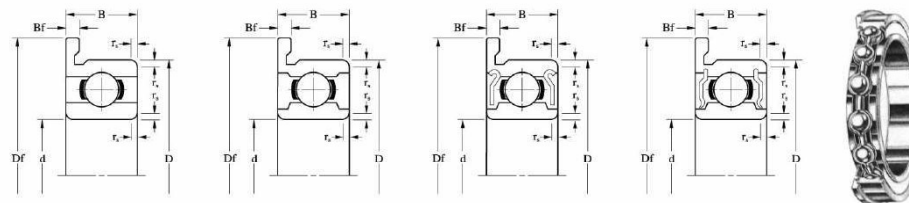
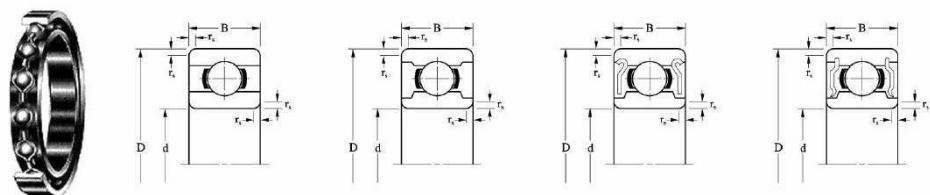


# Extra thin metric series: 6700, 6800, 6900 ( $10 \leq d \leq 30\text{mm}$ )



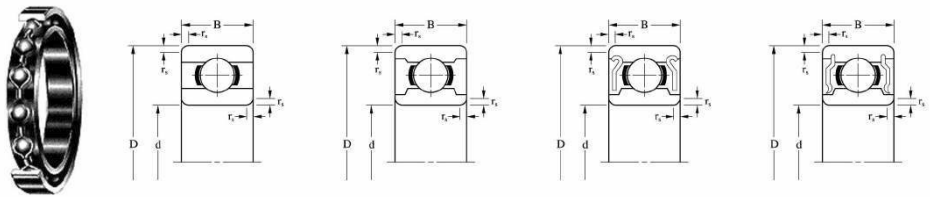
Bore Diameter: d		Outer Diameter: D		Flange Diameter: Df		Chamfer r <sub>s</sub> (min)		Width: B		Flange Width: Bf		Bearing Reference							
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Open	Flange Open	2 Shields	Flange 2 Shields				
10	0.3937	15	0.5906	16.5	0.6496	0.15 <sup>(4)</sup>	0.0059 <sup>(4)</sup>	3	0.1181	0.8	0.0315	6700	F6700	—	—				
		15	0.5906	16.5	0.6496	0.15 <sup>(4)</sup>	0.0059 <sup>(4)</sup>	4	0.1575	0.8	0.0315	—	—	6700ZZ	F6700ZZ				
		19	0.7480	21.0	0.8268	0.30	0.0118	5	0.1969	1.0	0.0384	6800 <sup>(1)</sup>	F6800 <sup>(1)</sup>	6800ZZ	F6800ZZ				
		19	0.7480	21.0	0.8268	0.30	0.0118	7	0.2756	1.5	0.0581	63800 <sup>(1)</sup>	F63800 <sup>(1)</sup>	63800ZZ	F63800ZZ				
		22	0.8661	25.0	0.9843	0.30	0.0118	6	0.2362	1.5	0.0581	6900 <sup>(1)</sup>	F6900 <sup>(1)</sup>	6900ZZ	F6900ZZ				
12	0.4724	18	0.7087	19.5	0.7677	0.20	0.0079	4	0.1575	0.8	0.0315	6701 <sup>(1)</sup>	F6701 <sup>(1)</sup>	6701ZZ	F6701ZZ				
		21	0.8268	23.0	0.9055	0.30	0.0118	5	0.1969	1.1	0.0433	6801 <sup>(1)</sup>	F6801 <sup>(1)</sup>	6801ZZ	F6801ZZ				
		21	0.8268	23.0	0.9055	0.30	0.0118	7	0.2756	1.5	0.0581	63801 <sup>(1)</sup>	F63801 <sup>(1)</sup>	63801ZZ	F63801ZZ				
		24	0.9449	26.5	1.0433	0.30	0.0118	6	0.2362	1.5	0.0581	6901 <sup>(1)</sup>	F6901 <sup>(1)</sup>	6901ZZ	F6901ZZ				
15	0.5906	21	0.8268	22.5	0.8858	0.20	0.0079	4	0.1575	0.8	0.0315	6702 <sup>(1)</sup>	F6702 <sup>(1)</sup>	6702ZZ	F6702ZZ				
		24	0.9449	26.0	1.0236	0.30	0.0118	5	0.1969	1.1	0.0433	6802 <sup>(1)</sup>	F6802 <sup>(1)</sup>	6802ZZ	F6802ZZ				
		24	0.9449	26.0	1.0236	0.30	0.0118	7	0.2756	1.5	0.0581	63802 <sup>(1)</sup>	F63802 <sup>(1)</sup>	63802ZZ	F63802ZZ				
