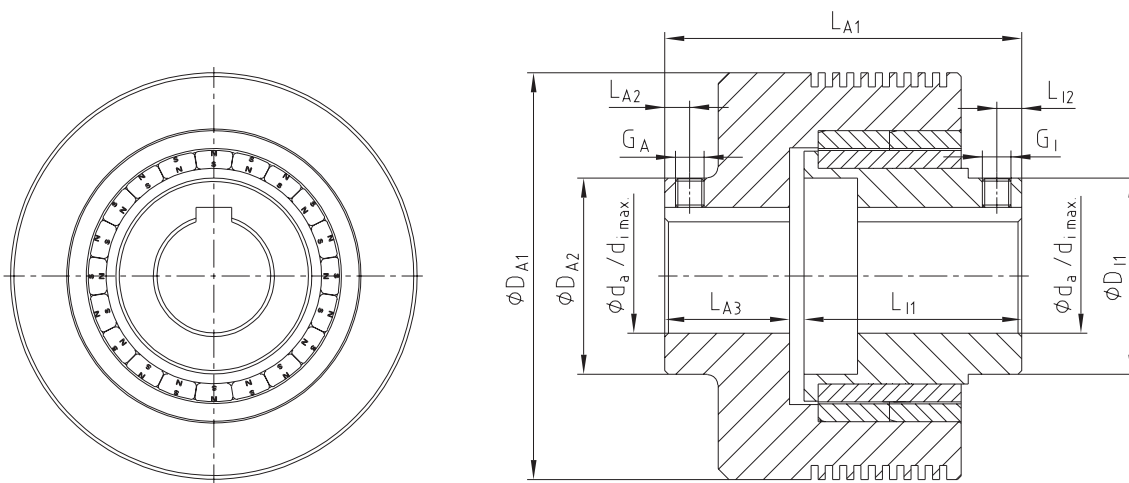
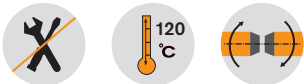
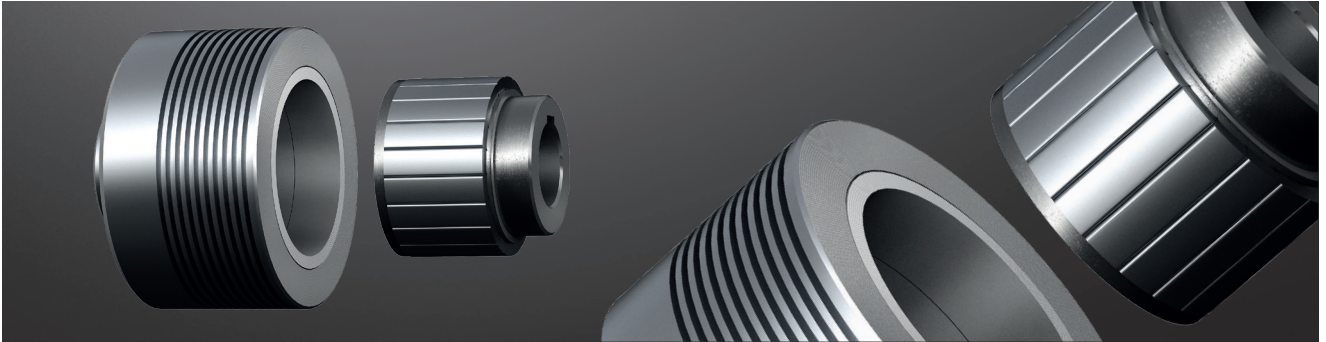


MINEX®-H

Magnetic couplings

Hysteresis coupling



Technical data

Size	Overload torque $T_{max. 20\text{ °C}}$ [Nm]	Finish bore d_a/d_i max. [mm]	Dimensions [mm]										Allowed power loss PV perm. 20 °C [W]	Max. speed $n_{max.}$ [rpm]	Max. temperature $t_{max.}$ [°C]
			DA1	DA2	LA1	LA2	LA3	DI1	LI1	LI2	GA	GI			
HA 48/12	1.2	16	82	35	63	15	35	35	41	15	M4	M4	80	1800	120
HB 48/12	2.4	16	82	35	83	15	35	35	61	15	M4	M4	88	1800	120
HA 60/16	2	22	94	45	63	15	35	45	41	15	M5	M5	87	1800	120
HB 60/16	4	22	94	45	83	15	35	45	61	15	M5	M5	96	1800	120
HA 71/20	3	32	114	55	63	15	35	55	41	15	M8	M8	98	1800	120
HB 71/20	6	32	114	55	83	15	35	55	61	15	M8	M8	110	1800	120

