

Couplings Overview

Rigid, One-Piece



One-piece clamp coupling
Steel burnished

Page 368

Shaft diameter up to 50 mm.
Torque up to 2250 Nm.



One-piece clamp coupling
Stainless Steel

Page 368

Shaft diameter up to 50 mm.
Torque up to 2250 Nm.



Two-Piece clamp Couplings
Steel burnished

Page 368

Shaft diameter up to 50 mm.
Torque up to 2250 Nm.



Two-Piece clamp Couplings
Stainless Steel

Page 368

Shaft diameter up to 50 mm.
Torque up to 2250 Nm.



Rigid Coupling TR
Steel and
Stainless Steel

Page 369

Shaft diameter up to 50 mm.
Torque up to 490 Nm.



Two-Piece clamp Couplings
Grey Cast Iron
DIN 115

Page 369

Shaft diameter up to 100 mm.
Torque up to 5400 Nm.



Rigid Coupling
ST-K

Page 370

Shaft diameter up to 100 mm.
Torque up to 5590 Nm.

Torsionally Stiff, Angular Flexibility



Torsionally-Stiff Couplings HU
Set-Screw Style

Page 371

Shaft diameter up to 12 mm.
Torque up to 3.5 Nm.



Torsionally-Stiff Couplings HB
Clamp Style

Page 371

Shaft diameter up to 16 mm.
Torque up to 3.5 Nm.



Curved-Tooth Gear Coupling
BW
Two-Part Plastic

Page 380

Shaft diameter up to 24 mm.
Torque up to 24 Nm.



Curved-Tooth Gear Coupling BOZ
Three-Part Plastic

Page 381

Shaft diameter up to 24 mm.
Torque up to 24 Nm.



Curved-Tooth Gear Coupling
BOS II
Polyamide/Sintered Metal

Page 382

Shaft diameter up to 24 mm.
Torque up to 40 Nm.

Torsionally Stiff, Transversal Flexibility



Torsionally-Stiff Couplings
HZ+HZD
Set-Screw Style

Page 372

Shaft diameter up to 30 mm.
Torque up to 44 Nm.



Torsionally-Stiff Couplings
HF + HFD
Clamp Style

Page 372

Shaft diameter up to 30 mm.
Torque up to 44 Nm.

Couplings Overview

Torsionally Stiff, Angular Flexibility, Transversal Flexibility



Shaft diameter up to 16 mm.
Torque up to 10 Nm.



Shaft diameter up to 30 mm.
Torque up to 102 Nm.

Torsionally Stiff, Angular, Transv. and Longitudinal Flexibility



Shaft diameter up to 35 mm.
Torque up to 60 Nm.



Shaft diameter up to 28mm.
Torque up to 60 Nm.

Torsionally Elastic, Angular Elastic, Transversal Flexible, Longitudinally Flexible



Shaft diameter up to 14 mm.
Torque up to 1.5 Nm.



Shaft diameter up to 64 mm.
Torque up to 500 Nm.



Shaft diameter up to 60 mm.
Torque up to 770 Nm.



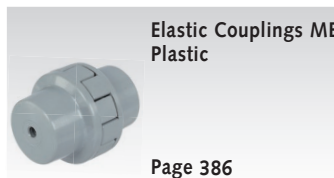
Shaft diameter up to 70 mm.
Torque up to 1480 Nm.



Shaft diameter up to 73 mm.
Torque up to 2500 Nm.



Shaft diameter up to 16 mm.
Torque up to 18 Nm.



Shaft diameter up to 48 mm.
Torque up to 250 Nm.



Shaft diameter up to 48 mm.
Torque up to 310 Nm.



Shaft diameter up to 115 mm.
Torque up to 3300 Nm.



Shaft diameter up to 48 mm.
Torque up to 310 Nm.



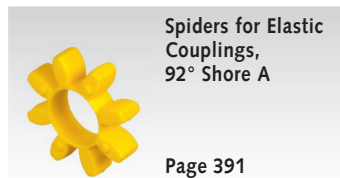
Shaft diameter up to 75 mm.
Torque up to 3600 Nm.



Shaft diameter up to 48 mm.
Torque up to 495 Nm.



Shaft diameter up to 48 mm.
Torque up to 452 Nm.



Torque up to 3300 Nm.



Torque up to 4950 Nm.



Torque up to 6185 Nm.



Shaft diameter up to 100 mm.
Torque up to 3000 Nm.



Torque up to 3000 Nm.

Couplings Overview

Friction Clutches



Shaft diameter up to 8 mm.
Torque up to 1.3 Nm.



Shaft diameter up to 8 mm.
Torque up to 1.3 Nm.



Shaft diameter up to 35 mm.
Torque up to 140 Nm.



Shaft diameter up to 70 mm.
Torque up to 320 Nm.



Shaft diameter up to 50 mm.
Torque up to 180 Nm.



Voltage 220 - 250 V AC.
Strength of current up to 10 A.



Shaft diameter up to 55 mm.
Torque up to 800 Nm.

Sliding Hubs



Shaft diameter up to 8 mm.
Torque up to 1.3 Nm.



Shaft diameter up to 65 mm.
Torque up to 1200 Nm.



Shaft diameter up to 80 mm.
Torque up to 1200 Nm.



Shaft diameter up to 40 mm.
Torque up to 280 Nm.



Other sizes and designs on request.



Connecting Shafts Page 766

*Selection Tool
on the Internet at www.maedler.de
in the section MÄDLER®-Tools*

Notes Regarding Couplings

General

Couplings serve to connect two shafts in order to transmit the driving power (transmission of speed and torque). As different applications lead to most diverse requirements for couplings, there is a large number of different types of couplings with sometimes contradictory characteristics

available on the market. If possible, the shafts should be supported right besides the couplings in order to avoid unnecessary vibration. This is particularly important for elastic couplings.

Torque Values

Depending on the type of coupling, the torques stated refer to either the maximum value or the nominal torque. The maximum permissible torque must never be exceeded (risk of fracture). The nominal torque is the value valid for the permissible permanent load (e.g. for elastic couplings). This value should be exceeded only as exception and for short times, and only up to the maximum permissible torque. Depending on the type of drive unit used and the type of shock load, the nominal torque of the drive unit has to be multiplied with the respective operating factor taken from the table below:

Operating Torque = Driving Torque x Operating Factor

The operating torque of the drive unit must not exceed the nominal torque of the coupling.

The driving torque can be derived from the driving power with the following formula:

$$T_{[Nm]} = 9550 \cdot \frac{P [kW]}{n [min^{-1}]} \cdot S$$

Operating Factors

Type of Shock Load

	Type of Drive Unit		
	Electric Engines Steam Turbines Shaftings	4 - 6 Cylinder Combustion Engines	1 - 3 Cylinder Combustion Engines
Weak shock load Low starting torque, uniform operation small light generators, small centrifugal pumps, small blowers, light machine tools, light transmissions	1.0	1.25	1.75
Medium shock load Medium starting torque, slight torque fluctuations larger conveying machinery, large blowers, centrifugal pumps and generators, large machine tools and wood working machines, rapid presses, flower mills and food grinders, shears, punches, grinding machines, washing machines, transmissions	1.25	1.5	2.0
Strong shock load High starting torque, strong shocks, alternating sense of rotation. centrifuges, gang saws, paper calender, roller tables, wet presses, ball and rod mills, heavy rolling mills for metal, rubber rolling mill, reciprocating machines without flywheel, cement mills, stone breakers	1.5	2.0	2.5

Rigid Couplings

These couplings do not compensate for misalignment of the shaft neither in axial nor in radial direction. They should therefore only be used with perfectly aligned shafts. Shocks and vibration are transferred without any damping.

Torsionally-Stiff Couplings

These couplings transmit the rotational movement synchronously with hardly any damping. Depending on the type of coupling more or less angular and/or axial displacement can be compensated.

Elastic Couplings

With these couplings an elastic intermediate ring usually dampens the shocks of the driving unit. In types without this ring, the coupling body is elastic. Due to the small endurance strength of the shock-dampening components, the nominal torque of the coupling is much lower than the maximum torque. The elastic rings are available as spare parts.

Friction Clutches and Sliding Hubs

These clutches or hubs are used if the torque must only be transmitted up to a certain, adjustable value. If the set maximum value is exceeded the coupling device starts slipping. If the torque falls below the limit again, the slipping stops. Thus for safety reasons a separate stop mechanism for the drive unit might be required.

For couplings with elastics inserts, following factors have to be considered, additional to the standard operating factors above:

Friction clutches usually serve to connect two shafts. Sliding hubs usually serve to mount a drive wheel (chain wheel, drive pulley, spur gear, friction wheel, or similar) on a shaft.

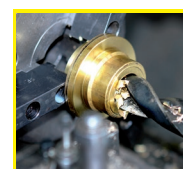
Some types can be used for both applications as, e.g., either a drive wheel or a shaft connection can be flange mounted. Combinations of elastic coupling and friction clutch can also be supplied.

Temperature-factor

Temperatur	-30°C to +30°C	to +40°C	to +60°C	to +80°C
Factor	1,0	1,2	1,4	1,8

Starting-factor

Starts per hour	100	200	400	800
Factor	1,0	1,2	1,4	1,6



**Reworking within
24h-service possible.
Custom made parts
on request.**

One-Piece Clamp Couplings MAS

Material: Steel C45 burnished,
Stainless steel 1.4301.

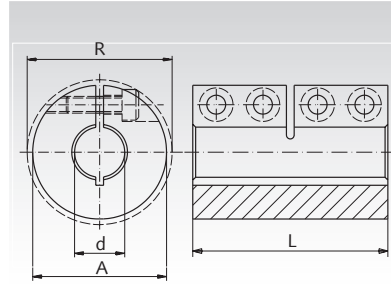


Temperature range from -40°C to +175°C.

Maximum torque 4,000 min⁻¹.

The screws DIN 912 are covered with a layer of nylon. Thus the bolts do not loosen with vibrations.

Bore tolerance: +0.051 mm.



Ordering Details: e.g.: Product No. 600 603 00, Clamp Coupling MAS, 3 mm Bore, without keyway

Product No. without keyway Steel	Product No. without keyway Stainless Steel	Product No. with keyway* Steel	Product No. with keyway* Stainless Steel	Torque T**		d mm	A mm	R mm	L mm	Screws DIN 912 12.9 / A2-70	Fastening Torque T _A		Weight g
				Steel Nm	Stainless Nm						Steel Nm	Stainless Nm	
600 603 00	600 996 03	-	-	14	11	3	14	18,0	30	M3 x 8	2,1	1,1	35
600 604 00	600 996 04	-	-	19	16	4	16	19,3	30	M3 x 8	2,1	1,1	45
600 605 00	600 996 05	-	-	21	18	5	18	21,2	30	M3 x 8	2,1	1,1	47
600 606 00	600 996 06	600 706 00	600 997 06	30	25	6	18	21,2	30	M3 x 8	2,1	1,1	47
600 608 00	600 996 08	600 708 00	600 997 08	50	40	8	24	26,8	35	M3 x 10	2,1	1,1	102
600 610 00	600 996 10	600 710 00	600 997 10	100	90	10	29	32,7	45	M4 x 12	4,6	2,5	185
600 612 00	600 996 12	600 712 00	600 997 12	100	90	12	29	32,7	45	M4 x 12	4,6	2,5	180
600 614 00	600 996 14	600 714 00	600 997 14	190	160	14	34	39,1	50	M5 x 16	9,5	5,4	272
600 615 00	600 996 15	600 715 00	600 997 15	190	160	15	34	39,1	50	M5 x 16	9,5	5,4	266
600 616 00	600 996 16	600 716 00	600 997 16	190	160	16	34	39,1	50	M5 x 16	9,5	5,4	261
600 619 00	600 996 19	600 719 00	600 997 19	300	260	19	42	48,2	65	M6 x 16	16	9,6	520
600 620 00	600 996 20	600 720 00	600 997 20	350	300	20	42	48,2	65	M6 x 16	16	9,6	518
600 625 00	600 996 25	600 725 00	600 997 25	390	325	25	45	50,8	75	M6 x 16	16	9,6	623
600 630 00	600 996 30	600 730 00	600 997 30	475	400	30	53	58,1	83	M6 x 18	16	9,6	920
600 635 00	600 996 35	600 735 00	600 997 35	1100	925	35	67	74,1	95	M8 x 25	39	23	1880
600 640 00	600 996 40	600 740 00	600 997 40	1325	1100	40	77	83,4	108	M8 x 25	39	23	2710
600 650 00	600 996 50	600 750 00	600 997 50	2250	1875	50	85	93,2	124	M10 x 25	77	46	3520

* Feather Key Groove DIN 6885/1, Tolerance P9.

** Maximum values which can only be achieved with perfect mounting and dimensional accuracy of the shaft.

Two-Piece Clamp Couplings MAT

Material: Steel C45 burnished,
Stainless steel 1.4301.

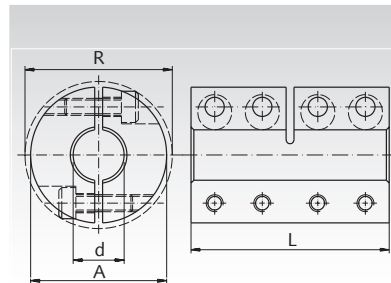


Temperature range from -40°C to +175°C.

Maximum torque 4,000 min⁻¹.

The screws DIN 912 are covered with a layer of nylon. Thus the bolts do not loosen with vibrations.

Bore tolerance: + 0.051 mm.



Ordering Details: e.g.: Product No. 600 803 00, Clamp Coupling MAT, 3 mm Bore, without keyway

Product No. without keyway Steel	Product No. without keyway Stainless Steel	Product No. with keyway* Steel	Product No. with keyway* Stainless Steel	Torque T**		d mm	A mm	R mm	L mm	Screws DIN 912 12.9 / A2-70	Fastening Torque T _A		Weight g
				Steel Nm	Stainless Nm						Steel Nm	Stainless Nm	
600 803 00	600 998 03	-	-	14	11	3	14	18,0	30	M3 x 8	2,1	1,1	35
600 804 00	600 998 04	-	-	19	16	4	16	19,3	30	M3 x 8	2,1	1,1	45
600 805 00	600 998 05	-	-	21	18	5	18	21,2	30	M3 x 8	2,1	1,1	47
600 806 00	600 998 06	600 906 00	600 999 06	30	25	6	18	21,2	30	M3 x 8	2,1	1,1	47
600 808 00	600 998 08	600 908 00	600 999 08	50	40	8	24	26,8	35	M3 x 10	2,1	1,1	102
600 810 00	600 998 10	600 910 00	600 999 10	100	90	10	29	32,7	45	M4 x 12	4,6	2,5	185
600 812 00	600 998 12	600 912 00	600 999 12	100	90	12	29	32,7	45	M4 x 12	4,6	2,5	180
600 814 00	600 998 14	600 914 00	600 999 14	190	160	14	34	39,1	50	M5 x 16	9,5	5,4	272
600 815 00	600 998 15	600 915 00	600 999 15	190	160	15	34	39,1	50	M5 x 16	9,5	5,4	266
600 816 00	600 998 16	600 916 00	600 999 16	190	160	16	34	39,1	50	M5 x 16	9,5	5,4	261
600 819 00	600 998 19	600 919 00	600 999 19	300	260	19	42	48,2	65	M6 x 16	16	9,6	520
600 820 00	600 998 20	600 920 00	600 999 20	350	300	20	42	48,2	65	M6 x 16	16	9,6	518
600 825 00	600 998 25	600 925 00	600 999 25	390	325	25	45	50,8	75	M6 x 16	16	9,6	623
600 830 00	600 998 30	600 930 00	600 999 30	475	400	30	53	58,1	83	M6 x 18	16	9,6	920
600 835 00	600 998 35	600 935 00	600 999 35	1100	925	35	67	74,1	95	M8 x 25	39	23	1880
600 840 00	600 998 40	600 940 00	600 999 40	1325	1100	40	77	83,4	108	M8 x 25	39	23	2710
600 850 00	600 998 50	600 950 00	600 999 50	2250	1875	50	85	93,2	124	M10 x 25	77	46	3520

* Feather Key Groove DIN 6885/1, Tolerance P9.

** Maximum values which can only be achieved with perfect mounting and dimensional accuracy of the shaft.

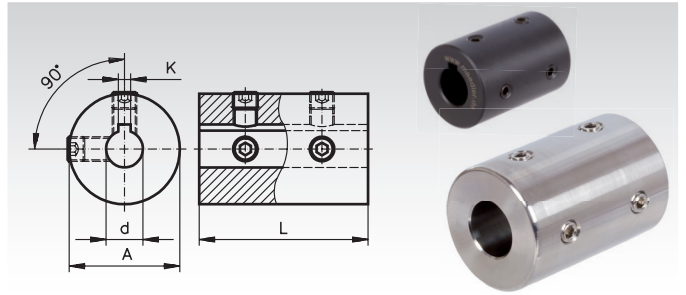
Set-Screw Couplings TR

Material: Steel C45 burnished.
Stainless Steel 1.4301.



Bore tolerance: +0.05 mm.

These couplings do not allow any shaft displacement in axial or radial direction. They should therefore only be used with perfectly aligned shafts.



Ordering Details: e.g.: Product No. 600 106 00, Set Screw Coupling TR, Steel without Keyway, Bore 6 mm

Product No. without keyway Steel	Product No. without keyway Stainless Steel	Product No. with keyway* Steel	Product No. with keyway* Stainless Steel	Torque T**		d mm	A mm	L mm	K mm	Screws DIN 916	Fastening Torque T _A		Weight g
				Steel Nm	Stainless Nm						Steel Nm	Stainless Nm	
600 106 00	600 991 06	600 206 00	600 992 06	4	2,7	6	18	30	2	M4	2,2	1,76	47
600 108 00	600 991 08	600 208 00	600 992 08	8	5,4	8	24	35	2	M4	2,2	1,76	102
600 110 00	600 991 10	600 210 00	600 992 10	12	8,1	10	29	45	3	M5	4,0	3,2	185
600 112 00	600 991 12	600 212 00	600 992 12	17	12	12	29	45	4	M6	7,2	5,8	180
600 114 00	600 991 14	600 214 00	600 992 14	30	20	14	34	50	5	M6	7,2	5,8	272
600 115 00	600 991 15	600 215 00	600 992 15	32	22	15	34	50	5	M6	7,2	5,8	266
600 116 00	600 991 16	600 216 00	600 992 16	35	24	16	34	50	5	M6	7,2	5,8	261
600 120 00	600 991 20	600 220 00	600 992 20	70	47	20	42	65	6	M6	7,2	5,8	518
600 125 00	600 991 25	600 225 00	600 992 25	135	91	25	45	75	8	M8	17	13,6	623
600 130 00	600 991 30	600 230 00	600 992 30	155	105	30	53	83	8	M8	17	13,6	920
600 135 00	600 991 35	600 235 00	600 992 35	230	155	35	67	95	10	M8	17	13,6	1880
600 140 00	600 991 40	600 240 00	600 992 40	310	210	40	77	108	12	M10	33	26,4	2710
600 150 00	600 991 50	600 250 00	600 992 50	490	340	50	85	124	14	M10	33	26,4	3520

* Feather Key Groove DIN 6885/1, Tolerance P9.

** For couplings with keyway: calculations based on feather-key connection.

For couplings without keyway, the transmittable torque is lower and depends on how far the set screws penetrate the shaft.

Clamp Couplings (Box couplings) DIN 115 Made from Cast Iron

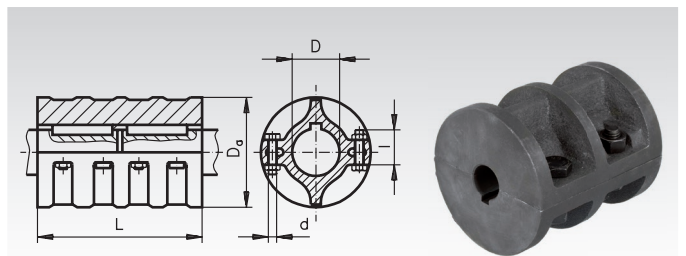
Material: Grey Cast Iron GG25.

Up to 50 mm bore these two-part couplings are manufactured according to bore tolerance zone V7. For larger bores the fit is U7. All bores have a feather key groove according to DIN 6885/1. Recommended shaft tolerance: f7.

A bearing must be placed right beside both ends of the coupling. Box couplings can be assembled and dismantled in radial direction without moving the shaft in vertical direction.

Version A: For shafts of the same diameter.

Version B: For shafts of different diameter available on request.



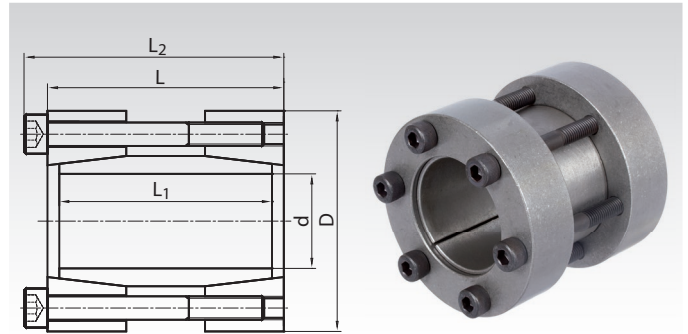
Ordering Details: e.g.: Product No. 600 020 00, clamp Coupling DIN 115 with Keyway

Product No. (with Keyway) Version A	Torque max. Nm	D mm	D _a mm	L mm	Hexagon Screws DIN 931		Speed n _{max.} min ⁻¹	Weight kg
					Amount	d x l mm		
600 020 00	25	20	85	100	4	M10 x 30	1700	1,9
600 025 00	40	25	100	130	4	M12 x 40	1500	4,5
600 030 00	60	30	100	130	4	M12 x 40	1500	4,2
600 035 00	80	35	110	160	6	M12 x 50	1420	6,5
600 040 00	100	40	110	160	6	M12 x 50	1420	6,2
600 045 00	125	45	120	190	6	M12 x 50	1350	8,5
600 050 00	150	50	130	190	6	M12 x 50	1300	9
600 055 00	500	55	150	220	6	M16 x 55	1200	13
600 060 00	850	60	150	220	6	M16 x 55	1200	12,5
600 065 00	1250	65	170	250	6	M16 x 55	1120	18,5
600 070 00	1700	70	170	250	6	M16 x 55	1120	17
600 080 00	2500	80	190	280	8	M16 x 60	1060	27
600 090 00	3800	90	215	310	8	M20 x 75	1000	41
600 100 00	5400	100	250	350	8	M20 x 90	920	63

Clamping Sets (Rigid Couplings) ST-K

Material: Steel.

- For connecting two shafts, as a rigid coupling.
- For medium torques.
- Easy mounting.
- Self-releasing at dismounting.
- No axial movement during mounting.



Ordering Details: e.g.: Product No. 615 880 15, Clamping Set ST-K, 15 mm

Product No.	d mm	D mm	L mm	L ₁ mm	L ₂ mm	T Nm	F _{ax} kN	P _W N/mm ²	Screws 12.9 Number x Size	T _A Nm	Weight kg
615 880 15	15	45	50	44	56	125	16	126	4 x M6	17	0,40
615 880 16	16	45	50	44	56	131	17	117	4 x M6	17	0,40
615 880 17	17	50	50	44	56	210	23	118	4 x M6	17	0,50
615 880 18	18	50	50	44	56	220	24	109	4 x M6	17	0,46
615 880 19	19	50	50	44	56	230	24	96	4 x M6	17	0,50
615 880 20	20	50	50	44	56	240	25	93	4 x M6	17	0,50
615 880 22	22	55	60	54	66	270	25	107	4 x M6	17	0,60
615 880 24	24	55	60	54	66	290	25	96	4 x M6	17	0,60
615 880 25	25	55	60	54	66	470	35	95	6 x M6	17	0,66
615 880 28	28	60	60	54	66	490	35	84	6 x M6	17	0,70
615 880 30	30	60	60	54	66	540	37	79	6 x M6	17	0,73
615 880 32	32	75	60	54	68	730	43	77	6 x M8	41	1,30
615 880 35	35	75	75	69	83	810	45	82	4 x M8	41	1,34
615 880 38	38	75	75	69	83	860	46	75	4 x M8	41	1,30
615 880 40	40	75	75	69	83	880	46	64	4 x M8	41	1,40
615 880 42	42	90	75	69	83	1430	66	65	4 x M8	41	2,0
615 880 45	45	90	85	79	93	1490	66	73	6 x M8	41	2,5
615 880 48	48	90	85	79	93	1640	68	70	6 x M8	41	2,4
615 880 50	50	90	85	79	93	1670	68	64	6 x M8	41	2,0
615 880 55	55	105	85	79	93	2520	90	63	8 x M8	41	3,3
615 880 60	60	105	85	79	93	2760	92	59	8 x M8	41	2,6
615 880 65	65	105	85	79	93	2930	92	53	8 x M8	41	3,0
615 880 70	70	125	100	94	110	3800	106	50	6 x M10	83	5,4
615 880 75	75	125	100	94	110	3850	107	47	6 x M10	83	5,0
615 880 80	80	125	100	94	110	4030	109	65	8 x M10	83	4,7
615 880 85	85	130	100	94	110	4260	121	64	8 x M10	83	5,5
615 880 90	90	135	100	94	110	4820	122	72	8 x M10	83	7,0
615 880 95	95	140	120	114	130	5170	124	67	8 x M10	83	7,5
615 881 00	100	150	120	114	132	5590	127	66	8 x M12	142	7,8

More sizes up to d=110mm for 7,400Nm are available.