		28	1.1024	30.5	1.2008	0.30	0.0118	7	0.2756	1.5	0.0581	6902 <sup>(1)</sup>	F6902 <sup>(1)</sup>	6902ZZ	F6902ZZ				
17	0.6693	23	0.9055	24.5	0.9646	0.20	0.0079	4	0.1575	0.8	0.0315	6703 <sup>(1)</sup>	F6703 <sup>(1)</sup>	6703ZZ	F6703ZZ				
		26	1.0236	28.0	1.1024	0.30	0.0118	5	0.1969	1.1	0.0433	6803 <sup>(1)</sup>	F6803 <sup>(1)</sup>	6803ZZ	F6803ZZ				
		26	1.0236	28.0	1.1024	0.30	0.0118	7	0.2756	1.5	0.0581	63803 <sup>(1)</sup>	F63803 <sup>(1)</sup>	63803ZZ	F63803ZZ				
		30	1.1811	32.5	1.2795	0.30	0.0118	7	0.2756	1.5	0.0581	6903 <sup>(1)</sup>	F6903 <sup>(1)</sup>	6903ZZ	F6903ZZ				
20	0.7874	27	1.0630	28.5	1.1220	0.20	0.0079	4	0.1575	0.8	0.0315	6704 <sup>(1)</sup>	F6704 <sup>(1)</sup>	6704ZZS	F6704ZZS				
		32	1.2598	35.0	1.3780	0.30	0.0118	7	0.2756	1.5	0.0581	6804 <sup>(1)</sup>	F6804 <sup>(1)</sup>	6804ZZS	F6804ZZS				
		32	1.2598	—	—	0.30	0.0118	10	0.3937	—	—	63804 <sup>(1)</sup>	—	63804ZZ	—				
		37	1.4567	40.0	1.5748	0.30	0.0118	9	0.3543	2.0	0.0787	6904 <sup>(1)</sup>	F6904 <sup>(1)</sup>	6904ZZ	F6904ZZ				
25	0.9843	32	1.2598	34.0	1.3386	0.20	0.0079	4	0.1575	1.0	0.0384	6705 <sup>(1)</sup>	F6705 <sup>(1)</sup>	—	—				
		37	1.4567	40.0	1.5748	0.30	0.0118	7	0.2756	1.5	0.0581	6805 <sup>(1)</sup>	F6805 <sup>(1)</sup>	6805ZZ	F6805ZZ				
		37	1.4567	—	—	0.30	0.0118	10	0.3937	—	—	63805 <sup>(1)</sup>	—	63805ZZ	—				
		42	1.6535	45.0	1.7717	0.30	0.0118	9	0.3543	2.0	0.0787	6905 <sup>(1)</sup>	F6905 <sup>(1)</sup>	6905ZZ	F6905ZZ				
30	1.1811	37	1.4567	39.0	1.5354	0.20	0.0079	4	0.1575	1.0	0.0384	6706 <sup>(1)</sup>	F6706 <sup>(1)</sup>	—	—				
		42	1.6535	45.0	1.7717	0.30	0.0118	7	0.2756	1.5	0.0581	6806 <sup>(1)</sup>	F6806 <sup>(1)</sup>	6806ZZ	F6806ZZ				
		47	1.8504	50.0	1.9685	0.30	0.0118	9	0.3543	2.0	0.0787	6906 <sup>(1)</sup>	F6906 <sup>(1)</sup>	6906ZZ	F6906ZZ				