Technical selection:

$$PV = \frac{T_{max. 20\text{ °C}} \cdot n_{Slip}}{9.55} \cdot Z \leq PV_{perm. 20\text{ °C}}$$

$$Z = \frac{t_{Slip}}{t_{Cycle}}$$

PV = Power loss

$T_{max. 20\text{ °C}}$ = Transmittable torque [Nm]

$PV_{all. 20\text{ °C}}$ = Allowed power loss [Nm]

n_{Slip} = Slip speed [1/min]

Z = Cycle factor (continuous slip operation Z=1)

t_{Slip} = Slip time [s]

t_{Cycle} = Cycle time [s]

Ordering
example:

MINEX® HB 60/16

d_i Ø18 mm

d_a Ø20 mm

Coupling size

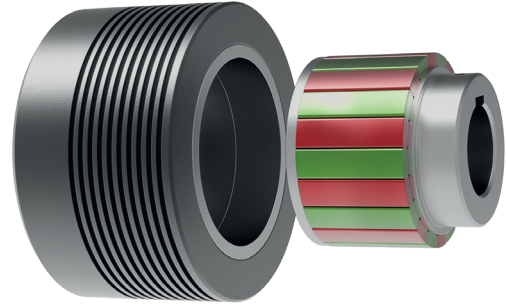
Finish bore (H7), feather keyway acc. to DIN 6885 sheet 1 (JS9)

Torque curve for overload

The MINEX[®]-H transfers the torque contact-free by means of magnetic force and serves as a wear-free torque limiter in overload.

Function normal mode:

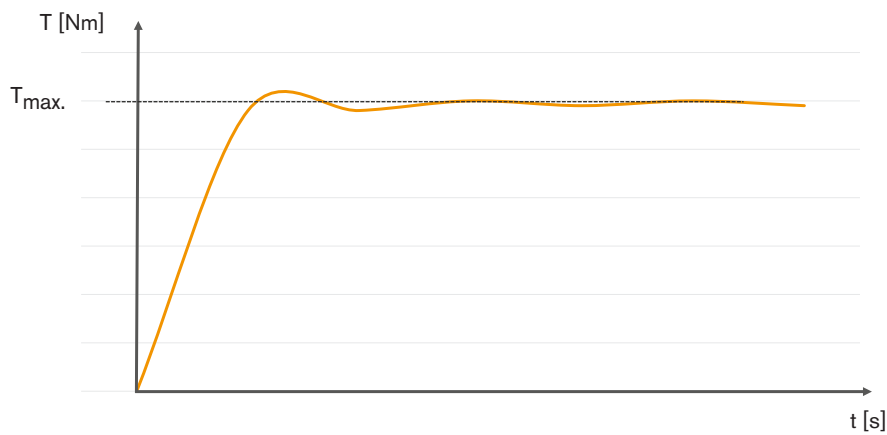
The torque is transferred from the drive to the output element contact-free by means of magnetic forces. The speed is transferred synchronously as long as the operating torque is below the selection torque (slip torque).



Function overload mode:

As soon as the operating torque exceeds the selection torque, the clutch slips and a relative speed is set between the drive and output side. During this, the hysteresis material is continuously reversed and heats up. The selection torque is almost constant in an overload. As the relative speed increases, the slip torque increases due to the eddy current effect.

Torque curve for overload



Characteristics:

- Touch-free torque transfer by means of magnetic force
- Wear-free torque limitation
- Maintenance-free
- Load-holding
- Very good repeatability of torque
- Applicable as coupling or brake

Examples of application:



Filling systems



Film winder



Materials handling



Medicine technology



Unwinding and winding equipment