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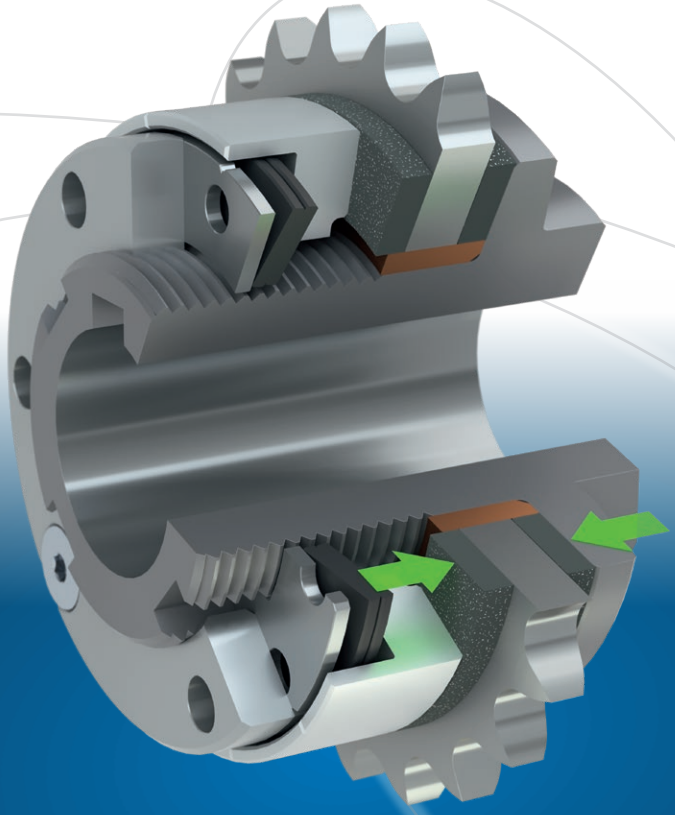


ROBA®-slip hubs

K.123.V16.EN

www.mayr®.com

ROBA® – a Well-known Trade Name

ROBA®-slip hub the load-holding, frictionally-locking safety clutch

ROBA® is a trade name which has been the symbol of quality and experience in clutch construction for decades. A comprehensive range of torque limiters has originated from the robust jaw clutch (ROBA®-safety slip clutch).
ROBA®-slip hub devices are simple to use. The torque table makes it possible to set the torque according to a scale and offers considerably simplified installation. ROBA®-slip hub devices are reasonably-priced drive elements which protect machinery and equipment against costly damage, and against downtimes resulting from time-consuming repairs.
As a result of their high-strength materials and careful manufacture with optimum utilisation of space, ROBA®-slip hub devices are smaller than similar clutches on the market. Twelve different designs and combinations are available. We have a solution for all drive units. However, if any of your wishes remain unanswered, please contact us.

ROBA® stands for: trust in safety.

Application

ROBA®-slip hub devices are used as overload protection for machine drives with chain sprockets, toothed wheels or pulleys. The ROBA®- slip hub is used wherever expensive and sensitive motors, gearboxes or machinery components need to be protected against overloads. If overload occurs, the drive element slips and, therefore, limits the torque.
ROBA®-slip hub devices are used in packing machines, transport systems and equipment, construction machinery, textile machinery, agricultural machinery, mechanical handling equipment, feed units, loading systems, in equipment for the chemical industry and in machinery and equipment in general industrial engineering.

Design

Despite their simple construction, ROBA®-slip hub devices are high-quality machine components. The ROBA®-slip hub is fully machined and phosphated and, therefore, protected against rust. It is a fully enclosed construction, so that dirt is prevented from reaching internal components.
The ROBA®-slip hub, which is a rotating component, fits very easily into all drive systems as a result of its smooth construction. It is particularly suitable for attachment to the outside of machines and for those systems which must be kept clean easily, e.g. in the food industry.
ROBA®-slip hub devices are designed in such a way that they can be adapted very easily to the most varied of working conditions, e.g. high slipping frequency and low torque or low friction work and extremely high torque, as well as all intermediate stages of torque and friction work, and the desired lifetime.

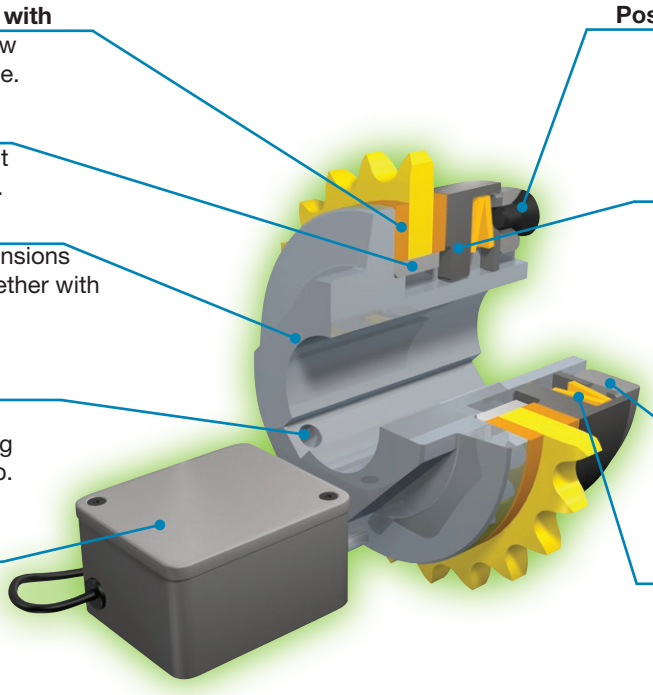
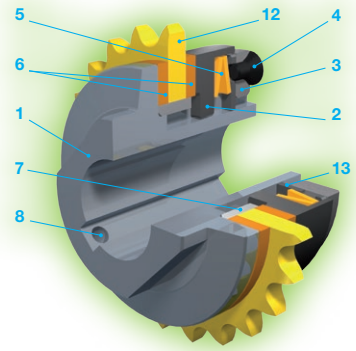


