

Angled ball joints with threaded ball and rivet ball shanks

SPECIFICATION

Version in Steel

Types

- Type **CS**: with threaded ball shank with safety catch
- Type **C**: with threaded ball shank without safety catch
- Type **BS**: with rivet ball shank, with safety catch
- Type **B**: with rivet ball shank, without safety catch

Steel

- Tensile strength class 5
- zinc plated, colourless passivated

Ball

Steel

- hardened
- ball seat lubricated

Version in Stainless Steel

Types

- Type **CSN**: with threaded ball shank, with safety catch
- Type **CN**: with threaded ball shank, without safety catch

Stainless Steel AISI 303

Ball

Stainless Steel

- not hardened
- ball seat greased

INFORMATION

Angled ball joints DIN 71802 consist of a ball socket DIN 71805 and a ball shank DIN 71803.

The angle of rotation for the type with safety catch (Types CS, BS, CSN) is 15°, without safety catch (Types C, B, CN) is 18°.

For assembly the ball is pushed through the circlip which acts as a retainer. Should the retaining force (see pull-off force in the table above) between ball and socket not be sufficient, this can be increased by adding a safety catch, which can easily be fitted.

To protect the angled ball point, a dust cap GN 710 can be added.

The hexagon nut is part of the angled ball joints.

ACCESSORY

- Dust caps GN 710 (see page 1158)

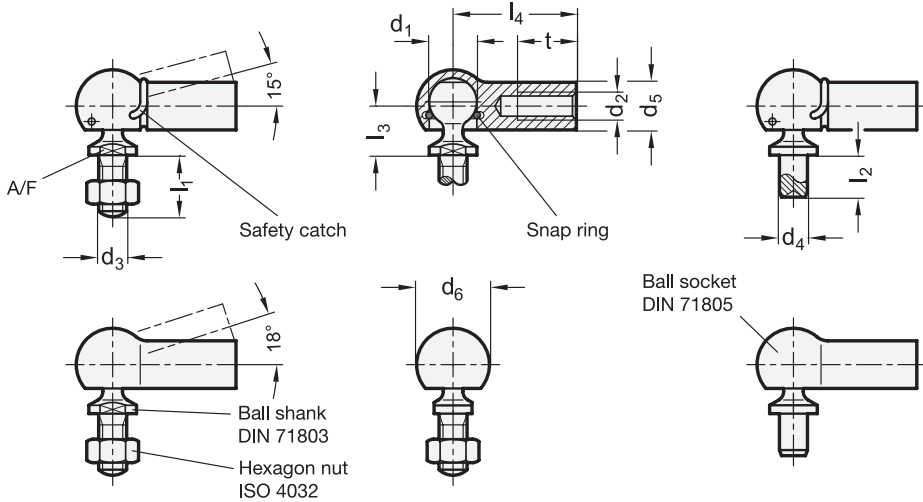
ON REQUEST

- smooth specification (Ball seat with play)
- Ball studs DIN 71803
- Ball sockets DIN 71805
- Axial joints (ball socket and ball shank in one axis)

TECHNICAL INFORMATION

- ISO-Fundamental Tolerances (see page A21)
- Stainless Steel characteristics (see page A26)
- Strength values of nuts (see page A20)





* Complete with type index of the Angled ball joints
BS **B**

DIN 71802-B/BS

Description	d1 H9/h9	d2	l2	d4 h11	d5	d6	l3	l4	t min.	A/F	min. pull-off force in N	⚖️
DIN 71802-8-M5L-4-*	8	M 5L	4	5	8	12.8	8.5	22	10.5	7	30	13
DIN 71802-8-M5-4-*	8	M 5	4	5	8	12.8	8.5	22	10.5	7	30	13
DIN 71802-8-M5L-7.5-*	8	M 5L	7.5	5	8	12.8	8.5	22	10.5	7	30	14
DIN 71802-8-M5-7.5-*	8	M 5	7.5	5	8	12.8	8.5	22	10.5	7	30	14
DIN 71802-10-M6L-4.5-*	10	M 6L	4.5	6	10	14.8	10.5	25	11.5	8	40	20
DIN 71802-10-M6-4.5-*	10	M 6	4.5	6	10	14.8	10.5	25	11.5	8	40	20
DIN 71802-10-M6L-8-*	10	M 6L	8	6	10	14.8	10.5	25	11.5	8	40	23
DIN 71802-10-M6-8-*	10	M 6	8	6	10	14.8	10.5	25	11.5	8	40	23
DIN 71802-13-M8L-5-*	13	M 8L	5	8	13	19.3	12	30	14	11	60	44
DIN 71802-13-M8-5-*	13	M 8	5	8	13	19.3	12	30	14	11	60	44
DIN 71802-13-M8L-10-*	13	M 8L	10	8	13	19.3	12	30	14	11	60	46
DIN 71802-13-M8-10-*	13	M 8	10	8	13	19.3	12	30	14	11	60	47
DIN 71802-16-M10L-6-*	16	M 10L	6	10	16	24	15	35	15.5	13	80	80
DIN 71802-16-M10-6-*	16	M 10	6	10	16	24	15	35	15.5	13	80	88
DIN 71802-16-M10L-13-*	16	M 10L	13	10	16	24	15	35	15.5	13	80	80
DIN 71802-16-M10-13-*	16	M 10	13	10	16	24	15	35	15.5	13	80	89
DIN 71802-16-M12L-6-*	16	M 12L	6	10	16	24	15	35	15.5	13	80	90
DIN 71802-16-M12-6-*	16	M 12	6	10	16	24	15	35	15.5	13	80	96
DIN 71802-16-M12L-13-*	16	M 12L	13	10	16	24	15	35	15.5	13	80	80
DIN 71802-16-M12-13-*	16	M 12	13	10	16	24	15	35	15.5	13	80	80
DIN 71802-19-M14FL-12-*	19	M 14 FL = M 14x1.5 L	12	14	22	30	19.5	45	21.5	16	100	200
DIN 71802-19-M14F-12-*	19	M 14 F = M 14x1.5	12	14	22	30	19.5	45	21.5	16	100	200
DIN 71802-19-M14FL-18-*	19	M 14 FL = M 14x1.5 L	18	14	22	30	19.5	45	21.5	16	100	190
DIN 71802-19-M14F-18-*	19	M 14 F = M 14x1.5	18	14	22	30	19.5	45	21.5	16	100	190