Price and delivery time on request.

T = transmittable torque at F_{ax} = 0.

F_{ax} = transmittable axial force at T = 0.

P_W = surface pressure onto the shaft.

T_A = Fastening torque of the screws.

Fit

Shaft h8, Hub H8.
Surface roughness max. 12.5µm.

Mounting

Slightly oil the clamping set before mounting, do not use molybdenum disulphide or grease. Tighten the screws evenly and crosswise in several steps.

Demounting

Due to the cone angle, the clamping set is usually released once all screws have been fully unfastened.

Torsionally-Stiff Couplings HU

Material:

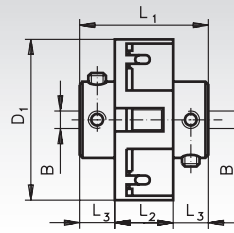
Up to D1 = 28 mm hubs made from brass, chromated and passivated.
From D1 = 41.4 mm aluminium alloy with iridite NCP finish.
Torque disc made from black acetal.

These unique, zero backlash, general purpose couplings provide electrical insulation. They are designed for the lower torque range and offer generous angular and radial misalignment compensation. Their axial stiffness is unique and they can anchor unrestricted shafts or perform light push/pull duties

Applications: pulse-triggered drive units (e.g. stepper motors, transducers, engine speed sensors, potentiometers).
Temperature range: -20°C to +60°C.

Ordering Details: e.g.: Product No. 601 002 00, Coupling HU, 2 mm Bore

Set-screw style



Product No.	Torque max. ²⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation at 3000min ⁻¹ 1)		Torsional Stiffness Nm/rad	Weight g
								Angular ±Degrees	Radial ±mm		
601 002 00	0,3	0,9	2	14,2	5,1	4,6	18	2	0,2	25	7
601 003 00	0,3	0,9	3	14,2	5,1	4,6	18	2	0,2	25	7
601 004 00	0,3	0,9	4	14,2	5,1	4,6	18	2	0,2	25	7
601 007 00	1,7	5	3	19,1	6,9	6,1	28	2	0,2	92	16
601 008 00	1,7	5	4	19,1	6,9	6,1	28	2	0,2	92	16
601 009 00	1,7	5	6	19,1	6,9	6,1	28	2	0,2	92	16
601 010 00	1,7	5	8	19,1	6,9	6,1	28	2	0,2	92	16
601 013 00	3,5	10,5	6	28,4	11,2	8,6	41,4	2	0,25	299	30
601 014 00	3,5	10,5	8	28,4	11,2	8,6	41,4	2	0,25	299	30
601 015 00	3,5	10,5	10	28,4	11,2	8,6	41,4	2	0,25	299	30
601 018 00	3,5	10,5	12	28,4	11,2	8,6	41,4	2	0,25	299	30

1) At lower speeds the couplings can compensate up to +/-1 mm radial and 10° angular displacement.

2) Operating factors: see coupling HB.

Torsionally-Stiff Couplings HB

Material:

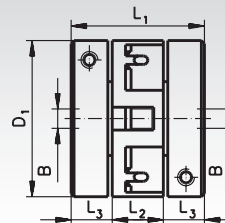
Up to D1 = 28 mm hubs made from brass, chromated and passivated.
From D1 = 41.4 mm aluminium alloy with iridite NCP finish.
Torque disc made from black acetal.

These unique, zero backlash, general purpose couplings provide electrical insulation. They are designed for the lower torque range and offer generous angular and radial misalignment compensation. Their axial stiffness is unique and they can anchor unrestricted shafts or perform light push/pull duties

Applications: pulse-triggered drive units (e.g. stepper motors, transducers, engine speed sensors, potentiometers).
Temperature range: -20°C to +60°C.

Ordering Details: e.g.: Product No. 601 103 00, Coupling HB, 3 mm Bore

Clamp style (bore 16 in set-screw style)



Product No.	Torque max. ²⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation at 3000min ⁻¹ 1)		Torsional Stiffness Nm/rad	Weight g
								Angular ±Degrees	Radial ±mm		
601 103 00	0,3	0,9	3	19,1	5,1	7	19,1	2	0,2	25	11
601 104 00	0,3	0,9	4	19,1	5,1	7	19,1	2	0,2	25	11
601 106 00	0,3	0,9	6	19,1	5,1	7	19,1	2	0,2	25	11
601 108 00	1,7	5	4	25,4	6,9	9,3	28	2	0,2	92	26
601 109 00	1,7	5	6	25,4	6,9	9,3	28	2	0,2	92	26
601 110 00	1,7	5	8	25,4	6,9	9,3	28	2	0,2	92	26
601 114 00	3,5	10,5	8	38,1	11,1	13,5	41,4	2	0,25	299	40
601 115 00	3,5	10,5	10	38,1	11,2	13,5	41,4	2	0,25	299	40
601 116 00	3,5	10,5	12	38,1	11,2	13,5	41,4	2	0,25	299	40
601 117 00 ³⁾	3,5	10,5	16 ³⁾	38,1	11,2	13,5	41,4	2	0,25	299	40

1) At lower speeds the couplings can compensate up to +/-1 mm radial and 10° angular displacement. The sizes D₁ = 19 and D₁ = 28 only 5 degrees.

2) Operating factors for couplings HU and HB (without shaft displacement):

Load Period	Operating Factor
short term	1
1 hour per day	1.5
3 hours per day	2
6 hours per day	3
12 hours per day	4

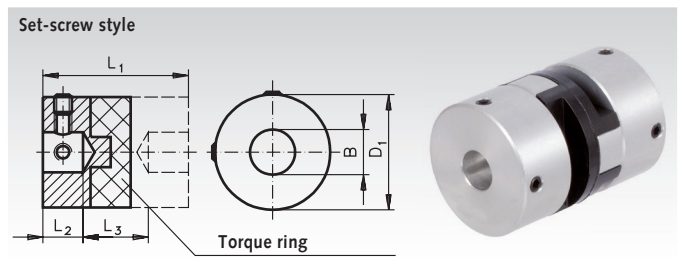
Torsionally-Stiff Couplings HZ with Blind Hole

Material: Hubs made from aluminium alloy with iridite NCP finish. Sliding disc made from black acetal.

These 3-part zero-backlash couplings provide electrical insulation. They consist of two hubs and a sliding disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Applications: Ideal for stepper motors due to the damping properties of plastic torque rings. Positioning drives, position encoders and incremental or absolute encoders, pumps etc.

Temperature range: -20°C to +60°C.



Ordering Details: e.g.: Product No. 601 201 00, Coupling HZ, 2 mm Bore

Product No.	Torque Max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation Angular ±Degrees	at 3000min ⁻¹ Radial ±mm	Torsional Stiffness Nm/rad	Weight g	Product No. Spare Part Sliding disc	Weight g
601 201 00*	0,06	0,7	2	12,7	3,8	5,1	6,4	0,5	0,1	10	2,5	601 237 00	0,1
601 202 00*	0,06	0,7	3	12,7	3,8	5,1	6,4	0,5	0,1	10	2,5	601 237 00	0,1
601 203 00*	0,21	2	3	12,7	3,8	5,1	9,5	0,5	0,1	30	4	601 238 00	0,1
601 204 00*	0,21	2	4	12,7	3,8	5,1	9,5	0,5	0,1	30	4	601 238 00	0,1
601 206 00*	0,5	4	3	15,9	4,3	7,3	12,7	0,5	0,1	65	11	601 239 00	0,5
601 207 00*	0,5	4	4	15,9	4,3	7,3	12,7	0,5	0,1	65	11	601 239 00	0,5
601 208 00*	0,5	4	6	15,9	4,3	7,3	12,7	0,5	0,1	65	11	601 239 00	0,5
601 301 00	1,7	8	4	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 302 00	1,7	8	6	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 303 00	1,7	8	8	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 305 00	4	13	6	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 306 00	4	13	8	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 307 00	4	13	10	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 308 00	9	53	8	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 309 00	9	53	10	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 310 00	9	53	12	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 312 00	17	57	10	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,7
601 313 00	17	57	12	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,7
601 315 00	17	57	16	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,7

* Hubs made of brass.

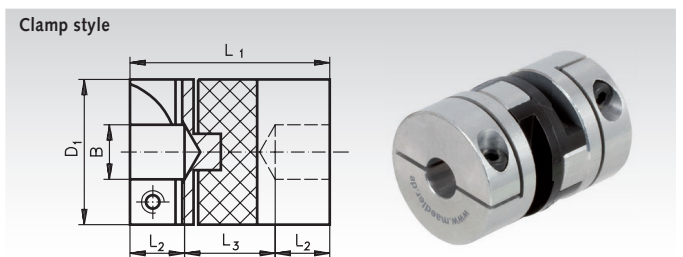
Torsionally-Stiff Couplings HF with Blind Hole

Material: Hubs made from aluminium alloy with iridite NCP finish. Sliding disc made from black acetal.

These 3-part zero-backlash couplings provide electrical insulation. They consist of two hubs and a sliding disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Applications: Ideal for stepper motors due to the damping properties of plastic torque rings. Positioning drives, position encoders and incremental or absolute encoders, pumps etc.

Temperature range: -20°C to +60°C.



Product No.	Torque max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation Angular ±Degrees	at 3000min ⁻¹ Radial ±mm	Torsional Stiffness Nm/rad	Weight g	Product No. Spare Part Sliding disc	Weight g
601 401 00	1,7	8	4	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 402 00	1,7	8	5	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 403 00	1,7	8	6	22	6,3	9,4	19,1	0,5	0,2	115	12	601 242 00	1,5
601 407 00	4	13	6	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 408 00	4	13	8	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 409 00	4	13	10	28,4	8,6	11,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 411 00	9	53	8	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 412 00	9	53	10	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 413 00	9	53	12	48	13	22	33,3	0,5	0,2	615	86	601 246 00	8
601 415 00	17	57	10	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,2
601 416 00	17	57	12	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,2
601 418 00	17	57	16	50,8	16,7	17,4	41,3	0,5	0,25	1200	148	601 248 00	12,2

¹⁾ Operating factors (without shaft displacement):

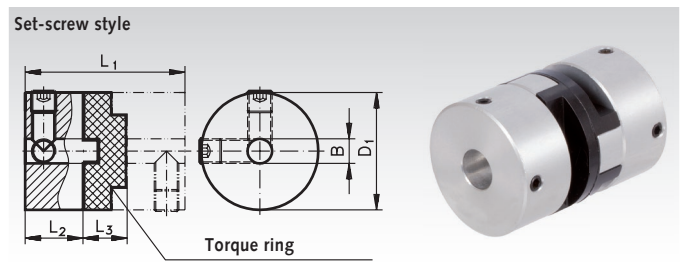
Load Period	Operating Factor
short term	1
1 hour per day	2
3 hours per day	4
6 hours per day	6
12 hours per day	8

Torsionally-Stiff Couplings HZD with Through Hole

Material: Hubs made from aluminium alloy with iridite NCP finish. Sliding disc made from black acetal.

These 3-part zero backlash couplings provide electrical insulation. They consist of two hubs and a sliding disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Applications: Ideal for stepper motors due to the damping properties of plastic torque rings. Positioning drives, position encoders and incremental or absolute encoders, pumps etc.



Ordering Details: e.g.: Product No. 601 301 05, Coupling, 4 mm Bore

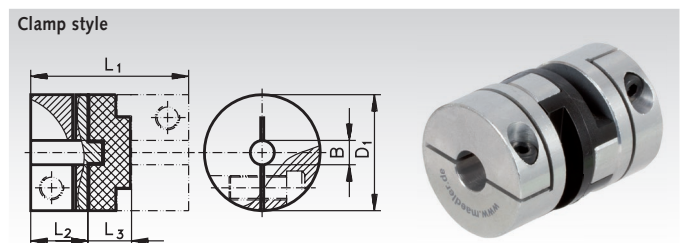
Product No.	Torque max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation at 3000min ⁻¹ Angular ±Degrees	Radial ±mm	Torsional Stiffness Nm/rad	Weight g	Product No. Spare Part Sliding disc	Weight g
601 301 05	1,7	8	4	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 302 05	1,7	8	6	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 303 05	1,7	8	8	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 305 05	4	13	6	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 306 05	4	13	8	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 307 05	4	13	10	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 308 05	9	53	8	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 309 05	9	53	10	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 310 05	9	53	12	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 312 05	17	57	10	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 313 05	17	57	12	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 315 05	17	57	16	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 318 05	30	95	12	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 319 05	30	95	16	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 320 05	30	95	20	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 325 05	44	150	16	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30
601 326 05	44	150	20	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30
601 327 05	44	150	30	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30

Torsionally-Stiff Couplings HFD with Through Hole

Material: Hubs made from aluminium alloy with iridite NCP finish. Sliding disc made from black acetal.

These 3-part zero backlash couplings provide electrical insulation. They consist of two hubs and a sliding disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Application: see description HZD (above).



Ordering Details: e.g.: Product No. 601 401 05, coupling, 4 mm Bore

Product No.	Torque Max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. Compensation at 3000min ⁻¹ Angular ±Degrees	Radial ±mm	Torsional Stiffness Nm/rad	Weight g	Product No. Spare Part Sliding disc	Weight g
601 401 05	1,7	8	4	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 402 05	1,7	8	5	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 403 05	1,7	8	6	26	9,4	7,2	19,1	0,5	0,2	115	13	601 242 00	1,5
601 407 05	4	13	6	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 408 05	4	13	8	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 409 05	4	13	10	32,4	11,6	9,2	25,4	0,5	0,2	205	31	601 244 00	2,7
601 411 05	9	53	8	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 412 05	9	53	10	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 413 05	9	53	12	48	15	18	33,3	0,5	0,2	615	74	601 246 00	8
601 415 05	17	57	10	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 416 05	17	57	12	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 418 05	17	57	16	50,8	17,8	15,3	41,3	0,5	0,25	1200	142	601 248 00	12,7
601 420 00	30	95	12	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 422 00	30	95	16	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 424 00	30	95	20	59,6	20,6	18,4	50	0,5	0,25	1375	208	601 250 00	20
601 430 00	44	150	16	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30
601 432 00	44	150	20	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30
601 434 00	44	150	30	78	28,4	21,2	57,1	0,5	0,25	2610	361	601 257 00	30

¹⁾ Operating factors (without shaft displacement):

Load Period	Operating Factor
short term	1
1 hour per day	2
3 hours per day	4
6 hours per day	6
12 hours per day	8

Torsionally-Stiff Couplings HZD with Through Hole, Stainless

Material: Hubs made from stainless steel 1.4305.
Torque disc made from black acetal.

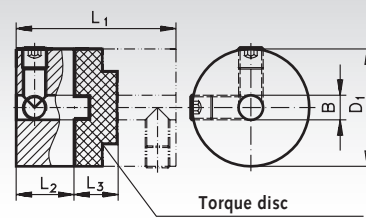


These 3-part zero backlash couplings provide electrical insulation. They consist of two hubs and a torque disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Applications: Ideal for stepper motors due to the damping properties of plastic torque discs. Positioning drives, position encoders such as incremental or absolute encoders, pumps etc.
Temperature range: -20°C to +60°C.

Ordering details: e.g.: Product No. 601 993 05, Coupling, 6 mm bore

Set-screw style



Product No.	Torque max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. displacement at 3000min ⁻¹		Torsional stiffness Nm/rad	Weight g	Product No. Spare part Torque disc	Weight g
								Angular ±Degrees	Radial ±mm				
601 993 05	4	13	6	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 993 06	4	13	8	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 993 07	4	13	10	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 993 08	9	53	8	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 993 09	9	53	10	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 993 10	9	53	12	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 993 12	17	57	10	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 993 13	17	57	12	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 993 15	17	57	16	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 993 18	30	95	12	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20
601 993 19	30	95	16	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20
601 993 20	30	95	20	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20

Torsionally-Stiff Couplings HFD with Through Hole, Stainless

Material: Hubs made from stainless steel 1.4305.
Torque disc made from black acetal.

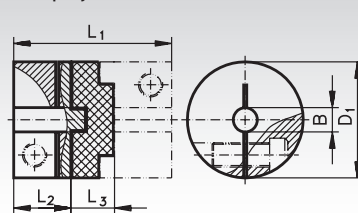


These 3-part zero backlash couplings provide electrical insulation. They consist of two hubs and a torque disc. They are versatile and of robust design. Large radial compensation, easy mounting even in confined spaces.

Applications: see description HZD (above).

Ordering Details: e.g.: Product No. 601 994 07, Coupling, 6 mm bore

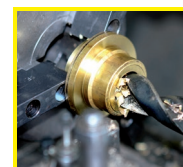
Clamp style



Product No.	Torque max. ¹⁾ Nm	Static Break Torque Nm	Bore B ^{+0.03} mm	L ₁ mm	L ₂ mm	L ₃ mm	D ₁ mm	max. displacement at 3000min ⁻¹		Torsional stiffness Nm/rad	Weight g	Product No. Spare part Torque disc	Weight g
								Angular ±Degrees	Radial ±mm				
601 994 07	4	13	6	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 994 08	4	13	8	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 994 09	4	13	10	32,4	11,6	9,2	25,4	0,5	0,2	205	76	601 244 00	2,7
601 994 11	9	53	8	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 994 12	9	53	10	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 994 13	9	53	12	42,0	15,0	12,0	33,3	0,5	0,2	615	165	601 245 00	8
601 994 15	17	57	10	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 994 16	17	57	12	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 994 18	17	57	16	50,8	17,8	15,3	41,3	0,5	0,25	1200	305	601 248 00	12,7
601 994 20	30	95	12	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20
601 994 22	30	95	16	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20
601 994 24	30	95	20	59,6	20,6	18,4	50	0,5	0,25	1375	510	601 250 00	20

¹⁾ Operating factors (without shaft displacement):

Load Period	Operating Factor
short term	1
1 hour per day	2
3 hours per day	4
6 hours per day	6
12 hours per day	8



**Reworking within
24h-service possible.
Custom made parts
on request.**

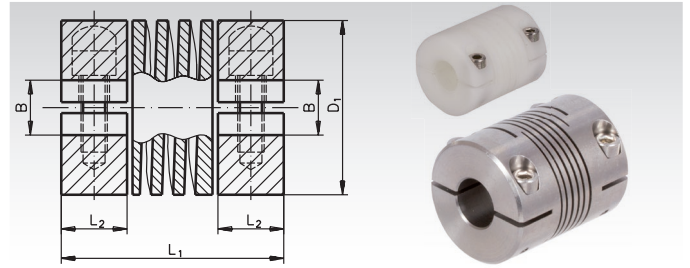
Self-Aligning Couplings KA, Short Version

Material: Plastic acetal.
Aluminium 2014A.
Stainless steel 1.4305.



- Torsionally rigid design.
- Zero backlash.
- Perfect transmission of torque.
- Very low restoring force.
- Speed max. 5,000 min⁻¹.

Number of screws: at plastic and steel 2 screws on each side.
At aluminium: 1 screw on each side.



Ordering Details: e.g.: Product No. 602 608 00, Coupling KA, Plastic, Bore 4mm

Product No. Plastic	Product No. Alu	Product No. Stainless Steel	Max. Operating Torque*			Bore B ^{+0.03} mm	Bore max ¹⁾ mm	L ₁ mm	L ₂ ** mm	D ₁ mm	Angular Misalignment Degrees	Parallel Misalignment mm	Weight		
			Plastic Nm	Alu Nm	Stainl. Nm								Plastic g	Alu g	Stainl. g
-	-	602 996 00***	-	-	0,45	2	3,00	12,7	3,2	6,35	3	0,07	-	-	2
-	602 702 00	602 996 02	-	0,4	0,5	3	3,18	14,2	4,5	9,52	3	0,1	-	2	6
602 608 00	602 708 00	602 996 08	0,24	0,9	1,0	4	6,00	19,05	6	12,70	5	0,127	2	6	10
602 610 00	602 710 00	602 996 10	0,24	0,9	1,0	6	6,00	19,05	6	12,70	5	0,127	2	6	10
602 612 00	602 712 00	602 996 12	0,35	1,5	1,8	4	6,35	20,3	6	15,87	5	0,127	3	8	22
602 614 00	602 714 00	602 996 14	0,35	1,5	1,8	5	6,35	20,3	6	15,87	5	0,127	3	8	22
602 616 00	602 716 00	602 996 16	0,35	1,5	1,8	6	6,35	20,3	6	15,87	5	0,127	3	8	22
602 620 00	602 720 00	602 996 20	0,64	2,5	2,7	6	8,00	22,85	6,5	19,05	5	0,127	8	12	34
602 622 00	602 722 00	602 996 22	0,64	2,5	2,7	8	8,00	22,85	6,5	19,05	5	0,127	8	12	34
602 624 00	602 724 00	602 996 24	1,4	4,0	6,0	6	11,00	31,75	9	25,40	5	0,127	13	32	90
602 626 00	602 726 00	602 996 26	1,4	4,0	6,0	8	11,00	31,75	9	25,40	5	0,127	13	32	90
602 628 00	602 728 00	602 996 28	1,4	4,0	6,0	10	11,00	31,75	9	25,40	5	0,127	13	32	90
602 630 00	602 730 00	602 996 30	2,5	6,0	10,0	10	16,00	44,45	12	31,75	5	0,127	35	76	220
602 632 00	602 732 00	602 996 32	2,5	6,0	10,0	12	16,00	44,45	12	31,75	5	0,127	35	76	220
602 634 00	602 734 00	602 996 34	2,5	6,0	10,0	16	16,00	44,45	12	31,75	5	0,127	35	76	220

* Please regard the operating factors page 377. ** Shaft can be pushed in further. Middle of coupling is relieved. *** Set-screw style. ¹⁾ Against surcharge.

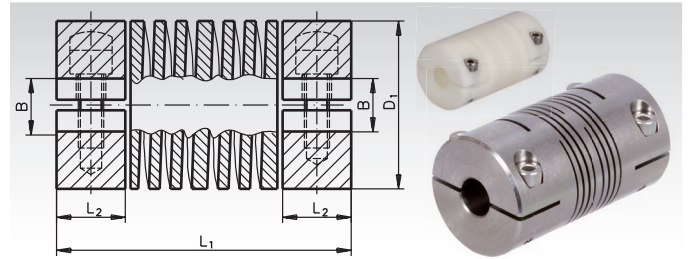
Self-Aligning Couplings LA, Long Version

Material: Plastic acetal.
Aluminium 2014A.
Stainless steel 1.4305.



- torsionally rigid design.
- zero backlash.
- perfect transmission of torque.
- very low restoring force.
- speed max. 5,000 min⁻¹.

Number of screws: at plastic and steel 2 screws on each side.
At aluminium up to Ø D₁=31.75mm only 1 screw on each side.



