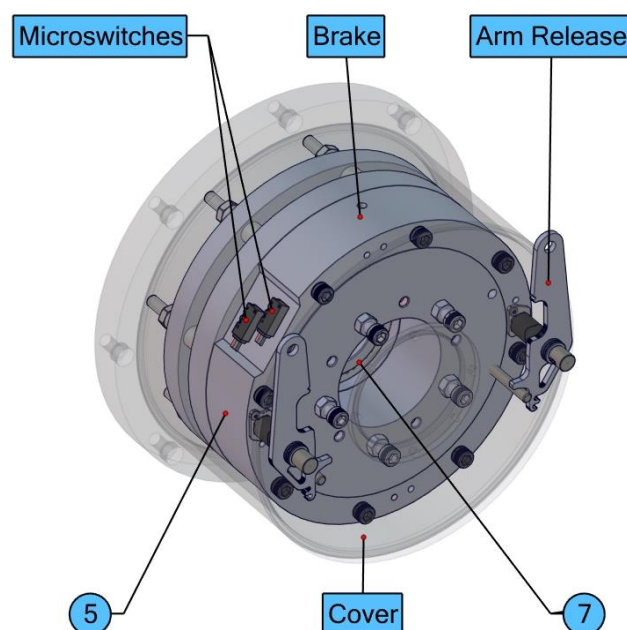
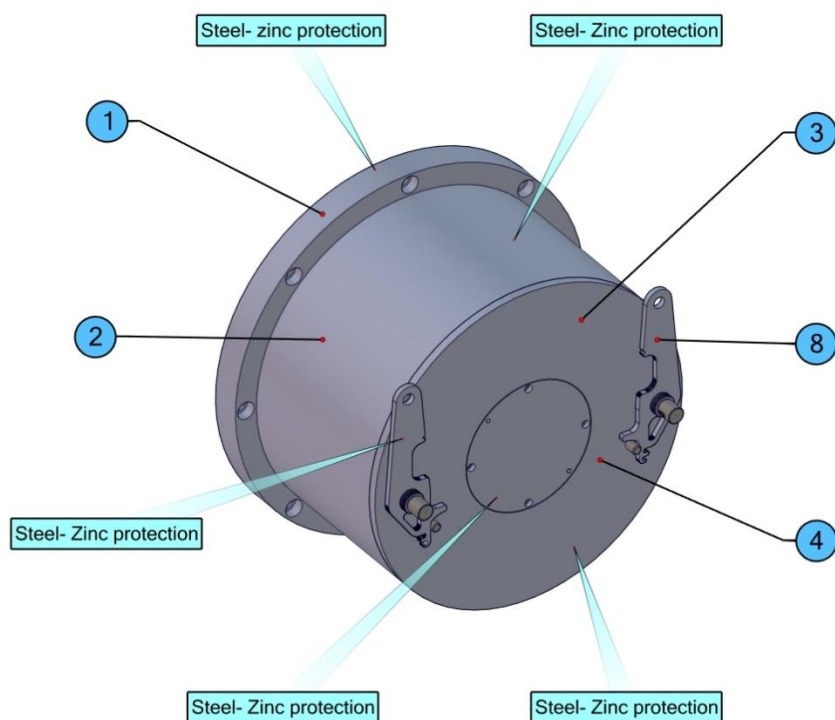
	<b>Temporiti s.r.l. – Brakes Model “K-COVER”</b>	<b>K-COVER series</b>
Date: <b>27-05-2015</b>	Prepared / Updated : Ing. <b>Germano Olivari</b>	Page <b>1 / 6</b>

## BRAKE SPECIFICATION

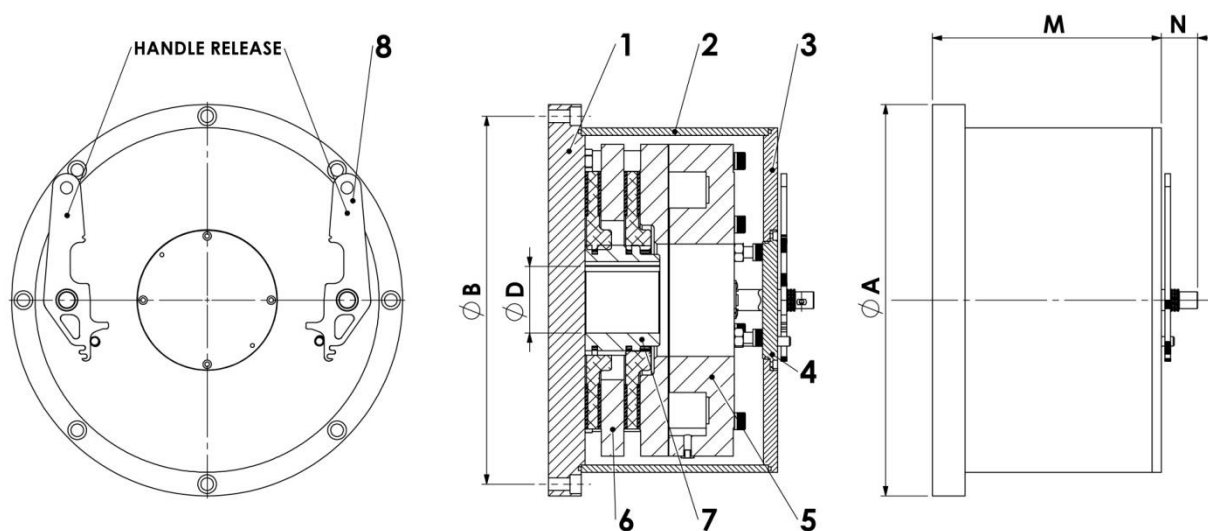
The K series electromechanical brake is a direct current spring-set brake. The main characteristics of K series are:

- Robust structure by steel bar.
- Minimum noiseless in the engagement and disengagement operation (< 70 dB according to directive 98/37/CEE and higher) (< 45 dB available as option).
- Ease assembly of brake due the pre assembling of it.
- Good heat dissipation: thought the motor fan and/or the body magnet, engine cover, brake cover. Mounting flange must be in steel because it also act as breaking surface.
- The electromagnet coil is completely cemented with epoxy resin, to grant IP66, and the mechanical parts are protects by special electroplating for 96 hours salt fog working. Brake Cover has the same zinc plating or anodic treatment, depending the construction material
- Handle release available with the special front side construction, to reduce the working space and the apply force.
- IP66 cover protection
- .Special friction material for not sticking effect and low wear also in case of heavy duty application.






## OVERALL DIMENSIONING



### Leggenda

- 1- Flange
- 2- Cover
- 3- Tapcover
- 4- Tapincover
- 5- Magnet
- 6- Disk
- 7- Hub

	KFB63	KFB100	KFB160	SFB100	SFB160	SFB250	SFB400
Temporiti Type	K9/D	K10	K10/D	K10/D	K11/D	K11/D	K12
D H7	Ø50 Z28	Ø70 Z45					Ø80 Z60
A	Ø353				410		500
B	Ø328				385		475
M	204,5	180	215		250		250
N	-	38,5					

	<b>Temporiti s.r.l. – Brakes Model “K-COVER”</b>	<b>K-COVER series</b>
Date: <b>27-05-2015</b>	Prepared / Updated : Ing. <b>Germano Olivari</b>	Page <b>3 / 6</b>

Data that can be modify from producer any time.


## PROPERTIES

		KFB63	KFB100	KFB160	SFB100	SFB160	SFB250	SFB400
Temporiti Type		<i>K9/D</i>	<i>K10</i>	<i>K10/D</i>	<i>K10/D</i>	<i>K11/D</i>	<i>K11/D</i>	<i>K12</i>
<b>Brake torque (Nm)</b>		<b>630</b>	<b>1000</b>	<b>1600</b>	<b>1300</b>	<b>2100</b>	<b>3300</b>	<b>4500</b>
<sup>(1)</sup> <b>Moment of inertia (kgm<sup>2</sup>)</b>		<b>0,0107</b>	<b>0,009</b>	<b>0,009</b>	<b>0,009</b>	<b>0,0227</b>	<b>0,0227</b>	<b>0,112</b>
<b>Speed Max. (min<sup>-1</sup>)</b>		<b>3000</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>
<sup>(2)</sup> <b>Voltage (VDC)</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Power (W)</b>		<b>80</b>	<b>120</b>	<b>120</b>	<b>120</b>	<b>220</b>	<b>220</b>	<b>320</b>
<b>Current (A)</b>		<b>0,8</b>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>	<b>2,2</b>	<b>2,2</b>	<b>3,2</b>
<b>Airgap (mm)</b>	<i>min</i>	<b>0,4</b>	<b>0,4</b>	<b>0,6</b>	<b>0,6</b>	<b>0,6</b>	<b>0,6</b>	<b>0,4</b>
	<i>max</i>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>	<b>1,2</b>

<sup>(1)</sup> Total moment of inertia of the discs and hub

<sup>(2)</sup> All possibilities for power supply.

Data that can be modify from producer any time.

	<b>Temporiti s.r.l. – Brakes Model “K-COVER”</b>	<b>K-COVER series</b>
<i>Date: 27-05-2015</i>	<i>Prepared / Updated : Ing. Germano Olivari</i>	<i>Page 4 / 6</i>

## COVER

For K series covers there are different kind of material in base of the brake.

### K9 BRAKE

<i>PART</i>	<i>MATERIAL</i>
<i>Tap cover</i>	<b>ASTM A105</b>
<i>Cover</i>	<b>ASTM A105</b>
<i>Flange</i>	<b>ASTM A105</b>
<i>Disk</i>	<b>C40</b>

### K10 BRAKE

<i>PART</i>	<i>MATERIAL</i>
<i>Tap cover</i>	<b>ASTM A105</b>
<i>Cover</i>	<b>ASTM A105</b>
<i>Flange</i>	<b>ASTM A105</b>
<i>Disk</i>	<b>AL 7075</b>


### K11 BRAKE

<i>PART</i>	<i>MATERIAL</i>
<i>Tap cover</i>	<b>ASTM A105</b>
<i>Cover</i>	<b>ASTM A105</b>
<i>Flange</i>	<b>ASTM A105</b>
<i>Disk</i>	<b>AL 7075</b>

<i>PART</i>	<i>MATERIAL</i>
<i>Tap cover</i>	<b>ASTM A105</b>
<i>Cover</i>	<b>ASTM A105</b>
<i>Flange</i>	<b>ASTM A105</b>
<i>Disk</i>	<b>AL 7075</b>

**K12 BRAKE** ASTM A105 parts undergo galvanizing treatment.

Data that can be modify from producer any time.

	<b>Temporiti s.r.l. – Brakes Model “K-COVER”</b>	<b>K-COVER series</b>
Date: <b>27-05-2015</b>	Prepared / Updated : Ing. <b>Germano Olivari</b>	Page <b>5 / 6</b>

## FRICION MATERIAL

> **material: G-95**

Friction material

> **DOC: 020**  
> **REVISION: 8**

> **RBLE: I. SANCHEZ**  
> **FECHA: 04/10/04**

### Description

Is the formulation standard of Frenos Saulea, designed principally for automotive clutch applications (passengers vehicles, etc).

Under normal operating conditions, G-95 will offer a reliable, hard wearing, yet economic material.

The glass fibre reinforcement yard is spiral wound with a fine copper core-producing a strong base with good heat transfer properties.

### Applications

- Is suitable for replacement clutch facings-these facings having high resistance to burst and providing smooth engagement.
- Also for brake blocks for stamped presses.

### Adhesives

The use of any well known thermosetting adhesive is recommended.

### Rubbing surfaces

Good quality, fine grained pearlitic cast iron with BHN of 150-200 is recommended.

### Physical properties

- Density g/cm<sup>3</sup> **1.80 - 1.90**
- Hardness (SHORE-D) **70-80**
- Acetone extraction **< 1.5%**
- Ignition loss **38-44%**

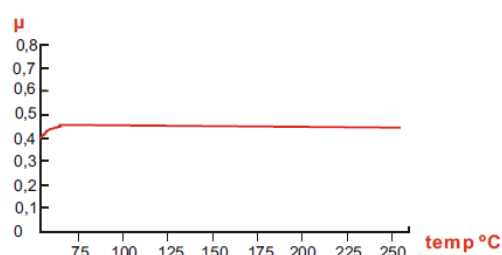
### Mechanical properties

- Burst resistance  
(200X137X 3,5)@200°C **> 10.500 rpm**

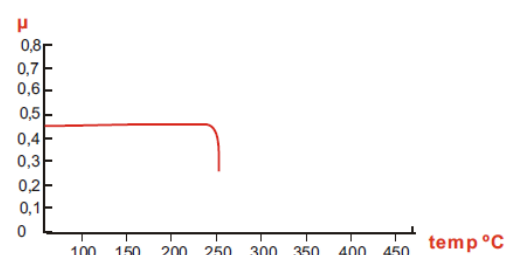
### Friction properties


- Friction coefficient (dynamic)  
(See graph) **0.45± 0.05**
- Wear rate (@ 79N, 7m/s, 300°C)  
F.A.S.T **50 - 80mm<sup>3</sup>**
- Recommended operating temperatures (max):  
Continuous operation **250 °C**  
Intermittent operation **350 °C**  
Initial Fading temperature **253 °C**

► **μ vs temperature (F.A.S.T constant clamping) @ 79N & 7m/s**



► **μ vs temperature (F.A.S.T constant friction) @100N & 11m/s**



	<b>Temporiti s.r.l. – Brakes Model “K-COVER”</b>	<b>K-COVER series</b>
Date: <b>27-05-2015</b>	Prepared / Updated : Ing. <b>Germano Olivari</b>	Page <b>6 / 6</b>

## ELECTRICAL CONNECTION

K-Cover brakes are dc electromagnetic brakes. For this reason the input voltage can be:

- a- Directly from a dc input.
- b- From a three phase input voltage, using a rectifier, like the electrical connection showed below.

