

KENDRION

INTORQ

POWERED BY KENDRION



KENDRION SOLUTIONS

INTORQ BFK468

Multi-coil brake –
Powerful and responsive

PRECISION. SAFETY. MOTION.

CHAIN & DRIVES®

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Our brakes – perfect for your safe application

KENDRION Industrial Brakes – stands for smart innovation and excellent service, which we consistently apply for the benefit of our customers:

Strong know-how

Our specialists develop the leading-edge permanent magnet and spring-applied brakes. With INTORQ as a new member of KENDRION, we have once again consistently expanded our range of spring-applied brakes and clutches for you. This way, we can find the right solution for any of your requirements.



Complete product portfolio

Electromagnetic brakes and clutches as well as perfectly matched accessories: with us you will find an exceptionally large selection of quickly available off-the-shelf products that can be put together in a modular system and the best expertise for customer-specific solutions.

Dynamic innovative power

More than 50 specialists working in agile teams in our research and development worldwide are creating convincing product solutions for tomorrow.

Excellent market knowledge

We are very familiar with our focus markets – thanks to extensive experience and research, but also thanks to long-term customer relationships built on partnership and eye-to-eye cooperation.

International power

Committed and competent employees, production sites in Germany, United States, India and China as well as a large number of certified sales partners all over the world make us a strong partner for you!

The INTORQ BFK468

On the point

- Fail-safe spring-applied brake
- Adjustable service brake and holding brake
- Very short switching times thanks to multi-coil system
- High braking torques due to special control
- Reducible brake module (Type E)
- UL-certified insulating material system



Suitable for the use of:



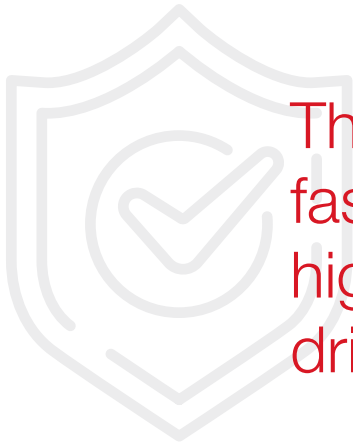
Tower cranes



Mobile cranes



Hoists



The standard solution for fastest reaction times and high braking torques for large drives with high loads

