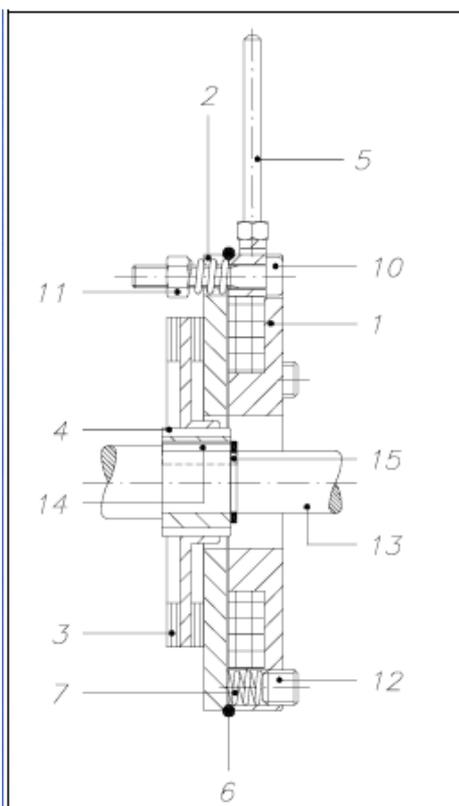
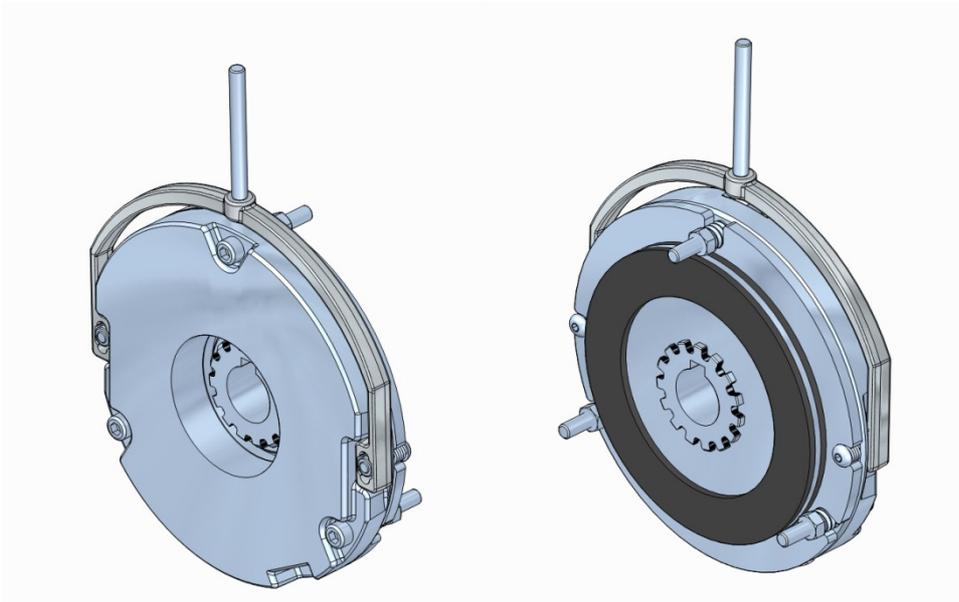




O.E.G. SPRING PRESSURE SAFETY BRAKES IN DIRECT CURRENT PCC TYPE

TECHNICAL DATASHEET



- | | |
|----|-------------------------|
| 1 | Magnet casing |
| 2 | Mobile anchor |
| 3 | Brake disc |
| 4 | Driving hub |
| 5 | Hand release (OPTIONAL) |
| 6 | Protection + "O" ring |
| 7 | Thrust spring |
| 10 | Fastening screw |
| 11 | Locking nut |
| 12 | Adjusting screw |
| 13 | Driving shaft |
| 14 | Key |
| 15 | Seeger ring |



The O.E.G. PCC brake series are safety brakes, since they act in the absence of power supply through the pressure exerted by springs. When the coil housed in the magnet body (1) is energized, the armature (2) is attracted, against the force of the springs (7), thus leaving it free to rotate the shaft (13), on which is mounted the fan (3) sliding axially on the motor shaft (13). Disconnecting the power supply, the springs (7) push the armature (2) pushing it against the fan (3). In this way the shaft (13) is braked. The softer construction creates a redundancy that makes the equipment safe.

FEATURES

Braking torque from 5 Nm to 55 Nm.

Normal input voltage 103 V DC and 178 V DC from half wave rectifier (see "Electrical accessories" section).

All voltages from 12 V DC to 300 V DC on request.

