

Do not use near welding areas.

GENERAL CHARACTERISTICS

An amplifier converts them into switch signals.

OPERATING SYSTEM

Residual current (opening)

Max. switching current

Min. switching current

Ambient temperature

External protection

Electrical protection

Mounting direction Mounting on cylinder

I, max. voltage drop

APPLICATION

Function

Hysteresis

Housing

Switching voltage

Residual ripple

MAGNETO-INDUCTIVE POSITION DETECTORS

This four-wire proximity sensor will monitor stroke end and intermediate positions

The permanent magnet is mounted in the piston head. On getting closer, its own

magnetic field generates variations of the current within the detector oscillator.

10 to 65 V DC < 10%

-10°C ; +70°C

: closing

: < 0.8 mA

100 mA

< 1 mm

3 mA

< 5 V

: IP65

of pneumatic cylinders equipped with built-in permanent magnets.



Series 881 Туре 2 wires

B



CONNECTION DIAGRAM No serial connection can be performed with several detectors.



Adaptation for CNOMO PCN Ø 25 mm cylinder : consult us

| Connection (three possib | ilities) : • 0.8 m cable + four-pin male connector Ø 12 mm, | | * : Load |
|---------------------------|--|---------------------------------|----------|
| | CNOMO E03.62.520.N | = (+) | |
| | 2 m cable with stripped ends | | |
| | integrated male connector Ø 12 mm (for different ext | tension cords available, see ov | erleaf) |
| Indicator lamp | : diode (yellow LED) which lights up when the contact is | s closed | - |
| Manuation and in a stinue | Long way De net use neer welding eress | | |

circuit protected by an aluminium box

short circuits and overcharges

: non-polarised detector protected against

- : any way **Do not use near welding areas** : ISO 15552 AFNOR NF ISO 15552 DIN ISO 15552, type PES series 450 Ø 32 to 200 mm with tie rods and Ø 32 to 125 mm with profiled barrel.
- ISO 6431 Ø 32 to 200 mm with tie rods, type TRINORM PIS series 436
- CNOMO 06.07.02/03 NFE 49001/002 Ø 32 to 200 mm with tie rods, type TRINORM PCN series 437

CHOICE OF EQUIPMENT

| | Can be mounted | CODE of one detector | |
|---|--|-----------------------|-----------------------|
| DESCRIPTION | on cylinders | with bracket | on its own |
| Inductive magnetic position detector, with wire 0.8 m long and four-pin male connector Ø 12 mm type conprox (1) to CNOMO | with tie rods Ø 32 to 100 mm | 88143676 [*] | 99142672* |
| eU3.40.150.N and EU3.62.520.N, CNOMO cutting oil resistant wire, delivered with mounting bracket for cylinders: | with tie rods Ø 125 to 200 mm | 88143678 | 00143072 |
| Inductive magnetic position detector, with wire 2 m long, stripped ends without connector, CNOMO cutting oil resistant wire, delivered with | with tie rods Ø 32 to 100 mm | 88143677 [*] | 004 40070* |
| mounting bracket for cylinders: | with tie rods Ø 125 to 200 mm | 88143679 | 88143673** |
| Inductive magnetic position detector with integrated four pic male | with tie rods Ø 32 to 100 mm | 88143617 [*] | |
| connector Ø 12 mm (2) type conprox, delivered with mounting bracket | with tie rods Ø 125 to 200 mm | 88143680 | 88143616 [*] |
| | with profiled barrel Ø 32 to 125 mm | 88143618 [*] | |

(1) Wires connected to pins 1 and 4 of the connector (car industry applications)

(2) Wires connected to pins 3 and 4 of the connector

In the case of use of a BIM magnetic detector on PES series 450 Ø 32, it is necessary * to add the option code = 995125



Mounting on U or H guiding units: The forward position detector support is specified (consult us)



Detector with wire





Detector with integrated connector



Marking male connectors

view from contact side

All leaflets are available on: www.ascojoucomatic.com

ACCESSORIES-MOUNTINGS

| | DESCRIPTION | | CODE |
|----------|--|----------|----------|
| ORDS | CNOMO extension cord, cutting oil resistant 4 wire conductors, 0.5 mm ² with 1 five-pin straight socket connector Ø 12 mm, CNOMO E03.62.520.N (1) (other end of wire stripped) | 5 m long | 88143675 |
| NDING CO | Standard PVC extension cord, 4 wire conductors, 0.5 mm ² with 1 four-pin straight socket connector Ø 12 mm (2) (other end of wire stripped) | 5 m long | 88143619 |
| EXTEN | Standard PVC extension cord, 4 wire conductors, 0.5 mm ² with 1 four-pin curved socket connector Ø 12 mm (2) (other end of wire stripped) | 5 m long | 88143620 |
| NG NG | Mounting device type KLI 1 for cylinders with tie rods Ø 32 to 100 mm | | 88143625 |
| UNTI | Mounting device type KLI 3 for cylinders with tie rods Ø 125 to 200 mm | | 88143674 |
| ĕª | Mounting device type KLI 2 for cylinders with profiled barrels Ø 32 to 125 mm | | 88143626 |