2 Seals			Load Rating		Max. Speed		Cage Type	Ball Complement		Weight(Ref.)		
2RS	2RU	TTS	Cr(N)	Cor(N)	Grease	Oil		Qty.:Z	Size:Dw	2 Shields	Flange 2 Shields	
—	—	—	(N)		x1000min <sup>-1</sup>			pcs.	mm	inch	g	
—	—	—	857	435	15	17	W	11	1.588	0.0625	1.3 <sup>(6)</sup>	1.6 <sup>(6)</sup>
2RS	—	TTS	857	435	15	17	W	11	1.588	0.0625	1.8	2.0
2RS	2RU	—	1720	840	34	40	J,TW	10	2.381	0.0937	5.1	5.6
2RS	2RU	—	1720	840	34	40	J,TW	10	2.381	0.0937	7.0	7.8
2RS	2RU	—	2700	1270	31	37	J	9	3.175	0.1250	9.4	10.6
2RS	—	TTS	928	532	13	15	W	13	1.588	0.0625	2.8	3.1
2RS	2RU	—	1920	1040	30	36	J,TW	12	2.381	0.0937	5.7	6.3
2RS	2RU	—	1920	1040	30	36	J,TW	12	2.381	0.0937	7.9	8.7
2RS	2RU	—	2890	1460	28	33	J	10	3.175	0.1250	10.8	11.9
2RS	—	TTS	937	581	11	13	W	14	1.588	0.0625	3.4	3.7
2RS	2RU	—	2070	1260	26	31	J	14	2.381	0.0937	6.7	7.4
2RS	2RU	—	2070	1260	26	31	J	14	2.381	0.0937	9.3	10.2
2RS	2RU	—	4330	2250	24	29	J	10	3.969	0.1563	16.0	17.3
2RS	—	TTS	969	657	9.5	11	W	16	1.588	0.0625	3.8	4.1
2RS	2RU	—	2230	1460	24	29	J,TW	16	2.381	0.0937	7.5	8.3
2RS	2RU	—	2230	1460	24	29	J,TW	16	2.381	0.0937	10.4	11.4
2RS	2RU	—	4590	2580	22	26	J	11	3.969	0.1563	16.7	18.2
2RS	—	TTS	1010	722	8.5	10	W	18	1.588	0.0625	5.6	6.0
2RS	2RU	—	4020	2460	21	25	J,RJ <sup>(5)</sup>	13	3.500	0.1378	17.1	18.9
2RS	2RU	—	4020	2460	21	25	J,RJ <sup>(5)</sup>	13	3.500	0.1378	23.8	—
2RS	2RU	—	6380	3680	19	22	RJ	11	4.762	0.1875	35.1	37.9
2RS	—	—	1100	838	7	8	W	21	1.588	0.0625	6.4 <sup>(6)</sup>	7.2 <sup>(6)</sup>
2RS	2RU	—	4300	2940	18	21	J,RJ <sup>(5)</sup>	15	3.500	0.1378	20.8	22.9
2RS	2RU	—	4300	2940	18	21	J,RJ <sup>(5)</sup>	15	3.500	0.1378	28.8	—
2RS	2RU	—	7010	4550	16	19	RJ	13	4.762	0.1875	42.0	45.1
—	2RU	—	1140	947	5.5	7	W	24	1.588	0.0625	7.3 <sup>(6)</sup>	7.7 <sup>(6)</sup>
2RS	2RU	—	4450	3440	15	18	J,RJ <sup>(5)</sup>	17	3.500	0.1378	23.8	26.1
2RS	2RU	—	7240	5010	14	17	RJ	14	4.762	0.1875	47.9	51.4

(1) Open type bearings have shields/seal grooves.  
 (2) Single shield or single seal types are also available; suffix Z, RS, RU or TS.  
 (3) Suffix H is added for stainless material types. Load ratings of stainless material types are calculated by Cr×0.85 and Cor×0.80 of SUJ2 material types.  
 (4) Not according to JIS B 1521.  
 (5) SUJ2 bearings use RJ type retainers, but stainless bearings use J type retainers.  
 (6) Weight of open type.  
 (7) Applicable only for open, single Z, ZZ, single RU and 2RU types in inner ring rotating conditions. Max. speeds for the contact rubber seal(s) types will be around 50-60% of above values.

