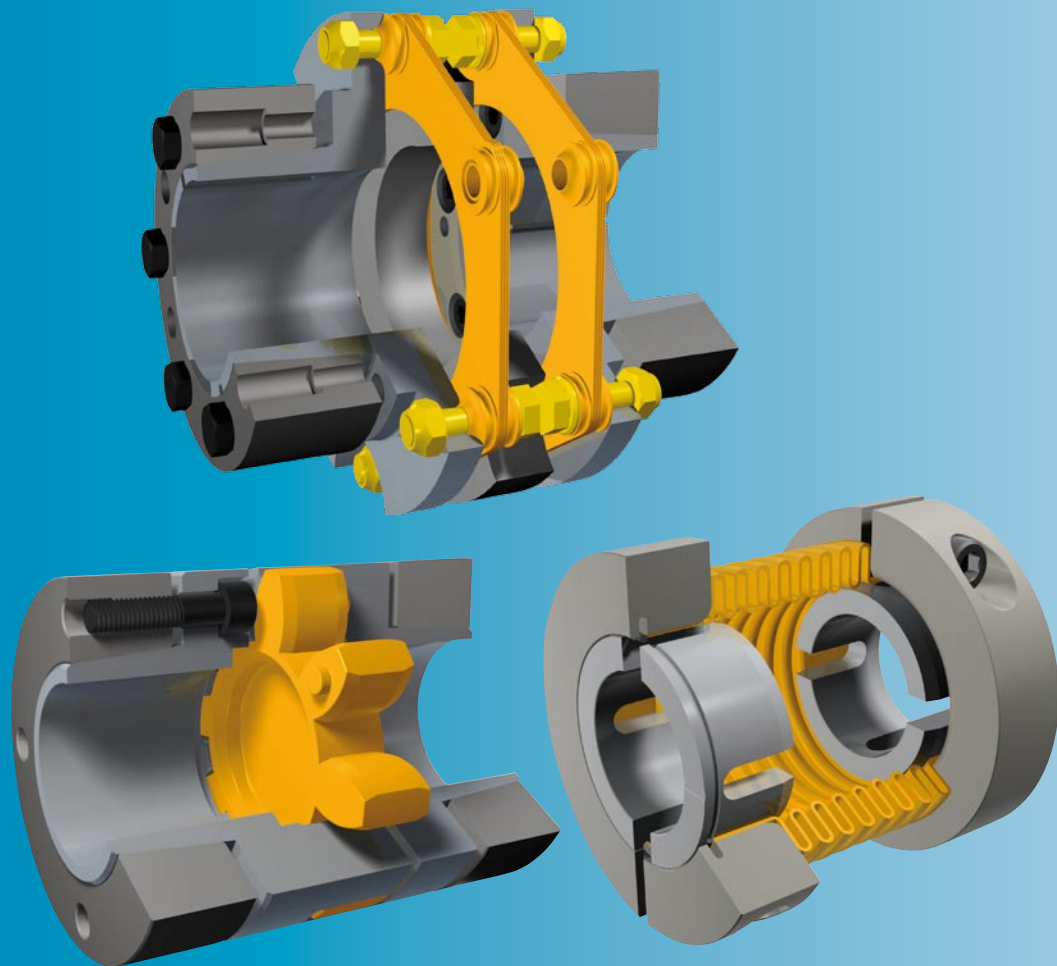


Shaft Couplings

Backlash-free Torque Transmission
Compensation of Shaft Misalignment



www.mayr.com

IMG.900.V06.GB

mayr[®]
your reliable partner

mayr[®] -your reliable partner

What is your definition of reliability?

We define reliability as the highest product quality and competent service from the initial contact right up to the after-sale service

- Largest variety in selection of standard products
- Market leader's competence arising from decades of experience in the development, production and application of power transmission products
- Optimum product selection due to our expertise in design and calculation
- Reliable component dimensioning
- Intelligent platform (modular construction)
- High flexibility for individual requests and customer-tailored solutions
- Quality-inspected suppliers
- Modern, highly robust materials
- 100% quality control
- Certified according to DIN EN ISO 9001:2000
- Personal supervision from the first contact right up to the after-sale service
- Worldwide local service network
- CAD-files available online to save time and costs during construction
- 24-hour delivery service for preferred products
- Short delivery times and on-time delivery
- Unlimited replacement part availability worldwide



A Worldwide Presence

Our Sales and Service network is constantly expanding. We guarantee you and your customers almost all over the world local representation. With eight branch firms in France, Switzerland, Italy, England, Poland, the USA, Singapore and China as well as around 30 representatives and eight subsidiaries in Germany, we provide local service for our customers in all important industrial areas.



Total Quality Management

Product Quality

Every delivery which leaves our firm has been subjected to a careful quality inspection, meaning that you are able to rely 100 % on *mayr*® products. If required, we pre-adjust our clutches and brakes accurately to the requested values and confirm the product characteristics with an Inspection Report.

Quality Management

mayr® uses the term quality to describe its products and services. Certification of our quality management confirms the quality-consciousness of our colleagues at every level of the company.

Our integrated management system is certified according to **DIN EN ISO 9001:2000 (Quality)** and **DIN EN ISO 14001 (Environment)** and complies with the **OHSAS 18001/OHRIS (Occupational Health and Safety)** demands.



Individual and Flexible Logistics

Flexible and optimally qualified colleagues ensure that your order is delivered according to schedule and with the most appropriate delivery method. We take into account your individual packaging and dispatch regulations as a matter of course. Our modern high rack warehouse has a permanently available stock of our wide standard product selection.

And if you are really in a hurry, simply use our uniquely-quick basic product delivery service!



Construction and Development

Innovations for Your Success

With our innovative and economical solutions, we are able to set new records in the field of power transmission. Our many worldwide patents prove our constant ambition of developing better and technologically superior products.

Highly qualified engineers, high-performance 3D-CAD-systems and the most up-to-date FEM calculation aids used in our Development and Construction departments mean that our business is perfectly equipped to offer our customers effective solutions.

Experts for all Power Transmission Questions

Exploit our know-how, gained by decades of experience in the development, production and application of drive technology products. Our experts in Construction and Development are happy to advise you personally and competently when selecting and dimensioning the drive solution you require.

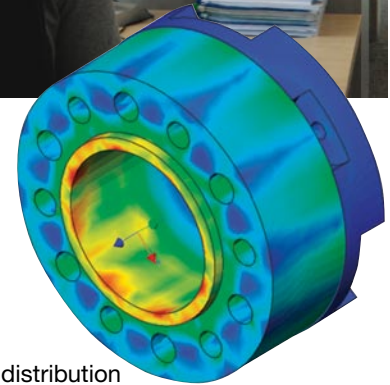


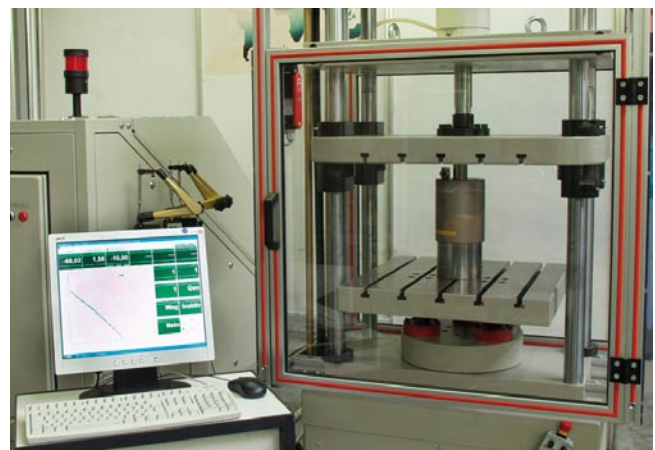
Illustration of the stress distribution in a backlash-free shaft connection

From Prototype to Finished Product

No mayr® product is released onto the market until it has proved its functional capabilities and reliability in extreme, long-term tests.

