



- 3 Type (Pairings)**
N Brass / steel, lubrication possible
W Steel PTFE / steel, self-lubricating

Specification

- Housing
Steel, zinc plated, blue passivated finish
- $d_1 = 5$ to 12 mm: turned
- $d_1 = 14$ to 25 mm: forged

- Pairings
 - Type N (lubrication possible)
Bearing socket
Brass, CuZn40Al1
Internal ring
Steel, 100Cr6
Hardened, ground, polished
 - Type W (self-lubricating)
Bearing socket
Steel, zinc plated
With PTFE insert
Internal ring
Steel, 100Cr6
Hardened, ground, polished

• ISO Fundamental Tolerances → page QVX

• RoHS compliant

On request

- Narrow model (ISO 12240-1, series E)

Information

GN 648.1 rod end bearings are a mechanical articulating joint that transmit traction and thrust from linkages and lever arms and are resistant to wear, especially under high alternating loads and impact in a radial / axial direction. Rod end bearings are used on the ends of control rods, steering links and tie rods.

see also...

- Further Information on Rod End Bearings as well as Load Values → page QVX
- Rod End Bearings GN 648.2 (Steel, with Threaded Stem) → page QVX
- Rod End Bearings GN 648.5 (Stainless Steel, Tapped Type) → page QVX
- Spherical Plain Bearings GN 648.8 → page QVX

How to order

GN 648.1-16-M16x1.5-N

1 Bore d_1

2 Thread d_2

3 Type

Metric table

Dimensions in: millimeters - inches

d₁ H7 Bore	d₂ Right hand thread	Left hand thread	CETOP connecting dimensions	b₁ -0.12	b₂	d₃	d₄	d₅	d₆	l₁	l₂	A/F	t	w Max. tilting angle
5 0.20	M 5	M 5L	M 4	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 0.35	10 0.39	13°
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 0.43	12 0.47	13°
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	13 0.51	16 0.63	14°
10 0.39	M 10	M 10L	M 10 x 1.25	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 0.67	20 0.79	13°
12 0.47	M 12	M 12L	M 12 x 1.25	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 0.75	22 0.87	13°
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 0.87	25 0.98	16°
16 0.63	M 16	M 16L	M 16 x 1.5	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 0.87	28 1.10	15°
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 1.06	32 1.26	15°
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	32 1.26	33 1.30	14°
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 1.26	37 1.46	15°
25 0.98	M 24 x 2	M 24 x 2L	-	31 1.22	22 0.87	29.6 1.17	60 2.36	33.5 1.32	42 1.65	94 3.70	124 4.88	36 1.42	42 1.65	15°
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	51 2.01	110 4.33	145 5.71	41 1.61	51 2.01	17°

* Only available in type W