

## Ball joints with threaded stud



**Housing**

AISI 431 stainless steel.

**Standard versions available**

- Type **NH** (lubrication possible): bronze CuSn8 bearing socket, hardened, ground and polished steel internal ring, hard chrome plated.
- Type **WH** (self lubricated): bronze CuSn8 bearing socket with PTFE-insert, hardened, ground and polished steel internal ring, hard chrome plated.

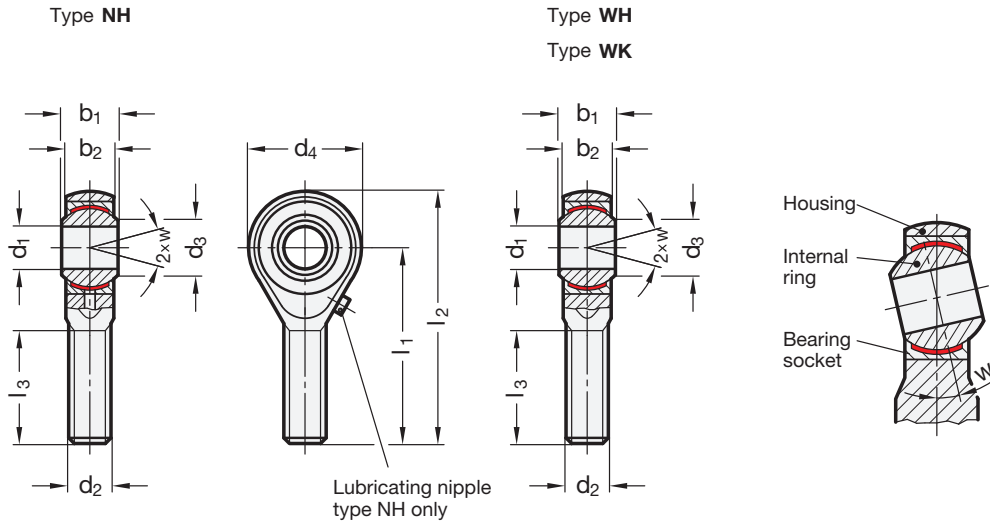


**Special executions on request** (For sufficient quantities)

- Type **WK** (self lubricated): AISI 316 Ti stainless steel bearing socket with PTFE-insert, hardened, ground and polished German material no. 1.4034 stainless steel internal ring.
- Ball joints DIN ISO 12240-4, series E (narrow model) on request.

**Features and applications**

Ball joints GN 648.6 are similar to DIN ISO 12240-4, series K (formerly DIN 648 K).



10  
474

Joins

Standard Elements	Main dimensions										△△
Description	d1 H7	d2	b1 -0.12	b2	d3	d4	l1	l2	l3	w	g
GN 648.6-5-M5-NH	5	M5	8	6	7.7	18	33	42	20	13°	15
GN 648.6-5-M5-WH	5	M5	8	6	7.7	18	33	42	20	13°	15
GN 648.6-5-M5-WK	5	M5	8	6	7.7	18	33	42	20	13°	14
GN 648.6-5-M5L-NH	5	M5L	8	6	7.7	18	33	42	20	13°	15
GN 648.6-5-M5L-WH	5	M5L	8	6	7.7	18	33	42	20	13°	13
GN 648.6-5-M5L-WK	5	M5L	8	6	7.7	18	33	42	20	13°	14
GN 648.6-6-M6-NH	6	M6	9	6.75	8.9	20	36	46	22	13°	20
GN 648.6-6-M6-WH	6	M6	9	6.75	8.9	20	36	46	22	13°	19
GN 648.6-6-M6-WK	6	M6	9	6.75	8.9	20	36	46	22	13°	19
GN 648.6-6-M6L-NH	6	M6L	9	6.75	8.9	20	36	46	22	13°	20
GN 648.6-6-M6L-WH	6	M6L	9	6.75	8.9	20	36	46	22	13°	20
GN 648.6-6-M6L-WK	6	M6L	9	6.75	8.9	20	36	46	22	13°	19
GN 648.6-8-M8-NH	8	M8	12	9	10.4	24	42	54	25	14°	40
GN 648.6-8-M8-WH	8	M8	12	9	10.4	24	42	54	25	14°	40
GN 648.6-8-M8-WK	8	M8	12	9	10.4	24	42	54	25	14°	38
GN 648.6-8-M8L-NH	8	M8L	12	9	10.4	24	42	54	25	14°	40
GN 648.6-8-M8L-WH	8	M8L	12	9	10.4	24	42	54	25	14°	38
GN 648.6-8-M8L-WK	8	M8L	12	9	10.4	24	42	54	25	14°	37

