

Swivel ball joints

Aluminum

SPECIFICATION

Types

- Type **A**: Ball with female thread
- Type **B**: Ball with male thread

Identification no.

- No. **1**: Clamping with adjustable hand lever (only for $d_1 = 39$ and 49)
- No. **2**: Clamping set with screw

Housing

Aluminum
anodized black **ELS**

Base plate, ball

Aluminium, blank

Adjustable hand lever (Identification no. 1)

- Zinc die casting, plastic coated, silver RAL 9006, textured finish
- Threaded stud and retaining screw, Stainless Steel AISI 303

Set screw (Identification no. 2)

Stainless Steel AISI 304



INFORMATION

GN 784 swivel ball joints allow precise and variable adjustment of the ball pivot within the rotation range. This is a particular advantage when adjusting scanners, cameras, lighting, monitors, etc.

Thanks to the efficient clamping mechanism, only small amounts of torque on the clamping screw result in comparatively strong clamping pressure on the ball. This force is easily applied by the clamping lever (Identification no. 1).

The ball joint can be mounted from below with the d_4 internal thread or together with the GN 784.1 (see page 1162) flange, available as an accessory, using three through-holes from above.

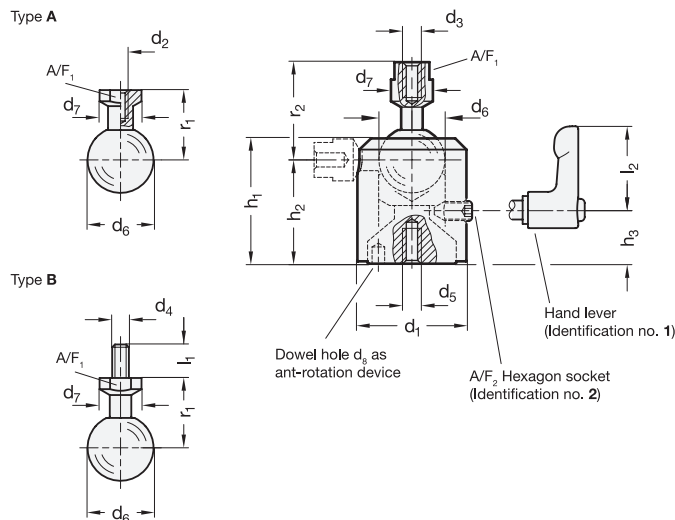
For a permanent high stop torque, the contact surfaces of the balls must be kept free of grease. Exceeding the recommended tightening torque increases the securing of the ball joint in its end position, but may result in increased wear and potential failure of the clamping mechanism.

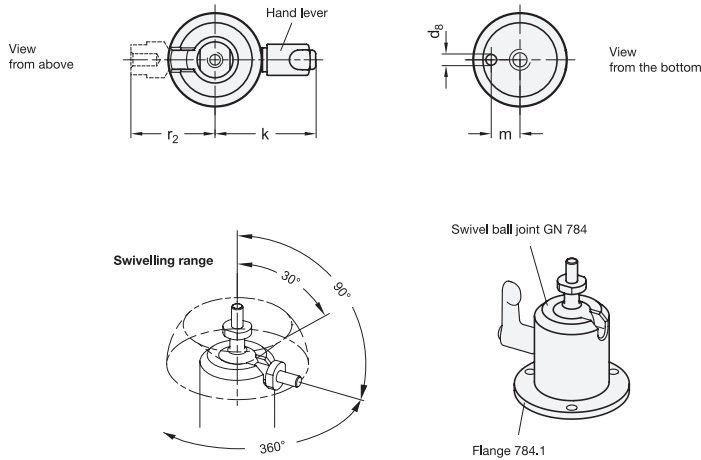
ON REQUEST

- Clamping with star knob DIN 6335 (see page 234)

TECHNICAL INFORMATION

- Stainless Steel characteristics (see page A26)





