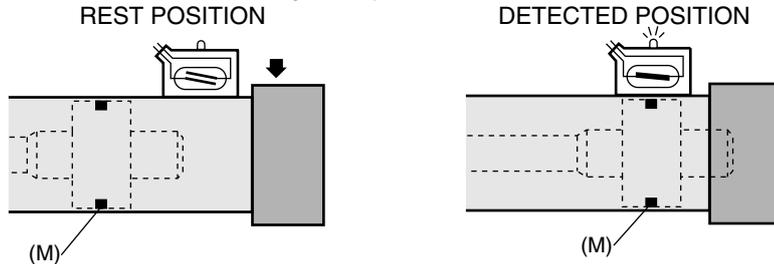


FUNCTIONAL DESCRIPTION

A permanent magnet (M) which is mounted on the piston of the air cylinder activates the reed switch of the non-contact magnetic position detector fastened on the outside of the non-magnetic cylinder barrel.



B

DETECTOR CHARACTERISTICS

MAX. SWITCHING POWER	DC = 10 W / AC = 1 2 VA
SWITCHING VOLTAGE	10 to 60 V DC and AC
MAX. SWITCHING CURRENT	500 mA
VOLTAGE DROP (EN 60.947-5-2)	< 2.7 volt (I = 200mA) < 2.9 volt (I = 500mA)
CONTACT RESISTANCE	max. 0.1 ohm
INSULATION RESISTANCE	10 ¹⁰ ohm
WITHSTAND VOLTAGE	DC = 470 V - AC = 600 V
SENSITIVITY	min. 3 mTesla (30 Gauss)
RESPONSE TIME opening	0.2 ms
closing	0.6 ms
REPEATABILITY	± 0.1 mm
LIFE	10 ⁷ operations
WORKING TEMPERATURE	-20 °C , +70 °C
HOUSING	Thermoplastic housing (PPS) with epoxy resin encapsulated printed circuit
DEGREE OF PROTECTION (CE I 529)	IP67
SIGNAL INDICATION	Green diode (LED) which lights up when the contact is established

**60 V⁽¹⁾
max.**

CONNECTION (5 possibilities / 6 types at option)	Integrated connector	45° lead outlet protected by feed-through sleeve				
	3-pin screw-type male connector, Ø M8	PVC lead, 2 or 5 m long, 2 wires 0.14 mm ² , stripped ends	0.8 m PVC lead + 3-pin plug-in male connector, Ø 8	5 m PVC lead + 3-pin screw-type male connector, Ø M8	0.8 m PVC lead + 3-pin screw-type male connector, Ø M12	
Recommendation for application For cylinder + detector applications with long travels and large movements you must use the mini-detector with M8 connector integrated in the housing and lead outlets with cable (2- or 3- wire) type class 6 especially intended for this purpose (specific accessory: consult us)						
		2 metres	5 metres			

Weight (g)	6	30	70	22	86	35
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Compatible cylinders	Description	CODES					
CAS - CIS CIB PES-PES Ω 450 PCN TUB R - RS	Reed switch type UNI detector only the mounting kit for each cylinder is ordered separately (see following pages)	88100140	88100142	88100144	88100146	88100594	88100148
K PEC P2L - P2B PES-PES Ω 453	Reed switch type UNI detector + mounting kit (*) (for direct mounting on cylinders with swallow tail grooves)	88100185	88100186	88100189	88100190	88100592	88100191

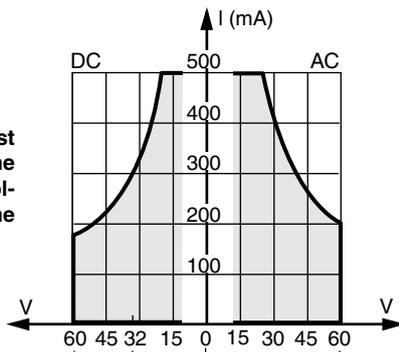
* UNI detector supplied with mounting kit (special nut + screw) for direct fitting to cylinder grooves
 (1) Version for 230 V AC/DC max. (50 mA - 11.5 VA), on request, with 2 m PUR cable, detector **only**, code: **88100418**
 detector + **mini mounting kit** (*), code: **88100417**



ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see opposite
MOUNTING KITS, INSTALLATION ON CYLINDERS: see following pages

MAXIMUM ELECTRICAL CHARACTERISTICS AND PROTECTION OF MAGNETIC DETECTOR (REED SWITCH)

60 V max. models

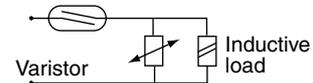


Note: The switching point must remain within the limits of the shaded area. Any excess voltage or power may damage the detector.