Fig. 1 Type 100.110

Functional Description

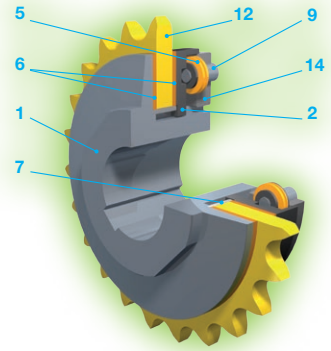
Part List Sizes 0 – 5



1. Hub
2. Thrust washer
3. Adjusting nut 0
4. Locking screw
5. Cup springs
6. Friction linings
7. Bearing bushing
8. Adjusting screw
12. Chain sprocket
13. Lock washer

Fig. 2 Type 100.110, Sizes 0 – 5

Part List Sizes 6 – 12



1. Hub
2. Thrust washer
5. Cup springs
6. Friction linings
7. Bearing bushing
9. Cup spring supporting bolt
12. Chain sprocket
14. Adjusting nut 0

Fig. 3 Type 100.110, Sizes 6 – 12

Contents

Function

The drive element (12) (chain sprocket or V-belt disk) is placed on the bushing (7) as shown in Figure 2 and clamped between the friction linings (6) with the aid of the thrust washer (2), the cup springs (5) and the adjusting nut (3) with the lock washer (13). The more powerfully the cup springs (5) are compressed by the adjusting nut (3), the higher the torque at which the drive element (12) slips. The precise torque adjustment operation is described on page 21.

It should also be noted that the difference in torque after friction lining wear is lowest with single cup spring layering and highest with triple cup spring layering. In addition, a torque adjustment in the uppermost quarter of the maximum torques gives a particularly even adjustment (the spring characteristic curve has its smallest increase in this area). Other friction linings are also available for special applications (see further details on page 19).

The ROBA®-slip hub is available for three different torque ranges.

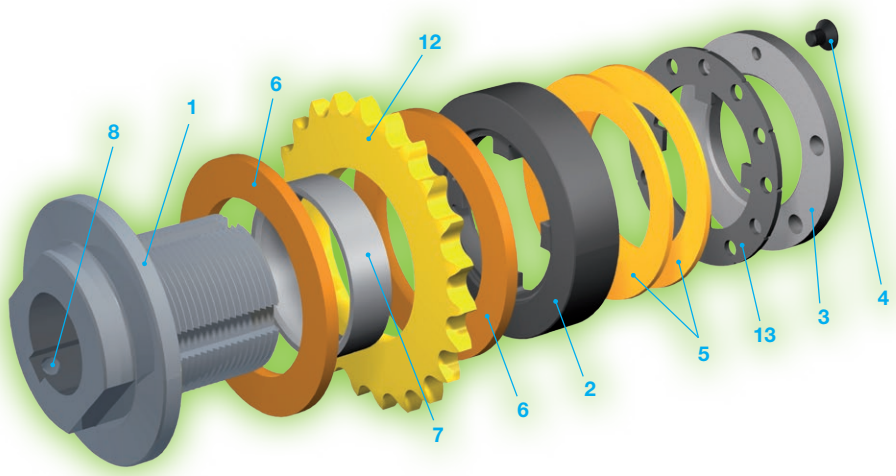


Fig. 4 Type 100.110, Sizes 0 – 5

Rule of thumb:

ROBA®-slip hub for **high friction work and low torque** (**single**-layer cup springs, single contact force).

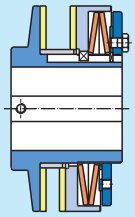
ROBA®-slip hub for **medium friction work and higher torque** (**double**-layer cup springs, double contact force).

ROBA®-slip hub for **low friction work and very high torque** (**triple**-layer cup springs, triple contact force).

Please observe the operating speed or slipping speed (see Explanation on page 19)!

ROBA®-slip hubs Summary of Constructional Designs

ROBA®- slip hub standard



Torque:
2 to 50.000 Nm

Sizes 0 to 12
Type 100._ _ _

- Safety clutch for machine drives requiring protection against overload.
  When the preset overload torque is reached, the drive element slips, preventing damage to the drive system.

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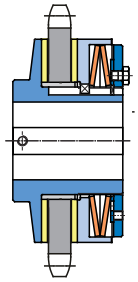
ROBA®-slip hub with standard chain sprocket



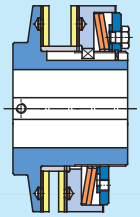
Torque:
6 to 1.400 Nm

Sizes 01 to 5
Type 100._ _ _

- Slip hub complete with chain sprocket as a reasonably-priced drive element with a high safety factor for all chain drives

Page 8

ROBA®-slip hub with rustproof friction linings



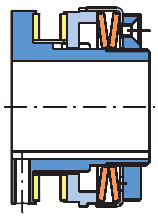
Torque:
6 to 2.400 Nm

Sizes 01 to 6
Type 100._2_

- For drives in open air installations, particularly wet ambient conditions or for long downtimes

Page 9

ROBA®-Co-Pro®



Torque:
5 to 1.500 Nm

Sizes 30 to 50
Type 1000._1000
Type 1010._1000

- Compact, high performance safety clutch

Hub designs:

Design M	Type 1000._1000
Design L	Type 1010._1000

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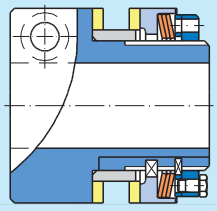
ROBA®-clamp



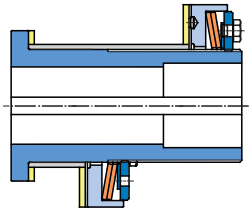
Torque:
2 to 400 Nm

Sizes 0 to 2
Type 106._ _ _

- For shaft ends without a keyway. Enables easy and fast shaft installation.
- The keyless slip hub is better suited to larger shafts than the standard design.