The spectrum of testing equipment is as varied as our range of products:

- Friction work test stands
- Wear test stands
- Noise measurement room with highly accurate noise measurement inspection devices
- Torque measurement stands up to 200.000 Nm
- Impact and alternating load test stands
- Force test stands
- Linear movement test stands
- Continuous performance test stands
- Magnetic flow measurement test stands
- High-speed test stands up to 20.000 rpm
- Misalignment and angular misalignment test stands
- Load and measurement test stands for DC motors



Product Data: Our 24-hour Service

Our website offers you detailed information 24 hours per day, 365 days per year with no delays. Here you can find not only the latest catalogues and technical documentation but also CAD-files for cost-saving construction of our products.

Unsurpassed - Our Standard Programme

For safety clutches, safety brakes, backlash-free shaft couplings and high-quality DC drives, we offer you a complete product range with market and branch optimised constructions and designs.

The Optimum Shaft Coupling for every Drive

Each drive has its own specific characteristics and therefore places different demands on the couplings which transmit the torque from one shaft to the second and which compensate for the resulting shaft misalignments. In most cases only backlash-free couplings are able to meet the requirements for high-speed, dynamic or reversing precision drives.

mayr® power transmission has three of the most established and most attractive backlash-free shaft couplings in its programme:

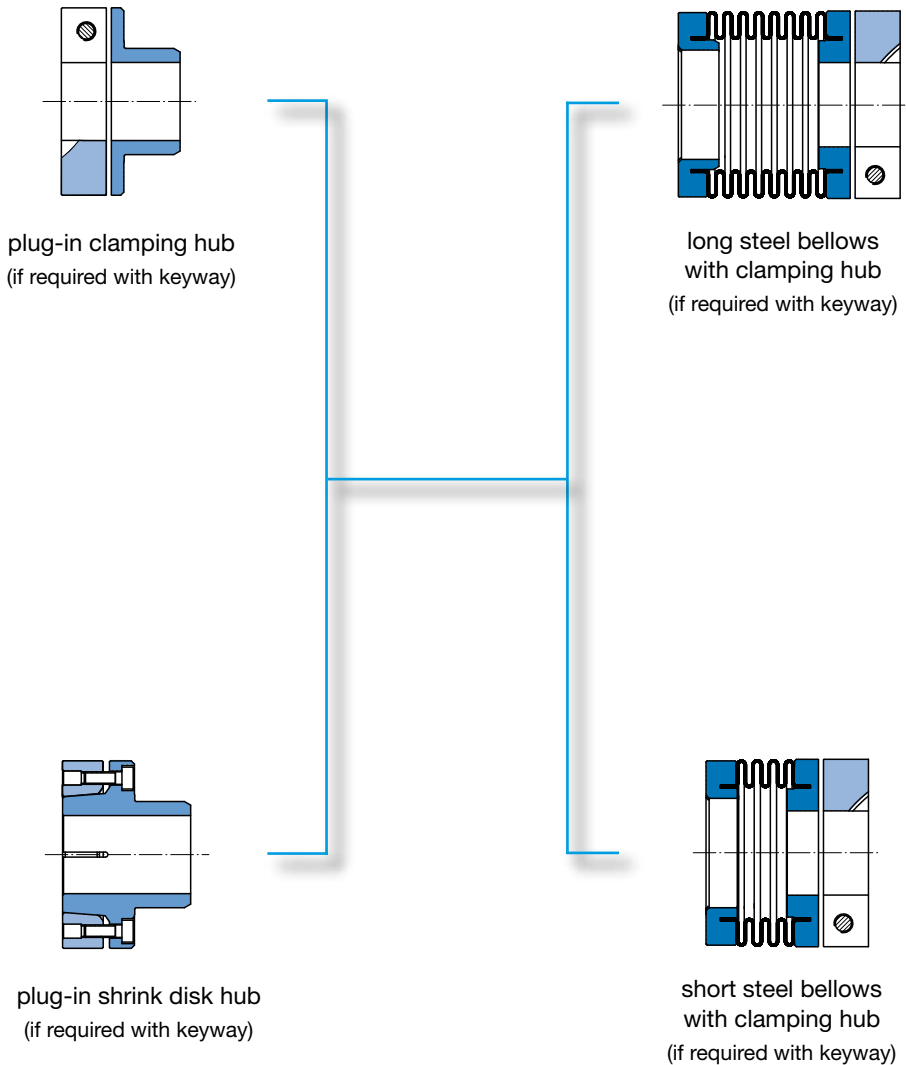
- **Disk pack couplings,**
- **Steel bellows couplings** and
- **Elastomer couplings**

Therefore, mayr® offers an optimum solution for many different drives.

Overview: Backlash-free Shaft Couplings Types, Designs, Characteristics

primeflex Steel bellows couplings Page 6	ROBA®-DS Servo couplings Page 8	smartflex® Steel bellows couplings Page 10	ROBA®-ES Elastomer couplings Page 12	ROBA®-DS All-steel couplings Page 14	EAS®-control-DS Torque measurement couplings Page 16	ROBA®-DS All-steel couplings Page 18
Flexible element						
Steel bellows	Disk pack	Steel bellows	Plastic element	Disk pack	Disk pack	Disk pack
Nominal torque range in Nm						
24 - 120	35 - 150	16 - 700	4 - 1040	190 - 24000	190 -1600	22000 - 110000
Max. permitted speed in rpm						
8000	22500	10000	28000	13600	9500	3600
Shaft diameter in mm						
10 - 45	10 - 45	8 - 85	6 - 80	14 - 170	14 - 110	on request
Max. permanent operation temp. in °C						
120	100	120	100	250	70	250
Torsionally rigid						
x	x	x		x	x	x
Torsionally flexible						
			x			
Vibration damping						
			x			
Can be combined with safety clutch						
x	x	x	x	x		x
Can be integrated with torque measurement						
				x		x
Distance between shaft ends						
graduated	variable	graduated	fixed	variable	fixed	variable
Single-joint design						
	x		x	x		x
• Shaft misalignment compensation axial						
	x		x	x		x
• Shaft misalignment compensation radial						
			x			
• Shaft misalignment compensation angular						
	x		x	x		x
Double-joint design						
x	x	x		x	x	x
• Shaft misalignment compensation axial						
x	x	x		x	x	x
• Shaft misalignment compensation radial						
x	x	x		x	x	x
• Shaft misalignment compensation angular						
x	x	x		x	x	x
ATEX design acc. 94/9 EC						
	x		x	x		
Product catalogue						
P.933.V_._GB	K.950.V_._GB	K.932.V_._GB	K.940.V_._GB	K.950.V_._GB	K.950.V_._GB	P.950000.V_._GB

Modular Structure

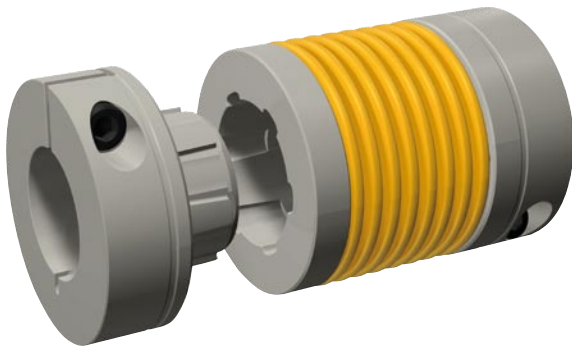


According to German notation, decimal points in this catalogue are represented with a comma (e.g. 0,5 instead of 0.5).
We reserve the right to make dimensional and constructional alterations.

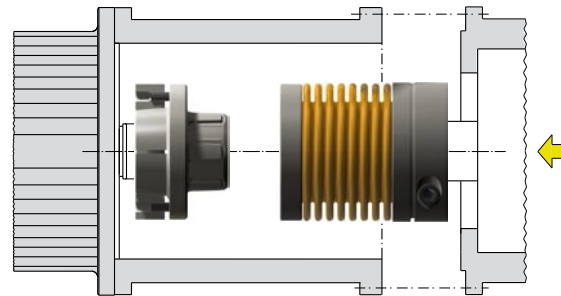
For detailed information, detailed technical data and dimensions, please see our product catalogue P.933.V_._GB.

