Series REED

Type

2 wires

numatics[®]

MAGNETIC POSITION DETECTORS for "T" and swallow tail grooves reed switch type



E to EO Valt AC

FEATURE

· A detector for any range of cylinders and actuators (cylinders with tie rods, profiled barrels, rounds...)

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.





DETECTOR CHARACTERISTICS

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MAX. SWITCHING POWER max.	DC = 5 W - AC = 5 VA
SWITCHING VOLTAGE	see below
MAX. SWITCHING CURRENT	100 mA
SHORT-CIRCUIT PROTECTION	no
REVERSE POLARITE PROTECTION	yes (without LED function)
OVERLOAD PROTECTION	no
VOLTAGE DROP (EN 60947-5-2)	< 5 volt
BREAKDOWN VOLTAGE	230 V DC
CONTACT RESISTANCE	0,2 ohm max.
INSULATION RESISTANCE	108 ohms at 100 V
SENSITIVITY	2,1 mTesla (21 Gauss)
REPONSE TIME	0,1 ms opening
	0,6 ms closing
REPEATABILITY	$< \pm 0.2$ mm
WORKING TEMPERATURE	- 25°C , + 70°C
HOUSING	PA + FV overmolding
DEGREE OF PROTECTION (CEI 60529)	IP 67
PROTECTION CLASS	cable outlet: classe II, M8 and M12 connection: classe III
APPROVAL	CE
SIGNAL INDICATION	yellow diode (LED) which lights up when the contact is established

CHOICE OF DETECTOR

Voltage	5 to 120 \	olt AC/DC		5 to 50 Vol 5 to 60 Vol		
	2 wires (or 5 m long, 0.14 mm², ed ends	plug-i	lead + 3-pin n male · and Ø M8	0.3 m PUR lead + 3-pin screw-type male connector, Ø M12	
Connection	1	/		···		
				on of pins		
	2 metres	5 metres	1 - 4 0,3 metre	1 - 3 0,3 metre	0,3 metre	
weight (g)	22	50	7	7	16	
compatible cylinders		33	catalogue number (1)			
PEC PES 453 PES Ω (453) CSC - CGT						
ISOCLAIR - PES 450 K - P2B - P2L with tie rods: PES 450 - PES Ω (450)	REED-FL2-00	REED-FL5-00	REED-QDS-M8E	REED-QDS-M8U	REED-QDS-M12E	

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PCN

(1) Detector supplied with mounting (integrated) kit for direct fitting to "T" cylinder grooves, for others cylinders types, see following pages Note: PUR cable resistant to cutting fluids

ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page



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

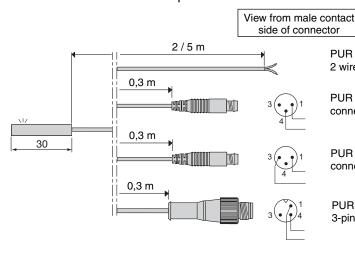
Maxi switching current: 100mA

For inductive loads (valves, contactors, ...), external protection is required to avoid damage caused by switch-off voltage peaks. Use freewheeling diode, transil diode, varistor or similar.

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.

REED SWITCH CONNECTION: 4 possibilities



PUR lead outlet Ø 3 mm with stripped ends, 2 wires 0.14 mm² - **brown wire = + blue wire = -**

PUR lead outlet Ø 3 mm with 3-pin plug-in male connector + screw Ø 8 mm (2 pins connected, 1 and 4)

PUR lead outlet Ø 3 mm with 3-pin plug-in male connector + screw Ø 8 mm (2 pins connected, 1 and 3)

PUR lead outlet Ø 3 mm resistant to cutting fluids, with 3-pin screw-type male connector, Ø M12 (2 pins connected, 1 and 4)

ACCESSORIES

description		catalogue number
extension consisting of PVC, length 5 m, 3 wire conductors 0.25 mm ² with 1 screw-on femal M8 connector (other end plain)	$ \begin{array}{c c} 5 \text{ m} & \text{br} = 1 \\ \text{blu} = 3 \\ \text{blk} = 4 \end{array} $	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)	$\begin{array}{c c} 5 \text{ m} & \text{br} = 1 \\ \text{blu} = 3 \\ \text{blk} = 4 \end{array}$	88100238
straiht 3-pin female connector Ø M8, IP67	CM5 1 3	88100202
Right angle 3-pin female connector Ø M8, orientable 90° x 90°, IP67	1 3 4	88100203
Cable cover and holder (sold by the metre - minimum length = 1 m)	swallow tail groove «T» slot	88144212 (1) 88100746 (1)
Block of memorizing position of adjustment detector		N199-1162

(1) For your order please add the requested length (in metres) to the order code - example: 2 m = 88144212 2