Ordering Details: e.g.: Product No. 602 806 00, Coupling LA, Plastic, Bore 4mm

Product No. Plastic	Product No. Alu	Product No. Stainless Steel	Max. Operating Torque*			Bore B ^{+0.03} mm	Bore max ¹⁾ mm	L ₁ mm	L ₂ ** mm	D ₁ mm	Angular Misalignment Degrees	Parallel Misalignment mm	Weight		
			Plastic Nm	Alu Nm	Stainl. Nm								Plastic g	Alu g	Stainl. g
-	602 900 00	602 998 00	-	0,6	0,9	3	4,76	19,55	5,3	9,52	3	0,12	-	4	8
-	602 902 00	602 998 02	-	1	1,5	4	4,76	19,55	5,3	9,52	3	0,12	-	4	8
602 806 00	602 906 00	-	0,51	1,3	-	4	6,35	22,85	6,5	12,7	5	0,17	4	8	-
602 808 00	602 908 00	-	0,32	2	-	6	6,35	22,85	6,5	12,7	5	0,17	4	8	-
-	-	602 998 12	-	-	1,9	4	6,35	25,40	6,5	12,7	5	0,17	-	-	18
-	-	602 998 14	-	-	3	6	6,35	25,40	6,5	12,7	5	0,17	-	-	18
-	602 916 00	-	-	3,4	-	4	8,00	25,40	6,5	15,87	5	0,2	-	10	-
602 818 00	602 918 00	602 998 18	0,61	2	3,4	5	8,00	25,40	6,5	15,87	5	0,2	6	10	30
602 820 00	602 920 00	602 998 20	0,91	3,4	5	6	8,00	25,40	6,5	15,87	5	0,2	6	10	30
602 824 00	602 924 00	-	0,87	3	-	6	10,00	26,50	6,5	19,05	7	0,25	12	16	-
602 826 00	602 926 00	-	1,3	5,3	-	8	10,00	26,50	6,5	19,05	7	0,25	12	16	-
-	-	602 998 30	-	-	4,8	6	10,00	28,00	6,5	19,05	7	0,25	-	-	46
-	-	602 998 32	-	-	8	8	10,00	28,00	6,5	19,05	7	0,25	-	-	46
602 834 00	602 934 00	602 998 34	1,67	5	10	6	12,70	38,10	11	25,4	7	0,38	20	44	115
602 836 00	602 936 00	602 998 36	2,5	10	16	8	12,70	38,10	11	25,4	7	0,38	20	44	115
602 838 00	602 938 00	602 998 38	2,5	10	16	10	12,70	38,10	11	25,4	7	0,38	20	44	115
602 840 00	602 940 00	602 998 40	4	15	25	10	16,00	57,15	16	31,75	7	0,5	58	100	290
602 842 00	602 942 00	602 998 42	4	15	25	12	16,00	57,15	16	31,75	7	0,5	58	100	290
602 844 00	602 944 00	602 998 44	4	15	25	16	16,00	57,15	16	31,75	7	0,5	58	100	290
602 846 00	602 946 00	602 998 46	6	22	36	12	19,00	66,67	18	38,1	7	0,6	86	160	440
602 848 00	602 948 00	602 998 48	6	22	36	16	19,00	66,67	18	38,1	7	0,6	86	160	440
602 850 00	602 950 00	602 998 50	6	22	36	19	19,00	66,67	18	38,1	7	0,6	86	160	440
-	602 954 00	602 998 54	-	30	48	16	22,00	76,20	20,00	44,5	7	0,8	-	240	730
-	602 956 00	602 998 56	-	30	48	19	22,00	76,20	20,00	44,5	7	0,8	-	240	730
-	602 958 00	602 998 58	-	40	37	16	26,00	95,30	25,06	50,8	7	0,9	-	405	1045
-	602 960 00	602 998 60	-	40	73	19	26,00	95,30	25,06	50,8	7	0,9	-	405	1045
-	602 962 00	602 998 62	-	40	73	24	26,00	95,30	25,06	50,8	7	0,93	-	405	1045
-	602 966 00	602 998 66	-	55	102	24	30,00	130,00	32	57,15	7	0,95	-	800	2155
-	602 968 00	602 998 68	-	55	102	30	30,00	130,00	32	57,15	7	0,95	-	800	2155

* Please regard the operating factors page 377.

*** Shaft must not be pushed in any further. ¹⁾ Against surcharge.

Flexible Couplings EK

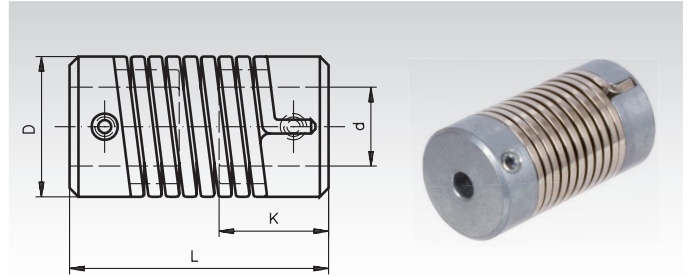
Material: Hubs made from zinc die-cast, Spring: Spring steel type C zinc-plated.

These couplings are elastic all-metal couplings, with hubs and spring bodies made from rustproof metal. The couplings only have a one-layer spring body. They are, however, flexible in all directions, suitable for both rotational directions and maintenance-free. They are locked against rotation with Allen set screws.

Temperature range from -40°C to +120°C.

Couplings are available pre-drilled ex stock.

Customized bores and feather-key grooves available at extra charge.



Ordering Details: e.g.: Product No. 602 000 00, Clutch EK, Pre-bored

Product No.	Nominal Torque Nm	Bores d		Bending max. Degree	D mm	K mm	L mm	Speed max. min ⁻¹	Weight	
		Pilot Bore mm	max. mm						kg	kg
602 000 00	0,15	2	6	5°	12	9	25	8000	0,014	0,10
602 001 00	0,5	3	8	5°	16	12,5	35	3000	0,028	0,10
602 002 00	1,5	6	14	5°	26	17	50	3000	0,100	0,10

Flexible Couplings EL

Material: Hubs 11 SMn Pb 37, from Ø 55 mm CK45.

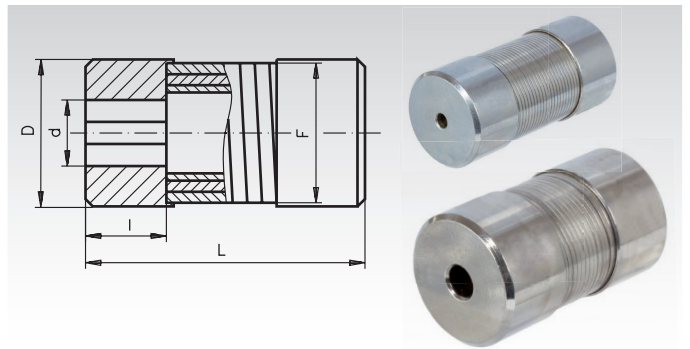
Spring: Spring steel type C.

Stainless version: Hub 1.4305.

Spring: Spring steel 1.4310.



These couplings are elastic all-metal couplings and completely maintenance free. The all-metal design leads to a strong resistance against oil and higher temperatures: -40°C to +100°C. Stainless version: -40°C to +300°C. The elastic part consists of a spring body, made up of three layers of wound springs welded into the connecting hubs. The couplings are suitable for both rotating directions. They can be locked against rotation with a feather key or with pins. The couplings are press-fitted. Demounting is done by pressing or pulling off. Vibrations and shocks are largely absorbed. Depending on the length of the coupling - S, L or Db - bending of 3 - 6° or axial displacement of 3 - 6% of the nominal shaft diameter are possible.

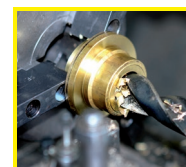


Couplings are available pre-drilled ex stock.

Customized bores and feather-key grooves available at extra charge.

Ordering Details: e.g.: Product No. 602 016 00, Clutch EL, Pre-bored

Product No.	Product No.	Product No.	Product No.	Nomin. Torque Nm	Bores d			Length L			D mm	F mm	I mm	Speed max. min ⁻¹	Weight		
					Pre-bored mm	for pin mm	for slot mm	S= short mm	L= long mm	Db= double mm					short kg	long kg	double kg
602 016 00	602 990 16	602 017 00	602 018 00	2,5	2,5	10	6	25	30	35	17	15,5	8	20000	0,032	0,036	0,039
602 005 00	602 990 05	602 006 00	602 007 00	5	3,5	12	8	35	45	50	21	19	10	15000	0,065	0,075	0,08
602 010 00	602 990 10	602 011 00	602 012 00	10	5,5	15	12	50	60	70	26	24	15	12000	0,13	0,15	0,17
602 013 00	602 990 13	602 014 00	602 015 00	10	5,5	19	14	50	60	70	30	28	15	10000	0,17	0,19	0,21
602 020 00	602 990 20	602 021 00	602 022 00	20	5,5	20	16	65	80	90	35	32	20	9000	0,31	0,36	0,39
602 023 00	602 990 23	602 024 00	602 025 00	20	5,5	25	19	65	80	90	38	36	20	8000	0,35	0,40	0,43
602 040 00	602 990 40	602 041 00	602 042 00	40	5,5	27	20	80	95	110	45	40	25	7000	0,65	0,71	0,79
602 043 00	602 990 43	602 044 00	602 045 00	40	5,5	31	24	80	95	110	48	45	25	7000	0,69	0,77	0,85
602 090 00	602 990 90	602 091 00	602 092 00	90	5,5	34	25	100	120	140	55	50	31	6000	1,19	1,34	1,50
602 110 00	602 991 10	602 111 00	602 112 00	90	5,5	35	28	100	120	140	55	52	31	6000	1,14	1,29	1,46
602 150 00	-	602 151 00	602 152 00	150	5,5	40	30	125	150	175	65	60	37	5000	2,07	2,35	2,65
602 220 00	-	602 221 00	602 222 00	220	5,5	45	35	150	180	210	75	70	44	4500	3,35	3,87	4,35
602 300 00	-	602 301 00	602 302 00	300	21	50	40	170	200	240	80	75	50	3000	4,16	4,69	5,39
602 500 00	-	602 501 00	602 502 00	500	24	64	50	210	250	300	100	95	62	1500	8,08	9,18	10,65



**Reworking within
24h-service possible.
Custom made parts
on request.**

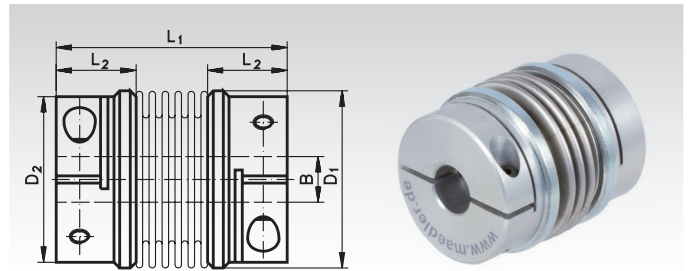
Metal Bellow Couplings MBK and MBL

Material: Hubs aluminium, bellow stainless steel.

- Zero backlash, with high torsional stiffness.
- For highly dynamic positioning and servo systems, pumps, portal drives etc..
- With clamps, ready-to-install for rapid mounting.
- Short and long versions with different misalignment values and different stiffnesses.
- Many different sizes and diameters available.

Temperature range: -40°C to +120 °C.

Ordering Details: e.g.: Product No. 601 518 03, Metal Bellow Coupling MBK, 3mm



Short Version MBK

Product No.	Torque max. Nm*	Bore B ^{+0.03 1)} mm	Bore max. ²⁾ mm	L ₁ mm	L ₂ mm	D ₁ mm	D ₂ mm	maximum Misalignment			Recommended max. Speed min ⁻¹	Torsional Stiffness Nm/rad	Weight g
								Angular ±Degrees	Radial ± mm	Axial ±mm			
601 518 03	2	3	8	31	11	20	18,2	2	0,06	0,35	5000	315	16
601 518 04	2	4	8	31	11	20	18,2	2	0,06	0,35	5000	315	16
601 518 05	2	5	8	31	11	20	18,2	2	0,06	0,35	5000	315	16
601 518 06	2	6	8	31	11	20	18,2	2	0,06	0,35	5000	315	16
601 518 08	2	8	8	31	11	20	18,2	2	0,06	0,35	5000	315	16
601 523 06	3,2	6	12	37,5	14	26	23,4	2	0,06	0,36	5000	755	34
601 523 08	3,2	8	12	37,5	14	26	23,4	2	0,06	0,36	5000	755	34
601 523 10	3,2	10	12	37,5	14	26	23,4	2	0,06	0,36	5000	755	34
601 523 12	3,2	12	12	37,5	14	26	23,4	2	0,06	0,36	5000	755	34
601 531 08	7,5	8	16	40	14	34	31	2,5	0,1	0,6	5000	1740	56
601 531 10	7,5	10	16	40	14	34	31	2,5	0,1	0,6	5000	1740	56
601 531 12	7,5	12	16	40	14	34	31	2,5	0,1	0,6	5000	1740	56
601 531 14	7,5	14	16	40	14	34	31	2,5	0,1	0,6	5000	1740	56
601 531 16	7,5	16	16	40	14	34	31	2,5	0,1	0,6	5000	1740	56
601 537 10	10	10	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99
601 537 12	10	12	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99
601 537 14	10	14	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99
601 537 16	10	16	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99
601 537 18	10	18	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99
601 537 20	10	20	20	49,7	18	41	37,4	2,5	0,15	0,8	5000	2880	99

¹⁾ Standard bores. ²⁾ Different bores (even one-sided) up to max bore available against surcharge.

Long Version MBL

Product No.	Torque max. Nm*	Bore B ^{+0.03 1)} mm	Bore max. ²⁾ mm	L ₁ mm	L ₂ mm	D ₁ mm	D ₂ mm	maximum Misalignment			Recommended max. Speed min ⁻¹	Torsional Stiffness Nm/rad	Weight g
								Angular ±Degrees	Radial ± mm	Axial ±mm			
601 618 03	1	3	8	45,2	11	20	18,2	6	0,5	1	5000	170	18
601 618 04	1	4	8	45,2	11	20	18,2	6	0,5	1	5000	170	18
601 618 05	1	5	8	45,2	11	20	18,2	6	0,5	1	5000	170	18
601 618 06	1	6	8	45,2	11	20	18,2	6	0,5	1	5000	170	18
601 618 08	1	8	8	45,2	11	20	18,2	6	0,5	1	5000	170	18
601 623 06	1,6	6	12	54,3	14	26	23,4	6	0,5	1	5000	380	38
601 623 08	1,6	8	12	54,3	14	26	23,4	6	0,5	1	5000	380	38
601 623 10	1,6	10	12	54,3	14	26	23,4	6	0,5	1	5000	380	38
601 623 12	1,6	12	12	54,3	14	26	23,4	6	0,5	1	5000	380	38
601 631 08	3,8	8	16	57	14	34	31	8	1	1,9	5000	915	63
601 631 10	3,8	10	16	57	14	34	31	8	1	1,9	5000	915	63
601 631 12	3,8	12	16	57	14	34	31	8	1	1,9	5000	915	63
601 631 14	3,8	14	16	57	14	34	31	8	1	1,9	5000	915	63
601 631 16	3,8	16	16	57	14	34	31	8	1	1,9	5000	915	63
601 637 10	5	10	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107
601 637 12	5	12	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107
601 637 14	5	14	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107
601 637 16	5	16	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107
601 637 18	5	18	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107
601 637 20	5	20	20	71,4	18	41	37,4	8	1,2	2,5	5000	1310	107

¹⁾ Standard bores. ²⁾ Different bores (even one-sided) up to max bore available against surcharge.

* The maximum torque is calculated for drives with uniform load and constant speed, and without shaft misalignment or axial displacement e.g.:

Counter torque of application = 2 Nm
 Operating factor = 3
 Required torque = 6 Nm

Select a coupling, with a max. torque larger than 6 Nm. Please note that the max. misalignment values (axial, radial and angular displacement) are mutually exclusive, i.e., if the misalignment in one direction reaches the maximum, the other two remaining misalignments must be at zero.

Operating Factors

Type of Load	Operating Factor
Uniform Load	1.5
Alternating Load	2
Shock load	3
Reversing shock load	4

Fastening torques page 378

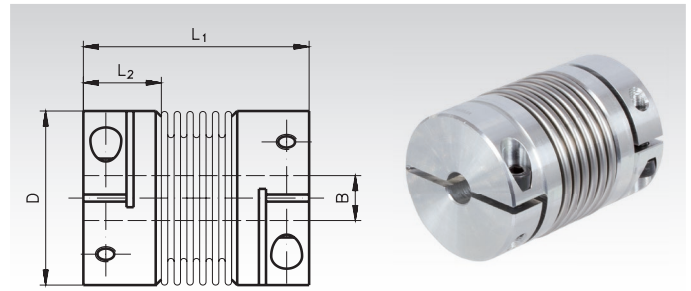
Metal Bellow Couplings MCK and MCL

Material: Aluminium clamp hubs, stainless steel bellow.

- Zero backlash, with high torsional stiffness.
- For machine tools, packing machines, textile machines, Linear drives etc..
- With clamps, ready-to-install for rapid mounting.
- Short and long versions with different misalignment values and different stiffnesses.
- Many different sizes and diameters available.

Temperature range: -30°C to +100 °C.

Ordering details: e.g.: Product No. 601 546 10, Metal Bellow Coupling MCK, 10mm



Short version MCK

Product No.	Torque max. Nm	Bore B ^{H7} 1) mm	Bore max. 2) mm	L ₁ ± 1 mm	L ₂ mm	D mm	Breakdown- Ø 3) mm	max. misalignment			Recommended max. Speed min ⁻¹	Torsional stiffness Nm/rad	Weight approx. g
								Angular ±Degrees	Radial ± mm	Axial ±mm			
601 546 10	18	10	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 546 11	18	11	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 546 14	18	14	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 546 19	18	19	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 546 24	18	24	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 546 25	18	25	25	63	20,5	45	48	1,5	0,2	0,5	12700	8000	200
601 556 10	30	10	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 556 11	30	11	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 556 14	30	14	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 556 19	30	19	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 556 24	30	24	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 556 25	30	25	25	65	25	54	—	1	0,1	0,4	10200	35000	270
601 566 14	60	14	35	79	30	65	67	1	0,1	0,4	8600	75000	500
601 566 19	60	19	35	79	30	65	67	1	0,1	0,4	8600	75000	500
601 566 24	60	24	35	79	30	65	67	1	0,1	0,4	8600	75000	500
601 566 28	60	28	35	79	30	65	67	1	0,1	0,4	8600	75000	500
601 566 32	60	32	35	79	30	65	67	1	0,1	0,4	8600	75000	500
601 566 35	60	35	35	79	30	65	67	1	0,1	0,4	8600	75000	500

¹⁾ Standard bores. ²⁾ Different bores (even one-sided) up to max bore as well feather keyways, available against surcharge.

³⁾ Screw head protrudes past D.

Long version MCL

Product No.	Torque max. Nm	Bore B ^{H7} 1) mm	Bore max. 2) mm	L ₁ ± 1 mm	L ₂ mm	D mm	Breakdown- Ø 3) mm	max. misalignment			Recommended max. Speed min ⁻¹	Torsional stiffness Nm/rad	Weight approx. g
								Angular ±Degrees	Radial ± mm	Axial ±mm			
601 646 10	18	10	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 646 11	18	11	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 646 14	18	14	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 646 19	18	19	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 646 24	18	24	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 646 25	18	25	25	72	20,5	45	48	1,5	0,2	0,5	12700	6000	200
601 656 10	30	10	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 656 11	30	11	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 656 14	30	14	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 656 19	30	19	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 656 24	30	24	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 656 25	30	25	25	74	25	54	—	1,5	0,2	0,5	10200	25000	270
601 666 14	60	14	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500
601 666 19	60	19	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500
601 666 24	60	24	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500
601 666 28	60	28	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500
601 666 32	60	32	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500
601 666 35	60	35	35	89	30	65	67	1,5	0,2	0,5	8600	50000	500

¹⁾ Standard bores. ²⁾ Different bores (even one-sided) up to max bore as well feather keyways, available against surcharge.

³⁾ Screw head protrudes past D.

Tightening torques for the mounting screws

Types MBK and MBL			Types MCK and MCL		
Hub-Ø D ₂ mm	Screw size	Tightening Torque Nm	Hub-Ø D mm	Screw size DIN 912	Tightening Torque Nm
18,2	M2,5	1,32	45	M5	6
23,4	M3	2,43	56	M6	12
31	M3	2,43	66	M8	30
37,4	M4	5,66			

Operating factors

Type of Load	Operating factor
Uniform Load	1.5
Alternating Load	2
Shock Load	2.5
Reversing shock load	4

Please note that the max. misalignment values (axial, radial and angular displacement) are mutually exclusive. If the misalignment in one direction reaches the maximum, the other two remaining misalignments must be at zero.

Membrane Couplings, Clamp Style MEM

Materials:

Hubs and sleeves: Aluminium alloy 2011T3 and 2011T8
BS 4300/5 FC1,
clear anodised finish.

Membranes: stainless high-quality spring steel.

Screw connection: Screws: heat-treated steel,
burnished.

Bushes: Steel zinc-plated and chromated black.

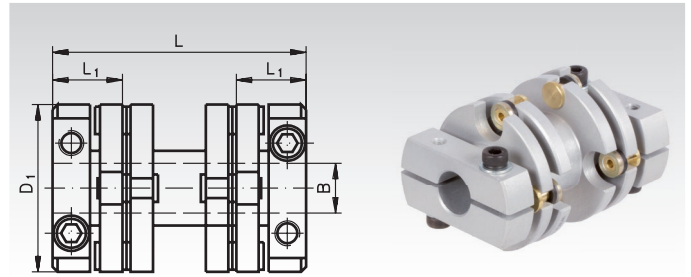
Connecting parts: Heat-treated steel, burnished.

Temperature range: -40°C to +120°C.

Max. speed: 5,000 min⁻¹.

Torsionally-stiff construction, no moving parts, all-metal design,
low moment of inertia.

The functional principle offers the highest operational readiness
to be achieved with flexible couplings. Excellent kinematic prop-
erties and high torsion-spring stiffness. Suitable for servo drives.
Tolerant flexural system and a dynamically balanced construc-
tion for high-end positioning and servo drives.



Ordering Details: e.g.: Product No. 601 701 00, Membrane Coupling MEM, 4 mm Bore

Product No.	Torque max. Nm	Bore B ^{+0.03} mm	L mm	L ₁ * mm	D ₁ mm	max. Misalignment			Torsional Stiffness Nm/rad	Weight g
						Angular ± Grad	Radial ± mm	Axial ± mm		
601 701 00	0,9	4	34,5	9,2	19,2	4	0,4	0,2	145	14
601 702 00	0,9	5	34,5	9,2	19,2	4	0,4	0,2	145	14
601 703 00	0,9	6	34,5	9,2	19,2	4	0,4	0,2	145	14
601 707 00	2,3	5	36,1	10	25,6	4	0,4	0,2	400	25
601 708 00	2,3	6	36,1	10	25,6	4	0,4	0,2	400	25
601 709 00	2,3	8	36,1	10	25,6	4	0,4	0,2	400	25
601 713 00	5,6	6	50,8	14	33,5	3	0,4	0,2	980	55
601 714 00	5,6	8	50,8	14	33,5	3	0,4	0,2	980	55
601 715 00	5,6	10	50,8	14	33,5	3	0,4	0,2	980	55
601 719 00	11,3	12	60,1	17	41,5	2	0,4	0,2	2020	109
601 720 00	11,3	14	60,1	17	41,5	2	0,4	0,2	2020	109
601 721 00	11,3	16	60,1	17	41,5	2	0,4	0,2	2020	109
601 725 00	30	16	78,1	22,9	52	2	0,4	0,2	4800	247
601 726 00	30	20	78,1	22,9	52	2	0,4	0,2	4800	247
601 729 00	60	20	90,7	26	66	2	0,4	0,2	12000	444
601 730 00	60	28	90,7	26	66	2	0,4	0,2	12000	444

* Depth of bore, remaining length relieved.

Operating Factor

Type of Load	Operating Factor
Uniform	1.5
Alternating	2
Shock	3
Reversing	4

Selection Tool
on the Internet at www.maedler.de
in the section **MÄDLER®-Tools**

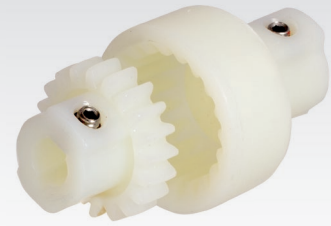
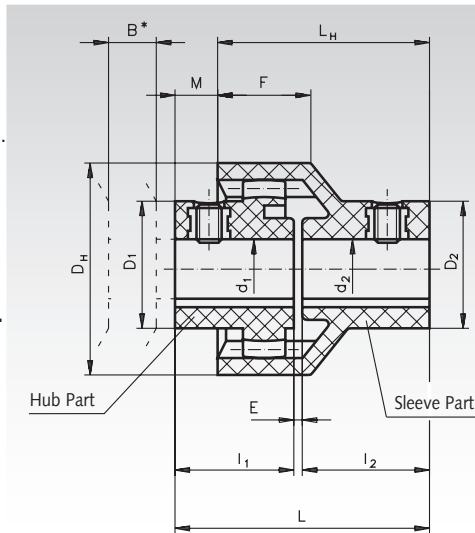
Curved-Tooth Gear Couplings BW, Polyamide 6.6

Bore tolerance + 0.05/-0.10 mm with feather keyways according to DIN 6885/1.

Largest axial displacement = max. ± 1 mm.
Largest angular displacement = max. $\pm 1^\circ$.
No radial displacement. The permissible displacement values are dependent on power and speed.

Max. speed: 6000 min⁻¹

Both parts have to be ordered separately.



