500	1 200	1 700	277.8	141.8	—	331	1.5
7934CDB	DF	DT	183 000	297 000	18 700	30 000	2 800	3 800	81.6	25.6	—	224	1
7034ADB	DF	DT	300 000	430 000	31 000	43 500	1 600	2 200	166.1	82.1	—	253	1
7234ADB	DF	DT	480 000	715 000	49 000	73 000	1 400	1 900	190.6	86.6	—	301	1.5
7234BDB	DF	DT	435 000	650 000	44 000	66 500	1 300	1 700	253.4	149.4	—	301	1.5
7334ADB	DF	DT	630 000	970 000	64 500	99 000	1 300	1 700	225.0	81.0	—	351	1.5
7334BDB	DF	DT	575 000	890 000	59 000	90 500	1 100	1 600	294.3	150.3	—	351	1.5

Boundary Dimensions (mm)					Basic Load Ratings (Single) (N) {kgf}				Factor f_0	Limiting Speeds (') (min ⁻¹) Grease Oil		Eff.Load Centers (mm)	Abutment and Fillet Dimensions (mm)			Mass
d	D	B	r	r1	Cr	C0r	Cr	C0r				a	da	Da	ra	(kg)
			min	min									min.	max	max.	approx.
180	250	33	2	1	145 000	184 000	14 800	18 800	16.6	3 200	4 500	45.3	190	240	2	4.9
	280	46	2.1	1.1	207 000	252 000	21 100	25 700	—	1 900	2 400	89.4	192	268	2	10.5
	320	52	4	1.5	305 000	385 000	31 000	39 000	—	1 700	2 200	98.2	198	302	3	18.1
	320	52	4	1.5	276 000	350 000	28 100	35 500	—	1 500	2 000	130.9	198	302	3	18.4
	380	75	4	1.5	410 000	535 000	41 500	54 500	—	1 500	2 000	118.3	198	362	3	42.1
	380	75	4	1.5	375 000	490 000	38 000	50 000	—	1 300	1 800	155.0	198	362	3	42.6
190	260	33	2	1	147 000	192 000	15 000	19 600	16.7	3 000	4 300	46.6	200	250	2	4.98
	290	46	2.1	1.1	224 000	280 000	22 800	28 600	—	1 800	2 400	92.3	202	278	2	11.3
	340	55	4	1.5	315 000	410 000	32 000	42 000	—	1 600	2 200	104.0	208	322	3	22.4
	340	55	4	1.5	284 000	375 000	28 900	38 000	—	1 400	2 000	138.7	208	322	3	22.5
	400	78	5	2	450 000	600 000	46 000	61 000	—	1 400	1 900	124.2	212	378	4	47.5
	400	78	5	2	410 000	550 000	42 000	56 000	—	1 300	1 700	162.8	212	378	4	47.2
200	280	38	2.1	1.1	189 000	244 000	19 300	24 900	16.5	2 800	4 000	51.2	212	268	2	6.85
	310	51	2.1	1.1	240 000	310 000	24 500	31 500	—	1 700	2 200	99.1	212	298	2	13.7
	360	58	4	1.5	335 000	450 000	34 500	46 000	—	1 500	2 000	109.8	218	342	3	26.5
	360	58	4	1.5	305 000	410 000	31 000	41 500	—	1 300	1 800	146.5	218	342	3	26.6
	420	80	5	2	475 000	660 000	48 500	67 000	—	1 300	1 800	129.5	222	398	4	54.4
	420	80	5	2	430 000	600 000	44 000	61 500	—	1 200	1 600	170.1	222	398	4	55.3