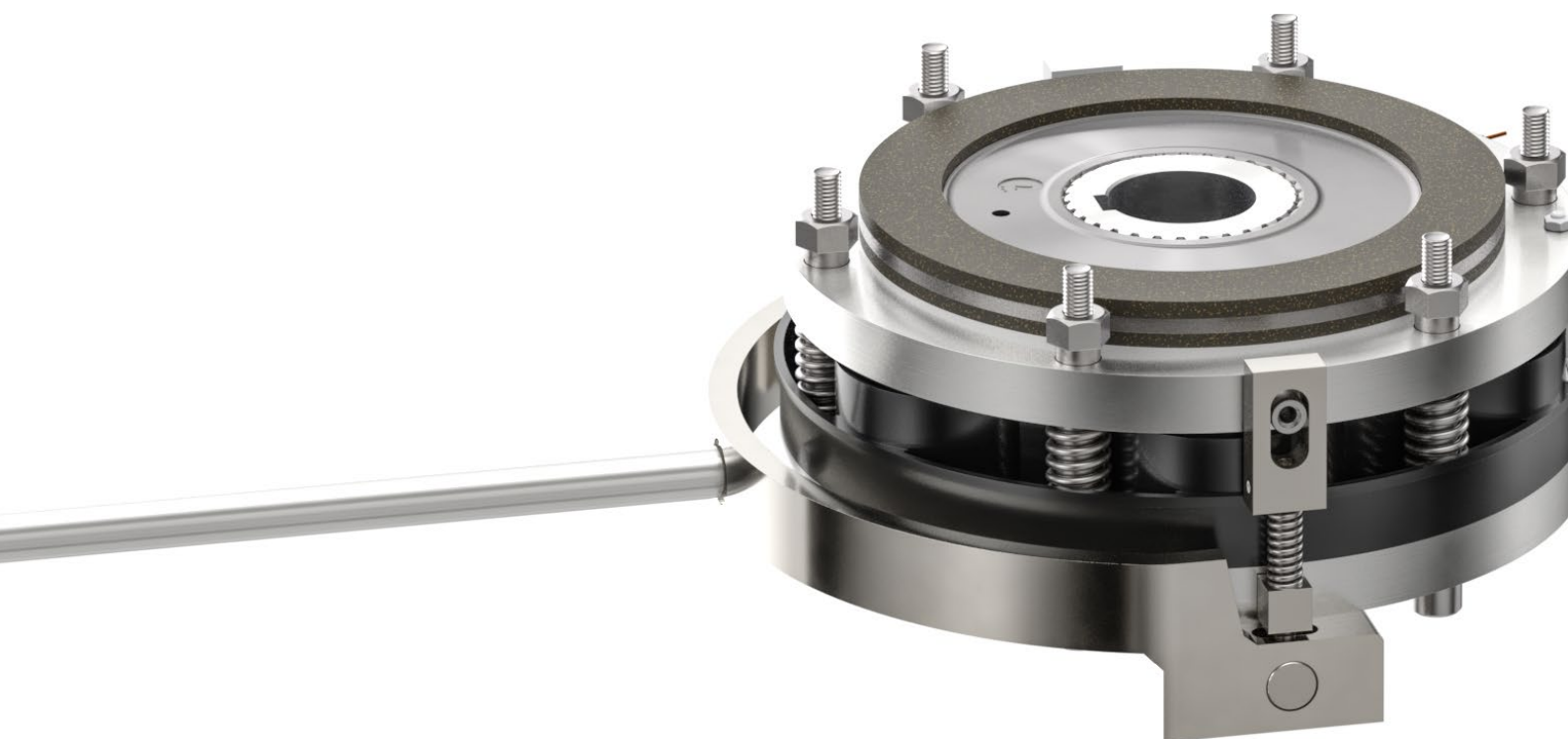


The friction lining ensures stable braking torque even at highest speeds. For drives that essentially require a holding function, very high holding torques can be generated due to the high performance of the brake. The BFK468 holds the load securely and can also be used as an emergency stop brake under highest speeds and loads.

The tried and tested adjustment screws enable the brake to have an extremely long service life. The adjustability ensures that the drive is available even with high wear requirements and does not require any spare parts.



The varied standard for large high-performance brakes



Technical highlights

- Rear bores for encoder attachment (N version)
- Noise-dampened design
- Low-wear rotor hub connection thanks to plastic sleeve
- Wear or function monitoring



Features

The series is characterized by various options that, in addition to the standard option, can also be customized.

- **Various micro switches**
with a safe service life for monitoring the switching function and checking wear
- **Dust protection ring and seals**
to protect the brake from dust, metal shavings and water and to protect the environment from friction dust.
- **Friction linings** for special requirements
- **Noise-reduced** applications

Options

Several brake options possible using a single stator:

- Torque adjustment for the E-version
- Connection to various shaft diameters by using the compatible standard hub (hub diameter)

Customized solutions – tailored exactly to your needs

Automation solutions have become an indispensable part of industry and everyday life. In this context, it is often the brakes that ensure safety: They hold loads and brake reliably in an emergency.

Just as automation continues to evolve, brakes must also face higher demands – forward-looking products are in demand. At the same time, quality and safety must be unconditionally guaranteed. This is a challenge that Kendrion Industrial Brakes meets with passion and care.



When it comes to developing customer-specific solutions, we have three aces up our sleeves:

- With our **new agile organization**, we respond much faster to customer requests.
- Our **modularly developed products** enable new configurations without complete redevelopment.
- The **global structure of our organization** bundles competencies and ensures valuable knowledge transfer.

This makes us a competent and reliable partner for our customers – starting with industry-savvy consulting, through product development with practical experience, to uncompromising quality assurance.



