



**3 Type (pairings)**

- N** Brass / Steel lubrication possible
- W** Steel-PTFE / Steel self lubricated

1

2

d <sub>1</sub> H7	d <sub>2</sub>	Left hand thread	b <sub>1</sub> -0,12	b <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	w Movement angle
5**	M 5	M 5L	8	6	7,7	18	33	42	20	13°
6	M 6	M 6L	9	6,75	8,9	20	36	46	22	13°
8	M 8	M 8L	12	9	10,4	24	42	54	25	14°
10	M 10	M 10L	14	10,5	12,9	28	48	62	29	13°
12	M 12	M 12L	16	12	15,4	32	54	70	33	13°
14	M 14	M 14L	19	13,5	16,8	36	60	78	38	16°
16	M 16	M 16L	21	15	19,3	42	66	87	40	15°
18	M 18 x 1,5	M 18 x 1,5L	23	16,5	21,8	46	72	95	44	15°
20	M 20 x 1,5	M 20 x 1,5L	25	18	24,3	50	78	103	47	14°
22	M 22 x 1,5	M 22 x 1,5L	28	20	25,8	54	84	111	51	15°
25	M 24 x 2	M 24 x 2L	31	22	29,6	60	94	124	58	15°
30*	M 30 x 2	M 30 x 2L	37	25	34,8	70	110	145	71	17°

\* only available in type W \*\* d<sub>1</sub> = 5 type N no lubrication possible

**Specification**

- Housing Steel
  - zinc-plated, blue passivated
  - d<sub>1</sub> = 5 up to 12: machined
  - d<sub>1</sub> = 14 up to 25: forged
- Pairings
  - Type N (lubrication possible)
    - Bearing socket  
Brass, CuZn40Al1
    - Internal ring  
Steel, 100Cr6  
hardened, ground, polished
  - Type W (self lubricated)
    - Bearing socket  
Steel, zinc plated  
with PTFE-insert
    - Internal ring  
Steel, 100Cr6  
hardened, ground, polished
- ISO-Fundamental tolerances → Page 1479
- RoHS compliant

**Information**

Ball joint heads GN 648.2 are similar to DIN ISO 12240-4, series K (formerly DIN 648 K).

see also ...

- More information to ball joint heads as well as load capacity → Page 1152
- Stainless Steel-Ball joint heads with threaded bolt GN 648.6 → Page 1157
- Ball joints → Page 1158

**On request**

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

How to order

GN648.2-10-M10L-W

- 1 d<sub>1</sub>
- 2 d<sub>2</sub>
- 3 Type

