



SS Stainless Steel

**3 Type (Pairings)**

- NH** Bronze / steel, lubrication possible
- WH** Bronze PTFE / steel, self-lubricating
- WK** Stainless steel PTFE / stainless steel, self-lubricating

**Specification**

- Housing  
Stainless steel AISI 431  
- Forged  
- Polished
- Pairings
  - Type NH (lubrication possible)  
Bearing socket  
Bronze CuSn8  
Internal ring  
Steel 100Cr6  
Hardened, ground, polished,  
**hard chrome plated**
  - Type WH (self-lubricating)  
Bearing socket  
Bronze CuSn8  
With PTFE insert  
Internal ring  
Steel 100Cr6  
Hardened, ground, polished,  
**hard chrome plated**
  - Type WK (self-lubricating)  
Bearing socket  
Stainless steel AISI 316Ti  
With PTFE insert  
Internal ring  
Stainless steel 420  
Hardened, ground, polished

• [ISO Fundamental Tolerances](#) → page QVX

• [Stainless Steel Characteristics](#) → page QVX

• [RoHS compliant](#)

**On request**

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

**Information**

GN 648.5 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 648.6 \(Stainless Steel, with Threaded Stem\)](#) → page QVX
- [Spherical Plain Bearings GN 648.9 \(Stainless Steel\)](#) → page QVX
- [Rod End Bearings GN 648.1 \(Steel, Tapped Type\)](#) → page QVX

How to order	1 Bore $d_1$
<b>GN 648.5-10-M10L-WH</b>	2 Thread $d_2$
	3 Type

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9  
3.10



## 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> -0.12	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	w Max. tilting angle
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 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	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	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	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°