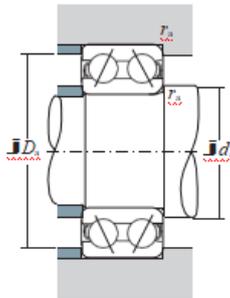
Bearing Numbers (°) Single Duplex			Basic Load Ratings (Matched)				Limiting Speeds (°)		Load Center Spacings (mm)		Abutment and Fillet Dimensions (mm)		
			(N)	{kgf}			(Matched) (min ⁻¹)		a_0				
			Cr	C0r	Cr	C0r	Grease	Oil	DB	DF	db (3)	Db	rb (3)
											min	max	max
7936CDB	DF	DT	236 000	370 000	24 000	37 500	2 600	3 600	90.6	24.6	—	244	1
7036ADB	DF	DT	335 000	505 000	34 500	51 500	1 500	2 000	178.8	86.8	—	273	1
7236ADB	DF	DT	495 000	770 000	50 500	78 500	1 400	1 800	196.3	92.3	—	311	1.5
7236BDB	DF	DT	450 000	700 000	45 500	71 000	1 200	1 700	261.8	157.8	—	311	1.5
7336ADB	DF	DT	665 000	1 070 000	68 000	109 000	1 200	1 600	236.6	86.6	—	371	1.5
7336BDB	DF	DT	605 000	975 000	62 000	99 500	1 100	1 500	309.9	159.9	—	371	1.5
7938CDB	DF	DT	239 000	385 000	24 400	39 000	2 400	3 400	93.3	27.3	—	254	1
7038ADB	DF	DT	365 000	560 000	37 000	57 000	1 400	1 900	184.6	92.6	—	283	1
7238ADB	DF	DT	510 000	825 000	52 000	84 000	1 300	1 700	208.0	98.0	—	331	1.5
7238BDB	DF	DT	460 000	750 000	47 000	76 000	1 100	1 600	277.3	167.3	—	331	1.5
7338ADB	DF	DT	730 000	1 200 000	74 500	122 000	1 100	1 500	248.3	92.3	—	390	2
7338BDB	DF	DT	670 000	1 100 000	68 000	112 000	1 000	1 400	325.5	169.5	—	390	2
7940CDB	DF	DT	305 000	490 000	31 500	50 000	2 200	3 200	102.3	26.3	—	273	1
7040ADB	DF	DT	390 000	620 000	40 000	63 500	1 300	1 800	198.2	96.2	—	303	1
7240ADB	DF	DT	550 000	900 000	56 000	92 000	1 200	1 600	219.6	103.6	—	351	1.5
7240BDB	DF	DT	495 000	815 000	50 500	83 000	1 100	1 500	292.9	176.9	—	351	1.5
7340ADB	DF	DT	770 000	1 320 000	78 500	134 000	1 100	1 400	259.0	99.0	—	410	2
7340BDB	DF	DT	700 000	1 200 000	71 500	123 000	950	1 300	340.1	180.1	—	410	2



Boundary Dimensions (mm)				Basic Load Ratings (N) (kgf)				Load Center Spacings (mm)		Bearing numbers
d	D	B	r	Cr	C0r	Cr	C0r	Grease	oil	
			min							
10	30	14.3	0.6	7 150	3 900	730	400	17 000	22 000	5200
12	32	15.9	0.6	10 500	5 800	1 070	590	15 000	20 000	5201
15	35	15.9	0.6	11 700	7 50	1 190	715	13 000	17 000	5202
	42	19	1	17 600	10 200	1 800	1 40	11 000	15 000	5302
17	40	17.5	0.6	14 600	9 00050	1 490	920	11 000	15 000	5203
	47	22.2	1	21 00000	12 600	2 140	1 280	10 000	13 000	5303
20	47	20.6	1	19 600	12 400	2 00000	1 270	10 000	13 000	5204
	52	22.2	1.1	24 600	15 00000	2 510	1 530	9 000	12 000	5304
25	52	20.6	1	21 300	14 700	2 170	1 500	8 500	11 000	5205
	62	25.4	1.1	32 500	20 700	3 350	2 110	7 500	10 000	5305
30	62	23.8	1	29 600	21 100	3 000	2 150	7 100	9 500	5206
	72	30.2	1.1	40 500	28 100	4 150	2 870	6 300	8 500	5306
35	72	27	1.1	39 00000	28 700	4 000	2 920	6 300	8 000	5207
	80	34.9	1.5	51 00000	36 00000	5 200	3 700	5 600	7 500	5307
40	80	30.2	1.1	44 00000	33 500	4 500	3 400	5 600	7 100	5208
	90	36.5	1.5	56 500	41 00000	5 800	4 200	5 300	6 700	5308
45	85	30.2	1.1	49 500	38 00000	5 050	3 900	5 000	6 700	5209
	100	39.7	1.5	68 500	51 00000	7 000	5 200	4 500	6 000	5309
50	90	30.2	1.1	53 00000	43 500	5 400	4 400	4 800	6 000	5210
	110	44.4	2	81 500	61 500	8 300	6 250	4 300	5 600	5310
55	100	33.3	1.5	56 00000	49 00000	5 700	5 000	4 300	5 600	5211
	120	49.2	2	95 00000	73 00000	9 700	7 450	3 800	5 000	5311
60	110	36.5	1.5	69 00000	62 00000	7 050	6 300	3 800	5 000	5212
	130	54	2.1	125 00000	98 500	12 800	10 000	3 400	4 500	5312
65	120	38.1	1.5	76 500	69 00000	7 800	7 50	3 600	4 500	5213
	140	58.7	2.1	142 00000	113 00000	14 500	11 500	3 200	4 300	5313
70	125	39.7	1.5	94 00000	82 00000	9 600	8 400	3 400	4 500	5214
	150	63.5	2.1	159 00000	128 00000	16 200	13 100	3 000	3 800	5314
75	130	41.3	1.5	93 500	83 00000	9 550	8 500	3 200	4 300	5215
80	140	44.4	2	99 00000	93 00000	10 100	9 500	3 000	3 800	5216