Technical Dimension

# Extra thin metric series : 6700, 6800, 6900 ( $35 \leq d \leq 95\text{mm}$ )



Bore Diameter: d		Outer Diameter: D		Chamfer r <sub>s</sub> (min)		Width: B Open		Bearing Reference			
mm	inch	mm	inch	mm	inch	mm	inch	Open	2 Shields	2 Seals	
35	1.3780	44	1.7323	0.3	0.0118	5	0.1969	6707 <sup>(1)</sup>	—	2RS	—
		47	1.8504	0.3	0.0118	7	0.2756	6807 <sup>(1)</sup>	6807ZZ	2RS	2RU
		55	2.1654	0.6	0.0236	10	0.3937	6907 <sup>(1)</sup>	6907ZZ	2RS	2RU
40	1.5748	50	1.9685	0.3	0.0118	6	0.2362	6708 <sup>(1)</sup>	—	2RS	—
		52	2.0472	0.3	0.0118	7	0.2756	6808 <sup>(1)</sup>	6808ZZ	2RS	2RU
		62	2.4409	0.6	0.0236	12	0.4724	6908 <sup>(1)</sup>	6908ZZ	2RS	2RU
45	1.7717	55	2.1654	0.3	0.0118	6	0.2362	6709 <sup>(1)</sup>	—	2RS	—
		58	2.2835	0.3	0.0118	7	0.2756	6809 <sup>(1)</sup>	6809ZZ	2RS	2RU
		68	2.6772	0.6	0.0236	12	0.4724	6909 <sup>(1)</sup>	6909ZZ	2RS	2RU
50	1.9685	62	2.4409	0.3	0.0118	6	0.2362	6710 <sup>(1)</sup>	—	2RS	—
		65	2.5591	0.3	0.0118	7	0.2756	6810 <sup>(1)</sup>	6810ZZ	2RS	2RU
		72	2.8346	0.6	0.0236	12	0.4724	6910 <sup>(1)</sup>	6910ZZ	2RS	2RU
55	2.1654	72	2.8346	0.3	0.0118	9	0.3543	6811 <sup>(1)</sup>	6811ZZ	2RS	2RU
		80	3.1496	1.0	0.0394	13	0.5118	6911 <sup>(1)</sup>	6911ZZ	2RS	2RU
60	2.3622	78	3.0709	0.3	0.0118	10	0.3937	6812 <sup>(1)</sup>	6812ZZ	2RS	2RU
		85	3.3465	1.0	0.0394	13	0.5118	6912 <sup>(1)</sup>	6912ZZ	2RS	2RU
65	2.5591	85	3.3465	0.6	0.0236	10	0.3937	6813 <sup>(1)</sup>	6813ZZ	2RS	—
		90	3.5433	1.0	0.0394	13	0.5118	6913 <sup>(1)</sup>	6913ZZ	2RS	—
70	2.7559	90	3.5433	0.6	0.0236	10	0.3937	6814 <sup>(1)</sup>	6814ZZ	2RS	2RU
		100	3.9370	1.0	0.0394	16	0.6299	6914 <sup>(1)</sup>	6914ZZ	2RS	—
75	2.9528	95	3.7402	0.6	0.0236	10	0.3937	6815 <sup>(1)</sup>	6815ZZ	2RS	—
		105	4.1339	1.0	0.0394	16	0.6299	6915 <sup>(1)</sup>	6915ZZ	2RS	—
80	3.1496	100	3.9370	0.6	0.0236	10	0.3937	6816 <sup>(1)</sup>	6816ZZ	2RS	2RU
		110	4.3307	1.0	0.0394	16	0.6299	6916 <sup>(1)</sup>	6916ZZ	2RS	—
85	3.3465	110	4.3307	1.0	0.0394	13	0.5118	6817 <sup>(1)</sup>	6817ZZ	2RS	—
		120	4.7244	1.1	0.0433	18	0.7087	6917 <sup>(1)</sup>	6917ZZ	2RS	—
90	3.5433	115	4.5276	1.0	0.0394	13	0.5118	6818 <sup>(1)</sup>	6818ZZ	2RS	—
		125	4.9213	1.1	0.0433	18	0.7087	6918 <sup>(1)</sup>	—	2RS	—
95	3.7402	120	4.7244	1.0	0.0394	13	0.5118	6819 <sup>(1)</sup>	—	—	2RU

