

# ELECTROMAGNETIC SERVICE BRAKES

MAIN CHARACTERISTICS	OPTIONS
<ul style="list-style-type: none"> <li>• FAILSAFE BRAKE BY SPRING APPLICATION</li> <li>• ELECTROMAGNETIC RELEASE</li> <li>• OPENING PROVING SWITCH</li> </ul>	<ul style="list-style-type: none"> <li>• MECHANICAL RELEASE LEVER</li> <li>• HYDRAULIC RELEASE</li> <li>• CLOSING PROVING SWITCH</li> <li>• MANUAL RELEASE CONTROL SWITCH</li> <li>• HIGH TEMPERATURE, IRON AND STEEL CONDITIONS</li> </ul>



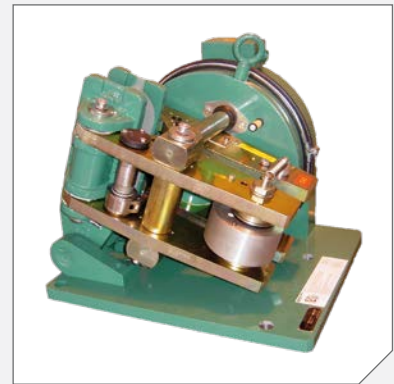
**645-650-660**

- Association with discs Ø175 to 625
- Manual wear compensation
- Option:  
Mounting on a vertical axis disc



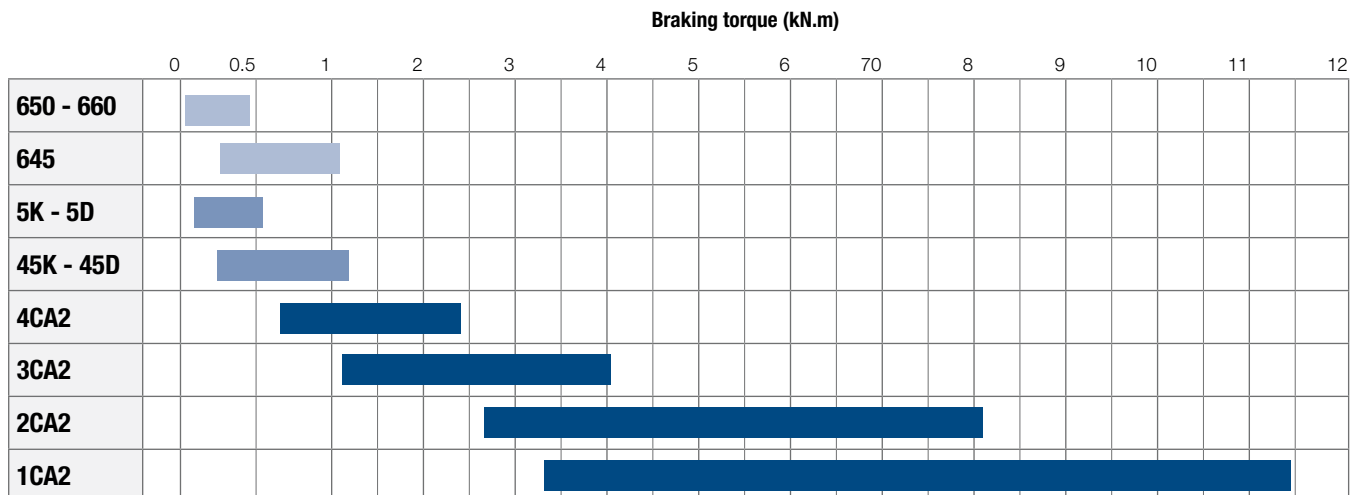
**5K - 5D  
45K - 45D**

- Association with discs Ø315 to 625
- Automatic wear compensation
- Option:  
Mounting on a vertical axis disc



**4CA2 - 3CA2  
2CA2 - 1CA2**

- Association with discs Ø445 to 995
- Automatic wear compensation
- Left and right hand calipers
- Option: Manual wear compensation