Page 11

ROBA®-min



Torque:
8 to 1.100 Nm

Sizes 1 to 5
Type 121._ _ _
Type 123._ _ _

- For drive elements with particularly small diameters and very large installation widths
- Larger installation width than Type 100, but only capable of transmitting lower torques

Hub designs:

short hub	Type 121._ _ _
long hub	Type 123._ _ _

Page 12

ROBA®-slip hub standard

Type 100._ _ _
Sizes 0 to 12

Sizes 0 to 5
Types 100.1_ _, 100.2_ _ and 100.3_ _

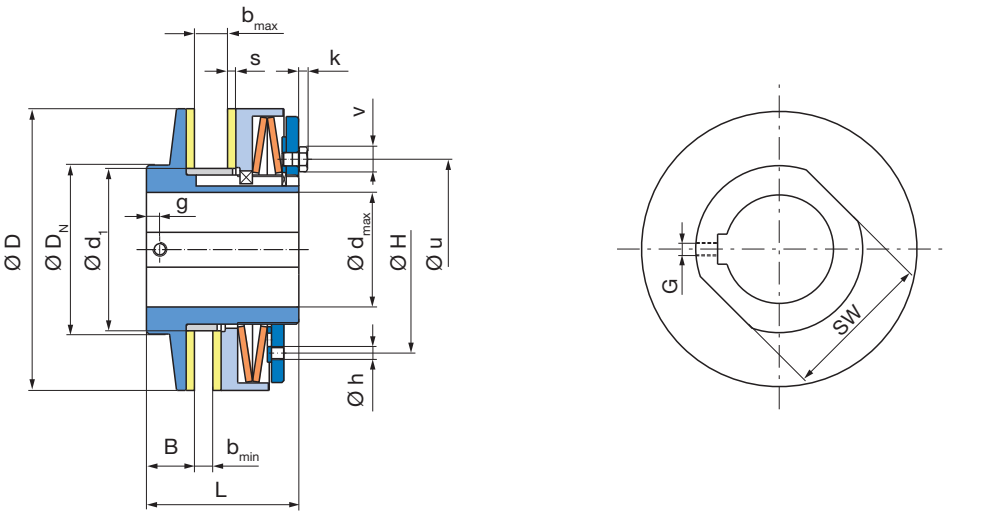


Fig. 5
Type 100.110

Sizes 6 to 12
Types 100.1_ _ and 100.2_ _

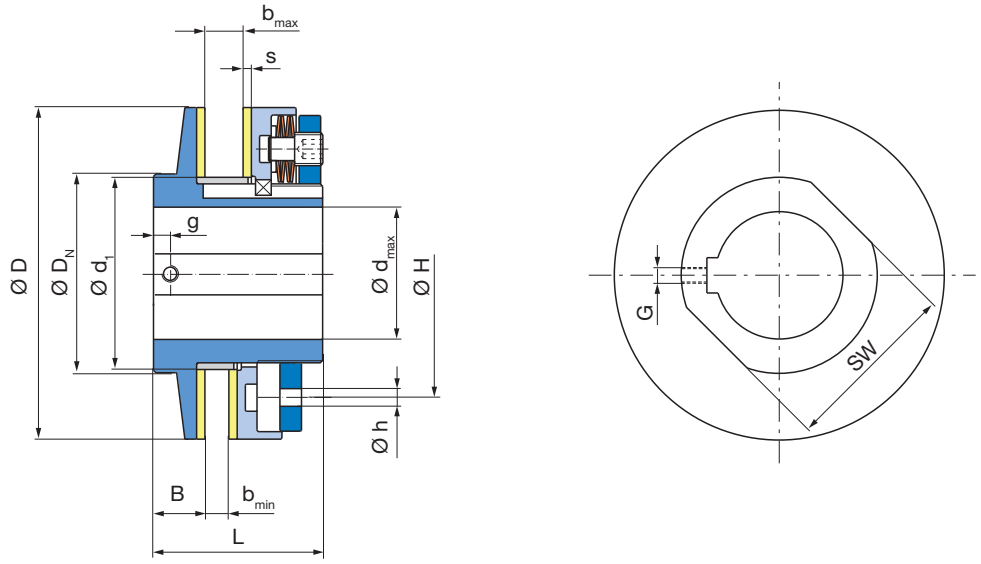


Fig. 6
Type 100.110

ROBA®-slip hub standard

We reserve the right to make dimensional and constructional alterations.

Technical Data (Sizes 0 to 5)				Size						
				0	01	1	2	3	4	5
Limit torques for overload	Type 100.11_	M_G	[Nm]	2 – 10	6 – 30	14 – 70	26 – 130	50 – 250	110 – 550	140 – 700
	Type 100.21_	M_G	[Nm]	10 – 20	30 – 60	70 – 130	130 – 250	250 – 550	550 – 1100	700 – 1400
	Type 100.3_ _	M_G	[Nm]	18 – 30	60 – 90	130 – 200	250 – 400	-	-	-
	Type 100.3_2	M_G	[Nm]	-	-	-	-	550 – 800	1100 – 1600	1400 – 2100
Operating speed [1]		n_{max}	[rpm]	8500	6600	5600	4300	3300	2700	2200
Weight (pilot bored)			[kg]	0.3	0.6	0.9	1.6	3.1	5.4	9.0

