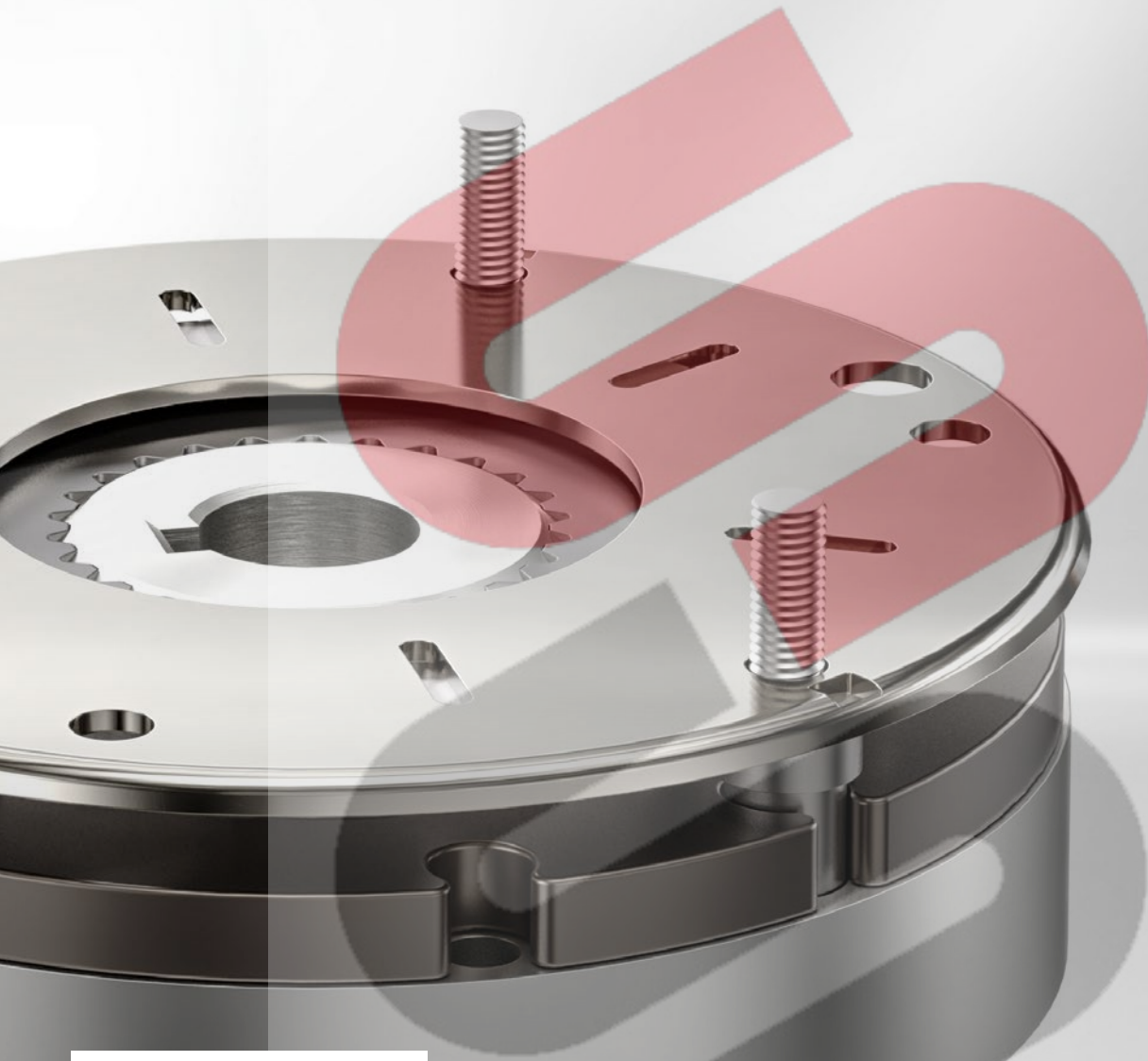


KENDRION

INTORQ

POWERED BY KENDRION



KENDRION SOLUTIONS

INTORQ BFK557

Holding brake with emergency stop function and minimal height

PRECISION. SAFETY. MOTION.

