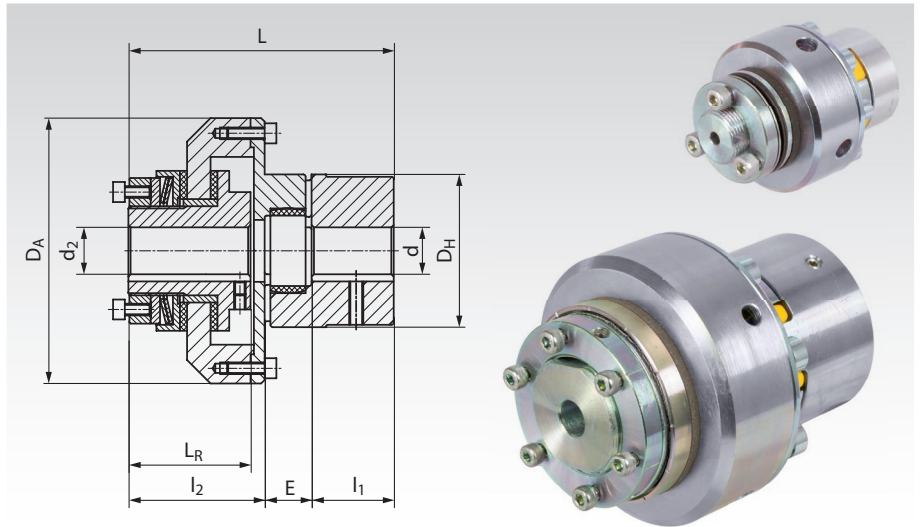


## Sliding Hubs with Torsionally-Flexible Coupling RNR

**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 <sub>2</sub>	d <sub>max.</sub> mm	d <sub>2 max.</sub> mm	D <sub>A</sub> mm	D <sub>H</sub> mm	l <sub>1</sub> mm	E mm	l <sub>2</sub> mm	L <sub>R</sub> 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 <sub>KN</sub> <sup>3)</sup> Nm	Torque Coupling T <sub>Kmax.</sub> <sup>4)</sup> Nm	Speed max. min <sup>-1</sup>
	Standard <sup>1)</sup> Nm	Optional <sup>2)</sup> Nm	Optional <sup>2)</sup> 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

<sup>1)</sup> With one disc spring (standard version).

<sup>2)</sup> With second or third disc spring (order separately).

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

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

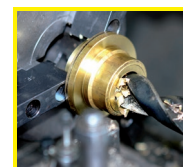
## Replacement Friction Discs and additional Disc Springs

Matching Coupling Product No.	Size	Outer			Outer		
		Product No. Friction Disc <sup>1)</sup>	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

<sup>1)</sup> 2 pieces required.

## Spiders for RNR

Matching Coupling Product No.	Size	Product No. Spare Part Spider 92° Shore, yellow	Torque		Product No. Optional Spider 98° Shore, red	Torque		Weight g
			Nom. Nm	max. Nm		Nom. Nm	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.**

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

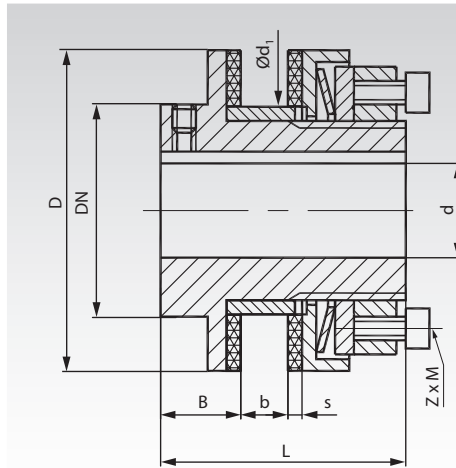
**Material:** Steel, zinc-plated and chromated.

- 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 <sup>-1</sup>	Bore		D mm	DN mm	B mm	Bore of Sprocket d <sub>1</sub> <sup>H8</sup> mm	Width		Bush length		s mm	L mm	Screws Z x M mm	Weight prebored kg
		1 Spring <sup>1)</sup> Nm	2 Springs <sup>2)</sup> Nm		b <sub>min.</sub> mm	b <sub>max.</sub> 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

<sup>1)</sup> With one disc spring (standard version). <sup>2)</sup> 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 <sup>1)</sup>	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 <sup>2)</sup>	320
612 107 00	7	240	612 107 01	250	612 107 02 <sup>3)</sup>	480
612 108 00	8	285	612 108 01	400	612 108 02 <sup>4)</sup>	640

<sup>1)</sup> 2 pieces required. <sup>2)</sup> Set with 16 springs. <sup>3)</sup> Set with 24 springs. <sup>4)</sup> 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](http://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.