Characteristics and Advantages

- Plug-in connection
- Backlash-free
- Can be de-installed even after longer operating periods without damaging the steel bellows
- Extremely compact and very high performance density
- Easy to install via clamping or shrink disk connections
- Frictionally-locking and positive-locking shaft-hub connections
- Excellent misalignment capability
- Can be variably dimensioned via the modular system
- Cost-effective



Installation Example

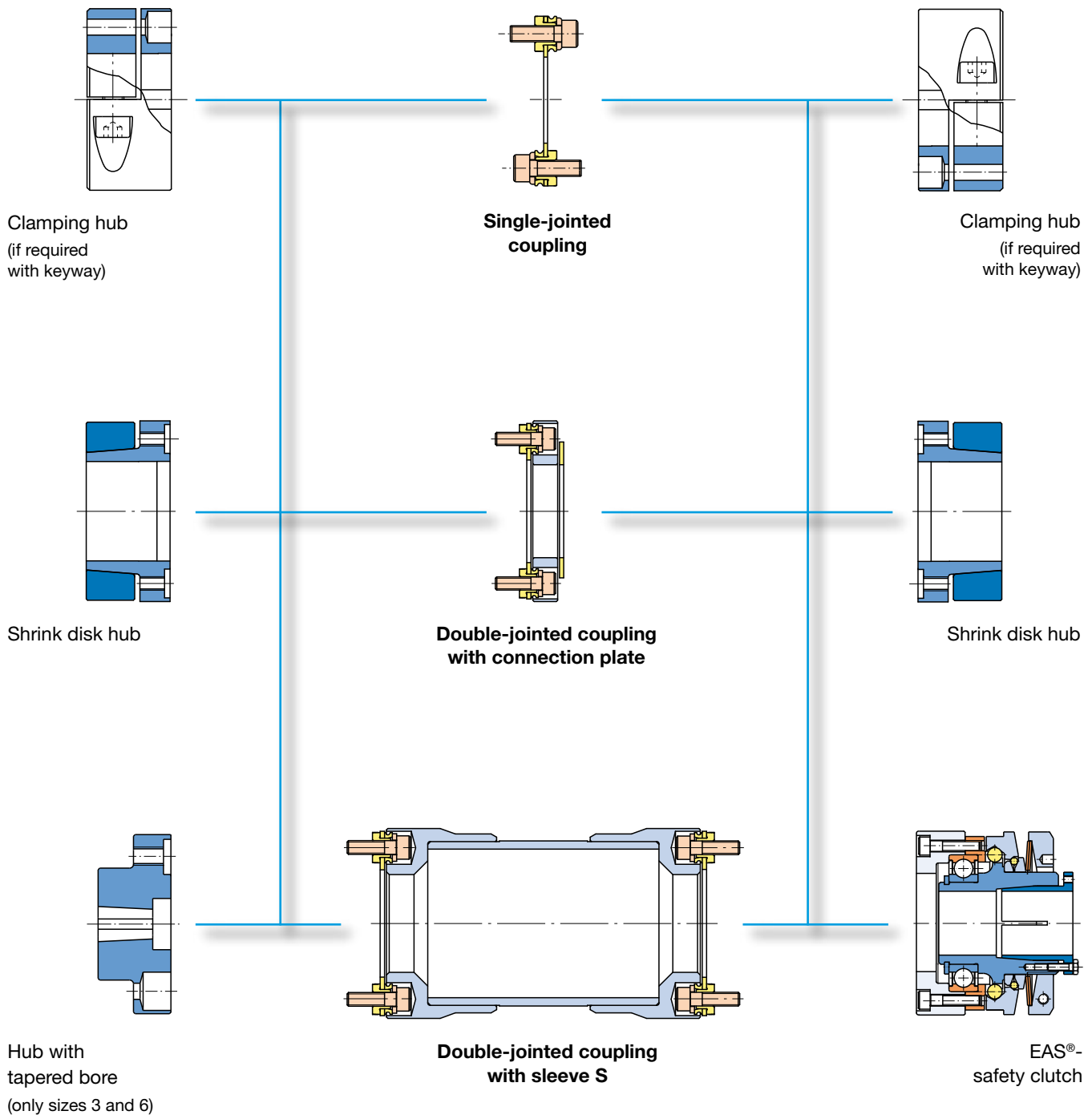


The primeflex®-steel bellows coupling transmits the torque backlash-free between the motor shaft and the gear shaft. By applying plug-in shrink disk hubs (see Installation Example) or plug-in clamping hubs, the primeflex®-steel bellows couplings can be mounted in areas which are difficult to access.

Technical Data, Dimensions				Size			
				1	2	3	
Nominal torque		T_{KN}	[Nm]	24	60	120	
Outer diameter			[mm]	47	60	79	
Clamping hub	Minimum bore		[mm]	12	19	25	
	Maximum bore		[mm]	25	35	45	
	Maximum speed	n_{max}	[rpm]	8000	6000	4000	
Length	long steel bellows		[mm]	77	93	117	
	short steel bellows		[mm]	62	74	92	
Permitted ¹⁾ misalignments	Axial displacement	long steel bellows	ΔK_a	[mm]	0,2	0,25	0,25
		short steel bellows	ΔK_a	[mm]	0,1	0,15	0,15
	Radial misalignment	long steel bellows	ΔK_r	[mm]	0,2	0,3	0,3
		short steel bellows	ΔK_r	[mm]	0,1	0,1	0,1
	Angular misalignment	long steel bellows	ΔK_w	[°]	1	1	1
		short steel bellows	ΔK_w	[°]	1	1	1
Torsional spring rigidity	long steel bellows	C_T	$[10^3 \frac{Nm}{rad}]$	9	22	50	
	short steel bellows	C_T	$[10^3 \frac{Nm}{rad}]$	18	44	100	

1) The permitted misalignments must not simultaneously reach their max. value.

Modular Structure

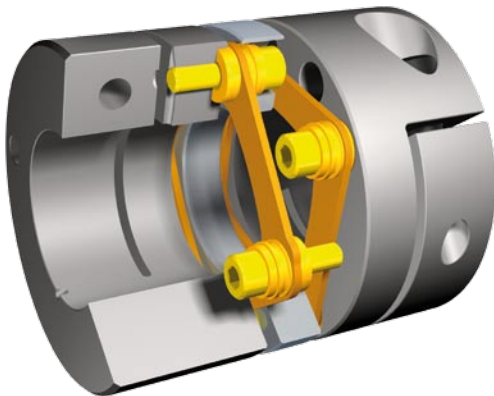


Also available in ATEX design according to the directive 94/9 EC (ATEX 95).

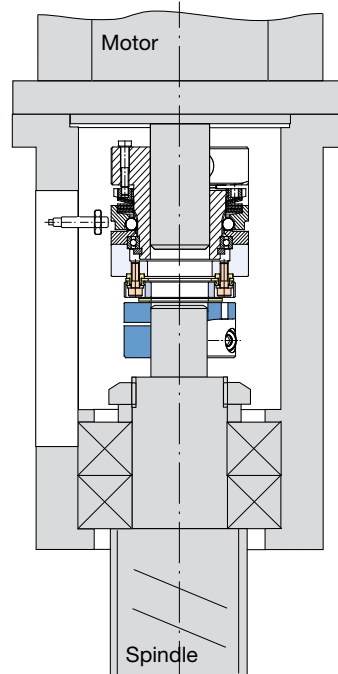
For detailed information, detailed technical data and dimensions, please see our product catalogue K.950.V_._GB.

Characteristics and Advantages

- ROBA®-DS servo couplings are made of steel and high-strength aluminium alloys – the basis of these extremely compact designs.
- Due to their high performance density, they transmit high torques at comparably low volumes.
- Their low mass moment of inertia also predestines ROBA®-DS servo couplings for highly dynamic drive systems with high speeds.
- The flexible disk pack compensates for shaft misalignments and transmits the torque backlash-free with a high torsional rigidity.
- ROBA®-DS servo couplings are absolutely wear-free and maintenance-free.



Installation Example



ROBA®-DS shaft coupling combined with an EAS®-safety clutch. Backlash-free and torsionally rigid torque transmission between the motor shaft and the spindle shaft. Compensation of axial, radial and angular misalignments.