(1) Wires connected to pins 1 (brown) and 4 (black) of the connector

(2) Wires connected to pins 3 (blue) and 4 (black) of the connector

DIMENSIONS AND WEIGHTS

It is possible to install magnetic detectors to monitor stroke end or intermediate positions



Detectors may be mounted on any of the 4 tie rods or profiled barrels



MOUNTING ON CYLINDER WITH PROFILED BARREL



| | Dimensions | ns cylinder Ø (mm) | | | | | | | Weight* | | |
|--------------------------------|------------|--------------------|----|----|----|----|-----|-----|---------|-----|--------|
| | (mm) | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | 200 | (in g) |
| | M1 | 46 | 50 | 54 | 58 | 65 | 72 | 84 | 97 | 111 | |
| | M2 | 39 | 41 | 48 | 52 | 60 | 68 | 78 | 96 | 110 | 67 |
| | M3 | 46 | 50 | 55 | 60 | 67 | 75 | 88 | - | - | 07 |
| * Weight of detector + bracket | M4 | 38 | 42 | 46 | 50 | 56 | 65 | 76 | - | - | |

Mounting instructions

Mounting instructions

(1)

2 (3)

(4)

(1)

(2)

(3)

(4)

- Install mounting bracket on detector

- Install mounting bracket on detector

- Start screwing bracket on detector

moderately with key (2.5 hexagonal)

JOUCOMATIC

- Position at measuring point

- Check that the detector is in contact with the

tube and tighten on cylinder, screwing down moderately with key (2.5 mm hexagonal)