### DISC BRAKE - 4CA2 CALIPER

Revision number: T10049-01-D

Revision date: 22.03.2016

Fail safe braking  
Braking by spring application  
Electromagnetic release  
Automatic wear compensation  
Opening proving switch  
Brake pads with wear indicator

**Working conditions:**

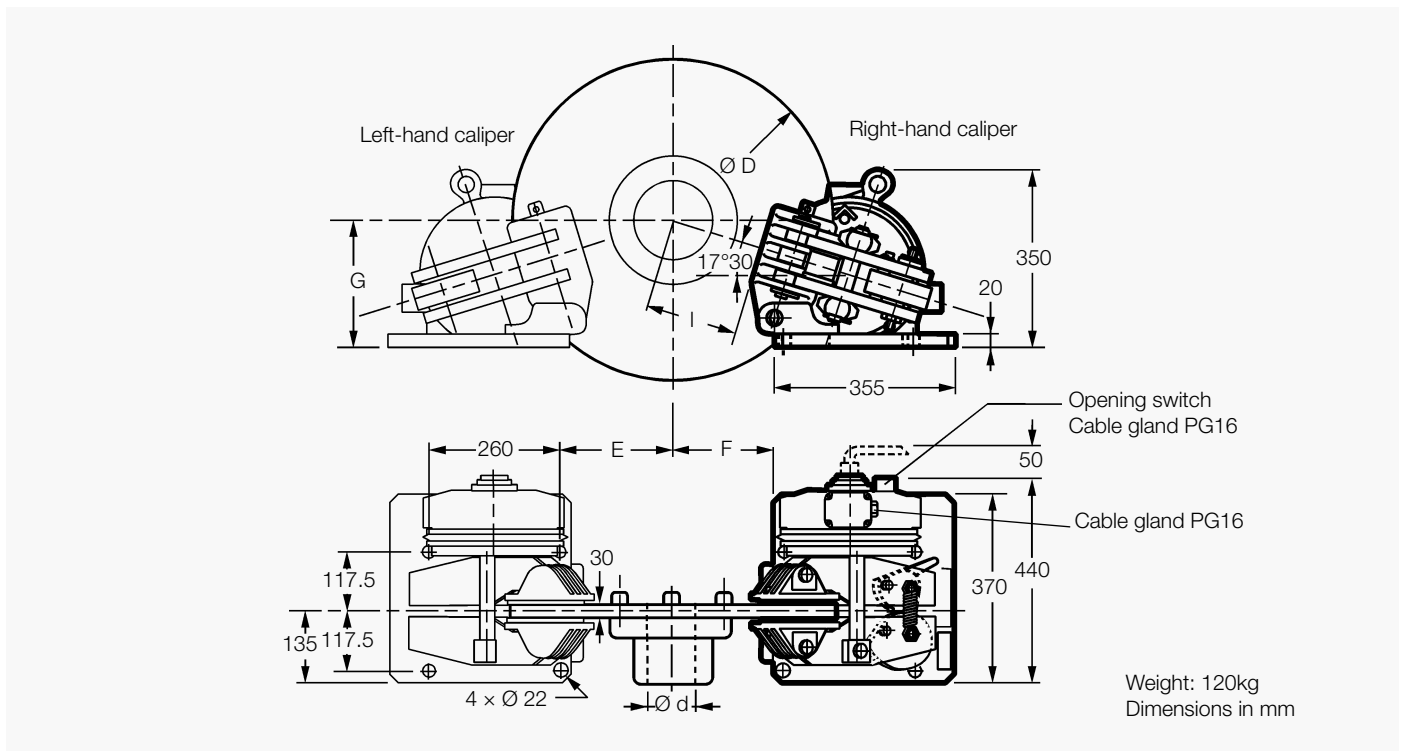
- Ambient temperature: -10°C to +60°C
  - Relative humidity ≤ 70%
  - Dust in atmosphere ≥ 65µ
- Other conditions, consult us.