230 V max. (AC/DC) model

Max. power = 11,5 VA (50 mA max.)
Life = 10⁶ operations

To obtain the maximum service life, there should be no arcing between contacts. The voltage and current values indicated must therefore not be exceeded.
In the case of electrical circuits with induction coils, protection devices should be used to absorb cut-off overvoltage. The ideal protection component is the varistor (507K250).



INDUCTIVE LOAD		220 Ω 4 W	100 Ω 4 W	100 Ω 4 W
		0,1 μF/250 V		0,1 μF 250 V
RESISTIVE LOAD		Protection not necessary		

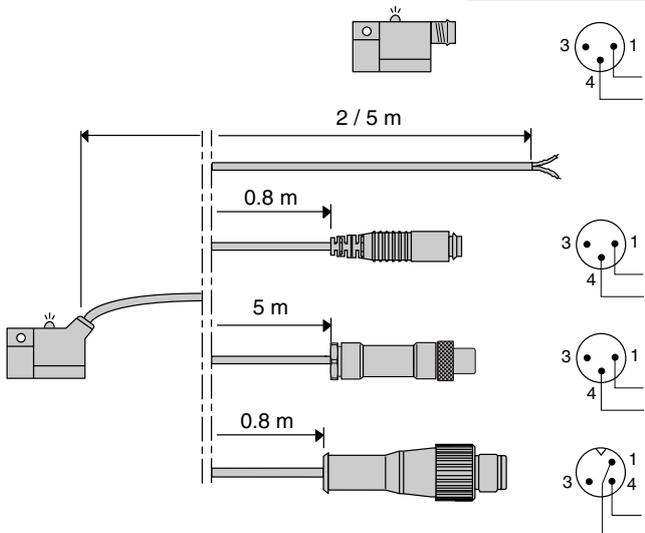
PARTICULAR APPLICATIONS (valid for all models)

- Detectors used for direct control of incandescent lamps: The capacity specified on the lamp is based on its resistance when hot. When switched on, the resistance of the cold lamp is very low. Therefore, the current rises quickly and may exceed the reed switch rating. Allowance should therefore be made for the real power of the cold lamp.
- With leads longer than 10 m, a 1000 Ω resistor must be fitted in series with the detector to reduce the capacitive effect caused by the wiring.

R = 4 W resistor. Standard CCTU resistors code RP 59, C = paper, polycarbonate or metallized mylar capacitor.
The user is responsible for supplying and assembling of components.

REED SWITCH CONNECTION : 5 possibilities

View from male contact side of connector



The UNI detectors reed switch are not polarized

3-pin screw-type male connector Ø M8 (2 pins connected)

Lead outlet Ø 3 mm with stripped ends, 2 wires 0.14 mm²

Lead outlet Ø 3 mm with 3-pin plug-in male connector, Ø 8 mm (2 pins connected)

Lead outlet Ø 3 mm with 3-pin screw-type male connector, Ø M8 (2 pins connected) (adaptable on inputs VCS connectors)

Lead outlet Ø 3 mm with 3-pin screw-type male connector, Ø M12 (2 pins connected)

ACCESSORIES

Description		CODE
Extension consisting of PVC, length 5 m, 3 wire conductors 0.25 mm ² with 1 screw-on femal M8 connector (other end plain) (1) (2)		88100239
Extension consisting of PVC, length 5 m, 3 wire conductors 0.25 mm ² with 1 screw-on femal M12 connector (other end plain) (2)		88100238
Straight 3-pin female connector Ø M8, IP67		88100202
Right angle 3-pin female connector Ø M8, orientable 90° x 90°, IP67		88100203

(1) Extension for integral M8 connector detectors. Coupling to snap-on Ø 8 male connectors is **not advised**.
(2) Detector connection: **brown and black wires (detector is unpolarised)**, blue wire not used