- Start screwing in the detector

- Position at measuring point

MOUNTING ON CYLINDERS

MOUNTING ON CYLINDERS WITH TIE RODS Ø 32 TO 200 mm



MOUNTING ON CYLINDERS WITH PROFILED BARREL Ø 32 TO 125 mm



All leaflets are available on: www.ascojoucomatic.com

P297-2



"COMPACT" MAGNETIC POSITION DETECTORS reed switch type



Series 881 Type 2 Wires



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

| SWITCHING VOLTAGE MAX. SWITCHING CURRENT 12 to 30 VC and AC 12 to 30 VC and AC 130 V max. 130 V max. 142 to 30 VC and AC 140 VA Could (= 100mA) 140 VA C and DC 2x10° ohm at 500 V max. 140 VA C and DC 2x10° ohm at 500 V max. 140 VA C and DC 140 VA C and DC 140 VA C and DC 140 VA C and DC 15 ms 15 mm 1FE 2x10° ohm at 500 V max. 140 VA C and DC 140 VA C and DC 140 VA C and DC 15 ms 15 mm 1FE 15 mm 15 m | MAX. SWITCHING POWER | | DC = 3 W / AC =10 VA | | | | | |
|--|-----------------------|-----------------------------|-----------------------|--------------------------|-----------------------------|--------------------------|-------------------------|--|
| MAX. SWITCHING CURRENT 100 mA 100 mA max. 01 ohm max. | SWITCHING | VOLTAGE | 12 to 30 VDC and AC | | | | | |
| VOLTAGE DROP (EN 60.947-5-2) < < 2.6 volt (I = 100M) | MAX. SWITC | HING CURRENT | 100 mA 30 V | | | | | |
| CONTACT RESISTANCE max. 0,1 ohm Interview INSULATION RESISTANCE 140 V AC and DC WITHSTAND VOLTAGE 140 V AC and DC SENSITIVITY 1140 V AC and DC RESPONSE TIME opening closing closing 0,2 ms REPEATABILITY ± 0,5 mm LIFE 2x10° operations WORKING TEMPERATURE - 25°C, + 70°C HOUSING Thermoplastic housing (PA-FV) with polyamide resine ncapsulated printed circuit IP67 SIGNAL INDICATION Velow diode (LED) which lights up when the contact is established PVC lead 2 or 5 m long. 0.8 m PVC lead + 3pin Quies 0.14 mm ² , strip- ped ends 0.8 m PVC lead + 3pin Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established CONNECTION (4 possibilities / 5 types at choice) 2 metres Velow diode (LED) 88144201 K Reed switch type COMPACT detector + mounting att (1) PES 450, PES 450, PES 450, PES 450, PES 450, PES 450, PES 450, PES 450, PES 450, PES | VOLTAGE DR | OP (EN 60.947-5-2) | | | < 2,6 volt (1 | = 100mA) | | |
| INSULATION RESISTANCE 2x10° ohm at S00 V WITHSTAND VOLTAGE 140 V AC and DC SENSITIVITY min.2 mTesla (20 Gauss) RESPONSE TIME opening closing 0,2 ms REPEATABILITY ± 0,5 mm LIFE 2x10° operations WORKING TEMPERATURE -25°C , + 70°C HOUSING Thermoplastic housing (PA-FV) with hoptyamide resin encapsulated printed circuit IP67 SIGNAL INDICATION Vellow diode (LED) which lights up when the contact is established PVC lead, 2 or 5 m long, 2 wires 0,14 mm², strip- ped ends 0.8 m PVC lead + 3-pin plug-in maile connector and 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m PVC lead + 3-pin screw-type male connec- tornector, 0 MB 0.8 m P | CONTACT RE | ESISTANCE | | | max. 0 | 1 ohm | | |
| WITHSTAND VOLTAGE 140 V AC and DC SENSITIVITY min.2 mTesla (20 Gauss) RESPONSE TIME opening closing 0,5 ms REPEATABILITY ± 0,5 mm LIFE 2x10 ⁷ operations WORKING TEMPERATURE 7-25°C, + 70°C HOUSING Thermoplastic housing (PA-FV) with polyamide resin encapsulated printed circuit DEGREE OF PROTECTION (CE IS29) SIGNAL INDICATION PVC lead, 2 or 5 m long, 2 wires 0.14 mm ² , stip- ped ends 0.8 m PVC lead + 3-pin connector and Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin connector, Ø M8 0.8 m PVC l | INSULATION | RESISTANCE | | | 2x10 ⁶ ohn | n at 500 V | | |
| SENSITIVITY min. 2 mTesla (20 Gauss) RESPONSE TIME opening closing 0,2 ms REPEATABILITY ± 0,5 mm LIFE ± 0,5 mm WORKING TEMPERATURE HOUSING -25°C, + 70°C MORKING TEMPERATURE HOUSING Thermoplastic housing (PA-FV) with hopyamide resine encapsulated printed circuit IP67 SIGNAL INDICATION Yellow diode (LED) which lights up when the contact is established OS m PVC lead + 3 pin ped ends 0.8 m PVC lead + 3 pin ped ends 0.8 m PVC lead + 3 pin plug-in male connector and Ø M8 0.8 m PVC lead + 3 pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.8 m PVC lead + 3 pin ped ends 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC lead + 3 pin plug-in male connector, Ø M8 0.8 m PVC | WITHSTAND | VOLTAGE | | | 140 V AC | and DC | | |
| RESPONSE TIME opening closing 0,2 ms REPEATABILITY ± 0,5 mm LIFE 2x10 ^o particles WORKING TEMPERATURE + 0,5 mm HOUSING Thermoplastic housing (PA-FV) with polyamide resin encapsulated printed circuit IP67 DEGREE OF PROTECTION (CE IS29) Yellow diode (LED) which lights up when the contact is established PVC lead, 2 or 5 m long, 2 wires 0.14 mm ² , strip- ped ends 0.8 m PVC lead + 3-pin screw-type male connector connector and Ø M8 CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metres Weight (g) 23 54 Using COMPACT detector + mounting kit (products with swallow all grooves) 88144201 88144201 88144202 88144203 88144203 88144204 | SENSITIVITY | , | | | min. 2 mTesla | a (20 Gauss) | | |
| closing 0,5 ms REPEATABILITY ± 0,5 mm LIFE 2x10' operations VORKING TEMPERATURE -25°C, + 1°°C HOUSING Thermoplastic housing (PA-FV) with polyamide resin encapsulated printed circuit IP67 SIGNAL INDICATION PVC lead, 2 or 5 m long, 2 wires 0.14 mm², strip- ped ends 0.8 m PVC lead + 3-pin screw-type male connector and Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connec- tor, Ø M12 CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metres 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 5 metres 0.8 m PVC lead + 3-pin screw-type male connec- tor, Ø M12 Weight (g) 23 54 14 61 24 Compatible cylinders with swallow tail grooves) 88144201 88144203 88144203 88144209 SigoCLAIR PESA 450 PESA 450 PESA | RESPONSE ⁻ | TIME opening | | | 0,2 | ms | | |