**Use:**

Any application up to 1000act/h

**Options:**

- Manual release lever
- Hydraulic release
- Manual wear compensation
- Flameproof protection
- Marine protection
- Closing proving switch
- Switch on release nut



Response time at nominal torque : see the leaflet of the associated electrical power supply.

Discs		445	495	550	625	705	795
Nominal torque for 1 caliper adjustable from -30 to +20%	N.m	950	1100	1270	1500	1750	2000
Maximum disc speed for nominal torque	r.p.m.	2100	1900	1800	1500	1300	1200
D	mm	445	495	550	625	705	795
d	mm	0-70	0-100	0-100	0-100	0-120	0-130
E	mm	130	160	180	215	255	295
F	mm	110	140	160	195	235	275
G	mm	225	235	240	250	260	275
I (approx. dimension)	mm	90	125	145	180	225	265
Maximum reaction on shaft	1 caliper	N 7400					
	2 calipers	N 4450					

**Opening proving switch :**

250VAC maxi., 5A maxi., with interrupting capacity: 50VA maxi.  
220VDC maxi., 5A maxi., with interrupting capacity: 50W maxi.

Compatible with PLC (Programmable Logic Controllers).  
An opening switch used with other equipment than PLC must not be reused with a PLC.

# SIME Brakes Industrial Braking Systems

## Service Brakes

### DISC BRAKE - 3CA2 CALIPER

Revision number: T10050-01-C

Revision date: 19.04.2016

Fail safe braking  
Braking by spring application  
Electromagnetic release  
Automatic wear compensation  
Opening proving switch  
Brake pads with wear indicator

**Working conditions:**

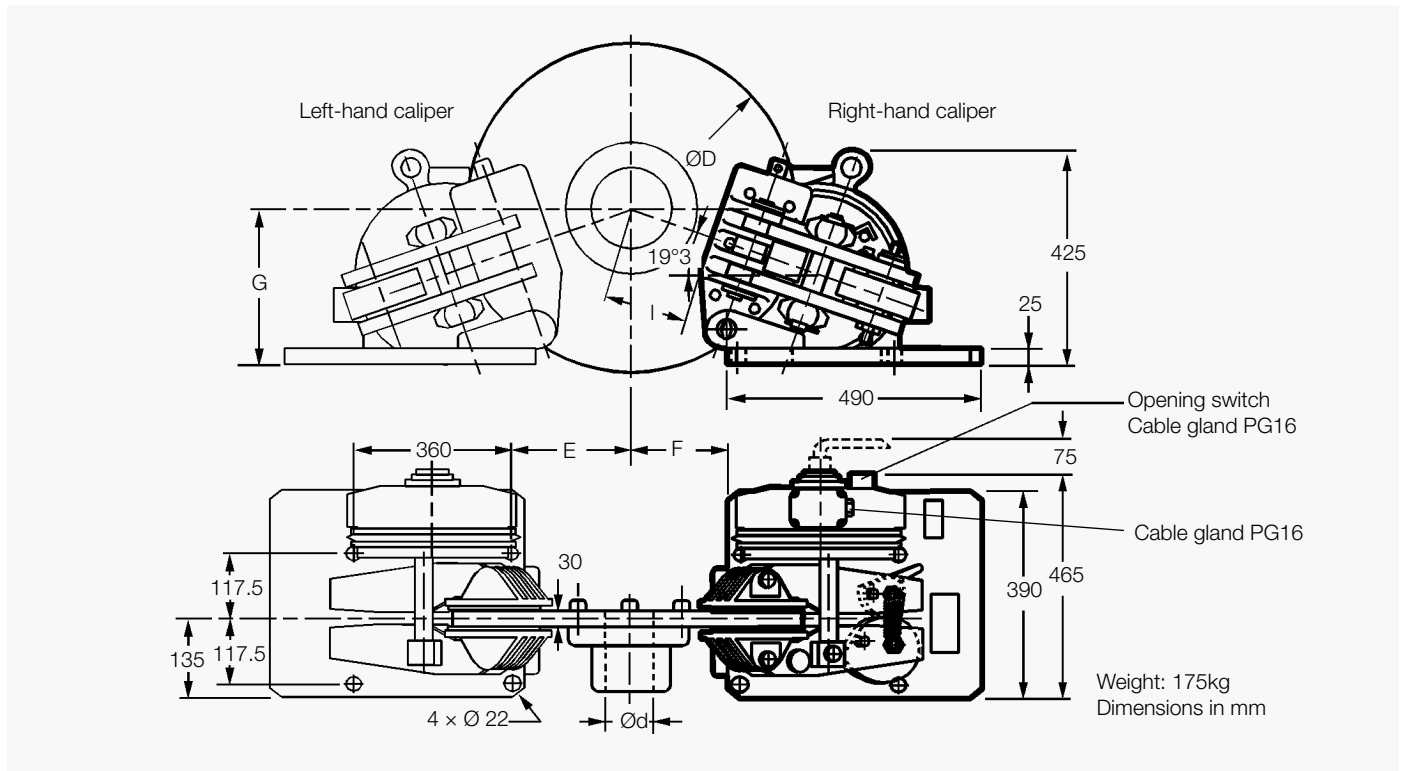
- Ambient temperature: -10°C to +60°C
- Relative humidity ≤ 70%
- Dust in atmosphere ≥ 65µ