Technical Data, Dimensions			Size				
			3	6	10	15	
Nominal torque ¹⁾		T_{KN} [Nm]	35	60	100	150	
Peak torque ²⁾		T_{KS} [Nm]	52	90	150	225	
Alternating torque		T_{KW} [Nm]	21	36	60	90	
Outer diameter		[mm]	45	56	69	79	
Clamping hub	Minimum bore		[mm]	10	14	19	25
	Maximum bore		[mm]	20	28	35	42
	Maximum speed ³⁾		n_{max} [rpm]	13500	10800	9000	7800
	Length single-jointed coupling		[mm]	48,5	52,6	67	69,9
	Min. length double-jointed coupling		[mm]	59	64,7	79,5	82,8
Permitted ⁴⁾ misalignments	Axial displacement ^{5) 6)}		ΔK_a [mm]	0,5	0,7	0,9	1,1
	Radial misalignment ⁵⁾	with connection plate	ΔK_r [mm]	0,15	0,15	0,2	0,2
		with special sleeve	ΔK_{rH} [mm]	Please contact the manufacturer.			
	Angular misalignment per disk pack		ΔK_w [°]	1,0	1,0	1,0	1,0
Torsional spring rigidity		disk pack $C_{T LP}$ [$10^3 \frac{Nm}{rad}$]	17	35	60	145	

1) Valid for max. permitted shaft misalignments.

2) Valid for constant load direction, max. load cycles $\leq 10^5$.

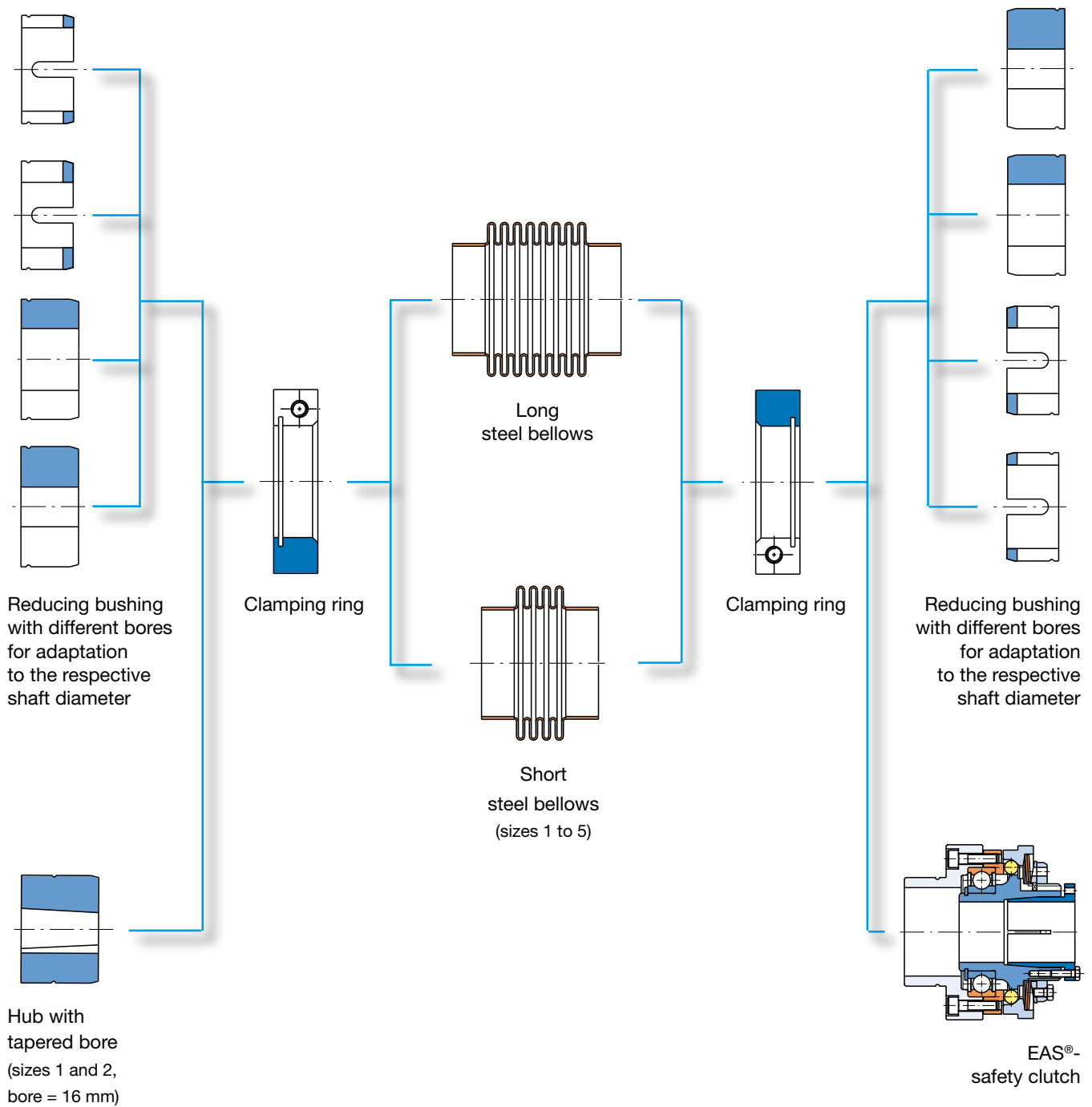
3) Not valid for coupling with special sleeve.

4) The permitted misalignments must not simultaneously reach their max. value.

5) The values refer to couplings with 2 disk packs.

6) Only permitted as a static or virtually static value.

Modular Structure

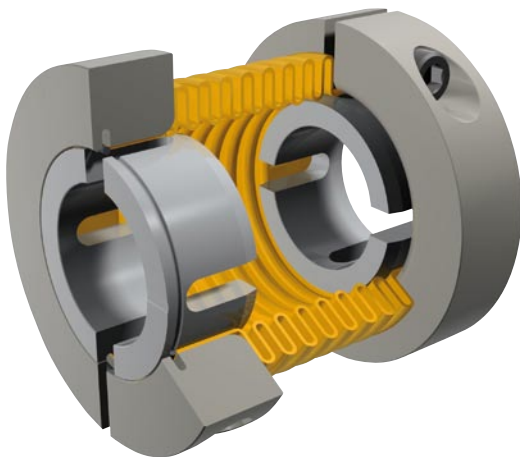


For detailed information, detailed technical data and dimensions, please see our product catalogue K.932.V_._GB.

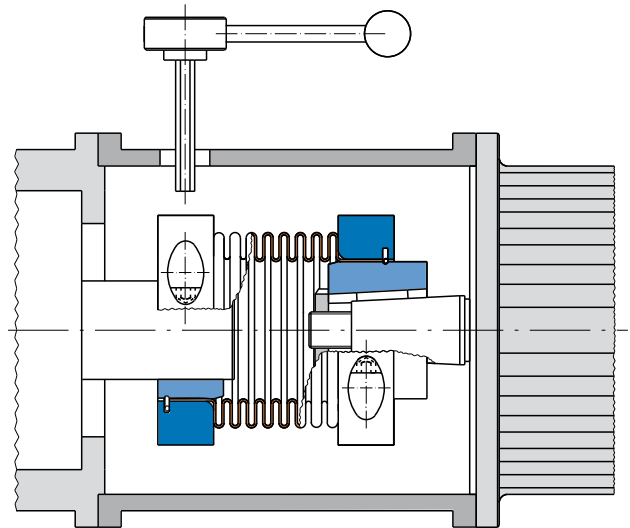
This catalogue is also available for download as a pdf file on our website www.mayr.com.

Characteristics and Advantages

- smartflex®-steel bellows couplings compensate for axial, angular and radial shaft misalignments.
- Backlash-free shaft attachment, backlash-free torque transmission and high torsional rigidity provide high precision in the drive line.
- The easy and fast shaft attachment saves installation time.
- Due to the ingeniously simple set-up, the price-performance ratio is extremely advantageous.
- On radial misalignment, the misalignment capability of smartflex®-couplings is up to three times higher than the misalignment capability of common steel bellows couplings.
- The high misalignment capability eliminates the most common accident cause on previous generations of steel bellows.
- A flexible modular structure minimises storage and provides high availability.