| REPEATABILITY ± 0.5 mm LIFE 2x10 ² operations WORKING TEMPERATURE -25°C, +70°C HOUSING P67 DEGREE OF PROTECTION (CE IS29) Yellow diode (LED) which lights up when the contact is established PVC lead, 2 or 5 m long, 2 wires 0.1 4 mm ² , strp- ped ends 0.8 m PVC lead +3-pin connector and Ø M8 0.8 m PVC lead +3-pin screw-type male connec- tor, Ø M2 CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metres 0.8 m PVC lead +3-pin connector and Ø M8 0.8 m PVC lead +3-pin screw-type male connec- tor, Ø M2 Weight (g) 23 54 14 61 24 Compatible cylinders Description CODES 88144203 88144209 88144204 ISOCLAR PES 450 PES 4 | | closing | | | 0,5 | ms | | |
| LIFE 2210' operations WORKING TEMPERATURE -25°C , + 70°C Thermoplastic housing (PA-FV) with polyamide resin encapsulated printed circuit PFC SIGNAL INDICATION (CE 152) SIGNAL INDICATION (CE 152 | REPEATABIL | ITY | | | ± 0,5 | mm | | |
| WORKING TEMPERATURE -28°C, 70°C HOUSING Thermoplastic housing (PA-FV) with polyamide resin encapsulated printed circuit JP67 SIGNAL INDICATION Velow diode (LED) which lights up when the contact is established Velow diode (LED) which lights up when the contact is established CONNECTION (4 possibilities / 5 types at choice) Velow diode (LED) which lights up when the contact is established Weight (g) 23 54 14 61 24 Compatible cylinders Description CODES CODES 88144203 88144203 88144209 88144204 K Reed switch type COMPACT the roots in dig grooves) 88144201 88144201 88144203 88144203 88144209 88144204 | LIFE | | | | 2x10 ⁷ op | erations | | |
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| DEGREE OF PROTECTION (CE 1529) Yellow diode (LED) which lights up when the contact is established SIGNAL INDICATION Yellow diode (LED) which lights up when the contact is established PVC lead, 2 or 5 m long, 2 wires 0.14 mm ² , strip- ped ends 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin plug-in male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.9 m PVC lead + 3-pin plug-in male connector and Ø M8 0.9 m PVC lead + 3-pin plug-in male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.9 m PVC lead + 3-pin plug-in male connector and Ø M8 0.9 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.9 m PVC lead + 3-pin plug-in male connector and Ø M8 0.9 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.9 m PVC lead + 3-pin plug-in male connector and Ø M8 0.9 m PVC lead + 3-pin screw-type male connector, Ø M8 Velogit (g) 2 metres 5 m etres 14 61 24 Compatible cylinders Description 88144201 88144203 88144209 < | HOUSING | | Therm | hoplastic ho | using (PA-EV) with poly | amide resin encapsulate | ed printed circuit | |
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| CONNECTION (4 possibilities / 5 types at choice) PVC lead, 2 or 5 m long, 2 wires 0.14 mm ² , strip- ped ends 0.8 m PVC lead + 3-pin plug-in male connector and Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 0.8 m PVC lead + 3-pin screw-type male connector, Ø M8 Weight (g) 2 metres 5 metres 0.9 m etc. 0.9 m etc. </td <td>SIGNAL INDI</td> <td>CATION</td> <td></td> <td>Vellow dio</td> <td>de (LED) which lights u</td> <td>o when the contact is es</td> <td>tablished</td> | SIGNAL INDI | CATION | | Vellow dio | de (LED) which lights u | o when the contact is es | tablished | |
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| 2 wires 0.14 mm², stripped ends plug-in male connector and Ø M8 screw-type male connector, Ø M8 screw-type male connector, Ø M2 CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metres image: connector and Ø M8 image: connector and Ø M8 image: connector, Ø M8 image: connector, Ø M8 image: connector, Ø M2 | | | PVC lead, 2 | or 5 m long, | 0.8 m PVC lead + 3-pin | 0,8 m PVC lead + 3-pin | 0.8 m PUR lead + 3-pin | |
| CONNECTION (4 possibilities / 5 types at choice) ped ends connector and Ø M8 connector, Ø M8 tor, Ø M12 Veight (g) 2 metres 5 metres image: metric of the second | | | 2 wires 0.14 | mm ² , strip- | plug-in male | screw-type male | screw-type male connec- | |
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| CONNECTION (4 possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of the possibilities / 5 types at choice)Image: Constant of type / 5 types / 5 ty | | | | | | | | |
| CONNECTION (4 possibilities / 5 types at choice) Image: Construction of the choice) I | | | | | | | (2) | |
| CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metres | | | Carrie C | 4 | | | 94 | |
| CONNECTION (4 possibilities / 5 types at choice) 2 metres 5 metre | | | and the second second | | | | | |
| (4 possibilities / 5 types at choice) 2 metres 5 metres | | | 100 | | | | | |
| Veight (g)2 metres5 metres000Weight (g)2354146124Compatible cylindersDescriptionCODESK KN PEC PCL PES 453Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)881442018814420288144203881442038814420988144204ISOCLAIR PES 450, PES 450, PES 450, red separately (see following pages)8814420188144202881442038814420988144204 | (4 possibilitie | s / 5 types at choice) | | | | | | |
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| Lements 2 metres 5 metres Image: Compatible of the compatible | | | | | (•.•) | (···) | | |
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| Weight (g)2354146124Compatible cylindersDescriptionCODESK N PEC PEC PEC PESΩ (453)Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)8814420188144202881442038814420988144204ISOCLAIR PESΩ (453)Reed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages)8814420188144202881442038814420988144204 | | | 2 metres | 5 metres | | | | |