S1 service, class F insulation, watertight coil.

Absestos free noiseless friction packing.

Steel driving hub with antivibration 'O' ring.

Steel brake disc.

No axial load on the driving shaft.

Braking torque adjustable from 100% to 50%.

Possible assembly of hand release device (with the exception of size 56).

Minimum axial dimensions.

TYPICAL APPLICATION

Automation requiring smooth braking and average duty.

Transfer machine.

Electric trucks.

Forklift.



DIMENSIONS

With reference to the drawing, see brake dimensions in the table.

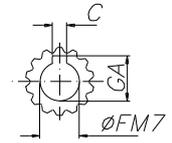
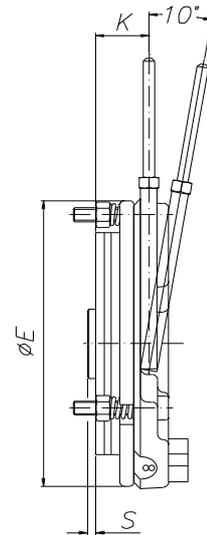
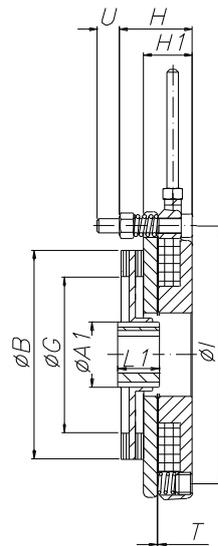
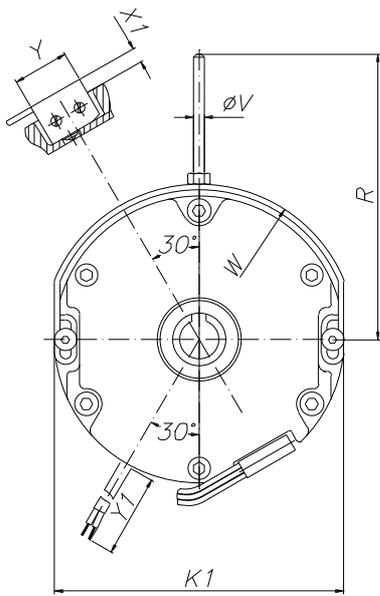
Where present, the letter superscript indicates possible constructive alternatives that have to be considered coupled by apex (i.e. choosing C1 means you have GA1, X1, Y1, Z1).

	56	63/71	80/90	100/112	132/160
M_F[Nm]	3	7	15	25	55
A	23	25	35	46	62
B	50	80	100	124	152
C	4	5	6	6/8	8
E	73	103	126	154	200
F	11	12	18	18	24
F¹	11	14	20	24	28
G	23	60	65	85	114
GA	12,8	14,3	20,8	20,8	27,3
GA¹	12,8	16,3	22,8	27,3	31,3
H	25,2	17,5	19,7	22,7	40,8
H¹	33,7	26	28,2	32,2	40,8
I	62	93	116	139	178
L	10	20	23	26	19
P	5	5	5	6	8
T	0,2	0,2	0,2	0,25	0,3
U	5,5	9	9	7,8	9,2
X	8.5	8.5	8.5	8.5	8.5
Y¹	150	200	250	300	400
PESO[daN]	0,73	1	2,62	2,87	6,05
P [W]	15	18	25	35	60

DRAWINGS



Technical Datasheet PCC TYPE





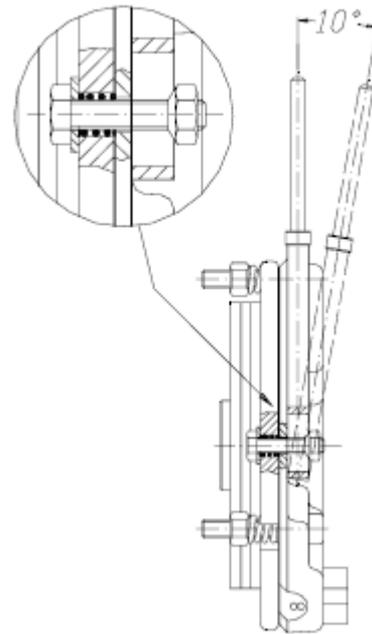
TECHNICAL INFORMATION

Brakes are made in the standard three-spring version. The braking torque is preset. Brakes with higher or lower braking torque can be supplied on request.

Adjusting the braking torque to low values allows to release the brake even with higher air gaps with respect to hand release S value.

For safety reasons, S value should be increased to a value that won't allow the brake release @ the specific braking torque.