Installation Example

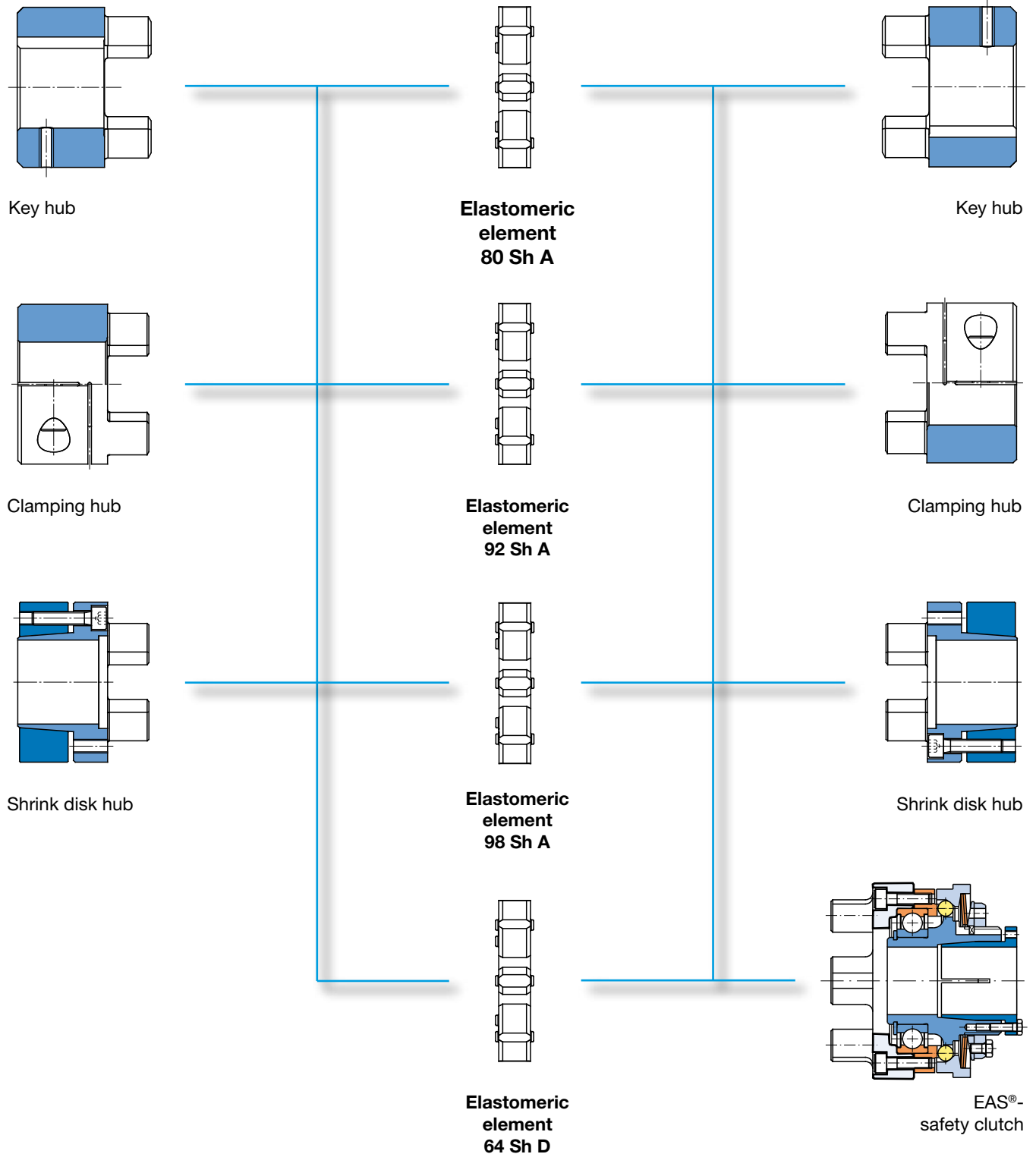


By applying clamping ring hubs, the smartflex®-steel bellows couplings can be mounted in areas which are difficult to access. Please provide an opening in the bell housing for the Allen wrench as depicted in the example.

Technical Data, Dimensions				Size						
				0	1	2	3	4	5	
Nominal torque		T_{KN}	[Nm]	16	40	100	200	400	700	
Outer diameter			[mm]	46	57	72	94	118	146	
Reducing bushing	Minimum bore		[mm]	8	11	16	18	30	40	
	Maximum bore		[mm]	19	25	36	50	62	85	
	Maximum speed		n_{max}	[rpm]	10000	8000	6000	4000	3000	2500
Length	long steel bellows		[mm]	49,5	59,3	72	90,3	115	124	
	short steel bellows		[mm]	-	43,7	52,5	65,6	87	98	
Permitted ¹⁾ misalignments	Axial displacement	long steel bellows	ΔK_a	[mm]	0,4	0,6	0,8	0,8	0,8	0,6
		short steel bellows	ΔK_a	[mm]	-	0,3	0,4	0,4	0,6	0,6
	Radial misalignment	long steel bellows	ΔK_r	[mm]	0,3	0,4	0,5	0,5	0,5	0,5
		short steel bellows	ΔK_r	[mm]	-	0,1	0,1	0,1	0,1	0,1
	Angular misalignment	long steel bellows	ΔK_w	[°]	3	3	3	3	1,5	1,0
		short steel bellows	ΔK_w	[°]	-	1,5	1,5	1,5	1,2	1,0
Torsional spring rigidity	long steel bellows	C_T	$[10^3 \frac{Nm}{rad}]$	4	9	22	50	125	305	
	short steel bellows	C_T	$[10^3 \frac{Nm}{rad}]$	-	18	44	100	168	380	

1) The permitted misalignments must not simultaneously reach their max. value.

Modular Structure



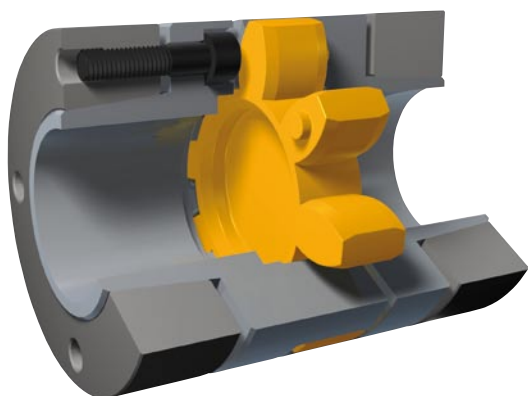
Also available in ATEX design according to the directive 94/9 EC (ATEX 95).

For detailed information, detailed technical data and dimensions, please see our product catalogue K.940.V_._GB.

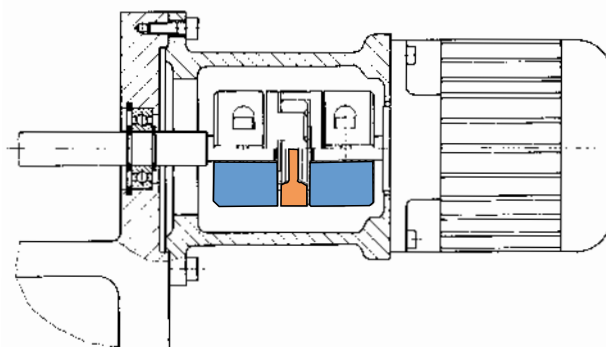
This catalogue is also available for download as a pdf file on our website www.mayr.com.

Characteristics and Advantages

- ROBA®-ES couplings transmit the torque backlash-free via pre-tensioned elastomer elements and compensate for shaft misalignments.
- Rigidity and damping behaviour are variable due to four elastomeric elements per size in different Shore hardnesses.
- ROBA®-ES elastomer couplings are insertable and are, therefore, also suitable for blind installation.
- The couplings are maintenance-free, media-resistant and temperature-resistant. This guarantees the highest operational safety.
- ROBA®-ES couplings are torsionally flexible within narrow areas. However, in comparison to the toothed belt drive, their rigidity is still 2 to 4 times higher.