85	150
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2 800	3 600	5217
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Dynamic Equivalent Load

$$P = XF_r + YF_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$		e
X	Y	X	Y	
1	0.92	0.67	1.41	0.68

Static Equivalent Load

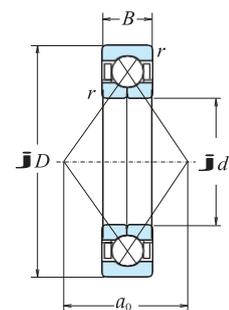
$$P_0 = F_r + 0.76 F_a$$

Load Center Spacings (mm)	d_a	Abutment and Fillet Dimensions (mm)		Mass (kg)
		Da	ra	
a0	min.	max.	max.	approx.
14.5	15	25	0.6	0.050
16.7	17	27	0.6	0.060
18.3	20	30	0.6	0.070
22.0	21	36	1	0.11
20.8	22	35	0.6	0.090
25.0	23	41	1	0.14
24.3	26	41	1	0.12
26.7	27	45	1	0.23
26.8	31	46	1	0.19
31.8	32	55	1	0.34
31.6	36	56	1	0.29
36.5	37	65	1	0.51
36.6	42	65	1	0.43
41.6	44	71	1.5	0.79
41.5	47	73	1	0.57
45.5	49	81	1.5	1.05
43.4	52	78	1	0.62
50.6	54	91	1.5	1.4
45.9	57	83	1	0.67
55.6	60	100	2	1.95
50.1	64	91	1.5	0.96
60.6	65	110	2	2.3
56.5	69	101	1.5	1.35
69.2	72	118	2	3.15
59.7	74	111	1.5	1.65
72.8	77	128	2	3.85
63.8	79	116	1.5	1.8
78.3	82	138	2	4.9
66.1	84	121	1.5	1.9
69.6	90	130	2	2.5

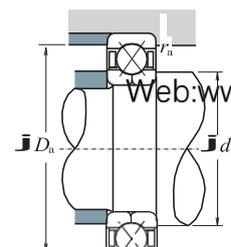
Angular Contact Ball Bearings

75.3	95	140	2	3.4	
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Boundary Dimensions (mm)				Basic Load Ratings (N) (kgf)				Load Center Spacings (min-1)	
d	D	B	r	Cr	C0r	Cr	C0r	Grease	oil
			min						



