

QM/45/RAP, QM/45/LAP QM/45/LSU

**Magnetically Operated Switches
Reed Switches**

- **Very neat, compact, cylindrical units**
- **LED indicator on QM/45/LAP and QM/45/LSU Models**
- **Suitable for use with our ranges of magnet piston cylinders**
- **Simple, reliable switching with very fast response times**

Technical Data

Operation:

QM/45/RAP	Normally open
QM/45/LAP, QM/45/LSU	Normally open with LED (red)

Switching Voltage:

10 to 30 V a.c./d.c.	QM/45/RAP
10 to 30 V d.c.	QM/45/LAP
10 to 240 V a.c./170 V d.c.	QM/45/LSU

Switching Current (see graph overleaf):

0,5 A max (0,18 A max QM/45/LSU)

Switching Power:

10 W/VA maximum

Note: Switch life may be greatly reduced when switching reactive loads, e.g. solenoid, relay, and long cable runs. In such cases the fitment of appropriate voltage/current limiting devices should be considered.

Contact Resistance:

150 mΩ

Response Time:

1,8 ms

Operating Temperature:

-20°C to +80°C

Protection Rating:

IP 66 (DIN 40050)

Shock Resistance:

50 g (during 11 ms)

Vibration Resistance:

35 g (at 50 to 2000 Hz)

Cable Type:

PVC 2 x 0,34	QM/45/RAP, QM/45/LSU
PVC 3 x 0,34	QM/45/LAP

Cable Length:

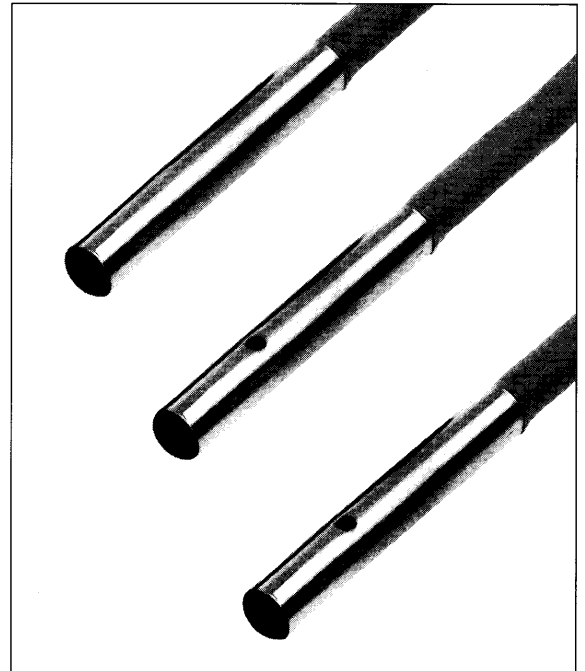
2, 5 or 10 m	QM/45/RAP, QM/45/LAP
2 or 5 m	QM/45/LSU

Materials:

Nickel plated brass body

Alternative Switches:

See page 4.3.045.02

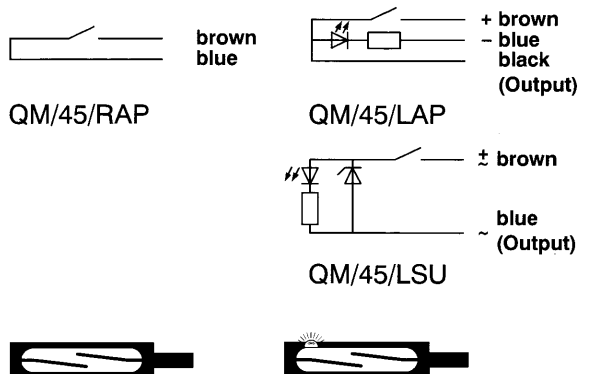


Ordering Information

To order a reed switch with LED and 5 m cable length quote: QM/45/LAP/5V

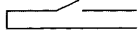
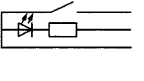
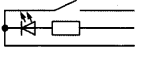
To order a reed switch with 2 m cable length quote: QM/45/RAP/2V

Order switch mounting brackets separately.





Alternative Switches

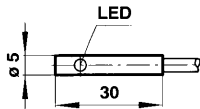
Symbol	Switches (without LED)	Symbol	Switches (with LED)	Description
 brown blue	QM/45/RAP/*U	 + brown - blue black (Output)	QM/45/LAP/*U	Flexible polyurethane cable 3 x 0,14 (2 m length)
		 - blue + brown black (Output)	QM/45/LAN/*V	Negative output, PVC cable 3 x 0,34 (2 m length)

* Insert cable length

Weight for Switches

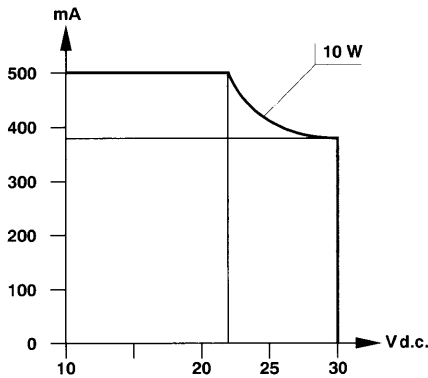
Model	Weight (kg)
QM/45/RAP/2V	0,050
QM/45/LAP/2V	0,063
QM/45/LSU/2V	0,050

Basic Dimensions

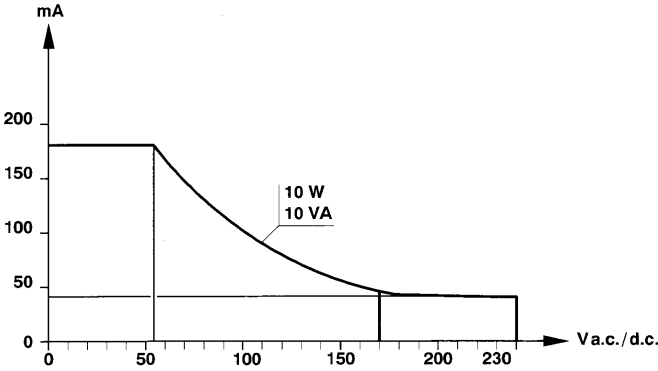


Switching current and switching voltage

QM/45/RAP, QM/45/LAP, QM/45/LAN



QM/45/LSU



Warning

These products are intended for use in industrial control systems only. Do not use these products where voltage, current and temperatures can exceed those listed under **Technical Data**.

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

Through misuse, age, or malfunction, components used in control 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.