Lever rotation angle will increase accordingly.





BRAKE SELECTION

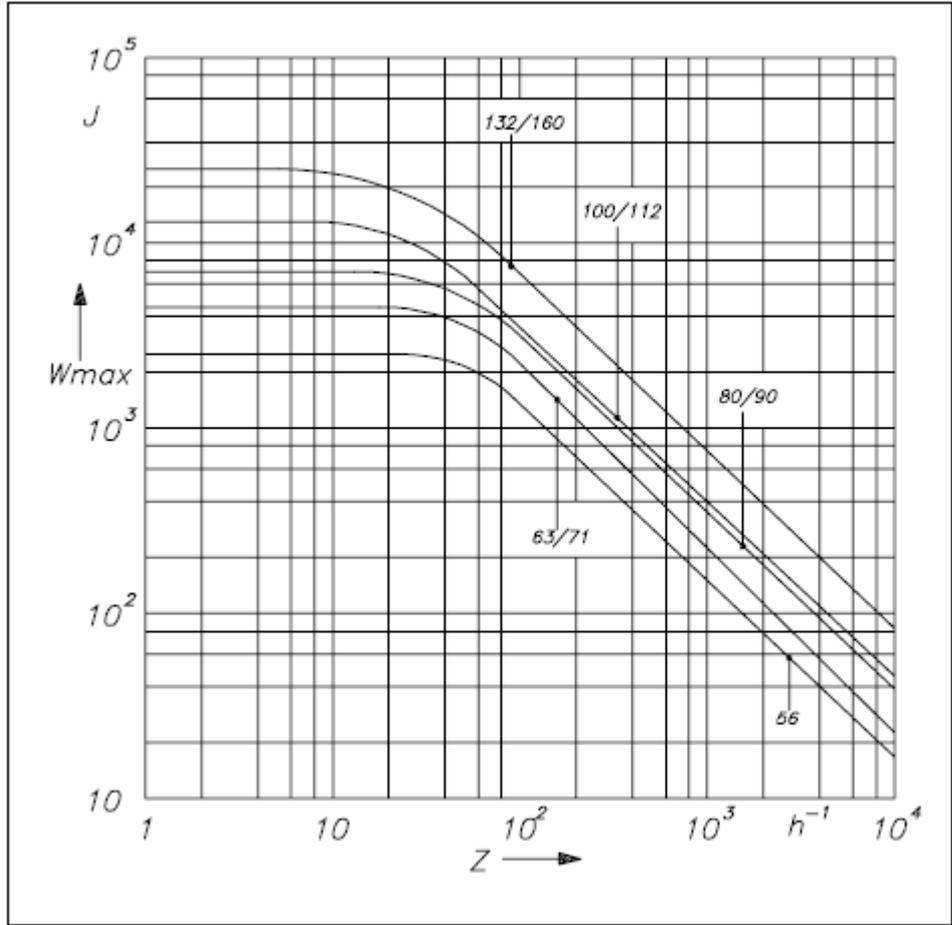
The following table shows the characteristic values to be taken into consideration for the check calculation of the correct brake selection.

		56	63/71	80/90	100/112	132/160
Braking torque	$M_F^{1)}$ [Nm]	3	8	14	25	55
	$M_F^{2)}$ [Nm]	6	16	28	50	110
Air Gap	T_{min} [mm]	0,2	0,2	0,2	0,25	0,3
	T_{max} [mm]	0,35	0,5	0,6	0,65	0,7
Max speed	n_{max} [min ⁻¹]	4500	3600	3600	3600	3600
Release lever height	X [mm]					
Brake disc moment of inertia	J [kgcm ²]	0,12	0,6	1,3	8,8	16
Brake life	$W^3)_{tot}$ [MJ]	200	500	750	1000	1600
	$W^4)_2$ [MJ]	10	30	60	80	132
t_1	[ms]	30	40	60	100	150
$t_2^{5)}$	[ms]	50	80	150	250	400
$t_2^{6)}$	[ms]	5	8	15	25	40

- 1) With current rectifier NBR TYPE (see "Electrical accessories" section).
- 2) With current rectifier SBR TYPE (see "Electrical accessories" section).
- 3) For friction packing wear up to a 1 mm thickness.
- 4) Between two wear adjustments from T_{min} to T_{max} .
- 5) Opening on AC side.
- 6) Opening on DC side.



BRAKE WORKING DIAGRAM FOR CALCULATIONS





LAVORO MASSIMO
PER NUMERO DI
INTERVENTI/ORA