| Weight (g)2354146124Compatible cylindersDescriptionCODESK KN PEC P2L - P2B PES 453 PESΩ (453)Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)Reed switch type COMPACT detector + mounting on cylinders with swallow tail grooves)8814420188144202881442038814420988144204ISOCLAIR PES 450 + PES 450, PCN with tie rodsReed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages)8814420188144202881442038814420988144204 | | | | 54 | | 24 | 0.1 | |
| Compatible cylindersDescriptionCODESK KN PEC P2L - P2B Cylinders with swallow tail grooves)Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)88144201881442038814420988144209ISOCLAIR PESΩ (453)Reed switch type COMPACT detector + PESΩ (450), PESΩ (450), PCN with tie rodsReed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages)8814420188144203881442038814420988144204 | Weight (g) | | 23 | 54 | 14 | 61 | 24 | |
| cylinders Description CODEC K Reed switch type COMPACT detector + mounting kit (1) PEC Reed switch type COMPACT detector + mounting on cylinders with swallow tail grooves) Reed switch type COMPACT detector 88144201 88144202 88144203 88144209 88144204 ISOCLAIR PES 450 + PES 450, PES 450, PES 450, PES 450, PES 450, PCN Reed switch type COMPACT detector 88144201 88144202 88144203 88144209 88144204 (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves (2) | Compatible | Description | | | C | ODES | | |
| K KN PEC PEC PES 453 PES 453Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)Reed switch type COMPACT detector + mounting on cylinders with swallow tail grooves)8814420188144202881442038814420988144204ISOCLAIR PES 450 + PES 450, PES 450, PES 450, PES 450, PCNReed switch type COMPACT detector + the mounting kit for each cylinder is orde- red separately (see following pages)8814420188144202881442038814420988144204 | cylinders | Description | | | | .0020 | | |
| KN PEC PEC PES 453 PES 453Reed switch type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)Reed switch type stail grooves)8814420188144202881442038814420988144204ISOCLAIR PES 450 + PES 450, PES 450 | к | | | | | | | |
| PEC PEC PEC PES PES 453 PESΩ (453)detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves)detector + mounting on cylinders with swallow tail grooves)8814420188144202881442038814420988144204ISOCLAIR PES 450 + PES 450, PES 4 | KN | Reed switch type COMPACT | | | | | | |
| P2L - P2B PES 453 PES 453 PES (453) (for direct mounting on cylinders with swallow tail grooves) (for direct mounting on cylinders with swallow tail grooves) 88144201 88144203 88144209 88144209 ISOCLAIR PES 450 + PES 450, PES (450), PCN with tie rods Reed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages) 88144201 88144203 88144209 88144209 88144204 | PEC | detector + mounting kit (1) | | | | | | |
| PES 453 PES 453 cylinders with swallow tail grooves) cylinders with swallow tail grooves) kallow ISOCLAIR PES 450 Reed switch type COMPACT detector 88144201 88144202 88144203 88144209 88144204 PES 450, PES 450, PES 450, PES 450, PCN with tie rods Reed switch type COMPACT detector 88144201 88144202 88144203 88144209 88144204 * | P2I - P2B | (for direct mounting on | | | | | | |
| PESΩ (453) tail grooves) 88144201 88144202 88144203 88144209 88144204 ISOCLAIR PES 450 + PES 450, PES (450), PCN with tie rods Reed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages) 88144202 88144203 88144209 88144204 (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | PES 453 | cylinders with swallow | | | | | | |
| Non-Section (100) Reed switch type 88144201 88144202 88144203 88144209 88144204 ISOCLAIR PES 450 + PES 450, PES (450), PCN with tie rods Reed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages) 88144202 88144203 88144209 88144204 (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves Image: Comparison of the screw of the | PESΩ (453) | tail grooves) | | | | | | |
| ISOCLAIK PES 450 + PES 450, PES 450, PES 450, PES 450, PES 0 (450), PCN with tie rods Reed switch type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages) (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | | | 88144201 | 88144202 | 88144203 | 88144209 | 88144204 | |
| PES 450 + COMPACT detector PES 450, PES 450, PES (450), PCN with tie rods the mounting kit for each cylinder is orde- red separately (see following pages) (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | ISOCLAIR | Reed switch type | | | | | | |
| PES 450, PESΩ (450), PCN the mounting kit for each cylinder is orde- red separately (see following pages) each cylinder is orde- red separately (see following pages) (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves Image: Constant of the screw o | PES 450 | COMPACT detector | | | | | | |
| PESΩ (450), PCN each cylinder is orde- red separately (see following pages) each cylinder is orde- red separately (see (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | | the mounting kit for | | | | | | |
| PCN red separately (see following pages) with tie rods following pages) (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | PESO (450) | each cylinder is orde- | | | | | | |
| (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | PCN (+30), | red separately (see | | | | | | |
| (1) Detector supplied with mounting kit (special put + screw) for direct fitting to cylinder grooves | with tie rods | following pages) | | | | | | |
| | (1) Detector a | upplied with mounting kit | (enecial put | + corowi) fo | r direct fitting to oulindo | r drooves | <u> </u> | |