We will find the
solution that suits
you best!

Technical data

Design types	Basic module E, Basic module N
Standard rated voltages	205/103 V, 360/180 V
Protection class	IP00 – IP54
Thermal class	F (155°C)
Ambient temperature	-20 to 40°C
Rated torques	100 to 2400 Nm
Duty cycle	100% duty cycle
Nominal backlash	1°
Options	Flange, hand release, cover ring, cap, wear monitoring, ...
Note	Please read the general information on data sheets and the corresponding operating instructions. Design subject to change without notice.



Brake size	Rated torques for service brakes @ 100 [min ⁻¹]	Rated torques for holding brakes @ 100 [min ⁻¹]	Nominal Power [W] Holding / Release	Maximum speed n_{max} [min ⁻¹]	Switching work one-time switching W_{max} [J]	Number of emergency stops for holding brakes Z_{ges} [-] *	Friction work until maintenance for service brakes with WR lining Q_{BW} [MJ]
18	150	300	85/340	4400	60.000	200	350
20	260	520	102/408	3700	80.000	200	530
25	400	800	132/528	3000	120.000	200	800
31	1200	2400	230/920	2300	300.000	100	1300

* The number of emergency stops from the highest speed takes into account multiple brake adjustments.

Basic module E, characteristic torque reduction

With the basic module E, the characteristic torque can be reduced using the adjustment ring located in the magnet part.

Detailed information on detents, torque reductions and setting dimensions can be found in the operating instructions.

Dimensions

Brake size	d H7 ¹⁾	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈	d ₉	d ₁₀	d ₁₁	d ₁₂	d ₁₃	d ₁₆	d _i	d _a
18	30/35/40/45	6 x M8	196	75	4 x M8	95	217	217	116	62	77	220	24	14	6 x 9	129	174
20	35/40/45/50	6 x M10	230	85	4 x M10	110	254	254	135	72	90	257	36	20	6 x 11	148	206
25	40/45/50/55/60/65/70 ³⁾	6 x M10	278	115	4 x M10	140	302	302	180	85	120	305	36	25	6 x 11	199	254
31	80	8 x M16	360	150	4 x M16 ²⁾	200	390	390	–	–	150	–	–	–	8 x 17	243	330

Brake size	h	h ₁ min.	h ₁ max.	h ₂	h ₃	h ₄	h ₅ max.	h ₆	h ₇	h ₈	l	l ₁ ⁴⁾	l ₂	l ₃	l ₄	s _{LN}	α	β
18	83.1	89.1	96.5	3	11	70.6	385	128	34	108.1	35	600	15.3	9.6	9.3	0.4	54°	8°
20	95.6	105.6	111.6	3.5	11	80.6	650	150	69	120.6	40	600	12.4	12	11.4	0.4	54°	8°
25	110.7	121.7	131.7	4.5	12.5	95.7	1045	173.5	69	135.7	50	600	17.3	12	14.8	0.5	51.5°	6.5°
31	149	–	–	10	10	Manual release not available					70	600	33	24	23.5	0.5	5°	–

