



BINDER CLUTCHES & BRAKES

SPRING-APPLIED SINGLE-DISC BRAKE

76 13106H00 / 76 13706H00
76 13113A00



POWER OF PARTNERSHIP AND MAGNETISM

COMPACT LINE

Kendrion Power Transmission

BINDER CLUTCHES & BRAKES

Our company's strength is measured by the delivery of products, performances, as well as a high degree of esteem towards our customers. KENDRION POWER TRANSMISSION is striving to develop a long-term relationship with its

customers and to cultivate this relationship under the motto "Power of Partnership". Ambitious aims can only be realised through a close and productive co-operation with our customers.

The development of high-quality standard products as well as optimised tailor made solutions is the foundation of all our actions.

Power of Partnership stands for a co-operation with the Kendrion employees without bureaucracy, ensuring a long and successful partnership with our customers.

Top Market Knowledge...

the realisation of market orientated products are the results of our competence in electromagnetism which has been achieved with decades of experience and knowledge. The development of most innovative concepts and the

use of the most modern technologies in our research department together with the use of the latest production and logistic processes are our strengths.

Our customers profit from the individual solutions for high volume as well as the availability of individual products on the basis of a standard platform.

Our know-how is growing steadily hand in hand with the constant optimisation of every business process.

Optimal tailor made solutions...

are not empty promises. The profound understanding of the Power of Magnetism at KENDRION POWER TRANSMISSION is the source of the research/development of market orientated products. Continuous expansion of the technological possibilities

enables us to be in the position to offer optimal solutions of brakes and clutches for numerous applications. We lay great emphasis on being able to offer solutions for different applications such as:

... SECURING
... STOPPING
... POSITIONING
... ACCELERATING.

Important synergies as a basis for success...

KENDRION POWER TRANSMISSION is a European company with a local presence in all economic regions of the world. Integrated in and yielding performance to the Kendrion Holding N.V., which is noted on the Amsterdam stock exchange, as a successful company with an annual turnover of 1,8 billion EUR; and approx. 5500 employees all over the world.

This is an excellent basis to realise, secure and enable our long-term goals and company objectives. A network of connected companies within Kendrion is another valuable factor for the success of KENDRION POWER TRANSMISSION. We live the "Power of Partnership" in a firm exchange

of expertise and business relationship within these companies.



Kendrion Power Transmission protects people and the environment

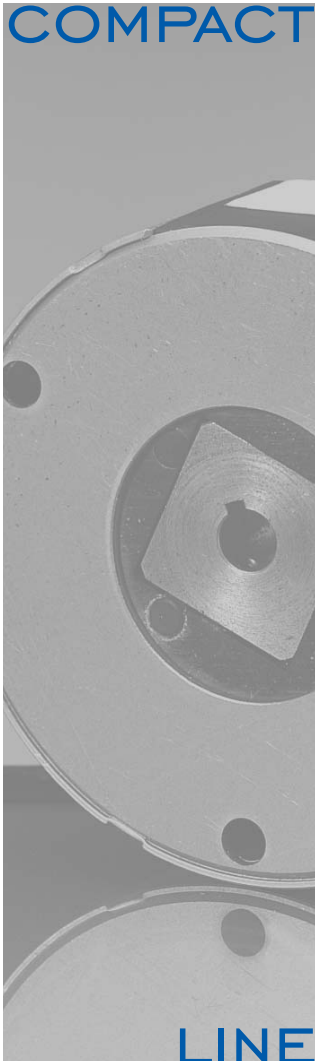
General technical information

76 13106H00/76 13706H00

76 13113A00

Product line information

BINDER CLUTCHES & BRAKES



The COMPACT LINE is comprised of spring-applied single-disc brakes delivered as fully assembled units to ensure easy attachment to the motor.

Due to their compact design, these brakes are ideally suited to fit into confined spaces.

Electromagnetically operated spring-applied brakes generate the brake torque when voltage is removed.