(2) PUR cable resistant to cutting fluids

ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page



00204GB-2005/R01



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



REED SWITCH CONNECTION : 4 possibilities



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.

The detectors reed switch



| Description | | | | | |
|---|---|-------------------------|--|--|--|
| 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) | 5 m | 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) | $ \begin{array}{c} 5 \text{ m} \\ \text{blue} = 3 \\ \text{blue} = 4 \\ \end{array} $ | 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) | | 88144212 ⁽³⁾ | | | |

(1) Extension for M8 connector detectors.

(2) Detector connection: brown and black wires (detector is unpolarised), blue wire not used

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



"COMPACT" MAGNETIC POSITION DETECTORS magneto-resistive (MR)

Series 881 Type 3 Wires



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. SWITC SWITCHING MAX. SWITC CONNECTIO VOLTAGE DR VOLTAGE DR | HING POWER VOLTAGE 10 to 30 VDC HING CURRENT N OP (EN 60.947-5-2) OP (EN 60.947-5-2) CE CURPENT | 3 W 100 mA PNP < 1,1 volt (I = 50 mA) < 1,2 volt (I = 100 mA) | | | | | |
|---|---|---|--|---|---|--|--|
| MAX. LEARA MAX. ALLOW INSULATION SENSITIVITY | ABLE OVERVOLTAGE RESISTANCE (500V) | | | max. 40 volt (20x10 min. 2 mTesla | nA 10 seconds) ⁶ ohm a (20 Gauss) | | |
| RESPONSE | TIME opening closing ITY | | | 0,2 0,1 ± 0,1 | ms ms mm | | |
| LIFE WORKING TE ELECTRICAL HOUSING DEGREE OF | EMPERATURE PROTECTION PROTECTION (CE I 529) | Polari Therm | zed detecto noplastic ho | 5x10 ⁷ op - 25°C , r, protectec against sho using (PA-FV) with poly IP(low diade (LED) which | erations + 70°C ort-circuits and overloads amide resin encapsulate 57 | s (see opposite) ed printed circuit | |
| SIGNAL INDI | CATION | PVC lead, 2 3 wires 0.14 | or 5 m long, mm ² , strip- | 0,8 m PVC lead + 3-pin plug-in male | 0,8 m PVC lead + 3-pin screw-type male | 9 0,8 m PUR lead + 3-pin screw-type male connec- | |
| CONNECTION (4 possibilities / 5 types at choice) | | 2 metres | 5 metres | connector and Ø M8 | connector, Ø M8 | tor, Ø M12 | |
| Weight (g) | | 23 | 54 | 14 | 61 | 24 | |
| Compatible cylinders | Description | | | C | CODES | | |
| K KN PEC P2L - P2B PES 453 PES Ω (453) ISOCLAIR PES 450 + PES 450, PES Ω (450), PCN with tie rods | Magneto-resistive type COMPACT detector + mounting kit (1) (for direct mounting on cylinders with swallow tail grooves) Magneto-resistive type COMPACT detector the mounting kit for each cylinder is orde- red separately (see following pages) | 88144205 | 88144206 | 88144207 | 88144210 | 88144208 | |

ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page



All leaflets are available on: www.ascojoucomatic.com

00205GB-2005/R01



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 (PNP)



CONNECTION OF MAGNETO-RESISTIVE DETECTORS: 4 possibilities



| 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) | 5 m | 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) | $ \underbrace{5 \text{ m}}_{\text{PVC}} \xrightarrow{\text{br} = 1}_{\text{blu} = 3} \underbrace{1}_{4} \underbrace{2}_{3}^{2} $ | 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) | | 88144212 ⁽³⁾ |

(1) Extension for M8 connector detectors.

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

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



"T SLOT" MAGNETIC POSITION DETECTORS reed switch type

for series 453 PES type cylinders



Series 881 Type 2 wires

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

| MAX. SWITCHING POWER SWITCHING VOLTAGE | | 6 W 10 to 30 VDC and AC | | | | | |
|--|--|--|--|---|--|--|--|
| MAX. SWITCH | HING CURRENT | | 200 | mA | | | |
| VOLTAGE DR | OP (EN 60.947-5-2) | | < 3 volt (I | = 200mA) | | | |
| CONTACT RE | SISTANCE | | max. (| 0,15 Ω | | | |
| INSULATION | RESISTANCE | | > 10 | 0 MΩ | | | |
| WITHSTAND | VOLTAGE | | 200 | V DC | | | |
| SENSITIVITY | | | min. 2,5 mTes | sla (25 Gauss) | | | |
| RESPONSE T | IME opening | | 0,3 | ms | | | |
| | closing | | 0,1 | ms | | | |
| REPEATABILI | TY | | ± 0,5 | 5 mm | | | |
| LIFE | | | 10 ⁷ operations | (resistive load) | | | |
| WORKING TE | MPERATURE | | - 15°C . | , + 70°C | | | |
| HOUSING | | I hermoplasti | c housing (PA) with epo | pxy resin encapsulated p | rinted circuit | | |
| DEGREE OF | PROTECTION (CE 529) | | IP | 67 | | | |
| SIGNAL INDIC | CATION | orange dio | de (LED) which lights ι | up when the contact is es | stablished | | |
| SIGNAL INDICATION CONNECTION (3 possibilities / 4 types at choice) | | PVC lead, 2 m long, 2 wires 0.14 mm ² , stripped and tinned ends | PVC lead, 5 m long, 2 wires 0.14 mm ² , stripped and tinned ends | 0,15 m PVC lead + 3-pin plug-in male connector and Ø M8 | 0.15 m PVC lead + 3-pin screw-type male connector, Ø M12 | | |
| Weight (g) | | 21 | 51 | 7 | 14 | | |
| Compatible cylinders | Description | | (| CODES | 1 | | |
| PES series 453 | Reed switch type "T" de- tector + mounting kit (1) (for direct mounting on cylin- ders with "T" slot) | 88100733 | 88100734 | 88100735 | 88100736 | | |

(1) Detector supplied with mounting kit (integrated) for direct fitting to cylinder grooves

ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page





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



REED SWITCH CONNECTION : 3 possibilities

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 W resistor must be fitted in

• With leads longer than 10 m, a 1000 W 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.