Protection ratings for spring-applied brakes BFK457 and **BFK458**

The protection classes listed in the table were classified under the test conditions stipulated by the DIN EN 60529 standard (protection by housing) and the DIN EN 60034-5 standard (rotating electric machines).

usually restricted when it has a slot for manual release. Generally, if the brake is used in damp conditions, it is necessary to ensure there is water drainage and ventilation.

When the brake is mounted under the fan cowl, it is necessary for the brake to be protected by the fan and the cowl from splashes of water. This protection by the cowl is

Mounting position	BFK458 without additional components	BFK458 with seal and shaft seal	BFK457 without additional components
On the machine's free side frame	IP00	IP54	IP00
Under the fan cowl <i>without</i> manual release	IP55	IP55	IP55
Under the fan cowl <i>with</i> manual release	IP22	IP55	IP22

BFK458



BFK457



Kendrion INTORQ GmbH



Our brakes - perfect for your safe application

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

Strong know-how

Our specialists develop pioneering permanent magnet and spring-applied brakes. On the one hand, they use the bundled know-how in the team; on the other hand, they maintain a dialogue with customers in order to always keep trends and requirements in mind. With INTORQ as a new addition to KENDRION, we have once again consistently expanded our range of spring-applied brakes and clutches for you. So we can find the right solution for every requirement.

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

Worldwide, more than 50 specialists in our research and development department work in agile teams to create convincing product solutions for tomorrow.

In-depth market knowledge

We are very familiar with our focus markets - thanks to in-depth experience and research, but also thanks to long-standing customer relationships based on partnership at eye level.

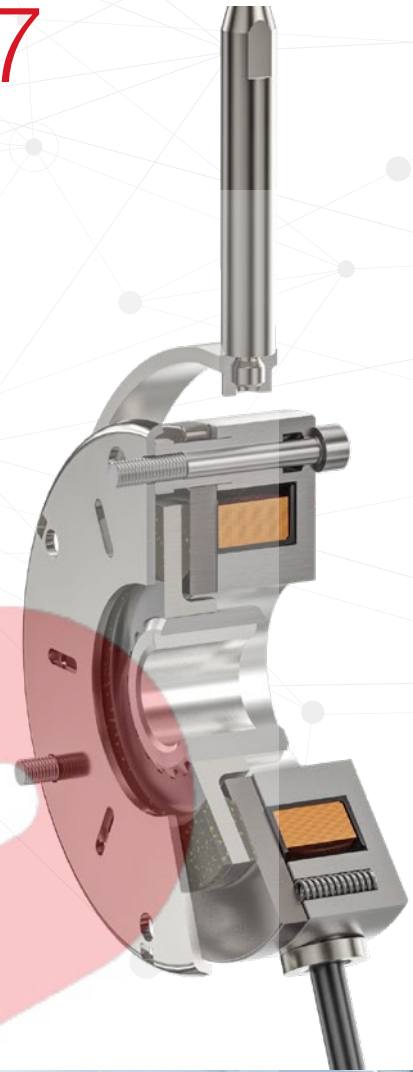
International power

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

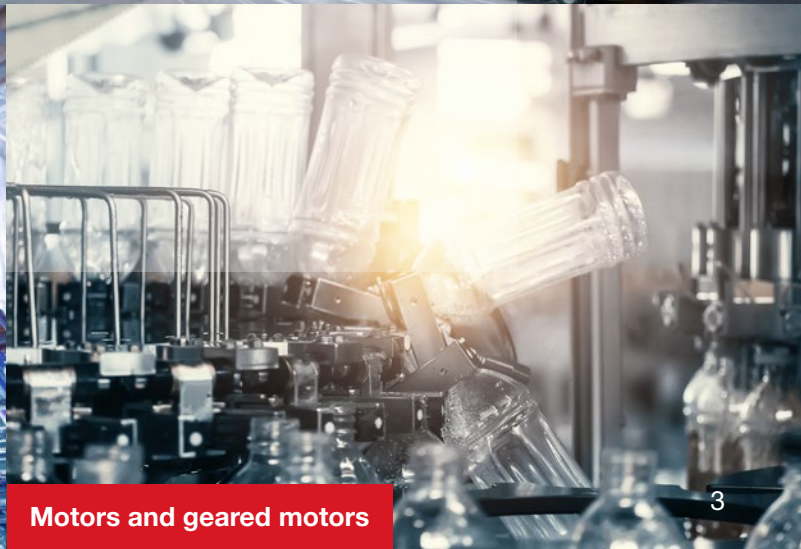
The INTORQ BFK557

On the point

- Fail-safe spring-applied brake
- Flat, space saving design
- Holding brake with emergency stop function
- Optimized for motors in FI operation
- Project solution as an operating brake is possible



Suitable for the use of:





The optimal holding brake

Brakes are used for many applications that need to perform a holding function only. Except for the classic emergency stop situations, dynamic braking rarely occurs.

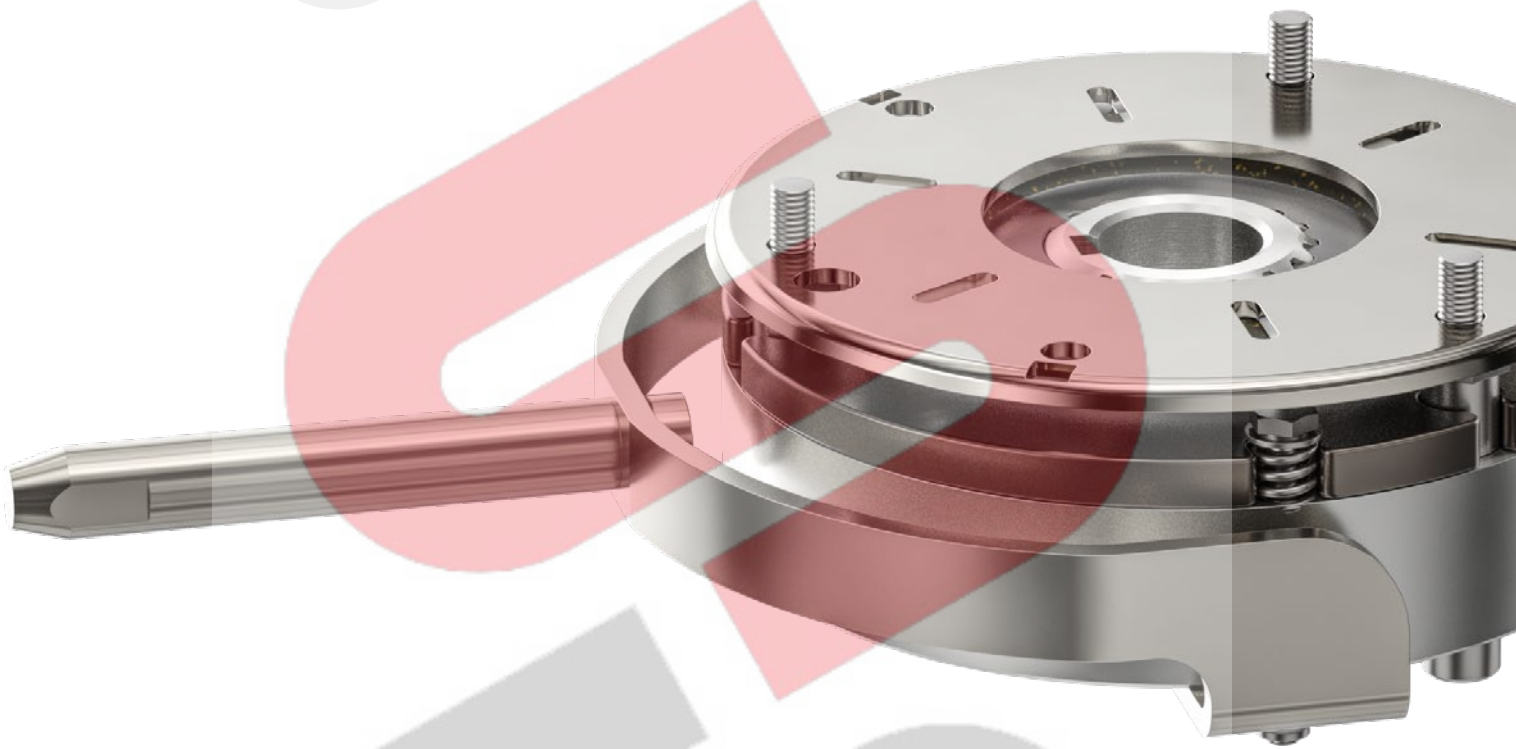
Kendrion has launched a new brake series, the INTORQ BFK557, which is precisely tailored to these requirements. This series features friction linings designed for this purpose and can be used without any problems in speed-controlled motors (FI operating mode). The BFK557 also features the expected high-level emergency stopping energy of INTORQ brakes. A friction lining which has a low tendency to stick was specially selected.

The new INTORQ BFK557, labeled with CE mark and UL-certified, can be used around the world in all markets. As with the BFK457, BFK458 and BFK470 series, the bolt hole circle, the available hub diameters and the number of mounting bolts are always identical. Thus, interchangeability between each series is guaranteed.

The compactness of the brake and fixed air gap ensure a simple and cost-effective installation process. Furthermore, there are no maintenance expenditures. Kendrion also provides the corresponding rectifiers, to match your requirements, for optimally controlling the brakes. Get in touch with us!



Perfect for use as a holding brake
with minimal height

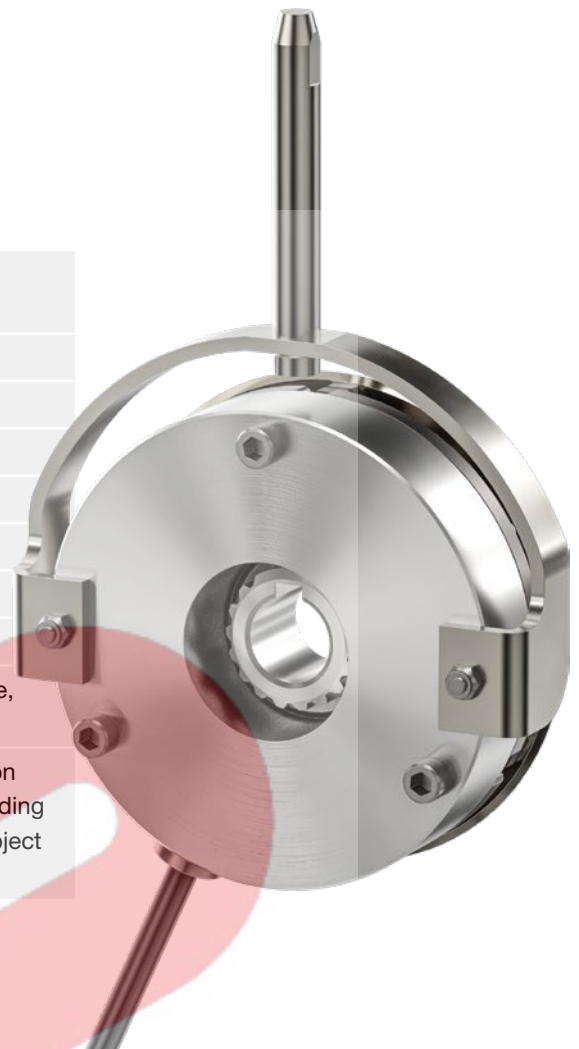


Technical highlights

- Flat, compact design
- Maintenance-free
- Quick, easy installation
- Options: Friction plate, flange, hand-release, cover ring

Technical details

Design types		Rated torque, minimum torque (H version)
Standard rated voltages		24 V, 103 V, 180 V, 205 V
Protection class		IP00 – IP55
Thermal class		F (155°C)
Ambient temperature		-20 to 50°C
Min. holding torques		2 to 40 Nm
Operating time		100% ED
Nominal angular backlash		1°
Options		Friction plate, flange, hand-release, cover ring
Notice		Please read the general information on data sheets and the corresponding operating instructions. Design subject to change without notice.



