

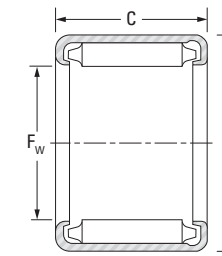
CAT.NO.B2020E-1 (B-2-41,42) 7

**'NEEDLE ROLLER BEARINGS'**

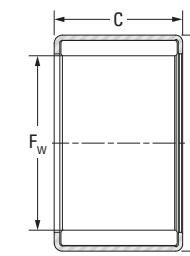
The basic dynamic load rating C on these two pages will be corrected as shown in the red frame.

**DRAWN CUP NEEDLE ROLLER BEARINGS  
FULL COMPLEMENT  
OPEN ENDS**

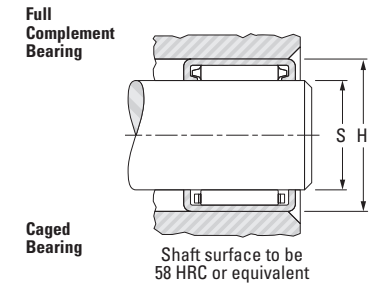
**METRIC SERIES  
BM, BHM, YM SERIES**



**BM, BHM**



**YM**



**Full Complement Bearing**

**Caged Bearing**

Shaft surface to be 58 HRC or equivalent

Shaft Dia.	F <sub>w</sub>	D	C		C <sub>3 min.</sub>	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>u</sub>	Approx. Wt.	Mounting Dimensions				Inspection gage	Mounting inner ring (pages B-2-43 to B-2-45)
			+0 -0.3	+0.000 -0.012			Dynamic	Static			Shaft (h5)		Housing (H6)			
mm in	mm in	mm in	mm in	mm in	mm in	Open Ends	C	C <sub>0</sub>	kN lbf	kg lbs	Max. mm in	Min. mm in	Max. mm in	Min. mm in		
3.5 0.1378	3.5	8	11	—	—	YM040811A	4.10 920	4.20 940	0.62	0.003	3.500	3.495	8.009	8.000	Table B2-4	—
6.13 0.2413	6.13	11	9.7	—	—	6YM1110BM	4.70 1060	5.80 1300	0.88	0.004	6.130	6.124	11.011	11.000	Table B2-4	—
8 0.3150	8	12	10	—	—	YM081210	6.10 1370	8.80 1980	1.35	0.004	8.000	7.994	12.011	12.000	Table B2-4	—
	8	13	10	—	—	YM081310AM	5.65 1270	7.70 1730	1.15	0.006	8.000	7.994	13.011	13.000	Table B2-4	—
10 0.3937	10	14	10	—	—	10BM1410	6.55 1470	9.50 2140	1.45	0.004	10.000	9.994	14.011	14.000	Table B2-4	—
12 0.4724	12	18	12	—	—	12BM1812	9.70 2180	12.8 2880	1.90	0.010	12.000	11.992	18.011	18.000	Table B2-4	—
14 0.5512	14	20	12	—	—	14BM2012	10.5 2360	14.8 3330	2.25	0.011	14.000	13.992	20.013	20.000	Table B2-4	—
15 0.5906	15	21	10	—	—	15BM2110	8.85 1990	12.0 2700	1.85	0.009	15.000	14.992	21.013	21.000	Table B2-4	—
	15	21	12	—	—	15BM2112	11.2 2520	16.1 3620	2.45	0.012	15.000	14.992	21.013	21.000	Table B2-4	—
	15	21	16	—	—	15BM2116	15.4 3460	24.4 5490	3.70	0.016	15.000	14.992	21.013	21.000	Table B2-4	—
16 0.6299	16	22	12	—	—	16BM2212	11.7 2630	17.3 3890	2.65	0.012	16.000	15.992	22.013	22.000	Table B2-4	—
17 0.6693	17	23	12	—	—	17BM2312	11.9 2680	18.2 4090	2.70	0.013	17.000	16.992	23.013	23.000	Table B2-4	—
	17	24	12	—	—	YM172412-1	14.9 3350	21.5 4830	3.25	0.016	17.000	16.992	24.013	24.000	Table B2-4	—
	17	24	17	—	—	BM172417-1	18.3 4110	28.2 6340	4.30	0.023	17.000	16.992	24.013	24.000	Table B2-4	—
	17	24	20	—	—	BHM1720A	21.7 4880	35.1 7890	5.55	0.026	17.000	16.992	24.013	24.000	Table B2-4	—
	17	24	25	—	—	BHM1725	27.2 6110	46.9 10540	7.30	0.034	17.000	16.992	24.013	24.000	Table B2-4	—
18 0.7087	18	24	16	—	—	18BM2416	17.2 3870	29.4 6610	4.45	0.018	18.000	17.992	24.013	24.000	Table B2-4	—
20 0.7874	20	26	14	—	—	YM202614	17.2 3870	31.4 7060	4.75	0.019	20.000	19.991	26.013	26.000	Table B2-4	—
	20	26	16	—	—	20BM2616	17.0 3820	31.7 7130	4.85	0.021	20.000	19.991	26.013	26.000	Table B2-4	—

