

FEATURE

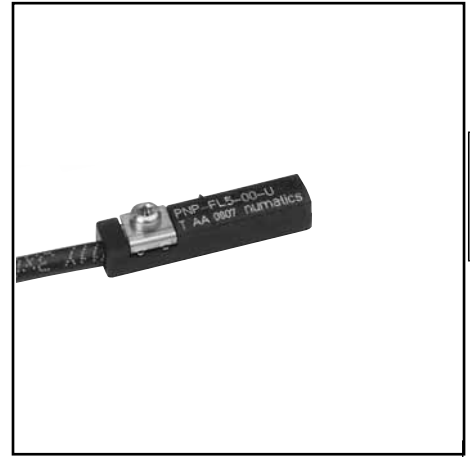
- A detector for any range of cylinders and actuators (cylinders with tie rods, profiled barrels, rounds...)

PRINCIPLE

Static non-contact proximity switch on air cylinders equipped with built-in permanent magnets.

FUNCTIONAL DESCRIPTION

When the permanent magnet which is mounted on the piston approaches the detector the magnetic field it generates causes the semiconductors' resistors to change. This current variation increases the resistance and a switching signal is generated.



DETECTOR CHARACTERISTICS

MAX. SWITCHING POWER	3 W
SWITCHING VOLTAGE	10 to 30 V DC
MAX. SWITCHING CURRENT	100 mA
WIRING	PNP - NPN
REVERSE POLARITY PROTECTION	yes
OVERLOAD PROTECTION	yes
SHORT-CIRCUIT PROTECTION	yes
VOLTAGE DROP (EN 60947-5-2)	< 1,5 volt (I = 50 mA) < 2,5 volts (I = 100 mA)
MAX. LEAKAGE CURRENT	< 50 µA
MAX. ALLOWABLE OVERVOLTAGE	32 VCC max. (100 ms)
SENSITIVITY	2 mTesla (20 Gauss)
RESPONSE TIME	110 µs opening 220 µs closing
REPEATABILITY	< 0,2 mm
WORKING TEMPERATURE	- 25°C , + 85°C
HOUSING	PA + FV overmolding
DEGREE OF PROTECTION (CEI 60529)	IP67
PROTECTION CLASS	class III
SIGNAL INDICATION	yellow diode (LED) which lights up during switching
CONFORM TO	CE (UL and cUL for 2 m and M8 connection)

CHOICE OF DETECTOR

Voltage	10 to 30 Volt DC					
	PUR lead, 2 or 5 m long, 3 wires 0.14 mm², stripped ends		0,3 m PUR lead + 3-pin plug-in male connector and Ø M8		0,3 m PUR lead + 3-pin screw-type male connector, Ø M12	
Connection						
	2 metres	5 metres	0,3 metre	0,3 metre	0,3 metre	
weight (g)	PNP 22	NPN 22	PNP 50	PNP 7	NPN 7	PNP 16
compatible cylinders:	catalogue number (1)					

PEC
PES 453
PESΩ (453)
CSC - CGT

ISOCLAIR - PES 450
K - P2B - P2L
with tie rods:
PES 450 - PES Ω (450)
PCN

PNP-FL2-00-U NPN-FL2-00-U PNP-FL5-00 PNP-QDS-M8-U NPN-QDS-M8-U PNP-QDS-M12

(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

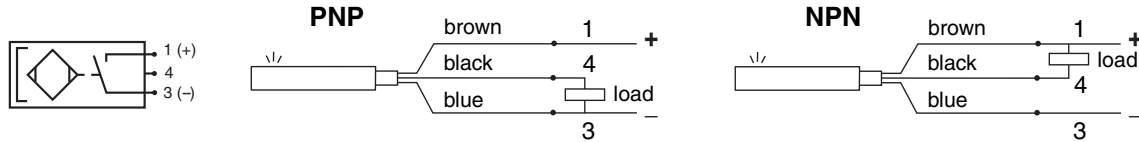
ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page

B

ELECTRICAL PROTECTION

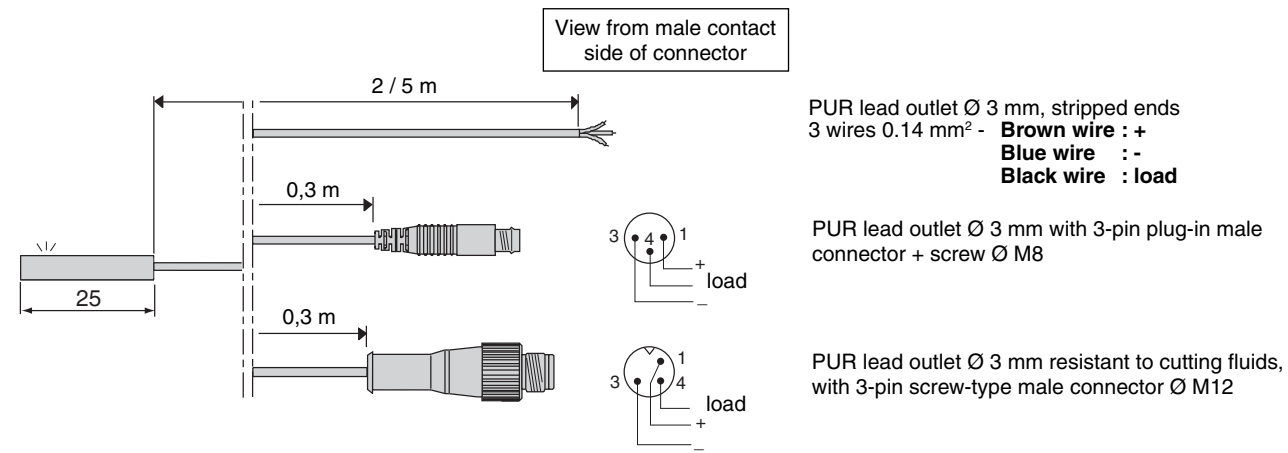
- Output protected against short-circuit as long as the output current is restricted to 0.1 A.
- Improper wire connection may prevent the detector from operating or even destroy it.
- It is recommended to install a protection diode (mounted in parallel) on an inductive load in spite of the internal protection.

CONNECTION



**Polarities
to be observed**

CONNECTION OF MAGNETO-RESISTIVE DETECTORS: 3 possibilities



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) (1)	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) (1)	88100238
straiht 3-pin female connector Ø M8, IP67	88100202
Right angle 3-pin female connector Ø M8, orientable 90° x 90°, IP67	88100203
Cable cover and holder (sold by the metre - minimum length = 1 m)	swallow tail groove 88144212 (2)
	«T» slot 88100746 (2)
Block of memorizing position of adjustment detector	N199-1162

(1) **Detector connection, brown wire = +, blue wire = -, black wire = load**

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