

Item description/product images



Description

Material:

Hub aluminium.
Bellows stainless steel.

Version:

Bright.

Note:

Play-free mini metal bellows coupling with high torsional stiffness. The metal bellows compensates for axial, radial and angular shaft misalignment with low restoring forces. With grub screw for fastening to shafts.

They are primarily used when precise position and motion transmission is required, e.g. highly dynamic positioning and servo systems, rotary encoders, tachometers, potentiometers.

Temperature range:

-30 °C to +120 °C.

Assembly:

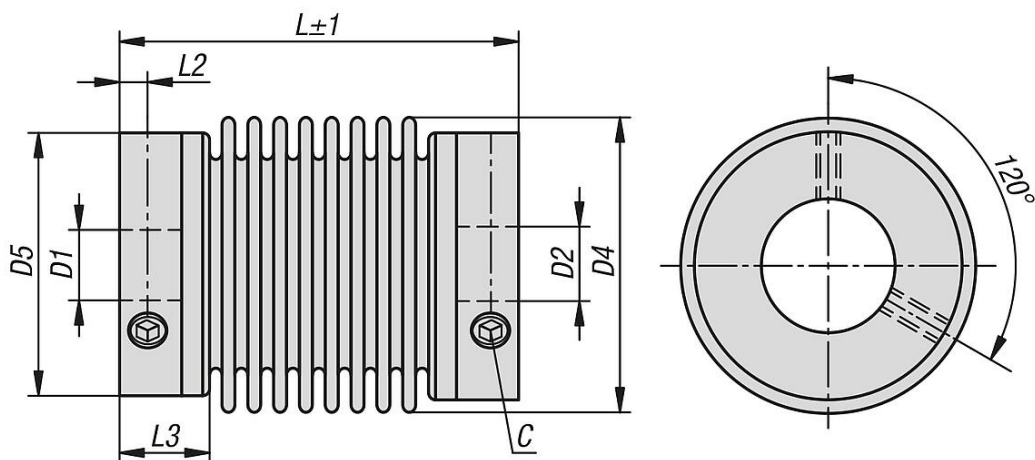
The metal bellows coupling hubs have an H7 tolerance. The recommended clearance tolerance is 0.02 - 0.05 mm. This tolerance and lubricating the shaft journals aid assembly and removal.

The metal bellows may be deformed max. 3 times over the permissible deflection values specified in the catalogue during assembly and removal. Avoid any use of force.

On request:

Desired hub holes D1 and D2 separately with tolerance class or tolerance zone. Keyway acc. to DIN 6885. Please observe largest possible bore by keyway.

Drawings



Overview of items

Order No.	Size	Nominal torque Nm	Inertia (gcm ²)	Torsional stiffness Nm/rad	Spring stiffness radial (N/mm)	Spring stiffness axial N/mm
23003-0050230303	5	0,5	1,5	200	18	10
23003-0050230404	5	0,5	1,5	200	18	10
23003-0050230505	5	0,5	1,5	200	18	10
23003-0050230606	5	0,5	1,5	200	18	10
23003-0100250303	10	1	2	360	31	20
23003-0100250305	10	1	2	360	31	20
23003-0100250505	10	1	2	360	31	20
23003-0100250606	10	1	2	360	31	20
23003-0150260505	15	1,5	2	750	59	15
23003-0150260506	15	1,5	6	750	59	15
23003-0150260508	15	1,5	6	750	59	15
23003-0150260606	15	1,5	6	750	59	15
23003-0150260608	15	1,5	6	750	59	15
23003-0150260808	15	1,5	6	750	59	15
23003-0200280606	20	2	12,6	1300	21	11
23003-0200280608	20	2	12,6	1300	21	11
23003-0200280610	20	2	12,6	1300	21	11
23003-0200280808	20	2	12,6	1300	21	11
23003-0200280810	20	2	12,6	1300	21	11
23003-0200281010	20	2	12,6	1300	21	11
23003-0450401010	45	4,5	68	6500	168	32
23003-0450401012	45	4,5	68	6500	168	32
23003-0450401014	45	4,5	68	6500	168	32
23003-0450401212	45	4,5	68	6500	168	32
23003-0450401214	45	4,5	68	6500	168	32
23003-0450401414	45	4,5	68	6500	168	32
23003-1000451212	100	10	150	8100	120	27
23003-1000451215	100	10	150	8100	120	27
23003-1000451219	100	10	150	8100	120	27
23003-1000451515	100	10	150	8100	120	27
23003-1000451519	100	10	150	8100	120	27
23003-1000451919	100	10	150	8100	120	27