Technical Data (Sizes 6 to 12)				Size						
				6	7	8	9	10	11	12
Limit torques for overload	Type 100.11_	M_G	[Nm]	240–1200	400–2000	680–3400	1200–6000	2000–10000	3400–17000	5000–25000
	Type 100.21_	M_G	[Nm]	1200–2400	2000–4000	3400–6800	6000–12000	10000–20000	17000–34000	25000–50000
Operating speed [1]		n_{max}	[rpm]	1900	1600	1300	1100	920	780	690
Weight (pilot bored)			[kg]	12.4	21.2	30.7	79	125	179	278

Dim. [mm]		B	b		D	D_N	d_1^{H8} [8]	d		G	g	H	h	k	L	SW	s	u	v
			b_{min}	b_{max}				d_{min}	d_{max}										
Size	0	8,5	2	6	45	45	35	7	20 [2]	M4	3	37	3	- [7]	33	-	2,5	37	2 [7]
	01	16	3	8	58	40	40	12	22	[3]	4	46	5	- [7]	45	32	3	46	2,5 [7]
	1	17	3	10	68	45	44	12	25	[4]	5	50	5	1,3 [7]	52	41	3	50	3 [7]
	2	19	4	12	88	58	58	15	35	[5]	5	67	6	3	57	50	3	67	10
	3	21	5	15	115	75	72	19	45	[6]	5	84	6	5,5	68	65	4	84	13
	4	23	6	18	140	90	85	25	55	M8	6	104	7	5,5	78	80	4	97	13
	5	29	8	20	170	102	98	30	65	M8	8	125	8	5,5	92	90	5	109	13
	6	31	8	23	200	120	116	40	80	M8	8	150	10	-	102	105	5	-	-
	7	33	8	25	240	150	144	48	100	M10	8	185	10	-	113	135	5	-	-
	8	35	8	25	285	180	170	60	120	M10	8	230	10	-	115	165	5	-	-
	9	53	12	28	350	225	237	57	140	M12	9	290	10	-	162	220	6	-	-
	10	60	15	35	415	255	270	80	160	M12	9	340	10	-	185	250	6	-	-
	11	73	20	45	490	285	305	90	180	M16	11	400	10	-	222	280	7	-	-
	12	79	25	55	555	315	335	100	200	M16	11	450	10	-	250	310	7	-	-

Order Number

Adjusting nut		
standard	**0**	
with radial adjustment [10]	**1**	
for triple layering (for high torque range: Sizes 3 to 5)	**2**	
Bore Hub Ø d^{H7}		
Keyway acc. DIN 6885-1 DIN 6885-3		

__ / 1 0 0 . __ __ __ / __ / __ / __

Sizes 0 to 12		
Torque range [9]		
low	**1**	
medium	**2**	
high [10]	**3**	
Friction lining		
1	standard	
4	for oil running [11]	
5	special low-friction material [11]	
Width of drive element b Dependent on size: if not specified, we deliver the bearing bushing for maximum installation width b_{max}. For narrower drive elements, the bearing bushing is shortened, see page 20.		

Example: Order Number 4 / 100.210 / 50 / 6885-1 / 15

1) See Explanations page 19
2) Size 0: up to Ø 19 keyway acc. DIN 6885-1
over Ø 19 keyway acc. DIN 6885-3
3) Size 01: up to Ø 12 M4, over Ø 12 M5
4) Size 1: up to Ø 12 M4, over Ø 12 up to Ø 17 M5, over Ø 17 M6
5) Size 2: up to Ø 17 M5, over Ø 17 M6
6) Size 3: up to Ø 22 M6, over Ø 22 M8
7) Hexagon socket countersunk screw to ISO 10642/DIN 7991
8) Tolerance value H8 refers to output element bore.
9) See Technical Data, limit torque for overload M_G
10) Only Sizes 0 to 5
11) For available torques, see Table 1, page 19

Technical Explanations

Torques – Cup Spring Layering

The cup spring layering in Figs. 22 – 24 show our ROBA®-slip hub standard design. Each layering results in a different spring characteristic curve or spring force (torque). A rule of thumb when using ROBA®-slip hubs is:

ROBA®-slip hub for high friction work and low torque; single-layer cup spring.

ROBA®-slip hub for medium friction work and larger torques; double-layer cup springs.

ROBA®-slip hub for low friction work and very high torques; triple-layer cup springs.

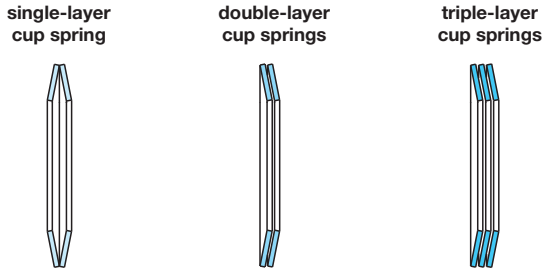


Fig. 22 **Fig. 23** **Fig. 24**

The torque behaviour of the ROBA®-slip hub on friction lining wear is clearly shown in Figs. 25 and 26. With single cup spring layering, the torque reduction on wear is very low (Fig. 25). With double cup spring layering, the change in torque is larger (Fig. 26), and with triple cup spring layering, the torque reduction is highest. However, the cup springs are designed with a relatively flat characteristic curve so that large wear paths can occur without larger drops in torque.

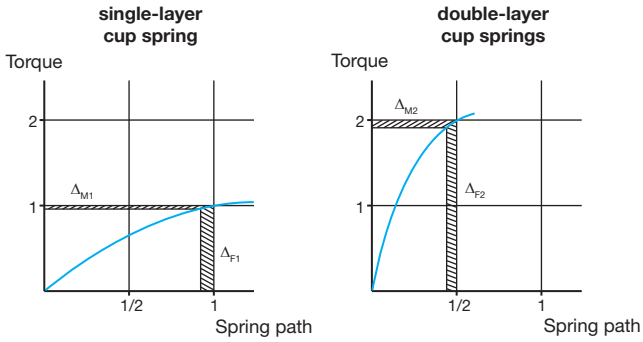


Fig. 25 **Fig. 26**

For special applications, weaker cup springs are available for the individual slip hub sizes, with which the minimum torques can be under-run.

