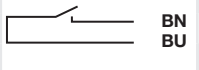
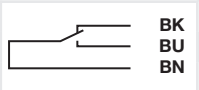
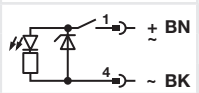
- **Suitable for all cylinder ranges with magnetic piston**
- **Switches can be mounted flush with the delivered special adaptor**
- **LED indicator on LSU models**
- **Alternative variants allows a wide range of application**



## Technical features

**Operation:**
M/50/LSU Normally open with LED (yellow)
**Switching voltage (Ub):**
10 ... 240 V a.c./170 V d.c.
**Switching voltage output:**
Ub - 2,7 V
**Switching current (see graph overleaf):**
0,18 A max.
**Switching power:**
10 W/10 VA max.
**Contact resistance:**
150 mΩ
**Response time:**
1,8 ms
**Operating temperature:**
-25°C ... +80°C (-13°F ... +176°F)
**High temperature version:**
+150°C max.(+302 °F)
**Protection rating (EN 60529):**
IP 66
**Shock resistance:**
50 g (during 11 ms)
**Vibration resistance:**
35 g (at 2000 Hz)
**Cable type:**
2 x 0,25: PVC, PUR or silikone
3 x 0,25 PVC
**Cable length:**
2, 5 or 10 m
**Electromagnetic compatibility according to:**
EN 60947-5-2
**Materials:**
Body: plastic
Cable: see table below

## Technical data

| Symbol | Voltage (V a.c.) | Voltage (V d.c.) | Current maximum (mA) | Function | Operating temperature (°C) | LED | Protection class | Plug | Cable length (m) | Cable type | Weight (g) | Model |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  ± BN ~ BU | 10 ... 240 | 10 ... 170 | 180 | Closer | -25 ... +80 | • | IP66 | — | 2, 5 or 10 | PVC 2 x 0,25 | 37 | M/50/LSU/*V |
| | 10 ... 240 | 10 ... 170 | 180 | Closer | -25 ... +80 | • | IP66 | — | 5 | PUR 2 x 0,25 | 37 | M/50/LSU/5U |
|  BN BU | 10 ... 240 | 10 ... 170 | 180 | Closer | -25 ... +150 | — | IP66 | — | 2 | Silicon 2 x 0,25 | 37 | TM/50/RAU/2S |
|  BK BU BN | 10 ... 240 | 10 ... 170 | 180 | Changeover | -25 ... +80 | — | IP66 | — | 5 | PVC 3 x 0,25 | 37 | M/50/RAC/5V |
|  1 + ~ BN 4 ~ BK | 10 ... 60 | 10 ... 60 | 180 | Closer | -25 ... +80 | • | IP66 | M8 x 1 | 0,3 | PVC 3 x 0,25 | 16 | M/50/LSU/CP *1) |

* Insert cable length; *1) Plug-in connector see page 2; Color code: BK = black, BN = brown, BU = blue



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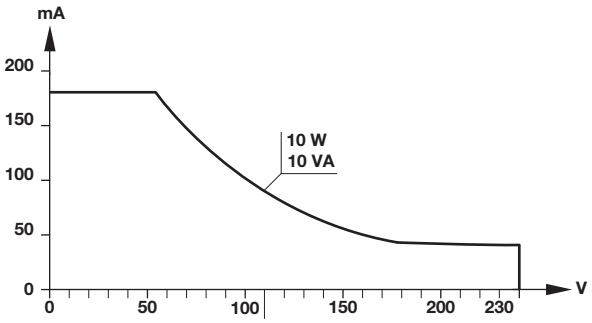
## Options selector

★M/50/★★★/★★★

| Variants | Substitute |
|---|---|
| High temperature (+150°C) | T |
| Type | Substitute |
| Reed with LED | L |
| Reed without LED | R |
| Switching voltage | Substitute |
| Standard | S |
| Special | A |
| Function | Substitute |
| Closer | U |
| Changeover | C |

| Cable | Substitute |
|---|---|
| Silicone | S |
| PVC | V |
| PUR | U |
| **Cable length/plug** | **Substitute** |
| 2 m | 2 |
| 5 m | 5 |
| 10 m | 10 |
| Cable (0,3 m) with plug M8 x 1 | CP |

## Switching current and switching voltage M/50/LSU, M/50/RAC, M/50/RAU




## Accessories

**Plug-in connector cable with nut**



| Outer cover | Cable length (m) | Weight (kg) | Connector | Connector |
|---|---|---|---|---|
| PVC 3 x 0,25 | 5 m | 0,18 | M8 x 1 | M/P73001/5 |
| PUR 3 x 0,25 | 5 m | 0,18 | M8 x 1 | M/P73002/5 |
| PUR 3 x 0,34 | 5 m | 0,21 | M12 x 1 | M/P34594/5 |

