

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 clamping hubs 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:

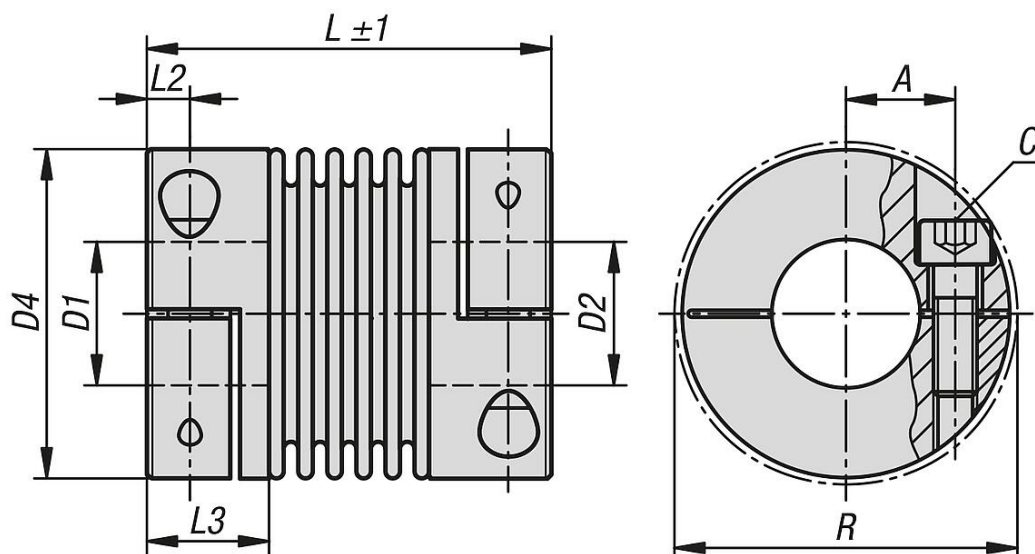
The metal bellows coupling hubs have an H7 tolerance. The recommended clearance tolerance is 0.02 - 0.05 mm. This tolerance and lubricating the shaft journals aid assembly and removal.

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
23003-05-0050250303	5	0,5	2,8	200	18	10
23003-05-0050250404	5	0,5	2,8	200	18	10
23003-05-0050250505	5	0,5	2,8	200	18	10
23003-05-0050250606	5	0,5	2,8	200	18	10
23003-05-0100260303	10	1	3,4	380	31	20
23003-05-0100260305	10	1	3,4	380	31	20
23003-05-0100260505	10	1	3,4	380	31	20
23003-05-0100260506	10	1	3,4	380	31	20
23003-05-0100260606	10	1	3,4	380	31	20
23003-05-0150260505	15	1,5	8	750	59	15
23003-05-0150260506	15	1,5	8	750	59	15
23003-05-0150260508	15	1,5	8	750	59	15
23003-05-0150260606	15	1,5	8	750	59	15
23003-05-0150260608	15	1,5	8	750	59	15
23003-05-0150260808	15	1,5	8	750	59	15
23003-05-0200380606	20	2	27	1300	21	11
23003-05-0200380608	20	2	27	1300	21	11
23003-05-0200380610	20	2	27	1300	21	11
23003-05-0200380808	20	2	27	1300	21	11
23003-05-0200380810	20	2	27	1300	21	11
23003-05-0200381010	20	2	27	1300	21	11
23003-05-0450411010	45	4,5	100	6500	168	32
23003-05-0450411012	45	4,5	100	6500	168	32
23003-05-0450411014	45	4,5	100	6500	168	32
23003-05-0450411212	45	4,5	100	6500	168	32
23003-05-0450411214	45	4,5	100	6500	168	32
23003-05-0450411414	45	4,5	100	6500	168	32
23003-05-1000471212	100	10	233	8100	120	27
23003-05-1000471215	100	10	233	8100	120	27
23003-05-1000471219	100	10	233	8100	120	27
23003-05-1000471515	100	10	233	8100	120	27
23003-05-1000471519	100	10	233	8100	120	27
23003-05-1000471919	100	10	233	8100	120	27