Other cup spring layerings can be produced (e.g. combinations of double and single-layering) individually for special applications. In Figs. 25 and 26 it is shown that a torque adjustment in the uppermost quarter of the spring characteristic curve (torque) produces a particularly even torque, as the spring characteristic curve has its smallest increase in this area.

The torques stated in the Table “Technical Data” refer to drive elements made of steel or cast iron!

During the start-up phase (matching the friction surfaces), after long downtimes and during or after long slipping occurrences, the friction lining wear pattern and the friction coefficiencies may change. This can lead to changes in torque.

Friction Linings

As shown in Table 1 below, four different friction linings are available. The torque and the speed values in the slip hub catalogue are applicable for the standard friction lining during dry running. For other friction linings, please find the correct values in Table 1 or ask the manufacturers for special application values.

Friction lining number	Application	Available torque from $M_{max.}$
1	standard for dry running	100 %
2	rustproof friction pairing	100 %
4	bronze friction lining for oil running	30 %
5	special low-friction material (only for single-layer cup spring layering and with reduced friction)	50 %

Table 1

Speeds

The ROBA®-slip hub is thermically loaded depending on the slipping speed, slip time and the set torque.

To make sure that the ROBA®-slip hub friction linings are not overheated or destroyed, the specified friction parameters must not be exceeded.

The recommended values in the Reference Values Diagram (Diagram 1) show the maximum slipping speed limits of the standard friction linings in dry running.

These speed limits refer to a maximum slip time of 1 second.

For longer slip times, the slipping speed must be reduced.

If in doubt, please carry out the friction work calculations for the respective application.

If the permitted slipping duration is exceeded, the ROBA®-slip hub will be overloaded.
=> Destruction of the friction linings

A speed monitor prevents the drive elements slipping for an excessively long time. Please ask the manufacturers for devices adapted to your application.

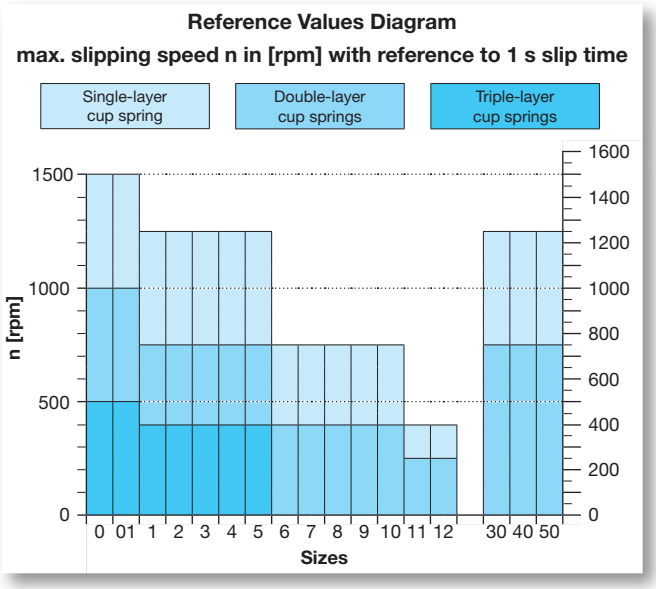


Diagram 1

Technical Explanations

Adjusting Nuts

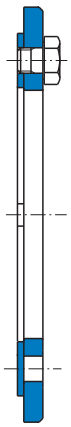


Fig. 27
Adjusting Nut 0
Sizes 0 – 5

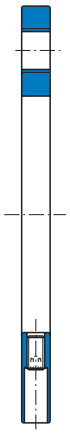


Fig. 28
Adjusting Nut 0
Sizes 6 – 12

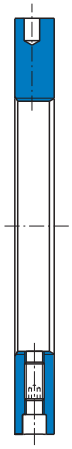


Fig. 29
Adjusting Nut 1
Sizes 0 – 5

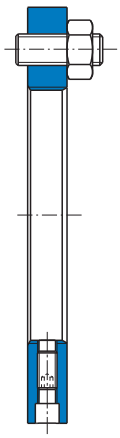


Fig. 30
Adjusting Nut 2
Sizes 3 – 5

The **standard adjusting nut for Sizes 0 – 5** (adjusting nut 0, Fig. 27) is adjusted using a face wrench (Fig. 31). The adjusting nut is secured using a lock washer with four projections as well as a hexagon head screw which is screwed through the adjusting nut into the lock washer bores.

The **standard adjusting nut for Sizes 6 – 12** (adjusting nut 0, Fig. 28) has no lock washer. It is secured against twisting with a radial set screw.

Additionally, we provide an **adjusting nut for radial adjustment** for Sizes 0 – 5. Adjustment takes place here using a hook wrench (Fig. 32). On this design (adjusting nut 1, Fig. 29), the thrust washer must be shortened. The device is additionally secured against twisting using a radial screw-in set screw, which is pressed into one of the four hub keyways.

For triple-layering on the ROBA®-slip hub Sizes 0 – 2, the adjusting nut 0 or 1 is used. On Sizes 3 – 5, the adjusting nut 2 is used (Fig. 30).
The adjusting nut 2 for the ROBA®-slip hub varies from the adjusting nut 0 or 1 for the ROBA®-slip hub as it has six axial set screws for torque adjustment. As with adjusting nut 1, it is secured using a radial set screw.
For high torque adjustments, it may be necessary to lengthen the lever on the face wrench or hook wrench (e.g. extension using a pipe).