Ordering Details: e.g.:

1 Item Coupling BW, Bore $d_1 = 6$, $d_2 = 10$ mm:

1 Item Product No. 607 006 00 Hub Part

1 Item Product No. 606 110 00 Sleeve Part

Product No. Hub	Size	d_1 mm	D_1 mm	Product No. Sleeve	d_2 mm	D_2 mm	Torque normal Nm	Torque peak Nm	D_H mm	B^* mm	$I_1; I_2$ mm	E mm	L mm	L_H mm	M mm	F mm	Weight Hub g	Weight Sleeve g
607 006 00	14	6	22	-	-	-	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 007 00	14	7	22	-	-	-	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 008 00	14	8	22	-	-	-	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 009 00	14	9	22	-	-	-	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 010 00	14	10	23	606 110 00	10	25	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 011 00	14	11	23	606 111 00	11	25	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 012 00	14	12	26	606 112 00	12	26	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 014 00	14	14	26	606 114 00	14	26	5	10	40	15	23	2	48	40	8	18,5	13,5	28
607 212 00	19	12	27	-	-	-	8	16	47	16	25	2	52	42	10	19,0	15,5	32
607 214 00	19	14	27	606 314 00	14	29	8	16	47	16	25	2	52	42	10	19,0	15,5	32
607 216 00	19	16	30	606 315 00	15	29	8	16	47	16	25	2	52	42	10	19,0	15,5	32
607 219 00	19	19	32	606 319 00	19	35	8	16	47	16	25	2	52	42	10	19,0	15,5	32
607 410 00	24	10	26	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 411 00	24	11	26	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 412 00	24	12	26	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 414 00	24	14	32	606 514 00	14	32	12	24	53	17	26	2	54	45	9	21,5	25	45
607 415 00	24	15	32	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 416 00	24	16	32	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 418 00	24	18	36	-	-	-	12	24	53	17	26	2	54	45	9	21,5	25	45
607 419 00	24	19	36	606 519 00	19	36	12	24	53	17	26	2	54	45	9	21,5	25	45
607 420 00	24	20	36	606 520 00	20	36	12	24	53	17	26	2	54	45	9	21,5	25	45
607 424 00	24	24	38	606 524 00	24	40	12	24	53	17	26	2	54	45	9	21,5	25	45

* B is the minimum dimension by which a machine part has to be moved in order to demount one of the coupled units in vertical direction.

General

All parts of the couplings are made from plastic (polyamide). This means large wear resistance and excellent resistance to oils, fats, grease, fuels, alcohols, esters, ketones, and grachatic hydrocarbons. But concentrated mineral acids, formic acid, kresol, glycol and benzyl alcohol can - especially at higher temperatures - dissolve polyamide 6.6. The plastics are resistant to condensation and splash water. Operating temperature -25°C to +100°C.

The torque of the couplings is transmitted from the first hub with the toothing via the sleeve part with straight inner toothing onto the second hub. Horizontal as well as vertical shaft connection is possible. The curved-tooth gear couplings BW compensate angular and axial misalignment of the shafts.

When running the coupling in, the outer layer of the plastic teeth is worn away. The resulting flocculent abrasion is not to be interpreted as wear. Simple mounting - no maintenance - low weight - long service life.

Mounting

Align shafts, put feather keys into the keyways, push hub and sleeve part onto the shaft. The set screws can be entered. Now the hub part is pushed that far into the sleeve part, that a gap of 2mm remains between the shaft ends. Then the set screws have to be tightened firmly.

Curved-Tooth Gear Couplings BOZ, Polyamide 6.6

Tolerance of the bore + 0.05/-0.10 mm with feather keyway according to DIN 6885/1.

Largest axial displacement = max. ± 1 mm.
Largest angular displacement = max. $\pm 1^\circ$ per hub part.

Largest radial displacement at 1500 min⁻¹.
Product No. 607 000 00 to 607 200 00 = max. 0.3 mm.

Product No. 607 400 00 = max. 0.35 mm.

The permissible displacement values are dependent on power and speed.

Max. speed: 6,000 min⁻¹.

All 3 parts have to be ordered seperately.

Ordering Details: e.g.:

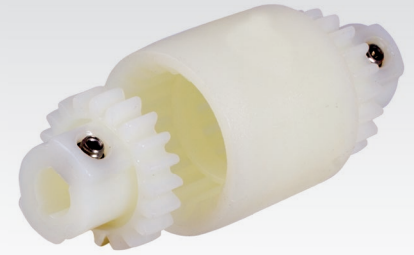
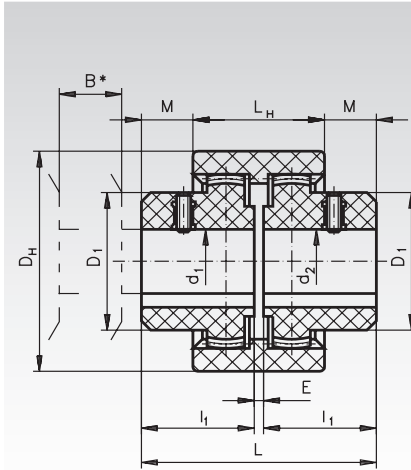
1 Item Coupling BOZ 5 Nm

Bore $d_1 = 8$, $d_2 = 10$ mm:

1 Item Product No. 607 000 00, Sleeve Part

1 Item Product No. 607 008 00, Hub Part d_1

1 Item Product No. 607 010 00, Hub Part d_2



Product No. Hub	Size	d_1 ; d_2 mm	Product No. Sleeve	Torque normal Nm	Torque peak Nm	D_1 mm	D_H mm	B^* mm	I_1 mm	E mm	L mm	L_H mm	M mm	Weight Hub g	Weight Sleeve g
607 006 00	14	6	607 000 00	5	10	22	40	15	23	4	50	37	6,5	13,5	27
607 007 00	14	7	607 000 00	5	10	22	40	15	23	4	50	37	6,5	13,5	27
607 008 00	14	8	607 000 00	5	10	22	40	15	23	4	50	37	6,5	13,5	27
607 009 00	14	9	607 000 00	5	10	22	40	15	23	4	50	37	6,5	13,5	27
607 010 00	14	10	607 000 00	5	10	23	40	15	23	4	50	37	6,5	13,5	27
607 011 00	14	11	607 000 00	5	10	23	40	15	23	4	50	37	6,5	13,5	27
607 012 00	14	12	607 000 00	5	10	26	40	15	23	4	50	37	6,5	13,5	27
607 014 00	14	14	607 000 00	5	10	26	40	15	23	4	50	37	6,5	13,5	27
607 212 00	19	12	607 200 00	8	16	27	47	16	25	4	54	37	8,5	15,5	34
607 214 00	19	14	607 200 00	8	16	27	47	16	25	4	54	37	8,5	15,5	34
607 216 00	19	16	607 200 00	8	16	30	47	16	25	4	54	37	8,5	15,5	34
607 219 00	19	19	607 200 00	8	16	32	47	16	25	4	54	37	8,5	15,5	34
607 410 00	24	10	607 400 00	12	24	26	53	17	26	4	56	41	7,5	25	40
607 411 00	24	11	607 400 00	12	24	26	53	17	26	4	56	41	7,5	25	40
607 412 00	24	12	607 400 00	12	24	26	53	17	26	4	56	41	7,5	25	40
607 414 00	24	14	607 400 00	12	24	32	53	17	26	4	56	41	7,5	25	40
607 415 00	24	15	607 400 00	12	24	32	53	17	26	4	56	41	7,5	25	40
607 416 00	24	16	607 400 00	12	24	32	53	17	26	4	56	41	7,5	25	40
607 418 00	24	18	607 400 00	12	24	36	53	17	26	4	56	41	7,5	25	40
607 419 00	24	19	607 400 00	12	24	36	53	17	26	4	56	41	7,5	25	40
607 420 00	24	20	607 400 00	12	24	36	53	17	26	4	56	41	7,5	25	40
607 424 00	24	24	607 400 00	12	24	38,5	53	17	26	4	56	41	7,5	25	40

* B is the minimum dimension by which a machine part has to be moved in order to demount one of the coupled units in vertical direction.

General

The couplings BOZ are double-cardanic couplings to compensate radial and angular misalignment.

All parts of the couplings are made from plastic (polyamide) and consist of one sleeve part with 2 internal toothings and 2 hub parts d_1 and d_2 with external toothing.

This means large wear resistance and excellent resistance to oils, fats, grease, fuels, alcohols, esters, ketones, and grachatic hydrocarbons. But concentrated mineral acids, formic acid, kresol, glycol and benzyl alcohol can - especially at higher temperatures - dissolve polyamide 6.6. The plastics are resistant to condensation and splash water. Operating temperature -25°C to +100°C.

When running the coupling in, the outer layer of the plastic teeth is worn away. The resulting flocculent abrasion is not to be interpreted as wear. Simple mounting - no maintenance - low weight - long service life.

Mounting

Align shafts, put feather keys into the keyways, push hub and sleeve part onto the shaft. The set screws can be entered. Now the hub part is pushed that far into the sleeve part, that a gap of 4mm remains between the shaft ends. Then the set screws have to be tightened firmly.

Selection Tool
on the Internet at www.maedler.de
in the section **MÄDLER®-Tools**

Curved-Tooth Gear Couplings BOS II made from Polyamide/Sintered Metal

Material: Sleeve part: polyamide 6.6.
Hub parts: sintered metal, burnished.

Bore tolerance H7 with keyways DIN 6885/1 and set screws (2 screws per hub).

Hubs with * are pre-bored, without keyway and without set screw threads.

Axial displacement = max. ± 2 mm per hub.

Angular displacement = max. $\pm 1^\circ$ per hub.

Radial displacement = max. 0.3 mm at 1500 min⁻¹.

The permissible displacement values are dependent on power and speed.

Temperature range: -40°C to +80°C,
short time up to +120°C.

All 3 parts have to be ordered separately.

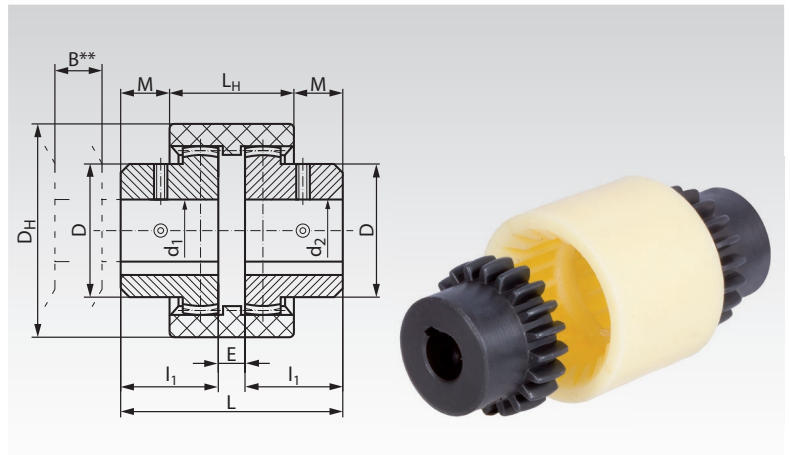
Other sizes and bores on request.

Ordering Details: e.g. for coupling Size 14,
with bore 8mm and bore 10mm:

1 Item Product No. 607 614 08 Hub, size 14, bore 8mm

1 Item Product No. 607 614 10 Hub, size 14, bore 10mm

1 Item Product No. 607 614 00 Sleeve, size 14



Position of set screws:

1 x on opposite of keyway, 1 x 90° displaced.

Product No. Hub	Size	Hub-bore d_1 / d_2	Product No. Sleeve	Torque normal Nm	Torque peak Nm	Speed max. min ⁻¹	D mm	D_H mm	B^{**} mm	I_1 mm	E mm	L mm	L_H mm	M mm	Weight Hub g	Weight Sleeve g
607 614 01*	14	5*	607 614 00	12	22	13000	25	41	14	20	9	49	37	6	80	25
607 614 08	14	8	607 614 00	12	22	13000	25	41	14	20	9	49	37	6	80	25
607 614 10	14	10	607 614 00	12	22	13000	25	41	14	20	9	49	37	6	80	25
607 614 12	14	12	607 614 00	12	22	13000	25	41	14	20	9	49	37	6	80	25
607 614 14	14	14	607 614 00	12	22	13000	25	41	14	20	9	49	37	6	80	25
607 619 01*	19	10*	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 10	19	10	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 12	19	12	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 14	19	14	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 15	19	15	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 16	19	16	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 619 19	19	19	607 619 00	18	30	11000	32	48	14	21	9	51	37	7	100	35
607 624 01*	24	10*	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 12	24	12	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 14	24	14	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 15	24	15	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 16	24	16	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 19	24	19	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 20	24	20	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35
607 624 24	24	24	607 624 00	24	36	10000	36	52	13,5	21	13	55	40	7,5	150	35

* Hubs pre-bored, without keyway, set screw threads and screws.

** B is the minimum dimension by which a machine part has to be moved in order to demount one of the coupled units in vertical direction.

General

When running the coupling in, the outer layer of the plastic teeth is worn away. The resulting flocculent abrasion is not to be interpreted as wear. Simple mounting - no maintenance - low weight - long service life.

Mounting

Align shafts, put feather keys into the shafts, push hubs onto the shafts. Push the hubs into the sleeve part, until you reach length L. The distance between the shafts should be measure E. Then the set screws have to be tightened firmly.

Curved-Tooth Gear Couplings BOS II made from Polyamide/Sintered Metal

Material: Sleeve part: polyamide 6.6.

Hub parts: sintered metal, burnished.

Bore tolerance H7 with keyways DIN 6885/1 and set screws (2 screws per hub).

Hubs with * are pre-bored, without keyway and without set screw threads.

Axial displacement = max. ± 2 mm per hub.

Angular displacement = max. $\pm 1^\circ$ per hub.

Radial displacement = max. 0.3 mm at 1500 min⁻¹.

The permissible displacement values are dependent on power and speed.

Temperature range: -40°C to +80°C,

short time up to +120°C.

All 3 parts have to be ordered separately.

Other sizes and bores on request.

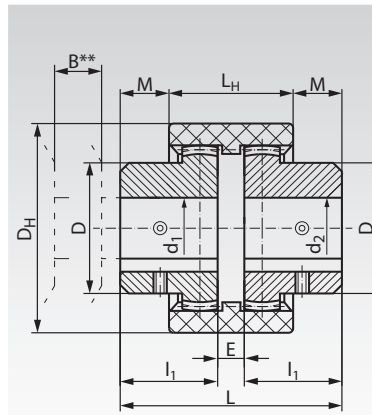
Ordering Details: e.g. for coupling Size 28,

with bore 14mm and bore 15mm:

1 Item Product No. 607 628 14 Hub, size 28, bore 14mm

1 Item Product No. 607 628 15 Hub, size 28, bore 15mm

1 Item Product No. 607 628 00 Sleeve, size 28



Position of set screws:

1 x on keyway, 1 x 90° displaced.

Product No. Hub	Size	Hub-bore d_1 / d_2	Product No. Sleeve	Torque normal Nm	Torque peak Nm	Speed max. min ⁻¹	D mm	D _H mm	B** mm	I ₁ mm	E mm	L mm	L _H mm	M mm	Weight Hub g	Weight Sleeve g
607 628 01*	28	6*	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 14	28	14	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 15	28	15	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 16	28	16	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 18	28	18	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 19	28	19	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 20	28	20	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 22	28	22	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 24	28	24	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 628 25	28	25	607 628 00	48	85	8000	44	67	16,5	35	13	83	46	18,5	380	70
607 632 01*	32	12*	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 632 19	32	19	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 632 20	32	20	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 632 22	32	22	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 632 24	32	24	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 632 25	32	25	607 632 00	65	110	7300	50	76	17	35	13	83	47	18	500	90
607 638 01*	38	12*	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 638 19	38	19	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 638 20	38	20	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 638 22	38	22	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 638 25	38	25	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 638 30	38	30	607 638 00	95	170	6500	58	84	17,5	35	13	83	48	17,5	650	105
607 642 01*	42	12*	607 642 00	115	220	6200	68	93	17,5	38	14	90	49	20,5	930	130
607 642 25	42	25	607 642 00	115	220	6200	68	93	17,5	38	14	90	49	20,5	930	130
607 642 30	42	30	607 642 00	115	220	6200	68	93	17,5	38	14	90	49	20,5	930	130
607 642 35	42	35	607 642 00	115	220	6200	68	93	17,5	38	14	90	49	20,5	930	130
607 642 38	42	38	607 642 00	115	220	6200	68	93	17,5	38	14	90	49	20,5	930	130
607 648 01*	48	12*	607 648 00	160	300	5500	68	98	19	45	11	101	49	26	1100	160
607 648 30	48	30	607 648 00	160	300	5500	68	98	19	45	11	101	49	26	1100	160
607 648 35	48	35	607 648 00	160	300	5500	68	98	19	45	11	101	49	26	1100	160
607 648 38	48	38	607 648 00	160	300	5500	68	98	19	45	11	101	49	26	1100	160
607 648 40	48	40	607 648 00	160	300	5500	68	98	19	45	11	101	49	26	1100	160

* Hubs pre-bored, without keyway, set screw threads and screws.

** B is the minimum dimension by which a machine part has to be moved in order to demount one of the coupled units in vertical direction.

General

Simple mounting - no maintenance - long service life.
When running the coupling in, the outer layer of the plastic teeth is worn away. The resulting flocculent abrasion is not to be interpreted as wear.

Mounting

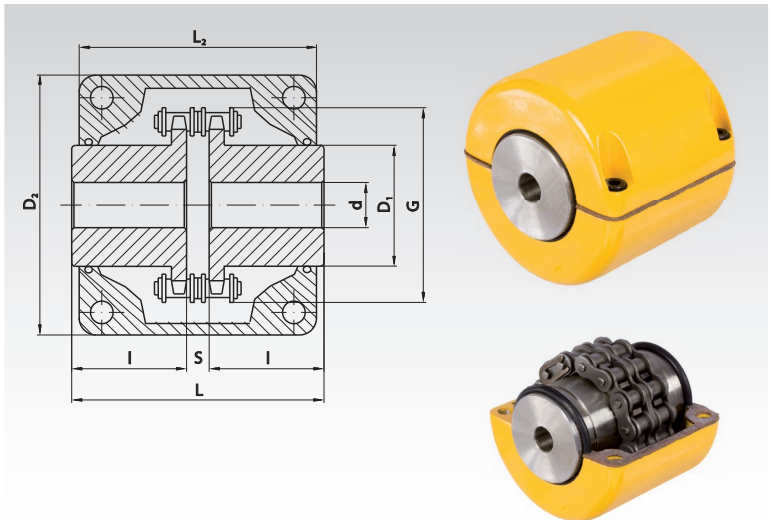
Align shafts, put feather keys into the shafts, push hubs onto the shafts. Push the hubs into the sleeve part, until you reach length L. The distance between the shafts should be measure E. Then the set screws have to be tightened firmly.

Chain Couplings with Casing

Material: Chain wheels made from steel, teeth hardened.
Chain with clip link made from steel.
Casing made from aluminium, yellow painted, with o-ring-seals.

- Elastic transmission of torque.
- Compensation of large shaft disalignment.
- Fast declutching by simply loosening the chain.
- Axial shaft movement is allowed.
- Not for strong shocks recommend.

The chain wheels are pre-bored. Customized bores, featherkeys and setscrew threads against extra charge.
At mounting, the casing has to be filled with grease.
Temperature range: -30°C to +120°C.



Ordering Details: e.g.: Product No. 140 330 12, Chain Coupling Type 3012

Product No. Coupling complete	Type	Chain- size DIN	Torque		Speed max. min ⁻¹	d mm	d _{max.} mm	D ₁ mm	D ₂ mm	G mm	L mm	L ₂ mm	l mm	s mm	Weight kg	Product No. spare part Chain	Weight kg
			Nom. Nm	Peak Nm													
140 330 12	3012	06 B-2	45	190	5000	12	16	27,2	69	45	65,0	63	29,5	6,0	0,53	140 331 12	0,09
140 340 12	4012	08 A-2	110	249	4800	12	22	36	77	62	79,4	72	36,0	7,4	1,03	140 341 12	0,18
140 340 14	4014	08 A-2	150	329	4800	12	28	45	84	69	79,4	75	36,0	7,4	1,43	140 341 14	0,21
140 340 16	4016	08 A-2	180	419	4800	13,5	32	51,5	92	77	87,4	75	40,0	7,4	1,85	140 341 16	0,24
140 350 14	5014	10 A-2	250	620	3600	14,5	35	56	101	86	99,7	85	45,0	9,7	2,62	140 351 14	0,43
140 350 16	5016	10 A-2	300	791	3600	14,5	40	64	111	96	99,7	85	45,0	9,7	3,25	140 351 16	0,49
140 350 18	5018	10 A-2	380	979	3000	16	45	73,5	122	106	99,7	85	45,0	9,7	4,20	140 351 18	0,55
140 360 18	6018	12 A-2	630	1810	2500	20	56	89,5	147	127	123,5	105	56,0	11,5	7,75	140 361 18	0,99
140 360 20	6020	12 A-2	770	2210	2500	20	60	102,5	160	139	123,5	105	56,0	11,5	9,58	140 361 20	1,11

Chain Couplings

Material: Steel, with double-strand chain DIN 8187.

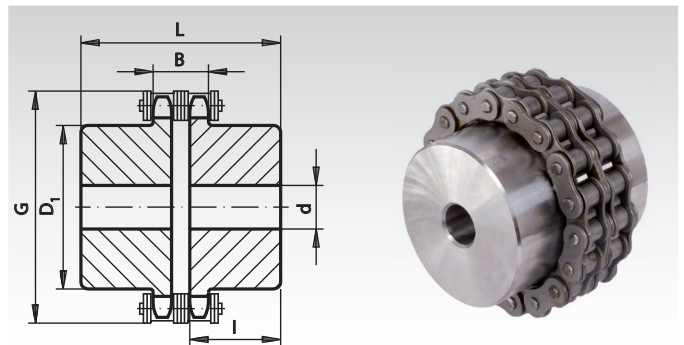
The couplings are delivered assembled or unassembled.
The chain is packed separately. Number of teeth = 18.

- Elastic transmission of torque.
- Compensation of large shaft disalignment.
- Fast declutching by simply loosening the chain.
- Axial shaft movement is allowed.
- Not for strong shocks recommend.

The chain wheels are pre-bored. Customized bores, featherkeys and setscrew threads against extra charge.

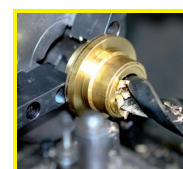
Temperature range: -30°C to +220°C.

Ordering Details: e.g.: Product No. 140 301 00, Chain Coupling 06 B-2



Product No.	DIN-ISO	Nominal* Torque Nm	Moment of Inertia mD ² kgm ²	P/n* max. kW/min ⁻¹	n max. min ⁻¹	d min. mm	D ₁ Ø mm	l mm	B mm	Max. Space required G mm	L mm	Weight kg
140 301 00	06 B-2	95	0,00117	0,0097	6000	12	45	25	15,2	63,9	55	0,78
140 304 00	08 B-2	240	0,00474	0,0246	5500	15	60	32	20,7	86	71	1,83
140 308 00	10 B-2	380	0,013	0,039	4500	15	75	35	25	107	78	3,21
140 312 00	12 B-2	600	0,0301	0,0616	3000	25	90	40	29,5	126,5	89,5	4,97
140 316 00	16 B-2	1480	0,158	0,1519	2500	30	120	60	46,7	170	137	12,30

* Selection according to the ratio of driving power to speed (P/n), the nominal torque must not be exceeded (incl. operating factor).



**Reworking within
24h-service possible.
Custom made parts
on request.**

Elastic Couplings MU

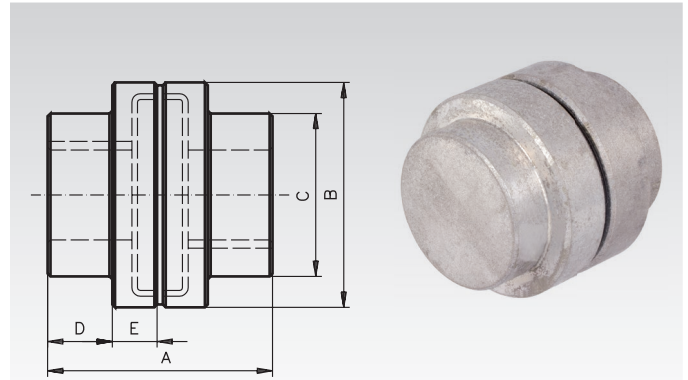
Material: The two halves of the coupling are made from magnesium alloy. Insert made from neoprene.

These couplings are particularly suited for pump drives, requiring high torque combined with a low-weight coupling. The two halves of the coupling are made from special magnesium alloy. This keeps the weight of the coupling down. The insert, made from neoprene, elastically assimilates shock loads. The rim of the neoprene insert automatically leads to the correct axial clearance. Its sealing property also means that the coupling does not need to be protected, even in dusty environments. No frictional corrosion, i.e., easy disassembly even after longterm use. The two halves of the coupling offer full electric insulation.

Couplings are available pre-drilled ex stock.

Customized bores and feather-key grooves available at extra charge.

Temperature range: -30°C to +120°C.