Weight type B





Joints, Couplings, Gears 10

* Complete with type index of the Angled ball joints

CS C

DIN 71802-C/CS

Description	d1 H9/h9	d2	d3	d5	d6	l1	l3	l4	t min.	A/F	min. pull-off force in N	⚖
DIN 71802-8-M5-*	8	M 5	M 5	8	12.8	10	8.5	22	10.5	7	30	14
DIN 71802-8-M5L-*	8	M 5L	M 5	8	12.8	10	8.5	22	10.5	7	30	15
DIN 71802-10-M6-*	10	M 6	M 6	10	14.8	12.5	10.5	25	11.5	8	40	25
DIN 71802-10-M6L-*	10	M 6L	M 6	10	14.8	12.5	10.5	25	11.5	8	40	25
DIN 71802-13-M8-*	13	M 8	M 8	13	19.3	16.5	12	30	14	11	60	49
DIN 71802-13-M8L-*	13	M 8L	M 8	13	19.3	16.5	12	30	14	11	60	50
DIN 71802-16-M10-*	16	M 10	M 10	16	24	20	15	35	15.5	13	80	90
DIN 71802-16-M10L-*	16	M 10L	M 10	16	24	20	15	35	15.5	13	80	95
DIN 71802-16-M12-*	16	M 12	M 12	16	24	20	15	35	15.5	13	80	100
DIN 71802-16-M12L-*	16	M 12L	M 12	16	24	20	15	35	15.5	13	80	100
DIN 71802-19-M14F-*	19	M 14F = M 14x1.5	M 14 x 1.5	22	30	28	19.5	45	21.5	16	100	217
DIN 71802-19-M14FL-*	19	M 14 FL = M 14x1.5 L	M 14 x 1.5	22	30	28	19.5	45	21.5	16	100	220

Weight type C

* Complete with type index of the Angled ball joints

CSN CN

DIN 71802-CN/CSN

STAINLESS STEEL

Description	d1 H9/h9	d2	d3	d5	d6	l1	l3	l4	t min.	A/F	min. pull-off force in N	⚖
DIN 71802-8-M5-*	8	M 5	M 5	8	12.8	10	8.5	22	10.5	7	30	10
DIN 71802-8-M5L-*	8	M 5L	M 5	8	12.8	10	8.5	22	10.5	7	30	15
DIN 71802-10-M6-*	10	M 6	M 6	10	14.8	12.5	10.5	25	11.5	8	40	20
DIN 71802-10-M6L-*	10	M 6L	M 6	10	14.8	12.5	10.5	25	11.5	8	40	25
DIN 71802-13-M8-*	13	M 8	M 8	13	19.3	16.5	12	30	14	11	60	50
DIN 71802-13-M8L-*	13	M 8L	M 8	13	19.3	16.5	12	30	14	11	60	50
DIN 71802-16-M10-*	16	M 10	M 10	16	24	20	15	35	15.5	13	80	98
DIN 71802-16-M10L-*	16	M 10L	M 10	16	24	20	15	35	15.5	13	80	95
DIN 71802-16-M12-*	16	M 12	M 12	16	24	20	15	35	15.5	13	80	102
DIN 71802-16-M12L-*	16	M 12L	M 12	16	24	20	15	35	15.5	13	80	102
DIN 71802-19-M14F-*	19	M 14F = M 14x1.5	M 14 x 1.5	22	30	28	19.5	45	21.5	16	100	218
DIN 71802-19-M14FL-*	19	M 14 FL = M 14x1.5 L	M 14 x 1.5	22	30	28	19.5	45	21.5	16	100	219

Weight type CN