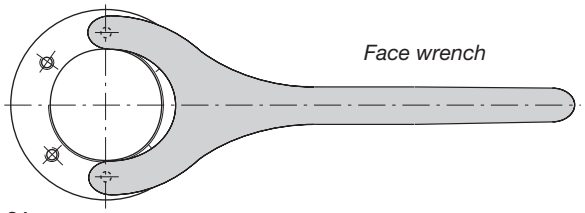


Fig. 31

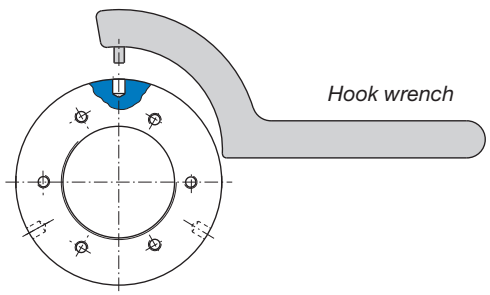


Fig. 32

Bearing Bushing

If the drive element installation width is not specified on order, we deliver the bearing bushing (Fig. 33) for the maximum installation width (b_{max}). If a smaller installation width is required, the bearing bushing must be shortened accordingly on the end without the inner chamfer, see the Example below. The bearing bushing is to be installed with the inner chamfer facing forwards, see Fig. 33.

Example for shortening the bearing bushing: *
ROBA®-slip hub, Size 3, Type 100.210 (see page 7)
Drive element = chain sprocket disk 3/4" x 1/2", z = 23,
chain sprocket width B_1 = 12,7 mm
Bearing bushing width l [mm] according to the formula below:
$l = b + 1.5 . s + 0.5$
$l = 12.7 + 1.5 \cdot 4 + 0.5$
$l = 19.2_{-0.2}$ mm
* The total length of the clutch is not affected.

Bearing bushing width:

$l = b + 1.5 \cdot s + 0.5$	**[mm]**	for standard friction pairing Type 100._10
$l_1 = b + 1.5 \cdot s + 2 \cdot s_1 + 0.5$	**[mm]**	for rustproof friction pairing Type 100._20
$l = b + 2 \cdot s + f$	**[mm]**	for Type 10_0._1000

l	[mm]	=	bearing bushing width (Tolerance – 0.2 mm)
l_1	[mm]	=	bearing bushing width for slip hubs with rustproof friction linings (see page 9)
b	[mm]	=	maximum installation width for drive elements (nominal dimension + tolerance)
s	[mm]	=	Friction lining strength (see page 7 for Type 100._ _0, see page 10 for Type 10_0._1000)
s_1	[mm]	=	Strength of rustproof disk (see page 9)
f	[mm]	=	Dimension for Type 10_0._1000 (see Table 2)

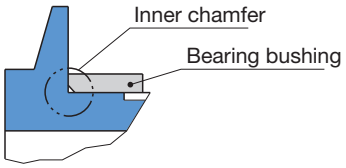


Fig. 33

Size	f	
	Type 1000	Type 1010
30	-0.5	+5.5
40	-1.5	+4.5
50	-1.5	+4.5

Table 2

For high radial load and high slipping frequency, we recommend the ROBA®-slip hub with needle bearing Type 160 (page 14).

Maintenance – Installation

Due to its smooth construction, the ROBA®-slip hub is easy to clean. As the friction linings wear down, the ROBA®-slip hub must be re-adjusted or, if they are very worn, the friction linings must be replaced. Apart from this, the ROBA®-slip hub needs no maintenance.
During installation, please ensure that no grease or oil comes into contact with the friction surfaces. In the area of the friction surfaces, the drive element surface must be finely polished and have exactly plane parallel surfaces (see Fig. 34 and Table 3).

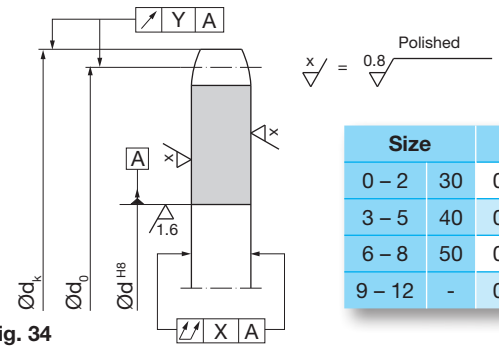
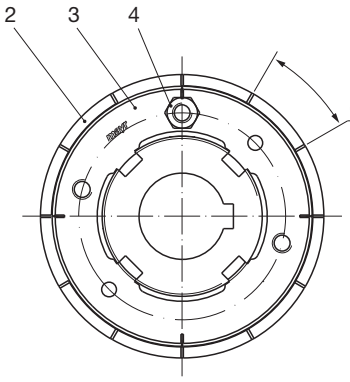


Fig. 34

Size		X	Y
0 – 2	30	0.05	0.10
3 – 5	40	0.08	0.15
6 – 8	50	0.10	0.20
9 – 12	-	0.12	0.30

Table 3

Torque Adjustment



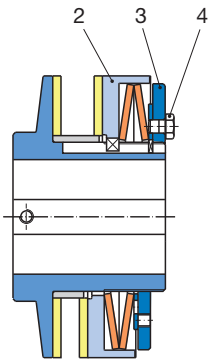


Fig. 35
Sizes 0 – 5

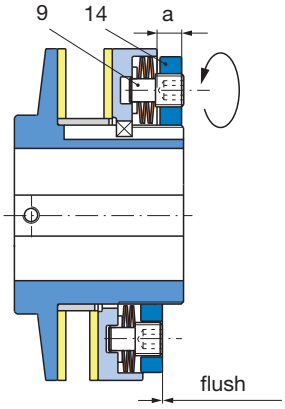


Fig. 36
Sizes 6 – 12

On the ROBA®-slip hub devices Sizes 1 – 5, the rear side of the thrust washer (Item 2) is engraved with 12 markings (24 markings on Size 0), and the adjusting nut (Item 3) is engraved with four markings (see Fig. 35).
The adjusting nut with locking washer is adjusted by hand up to the contact on the cup springs. The four notches on the adjusting nut and the notches on the thrust washer must align. Then the adjusting nut should be turned by the number of graduation lines which equal the required torque.