Applications

- Machining equipment
- Building installations
- Wheelchairs
- ...

Versions

76 13106H00 torque 1 Nm
DC

76 13706H00 torque 1 Nm
single-phase AC

76 13113A00 torque 8 Nm
DC

Information on technical data included in the data sheets

The information provided in the operating instructions must be strictly adhered to when designing a machine (e.g. motor) and when using the brakes. The brakes are manufactured and tested in compliance with DIN VDE 0580 requirements. The insulation materials used conform with thermal class F norms. Operation of the brake as a pure holding brake without friction work is only permitted after prior consultation with the manufacturer. The specified times apply to the following conditions: separate switching of the brake, operating temperature, rated voltage, and

rated air gap. All values are mean values that are subject to variation. In the case of AC brake switching, the coupling time t_1 is substantially longer. W_{max} (maximum switching energy) is the switching energy that must not be exceeded during braking operations at max. 1500 rpm. Braking operations at >1500 rpm lead to a substantial reduction in the maximum admissible switching energy per switching operation. Such operation is only permitted after prior consultation with the manufacturer. The maximum switching power P_{max} is the switching energy W that can be converted by the

brake per hour. In the case of applications where the number of switching operations per hour is greater than 1 ($Z > 1$), the diagram (W_{max} as a function of the number of switching operations per hour Z) shown in the operating instructions applies. The P_{max} and W_{max} values are approximate values; they apply to applications where the brake is installed between the B-face end shield of the motor and the motor fan. The specified rated torques M_2 characterise the torque level of the brakes. Depending on the application of the brake, the switching torque M_1 and the transmissible torque M_4 may

differ from the specified M_2 values. The switching torque M_1 depends on the speed (rpm). If the friction surfaces are contaminated with oil, grease or dirt the transmissible torque M_4 and the switching torque M_1 may drop.

All technical data is subject to the running-in process of the brake being completed. Vertical operation of the brake is only permitted after prior consultation with the manufacturer.

SPRING-APPLIED SINGLE-DISC BRAKE

DC or single-phase AC

Versions	76 13106H00 - DC Gleichstrom
	76 13706H00 - single-phase AC
Standard rated voltages	76 13106H00 - 24V DC 76 13706H00 - 230V AC, 50 Hz
Protection	IP 00
Thermal class	F
Rated torques	1 Nm
Accessories (options)	mounting screws

Specification subject to change without notice.
The "General technical information" and the "Operating instructions" 76 13106H00 / 76 13706H00 must be strictly observed.

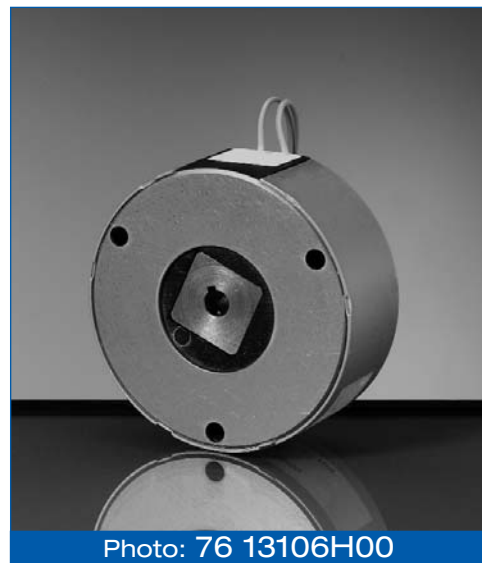


Photo: 76 13106H00

Technical data

Size	Rated torque	Max. speed	Max. switching power	Max. switching power energy (Z = 1)	Rated power		Response times		Moment of inertia hub and friction disc	Weight
					P_N	P_S	on	off		
	M_2	n_{max}	P_{max}	W_{max}	P_N	P_S	t_1	t_2	J	m
	[Nm]	[rpm]	[kJ/h]	[kJ]	[W]	[VA]	[ms]	[ms]	[kgcm ²]	[kg]
06	1	8000	50	16	14	24	15	20	0.096	0.42

Ordering data (to be fully specified)

SPRING-APPLIED SINGLE-DISC BRAKE

Please specify requested version.

