



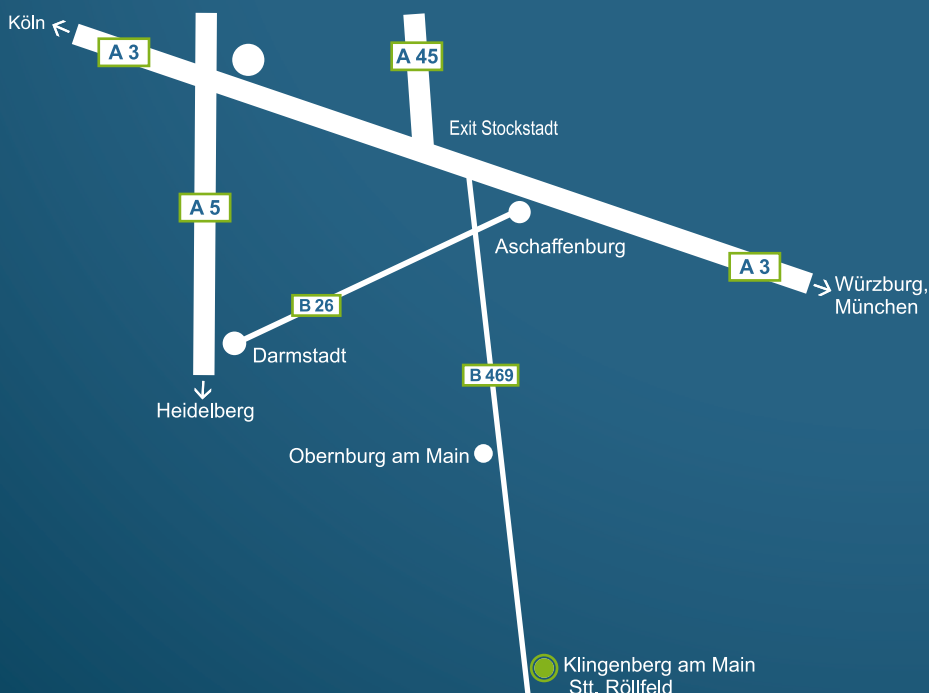
MAGNETIC COUPLINGS

Permanent magnetic coupling
Hysteresis Clutch

KBK – The Company

KBK Antriebstechnik GmbH - successful since 2003

Our products are based on the experience of more than 30 years in developing and producing shaft-hub-connections and backlash-free couplings combined with professional advice, service and professional competence. Our sophisticated modular design forms the basis for top quality products at reasonable prices. It enables us to produce almost all elastomer-, metal bellows-, safety couplings and line shafts as well as locking devices from the standard range within two hours, provide them with customized bores and organize a direct delivery to you by courier. Our traffic-favourable position on the edge of the Rhine-Main area simplifies the delivery to our customers all over the world. Benefit from our strenghts and our strong motivation to satisfy all our business-partners and save time and money for your company.



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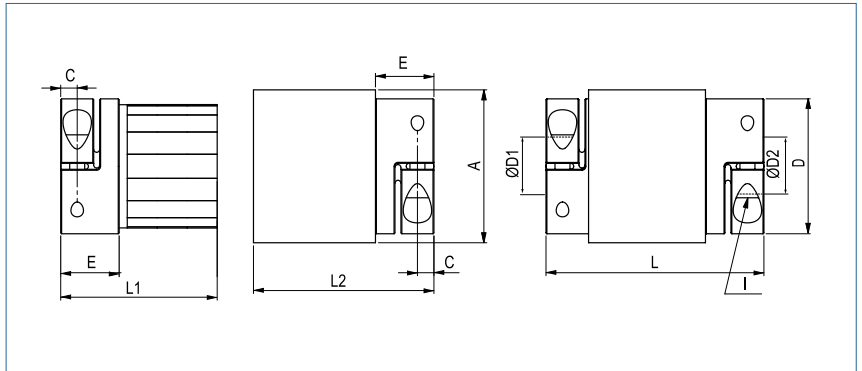
Magnetic Couplings

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Permanent magnetic coupling

with collet clamps

optional full
stainless steel
version



Order Code

PMK - 18 - 16 - 20

Type

Size

ØD1 (H7)

ØD2 (H7)

