

ELECTROMAGNETS



DICTATOR electromagnets are manufactured in Germany. They meet the highest quality standards and have been tested according to all relevant regulations.

The electromagnets for hold-open systems are a great example of DICTATOR's flexibility. There are numerous different models available, so that the right magnet can be supplied for practically any application.



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Subject to technical changes. No claim for compensation in case of errors.

Electromagnets range ST ______07.03.16

Electromagnets with feed-back contact and 4-pole plug-in termination

High holding force – small size



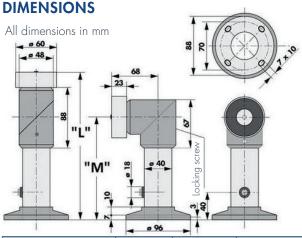
Electromagnets range S

Electromagnets with swivel head, for floor, wall or ceiling installation



CHARACTERISTICS

- Head position can be adjusted to the correct position without interfering with any electrical connections
- Distance tube allows to compensate distance differences between wall/ceiling/floor and door
- Tube available in three different lengths and can also be shortened on site to the required length if necessary
- Interrupter key integrated in the distance tube. If well-accessible, an additional hand release switch is not needed
- Electromagnet with 175 mm distance tube also available without interrupter key, in which case a separate release switch is necessary
- Mounting plate and distance tube in lacquered steel (RAL 9010 pure white), magnet itself of zinc-plated steel, other parts of dust gray plastic (RAL 7037)
- With a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



Туре	Length 'L'	Height 'M'	Part no.
EM GD 60 S 175	175	107	040111
EM GD 60 S 175 S	175	107	040164
EM GD 60 S 325	325	257	040112
EM GD 60 S 475	475	407	040113



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 40
Temperature range	-20 °C to +60 °C
Surface	zinc-plated; powder coated RAL 9010
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Power consumption EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)

INSTALLATION



Description	Part no.
EM GD 60 S 175 electromagnet, 700 N, 24 VDC, LE 07016	040111
EM GD 60 S 175 S electromagnet, 1000 N, 24 VDC, LE 07016	040164
EM GD 60 S 175 oT electromagnet, 700 N, 24 VDC, LE 07016	040264
EM GD 60 S 325 electromagnet, 700 N, 24 VDC, LE 07016	040112
EM GD 60 S 475 electromagnet, 700 N, 24 VDC, LE 07016	040113



Electromagnets range K

For wall installation, with plastic base and optional release button



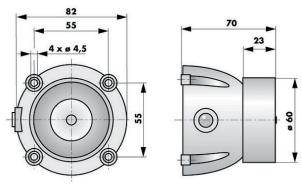
CHARACTERISTICS

- Allows to compensate large distances between door and wall without using a distance tube
- Available with or without integrated release button
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Casing	plastics, black
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Description	Part no.
EM GD 60 K 70 electromagnet, 700 N, 24 VDC, LE 07016	040223
EM GD 60 K 70 oT electromagnet, 700 N, 24 VDC, LE 07016	040224



Electromagnets range Q

Electromagnets with lateral connection terminal

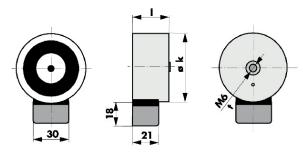


CHARACTERISTICS

- Electromagnets with no fixing plate
- The body of the magnet has an M6 threaded hole in its back for adjusting the magnet individually to each installation situation
- Lateral connection terminal for an easy connection
- Made of zinc-plated steel
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

DIMENSIONS

All dimensions in mm



Туре	k	I	t
EM GD 50 Q 23	ø 50	23	10
FM GD 70 Q 35	ø 70	35	15



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 70	1450 N
Power consumption EM GD 50	67 mA (1.6 W)
Power consumption EM GD 70	71 mA (1.7 W)

INSTALLATION



Description	Part no.
EM GD 50 Q 23 electromagnet, 600 N, 24 VDC, LE 07016	040020
EM GD 70 Q 35 electromagnet, 1450 N, 24 VDC, LE 07016	040022

Electromagnets range R

Electromagnets with lateral connection terminal

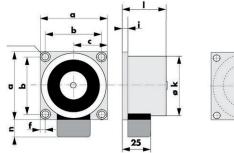
CHARACTERISTICS

- Available with a diameter of 50, 60 and 70 mm; they differ in holding force and size
- Provided with a connection terminal fixed laterally to the magnet for an easy connection
- Magnet and base plate made of zinc-plated steel
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS







Туре	а	b	С	f	g	i	k	I	n
EM GD	55	44	27,5	5,5	ø 4,5	3	ø 50	26	18
50 R 26									
EM GD	65	55	32,5	5,5	ø 4,5	3	ø 60	26	18
60 R 26									
EM GD	75	60	37,5	7,5	ø 5,5	4	ø 70	39	18
70 R 39									

