



### Specification

- Housing  
Steel  
- Zinc plated, blue passivated finish  
- Temperature resistant up to 300 °F (149 °C)
- Bearing socket  
Sintered bronze  
Oil impregnated, self-lubricating
- Internal ring  
Steel  
Hardened and ground
- ISO Fundamental Tolerances → page 2129
- RoHS compliant

### Information

DIN 648 rod end bearings are used in controlling and linking mechanisms in all types of machines. Suitable for high load, low speed applications with hanging angles, required linear, rotational or oscillatory motions.

The bearing socket is made of a special bronze material which makes these rod end bearings self-lubricating, maintenance-free, and guarantees lowest friction. In addition, these rod end bearings have less increase of clearance after longer operating hours than rod end bearings with PTFE surface, and therefore a higher life expectancy.

see also...

- Rod End Bearings DIN 648 (Metric Sizes, with Threaded Stem) → page 1740
- Rod End Bearings WN 648 (Inch Sizes, Tapped Type) → page 1736

How to order

**DIN648-14-M14**

1 Bore  $d_1$

2 Thread  $d_2$

**Metric table**

Dimensions in: millimeters - inches

<b>1</b> d <sub>1</sub> H7 Bore	<b>2</b> d <sub>2</sub> Right hand thread	Left hand thread	b <sub>1</sub>	b <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	l <sub>1</sub>	l <sub>2</sub>	A/F	t min.	w Max. tilting angle	Static load
5 0.20	M 4*	M 4L*	8 0.31	6 0.24	7.7 0.30	18 0.71	9 0.35	11 0.43	27 1.06	36 1.42	9	10 0.39	13°	0.6 kN 135 lbf
5 0.20	M 5	M 5L	8 0.31	6 0.24	7.7 0.30	18 0.71	9 0.35	11 0.43	27 1.06	36 1.42	9	10 0.39	13°	0.6 kN 135 lbf
6 0.24	M 6	M 6L	9 0.35	6.75 0.27	8.9 0.35	20 0.79	10 0.39	13 0.51	30 1.18	40 1.57	11	12 0.47	13°	0.7 kN 157 lbf
8 0.31	M 8	M 8L	12 0.47	9 0.35	10.4 0.41	24 0.94	12.5 0.49	16 0.63	36 1.42	48 1.89	14	16 0.63	14°	1.2 kN 270 lbf
10 0.39	M 10	M 10L	14 0.55	10.5 0.41	12.9 0.51	28 1.10	15 0.59	19 0.75	43 1.69	57 2.24	17	20 0.79	13°	1.4 kN 315 lbf
10 0.39	M 10 x 1.25*	M 10 x 1.25L*	14 0.55	10.5 0.41	12.9 0.51	28 1.10	15 0.59	19 0.75	43 1.69	57 2.24	17	20 0.79	13°	1.4 kN 315 lbf
12 0.47	M 12	M 12L	16 0.63	12 0.47	15.4 0.61	32 1.26	17.5 0.69	22 0.87	50 1.97	66 2.60	19	22 0.87	13°	1.9 kN 427 lbf
12 0.47	M 12 x 1.25*	M 12 x 1.25L*	16 0.63	12 0.47	15.4 0.61	32 1.26	17.5 0.69	22 0.87	50 1.97	66 2.60	19	22 0.87	13°	1.9 kN 427 lbf
14 0.55	M 14	M 14L	19 0.75	13.5 0.53	16.8 0.66	36 1.42	20 0.79	25 0.98	57 2.24	75 2.95	22	25 0.98	15°	3.6 kN 809 lbf
16 0.63	M 16	M 16L	21 0.83	15 0.59	19.3 0.76	42 1.65	22 0.87	27 1.06	64 2.52	85 3.35	22	28 1.10	15°	4.8 kN 1079 lbf
16 0.63	M 16 x 1.5*	M 16 x 1.5L*	21 0.83	15 0.59	19.3 0.76	42 1.65	22 0.87	27 1.06	64 2.52	85 3.35	22	28 1.10	15°	4.8 kN 1079 lbf
18 0.71	M 18 x 1.5	M 18 x 1.5L	23 0.91	16.5 0.65	21.8 0.86	46 1.81	25 0.98	31 1.22	71 2.80	94 3.70	27	32 1.26	15°	5.1 kN 1147 lbf
20 0.79	M 20 x 1.5*	M 20 x 1.5L*	25 0.98	18 0.71	24.3 0.96	50 1.97	27.5 1.08	34 1.34	77 3.03	102 4.02	30	33 1.30	14°	5.2 kN 1169 lbf
20 0.79	M 20	M 20L	25 0.98	18 0.71	24.3 0.96	50 1.97	27.5 1.08	34 1.34	77 3.03	102 4.02	30	33 1.30	14°	5.2 kN 1169 lbf
22 0.87	M 22 x 1.5	M 22 x 1.5L	28 1.10	20 0.79	25.8 1.02	54 2.13	30 1.18	37 1.46	84 3.31	111 4.37	32	37 1.46	15°	7.5 kN 1686 lbf
25 0.98	M 24 x 2	M 24 x 2L	31 1.22	22 0.87	29.5 1.16	60 2.36	33.5 1.32	42 1.65	94 3.70	124 4.88	36	42 1.65	15°	8.5 kN 1911 lbf
30 1.18	M 27 x 2*	-	37 1.46	25 0.98	34.8 1.37	70 2.76	40 1.57	50 1.97	110 4.33	145 5.71	41	51 2.01	17°	10.8 kN 2428 lbf
30 1.18	M 30 x 2	M 30 x 2L	37 1.46	25 0.98	34.8 1.37	70 2.76	40 1.57	50 1.97	110 4.33	145 5.71	41	51 2.01	17°	10.8 kN 2428 lbf
35 1.38	M 36 x 2	M 36 x 2L	43 1.69	28 1.10	37.7 1.48	80 3.15	40 1.57	58 2.28	125 4.92	165 6.50	50	56 2.20	19°	12.4 kN 2788 lbf

\* These CETOP threads are only available in certain minimum quantities.

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9  
3.10