Size	Torque TKN (Nm)	Dimensions (mm)										Technical Data						
		L	Ø A	D1/D2	L1	L2	H	C	E			I	Mass Inner- part (kg)	Mass Outer- part (kg)	Inertia Innerpart (g m²)	Inertia Quterpart (g m²)	Misalignment radial ΔKr (mm)	max speed min-1
		Length	Outer	Bore Size (H7) min~max						Magnet- length	Hub Ø	Screw (ISO4762) TA (Nm)						
2	1.2	55	31	3-14	39	41	9	3.5	11	20	25	M3 2	0.07	0.11	0.005	0.018	0.5	10000
4	2.5	58	38	6-18	40	42	12	5	13	20	32.5	M4 3.5	0.11	0.15	0.01	0.04	0.5	9000
10	5	58	46	6-25	39.5	41.5	15.5	5	13.5	20	40.5	M4 4.5	0.16	0.2	0.04	0.08	0.5	8000
18	9	78	51	10-25.4	53.5	58.5	17	5,5	19,5	30	45	M5 8	0.23	0.28	0.07	0.14	0.5	7000
30	13	88	56	10-32	58.5	63.5	20	7,5	24.5	36	56	M6 15	0.28	0.35	0.1	0.21	0.5	6000
60	30	107	67	12-35	73	78	23	10	29	40	66	M8 40	0.53	0.7	0.3	0.6	0.5	5000
150	60	130	84	12-44	91.5	93.5	28	11	33.5	50	82	M10 84	0.9	1.5	1.1	1.3	0.4	4000



Material

Clamping hub: aluminium
Magnetic media: stainless steel

Keyway

optional acc. DIN 6885

Range of temperature

-30 °C ~ 100 °C



Characteristics

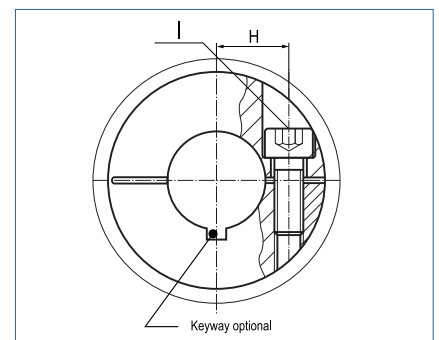
wear-free

maintenance-free

The coupling consists of 2 separated halves; the bearing has to be provided by the customer

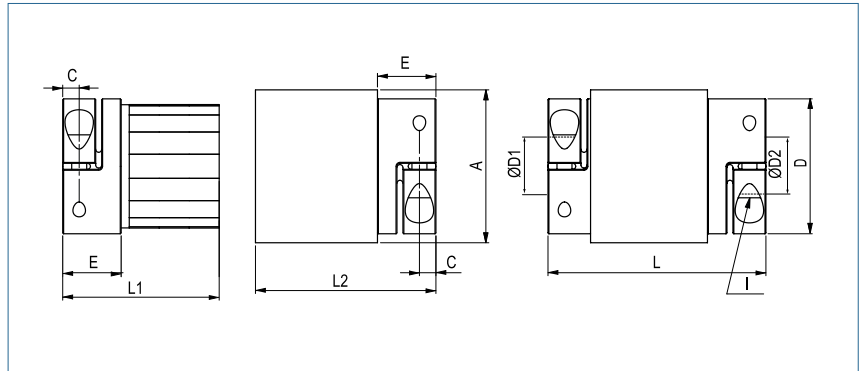
Infinitely variable torque adjustable by immersion depth

In case of overload the power transmission will be separated from the inner and outer part (by slightly jerking)



Hysteresis magnetic coupling

with collet clamps

optional full
stainless steel
version


Order Code

HMK - 18 - 16 - 20

Type

Size

ØD1 (H7)

ØD2 (H7)

Size	Torque TKN (Nm)	Dimensions (mm)											Technical Data					
		L	Ø A	D1/D2	L1	L2	H	C	E			I	Mass Inner- part (kg)	Mass Outer- part (kg)	Inertia Innerpart (g m²)	Inertia Outerpart (g m²)	Misalignment radial ΔKr (mm)	max speed min-1
		Length	Outer	Bore Size (H7) min~max						Magnet- length	Hub Ø	Screw (ISO4762) TA (Nm)						
2	0.1	55	31	3-14	39	41	9	3.5	11	20	25	M3 2	0.07	0.11	0.005	0.018	0.2	10000
4	0.2	58	38	6-18	40	42	12	5	13	20	32.5	M4 3.5	0.11	0.15	0.01	0.04	0.2	9000
10	0.4	58	46	6-25	39.5	41.5	15.5	5	13.5	20	40.5	M4 4.5	0.16	0.2	0.04	0.08	0.2	8000
18	0.9	78	51	10-25.4	53.5	58.5	17	5,5	19,5	30	45	M5 8	0.23	0.28	0.07	0.14	0.2	7000
30	1.2	88	56	10-32	58.5	63.5	20	7,5	24.5	36	56	M6 15	0.28	0.35	0.1	0.21	0.2	6000
60	2.5	107	67	12-35	73	78	23	10	29	40	66	M8 40	0.53	0.7	0.3	0.6	0.2	5000
150	5	130	84	12-44	91.5	93.5	28	11	33.5	50	82	M10 84	0.9	1.5	1.1	1.3	0.2	4000



