

**Magnetically Operated Switches  
Reed Switches**

- Very neat and compact low profile units
- LED indicator as standard on M/40
- Simple, reliable switching with very fast response times

**Technical Data**

Operation:

Normally open with LED (yellow)

Switching Voltage (Ub):

10 to 240 V a.c./ 170 V d.c.

Switching Voltage Output:

Ub - 2,7 V

Switching Current (see graph overleaf):

0,18 A maximum

Switching Power:

10 W/10 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 2000 Hz)

Cable Type:

PVC 2 x 0,25

Cable Length:

2 m

Materials:

Plastic body

**Alternative Switches:**

See page N 4.3.041.02


**Ordering Information**

To order a reed switch with LED and 2 m cable length quote: M/40/2

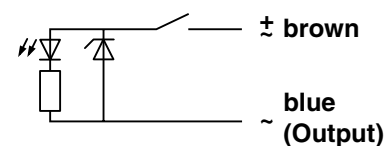
Order mounting brackets separately.

**Accessories**

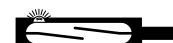
Plug-in connectors

See page

N 4.3.041.02



M/40





### Alternative Switches

Symbol	Switches (without LED)	Symbol	Switches (with LED)	Description
	TM/40/*		-	High temperature (+150 °C), silicone cable (2 m length)
			M/40*/PU	Very flexible polyurethane cable 2 x 0,25 (5 m length)
			M/40/P	Plug in connector, switching voltage 10 to 60 V a.c./75 V d.c., cable see below
	M/40/C/*			Changeover, PVC cable 3 x 0,25 (2 m length), switching voltage 10 to 110 V a.c./175 V d.c., switching current 250 mA, switching power 5 W/ 5 VA, response time 0,7 ms, contact resistance 100 mΩ, vibration resistance 30 g (during 11 ms)

\* Insert cable length

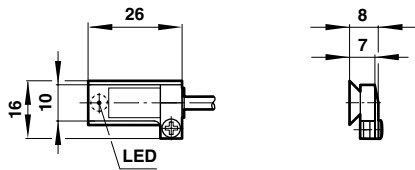
### Weights for Switches and Plug-in Connector Cables

Plug-in Connector Cables				Plug-in Connector Cables			
Model	Weight (kg)	Model	Outer cover	Weight (kg)	Model	Outer cover	Weight (kg)
M/40/2	0,039	M/P34614/*	PVC	0,150	M/P34615/*	PVC	0,156
M/40/P	0,007	M/P34595/*	Polyurethane	0,130	M/P34596/*	Polyurethane	0,136

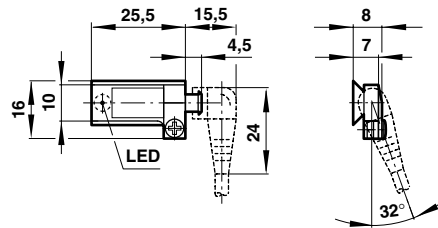
\* Insert 5 m cable length

### Basic Dimensions

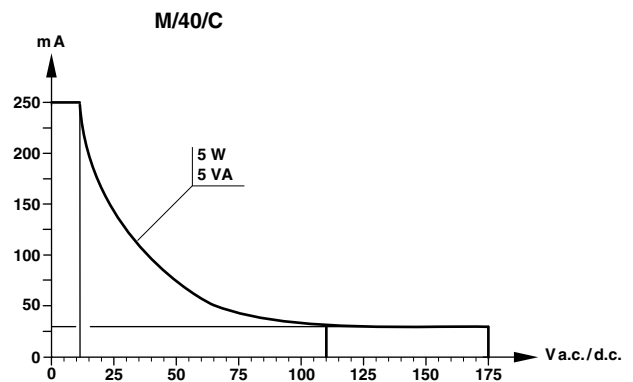
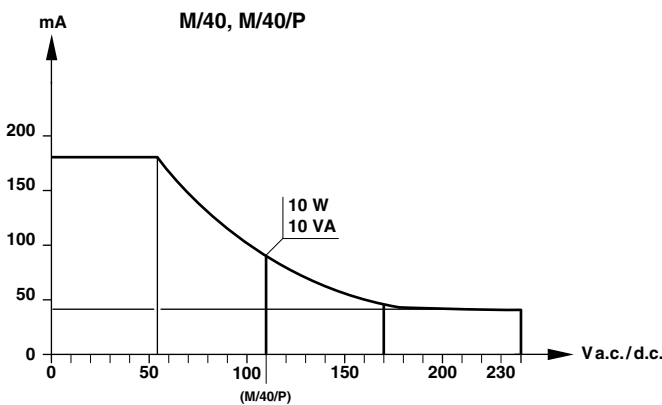
M/40, M/40\*/PU, M/40/C, TM/40