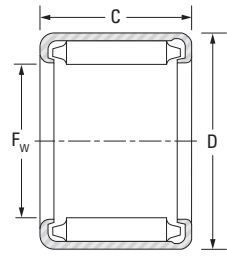
Note) - For information on the speed ratings, contact JTEKT.

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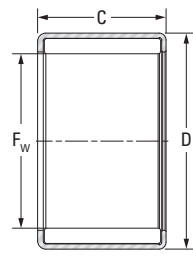


**DRAWN CUP NEEDLE ROLLER BEARINGS**  
**FULL COMPLEMENT**  
**OPEN ENDS**

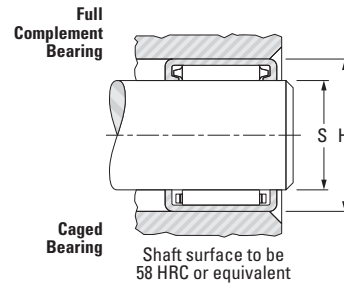
**METRIC SERIES**  
**BM, BHM, YM SERIES**



**BM, BHM**



**YM**

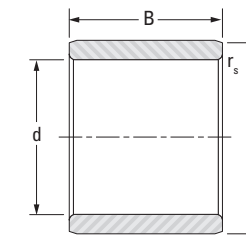


Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C		C <sub>3</sub> min. mm	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>u</sub> kN	Approx. Wt. kg lbs	Mounting Dimensions				Inspection gage	Mounting inner ring (pages B-2-43 to B-2-45)
			+0 -0.3 mm in	+0.000 -0.012 mm in			Dynamic C	Static C <sub>0</sub>			Shaft (h5)		Housing (H6)			
							kN lbf			Max.	Min.	Max.	Min.			
20 0.7874	20	26	20	—	—	20BM2620	21.5 4830	42.7 9600	6.70	0.026	20.000	19.991	26.013	26.000	Table B2-4	—
	20	27	15	—	—	BM2015	17.8 4000	28.0 6290	4.25	0.022	20.000	19.991	27.013	27.000	Table B2-4	—
	20	27	26	—	—	BM2026	31.5 7080	58.3 13110	9.10	0.040	20.000	19.991	27.013	27.000	Table B2-4	—
21 0.8268	21	27	20	—	—	21YM2720J	23.3 5240	47.6 10700	7.45	0.029	21.000	20.991	27.013	27.000	Table B2-4	—
22 0.8661	22	29	25	—	—	BM222925	30.5 6860	60.1 13510	9.40	0.043	22.000	21.991	29.013	29.000	Table B2-4	—
	25 0.9843	25	32	16	—	BM2516	21.5 4830	38.3 8610	5.85	0.028	25.000	24.991	32.016	32.000	Table B2-4	—
		25	32	20	—	BM2520	27.3 6140	52.0 11690	8.15	0.036	25.000	24.991	32.016	32.000	Table B2-4	—
25	25	32	26	—	—	BM2526	35.4 7960	72.7 16340	11.4	0.048	25.000	24.991	32.016	32.000	Table B2-4	—
	25	33	25	—	—	BHM2525	35.8 8050	66.6 14970	10.4	0.053	25.000	24.991	33.016	33.000	Table B2-4	—
	28 1.1024	28	34	17	—	—	BM2817	23.6 5310	50.0 11240	7.80	0.029	28.000	27.991	34.016	34.000	Table B2-4
28		34	24	—	—	BM2824	33.0 7420	77.1 17330	12.1	0.042	28.000	27.991	34.016	34.000	Table B2-4	—
28		37	30	—	—	28BHM3730	49.8 11200	95.1 21380	14.9	0.080	28.000	27.991	37.016	37.000	Table B2-4	—
28	28	39	30	—	—	BM283930A	50.7 11400	86.3 19400	13.5	0.101	28.000	27.991	39.016	39.000	Table B2-4	—
	30 1.1811	30	37	20	—	30BM3720	30.6 6880	62.9 14140	10.0	0.042	30.000	29.991	37.016	37.000	Table B2-4	—
		30	37	26	—	—	30BM3726	39.6 8900	87.7 19710	13.7	0.056	30.000	29.991	37.016	37.000	Table B2-4
34 1.3386	34	42	25	—	—	34YM4225L	42.1 9460	94.1 21150	14.7	0.075	34.000	33.989	42.016	42.000	Table B2-4	—
38 1.4961	38	48	20	—	—	YM3820PL	43.7 9820	83.3 18730	13.3	0.082	38.000	37.989	48.016	48.000	Table B2-4	—
40 1.5748	40	53	20	—	—	YM405320JM	54.2 12180	89.9 20210	14.4	0.116	40.000	39.989	53.019	53.000	Table B2-4	—

