23010 Beam couplings with radial clamping hub, aluminium

Item description/product images

Description

Material:
Aluminium.

Version:
Bright.

Note:
Zero backlash, torsionally rigid, resiliently flexible and maintenance-free full metal coupling for transmitting angle synchronous rotary movement. The innovative slit structure makes possible a very good axial, radial and angular flexibility with low reset force. Ideal for servomotors.

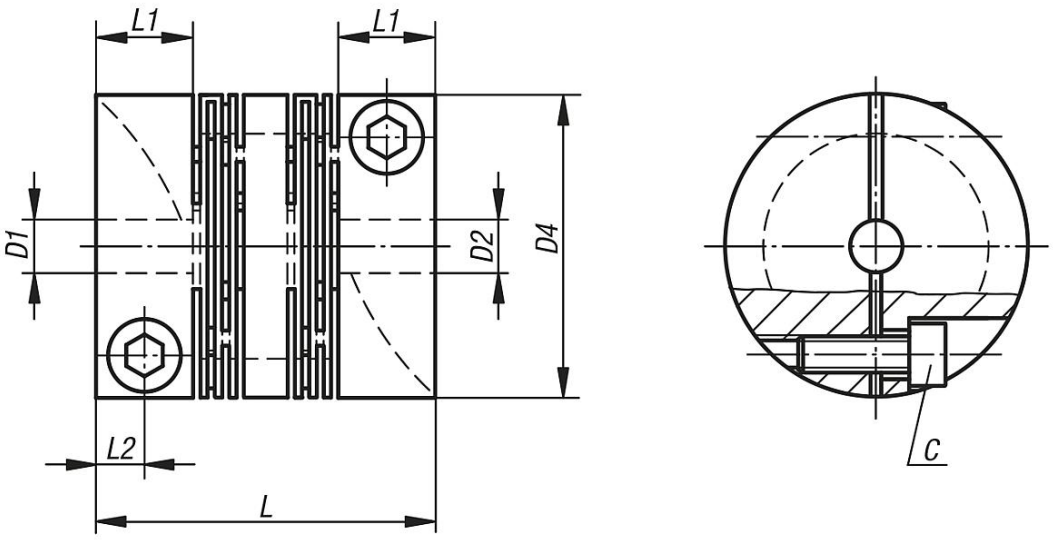
Assembly:
Recommended shaft tolerances h7.

On request:
Hub bores D1 and D2 with separate tolerance class or range.

Note:
Procedure for enlarging pre-drilled bores D1/D2:

Drill the bore out using a small as possible drill or milling cutter. Use a single point tool to turn or bore the hole out to its finished size. Ensure that the coupling is securely held during the machining process and that the drill feed is not too high. The cut depth should not exceed 0.5 mm and the feed for the single point tool should also be not too high.

Drawings



Overview of items

Order No.	Size	Nominal torque Nm	Moment of inertia (10^{-3} kgm^2)	Torsion resistance Nm/arcmin	Max. axial shaft displacement ±	Max. lateral shaft displacement	Max. angular shaft displacement	Axial spring stiffness N/mm	Lateral spring stiffness N/mm	Max. rpm
23010-1016	16	3	0,001	0,09	0,3	0,2	1°	155	234	10000
23010-1018	18	3	0,0003	0,12	0,3	0,2	1°	39	176	10000
23010-1020	20	5	0,0015	0,15	0,3	0,2	1°	192	243	9500

Overview of items

Order No.	Size	Nominal torque Nm	Moment of inertia (10^{-3} kgm^2)	Torsion resistance Nm/arcmin	Max. axial shaft displacement ±	Max. lateral shaft displacement	Max. angular shaft displacement	Axial spring stiffness N/mm	Lateral spring stiffness N/mm	Max. rpm
23010-1022	22	3	0,0008	0,17	0,3	0,2	1°	80	369	9500
23010-1025	25	7	0,0043	1,02	0,3	0,2	1°	140	437	8000
23010-1030	30	10	0,011	1,45	0,4	0,3	1°	170	363	6000
23010-1040	40	19	0,035	3,35	0,4	0,3	1°	270	379	5000
23010-1050	50	35	0,114	10,18	0,5	0,3	1°	410	853	5000
23010-1060	60	70	0,285	20,65	0,5	0,3	1°	510	1201	4500
23010-1070	70	130	0,480	27,55	0,5	0,3	1°	1900	2002	4000

Order No.	D1/D2 predrilled	D1/D2 min.	D1/D2 max.	D4	L	L1	L2	C (DIN 912-12.9)	Tightening torque of screws Nm
23010-1016	2,5	3	6	16	23	7	3,5	M2,5x6	1
23010-1018	2,5	3	6	18	16,6	5,5	2,75	M2,5x8	1
23010-1020	2,5	3	8	20	28	8	4	M2,5x8	1
23010-1022	2,5	3	10	22	20	5,5	2,75	M2,5x8	1
23010-1025	3,5	4	12	25	28	8	4	M3x10	2
23010-1030	5,5	6	14	30	40	11	5,5	M4x10	4
23010-1040	5,5	6	18	40	48	11	5,5	M5x14	9
23010-1050	9,5	10	26	50	65	19	9,5	M6x16	14
23010-1060	9,5	10	30	60	80	25	12,5	M8x18	30
23010-1070	14,5	15	35	70	95	25	12,5	M8x25	30