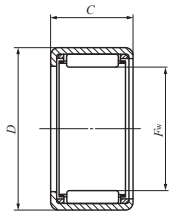
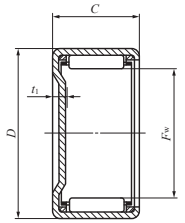
SHELL TYPE NEEDLE ROLLER BEARINGS

Inch Series

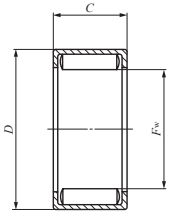




BA···Z BHA···Z



BAM BHAM



YB

Shaft dia. 34.925 — 38.100mm

Shaft dia. mm (inch)	Identification number									
	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Standard	Mass (Ref.) g	Closed end	Mass (Ref.) g	Grease retained	Mass (Ref.) g
34.925 (1 3/8)	**BA 228 Z**	23.5	**BAM 228**	29	—	—	—	—	—	—
	BA 2212 Z	35.5	**BAM 2212**	41	—	—	—	—	—	—
	BA 2216 Z	47.5	**BAM 2216**	53	—	—	—	—	—	—
	BA 2220 Z	59	**BAM 2220**	64	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	**YB 228**	30.5
	—	—	—	—	—	—	—	—	**YB 2212**	46
	—	—	—	—	—	—	—	—	**YB 2220**	77.5
	—	—	—	—	**BHA 228 Z**	37	**BHAM 228**	43	—	—
	—	—	—	—	**BHA 2210 Z**	44	**BHAM 2210**	50	—	—
	—	—	—	—	**BHA 2212 Z**	53	**BHAM 2212**	59	—	—
	—	—	—	—	**BHA 2216 Z**	71	**BHAM 2216**	77	—	—
	—	—	—	—	**BHA 2220 Z**	87	**BHAM 2220**	98.5	—	—
38.100 (1 1/2)	**BA 248 Z**	38.5	**BAM 248**	47.5	—	—	—	—	—	—
	BA 2410 Z	48.5	**BAM 2410**	57.5	—	—	—	—	—	—
	BA 2412 Z	58.5	**BAM 2412**	67.5	—	—	—	—	—	—
	BA 2414 Z	69	**BAM 2414**	78	—	—	—	—	—	—
	BA 2416 Z	79	**BAM 2416**	88	—	—	—	—	—	—
	BA 2420 Z	97.5	**BAM 2420**	106	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	**YB 246**	38
	—	—	—	—	—	—	—	—	**YB 248**	51.5
	—	—	—	—	—	—	—	—	**YB 2414**	91
	—	—	—	—	—	—	—	—	**YB 2416**	105
	—	—	—	—	—	—	—	—	**YB 2420**	131

Boundary dimensions mm(inch)				Standard mounting dimensions mm				Basic dynamic load rating	Basic static load rating	Allowable rotational speed(1)	Assembled inner ring
				Shaft dia. h6		Housing bore dia. J7					
F_w	D	C	t_1 Max.	Max.	Min.	Max.	Min.	C N	C_0 N	min^{-1}	
34.925 (1 3/8)	41.275 (1 5/8)	12.70(.500)	2.8					9 770	16 600	10 000	**IRB 188**
34.925 (1 3/8)	41.275 (1 5/8)	19.05(.750)	2.8					16 900	33 500	10 000	**IRB 1812**
34.925 (1 3/8)	41.275 (1 5/8)	25.40(1.000)	2.8					23 100	50 200	10 000	**IRB 1816**
34.925 (1 3/8)	41.275 (1 5/8)	31.75(1.250)	2.8	34.925	34.909	41.289	41.264	28 900	67 100	10 000	**IRB 1820**
34.925 (1 3/8)	41.275 (1 5/8)	12.70(.500)	—					23 000	49 500	4 500	**IRB 188**
34.925 (1 3/8)	41.275 (1 5/8)	19.05(.750)	—					33 400	79 800	4 500	**IRB 1812**
34.925 (1 3/8)	41.275 (1 5/8)	31.75(1.250)	—					52 000	141 000	4 500	**IRB 1820**
34.925 (1 3/8)	44.450 (1 3/4)	12.70(.500)	3.4					14 100	18 800	10 000	**IRB 188**
34.925 (1 3/8)	44.450 (1 3/4)	15.88(.625)	3.4					19 700	28 800	10 000	—
34.925 (1 3/8)	44.450 (1 3/4)	19.05(.750)	3.4	34.925	34.909	44.464	44.439	24 800	38 800	10 000	**IRB 1812**
34.925 (1 3/8)	44.450 (1 3/4)	25.40(1.000)	3.4					34 100	58 400	10 000	**IRB 1816**
34.925 (1 3/8)	44.450 (1 3/4)	31.75(1.250)	3.4					41 200	74 200	10 000	**IRB 1820**
38.100 (1 1/2)	47.625 (1 7/8)	12.70(.500)	2.8					12 900	17 900	9 000	—
38.100 (1 1/2)	47.625 (1 7/8)	15.88(.625)	2.8					17 800	27 100	9 000	**IRB 2010**
38.100 (1 1/2)	47.625 (1 7/8)	19.05(.750)	2.8	38.100	38.084	47.639	47.614	22 500	36 600	9 000	—
38.100 (1 1/2)	47.625 (1 7/8)	22.22(.875)	2.8					26 700	45 600	9 000	**IRB 2014**
38.100 (1 1/2)	47.625 (1 7/8)	25.40(1.000)	2.8					31 100	55 400	9 000	**IRB 2016**
38.100 (1 1/2)	47.625 (1 7/8)	31.75(1.250)	2.8					39 000	74 200	9 000	**IRB 2020**
38.100 (1 1/2)	47.625 (1 7/8)	9.52(.375)	—					21 000	34 100	4 000	—
38.100 (1 1/2)	47.625 (1 7/8)	12.70(.500)	—					28 700	50 900	4 000	—
38.100 (1 1/2)	47.625 (1 7/8)	22.22(.875)	—	38.100	38.084	47.639	47.614	48 900	101 000	4 000	**IRB 2014**
38.100 (1 1/2)	47.625 (1 7/8)	25.40(1.000)	—					55 100	118 000	4 000	**IRB 2016**
38.100 (1 1/2)	47.625 (1 7/8)	31.75(1.250)	—					66 800	151 000	4 000	**IRB 2020**

Note(1) Allowable rotational speed applies to oil lubrication. For grease lubrication, a maximum of 60% of this value is allowable.

Remark Shell Type Grease Retained Full Complement Needle Roller Bearings are provided with prepacked grease. Standard type and closed end type bearings are not provided with prepacked grease, so perform proper lubrication when using these types of bearings.

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch