

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

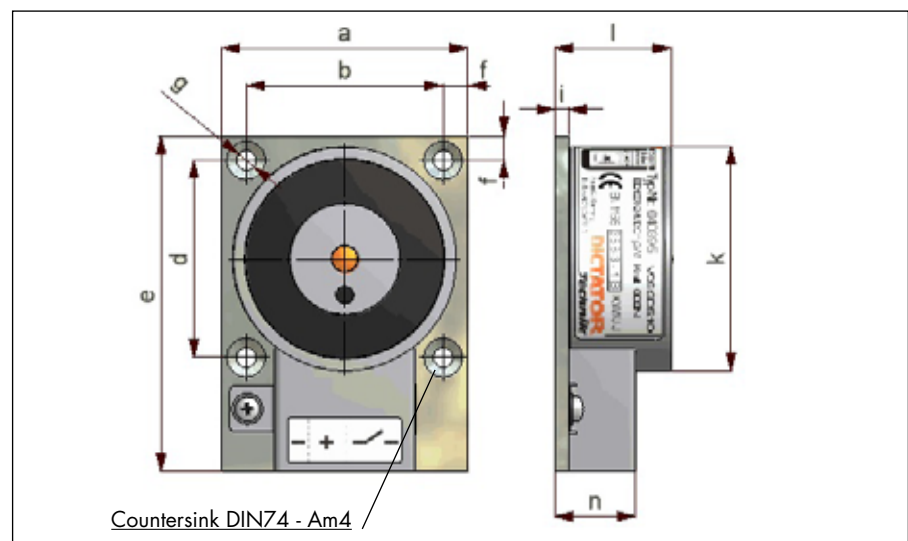
Model RM

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 |

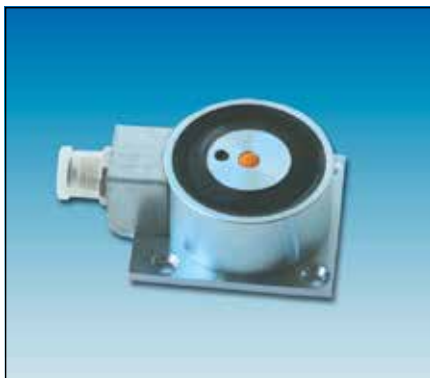
All dimensions in mm

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

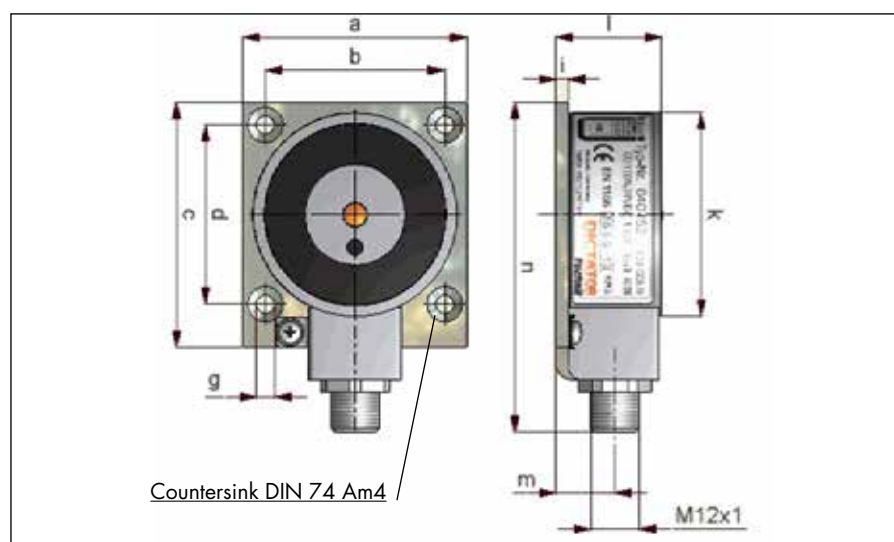
Model ST

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.

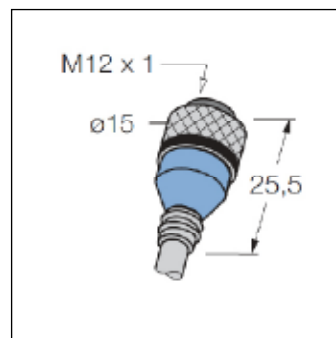
Please note: It must be possible to release a fire protection door held open by an electromagnet with a hand switch which is not hidden by the open door. (DICTATOR hand switch part no. 040005).

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.

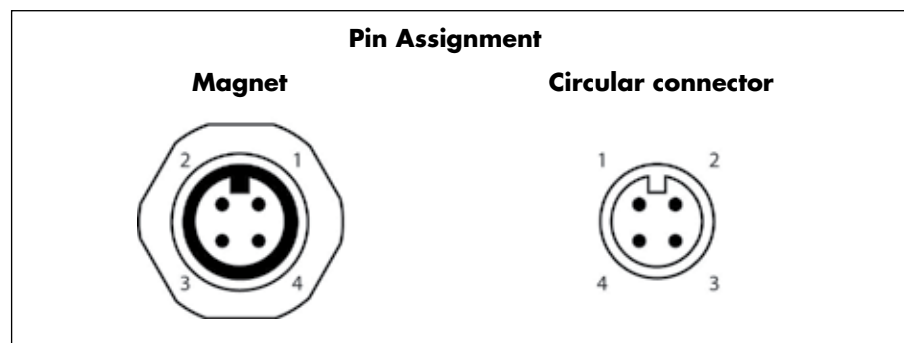
Circular Connector M12x1



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) |