GN 784

Description	d1	d2	r1	d3	r2	d4	l1	d5	d6	d7	d8	h1	h2	h3	k	l2	m	A/F A/F 1 2	Tightening torque in Nm ≈	Stop torque on the ball in Nm ≈	⚖	
GN 784-23-M4-A-2-ELS	23	M 4*	17.3	-	-	-	-	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	30
GN 784-23-M5-A-2-ELS	23	-	-	M 5**	24.8	-	-	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	35
GN 784-23-1/4-A-2-ELS	23	-	-	1/4**	24.8	-	-	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	30
GN 784-31-M5-A-2-ELS	31	M 5*	21.5	-	-	-	-	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	70
GN 784-31-M6-A-2-ELS	31	-	-	M 6**	32.5	-	-	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	70
GN 784-31-1/4-A-2-ELS	31	-	-	1/4**	32.5	-	-	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	73
GN 784-39-M5-A-1-ELS	39	M 5*	25.5	-	-	-	-	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	159
GN 784-39-M5-A-2-ELS	39	M 5*	25.5	-	-	-	-	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	159
GN 784-39-M6-A-1-ELS	39	-	-	M 6**	36.2	-	-	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	164
GN 784-39-M6-A-2-ELS	39	-	-	M 6**	36.2	-	-	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	150
GN 784-39-M8-A-1-ELS	39	-	-	M 8**	40.5	-	-	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	165
GN 784-39-M8-A-2-ELS	39	-	-	M 8**	40.5	-	-	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	130
GN 784-39-3/8-A-1-ELS	39	-	-	3/8***	40.5	-	-	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	133
GN 784-39-3/8-A-2-ELS	39	-	-	3/8***	40.5	-	-	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	128
GN 784-49-M8-A-1-ELS	49	M 8*	30.8	-	-	-	-	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	285
GN 784-49-M8-A-2-ELS	49	M 8*	30.8	-	-	-	-	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	260
GN 784-49-3/8-A-1-ELS	49	-	-	3/8***	44.8	-	-	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	290
GN 784-49-3/8-A-2-ELS	49	-	-	3/8***	44.8	-	-	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	274
GN 784-49-M10-A-1-ELS	49	-	-	M 10**	51.8	-	-	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	300
GN 784-49-M10-A-2-ELS	49	-	-	M 10**	51.8	-	-	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	275
GN 784-23-M5-B-2-ELS	23	-	17.3	-	-	M 5	8	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	32
GN 784-23-M6-B-2-ELS	23	-	17.3	-	-	M 6	10	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	40
GN 784-23-1/4-B-2-ELS	23	-	17.3	-	-	1/4	10	M 5***	14	11	2.5	26.6	21.7	10.6	-	-	7	9	2.5	1.5	4.5	29
GN 784-31-M6-B-2-ELS	31	-	21.5	-	-	M 6	10	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	80
GN 784-31-M8-B-2-ELS	31	-	21.5	-	-	M 8	12	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	80
GN 784-31-1/4-B-2-ELS	31	-	21.5	-	-	1/4	10	M 6***	18	14	3.5	35.5	29.6	14.9	-	-	9	12	3	2.5	6.5	70
GN 784-39-M6-B-1-ELS	39	-	25.5	-	-	M 6	10	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	160
GN 784-39-M6-B-2-ELS	39	-	25.5	-	-	M 6	10	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	130
GN 784-39-M8-B-1-ELS	39	-	25.5	-	-	M 8	12	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	161
GN 784-39-M8-B-2-ELS	39	-	25.5	-	-	M 8	12	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	160
GN 784-39-3/8-B-1-ELS	39	-	25.5	-	-	3/8	12	M 8***	24	15	4.5	45	37.2	18.9	44	30	12	13	-	4	16	165
GN 784-39-3/8-B-2-ELS	39	-	25.5	-	-	3/8	12	M 8***	24	15	4.5	45	37.2	18.9	-	-	12	13	4	4	16	165
GN 784-49-M8-B-1-ELS	49	-	30.8	-	-	M 8	12	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	289
GN 784-49-M8-B-2-ELS	49	-	30.8	-	-	M 8	12	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	287
GN 784-49-M10-B-1-ELS	49	-	30.8	-	-	M 10	15	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	290
GN 784-49-M10-B-2-ELS	49	-	30.8	-	-	M 10	15	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	264
GN 784-49-3/8-B-1-ELS	49	-	30.8	-	-	3/8	12	M 8***	28	19.5	4.5	56	46.1	24	49	30	16	17	-	4	20	294
GN 784-49-3/8-B-2-ELS	49	-	30.8	-	-	3/8	12	M 8***	28	19.5	4.5	56	46.1	24	-	-	16	17	4	4	20	294

*usable depth of thread min. 1.5 x d2 | ** usable depth of thread min. 1.5 x d3 | *** usable depth of thread min. 1.5 x d5

