

- Robust units for wide variety of applications
- LED indicator on QM/32 models
- Suitable for use with our tie rod construction magnet piston cylinders and many other magnetic devices

### Technical Data

#### Operation:

- QM/31 Normally open
- QM/32 Normally open with LED (yellow)

#### Switching Voltage:

10 to 240 V a.c./d.c.

#### Switching Voltage Output:

Ub - 2 V (QM/32)

#### Switching Current (see graph overleaf):

- 2 A maximum QM/31
- 1 A maximum QM/32

#### Switching Power:

50 W/50VA 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:

100 mΩ

#### Response Time:

3 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 (50 to 2000 Hz)

#### Cable Type:

PVC 2 x 0,75

#### Cable Length:

2, 5 or 10 m

#### Materials:

Plastic body

### Alternative Switches:

See page N 4.3.021.02



### Ordering Information

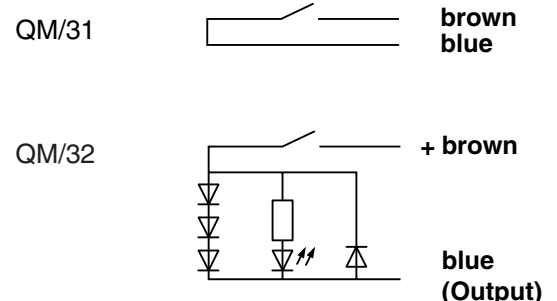
To order a reed switch with LED and 5 m cable length quote: QM/32/5

To order a reed switch with 2 m cable length quote: QM/31/2

Order mounting brackets separately.

### Accessories

Plug-in connector See page N 4.3.021.02





## Alternative Switches

Symbol	Switches (without LED)	Symbol	Switches (with LED)	Description
<p><b>brown blue</b></p>	TQM/31/*	<p><b>+ brown blue (Output)</b></p>	QM/32/P	High temperature (+150 °C), silicone cable 2 x 0,75 (2, 5 or 10 m length)
<p><b>black blue brown</b></p>	QM/31/C/*			Changeover, PVC cable 3 x 0,5 (5 m length) switching voltage 10 to 110 V a.c./175 V d.c., switching current 250 mA (see graph), switching power 5W/ 5 VA, response time 0,7 ms, contact resistance 100 mΩ, vibration resistance 20 g (during 11 ms)

\* Insert cable length

## Weights for Swiches and Plug-in Connector Cables

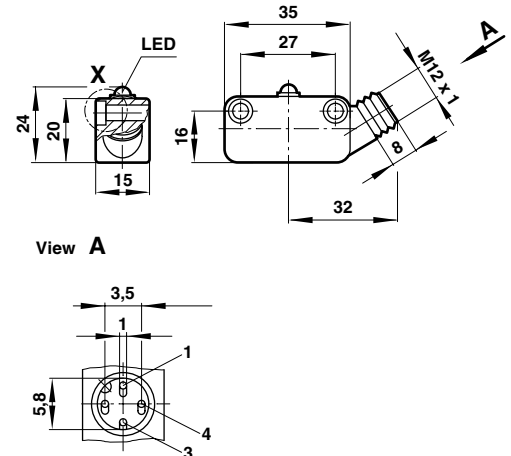
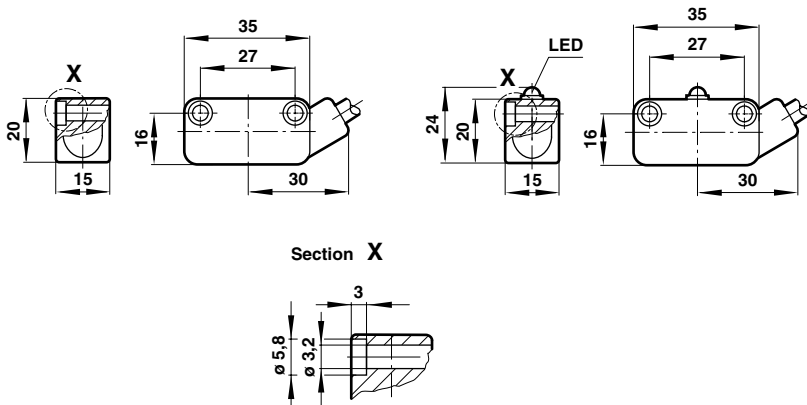
		 Plug-in Connector Cables		
Model	Weight (kg)	Model	Outer cover	Weight (kg)
QM/31/2	0,102	M/P34692/*	PVC	0,182
QM/32/2	0,108	M/P34594/*	Polyurethane	0,182
QM/32/P	0,015			

## Basic Dimensions

QM/31

QM/32

QM/32/P



## 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.

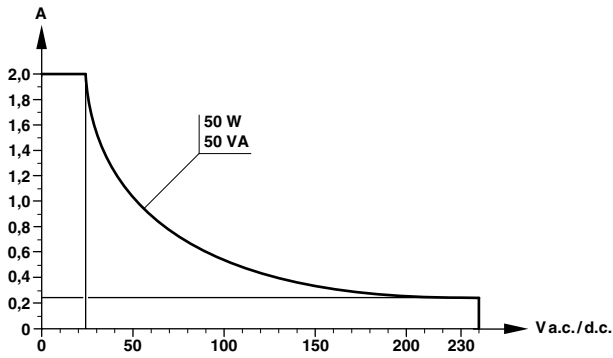
**System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.**

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

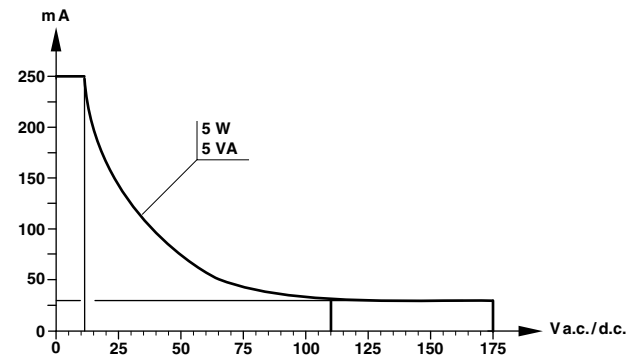


## Switching current and switching voltage

QM/31, TQM/31



QM/31/C



QM/32