M/40/P



### Switching current and switching voltage



### 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.

**Magnetically Operated Switches  
Solid State**

- Very neat and compact low profile units
- LED indicator as standard
- Particularity suited for use where high levels of vibration are present
- CE - Marking

**Technical Data**

Operation:

- M/41 NPN grounded emitter output with LED (yellow)
- M/42 PNP open collector output with LED (yellow)

Switching Voltage (Ub):

10 to 30 V d.c.

Switching Voltage Output:

Ub - 1 V

Inducted Voltage:

0,5 V

Switching Current (see graph overleaf):

200 mA maximum

Switching Power:

6 W maximum

Response Time:

0,5 ms

Operating Frequency:

1 kHz

Operating Temperature:

- 20°C to +70°C

Protection Rating:

IP 66 (DIN 40050)

Cable Type:

PVC 3 x 0,25

Cable Length:

2 m

Materials:

Plastic body

**Alternative Switches:**

See page N 4.3.043.02


**Ordering Information**

To order a solid state (PNP) with 2 m cable length quote: M/42/2

To order a solid state (NPN) with 2 m cable length quote: M/41/2

Order mounting brackets separately.

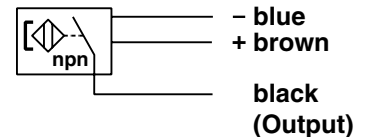
**Accessories**

See page

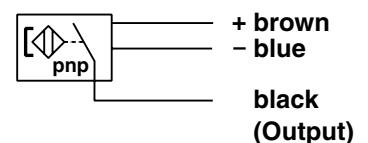
Plug-in connectors

N 4.3.043.02

M/41



M/42





### Alternative Switch

Symbol	Switches (with LED)	Description
	M/42/P	Plug-in connector, cable see below
	M/42*/PU	Very flexible polyurethane cable 3 x 0,25 (5 m length)

\* Insert cable length

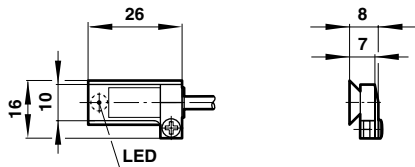
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M/42/P	0,008	M/P34595/*	Polyurethane	0,130	M/P34596/*	Polyurethane	0,136

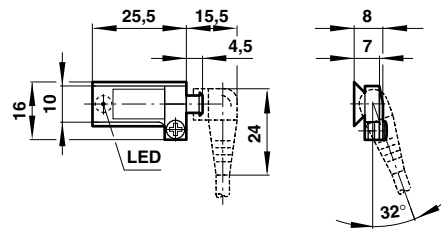
\* Insert 5 m cable length

### Basic Dimensions

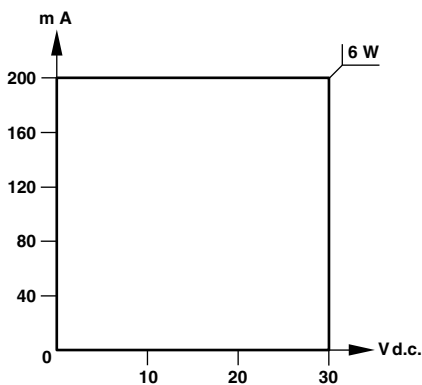
M/41, M/42



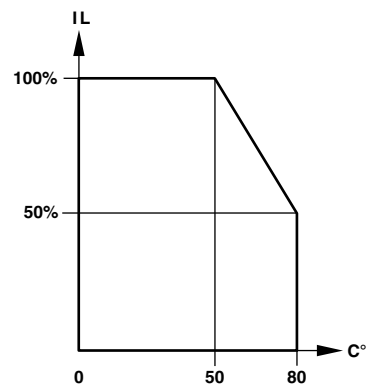
M/42/P



### Switching current and switching voltage



### Temperature curve



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