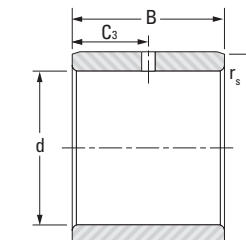
Note) - For information on the speed ratings, contact JTEKT.

**INNER RINGS FOR FULL COMPLEMENT DRAWN CUP NEEDLE ROLLER BEARINGS**

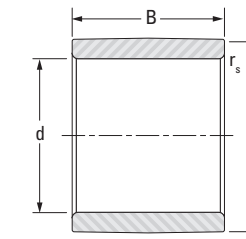
**METRIC SERIES**



**IM**



**IMC**



**IM...R6**

Shaft Dia. mm in	d mm in	F <sup>(1)</sup> mm in	B mm in	Hole Location C <sub>3</sub> mm in	r <sub>s</sub> min. mm in	Inner Ring Designation	Approx. Wt. kg lbs	
8 0.3150	8 0.3150	12 0.4724	12.4 0.488		0.3 0.01	IM 8 12 12,4	0.006 0.013	
	9 0.3543	9 0.3543	13 0.5118	12.4 0.488		IM 9 13 12,4	0.006 0.013	
10 0.3937		9 0.3543	13 0.5118	12.4 0.488		IM 9 13 12,4 R6	0.006 0.013	
	10 0.3937	14 0.5512	12.4 0.488		IM 10 14 12,4	0.007 0.015		
	10 0.3937	14 0.5512	16.4 0.646		IM 10 14 16,4	0.009 0.020		
11 0.4331	11 0.4331	15 0.5906	12.4 0.488		0.3 0.01	IM 11 15 12,4	0.008 0.018	
	12 0.4724	12 0.4724	15 0.5906	12.4 0.488		IM 12 15 12,4	0.006 0.013	
		12 0.4724	16 0.6299	12.4 0.488		IM 12 16 12,4	0.008 0.018	
12	12 0.4724	16 0.6299	12.4 0.488		0.3 0.01	IM 12 16 12,4 R6	0.008 0.018	
	12 0.4724	16 0.6299	12.4 0.488	6.2 0.24	0.3 0.01	IMC 12 16 12,4	0.008 0.018	
	13 0.5118	13 0.5118	17 0.6693	12.4 0.488		0.3 0.01	IM 13 17 12,4	0.009 0.020
13 0.5118		18 0.7087	12.4 0.488		0.35 0.014	IM 13 18 12,4	0.011 0.025	
		13 0.5118	18 0.7087	12.4 0.488		0.35 0.014	IM 13 18 12,4 R6	0.011 0.025
13	13 0.5118	18 0.7087	16.4 0.646		0.35 0.014	IM 13 18 16,4	0.015 0.033	
	15 0.5906	15 0.5906	20 0.7874	12.4 0.488		0.35 0.014	IM 15 20 12,4	0.013 0.028
		15 0.5906	20 0.7874	16.4 0.646		0.35 0.014	IM 15 20 16,4	0.017 0.037
17 0.6693	17 0.6693	22 0.8661	16.4 0.646		0.35 0.014	IM 17 22 16,4	0.019 0.041	
	17 0.6693	22 0.8661	16.4 0.646		0.35 0.014	IM 17 22 16,4 R6	0.019 0.041	
	17 0.6693	22 0.8661	16.4 0.646	8.2 0.32	0.35 0.014	IMC 17 22 16,4	0.019 0.041	
20 0.7874	20 0.7874	25 0.9843	16.4 0.646		0.35 0.014	IM 20 25 16,4	0.022 0.047	
	20 0.7874	25 0.9843	16.4 0.646		0.35 0.014	IM 20 25 16,4 R6	0.022 0.047	
20	20 0.7874	25 0.9843	16.4 0.646	8.2 0.32	0.35 0.014	IMC 20 25 16,4	0.022 0.047	
	20 0.7874	25 0.9843	20.4 0.803		0.35 0.014	IM 20 25 20,4	0.027 0.060	

(1) Call for O.D. tolerance

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