INSTALLATION



🚁 Installation	
instructions	

TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Holding force EM GD 70 S	1700 N
Holding force EM GD 70 R	2000 N
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (1.7 W)
Power consumption EM GD 70 S/EM GD 70R	142 mA (3.4 W)

Description	Part no.
EM GD 50 R 26 electromagnet, 600 N, 24 VDC, LE 07016	040021
EM GD 60 R 26 electromagnet, 700 N, 24 VDC, LE 07016	040133
EM GD 60 R 26 S electromagnet, 1000 N, 24 VDC, LE 07016	040134
EM GD 70 R 39 electromagnet, 1450 N, 24 VDC, LE 07016	040023
EM GD 70 R 39 S electromagnet, 1700 N, 24 VDC	040117
EM GD 70 R 39 R electromagnet, 2000 N, 24 VDC	040118

Electromagnets range RI

Electromagnets with IP 65 connection terminal



CHARACTERISTICS

- Connected in the waterproof plastic connection terminal
- In case the magnets are exposed to the sun, they can be manufactured with an UV resistant sealing compound contains silicone - (part no. 041014)
- Electromagnets EM GD 50 and 60 are designed to be used with 24 VDC as well as 24 VAC
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

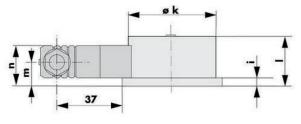


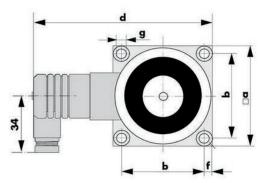
DIMENSIONS

All dimensions in mm

Cable inlet EM GD 50 RI and EM GD 60 RI: PG 9

Cable inlet EM GD 70 RI: PG 11





Туре	а	b	d	f	g	i	k	I	m	n
EM GD 50 R 26 I	55	44	100	5,5	ø 4,5	3	ø 50	26	14	18
EM GD 60 R 26 I	65	55	110	5	ø 5,5	3	ø 60	26	14	18
EM GD 70 R 39 I	75	60	118	7,5	ø 5,5	4	ø 70	39	20	18

TECHNICAL DATA

Voltage	24 VDC +/-10 %
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Electrical connection	lateral terminals on the magnet
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Power consumption EM GD 50\/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (2.6 W)

INSTALLATION





Description	Part no.
EM GD 50 R 26 I electromagnet, 600 N, 24 VDC/AC, LE 07016	040107
EM GD 60 R 26 I electromagnet, 700 N, 24 VDC/AC, LE 07016	040131
EM GD 60 R 26 IS electromagnet, 1000 N, 24 VDC/AC, LE 07016	040132
EM GD 60 R 26 IS electromagnet, 1000 N, 24 VDC/AC, UV resistant execution, grey sealing compound with silicone, LE 07016	041014
EM GD 70 R 39 I electromagnet, 1450 N, 24 VDC, LE 07016	040108
EM GD 70 R 39 I electromagnet, 1450 N, 230 VDC	040208
EM GD 70 R 39 I electromagnet, 1450 N, 230 VAC	040259

Electromagnets range F

Electromagnets with connection terminal on the mounting plate



CHARACTERISTICS

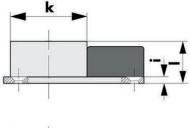
- Includes electromagnets EM GD 40, EM GD 50, EM GD 60 and EM GD 70 (different holding force and size)
- Connection terminal on the mounting plate of the magnet
- Magnet and base plate of zinc-plated steel as standard
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 11557
- Some articles may differ from the photo

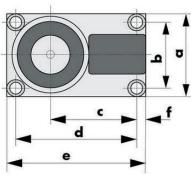


DIMENSIONS

All dimensions in mm

EM GD 40 F23 and EM GD 50 F 26 magnets





TECHNICAL DATA

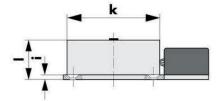
Voltage	24 VDC +/-10 %
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 40	300 N
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Holding force EM GD 70 S	1700 N
Holding force EM GD 70 R	2000 N
Power consumption EM GD 40	75 mA (1.8 W)
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (1.7 W)
Power consumption EM GD 70 S/EM GD 70 R	142 mA (3.4 W)

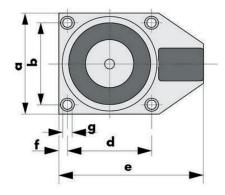
Туре	a	b	С	d	е	f	g	i	k	I
EM GD 40 F 23	45	35	45	63	73	5	ø 4,5	3	ø 40	23
EM GD 50 F 26	55	44	51	74	83	4,5	ø 4,5	3	ø 50	26