1

Coil voltage: (standard 24 V DC, 230 V AC)

Voltage: _____ V DC AC

2

Nominal voltage (standard 50 Hz)

Frequency: _____ Hz (only with 76 13706H00)

HUB

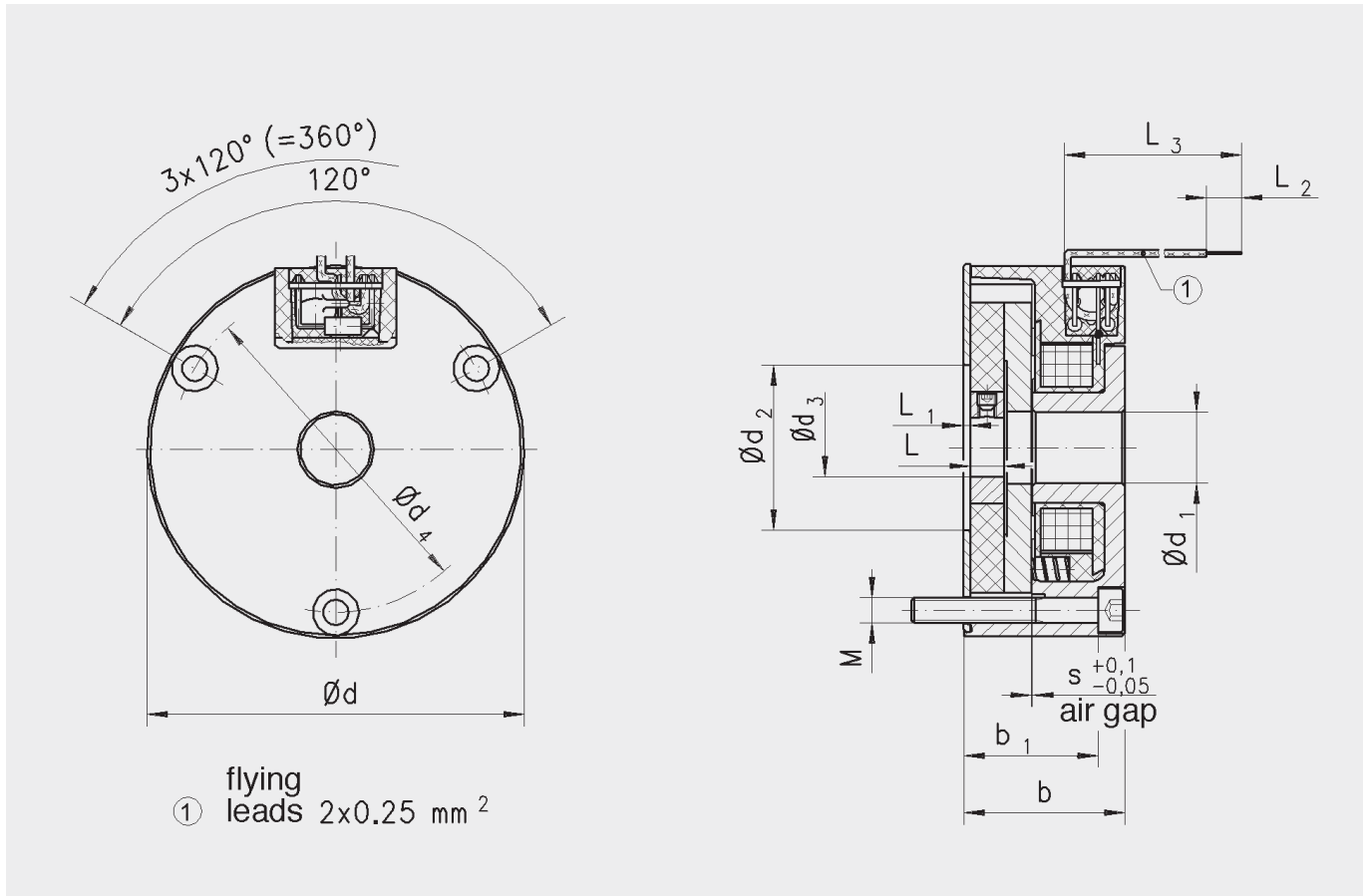
1

Bore diameter (standard), groove JS9 as per DIN 6885, sheet 1

Size 06: Ø 6, Ø 8, Ø 10 mm

Bore diameter: _____ mm

or pilot bore



Size	d	d ₁	d ₂	d ₃ (H7)	d ₄	b	b ₁	L	L ₁	L ₂	L ₃	s	s _{max}	M
06	65	12.2	28.7	6 ¹⁾ / 10 ²⁾	56	28	23	5.5	1.35	6	250	0.2	0.5	4

1) Min. bore with keyway JS9 as per DIN 6885, sheet 1.
 2) Max. bore with keyway JS9 as per DIN 6885, sheet 1.
 Supporting keyway over entire length. Shaft ISO fitting k6. (1), 2)

Accessories

Size	Mounting screws			
	Screw	Nominal torque	Material number	Screws per brake
06	ISO 4762 - M4 x 30 - 8.8	2.5 Nm	304 511	3

SPRING-APPLIED SINGLE-DISC BRAKE
DC

Versions	76 13113A00
Standard rated voltages	102 V, 178V DC
Protection	IP 54 (when installed under motor fan hood)
Thermal class	F
Rated torques	8 Nm
Accessories (options)	flange, mounting screws

Specification subject to change without notice.
The "General technical information" and the "Operating instructions" 76 13113A00 must be strictly observed.



Photo: 76 13113A00

Technical data

Size	Rated torque	Max. speed	Max. switching power		Max. switching energy (Z=1)	Rated power	Response times		Moment of inertia hub and friction disc	Weight
			built in	attached			on	off		
	M ₂	n _{max}	P _{max}	P _{max}	W _{max}	P _N	t ₁	t ₂	J	m
	[Nm]	[rpm]	[kJ/h]	[kJ/h]	[kJ]	[W]	[ms]	[ms]	[kgcm ²]	[kg]
13	8	3000	300	100	32	33	25	30	1.5	1.2

Ordering data (to be fully specified)

SPRING-APPLIED SINGLE-DISC BRAKE

Please specify requested version

1

Coil voltage (standard 102 V, 178 V)