Installation Example

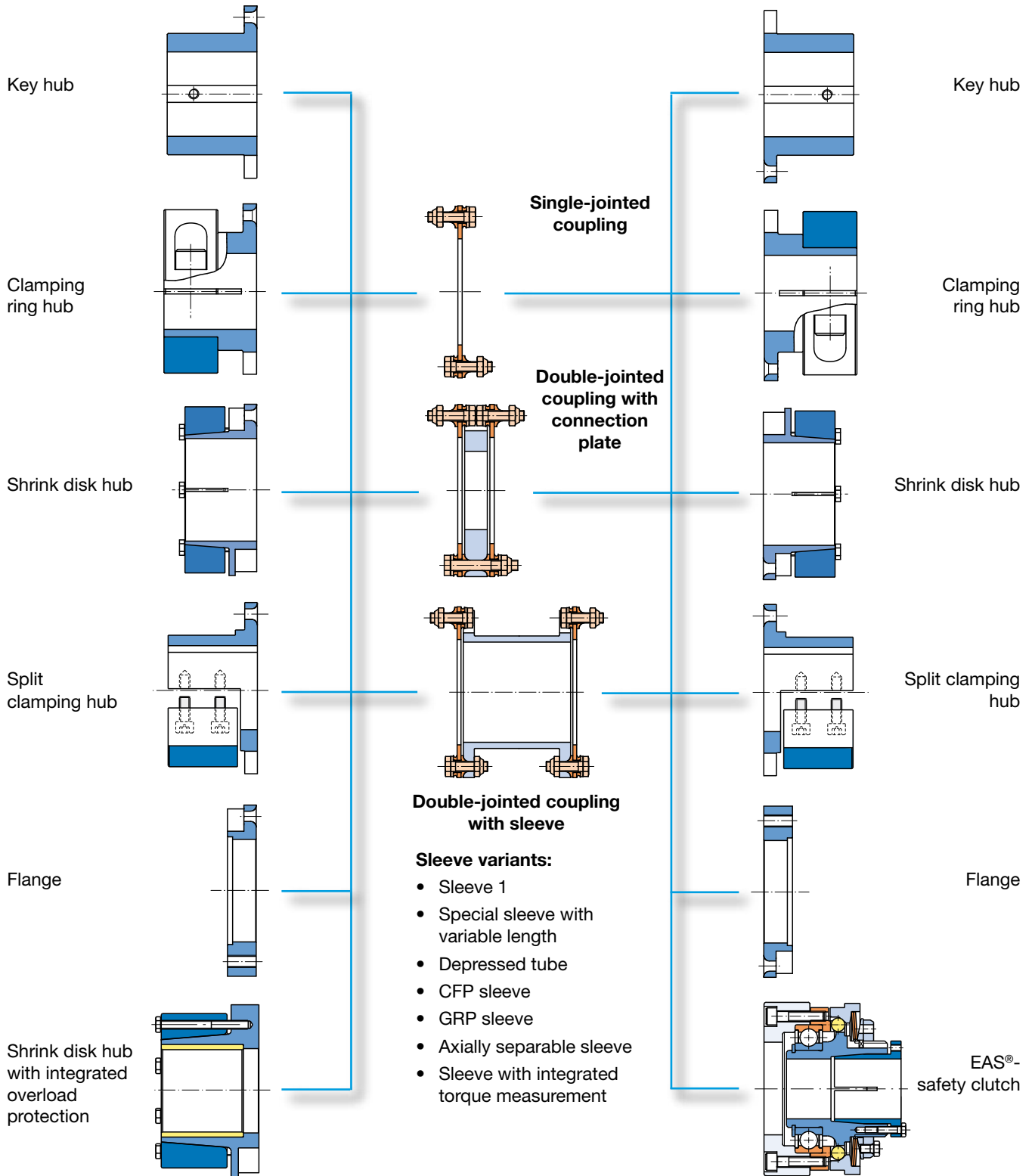


The ROBA®-ES shaft coupling transmits the torque backlash-free between the motor shaft and the output shaft. It also compensates for axial, radial and angular shaft misalignments.

Technical Data, Dimensions				Size									
				14	19	24	28	38	42	48	55	65	
Nominal torque	Elastomeric element hardness 98 Sh A	T_{KN}	[Nm]	13	17	60	160	325	450	525	685	1040	
Peak torque	Elastomeric element hardness 98 Sh A	T_{KS}	[Nm]	26	34	120	320	650	900	1050	1370	2080	
Alternating torque	Elastomeric element hardness 98 Sh A	T_{KW}	[Nm]	See coupling dimensioning in the current ROBA®-ES catalogue.									
Outer diameter			[mm]	30	40	55	65	80	95	105	120	135	
Shrink disk hub	Minimum bore		[mm]	6	10	15	19	20	28	35	40	45	
	Maximum bore		[mm]	14	20	28	38	45	50	60	70	75	
	Maximum speed		n_{max}	[rpm]	28000	21000	15500	13200	10500	9000	8000	6300	5600
Length			[mm]	50	66	78	90	114	126	140	160	185	
Elast. element hardness 98 Sh A	Permitted misalignment ¹⁾	axial	ΔK_a	[mm]	1,0	1,2	1,4	1,5	1,8	2,0	2,1	2,2	2,6
		radial	ΔK_r	[mm]	0,09	0,06	0,1	0,11	0,12	0,14	0,16	0,17	0,18
		angular	ΔK_w	[°]	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9
Torsional spring rigidity	static	$C_{T stat.}$	$[10^3 \frac{Nm}{rad}]$	0,12	0,9	3,7	4,2	7,4	13,8	15,1	20,5	32,8	
	dynamic	$C_{T dyn.}$	$[10^3 \frac{Nm}{rad}]$	0,3	2,2	7,6	10,1	19,9	31,1	44,9	48,2	67,4	

1) The permitted misalignments must not simultaneously reach their max. value.

Modular Structure



Also available in ATEX design according to the directive 94/9 EC (ATEX 95).



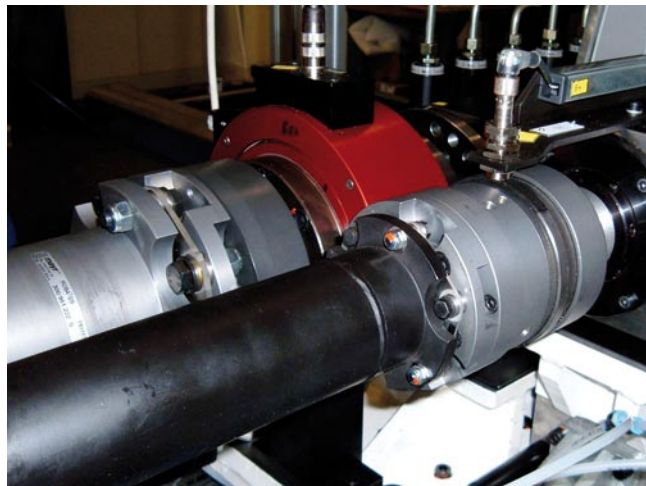
Also available in rustproof design.

For detailed information, detailed technical data and dimensions, please see our product catalogue K.950.V_._GB.

This catalogue is also available for download as a pdf file on our website www.mayr.com.

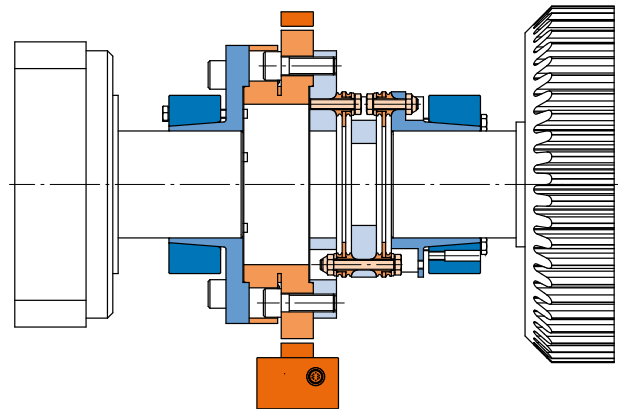
Characteristics and Advantages

- ROBA®-DS couplings are not sensitive to alternating loads up to the full nominal torque.
- Due to their high performance density, they have a low mass moment of inertia.
- ROBA®-DS disk pack couplings transmit the torque absolutely backlash-free and with a constantly high torsional rigidity up to the nominal torque.
- On ROBA®-DS couplings, the full nominal torque can be used, even on alternating torques and shaft misalignments.
- They have a high misalignment capability with low restoring forces.
- ROBA®-DS couplings are extremely robust and can therefore be used even under difficult conditions.
- The high variant variety permits optimum coupling configuration.