ACCESSORIES

| Description | | CODE |
|--|--|-------------------------|
| Extension cord made of PVC, length 5 m, 3 wires 0.25 mm ² with 1 screw-type female M8 connector (other end stripped) (1) (2) | $5 \text{ m} \text{br = 1} \\ blu=3 \text{ log} 3 \\ blk=4 \text{ log} 3$ | 88100239 |
| Extension cord made of PVC, length 5 m, 3 wires 0.25 mm ² with 1 screw-type female M12 connector (other end stripped) (2) | $ \begin{array}{c} 5 \text{ m} \\ \text{blue 3} \\ \text{blue 4} \\ 4 \\ \end{array}^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 |
| Cable cover and holder (sold by the metre - minimum length = 1 m) | 1 | 88100746 ⁽³⁾ |

Extension for M8 connector detectors.

(2) Detector connection: brown and black wires (detector is unpolarised), blue wire not used

(3) For your order please add the requested length (in metres) to the order code 88100746. Example:

DIMENSIONS

The magnetic detector fits directly into the grooves in the cylinder body. Detection of very small movements or very short strokes means that more than one groove will have to be used.





INSTALLATION RECOMMENDATION

In order to control **the max. end** of cylinder stroke, the detectors must be mounted in the following direction:

2 m = 88100746 2 2,5 m = 88100746 3

PES cylinders series 453 Ø 32-100 : cable oriented towards the cylinder barrel.





"T SLOT" MAGNETIC POSITION DETECTORS magneto-resistive (MR)

for series 453 PES type cylinders

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.



Series 881 Type 3 Wires



DETECTOR CHARACTERISTICS

| MAX. SWITCHING POWER | | | 4 | W | | | | |
|---|---|--|---|---|---|--|--|--|
| SWITCHING VOLTAGE 10 to 30 VDC | | | | | | | | |
| MAX. SWITCHING CURRENT | | 200 mA | | | | | | |
| CONNECTION | J | | PNP | N.O. | | | | |
| VOLTAGE DRO | OP (EN 60.947-5-2) | | < 0,7 volt (I | = 200 mA) | | | | |
| INSULATION F | RESISTANCE | | > 1 | GΩ | | | | |
| SENSITIVITY | | | min. 2,5 mTes | la (25 Gauss) | | | | |
| RESPONSE T | IME opening | | 0,8 | μs | | | | |
| | closing | | 0,3 | μs | | | | |
| REPEATABILI | ΓY | | ± 0,2 | 2 mm | | | | |
| LIFE | | | 10 ¹¹ operations | (resistive load) | | | | |
| WORKING TEI | MPERATURE | | - 15°C , | + 80°C | | | | |
| ELECTRICAL | PROTECTION | Polarized detecto | r, protectec against sho | ort-circuits and overloads | s (see opposite) | | | |
| HOUSING | | Thermoplastic | c housing (PA) with epo | xy resin encapsulated p | rinted circuit | | | |
| DEGREE OF F | PROTECTION (CE I 529) | | IP | 67 | | | | |
| SIGNAL INDIC | ATION | ora | nge diode (LED) which | lights up during switchir | ng | | | |
| CONNECTION (3 possibilities / 4 types at choice) | | PVC lead, 2 m long, 3 wires 0.14 mm ² , stripped and tinned ends | PVC lead, 5 m long, 3 wires 0.14 mm², stripped and tinned ends | 0,15 m PVC lead + 3-pin plug-in male connector and Ø M8 | 0,15 m PCV lead + 3- pin screw-type male connector, Ø M12 | | | |
| Weight (g) | | 23 | 53 | 7 | 14 | | | |
| Compatible | | | | | | | | |
| cylinders | Description | | 0 | CODES | | | | |
| PES series 453 | Magneto-resistive type "T" detector + mounting kit (1) | 00400727 | 99400729 | 99400720 | 99100740 | | | |
| Coaxial valve series 287 - 387 | (for direct mounting on cylin- ders with "T" slot) | 88100737 | 88100738 | 88100739 | 88100740 | | | |

(1) Detector supplied with mounting (integrated) kit for direct fitting to cylinder grooves

ACCESSORIES AND OTHER ELECTRICAL CHARACTERISTICS: see following page





] load

ELECTRICAL PROTECTION

• Improper wire connection may prevent the detector from operating or even destroy it.