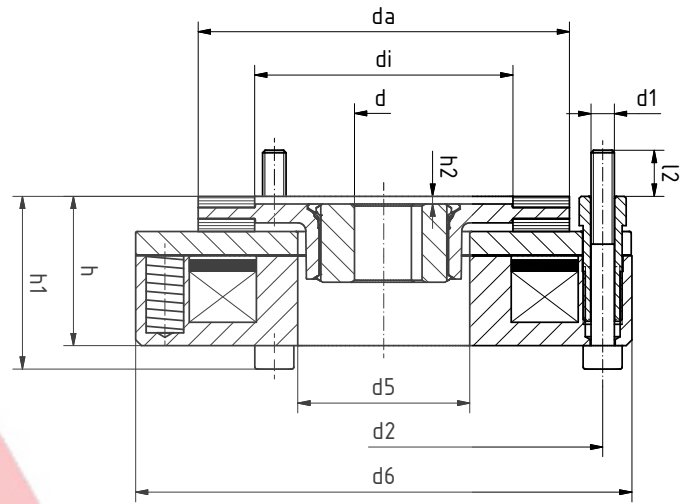
Brake size	Rated torque @ 100 [min ⁻¹] M ₂ torque	Minimum torque* M ₄ torque	Rated power [W] (at 20°C)	Emergency-stop speed n _{max} [min ⁻¹]	Switching energy for single switching W _{max} [J]	Number of emergency stops with maximum energy Z _{ges} [-]
06	5	4	20	6000	3000	100
08	10	8	25	5000	7500	100
10	20	16	27	4000	12000	100
12	40	32	40	3600	24000	100

* For the H version, the minimum torque is specified on the brake's name plate.

You will find the right design for your application in our product finder!



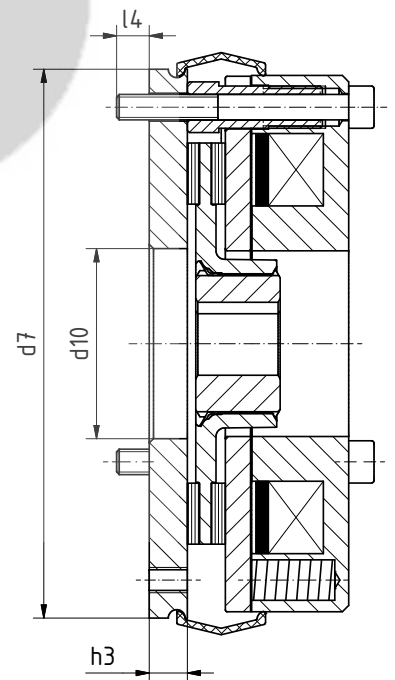
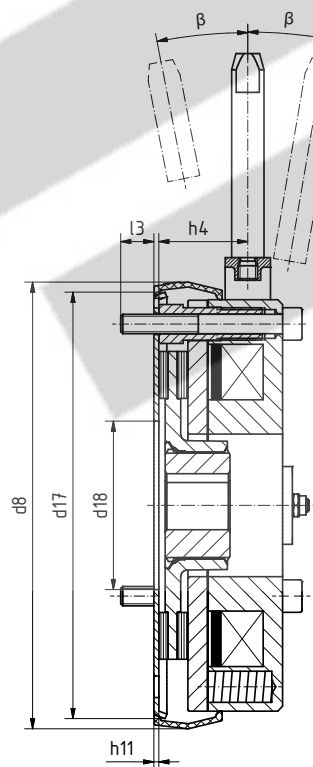
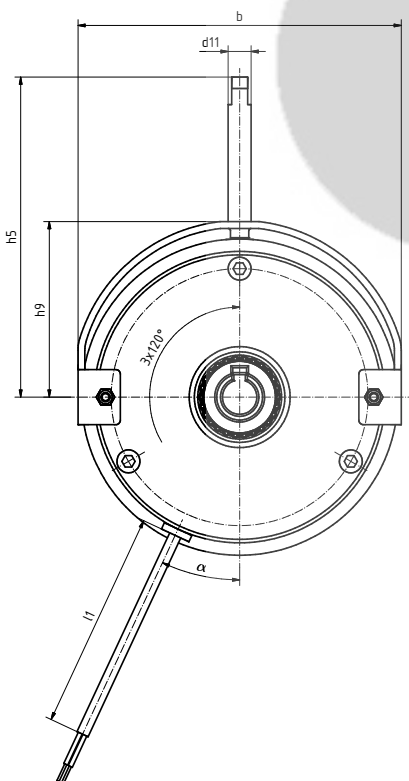
Measurements