Material

Clamping hub: aluminium
Magnetic media: stainless steel

Keyway

optional acc. DIN 6885

Range of temperature

-30 °C ~ 100 °C

Power dissipation

 $P_v = (T \times n_g) / 9.55$


Characteristics

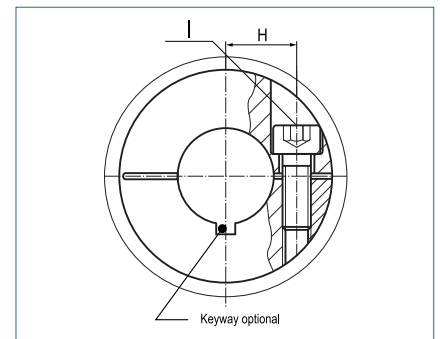
wear-free

maintenance-free

The coupling consists of 2 separated halves; the bearing has to be provided by the customer

Infinitely variable torque adjustable by immersion depth

In case of overload the power transmission will be separated from the inner and outer part (by slightly jerking)

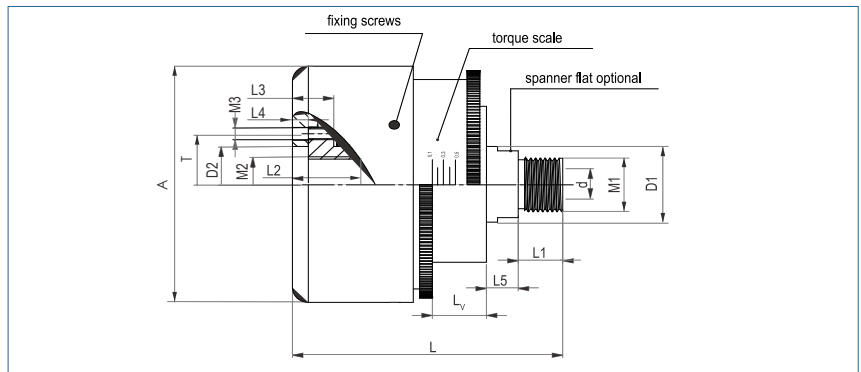
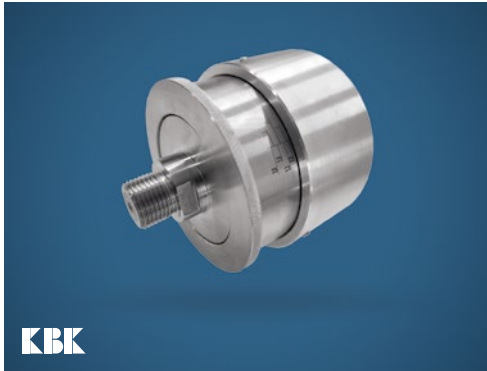


max. Power dissipation							
Size	2	4	10	18	30	60	150
P _{VMAX}	4	5	7	12	14	20	30

optional full
stainless steel
version

Hysteresis Clutch

with inner and outer threads



Order Code

HSM - 2a - M18x1.5 - M18x1.5

Type

Size

M1

M2

Size	Torque TKN (Nm)	Dimensions (mm)													
		L Length (mm)	L1 Spigot- length (mm)	L2 Thread- length (mm)	L3 Thread- length (mm)	L4 Centering- length (mm)	L5 Centering- length (mm)	A Outer Ø (mm)	d Bore (mm)	D1 Centering Ø (h7)	D2 Centering Ø (H7)	M1 / M2 Male Thread/ Female Thread	M3 Fixing Threads	T Pitch circle (mm)	L _v Adjust- ing-length (mm)
1a	0.4 - 1.0	70	14	25	10	5	10	73	10	20	18	M16 x 1.5	M3	25	8
1b	0.2 - 0.5	70	14	25	10	5	10	73	10	20	18	M16 x 1.5	M3	25	8
2a	0.8 - 2.0	85	14	25	10	5	10	79	10	25	25	M18 x 1.5	M4	33	10
2b	0.1 - 1.3	85	14	25	10	5	10	79	10	25	25	M18 x 1.5	M4	33	10
4a	1.6 - 4.0	85	14	25	10	5	10	105	10	30	30	M24 x 1.5	M4	48	10
4b	0.2 - 2.6	85	14	25	10	5	10	105	10	30	30	M24 x 1.5	M4	48	10