Ordering Details: e.g.: Product No. 603 022 00, Coupling MU, without Bore

Product No.	Torque nominal Nm	Torque max. Nm	max. Speed min ⁻¹	Bores		A mm	B mm	C mm	D mm	E mm	Distance between Shaft Ends		Weight kg
				pre-bored mm	max. mm						min. mm	max. mm	
603 022 00	38,5	150	23100	-	22	66	66	51	14	17	1,6	19	0,34
603 028 00	45	200	19900	-	28	79	74	57	17	21	1,6	22	0,45
603 038 00	79	380	15800	-	38	92	88	74	20	24	1,6	22	0,9
603 044 00	119	600	14700	-	44	109	102	77	26	27	1,6	28,6	1,36
603 057 00	248	800	11200	-	57	120	122	102	27	31	1,6	32	1,8
603 064 00	559	1580	9800	-	64	152	152	114	41	34	1,6	35	3,17
603 073 00	1315	2500	8600	-	73	180	175	132	53	33	1,6	47,6	5,4

Product No. of coupling	Product No. Spare Part Insert	Weight g
603 022 00	603 122 00	20
603 028 00	603 128 00	46
603 038 00	603 138 00	50
603 044 00	603 144 00	60

Product No. of coupling	Product No. Spare Part Insert	Weight g
603 057 00	603 157 00	70
603 064 00	603 164 00	80
603 073 00	603 173 00	90



Highly Elastic Couplings PU

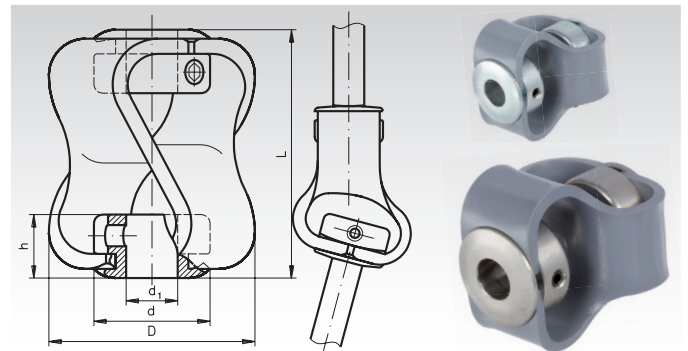
Materials: Polyester, hubs either zinc plated steel or stainless steel 1.4305.

These torsionally-stiff couplings made in one-part from flexible plastic are easily mounted.

They show very good chemical resistance against acids, bases, solvents, greases and oils. They have a very high tear resistance, are highly flexible at low temperatures, have good shock and vibration damping properties and are corrosion resistant.

Max. speed: 3000 min⁻¹.

Temperature range: -40°C to +100°C.

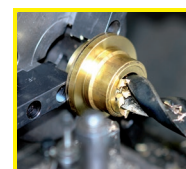


Ordering Details: e.g.: Product No. 603 201 00, Highly Elastic Coupling PU, zinc-plated

Product No. zinc-plated	Product No. stainless	torque ¹⁾ Nm	Bore ²⁾ d ₁ +0,03 mm	Ø D mm	max. Length L mm	Hub-Ø d mm	Hub Length h mm	max. Misalignment			Screw size	Weight g
								Angular Degrees	Radial mm	Axial mm		
603 201 00	603 992 01	0,5 (0,8)	6 (10)	27	27	18	7,9	10	2,6	4,5	M3	25
603 202 00	603 992 02	1,8 (3)	10 (12,7)	48	48	25	12,7	15	3,2	7,5	M4	92
603 205 00	603 992 05	5 (8)	12 (16)	54	55	28	16	15	3,2	8,5	M5	124
603 210 00	603 992 10	10 (18)	14 (16)	56	56	28	16	15	3,2	11	M6	136

¹⁾ Max. torque at max. shaft displacement. The bracketed values are valid for a shaft displacement of 1°, 0.5mm radial and 2mm axial.

²⁾ Standard bore. Other bore sizes on request. Bracketed values: Max. possible bores.



Reworking within 24h-service possible. Custom made parts on request.

Elastic Couplings ME

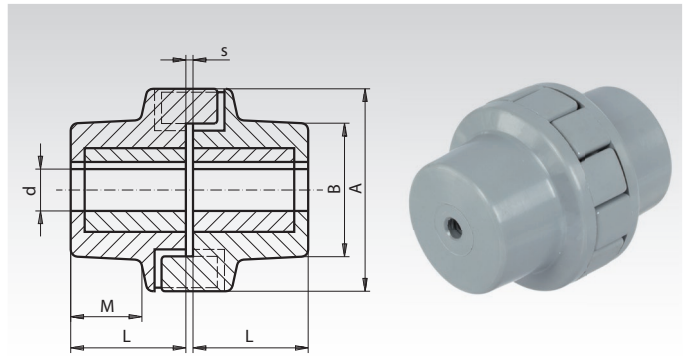
Material: Polyamide.

These plastic couplings consist of only two parts. There are none of the usual toothed rings or rubber inserts. The coupling bodies are made from polyamide. From 3 Nm, the bores of the coupling are lined with an aluminium bush. Immaculate functioning at operating temperatures of -25° to +80°C, short term up to +100°C. The couplings are resistant to condensation and splash water, as well as oil, grease, fat, fuel, alcohol and bases, but not resistant to phenol, acids and benzyl alcohol. The couplings require no maintenance. A single application of fat or oil onto the contact areas when mounting the coupling does however increase the service life.

Couplings are available pre-drilled ex stock.

Customized bores and feather-key grooves available at extra charge.

Ordering Details: e.g.: Product No. 603 310 00, Coupling ME, Pre-drilled



Product No.	Nominal Torque Nm	Bores d		A	B	L	M	S	S	S*	Speed max. min ⁻¹	Weight kg
		pre-drilled mm	max. mm	mm	mm	mm	mm	min. mm	normal mm	max. mm		
603 310 00	0,3	4,9	10	35	20	20	12	1,5	2	2,5	10000	0,02
603 318 00	3	5,9	18	50	35	30	19	1,5	2	2,5	9000	0,13
603 324 00	15	7,9	24	65	45	40	25	2	3	4	7000	0,33
603 332 00	40	11,8	32	80	55	50	34	2	3	4	5000	0,58
603 342 00	120	14,8	42	110	70	80	62	2,5	4	5,5	4000	1,50
603 348 00	250	19,8	48	140	80	80	58	2,5	4	5,5	3000	2,00

* S max. must not be exceeded at axial or angular displacement.

Elastic Couplings RN

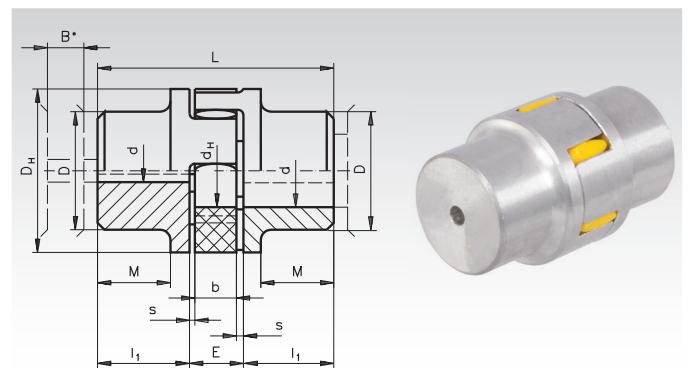
Material: Hubs made from aluminium, plastic spider (insert) made from polyurethane, shore hardness 92° (yellow**).

Spare part plastic insert available in 92° an 98° Shore (red).

Couplings are available undrilled or pre-drilled ex stock.

Customized bores and feather-key grooves available at extra charge.

Temperature range: -40°C to +90°C.



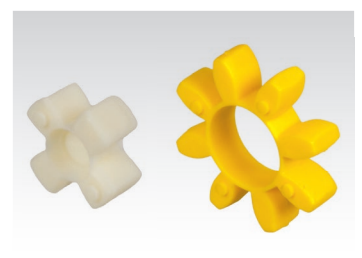
Ordering Details: e.g.: Product No. 605 197 00, Coupling RN

Product No.	Size	Torque nominal max.		Bores d		max. Speed at 30m/s min ⁻¹	Torsional Angle at max. Nm	B*	I ₁	E	s	b	L	M	D _H	D	d _H	Weight ¹⁾ kg
		Nm	Nm	pre-drilled mm	max. mm			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
605 197 00**	7	1,12	2,24	-	6,35	40000	2°	7	7	8	1	6	22	-	14	14	-	0,007
605 198 00**	9	2,93	6	-	9	28000	2°	9	10	10	1	8	30	-	20	20	7	0,017
605 199 00	14	7,5	15	-	16	19000	10°	11	11	13	1,5	10	35	-	30	30	10	0,05
605 200 00	19	10	20	5,0	19	14000	5°	13	25	16	2	12	66	20	40	32	18	0,15
605 201 00	24	35	70	7,0	24	10600	5°	15	30	18	2	14	78	24	55	40	27	0,27
605 202 00	28	95	190	9,0	28	8500	5°	16	35	20	2,5	15	90	28	65	48	30	0,46
605 203 00	38	190	380	13,6	38	7100	5°	19	45	24	3	18	114	37	80	66	38	0,98
605 204 00	42	265	530	20,0	42	6000	5°	21	50	26	3	20	126	40	95	75	46	1,15
605 205 00	48	310	620	20,0	48	5600	5°	22	56	28	3,5	21	140	45	105	85	51	1,95

* B is the average dimension by which, e.g., a driven or driving machine has to be moved in order to demount one of the coupled units in radial direction.

** Size 7 and 9: With white insert. ¹⁾ Weights refer to max. customized bore without keyways.

Matches coupling Product No.	Size	Product No. Spare Part Spider 92° Shore, yellow	Torque nominal Nm	Torque max. Nm	Product No. Optional Spider 98° Shore, red	Torque Nominal Nm	Torque max. Nm	Weight g
605 197 00	7	605 092 07**	1,12	2,24	-	-	-	0,7
605 198 00	9	605 092 09**	2,93	5,86	-	-	-	1,8
605 199 00	14	605 092 14	7,5	15	605 098 14	12,5	25	5
605 200 00	19	605 092 19	10	20	605 098 19	17	34	7
605 201 00	24	605 092 24	35	70	605 098 24	60	120	22
605 202 00	28	605 092 28	95	190	605 098 28	160	320	32
605 203 00	38	605 092 38	190	380	605 098 38	325	650	58
605 204 00	42	605 092 42	265	530	605 098 42	450	900	70
605 205 00	48	605 092 48	310	620	605 098 48	525	1050	98



** Size 7 and 9: White insert.

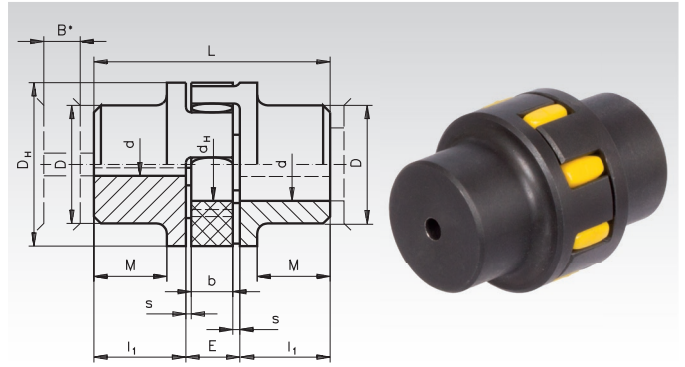
Elastic Couplings RNG

Material: Coupling hubs: Grey Cast Iron GJL25.
Spider (insert): Polyurethane, hardness 92°A Shore (yellow).
Spare part plastic spider available in 92°A (yellow), 98°A (red) or 64°D (green).

Couplings are pre-bored ex stock.

Customized bores and feather-key grooves available at extra charge.

Temperature range: -40°C to +90°C.



Ordering Details: e.g.: Product No. 605 300 00, Coupling RNG

Product No.	Size	Torque nominal Nm	Torque max. Nm	Bores d pre-drilled mm	Bores d max. mm	max. Speed at 30m/s min ⁻¹	Torsional Angle at max. Nm	B* mm	I ₁ mm	E mm	s mm	b mm	L mm	M mm	D _H mm	D mm	d _H mm	Weight ¹⁾ kg
605 300 00	19	10	20	5	19	14000	5	13	25	16	2,0	12	66	20	40	32	18	0,41
605 301 00	24	35	70	7	24	10600	5	15	30	18	2,0	14	78	24	55	40	27	0,73
605 302 00	28	95	190	9	28	8500	5	16	35	20	2,5	15	90	28	65	48	30	1,24
605 303 00	38	190	380	13	38	7100	5	19	45	24	3,0	18	114	37	80	66	38	2,1
605 304 00	42	265	530	13	42	6000	5	21	50	26	3,0	20	126	40	95	75	46	3,2
605 305 00	48	310	620	16	48	5600	5	22	56	28	3,5	21	140	45	105	85	51	4,4
605 307 00	55	410	820	16	55	4750	5	23	65	30	4,0	22	160	52	120	98	60	6,6
605 308 00	65	625	1250	18	70	4250	5	27	75	35	4,5	26	185	61	135	115	68	10,1
605 309 00	75	1280	2560	25	80	3550	5	32	85	40	5,0	30	210	69	160	135	80	16,0
605 310 00	90	2400	4800	29	97	2800	5	36	100	45	5,5	34	245	81	200	160	100	27,5
605 311 00	100	3300	6600	29	115	2500	5	40	110	50	6,0	38	270	89	225	180	113	34,5

* B is the average dimension by which, e.g., a driven or driving machine has to be moved in order to demount one of the coupled units in radial direction.

¹⁾ Weights refer to max. customized bore without keyways.

Spare part spiders page 391

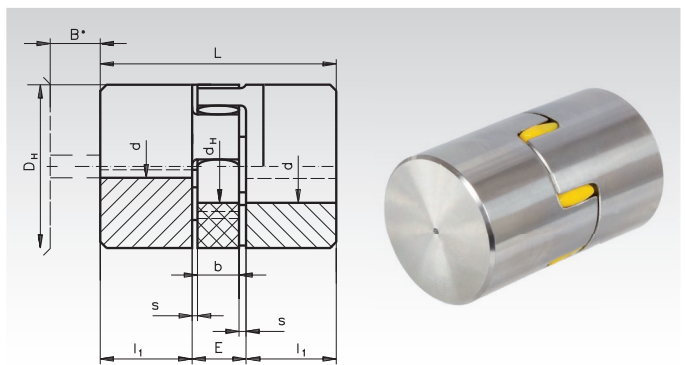
Elastic Couplings RNI, Stainless Steel

Material: Coupling hubs: Stainless steel 1.4301.
Spider (insert): Polyurethane, hardness 92°A Shore (yellow).
Spare part plastic spider available in 92°A (yellow), 98°A (red) or 64°D (green).

Couplings are pre-bored ex stock.

Custom bores or feather keyways available at extra charge.

Temperature range: -20°C to +80°C.



Ordering Details: e.g.: Product No. 605 992 00, Coupling RNI, without Bore

Product No.	Size	Torque nominal Nm	Torque peak Nm	d mm	d max. mm	max. Speed at 30 m/s min ⁻¹	Torsional angle at max. Nm Degrees	B* mm	I ₁ mm	E mm	s mm	b mm	L mm	D _H mm	d _H mm	Weight kg
605 992 00	19	10	20	-	25	14000	5	13	25	16	2,0	12	66	40	18	0,44
605 992 01	24	35	70	-	35	10600	5	15	30	18	2,0	14	78	55	27	0,78
605 992 02	28	95	190	-	40	8500	5	16	35	20	2,5	15	90	65	30	1,33
605 992 03	38	190	380	-	48	7100	5	19	45	24	3,0	18	114	80	38	2,84
605 992 04	42	265	530	-	55	6000	5	21	50	26	3,0	20	126	95	46	3,34
605 992 05	48	310	620	-	62	5600	5	22	56	28	3,5	21	140	105	51	5,66

* B is the average dimension by which, e.g., a driven or driving machine has to be moved in order to demount one of the coupled units in radial direction.

¹⁾ Weights refer to max. customized bore without keyways.

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Operating Instructions at www.maedler.de in the section Downloads

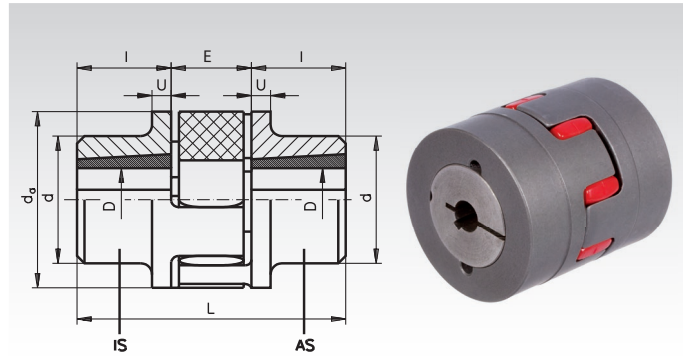
Elastic Couplings RNT for Taper Bushes

Material: Coupling hubs: Grey Cast Iron GJL25.
Spider (insert): Polyurethane, hardness 92°A or 98°A Shore.

Two coupling hubs combined with an insert and two taper bushes make up a ready-to-install elastic coupling. **All components have to be ordered separately.** This means accessibility (mounting from the inside or outside) and various bore diameters can be chosen. Temperature range: -20°C to +80°C.

Design IS: Mounting of bush from inside.
Design AS: Mounting of bush from outside.

Ordering Details: e.g.: Product No. 605 201 01, Coupling Hub RNT, Version IS
605 201 01, Coupling Hub RNT, Version AS
605 092 24, Spider
and two matching Clamping Bushes 2x 622 501...



Hubs for Couplings RNT

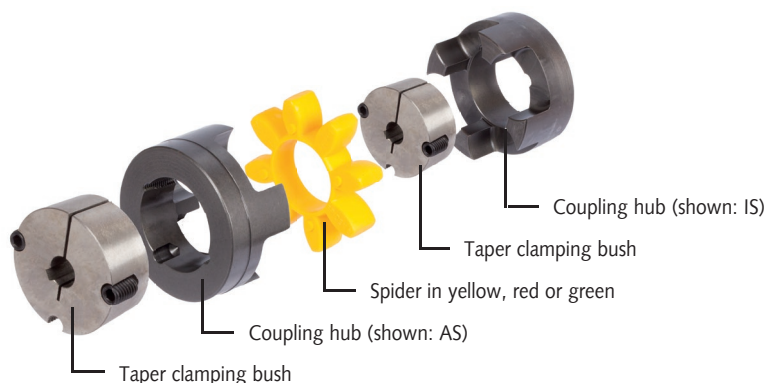
Product No. Coupling hub	Hub version	Size	Nominal Torque		d _a mm	d mm	L mm	I mm	U mm	E mm	Bore D min. mm	Bore D max. mm	Bush No.	Speed max. at V=40 m/s min ⁻¹	Weight kg
			92 Sh Nm	98 Sh Nm											
605 201 01	IS	24	35	60	55	55	64	23	-	18	10	25	1008	14000	0,4
605 201 02	AS	24	35	60	55	55	64	23	-	18	10	25	1008	14000	0,4
605 202 01	IS	28	95	160	65	65	66	23	-	20	10	28	1108	11800	0,6
605 202 02	AS	28	95	160	65	65	66	23	-	20	10	28	1108	11800	0,6
605 203 01	IS	38	190	325	80	78	70	23	8	24	10	28	1108	9500	0,9
605 203 02	AS	38	190	325	80	78	70	23	8	24	10	28	1108	9500	0,9
605 204 01	IS	42	265	450	95	94	78	26	10	26	12	42	1610	8000	1,5
605 204 02	AS	42	265	450	95	94	78	26	10	26	12	42	1610	8000	1,5
605 205 01	IS	48	310	525	105	104	106	39	11	28	20	42	1615	7100	2,6
605 205 02	AS	48	310	525	105	104	106	39	11	28	20	42	1615	7100	2,6
605 206 01	IS	55	410	685	120	118	96	33	13	30	12	50	2012	6300	2,8
605 206 02	AS	55	410	685	120	118	96	33	13	30	12	50	2012	6300	2,8
605 207 01	IS	65	625	940	135	115	101	33	14	35	12	50	2012	5600	3,5
605 207 02	AS	65	625	940	135	115	101	33	14	35	12	50	2012	5600	3,5
605 208 01	IS	75	1280	1920	160	158	144	46	10	40	16	65	2517	4750	6,9
605 208 02	AS	75	1280	1920	160	158	144	46	10	40	16	65	2517	4750	6,9
605 209 01	IS	90	2400	3600	200	160	149	52	19	45	25	75	3020	3750	9,6
605 209 02	AS	90	2400	3600	200	160	149	52	19	45	25	75	3020	3750	9,6

Spiders for Couplings RNT (Page 391)

Size	Ø mm	Product No. 92° Shore A yellow	Transmittable torque			Product No. 98° Shore A red	Transmittable torque			Weight kg
			nominal Nm	max. Nm	alternat. Nm		nominal Nm	max. Nm	alternat. Nm	
24	55	605 092 24	35	70	9,1	605 098 24	60	120	16	0,02
28	65	605 092 28	95	190	25	605 098 28	160	320	42	0,03
38	80	605 092 38	190	380	49	605 098 38	325	650	85	0,06
42	95	605 092 42	265	530	69	605 098 42	450	900	117	0,07
48	105	605 092 48	310	620	81	605 098 48	525	1050	137	0,10
55	120	605 092 55	410	820	107	605 098 55	685	1370	178	0,12
65	135	605 092 65	625	1250	163	605 098 65*	940	1880	244	0,21
75	160	605 092 75	1280	2560	333	605 098 75*	1920	3840	499	0,34
90	200	605 092 90	2400	4800	624	605 098 90*	3600	7200	936	0,70

* From size 65 shore hardness 95°A.

Note: Spiders with hardness 64°D Shore are not recommended for taper couplings.



Taper Bushes
Page 360

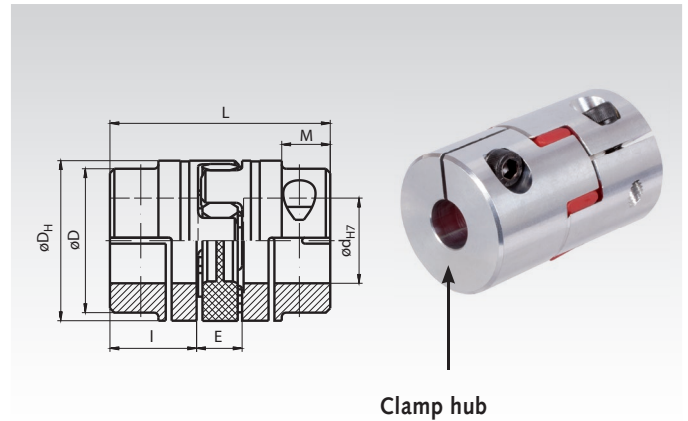


Elastic Couplings RNK, backlash-free, with clamps

Material: Size 5 - 38: Hubs made from Aluminium.
From size 42, made from steel. Spider made from Polyurethane.
Size 5 - 9: Shore hardness 92° (yellow or white).
From size 14: Shore hardness 98° (red).

- Zero backlash, insertable elastic coupling.
- With clamps, ready-to-install for rapid mounting.
- Many different sizes and diameters available.
- From size 14 can be exchanged with couplings RN, RNH and couplings from many other suppliers.
- On request with soft inserts.

Temperature range: -30°C to +90°C.



Clamp hub

Ordering Details: e.g.: Product No. 605 405 03, Coupling RNK, 3mm bore

Product No.	Size	Torque max. Nm	Bore d ^{H7} 1) mm	Bore min.-max. 2) mm	D _H 3) mm	D 3) mm	L mm	I mm	E mm	M mm	maximum misalignment 4)			Speed max. min ⁻¹ 5)	Weight approx. g
											Angular Degrees	Radial mm	Axial mm		
605 405 03	5	0,4	3	2 - 4	10	—	15	5	5	—	1	0,06	+0,4/-0,2	38000	2
605 405 04	5	0,5	4	2 - 4	10	—	15	5	5	—	1	0,06	+0,4/-0,2	38000	2
605 407 05	7	0,95	5	3 - 7	14	—	22	7	8	—	1	0,1	+0,6/-0,3	27000	6
605 407 06	7	1	6	3 - 7	14	—	22	7	8	—	1	0,1	+0,6/-0,3	27000	6
605 409 09	9	2,6	9	5 - 11	20	—	30	10	10	—	1	0,13	+0,8/-0,4	19000	17
605 409 10	9	2,7	10	5 - 11	20	—	30	10	10	—	1	0,13	+0,8/-0,4	19000	17
605 409 11	9	2,8	11	5 - 11	20	—	30	10	10	—	1	0,13	+0,8/-0,4	19000	17
605 414 11	14	5,6	11	6 - 16	30	—	35	11	13	—	0,9	0,09	+1/-0,5	13000	41
605 414 14	14	6,1	14	6 - 16	30	—	35	11	13	—	0,9	0,09	+1/-0,5	13000	41
605 414 16	14	6,5	16	6 - 16	30	—	35	11	13	—	0,9	0,09	+1/-0,5	13000	41
605 419 14	19	29	14	10 - 22	40	—	66	25	16	—	0,9	0,06	+1,2/-0,5	10000	150
605 419 16	19	30	16	10 - 22	40	—	66	25	16	—	0,9	0,06	+1,2/-0,5	10000	150
605 419 19	19	32	19	10 - 22	40	—	66	25	16	—	0,9	0,06	+1,2/-0,5	10000	150
605 424 16	24	38	16	12 - 28	55	—	78	30	18	—	0,9	0,1	+1,4/-0,5	7000	320
605 424 19	24	40	19	12 - 28	55	—	78	30	18	—	0,9	0,1	+1,4/-0,5	7000	320
605 424 24	24	44	24	12 - 28	55	—	78	30	18	—	0,9	0,1	+1,4/-0,5	7000	320
605 428 24	28	91	24	15 - 35	65	—	90	35	20	—	0,9	0,11	+1,5/-0,7	6000	470
605 428 28	28	97	28	15 - 35	65	—	90	35	20	—	0,9	0,11	+1,5/-0,7	6000	470
605 428 32	28	101	32	15 - 35	65	—	90	35	20	—	0,9	0,11	+1,5/-0,7	6000	470
605 438 28	38	110	28	16 - 45	80	—	114	45	24	—	0,9	0,12	+1,8/-0,7	5000	960
605 438 32	38	114	32	16 - 45	80	—	114	45	24	—	0,9	0,12	+1,8/-0,7	5000	960
605 438 38	38	120	38	16 - 45	80	—	114	45	24	—	0,9	0,12	+1,8/-0,7	5000	960
605 442 32	42	265	32	25 - 50	95	85	126	50	26	28	0,9	0,14	+2/-1	4000	3640
605 442 38	42	285	38	25 - 50	95	85	126	50	26	28	0,9	0,14	+2/-1	4000	3640
605 442 45	42	300	45	25 - 50	95	85	126	50	26	28	0,9	0,14	+2/-1	4000	3640
605 448 38	48	445	38	25 - 55	105	95	140	56	28	32	0,9	0,16	+2,1/-1	3600	4900
605 448 45	48	480	45	25 - 55	105	95	140	56	28	32	0,9	0,16	+2,1/-1	3600	4900
605 448 50	48	495	50	25 - 55	105	95	140	56	28	32	0,9	0,16	+2,1/-1	3600	4900

1) Standard bores (both sides).

