

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



### Technical features

#### Operation:

M/50/EAP (PNP) open collector output with LED (yellow)

M/50/EAN (NPN) grounded emitter output with LED (yellow)

#### Switching voltage (U<sub>b</sub>):

10 ... 30 V d.c.

#### Switching voltage output:

U<sub>b</sub> - 2 V

#### Inducted voltage:

0,5 V

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

150 mA max.

#### Switching power:

4,5 W max.

#### Response time:

< 0,5 ms

#### Operating frequency:

5 kHz

#### Protection rating (EN 60529):

IP 67 (standard)

IP 68 for type: M/50/EAP/5U

#### Operating temperature:

-40 ... +80°C (-40 ... 176°F)  
(IP67 & IP68)

#### Cable type:

PVC 3 x 0,12 (standard)

PUR 3 x 0,14 (M/50/EAP/5U)

#### Cable length:

2, 5 and 10 m

#### Electromagnetic compatibility

according to:

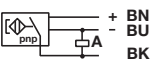
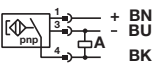
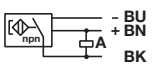
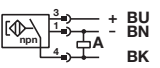
EN 60947-5-2

#### Materials:

Body: plastic

Cable: see table below

### Technical data

Symbol	Voltage (V d.c.)	Current maximum (mA)	Function	Operating temperature (°C)	LED	Protection class	Plug	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	150	PNP	-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAP*/V
	10 ... 30	150	PNP	-40 ... +80	•	IP68	—	5	PUR 3 x 0,14	37	M/50/EAP/5U
	10 ... 30	150	PNP	-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CP *1)
	10 ... 30	150	PNP	-40 ... +80	•	IP67	M12 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CC *1)
	10 ... 30	150	NPN	-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAN*/V
	10 ... 30	150	Closer	-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAN/CP *1)

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

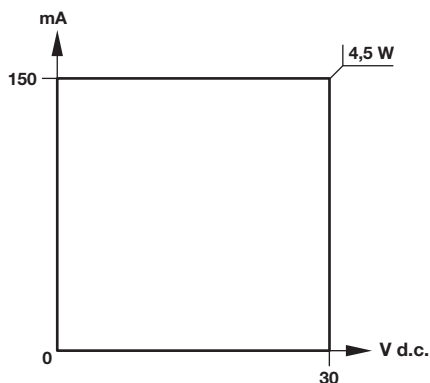
### Options selector

M/50/EA\*/\*\*\*

Function	Substitute
PNP	<b>P</b>
NPN	<b>N</b>

Cable	Substitute
PVC (Standard)	<b>V</b>
PUR	<b>U</b>
Cable length/plug	Substitute
2 m	<b>2</b>
5 m	<b>5</b>
10 m	<b>10</b>
Cable (0,3 m) with plug M8 x 1	<b>CP</b>
Cable (0,3 m) with plug M12 x 1	<b>CC</b>







### Switching current and switching voltage



### 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.

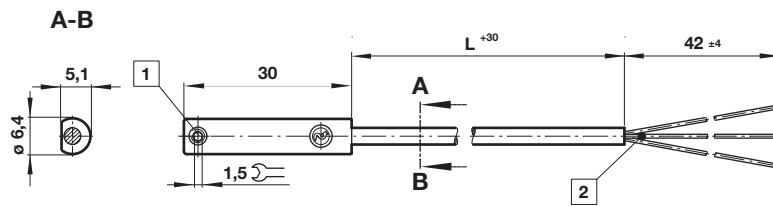
### Accessories

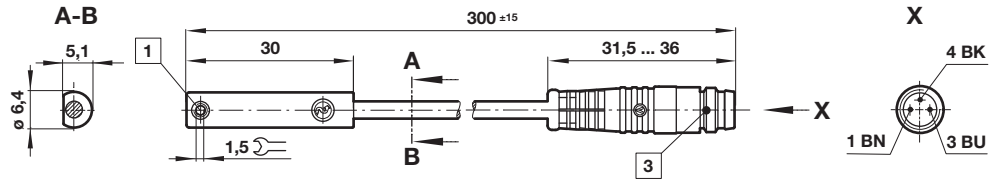
#### Plug-in connector cable with nut



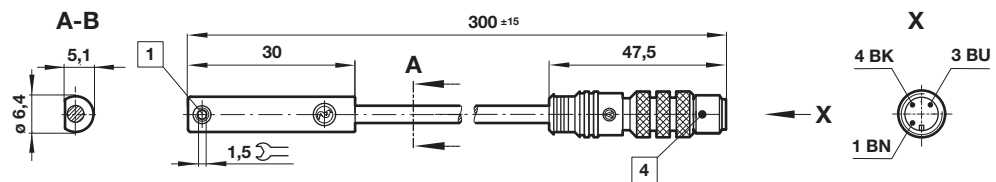
Outer cover	Cable length (m)	Weight (kg)	Connector	Connector
PVC 3 x 0,25	5 m	0,18	M8 x 1	M/P73001/5
PUR 3 x 0,25	5 m	0,18	M8 x 1	M/P73002/5
PUR 3 x 0,34	5 m	0,21	M12 x 1	M/P34594/5

**Drawings**

 M/50/EAP/\*V,  
 M/50/EAN/\*V  
 Cable length L = 2, 5 or 10 m

 Dimensions in mm  
 Projection/First angle

 M/50/EAP/CP,  
 M/50/EAN/CP


M/50/EAP/CC



- 1 Fixing screw
- 2 Color code: BK = black; BN = brown; BU = blue
- 3 Plug M8 x 1
- 4 Plug M12 x 1

**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.