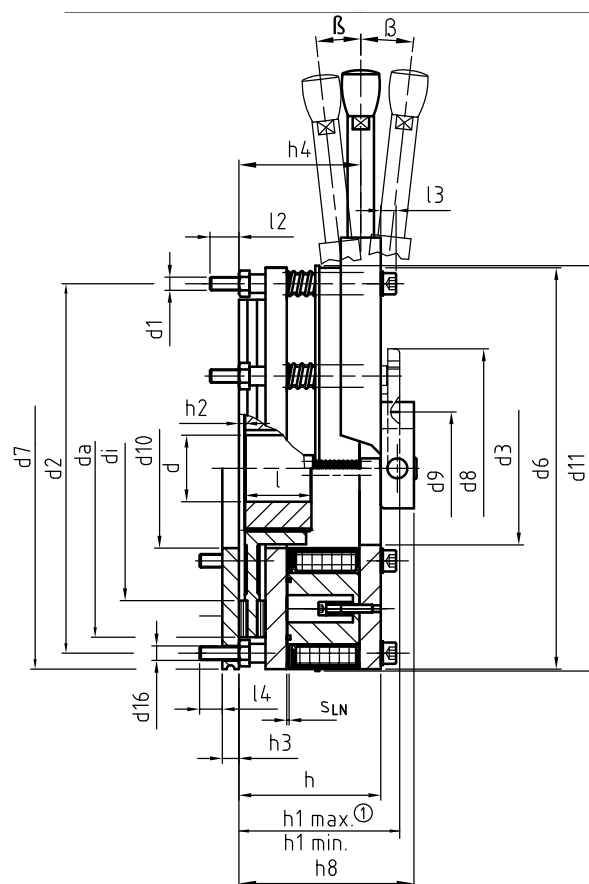
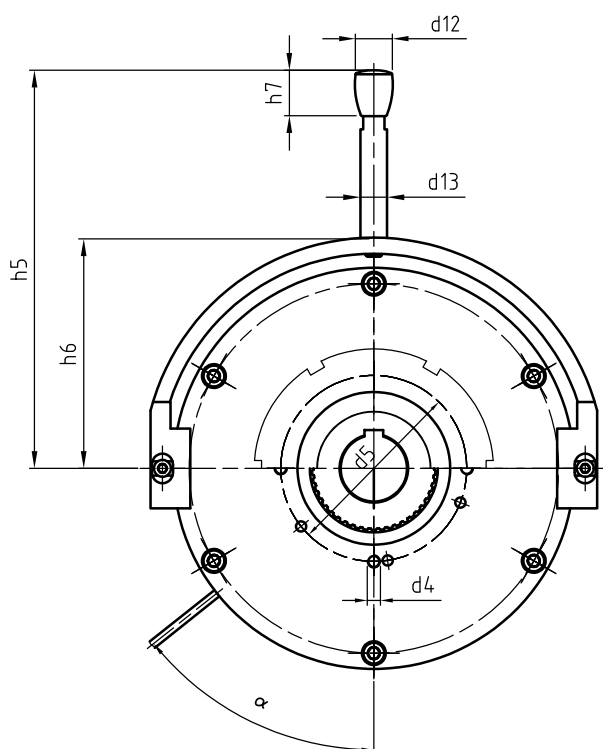
¹⁾ Only use hole diameters marked in bold for the characteristic torque for holding brakes.

