

- > Suitable for all cylinder ranges with magnetic piston
- > Resistant, reliable switching with a very fast response time
- > Switches can be mounted flush with the delivered special adaptor
- > Particularly suited for use in high levels of vibration
- > LED indicator
- > CE verified



Technical features

Operation:
PNP-output with LED (yellow)

Switching voltage (U_b):
10 ... 30 V d.c.

Switching voltage output:
U_b - 2 V

Switching current (see graph)
150 mA max.

Switching power:
4,5 W max.

Response time:
< 0,5 ms

Switching frequency:
1 kHz

Operating temperature:
-20 ... +50°C (-4 ... +122°F)

Ex-Identification:
II 3G Ex nA op is IIC T4 Gc X
II 3D Ex tc IIIC T110°C Dc IP67 X

Protection rating (EN 60529):
IP 67

Cable type:
PVC 3 x 0,25 mm²

Cable length:
5 m

Electromagnetic compatibility according to:
EN 60947-5-2

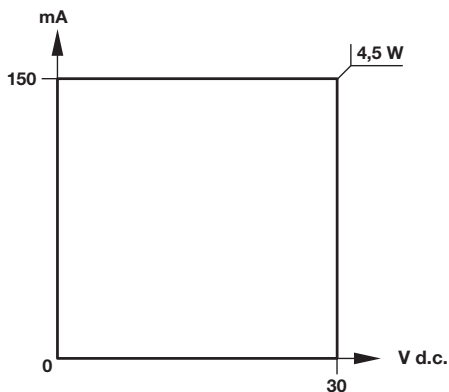
Materials:
Body: plastic
Cable: see table below

Technical data

Symbol	Voltage (V d.c.)	Current maximum (mA)	Function	Operating temperature (°C)	LED	Protection class	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-20 ... +50	•	IP67	5	PVC 3 x 0,25	40	M/50/EXP/5V

Color code: BK = black, BN = brown, BU = blue

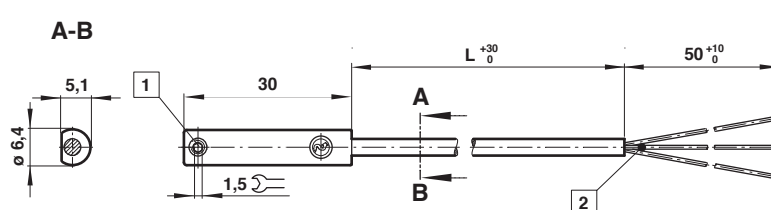
Switching current and switching voltage



Dimensions

Cable length L = 5 m

Dimensions in mm
Projection/First angle



- 1 Fixing screw
- 2 Color code
- BK = black
- BN = brown
- BU = blue

Protection against mechanical impacts on the magnetic switch:

1. Protection through profile groove








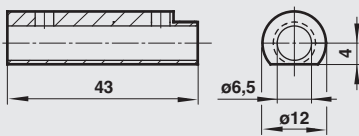


For cylinders with profile barrel, the magnetic switch is well protected in the profile groove. No additional impact protection is required.

2. Protection through measures by customer

The customer can, for example, install a protection plate or the magnet switch has a position that it protects against damages.

3. Protection through a separate protection element

For an open installation of a magnetic switch onto a cylinder barrel with external tie rods or round cylinders, an additional protection element for the magnetic switch has to be installed with the mounting element. A separate order for the protection element M/P73668 or M/P73673 is required!

Cylinder with external tie rods	Mounting element for magnetic switch	Protection unit ATEX	
			
Cylinder Ø (mm)	Model	Model	
32 ... 200	QM/27/2/1	M/P73668	
Roundline cylinder, stroke ≥ 50 mm	Mounting element for magnetic switch	Protection unit ATEX	
			
Cylinder Ø (mm)	Model	Model	
10	QM/33/010/22	M/P73673	
12	QM/33/012/22		
16	QM/33/016/22		
20	QM/33/020/22		
25	QM/33/025/22		
32	QM/33/032/22		
40	QM/33/040/22		
50	QM/33/050/22		
63	QM/33/063/22		
Roundline cylinder, stroke < 50 mm	Mounting element for magnetic switch	A separate protection unit must be realised by user.	
			
Cylinder Ø (mm)	Model		
10	QM/33/010/23		
12	QM/33/016/23		
16	QM/33/016/23		
20	QM/33/020/23		
25	QM/33/025/23		

Attention: During the assembly the magnetic switch must be completely inserted into the protection element.

Warning

These products are intended for use in industrial systems only. Do not use these products where values can exceed those listed under »**Technical features/data**«.

Before using these products with non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in control systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.