ROBA®-DS shaft coupling combined with an EAS®-safety clutch in a gear test stand manufactured by the company EGM (Entwicklungsgesellschaft für Montagetechnik GmbH, Hannover).

Installation Example



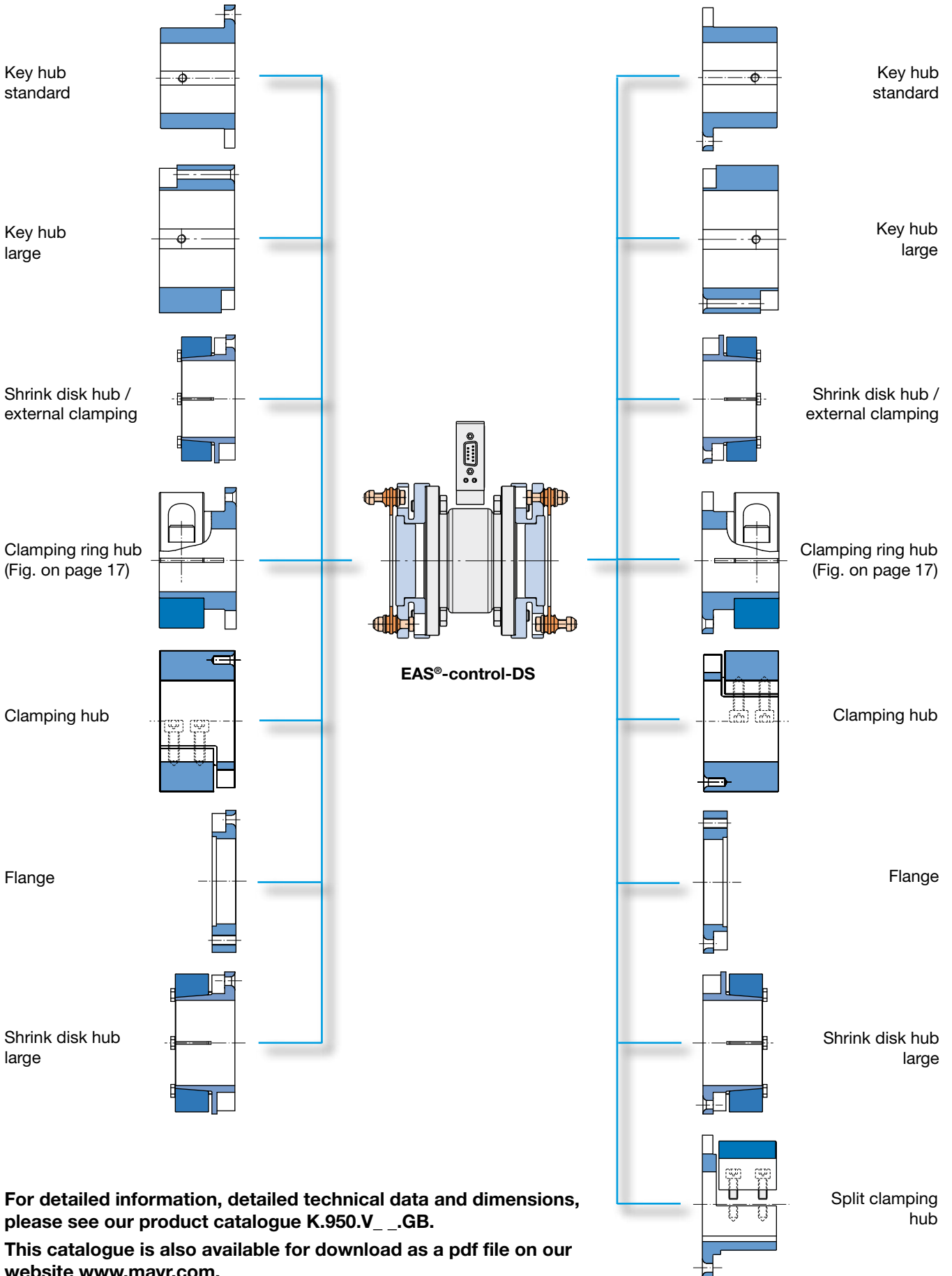
By using special adaptor flanges, different measurement flanges (for torque measurement) can be integrated into ROBA®-DS couplings.

Technical Data, Dimensions			Size													
			16	25	40	64	100	160	180	300	500	850	1400	2200		
Nominal torque ¹⁾	T_{KN}	[Nm]	190	290	450	720	1000	1600	2100	3500	5800	9500	15000	24000		
Peak torque ²⁾	T_{KS}	[Nm]	285	435	675	1080	1500	2400	3150	5250	8700	14250	22500	36000		
Outer diameter		[mm]	77	89	104	123	143	167	143	167	198	234	274	314		
Shrink disk hub	Minimum bore	[mm]	14	20	25	30	35	40	42	50	60	70	80	100		
	Maximum bore	[mm]	45	52	60	70	90	100	75	85	100	120	140	170		
	Maximum speed ³⁾	n_{max}	[rpm]	13600	11800	10100	8500	7300	6200	7300	6200	5200	4400	3800	3300	
	Min. length single-jointed coupling	[mm]	77,1	87,2	98,4	109,6	120	131,6	141,2	161,2	202	244	276	317,8		
	Min. length double-jointed coupling	[mm]	96,2	106,4	120,8	137,2	148	165,2	172,4	194,4	242	295	334	383,6		
Permitted ⁴⁾ misalignments	Axial displacement ^{5) 6)}	ΔK_a	[mm]	1,1	1,3	1,5	1,8	2,1	2,5	1,0	1,2	1,4	1,6	1,9	2,2	
	Radial misalignment ⁵⁾	with connection plate	ΔK_r	[mm]	0,3	0,3	0,4	0,45	0,45	0,55	0,25	0,25	0,35	0,4	0,5	0,55
		with sleeve 1	ΔK_{rH}	[mm]	1,0	1,2	1,5	1,8	2,1	2,2	1,2	1,25	1,35	1,7	2	2,6
		with special sleeve	ΔK_{rH}	[mm]	Please contact the manufacturer.											
	Angular misalignment per disk pack	ΔK_w	[°]	1,0	1,0	1,0	1,0	1,0	1,0	0,5	0,5	0,5	0,5	0,5	0,5	
Torsional spring rigidity	disk pack	C_{TLP}	$[10^5 \frac{Nm}{rad}]$	145	280	301	748	1135	1920	3000	3480	11900	20600	30150	46800	

1) Valid for changing load direction and max. permitted shaft misalignments.
 2) Valid for constant load direction, max. load cycles $\leq 10^5$.
 3) Not valid for coupling with special sleeve.

4) The permitted misalignments must not simultaneously reach their max. value.
 5) The values refer to couplings with 2 disk packs.
 6) Only permitted as a static or virtually static value.

Modular Structure



For detailed information, detailed technical data and dimensions, please see our product catalogue K.950.V_._GB.

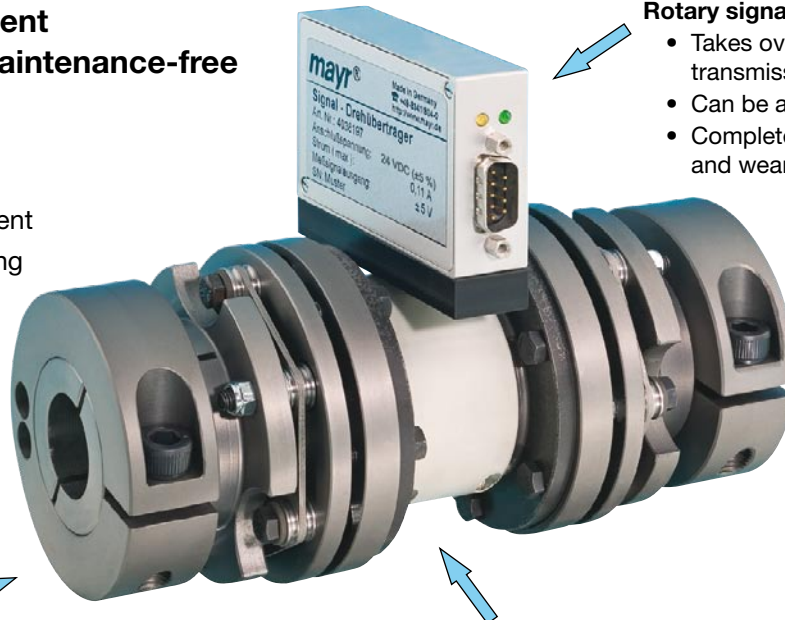
This catalogue is also available for download as a pdf file on our website www.mayr.com.