Material

housing: aluminum
magnetic body parts: stainless steel

Threads

different sizes on request

Temperature Range

0 °C ~ 40 °C (higher temperatures on request)

max. Power Dissipation

$P_v = (T \times n_s) / 9.55$

Size	Technical Data				
	Mass (kg)	Inertia inner part M1 (g m²)	Inertia outer part M2 (g m²)	max. power dissipation (W)	max speed (min⁻¹)
1a	0.8	0.13	0.36	15	4000
1b	0.8	0.13	0.36	15	4000
2a	1.2	0.25	0.62	23	3500
2b	1.2	0.25	0.62	23	3500
4a	1.9	0.79	1.62	30	3000
4b	1.9	0.79	1.62	30	3000



Characteristics

wear-free

maintenance-free

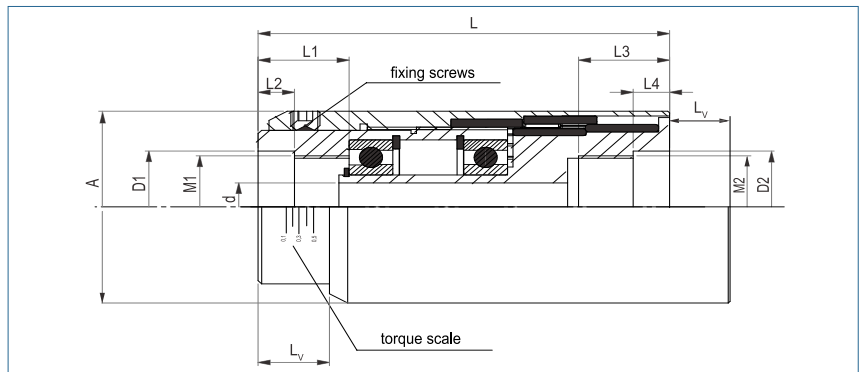
The coupling consists of 2 separated halves with integrated ball bearings

Infinitely variable torque adjustable by using the torque scale

In case of overload the power transmission will be separated from the inner and outer part (by slightly jerking)

Hysteresis Clutch

with threads



Order Code

HLM - 2 - M32x1.5 - M32x1.5

Type

Size

M1

M2

Size	Torque TKN (Nm)	Dimensions (mm)											
		L	L1	L2	L3	L4	A	d	D1	D2	M1	M2	L _v
		Length (mm)	Thread- length (mm)	Centering- length (mm)	Thread- length (mm)	Centering- length (mm)	Outer Ø (mm)	Bore (mm)	Centering Ø (H7)	Centering Ø (H7)	Thread	Thread	Adjusting- length (mm)
1	0.4 - 1.0	90	20	8	20	8	55	10	30	30	M27 x 1.5	M27 x 1.5	15
2	0.7 - 2.0	113	25	10	25	10	60	15	35	35	M32 x 1.5	M32 x 1.5	18
4	1.5 - 4.0	136	29	12	40	12	80	20	40	55	M38 x 1.5	M48 x 1.5	20



Material

housing: aluminum
magnetic body parts: stainless steel

Threads

different sizes on request

Temperature Range

0 °C ~ 40 °C (higher temperatures on request)

max. Power Dissipation

$P_v = (T \times n_s) / 9.55$

Size	Technical Data						
	Mass (kg)	Inertia outer part M1 (g m ²)	Inertia inner part M2 (g m ²)	max. power dissipation (W)	max speed (min ⁻¹)	max. radial force (N)	max. axial force (N)
1	1.2	0.43	0.09	18	4000	150	100
2	1.6	0.87	0.21	25	3500	200	150
4	3.2	2.68	0.55	40	3000	250	200



Characteristics

wear-free

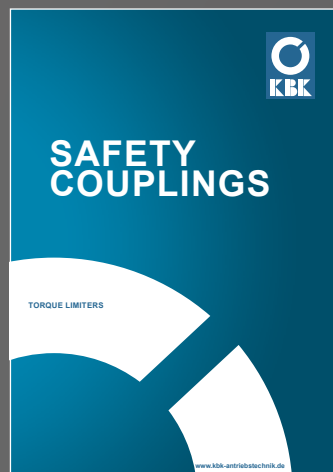
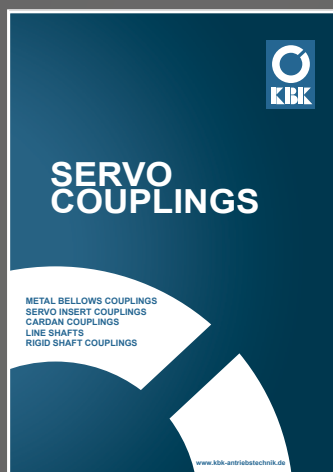
maintenance-free

The coupling consists of 2 separated halves
with integrated ball bearings

Infinitely variable torque adjustable by using
the torque scale

In case of overload the power transmission
will be separated from the inner and outer part
(by slightly jerking)

Please contact us for our catalogues
for **SERVO COUPLINGS**, **SAFETY COUPLINGS** and
SHAFT HUB CONNECTIONS



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