2) Different bores (even one-sided) up to max bore as well feather keyways, available against surcharge (smaller bores as special parts).

3) Follow the breakdown Ø as per the table below (screw head protrudes over diameter D_H or D).

4) Maximal values are mutually exclusive.

5) Above 30m/s, dynamic balancing is required.

Further details and dimensions

Size	Torque ¹⁾		Screw size DIN 912	Tightening Torque Nm	Max Ø ²⁾ mm	Torsion spring stiffness		Moment of inertia ³⁾ 10 ⁻⁶ Kgm ²
	T _{kN} Nm	T _{kmax} Nm				static Nm/rad	dynam. Nm/rad ⁴⁾	
5	0,5	1	M1,6	0,25	11,5	5,2	16	0,034
7	1,2	2,4	M2	0,35	16,5	14,3	43	0,196
9	3,0	6,0	M2,5	0,75	23,5	31	95	1,08
14	12,5	25	M3	1,5	32,2	172	513	5,7
19	17	34	M6	11	46	860	2580	36
24	60	120	M6	11	57	2060	6189	150
28	160	320	M8	25	71	3440	10314	330
38	325	650	M8	25	83	7160	21486	960
42	450	900	M10	69	91	19200	37690	4920
48	525	1050	M12	120	104,5	22370	45620	8260

1) Nominal moment and max. moment for the design. The permitted torque for each bore size may not be exceeded.

2) Screw head protrudes past diameter D_H or D.

3) Each one calculated with the max. bore.

4) At 0,5 x T_{kN}.

Spare Part Spiders

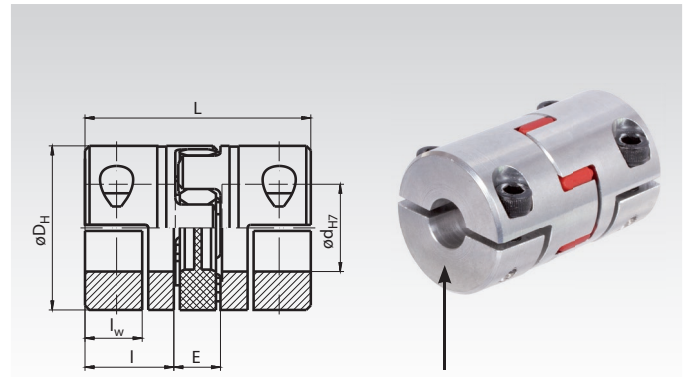
Product No. Spare Part Spider	Size	Shore hardness SH A	Colour	Weight g
605 192 05	5	92	yellow	0,2
605 192 07	7	92	yellow	0,7
605 192 09	9	92	yellow	1,8
605 198 14	14	98	red	5
605 198 19	19	98	red	7
605 198 24	24	98	red	22
605 198 28	28	98	red	32
605 198 38	38	98	red	58
605 198 42	42	98	red	79
605 198 48	48	98	red	98

Elastic Couplings RNH, backlash-free, with half shell clamp

Material: Size 14 - 38: Hubs made from Aluminium.
From size 42, made from steel. Spider made from Polyurethane.
Shore hardness 98° (red).

- Zero backlash, insertable elastic coupling.
- With removable half shell clamps, ready-to-install for rapid mounting with the possibility of demounting without removal of the other units.
- Many different sizes and diameters available.
- Size exchangeable with couplings RN, RNK and couplings from many other suppliers.
- On request with soft inserts.

Temperature range: -30°C to +90°C.



Half shell, removable

Ordering Details: e.g.: Product No. 605 514 10, Coupling RNH, 10mm bore

Product No.	Size	Torque max. Nm	Bore $d_{H7}^{1)}$ mm	Bore min.-max. ²⁾ mm	$D_H^{3)}$ mm	L mm	I mm	I_w mm	E mm	maximum misalignment ⁴⁾			Speed max. min^{-1}	Weight approx. g
										Angular Degrees	Radial mm	Axial mm		
605 514 10	14	5,5	10	10 - 14	30	35	11	8	13	0,9	0,09	+1/-0,5	13000	41
605 514 11	14	5,6	11	10 - 14	30	35	11	8	13	0,9	0,09	+1/-0,5	13000	41
605 514 14	14	6,1	14	10 - 14	30	35	11	8	13	0,9	0,09	+1/-0,5	13000	41
605 519 14	19	29	14	10 - 20	40	66	25	12	16	0,9	0,06	+1,2/-0,5	10000	150
605 519 16	19	30	16	10 - 20	40	66	25	12	16	0,9	0,06	+1,2/-0,5	10000	150
605 519 19	19	32	19	10 - 20	40	66	25	12	16	0,9	0,06	+1,2/-0,5	10000	150
605 519 20	19	32	20	10 - 20	40	66	25	12	16	0,9	0,06	+1,2/-0,5	10000	150
605 524 20	24	40	20	20 - 28	55	78	30	19,5	18	0,9	0,1	+1,4/-0,5	7000	320
605 524 24	24	44	24	20 - 28	55	78	30	19,5	18	0,9	0,1	+1,4/-0,5	7000	320
605 524 25	24	45	25	20 - 28	55	78	30	19,5	18	0,9	0,1	+1,4/-0,5	7000	320
605 524 28	24	47	28	20 - 28	55	78	30	19,5	18	0,9	0,1	+1,4/-0,5	7000	320
605 528 24	28	91	24	24 - 35	65	90	35	21,5	20	0,9	0,11	+1,5/-0,7	6000	470
605 528 25	28	92	25	24 - 35	65	90	35	21,5	20	0,9	0,11	+1,5/-0,7	6000	470
605 528 28	28	97	28	24 - 35	65	90	35	21,5	20	0,9	0,11	+1,5/-0,7	6000	470
605 528 32	28	101	32	24 - 35	65	90	35	21,5	20	0,9	0,11	+1,5/-0,7	6000	470
605 528 35	28	104	35	24 - 35	65	90	35	21,5	20	0,9	0,11	+1,5/-0,7	6000	470
605 538 32	38	114	32	32 - 44	80	114	45	25,5	24	0,9	0,12	+1,8/-0,7	5000	960
605 538 35	38	117	35	32 - 44	80	114	45	25,5	24	0,9	0,12	+1,8/-0,7	5000	960
605 538 38	38	120	38	32 - 44	80	114	45	25,5	24	0,9	0,12	+1,8/-0,7	5000	960
605 538 44	38	129	44	32 - 44	80	114	45	25,5	24	0,9	0,12	+1,8/-0,7	5000	960
605 542 35	42	217	35	35 - 50	95	126	50	25,5	26	0,9	0,14	+2/-1	4000	3640
605 542 38	42	235	38	35 - 50	95	126	50	25,5	26	0,9	0,14	+2/-1	4000	3640
605 542 44	42	270	44	35 - 50	95	126	50	25,5	26	0,9	0,14	+2/-1	4000	3640
605 542 50	42	310	50	35 - 50	95	126	50	25,5	26	0,9	0,14	+2/-1	4000	3640
605 548 40	48	362	40	40 - 60	105	140	56	29,5	28	0,9	0,16	+2,1/-1	3600	4900
605 548 44	48	390	44	40 - 60	105	140	56	29,5	28	0,9	0,16	+2,1/-1	3600	4900
605 548 50	48	452	50	40 - 60	105	140	56	29,5	28	0,9	0,16	+2,1/-1	3600	4900

¹⁾ Standard bores (both sides).

²⁾ Different bores (even one-sided) up to max bore as well feather keyways, available against surcharge (smaller bores as special parts).

³⁾ Follow the breakdown \varnothing as per the table below (screw head protrudes over diameter D_H).

⁴⁾ Maximal values are mutually exclusive.

⁵⁾ Above 30m/s, dynamic balancing is required.

Further details and dimensions

Size	Torque ¹⁾		Screw size DIN 912	Tightening Torque Nm	Max. \varnothing ²⁾ mm	Torsion spring stiffness		Moment of inertia ³⁾ 10^{-6} Kg m^2
	T_{kN} Nm	T_{kmax} Nm				static Nm/rad	dynam. Nm/rad ⁴⁾	
14	12,5	25	M3	1,5	34	172	513	5,7
19	17	34	M6	10	46	860	2580	36
24	60	120	M6	10	58	2060	6189	150
28	160	320	M8	25	73	3440	10314	330
38	325	650	M8	25	84	7160	21486	960
42	450	900	M10	49	94	19200	37690	4920
48	525	1050	M12	86	105	22370	45620	8260

¹⁾ Nominal moment and max. moment for the design. The permitted torque for each bore size may not be exceeded.

²⁾ Screw head protrudes past diameter D_H .

³⁾ Each one calculated with the max. bore.

⁴⁾ At $0,5 \times T_{kN}$.

Spare Part Spiders

Product No. Spare Part Spider	Size	Shore hardness		Colour	Weight g
		SH A	SH A		
605 198 14	14	98	98	red	5
605 198 19	19	98	98	red	7
605 198 24	24	98	98	red	22
605 198 28	28	98	98	red	32
605 198 38	38	98	98	red	58
605 198 42	42	98	98	red	79
605 198 48	48	98	98	red	98

Spiders for Elastic Couplings, standard type, 92° Shore A

Material: Polyurethane, shore hardness 92°A (soft), yellow.

Spiders (plastic inserts) for elastic couplings (jaw couplings) like RN, RNG, RNI, RNR, RNT and foreign parts of the same kind from other suppliers. Soft type, for common usage. Temperature range -40°C to +90°C.

Ordering Details: e.g.: Product No. 605 092 07, Spider standard, 92°A, Size 7

Product No. yellow	Size	Ø mm	No. of teeth	Transmittable torque			Torsional angle		Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	Altern. Nm	T _{KN} °	T _{K max}		
605 092 07	7*	14	4	1,1	2,2	0,3	1,3	2	40000	0,7
605 092 09	9*	20	4	2,9	5,9	0,8	1,3	2	28000	1,8
605 092 14	14	30	4	7,5	15	2,0	6,4	10	19000	5
605 092 19	19	40	6	10	20	2,6	3,2	5	14000	7
605 092 24	24	55	8	35	70	9,1	3,2	5	10600	22
605 092 28	28	65	8	95	190	25	3,2	5	8500	32
605 092 38	38	80	8	190	380	49	3,2	5	7100	58
605 092 42	42	95	8	265	530	69	3,2	5	6000	70
605 092 48	48	105	8	310	620	81	3,2	5	5600	98
605 092 55	55	120	8	410	820	107	3,2	5	4750	120
605 092 65	65	135	8	625	1250	163	3,2	5	4250	210
605 092 75	75	160	10	1280	2560	333	3,2	5	3550	340
605 092 90	90	200	10	2400	4800	624	3,2	5	2800	700
605 092 95	100	225	10	3300	6600	858	3,2	5	2500	900

* Size 7 and 9: White or yellow, depending on the producer.



T_{KN} = Nominal torque.

T_{K max} = Peak torque.

Spiders for Elastic Couplings, standard type, 98° Shore A

Material: Polyurethane, shore hardness 98°A (medium hard), red.

Spiders (plastic inserts) for elastic couplings (jaw couplings) like RN, RNG, RNI, RNR, RNT and foreign parts of the same kind from other suppliers. Medium hard type, for high torques. Temperature range -30°C to +100°C.

Ordering Details: e.g.: Product No. 605 098 14, Spider standard, 98°A, Size 14

Product No. red	Size	Ø mm	No. of teeth	Transmittable torque			Torsional angle		Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	Altern. Nm	T _{KN} °	T _{K max}		
605 098 14	14	30	4	12,5	25	3,3	6,4	10	19000	5
605 098 19	19	40	6	17	34	4,4	3,2	5	14000	7
605 098 24	24	55	8	60	120	16	3,2	5	10600	22
605 098 28	28	65	8	160	320	42	3,2	5	8500	32
605 098 38	38	80	8	325	650	85	3,2	5	7100	58
605 098 42	42	95	8	450	900	117	3,2	5	6000	70
605 098 48	48	105	8	525	1050	137	3,2	5	5600	98
605 098 55	55	120	8	685	1370	178	3,2	5	4750	120
605 098 65	65*	135	8	940	1880	244	3,2	5	4250	210
605 098 75	75*	160	10	1920	3840	499	3,2	5	3550	340
605 098 90	90*	200	10	3600	7200	936	3,2	5	2800	700
605 098 95	100*	225	10	4950	9900	1287	3,2	5	2500	900

* From size 65 shore hardness 95° A.



T_{KN} = Nominal torque.

T_{K max} = Peak torque.

Spiders for Elastic Couplings, standard type, 64° Shore D

Material: Polyurethane, shore hardness 64°D (hard), green.

Spiders (plastic inserts) for elastic couplings (jaw couplings) like RN, RNG, RNI, RNR and foreign parts of the same kind from other suppliers. Hard type, for very high torques at small torsion angle. Temperature range -20°C to +100°C.

Ordering Details: e.g.: Product No. 605 064 14, Spider standard, 64°D, Size 14

Product No. green	Size	Ø mm	No. of teeth	Transmittable torque			Torsional angle		Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	Altern. Nm	T _{KN} °	T _{K max}		
605 064 14	14	30	4	16	32	4,2	4,5	7,0	19000	5
605 064 19	19	40	6	21	42	5,5	2,5	3,6	14000	7
605 064 24	24	55	8	75	150	19,5	2,5	3,6	10600	22
605 064 28	28	65	8	200	400	52	2,5	3,6	8500	32
605 064 38	38	80	8	405	810	105	2,5	3,6	7100	58
605 064 42	42	95	8	560	1120	146	2,5	3,6	6000	70
605 064 48	48	105	8	655	1310	170	2,5	3,6	5600	98
605 064 55	55	120	8	825	1650	215	2,5	3,6	4750	120
605 064 65	65	135	8	1175	2350	306	2,5	3,6	4250	210
605 064 75	75	160	10	2400	4800	624	2,5	3,6	3550	340
605 064 90	90	200	10	4500	9000	1170	2,5	3,6	2800	700
605 064 95	100	225	10	6185	12370	1608	2,5	3,6	2500	900



Note: Spiders with hardness 64°D Shore are not recommended for taper couplings. At couplings made from aluminium, the effective torque should not be higher than the transmittable torque of the 98°A Shore spiders.

T_{KN} = Nominal torque.

T_{K max} = Peak torque.

Spiders for Elastic Couplings, backlash-free type, 92° Shore A

Material: Polyurethane, shore hardness 92°A (soft), yellow.

Spiders (plastic inserts) for backlash-free elastic couplings (jaw couplings) like RNH and RNK and foreign parts of the same kind from other suppliers. Soft type, for common usage. Temperature range -40°C to +90°C.

Ordering Details: e.g.: Product No. 605 192 05, Spider backlash-free, 92°A, Size 5

Product No. yellow	Size	Ø mm	No. of teeth	Transmittable torque		Tors. spring stiffness		Stiffn. radial N/mm	Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	static Nm/rad	dynam. Nm/rad			
605 192 05	5	10	4	0,5	1,0	5,2	16	154	40000	0,2
605 192 07	7	14	4	1,1	2,2	14,3	43	219	27000	0,7
605 192 09	9	20	4	2,9	5,9	31	95	262	19000	1,7
605 192 14	14	30	4	7,5	15	115	344	336	12700	4,6
605 192 19	19	40	6	10	20	573	1720	1120	9550	7
605 192 24	24	55	8	35	70	1432	4296	1480	6950	18
605 192 28	28	65	8	95	190	2292	6876	1780	5850	29
605 192 38	38	80	8	190	380	4584	13752	2350	4750	49
605 192 42	42	95	8	265	530	6300	14490	2430	4000	79
605 192 48	48	105	8	310	620	7850	18055	2580	3600	98
605 192 55	55	120	8	410	820	9500	21850	2980	3150	115



Spiders for Elastic Couplings, backlash-free type, 98° Shore A

Material: Polyurethane, shore hardness 98°A (medium hard), red.

Spiders (plastic inserts) for backlash-free elastic couplings (jaw couplings) like RNH and RNK and foreign parts of the same kind from other suppliers. Medium hard type, for high torques. Temperature range -30°C to +100°C.

Ordering Details: e.g.: Product No. 605 198 14, Spider backlash-free, 98°A, Size 14

Product No. red	Size	Ø mm	No. of teeth	Transmittable torque		Tors. spring stiffness		Stiffn. radial N/mm	Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	static Nm/rad	dynam. Nm/rad			
605 198 14	14	30	4	12,5	25	172	513	654	12700	4,6
605 198 19	19	40	6	17	34	860	2580	2010	9550	7
605 198 24	24	55	8	60	120	2060	6190	2560	6950	18
605 198 28	28	65	8	160	320	3440	10314	3200	5850	29
605 198 38	38	80	8	325	650	7160	21486	4400	4750	49
605 198 42	42	95	8	450	900	19200	37690	5570	4000	79
605 198 48	48	105	8	525	1050	22370	45620	5930	3600	98
605 198 55	55	120	8	685	1370	23800	59500	6686	3150	115



Spiders for Elastic Couplings, backlash-free type, 64° Shore D

Material: Polyurethane, shore hardness 64°D (hard), green.

Spiders (plastic inserts) for backlash-free elastic couplings (jaw couplings) like RNH and RNK and foreign parts of the same kind from other suppliers. Hard type, for very high torques at small torsion angle. Temperature range -20°C to +100°C.

Ordering Details: e.g.: Product No. 605 164 14, Spider backlash-free, 64°D, Size 14

Product No. green	Size	Ø mm	No. of teeth	Transmittable torque		Tors. spring stiffness		Stiffn. radial N/mm	Speed at 30m/s min ⁻¹	Weight g
				Nominal Nm	Peak Nm	static Nm/rad	dynam. Nm/rad			
605 164 14	14	30	4	16	32	234	702	856	12700	4,6
605 164 19	19	40	6	21	42	2560	3810	2930	9550	7
605 164 24	24	55	8	75	150	2978	8934	3696	6950	18
605 164 28	28	65	8	200	400	4350	13050	4348	5850	29
605 164 38	38	80	8	405	810	10540	31620	6474	4750	49
605 164 42	42	95	8	560	1120	27580	68950	7270	4000	79
605 164 48	48	105	8	655	1310	36200	90500	8274	3600	98
605 164 55	55	120	8	825	1650	41460	103650	9248	3150	115



Note: Spiders with hardness 64°D Shore are not recommended for taper couplings. At couplings made from aluminium, the effective torque should not be higher than the transmittable torque of the 98°A Shore spiders.

Elastic Couplings DX

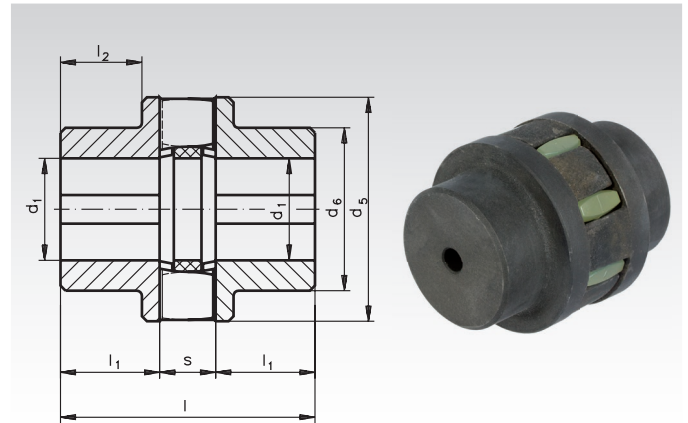
Material: To product 604 028 00: Hubs made from Aluminium.
From product 604 032 00: Hubs made from grey cast iron GG25.
Insert made from Polyurethane, shore hardness 92° A (soft).

- Insertable elastic coupling.
- Not backlash-free. Does not transfer any axial forces.
- Robust component for relatively large shaft offset.
Particularly suitable for large radial offset.
- Different sizes, up to a maximum nominal torque of 3,000 Nm.

Temperature range: -20°C to +80°C.

**Couplings are available pre-drilled ex stock.
Customized bores and feather-key grooves available at extra charge**

Ordering Details: e.g.: Product No. 604 024 00, Coupling DX without Bore



Product No.	Torque			Bores		d ₅ mm	d ₆ mm	l mm	l ₁ mm	l ₂ mm	S mm	Max. Shaft Misalignment ¹⁾			Speed Max. min ⁻¹	Weight Max. kg
	nominal Nm	max. Nm	alternating Nm	pre-drilled mm	max. d ₁ mm							Radial mm	Axial mm	Angular °		
604 024 00*	40	120	15	-	24	55	55	66	24	-	18	0,3	1,2	0,7	12500	0,55
604 028 00*	63	190	25	-	28	62	62	76	28	-	20	0,3	1,2	0,7	11100	0,76
604 032 00	100	300	35	9	32	70	52	86	32	22	22	0,3	1,2	0,7	9800	1,09
604 038 00	160	480	60	14	38	84	60	100	38	27	24	0,4	1,5	0,7	8100	1,76
604 042 00	220	660	80	14	42	92	68	110	42	31	26	0,4	1,5	0,7	7400	2,38
604 048 00	320	960	120	17	48	105	76	124	48	36	28	0,4	1,5	0,7	6500	3,38
604 055 00	450	1350	180	17	55	120	88	140	55	43	30	0,5	1,8	0,7	5700	4,89
604 060 00	630	1900	230	22	60	130	96	152	60	47	32	0,5	1,8	0,7	5200	6,29
604 065 00	900	2700	300	24	65	142	104	165	65	51	35	0,5	1,8	0,7	4800	8,15
604 075 00	1250	3750	450	30	75	165	120	190	75	59	40	0,6	2,1	0,7	4100	12,6
604 085 00	1800	5400	675	40	85	185	136	214	85	68	44	0,7	2,1	0,7	3700	17,9
604 100 00	3000	9000	1125	58	100	220	160	250	100	80	50	0,8	2,4	0,7	3100	29,3

* Material aluminium.

¹⁾ The stated maximum values for shaft misalignment must only occur in a single direction. With multiple misalignment the values have to be reduced. Furthermore, the figures stated are only valid up to a speed of 600 min⁻¹. At higher speeds the misalignment values must again be reduced.

Spiders for Coupling DX

Material: Polyurethane, shore hardness 92° A (soft).

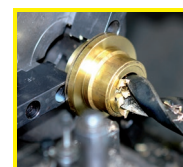
Only suitable for couplings DX.

Temperature range: -20°C to +80°C.