Voltage: _____ V DC

HUB

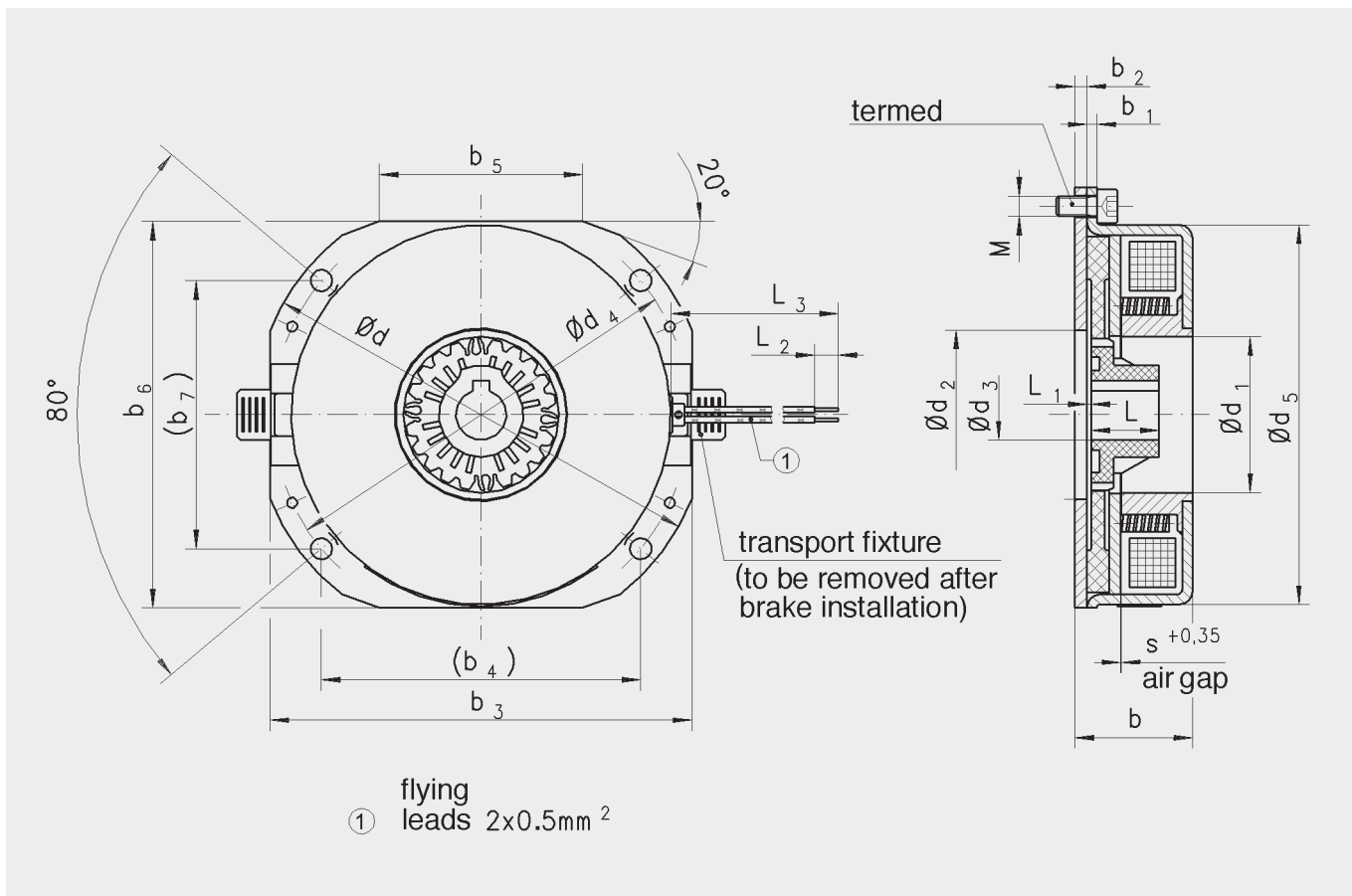
1

Bore diameter (standard),
groove JS9 as per DIN 6885, sheet 1

Size 13: Ø 12, Ø 15, Ø 17, Ø 20, Ø 22, Ø 25, Ø 28mm

Bore diameter: _____ mm

or pilot bore



Size	d	d ₁	d ₂	d ₃ (h9)	d ₄	d ₅	b	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	L	L ₁	L ₂	L ₃	s	s _{max}	M
13	134	46	50	12 ¹⁾ / 29 ²⁾	123	112	34.5	3	3.5	124.5	94.2	60	114	79	20.1	1.2	7	400	0.15	0.9	6

¹⁾ Min. bore with keyway P9 as per DIN 6885, sheet 1.

²⁾ Max. bore with keyway P9 as per DIN 6885, sheet 1.

Supporting keyway over entire length. Shaft ISO fitting k6. (¹⁾, ²⁾)

Accessories

Size	Flange	Mounting screws			
		Screw	Nominal torque	Tightening torque	Screws per brake
13	76 13113A00004	ISO 4762 - M 6 x 12 - 8.8	10 Nm	304 040	4



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COMPACT LINE

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