EM GD 60 F26 and EM GD 70 F 39 magnets





Туре	a	b	d	е	f	g	i	k	I
EM GD 60 F 26	65	55	55	93	5	ø 4,5	3	ø 60	26
EM GD 70 F 39	75	60	60	103	7,5	ø 5,5	4	ø 70	39

Description	Part no.
EM GD 40 F 23 electromagnet, 300 N, 24 VDC	040085
EM GD 50 F 26 electromagnet, 600 N, 24 VDC, LE 07016	040106
EM GD 60 F 26 electromagnet, 700 N, 24 VDC, LE 07016	040049
EM GD 60 F 26 S electromagnet, 1000 N, 24 VDC, LE 070016	040163
EM GD 70 F 39 electromagnet, 1450 N, 24 VDC, LE 07016	040037
EM GD 70 F 39 S electromagnet, 1700 N, 24 VDC	040115
EM GD 70 F 39 R electromagnet, 2000 N, 24 VDC	040122



Electromagnets range FT

Electromagnets with plastic casing and interrupter key



CHARACTERISTICS

- Cased in plastic for high aesthetic requirements
- Casing can be removed for an easy installation
- On the base plate there is a connection terminal for easy wiring
- With an interrupter key on top of the casing
- Two models available, depending on the cable insertion:
 - □ Insertion of the connection cable via a boring in the mounting plate (EM GD 60 F 26 T)
 - □ Insertion of the connection cable via a lateral PG 7 cable inlet (EM GD 60 F 26 TK), either on the left or right side
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



TECHNICAL DATA

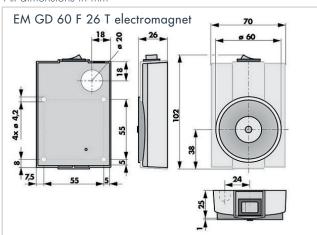
Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Electrical connection	connection terminal on base plate
Casing	white plastic casing
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

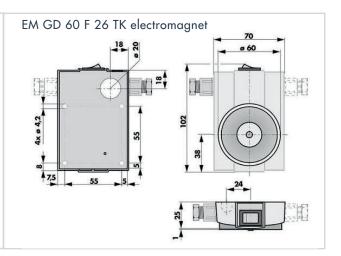
INSTALLATION



DIMENSIONS

All dimensions in mm





Description	Part no.
EM GD 60 F 26 T, 700 N, 24 VDC, LE 07016	040097
EM GD 60 F 26 TK electromagnet, 700 N, 24 VDC, LE 07016	040045

Electromagnets range U

Electromagnet for flush installation

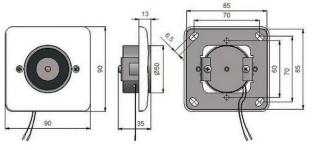
CHARACTERISTICS

- For use when there is not much space available between door and wall or when the magnet should be as discrete
- Installed in a standard flush box (provided by the customer). The white plastic front plate covers the flush box completely
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Casing	white plastic cover
Holding force	600 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Description	Part no.
Electro magnet EM GD 50 U 35, LE 07016	041011



Electromagnets range FB

Electromagnets for installation on the floor



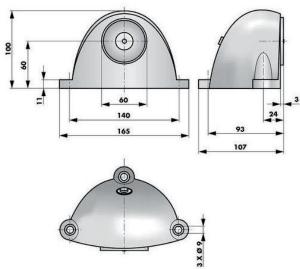
CHARACTERISTICS

- Sturdy and robust cast aluminum casing, perfect for this installation position, as the electromagnet can be exposed to impacts or water
- Rust-free material
- Can be furnished either with or without release key on the back of the casing
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated; aluminum
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Description	Part no.
EM GD 60 FB electromagnet, 700 N, 24 VDC, LE 07016	040370
EM GD 60 FB oT electromagnet, 700 N, 24 VDC, LE 07016	040371

Electromagnets range RM

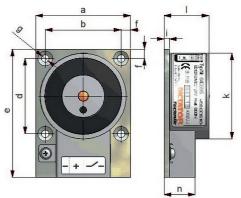
Electromagnets with feed-back contact and connection terminal block

CHARACTERISTICS

- Used when it is necessary to know remotely whether the counter plate is in contact with the electromagnet, e.g. on fire doors in transport vehicles, machines or central monitoring systems
- When the counter plate adheres to the magnet and if the latter is energized, this is registered by an integrated contact (NO) which passes on the information
- Equipped with a terminal block on the mounting plate, to which both power supply and feed-back contact are connected
- Due to its exposed connection terminal its IP rating is IP 20. If higher protection is required, we recommend the ST range
- Electromagnets EM GD RM allow a very wide range of switching voltages and switching currents
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being de-
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

