

**SHELL TYPE NEEDLE ROLLER BEARINGS**

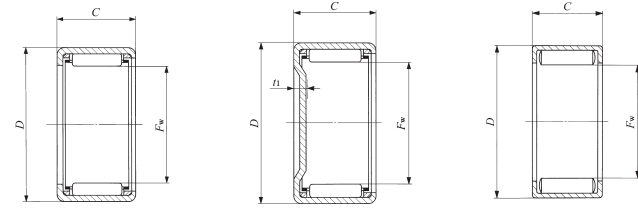
Inch Series



Shaft dia. 31.750 – 33.338mm

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
31.750 (1 1/4)	<b>BA 208 Z</b>	21.5	<b>BAM 208</b>	26	—	—	—	—	—	—
	<b>BA 2010 Z</b>	27	<b>BAM 2010</b>	31.5	—	—	—	—	—	—
	<b>BA 2012 Z</b>	32.5	<b>BAM 2012</b>	37	—	—	—	—	—	—
	<b>BA 2016 Z</b>	43	<b>BAM 2016</b>	47.5	—	—	—	—	—	—
	<b>BA 2020 Z</b>	53.5	<b>BAM 2020</b>	58	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	<b>YB 2010</b>	35
	—	—	—	—	—	—	—	—	<b>YB 2012</b>	42.5
	—	—	—	—	—	—	—	—	<b>YB 2016</b>	57
	—	—	—	—	—	—	—	—	<b>YB 2018</b>	64
	—	—	—	—	—	—	—	—	<b>YB 2020</b>	68
	—	—	—	—	<b>BHA 208 Z</b>	34.5	<b>BHAM 208</b>	40	—	—
	—	—	—	—	<b>BHA 2012 Z</b>	49.5	<b>BHAM 2012</b>	54.5	—	—
	—	—	—	—	<b>BHA 2016 Z</b>	66	<b>BHAM 2016</b>	71	—	—
	—	—	—	—	<b>BHA 2020 Z</b>	81.5	<b>BHAM 2020</b>	86.5	—	—
33.338 (1 5/16)	<b>BA 218 Z</b>	28.5	<b>BAM 218</b>	35	—	—	—	—	—	
	<b>BA 2110 Z</b>	35.5	<b>BAM 2110</b>	41.5	—	—	—	—	—	
	<b>BA 2112 Z</b>	43	<b>BAM 2112</b>	49	—	—	—	—	—	

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.



BA...Z BHA...Z

BAM BHAM

YB

Boundary dimensions mm(inch)				Standard mounting dimensions mm				Basic dynamic load rating N	Basic static load rating N	Allowable rotational speed(1) rpm	Assembled inner ring
$F_w$	$D$	$C$	$t_1$ Max.	Shaft dia. h6		Housing bore dia. J7					
				Max.	Min.	Max.	Min.				
31.750 (1 1/4)	38.100 (1 1/2)	12.70 (.500)	2.8					9 100	14 700	12 000	<b>IRB 168</b>
31.750 (1 1/4)	38.100 (1 1/2)	15.88 (.625)	2.8					12 500	22 200	12 000	<b>IRB 1610</b>
31.750 (1 1/4)	38.100 (1 1/2)	19.05 (.750)	2.8	31.750	31.734	38.114	38.089	15 700	29 600	12 000	<b>IRB 1612</b>
31.750 (1 1/4)	38.100 (1 1/2)	25.40 (1.000)	2.8					21 500	44 300	12 000	<b>IRB 1616</b>
31.750 (1 1/4)	38.100 (1 1/2)	31.75 (1.250)	2.8					26 900	59 200	12 000	<b>IRB 1620</b>
31.750 (1 1/4)	38.100 (1 1/2)	15.88 (.625)	—					27 000	59 000	4 500	<b>IRB 1610</b>
31.750 (1 1/4)	38.100 (1 1/2)	19.05 (.750)	—					31 800	72 500	4 500	<b>IRB 1612</b>
31.750 (1 1/4)	38.100 (1 1/2)	25.40 (1.000)	—	31.750	31.734	38.114	38.089	40 900	100 000	4 500	<b>IRB 1616</b>
31.750 (1 1/4)	38.100 (1 1/2)	28.58 (1.125)	—					45 300	114 000	4 500	—
31.750 (1 1/4)	38.100 (1 1/2)	31.75 (1.250)	—					49 400	128 000	4 500	<b>IRB 1620</b>
31.750 (1 1/4)	41.275 (1 5/8)	12.70 (.500)	3.4					13 700	17 600	12 000	<b>IRB 168</b>
31.750 (1 1/4)	41.275 (1 5/8)	19.05 (.750)	3.4					24 100	36 400	12 000	<b>IRB 1612</b>
31.750 (1 1/4)	41.275 (1 5/8)	25.40 (1.000)	3.4	31.750	31.734	41.289	41.264	33 200	55 000	12 000	<b>IRB 1616</b>
31.750 (1 1/4)	41.275 (1 5/8)	31.75 (1.250)	3.4					40 000	69 600	12 000	<b>IRB 1620</b>
33.338 (1 5/16)	41.275 (1 5/8)	12.70 (.500)	2.8					11 100	15 800	11 000	<b>IRB 168-1</b>
33.338 (1 5/16)	41.275 (1 5/8)	15.88 (.625)	2.8	33.338	33.322	41.289	41.264	15 400	23 900	11 000	<b>IRB 1610-1</b>
33.338 (1 5/16)	41.275 (1 5/8)	19.05 (.750)	2.8					19 300	32 100	11 000	<b>IRB 1612-1</b>

TA  
TLA  
BA  
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