Other conditions, consult us.

**Use:**  
Any application up to 1000act/h

**Options:**

- Manual release lever
- Hydraulic release
- Manual wear compensation
- Load regulated lowering
- Flameproof protection
- Marine protection
- Closing proving switch
- Switch on release nut



Response time at nominal torque : see the leaflet of the associated electrical power supply.

Discs		445	495	550	625	705	795
Nominal torque for 1 caliper adjustable from -30 to +20%	N.m	1600	1850	2100	2500	2900	3350
Maximum disc speed for nominal torque	r.p.m.	2100	1900	1800	1500	1300	1200
D	mm	445	495	550	625	705	795
d	mm	0-70	0-100	0-100	0-100	0-120	0-130
E	mm	100	120	150	185	225	265
F	mm	80	100	130	165	205	245
G	mm	285	295	305	315	330	345
l (approx. dimension)	mm	90	115	145	180	225	265
Maximum reaction on shaft	1 caliper	N					
	2 calipers	N					

**Opening proving switch :**  
250VAC maxi., 5A maxi., with interrupting capacity: 50VA maxi.  
220VDC maxi., 5A maxi., with interrupting capacity: 50W maxi.

Compatible with PLC (Programmable Logic Controllers).  
An opening switch used with other equipment than PLC must not be reused with a PLC.

### DISC BRAKE - 2CA2 AND 1CA2 CALIPERS

Revision number: T10051-01-C / T10065-01-B

Revision date: 22.03.2016 / 23.07.2012

Fail safe braking  
Braking by spring application  
Electromagnetic release  
Automatic wear compensation  
Opening proving switch

