

Electromagnet With Feed-Back Contact (Models ST/RM)

DICTATOR electromagnets with feed-back contact are used when information as to whether the counter plate adheres to the magnet (i.e. that the door is opened or closed) is required elsewhere. This is necessary for fire protection doors integrated in complex transport systems in big stores, for central control and monitoring systems or even for machines.

When the counter plate adheres to the magnet and if this is supplied with tension, this is registered by an integrated contact (NO) which passes on the information to the area required.

There are two models of magnets with feed-back contact:

- with connection terminal on the base plate (model **RM**, see ill.)
- with a 4-pole plug-in termination (model **ST**). The corresponding connector is available as accessory.

Model RM and ST electromagnets have been **tested** and are **approved** together with the DICTATOR smoke detectors RM by the German building authorities (approval no. Z-6.5-1903).



Technical Data

EM GD Electromagnet	Model RM	Model ST
Voltage	24 VDC ±15 %	
Power consumption ±10 %	see information on the following pages	
Force	600 N - 1450 N	
Duty cycle / Remanence	100 % / ON	
Operating temperature	-20 °C to +60 °C	
Finish	magnet and mounting plate zinc-plated	
IP rating	IP 20	IP 53
Contact type	1 x NO	
Switchable load	max. 180 V DC/AC; max 0.5 A DC/AC	



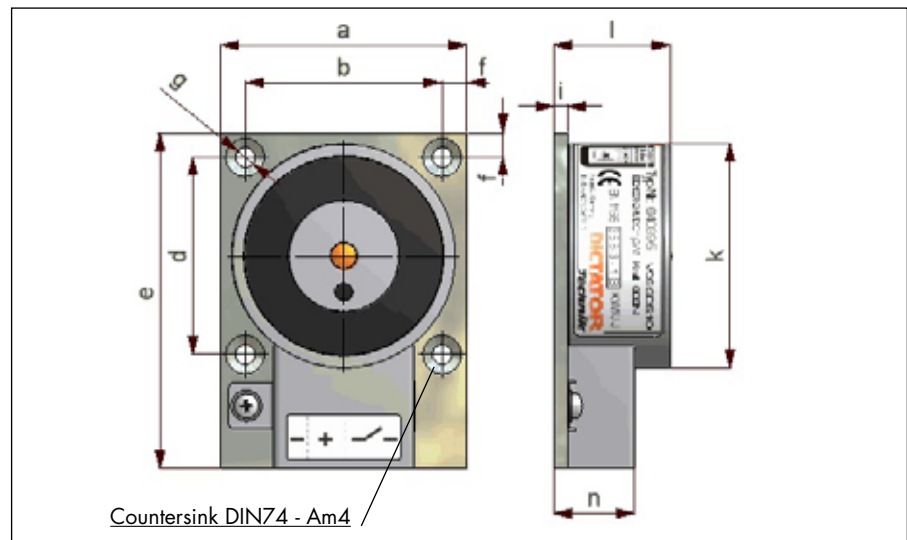
Electromagnet with Feed-Back Contact

Model RM

The RM electromagnets are equipped with a connection terminal on the base plate for the 24 VDC power supply and the feed-back contact (NO). Due to this type of connection terminal the protection is IP 20. If a higher protection is required we recommend to use the ST model (see next page).

The electromagnet covers a large range of admissible switching voltages and currents. Information concerning the correct installation are to be found on the page next but one.

Dimensions



Type	a	b	d	e	f	g	i	k	l	n
EM GD 50 F26 RM	55	44	44	75	5.5	Ø 4.5	3	Ø 50	26	18
EM GD 60 F26 RM	65	55	55	85	5	Ø 4.5	3	Ø 60	26	18
EM GD 70 F39 RM	75	60	60	95	7.5	Ø 5.5	4	Ø 70	39	19

All dimensions in mm

Technical Data

EM GD Electromagnet	50 F26 RM	60 F26 RM	70 F39 RM
Voltage	24 VDC ±15 %		
Power consumption ±10%	67 mA (1.6 W)	67 mA (1.6 W)	71 mA (1.7 W)
Force	600 N	700 N	1450 N
Duty cycle	100 %		
Operating temperature	-20 °C to +60 °C		
Remanence	0 N		
IP rating	IP 20		
Contact type	1 x NO		
Rupturing capacity	max. 10 VA (for each combination current/voltage)		
Switchable load	max. 180 V DC/AC; max. 0.5 A DC/AC		

Order Information

EM GD 50 F26 RM Electromagnet	force 600 N	part no. 040395
EM GD 60 F26 RM Electromagnet	force 700 N	part no. 040396
EM GD 70 F39 RM Electromagnet	force 1450 N	part no. 040397



Electromagnet with Feed-Back Contact

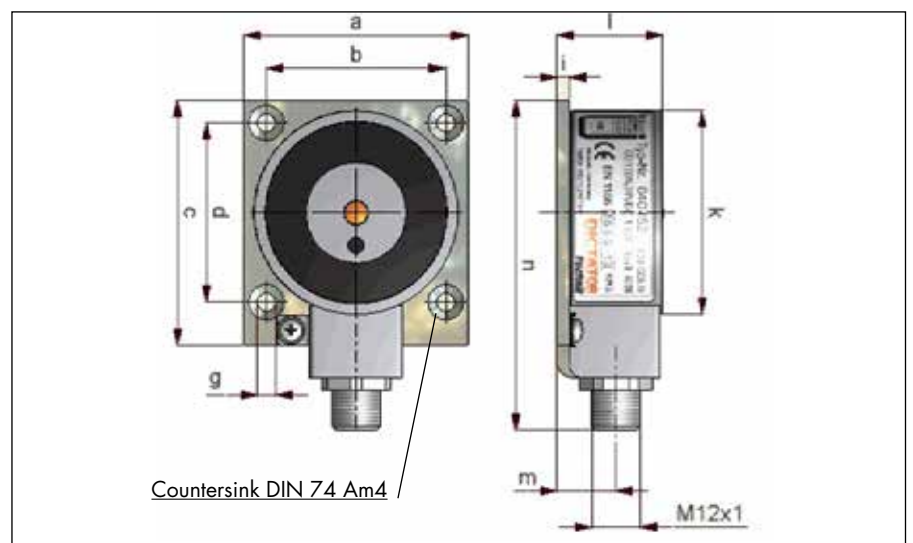
Model ST

The ST model electromagnets with feed-back contact are equipped with a 4-pole plug-in termination. We provide the corresponding connector as accessory. The plug-in connection reduces the installation time, avoids errors when connecting the magnet and increases the IP rating of the magnet with the connection cable plugged-in.

The electromagnet covers a large range of admissible switching voltages and currents.

Information concerning the correct installation is to be found on the next page.

Dimensions



Type	a	b	c	d	g	i	k	l	m	n
EM GD 50 F26 ST	55	44	60	44	∅ 4.5	3	∅ 50	26	14.5	81
EM GD 70 F39 ST	75	60	80	60	∅ 5.5	4	∅ 70	39	19.5	102

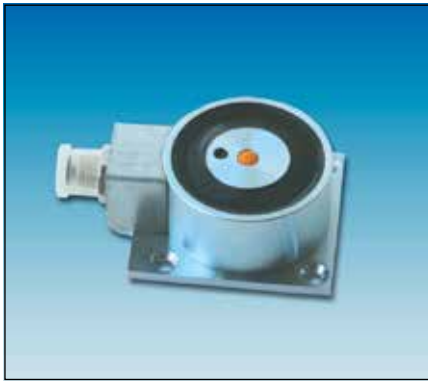
All dimensions in mm

Technical Data

EM GD Electromagnet	50 F26 ST	70 F39 ST
Voltage	24 VDC ±15 %	
Power consumption ±10 %	67 mA (1.6 W)	71 mA (1.7 W)
Force	600 N	1450 N
Duty cycle	100 %	
Operating temperature	-20 °C to +40 °C	
Remanence	0 N	
IP rating	IP 53 (with connection cable plugged in)	
Contact type	1x NO	
Breaking capacity	max. 10 VA (for each combination current/voltage)	
Switchable load	max. 180 V DC/AC; max 0.5 A DC/AC	

Order Information

EM GD 50 F26 ST Electromagnet	force 600 N	part no. 040152
EM GD 70 F39 ST Electromagnet	force 1450 N	part no. 040153
Circular connector M12x1 with connection cable		part no. 040187



Electromagnet with Feed-Back Contact

Installation

The magnet is fixed to the wall behind the door that needs to be kept open. In case of sliding doors it is installed in the position of the opened door. A counter plate needs to be fixed to the door as a counterpart to the magnet. Make sure that the counter plate completely covers the magnet and that it lies straight on the magnet. A selection of counter plates can be found later in this section.

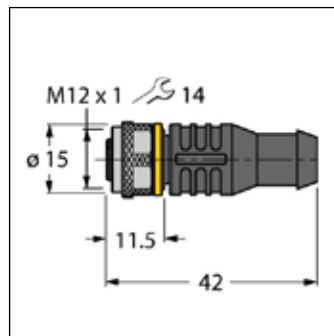
Please note: It must be possible to release a fire protection door held open by an electromagnet with a hand switch which is not hidden by the open door. (DICTATOR hand switch part no. 040005).

Electrical Connection

The **electrical connection** of the RM and ST models is different. The **RM model** can be used in any case as it is provided with a **connection terminal**. Each terminal is marked in order to make the connection as easy as possible.

The **ST models** are equipped with a 4-pole plug-in termination directly at the magnet. To connect this magnet there is required a circular connector M12x1 (part no. 040187). The ST model will be used especially in large installations or when the magnet is already installed during production of the doors or e.g. complete conveying systems. Installation time is reduced considerably due to the plug-in connector and errors are avoided.

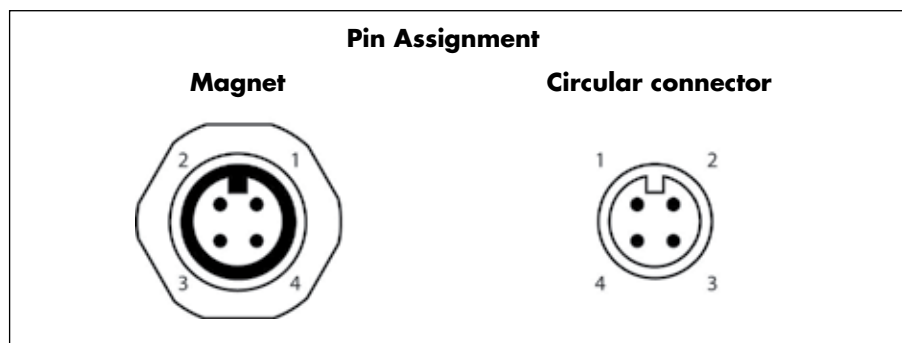
Circular Connector M12x1



Technical Data

IP rating	IP 67 (screwed on)
Load capacity	4 A, max. 250 V
Length of cable	10 m
Coupler	straight with swivel nut

Pin Assignment Model ST



Connector	Colour of cable	Connection
1	brown	Power supply 24 VDC
2	white	Power supply 24 VDC
3	blue	Feed-back contact (NO)
4	black	Feed-back contact (NO)