²⁾ 4 x M16 rotated by 45° for visual representation

³⁾ Ø 70 mm, groove according to Din 6885/3P9

⁴⁾ Length of the connecting cable

Dimensions in mm





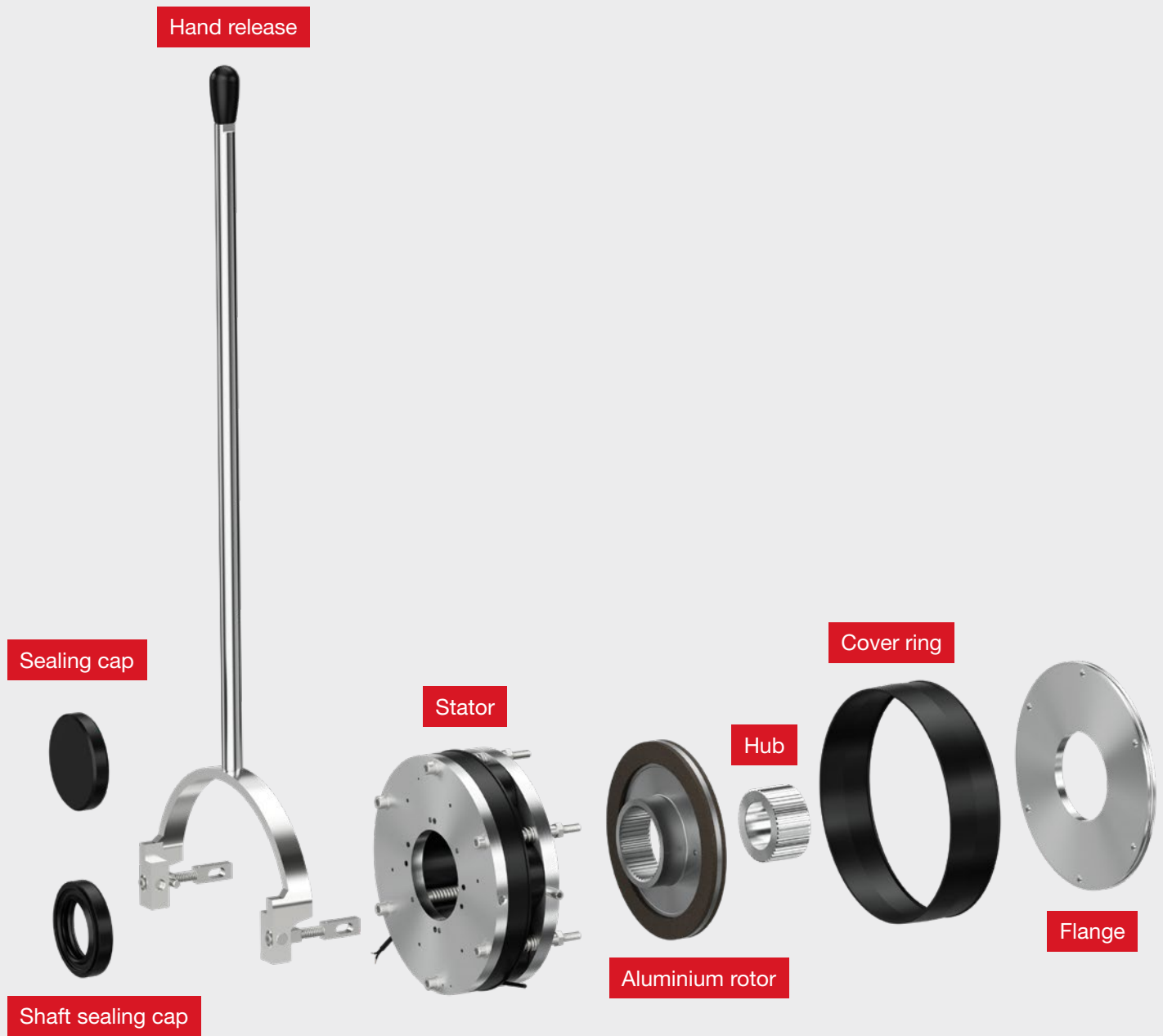
For an overview of the many standard options available, we offer you a choice of combinations. All features are available at short notice and have been extensively tested.

Design

- Brake size** ☐ 18 ☐ 20 ☐ 25 ☐ 31
- Type** ☐ E (with adjustment ring) (not available for size 31)
☐ N (without adjustment ring)
- Voltage** ☐ 205 V / 103 V DC for 230 V AC supply voltage (not available for size 31)
☐ 205 V / 103 V DC for 230 V AC supply voltage
- Cable length** ☐ Standard from 100 mm – 1000 mm in 100 mm steps
☐ from 1000 mm – 3000 mm in 250 mm steps
- Friction lining** ☐ Aluminium Standard ☐ Rotor with toothed intermediate ring
- Festening screws** ☐ For mounting on the motor bearing shield
☐ For flange with through holes

Options

- Counter friction surface** ☐ Flange
- Hand release** ☐ Mounted (not available for size 31)
- Microswitch** ☐ Switching function monitoring
☐ Wear monitoring
- Switching noise** ☐ Noise-reduced
- Hub** For bore diameter, see dimensions
- Sealing** ☐ Cover ring (not available for size 31, cannot be combined with manual release)
☐ Shaft sealing cap (shaft diameter on request, not available for size 31)
☐ Sealing cap (not available for size 31)
- Coating** ☐ Hard chrome-plated friction parts



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