An Adjustment Table (Fig. 37) is adhered to the clutch, from which the number of graduation lines necessary for the required torque can be read off. If a required torque value lies between two graduation lines, please adjust to the smaller value (positive spring force tolerance). After the torque adjustment has been made, please secure the adjusting nut by turning the locking screw (Item 4).

On ROBA®-slip hub devices Sizes 6 – 12, the dimension “a” (see Fig. 36) can be found in the adhered Table (Fig. 38) and can be adjusted accordingly (see Fig. 36) using the adjusting nut (Item 14).
Finally, the cup spring supporting bolts (Item 9) should be turned stepwise evenly approx. 1/4 turn until they are flush with the adjusting nut (Item 14).

mayr®
power transmission
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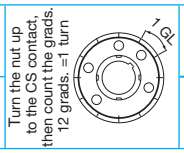
ROBA®-slip hub
Size 3

Surface-ground chain sprocket
for friction lining No. 1,
run-in condition



Single CS	Torque	Nm	50	62	80	100	130	150	200	235	250
	Graduation lines	GL	9	10	12	14	16	18	20	22	24
Double CS	Torque	Nm	250	295	340	375	420	450	480	520	550
	Graduation lines	GL	10	11	12	13	14	15	16	17	18

Fig. 37

mayr®
power transmission
D-87665 Mauerstetten
Made in Germany

ROBA®-slip hub
Size 6

Surface-ground chain sprocket
for friction lining No. 1,
run-in condition

Spring bolt
flush

Single Cup Spring	M [Nm]	240	300	420	540	660	780	900	1020	1140	1200
	a =	14.9	14.8	14.4	14.0	13.6	13.2	12.7	12.2	11.7	11.4
Double Cup Spring	M [Nm]		600	840	1080	1320	1560	1800	2040	2280	2400
	a =		12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.1	10.9

Fig. 38

The ROBA®-slip hub with triple cup spring layering has no Adjustment Table adhered to it.
Torque adjustment is carried out in the following way:
Please tighten the adjusting nut without using a lot of force. Then adjust the individual screws in the adjusting nut evenly in approx. 1/4 turns to the specified dimensions “b” or “a” shown in the Adjustment Diagram (if necessary, please order the Table from the manufacturers). In this way the required torque is obtained.

For initial adjustment, the ROBA®-slip hub should slip several times at 50 % of the torque specified in the Catalogue, in order to achieve a clean wear pattern on the friction lining.

Depending on the slipping frequency, occasional re-adjustment is necessary due to friction lining wear.

The ROBA®-slip hub can of course be delivered complete with a drive element at extra cost, pre-adjusted to the set torque.

For clutch Types with no adhered Adjustment Table, feel free to ask the manufacturers for Adjustment Diagrams.

Installation Examples

ROBA®-slip hub standard

Type 100.110

Features

Simple, robust and reasonably priced torque limitation for protection against overload damages.

Application

Protection of drives with narrow drive elements, e.g. single chain sprocket.

Technical Details

Axial attachment onto the shaft is carried out via a press cover and a screw, screwed into the central thread of the shaft. Slip monitoring is carried out by a speed monitor (available on request) with an external initiator.

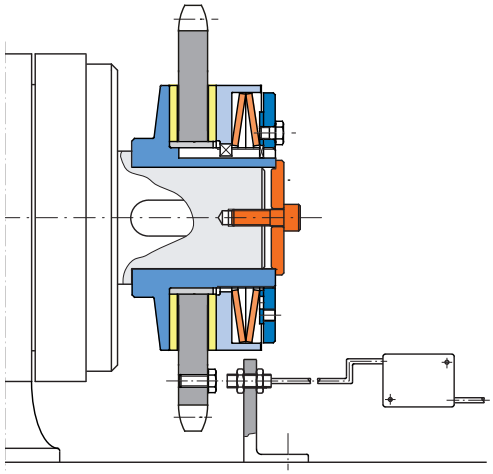


Fig. 39

ROBA®-slip hub with rustproof friction lining

Type 100.220

Features

Slip hub with disks made of stainless steel to prevent the friction linings rusting.

Application

Overload protection for machines operating in open air conditions, in particularly wet conditions or machines subject to long down-times.

Technical Details

The slip hub is held on the shaft via a set screw which applies pressure onto the keyway. The rustproof disks do not adhere to the friction lining and do not form rust compounds. A speed monitor (available on request) prevents excessively long slippage on overload.

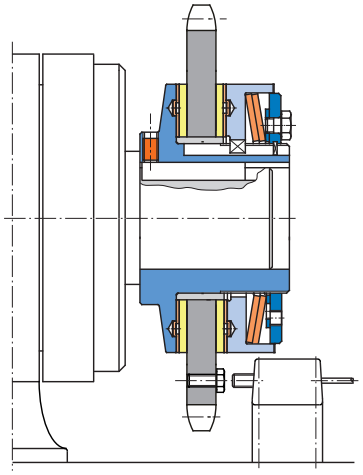


Fig. 40

ROBA®-slip hub with needle bearing

Type 160.210

Features

Needle bearing in place of the standard bearing bushing; suitable for continuous slipping at low speeds and torques.

Application

Drives with high radial loads, high slipping frequency and increased shaft run-out accuracy.