Standard Elements	Main dimensions										$\triangle$
Description	d1 H7	d2	b1 -0.12	b2	d3	d4	h1	h2	h3	w	g
GN 648.6-10-M10-WH	10	M10	14	10.5	12.9	28	48	62	29	13°	61
GN 648.6-10-M10-WK	10	M10	14	10.5	12.9	28	48	62	29	13°	61
GN 648.6-10-M10L-NH	10	M10L	14	10.5	12.9	28	48	62	29	13°	62
GN 648.6-10-M10L-WH	10	M10L	14	10.5	12.9	28	48	62	29	13°	62
GN 648.6-10-M10L-WK	10	M10L	14	10.5	12.9	28	48	62	29	13°	60
GN 648.6-12-M12-NH	12	M12	16	12	15.4	32	54	70	33	13°	96
GN 648.6-12-M12-WH	12	M12	16	12	15.4	32	54	70	33	13°	95
GN 648.6-12-M12-WK	12	M12	16	12	15.4	32	54	70	33	13°	94
GN 648.6-12-M12L-NH	12	M12L	16	12	15.4	32	54	70	33	13°	95
GN 648.6-12-M12L-WH	12	M12L	16	12	15.4	32	54	70	33	13°	94
GN 648.6-12-M12L-WK	12	M12L	16	12	15.4	32	54	70	33	13°	93
GN 648.6-14-M14-NH	14	M14	19	13.5	16.8	36	60	78	38	16°	133
GN 648.6-14-M14-WH	14	M14	19	13.5	16.8	36	60	78	38	16°	134
GN 648.6-14-M14-WK	14	M14	19	13.5	16.8	36	60	78	38	16°	133
GN 648.6-14-M14L-NH	14	M14L	19	13.5	16.8	36	60	78	38	16°	134
GN 648.6-14-M14L-WH	14	M14L	19	13.5	16.8	36	60	78	38	16°	133
GN 648.6-14-M14L-WK	14	M14L	19	13.5	16.8	36	60	78	38	16°	133
GN 648.6-16-M16-NH	16	M16	21	15	19.3	42	66	87	40	15°	203
GN 648.6-16-M16-WH	16	M16	21	15	19.3	42	66	87	40	15°	203
GN 648.6-16-M16-WK	16	M16	21	15	19.3	42	66	87	40	15°	199
GN 648.6-16-M16L-NH	16	M16L	21	15	19.3	42	66	87	40	15°	202
GN 648.6-16-M16L-WH	16	M16L	21	15	19.3	42	66	87	40	15°	201
GN 648.6-16-M16L-WK	16	M16L	21	15	19.3	42	66	87	40	15°	201
GN 648.6-18-M18x1.5-NH	18	M18x1.5	23	16.5	21.8	46	72	95	44	15°	278
GN 648.6-18-M18x1.5-WH	18	M18x1.5	23	16.5	21.8	46	72	95	44	15°	274
GN 648.6-18-M18x1.5-WK	18	M18x1.5	23	16.5	21.8	46	72	95	44	15°	254
GN 648.6-18-M18x1.5L-NH	18	M18x1.5L	23	16.5	21.8	46	72	95	44	15°	287
GN 648.6-18-M18x1.5L-WH	18	M18x1.5L	23	16.5	21.8	46	72	95	44	15°	270
GN 648.6-18-M18x1.5L-WK	18	M18x1.5L	23	16.5	21.8	46	72	95	44	15°	267
GN 648.6-20-M20x1.5-NH	20	M20x1.5	25	18	24.3	50	78	103	47	14°	354
GN 648.6-20-M20x1.5-WH	20	M20x1.5	25	18	24.3	50	78	103	47	14°	351
GN 648.6-20-M20x1.5-WK	20	M20x1.5	25	18	24.3	50	78	103	47	14°	345
GN 648.6-20-M20x1.5L-NH	20	M20x1.5L	25	18	24.3	50	78	103	47	14°	350
GN 648.6-20-M20x1.5L-WH	20	M20x1.5L	25	18	24.3	50	78	103	47	14°	350
GN 648.6-20-M20x1.5L-WK	20	M20x1.5L	25	18	24.3	50	78	103	47	14°	348
GN 648.6-22-M22x1.5-NH	22	M22x1.5	28	20	25.8	54	84	111	51	15°	460
GN 648.6-22-M22x1.5-WH	22	M22x1.5	28	20	25.8	54	84	111	51	15°	463
GN 648.6-22-M22x1.5-WK	22	M22x1.5	28	20	25.8	54	84	111	51	15°	458
GN 648.6-22-M22x1.5L-NH	22	M22x1.5L	28	20	25.8	54	84	111	51	15°	463
GN 648.6-22-M22x1.5L-WH	22	M22x1.5L	28	20	25.8	54	84	111	51	15°	460
GN 648.6-22-M22x1.5L-WK	22	M22x1.5L	28	20	25.8	54	84	111	51	15°	453
GN 648.6-25-M24x2-NH	25	M24x2	31	22	29.6	60	94	124	58	15°	631
GN 648.6-25-M24x2-WH	25	M24x2	31	22	29.6	60	94	124	58	15°	642
GN 648.6-25-M24x2-WK	25	M24x2	31	22	29.6	60	94	124	58	15°	625
GN 648.6-25-M24x2L-NH	25	M24x2L	31	22	29.6	60	94	124	58	15°	610
GN 648.6-25-M24x2L-WH	25	M24x2L	31	22	29.6	60	94	124	58	15°	630
GN 648.6-25-M24x2L-WK	25	M24x2L	31	22	29.6	60	94	124	58	15°	625
GN 648.6-30-M30x2-NH	30	M30x2	37	25	34.8	70	110	145	71	17°	1030
GN 648.6-30-M30x2-WH	30	M30x2	37	25	34.8	70	110	145	71	17°	1030
GN 648.6-30-M30x2-WK	30	M30x2	37	25	34.8	70	110	145	71	17°	1030
GN 648.6-30-M30x2L-NH	30	M30x2L	37	25	34.8	70	110	145	71	17°	1020
GN 648.6-30-M30x2L-WH	30	M30x2L	37	25	34.8	70	110	145	71	17°	1020
GN 648.6-30-M30x2L-WK	30	M30x2L	37	25	34.8	70	110	145	71	17°	1020