



**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 648.2 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 bearing 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 648.1 (Steel, Tapped Type) → page QVX
- Rod End Bearings GN 648.6 (Stainless Steel, with Threaded Stem) → page QVX
- Spherical Plain Bearings GN 648.8 → page QVX

How to order <b>GN 648.2-10-M10L-W</b>	1	Bore $d_1$
	2	Thread $d_2$
	3	Type

## Metric table

Dimensions in: millimeters - inches

<b>d<sub>1</sub></b> H7 Bore	<b>d<sub>2</sub></b> Right hand thread	Left hand thread	<b>b<sub>1</sub></b> -0.12	<b>b<sub>2</sub></b>	<b>d<sub>3</sub></b>	<b>d<sub>4</sub></b>	<b>l<sub>1</sub></b>	<b>l<sub>2</sub></b>	<b>l<sub>3</sub></b>	<b>w</b> Max. tilting angle
5** 0.20	M 5	M 5L	8 0.31	6 0.24	7.7 0.30	18 0.71	33 1.30	42 1.65	20 0.79	13°
6 0.24	M 6	M 6L	9 0.35	6.75 0.27	8.9 0.35	20 0.79	36 1.42	46 1.81	22 0.87	13°
8 0.31	M 8	M 8L	12 0.47	9 0.35	10.4 0.41	24 0.94	42 1.65	54 2.13	25 0.98	14°
10 0.39	M 10	M 10L	14 0.55	10.5 0.41	12.9 0.51	28 1.10	48 1.89	62 2.44	29 1.14	13°
12 0.47	M 12	M 12L	16 0.63	12 0.47	15.4 0.61	32 1.26	54 2.13	70 2.76	33 1.30	13°
14 0.55	M 14	M 14L	19 0.75	13.5 0.53	16.8 0.66	36 1.42	60 2.36	78 3.07	38 1.50	16°
16 0.63	M 16	M 16L	21 0.83	15 0.59	19.3 0.76	42 1.65	66 2.60	87 3.43	40 1.57	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	72 2.83	95 3.74	44 1.73	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	78 3.07	103 4.06	47 1.85	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	84 3.31	111 4.37	51 2.01	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	94 3.70	124 4.88	58 2.28	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	110 4.33	145 5.71	71 2.80	17°

\* Only available in type W \*\* For type N no lubrication possible