**Working conditions:**

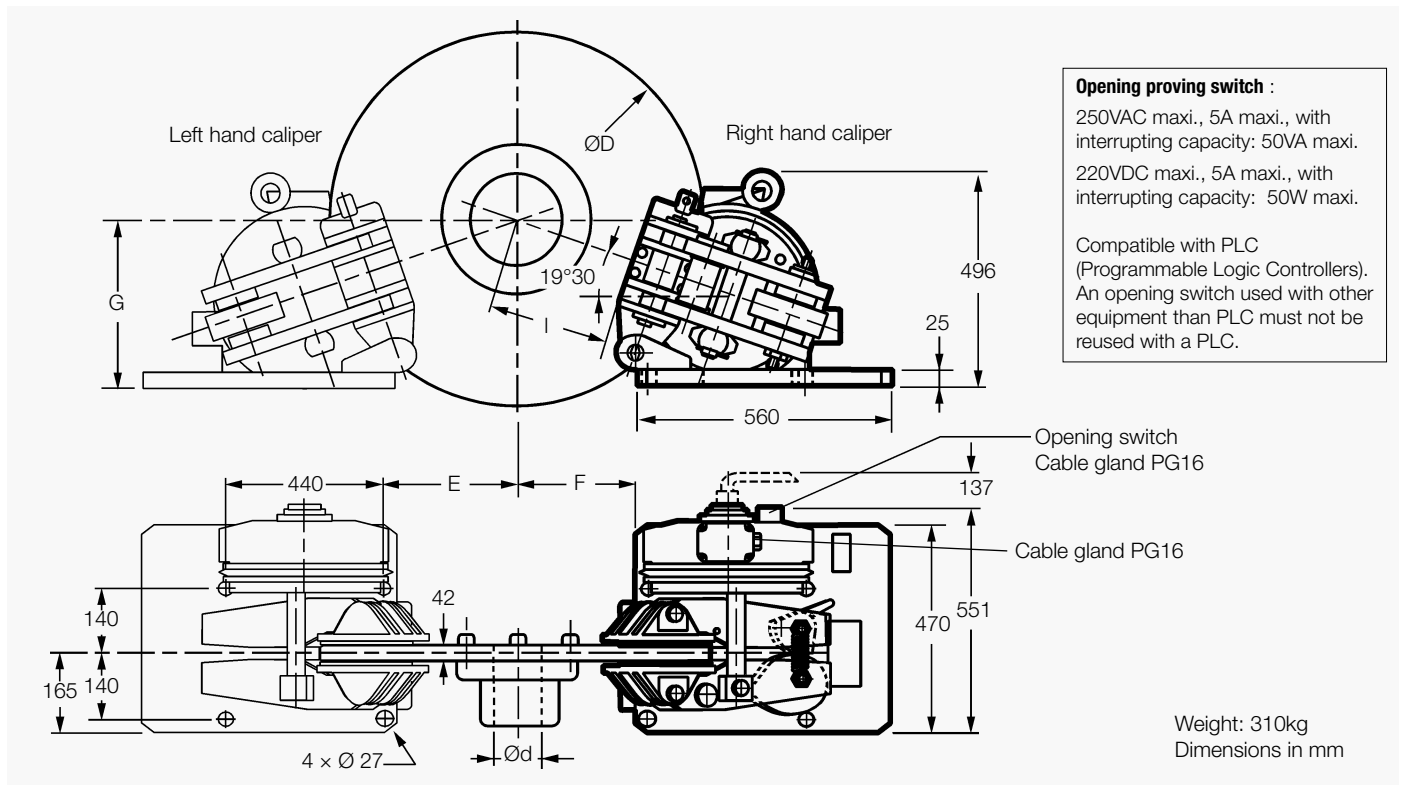
- Ambient temperature: -10°C to +60°C
  - Relative humidity ≤ 70%
  - Dust in atmosphere ≥ 65µ
- Other conditions, consult us.

**Use:**

Any application up to 600act/h

**Options:**

- Brake pads with wear indicator
- Manual wear compensation
- Hydraulic release
- Load regulated lowering
- Flameproof protection
- Marine protection.



Discs		625	795	995
D	mm	625	795	995
d	mm	40-140	40-180	40-180
E	mm	157	250	345
F	mm	127	220	315
G	mm	353	385	415
I (approx. dimension)	mm	174	268	368

Response time at nominal torque : see the leaflet of the associated electrical power supply.

Discs		625	795	995
<b>2CA2</b>				
Nominal torque for 1 caliper adjustable from -30 to +20%	N.m	3 800	5 150	6 700
Maximum disc speed for nominal torque	r.p.m.	1 500	1 200	900
Maximum reaction on shaft	1 caliper	N		
	2 calipers	N		

Discs		625	795	995
<b>1CA2</b>				
Nominal torque for 1 caliper adjustable from -50 to 100%	N.m	6 610	8 800	11 370
Maximum disc speed for nominal torque	r.p.m.	310	250	200
Maximum reaction on shaft	1 caliper	N		
	2 calipers	N		