## Mounting elements for magnetic switches

**Cylinder with external tie rods RA/8000/M, KA/8000/M RA/28000/M, RM/900/M**



**Roundline cylinder RM/55401/M**



**Roundline cylinder KM/55001/M, VSM/55640/N2**



**Roundline cylinder R./57100/M, R./57200/M R./57300/M**



**Roundline cylinder < 25 mm stroke RM/8000/M, KM/8000/M RM/28000/M**



**Roundline cylinder > 25 mm stroke RM/8000/M, KM/8000/M RM/28000/M**



**Mounting elements**








| Cylinder Ø(mm) | Model | Cylinder Ø(mm) | Model | Cylinder Ø(mm) | Model | Cylinder Ø(mm) | Model | Cylinder Ø(mm) | Model | Cylinder Ø(mm) | Model |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 ... 200 | QM/27/2/1 | 32 | QM/33/432/22 | 32 | QM/33/432/22 | 10 | QM/33/010/22 | 10 | QM/33/010/22 | 10 | QM/33/010/23 |
| | | 40 | QM/33/440/22 | 40 | QM/33/440/22 | 12 | QM/33/012/22 | 12 | QM/33/012/22 | 12 | QM/33/016/23 |
| | | 50 | QM/33/450/22 | 50 | QM/33/450/22 | 16 | QM/33/016/22 | 16 | QM/33/016/22 | 16 | QM/33/016/23 |
| | | 63 | QM/33/463/22 | 63 | QM/33/463/22 | 20 | QM/33/020/22 | 20 | QM/33/020/22 | 20 | QM/33/020/23 |
| | | 80 | QM/33/480/22 | 80 | QM/33/080/22 | 25 | QM/33/025/22 | 25 | QM/33/025/22 | 25 | QM/33/025/23 |
| | | 100 | QM/33/410/22 | 100 | QM/33/100/22 | 32 | QM/33/032/22 | | | | |
| | | | | 125 | QM/33/125/22 | 40 | QM/33/040/22 | | | | |
| | | | | | | 50 | QM/33/050/22 | | | | |
| | | | | | | 63 | QM/33/063/22 | | | | |

Dimensions see relevant cylinder sheets.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## Drawings

**M/50/LSU/*V, M/50/LSU/5U, TM/50/RAU/2S**
**Cable length L = 2, 5 or 10 m**



**M/50/RAC/5V**
**Cable length L = 5 m**

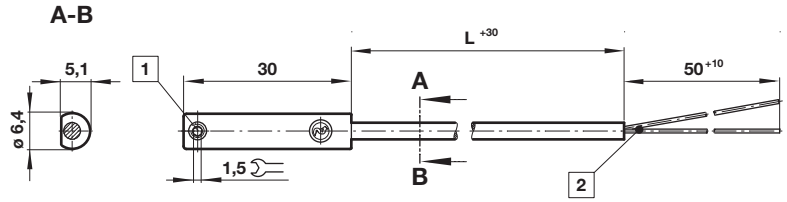


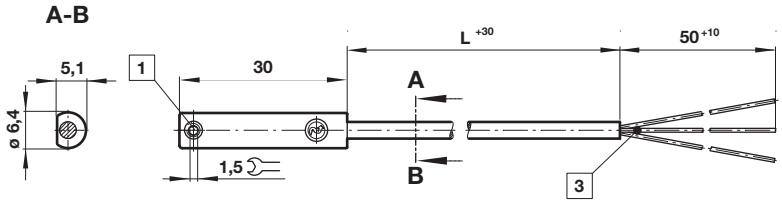
**M/50/LSU/CP**

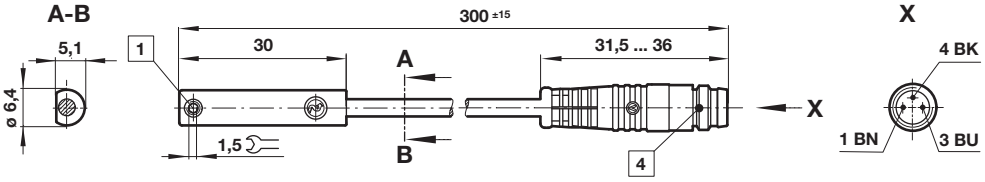


Dimensions in mm
Projection/First angle






1 Fixing screw
2 + BN = brown; - BU = blue (output)
3 - BK = black; + BN = brown; - ≠BU = blue
4 Plug M8 x 1, color code: BK = black; BN = brown; BU = blue

## 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.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