DIMENSIONS

All dimensions in mm



Туре	a	b	d	е	f	g	i	k	I	n
EM GD 50 F 26 RM	55	44	44	75	5,5	ø 4,5	3	ø 50	26	18
EM GD 60 F 26 RM	65	55	55	85	5	ø 4,5	3	ø 60	26	18
EM GD 70 F 39 RM	75	60	60	95	7,5	ø 5,5	4	ø 70	39	18

TECHNICAL DATA

Voltage	24 VDC +/-15 %
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 70	71 mA (1.7 W)
Temperature range	-20 °C to +60 °C
Protection	IP 20
Surface	zinc-plated
Switching capacity	max. 10 VA (for every combination current/voltage)
Switchable load	max. 180 V DC/AC; max. 0.5 A DC/AC
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 70	1450 N
Feedback contact	1 make contact (NO)

INSTALLATION



instructions

Description	Part no.
EM GD 50 F 26 RM electromagnet, 600 N, 24 VDC, LE 07016	040395
EM GD 60 F 26 RM electromagnet, 700 N, 24 VDC, LE 07016	040396
EM GD 70 F 39 RM electromagnet, 1450 N, 24 VDC, LE 07016	040397

Electromagnets range ST

Electromagnets with feed-back contact and 4-pole plug-in termination



CHARACTERISTICS

- Used when it is necessary to know remotely whether the counter plate is in contact with the electromagnet, e.g. on fire doors integrated in conveyor systems assigned to determined paths, central monitoring systems and certain machines
- With a 4-pole plug-in termination, which reduces the installation time on site, avoids errors when connecting the magnet and increases the IP rating of the magnet with the connection cable plugged-in (IP 53)
- Corresponding connector available as accessory (part no. 040187)
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- When the counter plate adheres to the magnet and whether it is energized is registered by an integrated contact (NO) which passes on the information
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



TECHNICAL DATA

ECHNICAL DAIA					
Voltage	24 VDC +/-15 %				
Power consumption EM GD 50	67 mA (1.6 W)				
Power consumption EM GD 70	71 mA (1.7 W)				
Temperature range	-20 °C to +60 °C				
IP rating	IP 53 (with connection cable plugged in)				
Surface	zinc-plated				
Switching capacity	max. 10 VA (for each combination current/voltage)				
Switchable load	max. 180 V DC/AC; max. 0.5 A DC/AC				
Holding force EM GD 50	600 N				
Holding force EM GD 70	1450 N				
Duty cycle	100 %				
Remanence	0 N				
Feedback contact	1 make contact (NO)				

DIMENSIONS All dimensions in mm Electromagnet

M12 x 1 25 14 Ø 15 11.5 4

Circular connector M 12 x 1

Description	Part no.
EM GD 50 F 26 ST electromagnet, 600 N, 24 VDC, with feedback contact, LE 07016	040152
EM GD 70 F 39 ST electromagnet, 1450 N, 24 VDC, with feedback contact, LE 07016	040153

Bar magnet EM FH

High holding force - small size

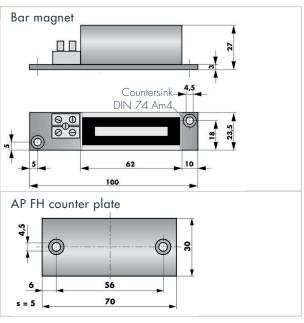
CHARACTERISTICS

- Perfect solution when a standard electromagnet (round) with a comparable holding force does not fit because of its larger dimensions
- With a width of only 24 mm, it can be placed discreetly in applications with limited space (e.g. smoke vents in window frames)
- Hight holding force of 400 N corresponds to that of a round electromagnet with a diameter of at least 40 mm
- Placed on a mounting plate along with a connection terminal to facilitate installation
- Equipped with a spark extinction diode. In the event of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +40 °C
Surface	zinc-plated
Casing	casing, powder-coated in pure white (RAL 9010)
Remanence	0 N
Duty cycle	100 %
Holding force	without feedback contact 5100 N, with feedback contact 4850 N
Power consumption	without feedback contact 438 mA (10.3 W), with feedback contact 355 mA (8,5 W)

INSTALLATION



ORDER INFORMATION

Description	Part no.
EM FH 100X24X27 electromagnet, 400 N, 24 VDC	040273

ACCESSORIES

Description	Part no.
AP FH70X30X5 for EM FH 100X24X27	040291