Compact and Robust Torque Measurement Coupling

- Integrated into tried and tested backlash-free shaft misalignment compensation couplings
- Simple electrical and mechanical installation
- Robust and reliable machine element
- Completely maintenance-free

Application fields

- Process control
- Quality management
- Machine monitoring
- Test stands



Rotary signal transmitter

- Takes over energy and signal transmission
- Can be added radially
- Completely maintenance and wear-free

ROBA®-DS

- Compensation of shaft misalignments
- High torsional rigidity
- High permitted alternating torques
- High flexibility with reference to hub/shaft connection

Extension sensor

- Torque measurement via strain gauge
- Torque-proportional output signal

Technical Data and Main Dimensions			Size		
			16	40	160
Nominal torque ¹⁾²⁾	T_{KN}	[Nm]	190	450	1600
Peak torque ³⁾	T_{KS}	[Nm]	285	675	2400
Clamping ring hub	minimum hub bore	$d_{R\ min}$	20	25	40
	maximum hub bore	$d_{R\ max}$	35	45	80
	maximum speed	n_{max}	9500	7000	4300
	Length Measurement coupling		178,2	230,8	329,2
Permitted misalignments ⁴⁾	perm. axial displacement ⁵⁾⁶⁾	ΔK_a	0,8	1,0	1,7
	perm. angular misalignment ⁷⁾	ΔK_w	0,7	0,7	0,7
	perm. radial misalignment ⁵⁾	ΔK_r	1,1	1,3	1,8
Spring stiffnesses	total torsional stiffness	[Nm/rad]	36200	114300	585000
	angular spring stiffness ⁷⁾	[Nm/rad]	229	298	1990

Technical Data for measuring system	
Supply voltage	24 VDC (±5 %)
Max. current consumption	0,11 A
Measuring signal output (dependent on rotational direction, 5 V refers to T_{KN})	0 ... ±5 V
Nominal temperature range	0 ... +70 °C
Temperature drift zero point	0,04 % / K
Temperature drift measurement value	0,03 % / K

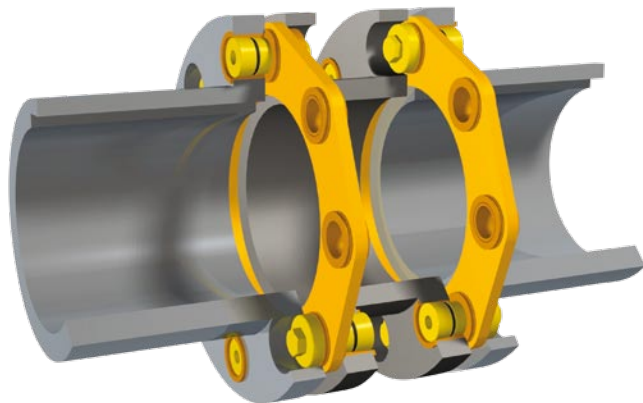
Technical Data for measuring system	
Band	0...1 kHz (-3 dB)
Max. data transmission distance	3 mm
Protection	IP 20
Max. dyn. load capability	100 % of T_{KN}
Connection	Sub-D connector, 9-pole
Permitted speed	0 - n_{max}
Max. total errors	1 % of T_{KN}

1) Other torques and construction sizes available on request.
 2) Valid for changing load direction as well as max. permitted shaft misalignment.
 3) Valid for constant load direction, max. load cycles $\leq 10^5$.
 4) The permitted misalignments may not simultaneously reach their maximum values.

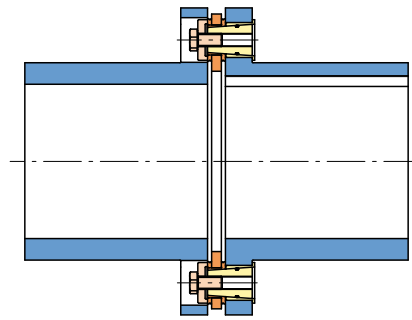
5) The values refer to couplings with 2 disk packs.
 6) Only permitted as a static or virtually static value.
 7) The values refer to 1 disk pack.

Characteristics and Advantages

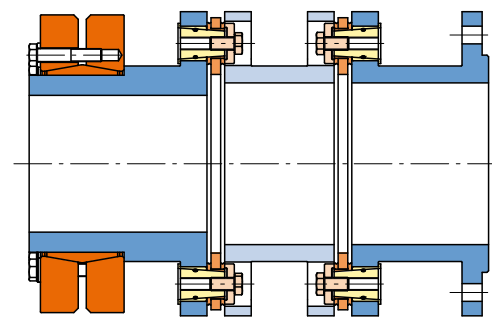
- Low screw tightening torques
- Can be installed / de-installed radially
- Easy and quick installation / de-installation
- No hydraulic installation tools required; can be installed with a torque wrench
- Backlash-free torque transmission
- FEM-optimized disk shape
- High torsional rigidity
- High performance density
- Compensation of axial, angular and radial misalignments
- Wear and maintenance-free
- High flexibility through customer-specific hubs and sleeves



Design Examples



Single-jointed coupling with key hubs



Double-jointed coupling with shrink disk hub and flange

The design of the hubs and sleeves is carried out according to the customers requirements.

Technical Data, Dimensions			Size				
			2200	3300	5000	7300	11000
Alternating torque ¹⁾	T_{KW} [Nm]		14 700	22 000	33 300	48 700	73 300
Nominal torque ²⁾	T_{KN} [Nm]		22 000	33 000	50 000	73 000	110 000
Peak torque ³⁾	T_{KS} [Nm]		44 000	66 000	100 000	146 000	220 000
Outer diameter	[mm]		290	332	378	431	492
Maximum speed	[rpm]		3600	3100	2700	2400	2100
Permitted ⁴⁾ misalignments	perm. axial displacement ⁵⁾	ΔK_a [mm]	1,6	1,7	2,1	2,3	2,3
	perm. radial misalignment with special sleeve	ΔK_{rH} [mm]	please contact the manufacturer				
	perm. angular misalignment per disk pack	ΔK_w [°]	0,4	0,4	0,4	0,4	0,4

1) Valid for changing load direction as well as for max. permitted shaft misalignment.
 2) Valid for constant load direction as well as for max. permitted shaft misalignment.
 3) Valid for constant load direction, max. load cycles $\leq 10^5$.
 4) The permitted misalignments may not simultaneously reach their maximum values.
 5) The values refer to couplings with 2 disk packs.

ROBA®-DS Wind power module

The *mayr*® company's decades of experience in shaft couplings and overload systems for all areas of mechanical engineering forms a strong basis for our wind power module. The wind power module has the following characteristics:

● Safe overload protection

An integrated ROBA®-slip bushing produced from a specially-developed bushing material ensures reliable overload protection against short-circuit torques due to its minimal torque tolerance.

● Electrical insulation

The electrical insulation through the sleeve made of glass fibre-reinforced plastic prevents damage to bearings and tooting.

● Compensation of shaft misalignments

Specially-developed rustproof steel disks allow compensation of extremely high axial, radial and angular shaft misalignments. This means that only low restoring forces are generated.

● Integrated brake disk

A brake disk can be integrated into the wind power module according to customer-specific requirements.

● Ease of installation

The disk packs and the intermediate sleeve can be mounted and de-installed radially without axial displacement of the hub being required.

It is possible to install the disk packs with low tightening torques by using special clamping nuts.





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You can find the complete address for the representative responsible for your area under www.mayr.com in the internet.

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