Product No. Spare Part Insert	Matching Product No.	Weight g
604 124 00	604 024 00	9
604 128 00	604 028 00	14
604 132 00	604 032 00	24
604 138 00	604 038 00	28
604 142 00	604 042 00	40
604 148 00	604 048 00	50
604 155 00	604 055 00	80
604 160 00	604 060 00	92
604 165 00	604 065 00	120
604 175 00	604 075 00	200
604 185 00	604 085 00	260
604 200 00	604 100 00	450



Recommendation:
Coupling RNG
page 387

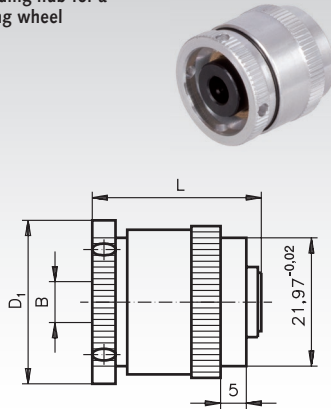


**Reworking within
24h-service possible.
Custom made parts
on request.**

Slip Clutches R2 and R6

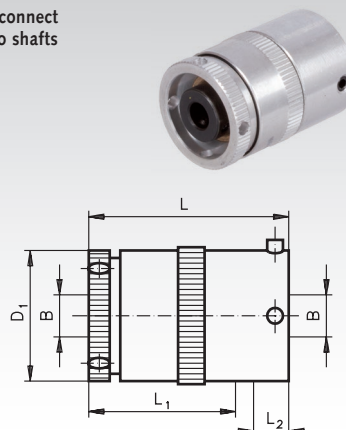
Type A - Concentric Arrangement

as sliding hub for a driving wheel



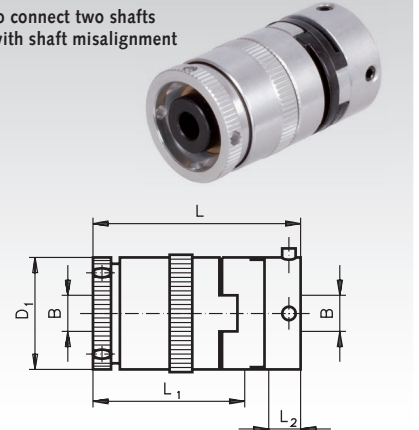
Type B - Axial Arrangement

to connect two shafts



Type C - Axial Arrangement

to connect two shafts with shaft misalignment

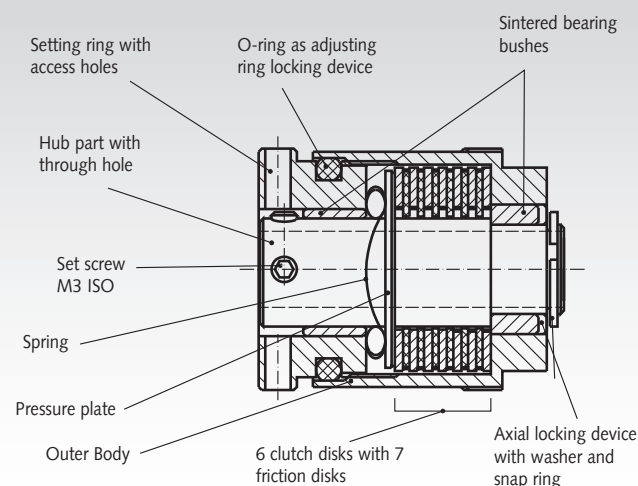


Material: Housing made of aluminium alloy with iridite NCP finish. Inner Hub made of steel.
Max. slip-speed 1,000 min⁻¹. Torsional backlash of the coupling below 2°.

Ordering Details: e.g.: Product No. 610 403 00, Friction Clutch, Type A, 6 mm Bore

Product No.	Type	Number of Friction Plates Pieces	L mm	L ₁ mm	L ₂ mm	D ₁ mm	Bore B ^{+0.03} mm	Set Screw Size and Arrangement	Weight g	Product No. Spare Part Insert	Weight g
610 403 00	A	2	26,4		-	25,8	6	M 3x3,	37	-	-
610 404 00	A	2	26,4		-	25,8	8	2x90°	37	-	-
610 408 00	A	6	32,4		-	25,8	6	only	48	-	-
610 409 00	A	6	32,4		-	25,8	8	at 1 Side	48	-	-
610 423 00	B	2	36	25	9	25,8	6	M 3x3, 2x90°	50	-	-
610 424 00	B	2	36	25	9	25,8	8	at Side 1	50	-	-
610 428 00	B	6	42,5	31	9	25,8	6	M 4x4, 2x90°	61	-	-
610 429 00	B	6	42,5	31	9	25,8	8	at Side 2	61	-	-
610 443 00	C	2	46,5	25	8,6	25,8	6	M 3x3, 2x90°	57	601 244 00	2,7
610 444 00	C	2	46,5	25	8,6	25,8	8	at Side 1	57	601 244 00	2,7
610 448 00	C	6	53,4	31	8,6	25,8	6	M 4x4, 2x90°	83	601 244 00	2,7
610 449 00	C	6	53,4	31	8,6	25,8	8	at Side 2	83	601 244 00	2,7

Sectional drawing of a slip clutch with 6 clutch plates



Torque range with 2 friction plates 2.4 Ncm to 53.8 Ncm. Dissipation at 20°C ambient temperature up to 7 watts. **Torque range with 6 friction plates 7.8 Ncm to 132.4 Ncm.** Dissipation at 20°C ambient temperature up to 8.6 Watt. Maximum permissible temperature at the surface for all sizes during operation 80°C.

An adjusting ring - screwed to the outer body - serves to adjust the torque. This ring acts via a disk spring onto the clutch or friction disks. Two sintered bearing sleeves serve as bearing housing to inner component. An O-Ring seals the hub off against dirt and with its friction force it also makes sure that the adjusting ring is not moved unintentionally. **The power can be connected to either the hub or the housing.**

Depending on the specific application, the friction clutch can be employed as torque limiter, as overrunning clutch or as brake. As the generation of heat is basically a function including the slip torque and the employed torque, the following formula was derived:

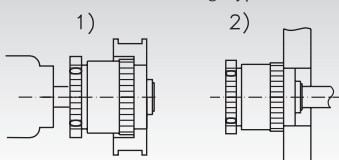
$$\frac{\text{Slippage (min}^{-1}) \times \text{Torque (Ncm)}}{955} = \text{Heat Dissipation in Watts}$$

As the connected components (shafts, gears, etc.) support the heat dissipation, in case of doubt please calculate the effective surface temperature under adverse operating conditions. The permissible temperatures are stated above.

Special designs: the modular-design principle used in slip clutches leads to many different designs and possible connecting parts, e.g., special flanges and other components, according to drawings.

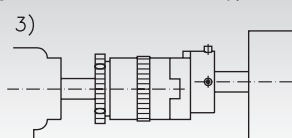
ATTENTION: the adjusting screws can damage the adjusting ring if they are loosened too far. 3/4 to 1 turn is sufficient.

Concentric mounting (type A)

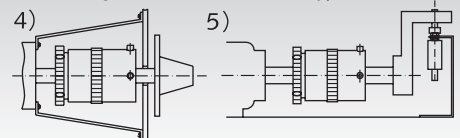


- 1) Pulley or sprocket (bondage recommend), shaft also used as bearing.
- 2) Mounted to the housing as permanent brake and shaft bearing.
- 3) Connection electronic engine and gear box, with assembly-related shaft misalignment.

Axial arrangement, both shafts outside (type C)



Axial arrangement, one shaft outside (type B)



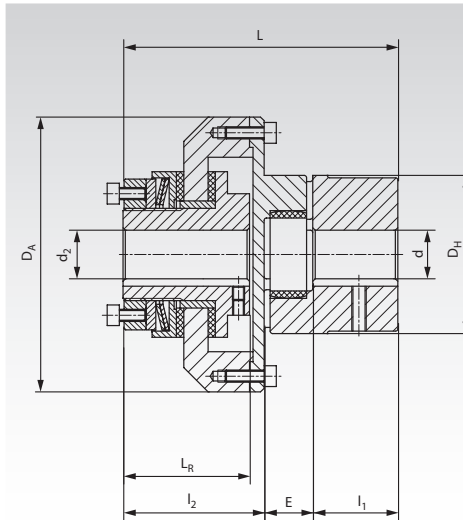
- 4) Shaft of a multi-turn potentiometer divided with slip clutches. No overrevving.
- 5) Protecting a lever key from damage using a slip clutch.

Sliding Hubs with Torsionally-Flexible Coupling RNR

Material: Sliding hub: steel, zinc-plated and chromated, rust-proof friction pads.

Elastic coupling: coupling hub steel (size 00 from aluminium), spider (plastic insert) Polyurethane. Hardness 92° Shore A (optional 98° Shore A).

- The slipping torque can be adjusted with common assembly tools for screws.
- The elastic coupling can be mounted in axial direction.
- Torque can be altered after mounting.
- By mounting additional springs, the torque range can be increased. (additional springs have to be ordered separately).
- Customized bores and feather-key grooves available at extra charge.



Ordering Details: e.g.: Product No. 612 199 00, Sliding Hub RNR with Torsionally-Flexible Coupling

Product No.	Size	d ; d ₂	d _{max.} mm	d _{2 max.} mm	D _A mm	D _H mm	I ₁ mm	E mm	I ₂ mm	L _R mm	L mm	Weight kg
612 199 00	00	4,8	16	10	44	30	11	13	35	31	59	0,35
612 200 00	0	5,7	25	20	63	40	25	16	37	33	78	0,90
612 201 00	01	10	35	22	80	55	30	18	50	45	98	1,95
612 202 00	1	10	40	25	98	65	35	20	58	52	113	3,10
612 203 00	2	14	48	35	120	80	45	24	64	57	133	5,50

Size	Torque of Sliding Hub			Torque Coupling T _{KN} ³⁾ Nm	Torque Coupling T _{Kmax.} ⁴⁾ Nm	Speed max. min ⁻¹
	Standard ¹⁾ Nm	Optional ²⁾ Nm	Optional ²⁾ Nm			
00	0,5 - 5	1 - 10	-	7,5	15	10.000
0	2,0 - 10	4 - 20	-	10,0	20	8.500
01	5,0 - 35	10 - 70	60 - 105	35,0	70	6.600
1	20,0 - 75	40 - 150	130 - 200	95,0	190	5.600
2	25,0 - 140	50 - 280	250 - 400	190,0	380	4.300

¹⁾ With one disc spring (standard version).

²⁾ With second or third disc spring (order separately).

³⁾ Nominal torque of the elastic coupling with standard spider 92° Shore A.

⁴⁾ Maximum torque of the elastic coupling with standard spider 92° Shore A.

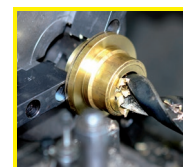
Replacement Friction Discs and additional Disc Springs

Matching Coupling Product No.	Size	Outer			Outer		
		Product No. Friction Disc ¹⁾	Ø mm	Weight g	Product No. Disc Spring	Ø mm	Weight g
612 199 00	00	612 100 01	30	2	612 100 02	30	5
612 200 00	0	612 100 11	45	3	612 100 12	42,5	5
612 201 00	01	612 101 01	58	10	612 101 02	53,1	10
612 202 00	1	612 101 11	68	13	612 101 12	61,5	20
612 203 00	2	612 102 01	88	21	612 102 02	79,5	40

¹⁾ 2 pieces required.

Spiders for RNR

Matching Coupling Product No.	Size	Torque		Torque		Weight g
		Spare Part Spider 92° Shore, yellow Nm	Nom. max. Nm	Optional Spider 98° Shore, red Nm	Nom. max. Nm	
612 199 00	00 (14)	605 092 14	7,5 15	605 098 14	12,5 25	5
612 200 00	0 (19)	605 092 19	10 20	605 098 19	17 34	7
612 201 00	01 (24)	605 092 24	35 70	605 098 24	60 120	22
612 202 00	1 (28)	605 092 28	95 190	605 098 28	160 320	32
612 203 00	2 (38)	605 092 38	190 380	605 098 38	325 650	58



Reworking within 24h-service possible. Custom made parts on request.

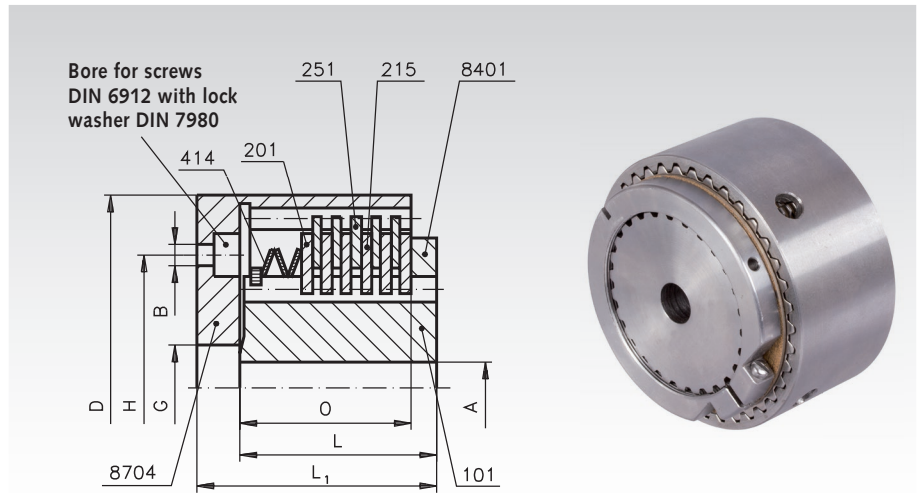
Multi-Plate Friction Clutches PD

Material: Steel.

Multi-plate friction clutches have proven to deliver an optimal performance when used with slow-starting machines. They are also used as safety couplings. The occurring torque peaks are levelled out by friction clutches. The disk pairing is steel/sintered bronze, with the inner plates of the pairings lined. The composition of the lining means up to 400°C can be withstood short term. At permanent load, however, only up to 250°C. Sintered clutch plates have the advantage of an almost constant friction coefficient even with fast growing circumferential speeds and higher temperatures. The assembly can be used for dry and wet operation. Advantages of these couplings are: Practical dimensions. Easy adjustment and re-adjustment. Inner and outer plates with special splines.

Couplings are available pre-drilled H7 ex stock.

Customized bores and feather-key grooves available at extra charge



Product No.	Torque*		Bore. A		B mm	D mm	GH7 mm	H mm	L mm	L ₁ mm	O mm	Speed max. min ⁻¹	Weight kg	Product No. Spare Plates Compl. Set	Weight Spare Part g
	Dry Nm	Wet Nm	Pre-bore H7 mm	max. mm											
611 001 00	14	6	10	20 ¹⁾	3x for M5	55	22	34	28	36	22	3000	0,44	611 011 00	71
611 002 00	33	14	12	25 ²⁾	3x for M5	67	32	44	35	43	28	3000	0,81	611 012 00	140
611 003 00	62	26	12	40 ³⁾	4x for M6	82	45	58	40	48	30	3000	1,45	611 013 00	227
611 004 00	126	54	25	42	4x for M6	100	62	76	45	53	36	2500	2,24	611 014 00	339
611 005 00	230	100	25	55	4x for M8	120	72	90	55	65	42	2500	3,97	611 015 00	703
611 006 00	380	160	25	70	6x for M10	145	85	110	65	77	53	2500	5,82	611 016 00	1558

¹⁾ From Bore 17 mm only with flat feather key-grooves according to DIN 6885/3.

²⁾ From Bore 22 mm only with flat feather key-grooves according to DIN 6885/3.

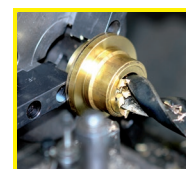
³⁾ From Bore 38 mm only with flat feather key-grooves according to DIN 6885/3.

* Max. transmittable torque for dry or wet operation. The minimum adjustable torque is at about 50% of the maximum value.

Construction and Mounting

The disk-mount 101 is equipped with splines, guiding the sinter-plates 215. The casing 8704 also has splines, which guide the outer plates 251 made from steel. The last component of the disk pack is a pressure plate 201. The disk spring 414 together with the adjusting screw 8401 lead to the friction grip of the disk pack. During assembly please make sure that the disk-mount 101 and the casing are securely fixed in axial direction. When connecting 2 shaft ends, one shaft has to be mounted inside the housing 8704 supported by a centering bearing. The disk-mount 101 must not rub against the casing 8704, but

against the sleeve or the bearing ring. Make sure no oil or fat enters the disk pack. For readjustment loosen the locking screw in the nut 8401. Turning left will increase the torque, turning left leads to a reduction. After re-setting always re-tighten the locking screw. When ordering spare parts always state the factory number 8401 on the adjusting screw .



**Reworking within
24h-service possible.
Custom made parts
on request.**

Safety Clutches SI

Material: Steel.

This clutch is a backlash-free overload system operating on the positive principle. It works with the recently developed principle of the "punched disk spring". At overload the disk spring disengages, the torque flow is interrupted. After the overload has passed, the clutch re-engages on its own.

The axial movement of the shift ring can be used to trigger a limit switch/sensor turning off the engine (travel 2mm).

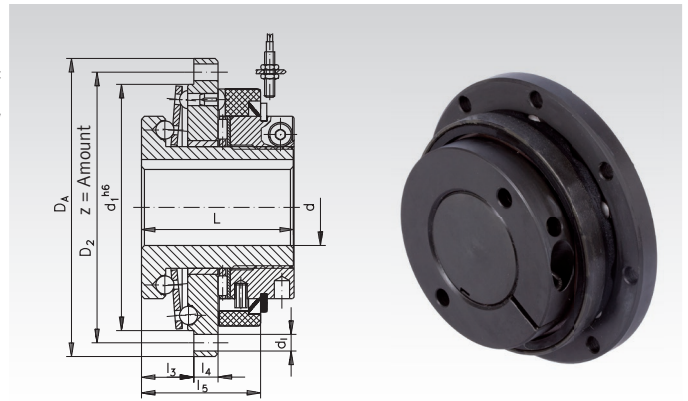
Customer components (e.g. sprockets, pulleys) can be easily integrated; special components, as needed for the common systems, are not required here.

Customized bores and feather-key grooves available at extra charge.

Ordering Details: e.g.: Product No. 612 720 00, Safety Clutch SI, 6-20 Nm

Product No.	Torque Nm	d _{max.} mm	L mm	D _A mm	D ₂ , z mm	d ₁ mm	d ₁ mm	l ₃ mm	l ₄ mm	l ₅ mm	*Speed max. min ⁻¹	Weight kg
612 720 00	6 - 20	20	45	80	71, z= 8	4,5	65	16	6	35	1500	0,69
612 725 00	20 - 60	25	50	98	89, z= 8	5,5	81	17	8	39	1500	1,26
612 735 00	25 - 80	35	60	120	110, z=12	5,5	102	21	10	42	1500	1,89
612 750 00	60 - 180	50	70	162	152, z=12	6,6	142	25	13	56	1500	3,93

* Higher speeds possible if technical data is transmitted.



Limit Switch (Engine-Emergency-Stop Switch)

Ordering Details: e.g.: Product No. 612 605 00 Limit Switch

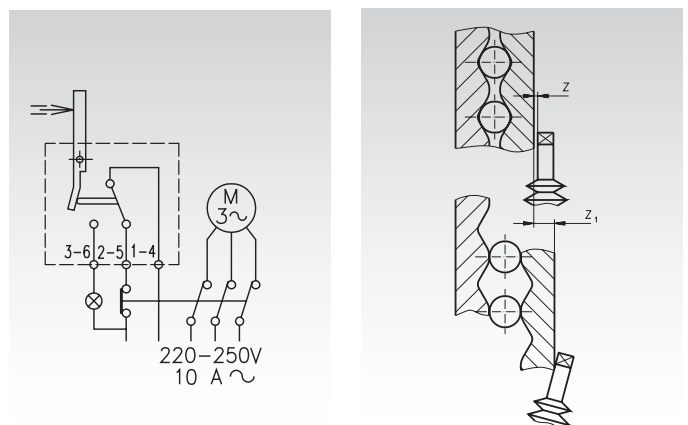
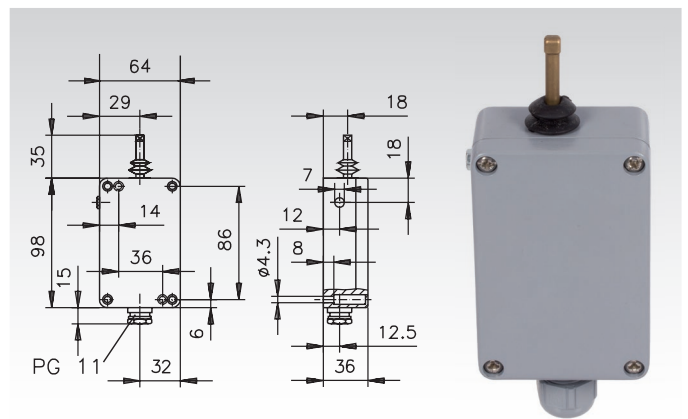
Product No.	Weight in g
612 605 00	324

Material: Housing made from aluminium die-cast, painted grey, with rubber seal. Switch made from brass. Bellow made from neoprene (black). Housing screws zinc-plated. Cable connection made from plastic (grey).

Electrical connection: 220-250V AC, 10 A.

Application: Robust limit switch for safety clutches SI (see above) and safety clutches CM (page 398) or similar applications. If the torque set on the clutch is exceeded, the clutch slips. At the same time the shift ring moves. The shift ring then triggers the switch and turns off the engine. This protects the entire drive system and prevents possible damage.

Mounting: On the back wall are two bores Ø 4.3 mm. These fit two screws M4 with internal hexagon, slot or cross recess (head-Ø up to 7 mm). The wall thickness around the mounting holes is 8 mm.

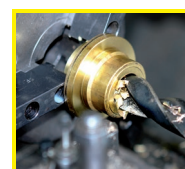
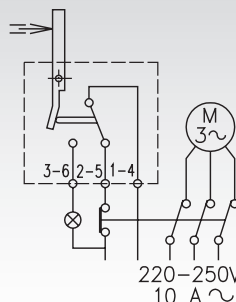


Dimension Z₁ for Limit Stop with Clutches SI

Product No. 612 720 00 to 612 750 00: 2 mm

Dimensions Z₁ for Limit Stop with Clutches CM

Size 20: 1.4 mm
 Size 25: 2.3 mm
 Size 35: 2.4 mm
 Size 45: 2.7 mm
 Size 55: 3.7 mm



Reworking within 24h-service possible. Custom made parts on request.

Safety Clutches CM

Material: Steel.

Overload system operating on the positive principle, available in 5 sizes. For each size there are 4 different disk-plate sets for different torque ranges. **The required disk-plate set has to be ordered separately and is supplied unassembled.**

When mounting simple driving elements, as sprockets, pulleys, etc., always make sure the shaft is supported.

Optimal protection against overloads.

Trigger torque can be adjusted.

High reproducibility of the triggering and re-engaging process.

Robust design, long service life, absolutely maintenance free.

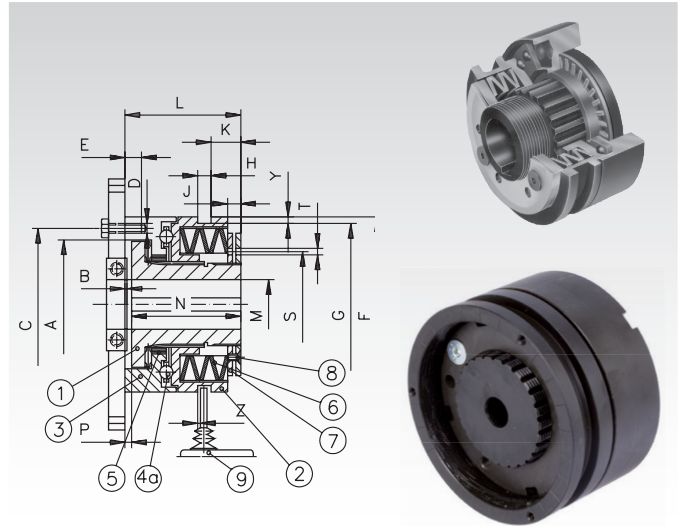
Immediate free-wheeling of the drive. Automatic emergency stop of the driving unit through switch (to be ordered separately).

Not negatively affected by frequent triggering sequences.

The disk-plate sets (S, M, L or LL) and the limit switch (emergency-stop switch) for all sizes Product No. 612 605 00 (page 397) have to be ordered separately.

Customized bores and feather-key grooves available at extra charge.

Ordering Details: e.g.: Product No. 612 620 00, Safety Clutch CM, Size 20
Product No. 612 620 02, Disk-Plate Set M (essential information)



Product No.	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	K mm	J mm	L mm	M _{min.} mm	M _{max.} mm	N mm	P mm	R mm	S mm	T mm	Y mm	Z mm	Weight kg
612 620 00	20	41	4	48	6xM5	6,5	55	50	9	7,5	3	38,5	7	20	35	3,1	6	38,5	5	2	0,3	0,5
612 625 00	25	60	4	70	6xM5	8	82	72	9	11,5	6	52	10	25	48	3,1	6	54	6	2	0,3	1,5
612 635 00	35	78	5	89	6xM6	10	100	91	9	12	6	61	14	35	56	3,6	8	70	6	2	0,5	2,9
612 645 00	45	90,5	5	105	6xM8	12	120	112	9	22	8,5	78	18	45	72	4,1	10	84	6	2	0,5	5,0
612 655 00	55	105	6,5	125	6xM10	15	146	140	9	27	11	100	24	55	93,5	4,1	14	108	10	2	0,8	9,8

Technical Data and Product No. of Disk-Plate Sets

Product No.	Product No	S	Nm for Disk-Plate Sets				Product No.	LL	Max. Speed		
			M		L				S-M	L-LL	
612 620 00	612 620 01	2,5 - 5	612 620 02*		5 - 10	612 620 02*	10 - 20	612 620 04	20 - 40	3300	1800
612 625 00	612 625 01	6,0 - 12	612 625 02		12 - 25	612 625 03	25 - 60	612 625 04	60 - 100	2890	1450
612 635 00	612 635 01	12,0 - 25	612 635 02		25 - 50	612 635 03	50 - 120	612 635 04	120 - 200	2350	1200
612 645 00	612 645 01	25,0 - 50	612 645 02		50 - 100	612 645 03	100 - 250	612 645 04	250 - 400	2000	1000
612 655 00	612 655 01	50,0 - 100	612 655 02		100 - 200	612 655 03	200 - 500	612 655 04	500 - 800	1650	850

* This spring set covers both torque ranges M and L (only for size 20).