30	62	16	1	31 000	45 000	3 150	4 600	8 500	12 000
	72	19	1.1	46 000	63 000	4 700	6 450	8 000	11 000
35	72	17	1.1	41 000	61 500	4 200	6 250	7 500	10 000
	80	21	1.5	55 000	80 000	5 600	8 150	7 100	9 500
40	80	18	1.1	49 000	77 500	5 000	7 900	6 700	9 000
	90	23	1.5	67 000	100 000	6 850	10 200	6 300	8 500
45	85	19	1.1	55 000	88 500	5 600	9 000	6 300	8 500
	100	25	1.5	87 500	133 000	8 900	13 500	5 600	7 500
50	90	20	1.1	57 000	97 000	5 850	9 900	5 600	8 000
	110	27	2	102 000	159 000	10 400	16 200	5 000	6 700
55	100	21	1.5	71 000	122 000	7 200	12 500	5 300	7 100
	120	29	2	118 000	187 000	12 000	19 100	4 500	6 300
60	110	22	1.5	85 500	150 000	8 750	15 300	4 800	6 300
	130	31	2.1	135 000	217 000	13 800	22 200	4 300	5 600
65	120	23	1.5	97 500	179 000	9 950	18 300	4 300	6 000
	140	33	2.1	153 000	250 000	15 600	25 500	3 800	5 300
70	125	24	1.5	106 000	197 000	10 800	20 100	4 000	5 600
	150	35	2.1	172 000	285 000	17 500	29 100	3 600	5 000
75	130	25	1.5	110 000	212 000	11 200	21 700	3 800	5 300
	160	37	2.1	187 000	320 000	19 100	33 000	3 400	4 800
80	125	22	1.1	77 000	167 000	7 850	17 000	3 800	5 300
	140	26	2	124 000	236 000	12 600	24 100	3 600	5 000
	170	39	2.1	202 000	360 000	20 600	37 000	3 200	4 300
85	130	22	1.1	79 000	176 000	8 050	18 000	3 800	5 000
	150	28	2	143 000	276 000	14 600	28 200	3 400	4 800
	180	41	3	218 000	405 000	22 300	41 000	3 000	4 000
90	140	24	1.5	94 000	208 000	9 600	21 200	3 400	4 800
	160	30	2	164 000	320 000	16 700	32 500	3 200	4 300
	190	43	3	235 000	450 000	23 900	45 500	2 800	3 800
95	145	24	1.5	96 500	220 000	9 800	22 500	3 400	4 500
	170	32	2.1	177 000	340 000	18 000	35 000	3 000	4 000
	200	45	3	251 000	495 000	25 600	50 500	2 600	3 600



Dynamic Equivalent Load

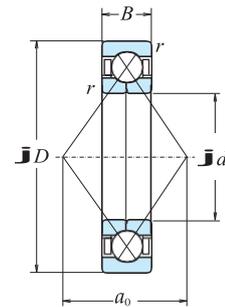
$$P_a = F_a$$

Static Equivalent Load

$$P_{0a} = F_a$$

Bearing numbers	Load Center Spacings (mm)	Abutment and Fillet Dimensions (mm)			Mass (kg)
		da	Da	ra	
	a0	min	max.	max	approx.
QJ 206	32.2	36	56	1	0.24
QJ 306	35.7	37	65	1	0.42
QJ 207	37.5	42	65	1	0.35
QJ 307	40.3	44	71	1.5	0.57
QJ 208	42.0	47	73	1	0.45
QJ 308	45.5	49	81	1.5	0.78
QJ 209	45.5	52	78	1	0.52
QJ 309	50.8	54	91	1.5	1.05
QJ 210	49.0	57	83	1	0.59
QJ 310	56.0	60	100	2	1.35
QJ 211	54.3	64	91	1.5	0.77
QJ 311	61.3	65	110	2	1.75
QJ 212	59.5	69	101	1.5	0.98
QJ 312	66.5	72	118	2	2.15
QJ 213	64.8	74	111	1.5	1.2
QJ 313	71.8	77	128	2	2.7
QJ 214	68.3	79	116	1.5	1.3
QJ 314	77.0	82	138	2	3.18
QJ 215	71.8	84	121	1.5	1.5
QJ 315	82.3	87	148	2	3.9
QJ 1016	71.8	87	118	1	1.05
QJ 216	77.0	90	130	2	1.85
QJ 316	87.5	92	158	2	4.6
QJ 1017	75.3	92	123	1	1.1
QJ 217	82.3	95	140	2	2.2
QJ 317	92.8	99	166	2.5	5.34
QJ 1018	80.5	99	131	1.5	1.45
QJ 218	87.5	100	150	2	2.75
QJ 318	98.0	104	176	2.5	6.4
QJ 1019	84.0	104	136	1.5	1.5
QJ 219	92.8	107	158	2	3.35
QJ 319	103.3	109	186	2.5	7.4