(1) Open type bearings have shield/seal grooves.  
 (2) Single shield or single seal types are also available; suffix Z, RS or RU.  
 (3) Suffix H is added for stainless material types. Load ratings of stainless material types are calculated by Cr×0.85 and Cor×0.80 of SUJ2 material types.  
 (4) SUJ2 bearings use RJ type retainers, but stainless bearings use J type retainers.  
 (5) Applicable only for open, single Z, ZZ, single RU and 2RU types in inner ring rotating conditions. Max. speeds for the contact rubber seal(s) types will be around 50-60% of above values.

Load Rating		Max. Speed		Cage Type	Ball Complement			Weight(Ref.)
Cr(N)	Cor(N)	Grease	Oil		Qty.:Z	Size:Dw		
(N)		x1000min <sup>-1</sup>				pcs.	mm	inch
1 860	1 630	4.9	6.0	W	26	2.000	0.0787	15.0
4 740	3 820	13	16	J,RJ <sup>(4)</sup>	19	3.500	0.1378	28.2
10 900	7 750	12	14	RJ	14	5.953	0.2344	73.3
2 510	2 230	4.3	5.0	W	25	2.381	0.0937	23.3
4 930	4 180	12	14	RJ	21	3.500	0.1378	30.3
13 700	9 920	11	13	RJ	14	6.747	0.2656	108
2 570	2 400	3.9	4.6	W	27	2.381	0.0937	25.6
6 210	5 380	11	13	RJ	21	3.969	0.1563	35.8
14 100	10 900	10	11	RJ	15	6.747	0.2656	130
2 670	2 650	3.5	4.1	W	30	2.381	0.0937	36.6
6 170	5 760	9.5	11	RJ	23	3.969	0.1563	49.5
14 500	11 700	9.0	11	RJ	16	6.747	0.2656	131
8 800	8 080	8.6	10	RJ	22	4.762	0.1875	78.3
16 600	14 100	8.1	9.6	RJ	17	7.144	0.2813	177
11 500	10 600	7.9	9.4	RJ	21	5.556	0.2187	99.4
20 200	17 300	7.5	8.9	RJ	17	7.938	0.3125	186
11 900	11 500	7.3	8.6	RJ	23	5.556	0.2187	125
17 300	16 000	7.0	8.3	RJ	19	7.144	0.2813	208
11 600	11 800	6.8	8.1	RJ	24	5.556	0.2187	134
23 700	21 100	6.4	7.6	RJ	17	8.731	0.3437	342
12 300	12 800	6.4	7.6	RJ	26	5.556	0.2187	142
24 000	22 600	6.0	7.1	RJ	18	8.731	0.3437	363
12 600	13 300	6.0	7.1	RJ	27	5.556	0.2187	150
24 800	23 900	5.7	6.7	RJ	19	8.731	0.3437	382
18 700	19 000	5.6	6.6	RJ	23	7.144	0.2813	266
31 900	29 600	5.3	6.2	RJ	17	10.319	0.4063	535
18 300	19 500	5.3	6.2	RJ	24	7.144	0.2813	279
32 400	31 600	5.0	5.9	RJ	18	10.319	0.4063	565
18 800	20 300	5.0	5.9	RJ	25	7.144	0.2813	285