Order No.	max. shaft offset radial (mm)	max. shaft offset axial (mm)	max. angular offset (°)	max. rpm	C (ISO 4029)	D1 (H7)	D2 (H7)
23003-0050230303	0,15	0,3	1,5	15000	1xM3	3	3
23003-0050230404	0,15	0,3	1,5	15000	1xM3	4	4
23003-0050230505	0,15	0,3	1,5	15000	1xM3	5	5
23003-0050230606	0,15	0,3	1,5	15000	1xM3	6	6
23003-0100250303	0,15	0,3	1,5	15000	1xM3	3	3
23003-0100250305	0,15	0,3	1,5	15000	1xM3	3	5
23003-0100250505	0,15	0,3	1,5	15000	1xM3	5	5
23003-0100250606	0,15	0,3	1,5	15000	1xM3	5	6
23003-0100250606	0,15	0,3	1,5	15000	1xM3	6	6
23003-0150260505	0,1	0,3	1,5	15000	2xM4	5	5
23003-0150260506	0,1	0,3	1,5	15000	2xM4	5	6
23003-0150260508	0,1	0,3	1,5	15000	2xM4	5	8
23003-0150260606	0,1	0,3	1,5	15000	2xM4	6	6
23003-0150260608	0,1	0,3	1,5	15000	2xM4	6	8
23003-0150260808	0,1	0,3	1,5	15000	2xM4	8	8
23003-0200280606	0,2	0,4	1,5	15000	2xM4	6	6
23003-0200280608	0,2	0,4	1,5	15000	2xM4	6	8
23003-0200280610	0,2	0,4	1,5	15000	2xM4	6	10
23003-0200280808	0,2	0,4	1,5	15000	2xM4	8	8
23003-0200280810	0,2	0,4	1,5	15000	2xM4	8	10
23003-0200281010	0,2	0,4	1,5	15000	2xM4	10	10
23003-0450401010	0,1	0,3	1,5	15000	2xM6	10	10
23003-0450401012	0,1	0,3	1,5	15000	2xM6	10	12
23003-0450401014	0,1	0,3	1,5	15000	2xM6	10	14
23003-0450401212	0,1	0,3	1,5	15000	2xM6	12	12
23003-0450401214	0,1	0,3	1,5	15000	2xM6	12	14
23003-0450401414	0,1	0,3	1,5	15000	2xM6	14	14

Overview of items

Order No.	max. shaft offset radial (mm)	max. shaft offset axial (mm)	max. angular offset (°)	max. rpm	C (ISO 4029)	D1 (H7)	D2 (H7)
23003-1000451212	0,15	0,4	1,5	15000	2xM6	12	12
23003-1000451215	0,15	0,4	1,5	15000	2xM6	12	15
23003-1000451219	0,15	0,4	1,5	15000	2xM6	12	19
23003-1000451515	0,15	0,4	1,5	15000	2xM6	15	15
23003-1000451519	0,15	0,4	1,5	15000	2xM6	15	19
23003-1000451919	0,15	0,4	1,5	15000	2xM6	19	19

Order No.	D1/D2 min.	D1/D2 max.	D1/D2 max. by keyway	D4	D5	L	L2	L3	Tightening torque of screws Nm
23003-0050230303	3	8	8	15	13,5	23	2	6	0,5
23003-0050230404	3	8	8	15	13,5	23	2	6	0,5
23003-0050230505	3	8	8	15	13,5	23	2	6	0,5
23003-0050230606	3	8	8	15	13,5	23	2	6	0,5
23003-0100250303	3	8	8	15	13,5	25	2	6	0,5
23003-0100250305	3	8	8	15	13,5	25	2	6	0,5
23003-0100250505	3	8	8	15	13,5	25	2	6	0,5
23003-0100250506	3	8	8	15	13,5	25	2	6	0,5
23003-0100250606	3	8	8	15	13,5	25	2	6	0,5
23003-0150260505	3	12	8	19	19	26	3	8	1,5
23003-0150260506	3	12	8	19	19	26	3	8	1,5
23003-0150260508	3	12	8	19	19	26	3	8	1,5
23003-0150260606	3	12	8	19	19	26	3	8	1,5
23003-0150260608	3	12	8	19	19	26	3	8	1,5
23003-0150260808	3	12	8	19	19	26	3	8	1,5
23003-0200280606	3	14	10	24	21,5	28	3	6	1,5
23003-0200280608	3	14	10	24	21,5	28	3	6	1,5
23003-0200280610	3	14	10	24	21,5	28	3	6	1,5
23003-0200280808	3	14	10	24	21,5	28	3	6	1,5
23003-0200280810	3	14	10	24	21,5	28	3	6	1,5
23003-0200281010	3	14	10	24	21,5	28	3	6	1,5
23003-0450401010	6	19	13	32	29	40	4	12	3
23003-0450401012	6	19	13	32	29	40	4	12	3
23003-0450401014	6	19	13	32	29	40	4	12	3
23003-0450401212	6	19	13	32	29	40	4	12	3
23003-0450401214	6	19	13	32	29	40	4	12	3
23003-0450401414	6	19	13	32	29	40	4	12	3
23003-1000451212	6	24	17	40	36	45	4	12	3
23003-1000451215	6	24	17	40	36	45	4	12	3
23003-1000451219	6	24	17	40	36	45	4	12	3
23003-1000451515	6	24	17	40	36	45	4	12	3
23003-1000451519	6	24	17	40	36	45	4	12	3
23003-1000451919	6	24	17	40	36	45	4	12	3