Technical Details

Axial attachment onto the shaft is carried out via a set screw and a press cover, or, as indicated in the drawing, via a locking ring.

The width of the drive element is not variable due to the fixed needle bearing length.

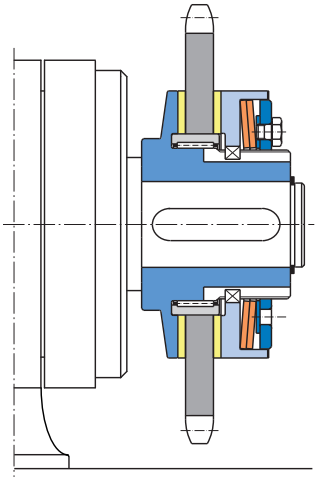


Fig. 41

ROBA®-min

Type 121.210

Features

Slip hub with a standard friction lining and a small bronze friction lining on the hub collar side.

Application

For drive elements with very small outer diameters and large installation widths.

Technical Details

The hub collar and a friction lining are significantly reduced.

On the side with the standard friction lining, an intermediate flange is additionally attached between lining and drive element and pinned to the drive element.

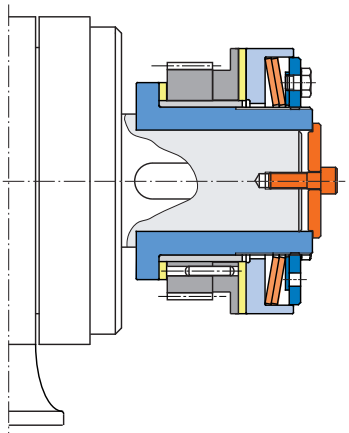


Fig. 42

Installation Examples

ROBA®-max

Type 170.110

Features

Slip hub with a long hub, the transmittable torques correspond to the standard ROBA®-slip hub.

Application

For very wide drive elements, e.g. multiple-row-chain sprockets.

Technical Details

The ROBA®-max can take drive elements with a large width range. The bearing bushing is modified to the required installation width. Attachment onto the shaft is carried out via a set screw which applies pressure onto the keyway.

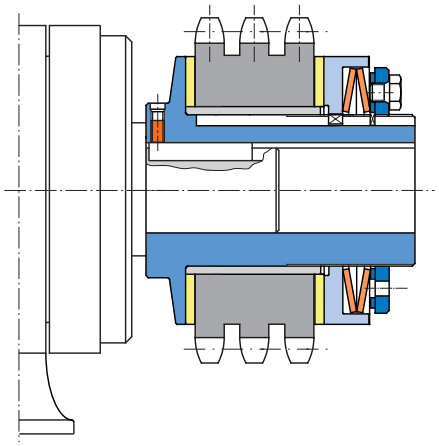


Fig. 43

ROBA®-lastic

Type 131.110

Features

Slip hub for connection of two shafts with polygon-shaped, highly flexible rubber elements.

Application

Overload protection, connection of two shafts in drives with large shaft misalignments, impacts and torsional vibrations.

Technical Details

The slip hub is attached onto the shaft using a press cover. The flexible coupling hub sits without attachment frictionally-locked on the shaft. Torque transmission takes place via a rubber element which has a high misalignment compensation capability and damps torsional vibrations and impacts.

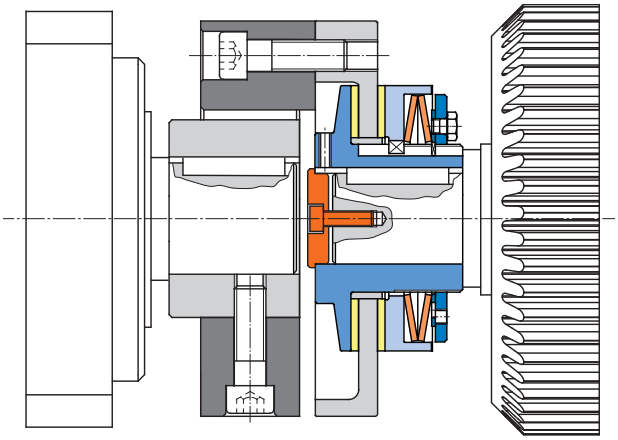


Fig. 44

ROBA®-LD - torsionally rigid

Type 134.110

Features

Slip hub combined with a torsionally rigid flexible all-steel coupling (ROBA®-D coupling).

Application

Overload protection, connection of two shafts and shaft misalignment compensation with low torsional backlash torque transmission.

Technical Details

The slip hub is attached using a press cover. The ROBA®-D hub is attached using a set screw onto the shaft. The ROBA®-D coupling transmits the torque backlash-free. Low torsional backlash results from the thrust washer jaw backlash in the slip hub outer keyways.

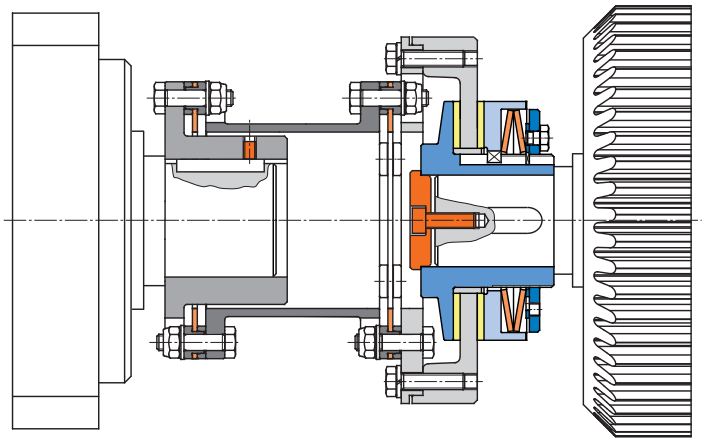


Fig. 45