Possible Disk-Plate Sets

S (light)		M (medium)		L (heavy)		LL (very heavy)	
Size 20 - 55	6 x 1S	Size 20 - 55	5 x 1M	Size 20	5 x 1M	Size 20	4 x 1L
				Size 25 - 55	5 x 1L	Size 25 - 55	3 x 2L

Functioning

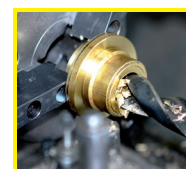
At normal operating conditions, the safety clutch transmits the torque from the driving shaft via the ball race onto the flange (3). The balls (4a) are pressed into the CNC-milled recesses in part (2) and (3) by the disk plates (6). In case of overload, i.e., if the torque request exceeds the preset limit, the clutch halves are separated; the remaining transmitted torque is very low. When the balls are lifted out of the recesses, against the spring pressure, the clutch part number (2) is moved in axial direction. This movement can be used to trigger an emergency-stop switch (9) for an engine. The clutch re-engages on its own as soon as the torque requirement falls below the set limit. Torque adjustment: By screwing in the torque-adjusting nut (7) all disk plates are further pretensioned (6). As soon as the desired pretension is achieved, the adjusting screw has to be fixed in position with the set screws (8).

Operating Factors

This table shows the operating factor that should - dependent on the type of application - be used as basis for calculating the correct size.

Operating Conditions

Centrifugal Moment	Uniform	Shock	Reversing
Low	1,4	1,7	2,0
Medium	1,7	2,0	2,3
High	2,0	2,4	2,6



Reworking within 24h-service possible. Custom made parts on request.

Sliding Hubs FS

Material:

Hub: Steel, zinc-plated and yellow passivated. Spring: Steel, black.

The sliding hubs can be delivered ex stock, pre-drilled with a bush of the length in **bold print**.

Required bush length:

The required bush length depends on the width of the component to be joined.

Up to Prod. No. 612 006 00:

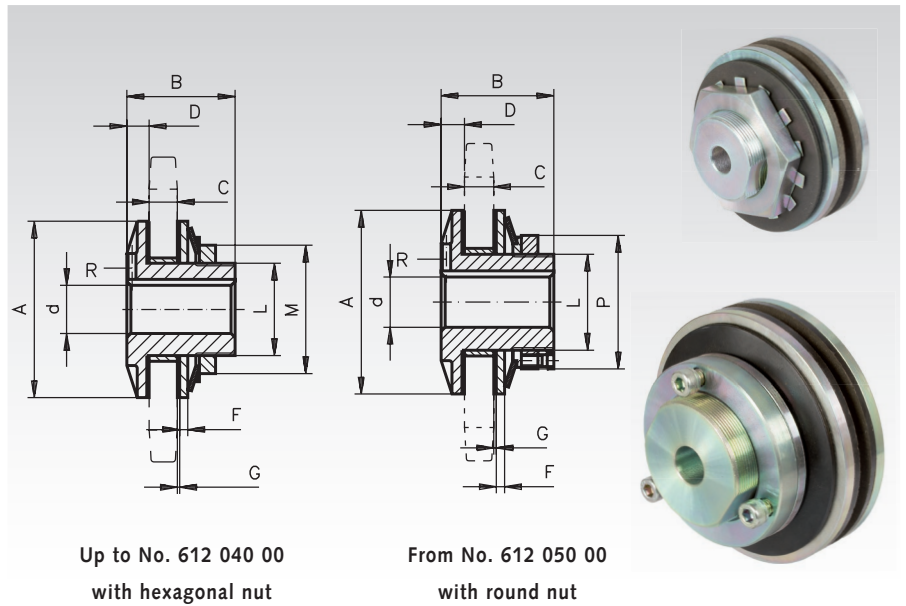
Bush length 4.2 mm for a component width of 5.3 to 6.0 mm.

From Prod. No. 612 010 00:

Bush length in mm = 1.5 x G + C.

Other bush lengths and customized bores or feather-key grooves against extra charge.

Ordering Details: e.g.: Product No. 612 000 00, Sliding Hub FS



Product No.	Torques		Bores d			AØ	B	C max.	D	F	G	LØ	M	PØ	R	Available Bush Lengths			Bore of the mounted Parts +0.05	Weight
	min. Nm	max. Nm	Pilot B. mm	min. mm	max. mm											L1 mm	L2 mm	L3 mm		
612 000 00	0,5	5	3,7	4	10	30	31	6	8,5	2	2,5	M16	SW 27	-	M4	4,2	-	-	21,00	0,15
612 001 00	1	10	3,7	4	10	30	31	6	8,5	2	2,5	M16	SW 27	-	M4	4,2	-	-	21,00	0,17
612 005 00	2	10	5,7	6	20	45	33	7	8,5	2	2,5	M30	SW 41	-	M4	4,2	-	-	34,00	0,35
612 006 00	4	20	5,7	6	20	45	33	7	8,5	2	2,5	M30	SW 41	-	M4	4,2	-	-	34,00	0,37
612 010 00	7	34	10 ^{HB}	10	22	64	48	9	16	5	4	M35	SW 50	-	M5	10,3	12,2	14	41,33	0,70
612 020 00	14	68	10 ^{HB}	10	22	64	48	9	16	5	4	M35	SW 50	-	M5	10,3	12,2	14	41,33	0,72
612 030 00	20	90	13 ^{HB}	13	25	90	62	16	19	5	4	M42	SW 60	-	M6	10,3	13,7	21	49,28	1,36
612 040 00	40	180	13 ^{HB}	13	25	90	62	16	19	5	4	M42	SW 60	-	M6	10,3	13,7	21	49,28	1,40
612 050 00	50	300	19 ^{HB}	19	40	127	76	16	21	6	4	M63	-	92	M8	16	19,5	21	73,10	3,36
612 060 00	100	600	19 ^{HB}	19	40	127	76	16	21	6	4	M63	-	92	M8	16	19,5	21	73,10	3,70
612 070 00	115	690	24 ^{HB}	24	60	178	98	28	25	6	5	M95	-	133	M10	17	20,6	22	104,88	8,60
612 080 00	230	1360	24 ^{HB}	24	60	178	98	28	25	6	5	M95	-	133	M10	17	20,6	22	104,88	8,90

* ca.-dimensions.

Matching Sliding Hub Product No.	Product No. Friction Disc*	Weight g	Product No. Disc Spring	Weight g	Product No. Threaded Ring or Adjusting Screw	Weight g	Product No. Bushes Length 1	Weight g	Product No. Bushes Length 2	Weight g	Product No. Bushes Length 3	Weight g
612 000 00	612 003 00	2	612 004 00	3	612 000 07	9	612 000 02	3	-	-	-	-
612 001 00	612 003 00	2	612 004 00	3	612 000 07	9	612 000 02	3	-	-	-	-
612 005 00	612 007 00	4	612 008 00	5	612 005 07	44	612 005 02	10	-	-	-	-
612 006 00	612 007 00	4	612 008 00	5	612 005 07	44	612 005 02	10	-	-	-	-
612 010 00	612 015 00	12	612 016 00	15	612 017 00	80	612 012 00	25	612 013 00	40	612 014 00	50
612 020 00	612 015 00	12	612 016 00	15	612 017 00	80	612 012 00	25	612 013 00	40	612 014 00	50
612 030 00	612 035 00	30	612 036 00	45	612 037 00	140	612 032 00	37	612 033 00	44	612 034 00	85
612 040 00	612 035 00	30	612 036 00	45	612 037 00	140	612 032 00	37	612 033 00	44	612 034 00	85
612 050 00	612 055 00	60	612 056 00	120	612 057 00	320	612 052 00	97	612 053 00	135	612 054 00	200
612 060 00	612 055 00	60	612 056 00	120	612 057 00	320	612 052 00	97	612 053 00	135	612 054 00	200
612 070 00	612 075 00	140	612 076 00	280	612 077 00	660	612 072 00	103	612 073 00	183	612 074 00	300
612 080 00	612 075 00	140	612 076 00	280	612 077 00	660	612 072 00	103	612 073 00	183	612 074 00	300

* 2 pieces required.

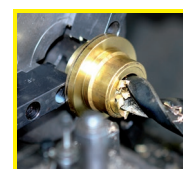
General

The sliding hubs FS are safety devices working on the positive principle. In case of overload, the disk clamped between the friction disks starts slipping and thus keeps the torque within the permissible limits. The power reengages automatically as soon as normal load is reached again. The hubs are cadmium plated for rust-protection. The drive disk is mounted on a maintenance-free bush made from sintered metal. Up to product no. 612 040 00, the torque is set with a hexagon adjusting screw. From product no. 612 050 00 the torque is set with a threaded ring with 3 hexagon nuts. On first use, the sliding hubs should be run in for about 250 turns at a speed of 60 min⁻¹. This should be done at a hub setting of 70-80% of the max. torque for one plate disk. Wear due to frequent slipping reduces the set torque. The figures in the table are calculated for dry operation.

With oil the load can be reduced by 50%. Higher torques, at the same outer diameter, can be achieved with a second spring disk.

Exception: Product No. 612 000 00 has 2 springs, Product No. 612 001 00 has 4 springs.

Mounting instruction at www.maedler.de in the section Downloads.



Reworking within 24h-service possible. Custom made parts on request.

Sliding Hubs FA as Torque Limiters for Chain-, Gear- and Belt Drive-wheels

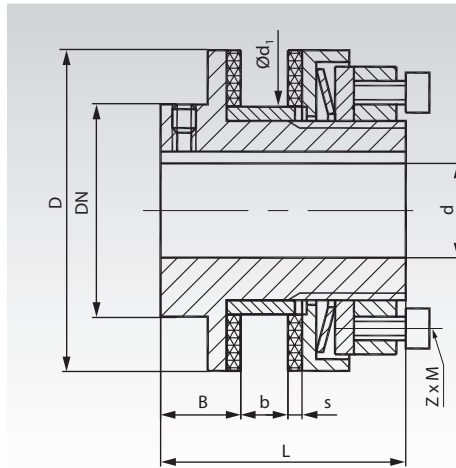
Material: Steel, zinc-plated and chromated.

- High-quality version.
- The slipping torque can be adjusted with common assembly tools for screws, also after mounting.
- By mounting additional springs, the torque range can be increased. (additional springs have to be ordered separately).
- The hubs are delivered with pilot bore and max. bush length. Customized bores, keyways and bush lengths at extra charge.

Required bush length:

The bush length required depends on the width of the component to be joined. To calculate the bush length take the width of the component and add 1.5 times the thickness of the friction disc, plus an additional 0.5mm.

Bush length in mm = $1.5 \times s + b + 0.5$.



Drawing: size 01 - 05



Ordering Details: e.g.: Product No. 612 100 00, Sliding Hub FA size 00

Product No	Size	Torque range		Speed max. min ⁻¹	Bore		D mm	DN mm	B mm	Bore of Sprocket d ₁ ^{H8} mm	Width		Bush length		s mm	L mm	Screws Z x M mm	Weight prebored kg
		1 Spring ¹⁾ Nm	2 Springs ²⁾ Nm		b _{min.} mm	b _{max.} mm					min. mm	max. mm						
612 100 00	00	0,5-5	1-10	10000	3,7	10	30	-	8,5	21	2	6	6	10	2,5	31	3x M4	0,1
612 100 10	0	2-10	4-20	8500	5,7	20	45	-	8,5	35	2	6	6	10	2,5	33	6x M4	0,3
612 101 00	01	5-35	10-70	6600	10	22	58	40	16	40	3	8	8	13	3	45	6x M4	0,6
612 101 10	1	20-75	40-150	5600	10	25	68	45	17	44	3	10	8	15	3	52	6x M5	0,9
612 102 00	2	25-140	50-280	4300	14	35	88	58	19	58	4	12	9	17	3	57	6x M6	1,8
612 103 00	3	50-300	100-600	3300	18	45	115	75	21	72	5	15	11	21,5	4	68	6x M8	3,4
612 104 00	4	90-600	180-1200	2700	24	55	140	90	23	85	6	18	12	24,5	4	78	6x M8	5,5
612 105 00	5	280-800	800-1600	2200	28	65	170	102	29	98	8	20	16	28	5	92	6x M8	8,8
612 106 00	6	300-1200	600-2400	1900	38	80	200	120	31	116	8	23	16	31	5	102	8x M20	14,0
612 107 00	7	600-2200	1200-4400	1600	45	100	240	150	33	144	8	25	16	33	5	113	12x M20	22,6
612 108 00	8	900-3400	1800-6800	1300	58	120	285	180	35	170	8	25	16	33	5	115	16x M20	33,6

¹⁾ With one disc spring (standard version). ²⁾ With second disc spring (order separately).

Replacement Friction Discs and additional Disc Springs

Matching Sliding Hub Product No.	Size	Outer Ø mm	Product No. Friction Disc ¹⁾	Weight g	Product No. Disc Spring	Weight g
612 100 00	00	30	612 100 01	2	612 100 02	5
612 100 10	0	45	612 100 11	3	612 100 12	5
612 101 00	01	58	612 101 01	10	612 101 02	10
612 101 10	1	68	612 101 11	13	612 101 12	20
612 102 00	2	88	612 102 01	21	612 102 02	40
612 103 00	3	115	612 103 01	51	612 103 02	100
612 104 00	4	140	612 104 01	79	612 104 02	200
612 105 00	5	170	612 105 01	157	612 105 02	400
612 106 00	6	200	612 106 01	216	612 106 02 ²⁾	320
612 107 00	7	240	612 107 01	250	612 107 02 ³⁾	480
612 108 00	8	285	612 108 01	400	612 108 02 ⁴⁾	640

¹⁾ 2 pieces required. ²⁾ Set with 16 springs. ³⁾ Set with 24 springs. ⁴⁾ Set with 32 springs.

Technical Explanations

The driving element (sprocket or pulley) is pushed onto the bush and clamped between the friction discs, supported by the round adjusting nut, the pressure plate, preload screws and the disk spring. The harder the disk spring is compressed by the pressure plate, the higher is the torque at which the driving element slips. The exact adjustment values for the torque can be found in the table stuck onto the sliding hubs.

Mounting instruction at www.maedler.de in the section Downloads.

Remarks to the versions

The pictures above show size 01 to 5. Sizes 00 and 0 are on the left side without hub. From size 6, instead of the central disc spring, there are pairs of little disc springs around each preload screw.

Customized bores, keyways and bush lengths are available at extra charge.

Torque – Increase

The torque values refer to the sprocket version with ground surfaces. Non-ground surfaces lead to faster wear of the friction disks.

Wear due to frequent slipping reduces the set torque.

At all sizes, the specified torque can be doubled by the addition of a (second) disc spring. The torque ranges with one or two disc springs are shown in the table.

At sizes from 01 to 5, the specified torque can be tripled by the addition of a (third) disc spring. The minimum torque setting is then approx. 65% of the maximum value.

Sliding Hubs FAK as Torque Limiters, with Clamp Hub

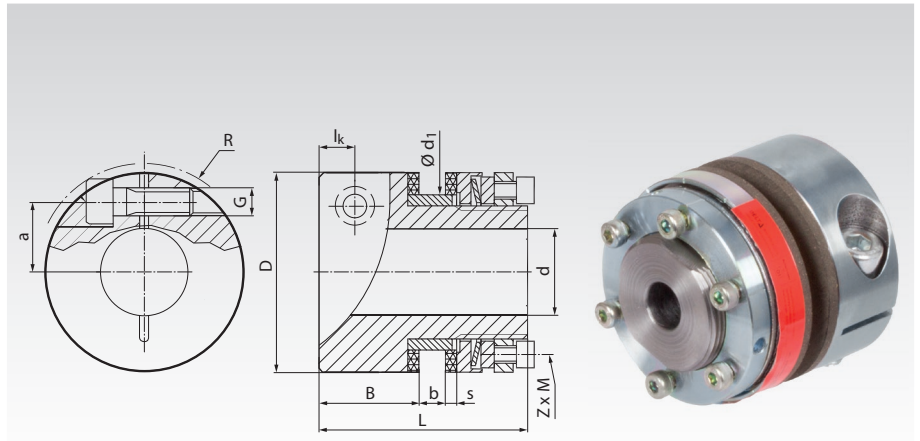
Material: Steel, zinc-plated and chromated.

- Clamp hub version.
- The slipping torque can be adjusted with common assembly tools for screws, also after mounting.
- By mounting an additional springs the torque range can be increased (additional spring has to be ordered separately).
- The hubs are delivered with pilot bore and max. bush length. Customized bores, keyways and bush lengths at extra charge.

Required bush length:

The bush length required depends on the width of the component to be joined. To calculate the bush length take the width of the component and add 1.5 times the thickness of the friction disc, plus an additional 0.5mm.

$$\text{Bush length in mm} = 1.5 \times s + b + 0.5.$$



Ordering Details: e.g.: Product No. 612 110 10, Sliding Hub FAK size 0

Product No.	Size	Torque range		Speed max. min ⁻¹	Bore		D mm	B mm	Bore of Sprocket d ₁ ^{H8} mm	Width		Bush length		s mm	L mm	Screws Z x M mm	Weight prebored kg
		1 Spring ¹⁾ Nm	2 Springs ²⁾ Nm		Pilot mm	d _{max} mm				b _{min} mm	b _{max} mm	min. mm	max. mm				
612 110 10	0	2 - 10	4 - 20	8500	10	22	45	21,5	35	2	6	6	10	2,5	46	6x M4	0,3
612 111 00	01	5 - 35	10 - 70	6600	10	25	58	26	40	3	8	8	13	3	55	6x M4	0,6
612 111 10	1	20 - 75	40 - 150	5600	18	28	68	30	44	3	10	8	15	3	65	6x M5	0,9
612 112 00	2	25 - 140	50 - 280	4300	18	40	88	34	58	4	12	9	17	3	72	6x M6	1,8

Clamp Screw Dimensions and Fastening Torque

Size	R mm	G mm	T _A Nm	l _k mm	a mm
0	50	M6	16	8	16
01	62	M8	41	10	19
1	74	M10	83	12	22
2	93	M12	145	14	30

¹⁾ With one disc spring (standard version).

²⁾ With second disc spring (order separately).

Replacement Friction Discs and additional Disc Springs

Matching Sliding Hub Product No.	Size	Outer Ø mm	Product No. Friction Disc ¹⁾	Weight g	Product No. Disc Spring	Weight g
612 110 10	0	45	612 100 11	3	612 100 12	5
612 111 00	01	58	612 101 01	10	612 101 02	10
612 111 10	1	68	612 101 11	13	612 101 12	20
612 112 00	2	88	612 102 01	21	612 102 02	40

¹⁾ 2 pieces required.

Remarks to the versions

The pictures above show size 01 to 2. Size 0 is on the left side without hub.

Customized bores, keyways and bush lengths are available at extra charge.

Technical Explanations

The driving element (sprocket or pulley) is pushed onto the bush and clamped between the friction discs, supported by the round adjusting nut, the pressure plate, preload screws and the disk spring. The harder the disk spring is compressed by the pressure plate, the higher is the torque at which the driving element slips. The exact adjustment values for the torque can be found in the table stuck onto the sliding hubs.

Torque – Increase

The torque values refer to the sprocket version with ground surfaces. Non-ground surfaces lead to faster wear of the friction disks.

Wear due to frequent slipping reduces the set torque.

At all sizes, the specified torque can be doubled by the addition of a (second) disc spring. The torque ranges with one or two disc springs are shown in the table.

Operating Instructions at www.maedler.de in the section Downloads

ROBA®-Sliding Hubs as Torque Limiters for Chain-, Gear- and Belt Drive-wheels

Material: Steel, zinc-phosphated.

ROBA®-sliding hubs are high-quality machine components. They are machined all-round and zinc-phosphated, i.e. rust-proof. They are of fully-closed design.

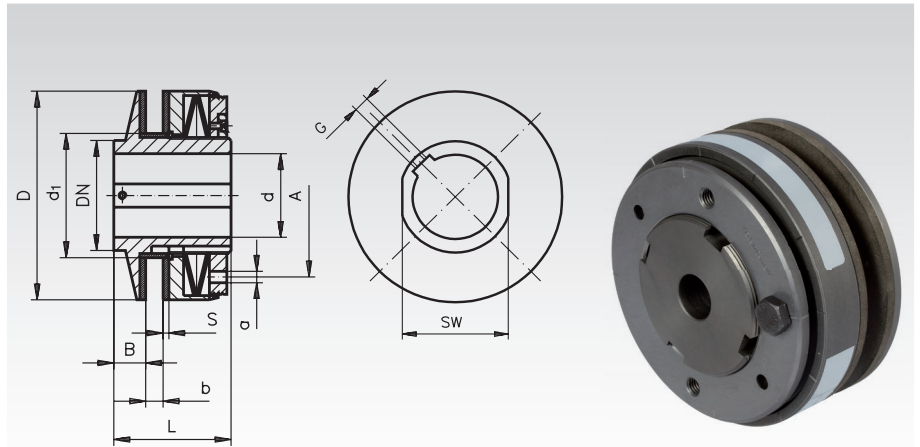
The sliding hubs are delivered pre-drilled with the max bush length (for b_{max}).

Required bush length:

The bush length required depends on the width of the component to be joined. To calculate the bush length take the width of the component and add 1.5 times the thickness of the friction lining, plus an additional 0.5mm.

Bush length in mm = $b + 1.5 \times s + 0.5$.

Other bush lengths, customized bores feather-key grooves and setscrew-threads available at extra charge.



Pictured version for up to 700 Nm max.

Ordering Details: e.g.: Product No. 612 300 00, ROBA-Sliding Hub

Product No.	Size	Torque		Speed max. min ⁻¹	Clamping Tool A mm	a ^{-0,2} mm	B mm	b _{min.} mm	b _{max.} mm	D mm	DN mm	Sprocket Bore d ₁ ^{H8} mm	d max. mm	Pilot Bore mm	Set Screw G mm	L mm	SW mm	Lining S mm	Weight Pre-drilled g
		min. Nm	max. Nm																
612 300 00	0	2	10	8500	37	3	8,5	2	6	45	45	35	20 ¹⁾	6	M4	33	-	2,5	300
612 320 00	1	14	70	5600	50	5	17	3	10	68	45	44	25	10	M*	52	41	3	900
612 340 00	2	26	130	4300	67	6	19	4	12	88	58	58	35	14	M**	57	50	3	1600
612 360 00	3	50	250	3300	84	6	21	5	15	115	75	72	45	18	M***	68	65	4	3100
612 380 00	4	110	550	2700	104	7	23	6	18	140	90	85	55	24	M8	78	80	4	5400
612 400 00	5	140	700	2200	125	8	29	8	20	170	102	98	65	28	M8	92	90	5	9000
612 420 00	6	240	1200	1900	150	8	31	8	23	200	120	116	80	38	M8	102	105	5	12400

M* Up to Ø12 M4, above Ø12 M5, above Ø17 M6.

M** Up to Ø 17 M5, above Ø 17 M6.

M*** Up to Ø 22 M6, above Ø 22 M8.

¹⁾ Above Ø19 only with keyway DIN6885/3.

Replacement Friction Linings and Face Spanners

Matching Product No.	Product No. Spare Part Friction Lining*	Weight g	Product No. Face Spanner	Weight g
612 320 00	612 321 00	13	612 322 00	159
612 340 00	612 341 00	21	612 342 00	240
612 360 00	612 361 00	51	612 342 00	240
612 380 00	612 381 00	79	612 382 00	750
612 400 00	612 401 00	157	612 402 00	1700
612 420 00	612 421 00	216	612 402 00	1700

* 2 pieces required.

Technical Explanations

The driving element (sprocket or pulley) is pushed onto the bush and clamped between the friction disks, supported by the pressure plate, the disk springs and the adjusting nut. The harder the disk springs are compressed by the adjusting nuts, the higher is the torque at which the driving element slips. The exact adjustment values for the torque can be found in the table stuck onto the sliding hubs.

The torque values refer to the sprocket version with ground surfaces. Non-ground surfaces lead to faster wear of the friction disks.

Wear due to frequent slipping reduces the set torque.

Torque – Increase

Changing the series stacking shown to a parallel stacking the maximum torque can be doubled. The minimum torque setting is then approx. 50% of the maximum value.

For product no. 612 320 00 to 612 400 00 the specified torque can be tripled by the addition of a (third) spring washer. The minimum torque setting is then approx. 65% of the maximum value.

For Product No. 612 360 00 to 612 400 00 this requires a special adjusting nut, and the pressure plate has to be shortened (both against surcharge).