Order No.	max. shaft offset radial (mm)	max. shaft offset axial (mm)	max. angular offset (°)	max. rpm	A	C (ISO 4029)	D1 (H7)
23003-05-0050250303	0,15	0,3	1,5	15000	5,2	M2	3
23003-05-0050250404	0,15	0,3	1,5	15000	5,2	M2	4
23003-05-0050250505	0,15	0,3	1,5	15000	5,2	M2	5
23003-05-0050250606	0,15	0,3	1,5	15000	5,2	M2	6
23003-05-0100260303	0,15	0,3	1,5	15000	5,2	M2	3
23003-05-0100260305	0,15	0,3	1,5	15000	5,2	M2	3
23003-05-0100260505	0,15	0,3	1,5	15000	5,2	M2	5
23003-05-0100260506	0,15	0,3	1,5	15000	5,2	M2	5
23003-05-0100260606	0,15	0,3	1,5	15000	5,2	M2	6
23003-05-0150260505	0,1	0,3	1,5	15000	7	M2,5	5
23003-05-0150260506	0,1	0,3	1,5	15000	7	M2,5	5
23003-05-0150260508	0,1	0,3	1,5	15000	7	M2,5	5
23003-05-0150260606	0,1	0,3	1,5	15000	7	M2,5	6
23003-05-0150260608	0,1	0,3	1,5	15000	7	M2,5	6
23003-05-0150260808	0,1	0,3	1,5	15000	7	M2,5	8
23003-05-0200380606	0,2	0,4	1,5	15000	9	M3	6
23003-05-0200380608	0,2	0,4	1,5	15000	9	M3	6
23003-05-0200380610	0,2	0,4	1,5	15000	9	M3	6
23003-05-0200380808	0,2	0,4	1,5	15000	9	M3	8
23003-05-0200380810	0,2	0,4	1,5	15000	9	M3	8
23003-05-0200381010	0,2	0,4	1,5	15000	9	M3	10
23003-05-0450411010	0,1	0,3	1,5	15000	12	M4	10
23003-05-0450411012	0,1	0,3	1,5	15000	12	M4	10
23003-05-0450411014	0,1	0,3	1,5	15000	12	M4	10
23003-05-0450411212	0,1	0,3	1,5	15000	12	M4	12
23003-05-0450411214	0,1	0,3	1,5	15000	12	M4	12
23003-05-0450411414	0,1	0,3	1,5	15000	12	M4	14

Overview of items

Order No.	max. shaft offset radial (mm)	max. shaft offset axial (mm)	max. angular offset (°)	max. rpm	A	C (ISO 4029)	D1 (H7)
23003-05-1000471212	0,15	0,4	1,5	15000	15,5	M4	12
23003-05-1000471215	0,15	0,4	1,5	15000	15,5	M4	12
23003-05-1000471219	0,15	0,4	1,5	15000	15,5	M4	12
23003-05-1000471515	0,15	0,4	1,5	15000	15,5	M4	15
23003-05-1000471519	0,15	0,4	1,5	15000	15,5	M4	15
23003-05-1000471919	0,15	0,4	1,5	15000	15,5	M4	19

Order No.	D2 (H7)	D1/D2 min.	D1/D2 max.	D1/D2 max. by keyway	D4	L	L2	L3	R	Tightening torque of screws Nm
23003-05-0050250303	3	3	8	8	15,5	25	2,5	7	17,5	0,43
23003-05-0050250404	4	3	8	8	15,5	25	2,5	7	17,5	0,43
23003-05-0050250505	5	3	8	8	15,5	25	2,5	7	17,5	0,43
23003-05-0050250606	6	3	8	8	15,5	25	2,5	7	17,5	0,43
23003-05-0100260303	3	3	8	8	15,5	26	2,5	7	17,5	0,43
23003-05-0100260305	5	3	8	8	15,5	26	2,5	7	17,5	0,43
23003-05-0100260505	5	3	8	8	15,5	26	2,5	7	17,5	0,43
23003-05-0100260506	6	3	8	8	15,5	26	2,5	7	17,5	0,43
23003-05-0100260606	6	3	8	8	15,5	26	2,5	7	17,5	0,43
23003-05-0150260505	5	3	10	10	20	26	3	8,5	21	0,85
23003-05-0150260506	6	3	10	10	20	26	3	8,5	21	0,85
23003-05-0150260508	8	3	10	10	20	26	3	8,5	21	0,85
23003-05-0150260606	6	3	10	10	20	26	3	8,5	21	0,85
23003-05-0150260608	8	3	10	10	20	26	3	8,5	21	0,85
23003-05-0150260808	8	3	10	10	20	26	3	8,5	21	0,85
23003-05-0200380606	6	3	14	14	25	38	3,5	11	27	2
23003-05-0200380608	8	3	14	14	25	38	3,5	11	27	2
23003-05-0200380610	10	3	14	14	25	38	3,5	11	27	2
23003-05-0200380808	8	3	14	14	25	38	3,5	11	27	2
23003-05-0200380810	10	3	14	14	25	38	3,5	11	27	2
23003-05-0200381010	10	3	14	14	25	38	3,5	11	27	2
23003-05-0450411010	10	6	18	18	32,5	41	5	13	34	3,5
23003-05-0450411012	12	6	18	18	32,5	41	5	13	34	3,5
23003-05-0450411014	14	6	18	18	32,5	41	5	13	34	3,5
23003-05-0450411212	12	6	18	18	32,5	41	5	13	34	3,5
23003-05-0450411214	14	6	18	18	32,5	41	5	13	34	3,5
23003-05-0450411414	14	6	18	18	32,5	41	5	13	34	3,5
23003-05-1000471212	12	6	25	25	40,5	47	5	13,5	41,5	4,5
23003-05-1000471215	15	6	25	25	40,5	47	5	13,5	41,5	4,5
23003-05-1000471219	19	6	25	25	40,5	47	5	13,5	41,5	4,5
23003-05-1000471515	15	6	25	25	40,5	47	5	13,5	41,5	4,5
23003-05-1000471519	19	6	25	25	40,5	47	5	13,5	41,5	4,5
23003-05-1000471919	19	6	25	25	40,5	47	5	13,5	41,5	4,5