

## Ball joints heads with threaded bolt

### SPECIFICATION

#### Types (pairings)

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

Housing Steel

- zinc plated, blue passivated
- d<sub>i</sub> = 5 up to 12: machined
- d<sub>i</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



### INFORMATION

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

- More information to ball joints as well as load capacity (see page 1134)

### ON REQUEST

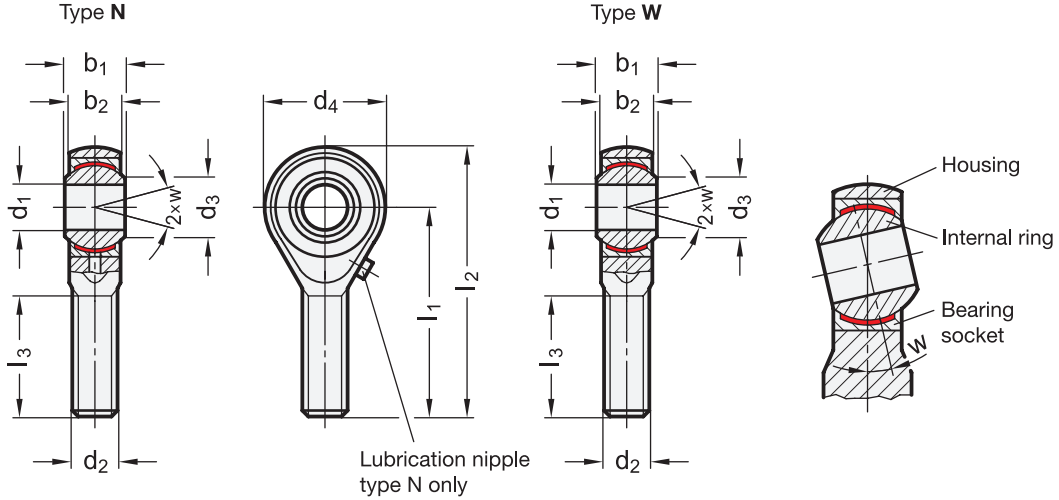
- narrow model (ISO 12240-1, series E)

### TECHNICAL INFORMATION

- ISO-Fundamental Tolerances (see page A21)



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Joints 10



\* Complete with type index of the Ball joint heads  
N W

GN 648.2

Description	d1 H7	d2	b1 -0.12	b2	d3	d4	l1	l2	l3	w	△
GN 648.2-5-M5-*	5**	M 5	8	6	7.7	18	33	42	20	13 °	15
GN 648.2-5-M5L-*	5**	M 5L	8	6	7.7	18	33	42	20	13 °	15
GN 648.2-6-M6-*	6	M 6	9	6.75	8.9	20	36	46	22	13 °	20
GN 648.2-6-M6L-*	6	M 6L	9	6.75	8.9	20	36	46	22	13 °	20
GN 648.2-8-M8-*	8	M 8	12	9	10.4	24	42	54	25	14 °	40
GN 648.2-8-M8L-*	8	M 8L	12	9	10.4	24	42	54	25	14 °	40
GN 648.2-10-M10-*	10	M 10	14	10.5	12.9	28	48	62	29	13 °	60
GN 648.2-10-M10L-*	10	M 10L	14	10.5	12.9	28	48	62	29	13 °	60
GN 648.2-12-M12-*	12	M 12	16	12	15.4	32	54	70	33	13 °	90
GN 648.2-12-M12L-*	12	M 12L	16	12	15.4	32	54	70	33	13 °	90
GN 648.2-14-M14-*	14	M 14	19	13.5	16.8	36	60	78	38	16 °	135
GN 648.2-14-M14L-*	14	M 14L	19	13.5	16.8	36	60	78	38	16 °	135
GN 648.2-16-M16-*	16	M 16	21	15	19.3	42	66	87	40	15 °	205
GN 648.2-16-M16L-*	16	M 16L	21	15	19.3	42	66	87	40	15 °	205
GN 648.2-18-M18x1.5-*	18	M 18 x 1.5	23	16.5	21.8	46	72	95	44	15 °	270
GN 648.2-18-M18x1.5L-*	18	M 18 x 1.5L	23	16.5	21.8	46	72	95	44	15 °	270
GN 648.2-20-M20x1.5-*	20	M 20 x 1.5	25	18	24.3	50	78	103	47	14 °	355
GN 648.2-20-M20x1.5L-*	20	M 20 x 1.5L	25	18	24.3	50	78	103	47	14 °	355
GN 648.2-22-M22x1.5-*	22	M 22 x 1.5	28	20	25.8	54	84	111	51	15 °	455
GN 648.2-22-M22x1.5L-*	22	M 22 x 1.5L	28	20	25.8	54	84	111	51	15 °	460
GN 648.2-25-M24x2-*	25	M 24 x 2	31	22	29.6	60	94	124	58	15 °	605
GN 648.2-25-M24x2L-*	25	M 24 x 2L	31	22	29.6	60	94	124	58	15 °	600
GN 648.2-30-M30x2-*	30***	M 30 x 2	37	25	34.8	70	110	145	71	17 °	1020
GN 648.2-30-M30x2L-*	30***	M 30 x 2L	37	25	34.8	70	110	145	71	17 °	1020

\*\* d1 = 5 type N no lubrication possible | \*\*\* only available in type W

Weight type W