



# NEEDLE ROLLER BEARINGS

## HJ TYPE

### INCH SERIES

- Check for availability.
- Nominal bearing diameters and widths shown.
- Tolerance tables found on page B-194.
- Clearance fit suggested for outer ring when housing is stationary relative to load.
- Tight transition fit suggested if housing rotates relative to load.
- Consult your representative for oscillating applications (e.g., low radial clearance concerns).
- Unmarked end of outer ring should be assembled against housing shoulder to clear maximum allowed housing fillet.
- Meets Military Standard MS 51961 and ASTM F2246.

Shaft Dia.	F <sub>w</sub>	D	C/B	r <sub>s min</sub>	Bearing Designation	Used With Inner Ring Designation <sup>(1)</sup>	Load Ratings		Speed Rating		Approx. Wt.
							Dynamic	Static	min <sup>-1</sup>		
							C	C <sub>0</sub>	Grease	Oil	
in.	mm in.	mm in.	mm in.	mm in.			kN lbf.		min <sup>-1</sup>		kg lbs.
5/8	15.875 0.6250	28.575 1.1250	19.050 0.750	0.64 0.03	HJ-101812	IR-061012	19.3 4350	20.7 4650	20000	30000	0.050 0.11
3/4	19.050 0.7500	31.750 1.2500	19.050 0.750	1.02 0.04	HJ-122012	IR-081212	20.7 4650	23.3 5240	16000	25000	0.059 0.13
	19.050 0.7500	31.750 1.2500	25.400 1.000	1.02 0.04	HJ-122016	IR-081216	27.5 6190	33.7 7580	16000	25000	0.077 0.17
7/8	22.225 0.8750	34.925 1.3750	19.050 0.750	1.02 0.04	HJ-142212	IR-101412	23 5180	27.9 6270	13000	21000	0.064 0.14
	22.225 0.8750	34.925 1.3750	25.400 1.000	1.02 0.04	HJ-142216	IR-101416	30.7 6910	40.3 9070	13000	21000	0.086 0.19
1	25.400 1.0000	38.100 1.5000	19.050 0.750	1.02 0.04	HJ-162412	IR-121612	25.3 5680	32.5 7300	12000	18000	0.073 0.16
	25.400 1.0000	38.100 1.5000	25.400 1.000	1.02 0.04	HJ-162416	IR-121616 IR-131616	33.6 7560	47.2 10600	12000	18000	0.095 0.21
1 1/8	28.575 1.1250	41.275 1.6250	25.400 1.000	1.02 0.04	HJ-182616	IR-141816 IR-151816	36.3 8170	53.8 12100	10000	16000	0.104 0.23
	28.575 1.1250	41.275 1.6250	31.750 1.250	1.02 0.04	HJ-182620	IR-141820 IR-151820	44.9 10100	70.3 15800	10000	16000	0.132 0.29
1 1/4	31.750 1.2500	44.450 1.7500	25.400 1.000	1.02 0.04	HJ-202816	IR-162016	37.4 8410	57.4 12900	9100	14000	0.113 0.25
	31.750 1.2500	44.450 1.7500	31.750 1.250	1.02 0.04	HJ-202820	IR-162020	46.3 10400	75.2 16900	9100	14000	0.145 0.32
1 3/8	34.925 1.3750	47.625 1.8750	25.400 1.000	1.02 0.04	HJ-223016	IR-182216	39.8 8950	64.1 14400	8200	13000	0.127 0.28
	34.925 1.3750	47.625 1.8750	31.750 1.250	1.02 0.04	HJ-223020	IR-182220	49.4 11100	84.1 18900	8200	13000	0.159 0.35
1 1/2	38.100 1.5000	52.388 2.0625	25.400 1.000	1.52 0.06	HJ-243316	IR-202416	47.6 10700	72.5 16300	7600	12000	0.154 0.34
	38.100 1.5000	52.388 2.0625	31.750 1.250	1.52 0.06	HJ-243320	IR-192420 IR-202420	58.7 13200	95.2 21400	7600	12000	0.195 0.43
1 5/8	41.275 1.6250	55.563 2.1875	25.400 1.000	1.52 0.06	HJ-263516	IR-212616	48.5 10900	76.5 17200	7000	11000	0.163 0.36
	41.275 1.6250	55.563 2.1875	31.750 1.250	1.52 0.06	HJ-263520	IR-212620 IR-222620	60.1 13500	100.5 22600	7000	11000	0.209 0.46
1 3/4	44.450 1.7500	58.738 2.3125	25.400 1.000	1.52 0.06	HJ-283716	IR-232816 IR-242816	49.8 11200	81.0 18200	6400	9900	0.177 0.39

<sup>(1)</sup> See pages B-204 to B-207 for inch series inner rings. Order inner rings separately.

<sup>(2)</sup> C<sub>g</sub> factor for bearing without inner ring.

<sup>(3)</sup> r<sub>a max</sub> is equal to the minimum bearing chamfer (r<sub>s min</sub>) at unmarked end.