Boundary Dimensions (mm)				Basic Load Ratings (N)				Load Center Spacings (mm)	
d	D	B	r	(kgf)				Grease	oil
			min	Cr	C0r	Cr	C0r		
100	150	24	1.5	98 500	232 000	10 000	23 700	3 200	4 300
	180	34	2.1	199 000	390 000	20 300	39 500	2 800	3 800
	215	47	3	300 000	640 000	31 000	65 500	2 400	3 400
105	160	26	2	115 000	269 000	11 800	27 400	3 000	4 000
	190	36	2.1	217 000	435 000	22 100	44 500	2 600	3 600
	225	49	3	305 000	640 000	31 000	65 500	2 400	3 200
110	170	28	2	139 000	315 000	14 200	32 000	2 800	3 800
	200	38	2.1	235 000	490 000	24 000	50 000	2 600	3 400
	240	50	3	320 000	710 000	32 500	72 500	2 200	3 000
120	180	28	2	147 000	350 000	15 000	36 000	2 600	3 600
	215	40	2.1	265 000	585 000	27 000	60 000	2 400	3 200
	260	55	3	360 000	835 000	36 500	85 500	2 000	2 800
130	200	33	2	169 000	415 000	17 300	42 000	2 400	3 200
	230	40	3	274 000	635 000	28 000	65 000	2 200	3 000
	280	58	4	400 000	970 000	40 500	99 000	1 900	2 600
140	210	33	2	172 000	435 000	17 600	44 500	2 200	3 000
	250	42	3	239 000	710 000	29 900	72 500	2 000	2 800
	300	62	4	440 000	1 110 000	44 500	114 000	1 700	2 400
150	225	35	2.1	197 000	505 000	20 100	51 500	2 000	2 800
	270	45	3	315 000	785 000	32 000	80 000	1 800	2 600
	320	65	4	460 000	1 230 000	47 000	125 000	1 600	2 200
160	240	38	2.1	224 000	580 000	22 800	59 000	1 900	2 600
	290	48	3	380 000	1 10 000	39 000	103 000	1 700	2 400
	340	68	4	505 000	1 400 000	51 500	143 000	1 500	2 000
170	260	42	2.1	268 000	705 000	27 300	72 000	1 800	2 400
	310	52	4	425 000	1 180 000	43 500	121 000	1 600	2 200
	360	72	4	565 000	1 610 000	57 500	164 000	1 400	2 000
180	280	46	2.1	299 000	830 000	30 500	84 500	1 700	2 200
	320	52	4	440 000	1 270 000	45 000	130 000	1 500	2 000
	380	75	4	595 000	1 770 000	60 500	180 000	1 300	1 800
190	290	46	2.1	325 000	925 000	33 000	94 000	1 600	2 200
	340	55	4	440 000	1 290 000	44 500	131 000	1 400	2 000
	400	78	5	655 000	1 980 000	67 000	202 000	1 300	1 700
200	310	51	2.1	345 000	1 20 000	35 500	104 000	1 500	2 000
	360	58	4	490 000	1 480 000	49 500	151 000	1 300	1 800
	420	80	5	690 000	2 180 000	70 500	222 000	1 200	1 600



Bearing numbers	Load Center Spacings (mm)	Abutment and Fillet Dimensions (mm)			Mass(kg)
		da	Da	ra	
	a0	min	max.	max	approx.
QJ 1020	87.5	109	141	1.5	1.6
QJ 220	98.0	112	168	2	4.0
QJ 320	110.3	114	201	2.5	9.3
QJ 1021	92.8	115	150	2	2.0
QJ 221	103.3	117	178	2	4.7
QJ 321	115.5	119	211	2.5	10.5
QJ 1022	98.0	120	160	2	2.5
QJ 222	108.5	122	188	2	5.6
QJ 322	122.5	124	226	2.5	12.5
QJ 1024	105.0	130	170	2	2.65
QJ 224	117.3	132	203	2	6.9
QJ 324	133.0	134	246	2.5	15.4
QJ 1026	115.5	140	190	2	4.0
QJ 226	126.0	144	216	2.5	7.7
QJ 326	143.5	148	262	3	19
QJ 1028	122.5	150	200	2	4.3
QJ 228	136.5	154	236	2.5	9.8
QJ 328	154.0	158	282	3	24
QJ 1030	131.3	162	213	2	5.2
QJ 230	147.0	164	256	2.5	12
QJ 330	164.5	168	302	3	29
QJ 1032	140.0	172	228	2	6.4
QJ 232	157.5	174	276	2.5	15
QJ 332	175.1	178	322	3	31
QJ 1034	150.5	182	248	2	8.6
QJ 234	168.0	188	292	3	19.5
QJ 334	185.6	188	342	3	41
QJ 1036	161.0	192	268	2	11
QJ 236	175.1	198	302	3	20.5
QJ 336	196.1	198	362	3	48
QJ 1038	168.0	202	278	2	11.5
QJ 238	185.6	208	322	3	23
QJ 338	206.6	212	378	4	54.5
QJ 1040	178.6	212	298	2	15
QJ 240	196.1	218	342	3	27
QJ 340	217.1	222	398	4	61.5

Dynamic Equivalent Load

$$P_a = F_a$$

Static Equivalent Load

$$P_{0a} = F_a$$