Brake size	Hub bore hole d H7 [mm]*	Mounting bolts d1*	Bolt-on pitch circle d2* [mm]	Inner diameter d5 [mm]	Outer diameter d6 [mm]	Height h [mm]	Height h1 [mm]	Hub offset h2 [mm]*	Screw-in length l2 [mm]
06	11/12/14/15	3xM4	72	31	83	29,4	33,4	1	6,6
08	11/12/14/15/20	3xM5	90	41,5	103	31,4	36,4	1	8,6
10	11/12/14/15/20	3xM6	112	44	127	38,2	44,2	2	11,8
12	20/25	3xM6	132	52	147	41,3	47,3	2	13,7

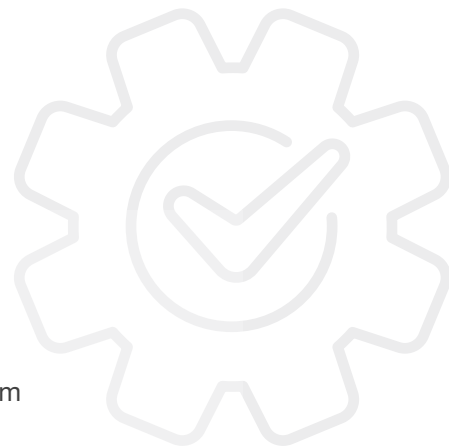
* Similar to BFK457, BFK458, BFK470

Brake size	Flange diameter d7 [mm]	d10 [mm]	Cover ring diameter d8 [mm]	Friction plate diameter d17 [mm]	d18 [mm]	Friction plate height h11 [mm]	Flange height h3 [mm]	d11 [mm]	h5 [mm]	h9 [mm]	b [mm]	Cable length l1 [mm]	l3 [mm]	l4 [mm]	h4 [mm]	α [°]	β [°] -2,5°
06	87	31	93	86	36	1,5	6	8	106	51	97	400	9,1	9,6	16	25	10
08	105	41	113	106	45	1,5	7	8	117	61,5	118	400	7,1	6,6	17,2	25	10
10	130	45	138	132	52	1,5	9	10	140	76,5	141	400	10,3	7,8	27,5	25	10
12	150	52	158	153	68	1,5	9	10	9	87,5	163	500	12,2	9,7	29,6	25	10



Overview of product variants

BFK557 - 



Design

- Version**
 - Minimum torque specification M_4 in Nm (H version), tolerance 0/+80%
 - Rated torque specification M_2 in Nm Based on 100 rpm, tolerance -25%/+40%

- Size**
 - 06
 - 08
 - 10
 - 12

- Voltage**
 - 24 V
 - 103 V
 - 180 V
 - 205 V

- Rotor**
 - Aluminium
 - Noise-reduced (rotor with toothed intermediate ring)
 - Plastic Only sizes 06 and 08

- Fastening screws** Included in all versions and adjusted in length according to the option (counter friction surface).

Options

- Hub**
 - For bore diameter, refer to the dimensions

- Hand-release**
 - Installed

- Counter friction face**
 - Friction plate
 - Flange

- Sealing**
 - Cover ring