CONNECTION (PNP)







CONNECTION OF MAGNETO-RESISTIVE DETECTORS: 3 possibilities



ACCESSORIES

| Description | | CODE |
|--|--|-------------------------|
| Extension cord made of PVC, length 5 m, 3 wires 0.25 mm ² with 1 screw-type female M8 connector (other end stripped) (1) (2) | $ \begin{array}{c} 5 \text{ m} \\ \text{blue 3} \\ \text{blue 4} \\ 1 \text{ log} 3 \end{array} $ | 88100239 |
| Extension cord made of PVC, length 5 m, 3 wires 0.25 mm ² with 1 screw-type female M12 connector (other end stripped) (2) | $ \begin{array}{c} 5 \text{ m} \\ \text{blue 3} \\ \text{blue 4} \\ \text{blue 4} \\ \text{blue 3} \\ \text{blue 3} \\ \text{blue 4} \\ \text{blue 3} \\ \text{blue 4} \\ \text{blue 3} \\ $ | 88100238 |
| Straight 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) | 1 | 88100746 ⁽³⁾ |

(1) Extension for M8 connector detectors.

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

(3) For your order please add the requested length (in metres) to the order code **881 00 746.** Example: 2 m = 88100746 2,5 m = 88100746 3

DIMENSIONS

The magnetic detector fits directly into the grooves in the cylinder body. Detection of very small movements or very short strokes means that more than one groove will have to be used.



INSTALLATION RECOMMENDATION

In order to control **the max. end** of cylinder stroke, the detectors must be mounted in the following direction:

PES cylinders series 453, Ø 32-100 : cable oriented towards the cylinder barrel



"UNI" MAGNETIC POSITION DETECTORS reed switch type

Series 881 Туре 2 wires

B

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



(M)



| | OTIATIAOTENIOTIOO | | | | | | | |
|--|---|--|--------------|-------------------------|------------------------|----------------------|------------------------|--|
| MAX. SWITCH | HING POWER | DC = 10 W / AC =1 2 VA | | | | | | |
| SWITCHING VOLTAGE | | 10 to 60 V DC and AC | | | | | | |
| MAX SWITCH | | 500 mA 60 V | | | | | | |
| | | = 27 (l + 200 mA) | | | | | | |
| VOLIAGE DROP (EN 60.947-5-2) | | $< 2.7 \text{ VOII (I = 200 \text{ IIIA)}}$ (max. / | | | | | | |
| | | < 2.9 VOIT (I = 500mA) | | | | | | |
| CONTACT RE | SISTANCE | max. 0.1 ohm | | | | | | |
| INSULATION RESISTANCE | | 10 ¹⁰ ohm | | | | | | |
| WITHSTAND VOLTAGE | | DC = 470 V - AC = 600 V | | | | | | |
| SENSITIVITY | | min. 3 mTesla (30 Gauss) | | | | | | |
| BESPONSE TIME opening | | 0.2 ms | | | | | | |
| closing | | 0.6 ms | | | | | | |
| | TV | + 0.1 mm | | | | | | |
| | | ± 0.1 min | | | | | | |
| | | 10' operations | | | | | | |
| WORKING TE | MPERATURE | -20 °C , +70 °C | | | | | | |
| HOUSING | | Thermoplastic housing (PPS) with expoxy resin encapsulated printed circuit | | | | | | |
| DEGREE OF | PROTECTION (CE 529) | IP67 | | | | | | |
| SIGNAL INDIC | CATION | Green diode (LED) which lights up when the contact is established | | | | | | |
| | | Integrated connector 45° lead outlet protected by feed-through sleeve | | | | | | |
| | N | 3-pin screw-type | PVC lead, 2 | or 5 m lona. | 0.8 m PVC lead + 3-pin | 5 m PVC lead + 3-pin | 0.8 m PVC lead + 3-pin | |
| (5 possibilition | (6 types at ention) | male connector | 2 wires 0 14 | Lmm ² strin- | nlug-in male | screw-type male | screw-type male | |
| (5 possibilities | 7 6 types at option) | a Mo | nod onde | | | connector @ M8 | connector @ M12 | |
| | | O IVIO | peu | enus | | | | |
| 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 es- pecially intented for this purpose (specific accessory: consult us) | | | 2 metres | 5 metres | | | | |
| Weight (g) | | 6 | 30 | 70 | 22 | 86 | 35 | |
| | | - | | | | | | |
| cylinders | Description | | | | CODES | | | |
| CAS - CIS CIB PES-PES Ω 450 | Reed switch type UNI detector only | 99100140 | 99100140 | 99100144 | 99100146 | 99100504 | 00100140 | |
| PCN TUB R - RS | cylinder is ordered se- parately (see following pages) | 88100140 | 00100142 | 00100144 | 88100146 | 86100594 | 00100140 | |
| K KN 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

Inductive

load

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



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



All leaflets are available on: www.asconumatics.eu

JOUCOMATIC

"UNI" MAGNETIC POSITION DETECTORS magneto-resistive (MR)

Series 881 Туре 3 wires



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 | | 6 W | | | | | | |
|--|---|--|------------------|---------------|--------------------|----------------------|------------------------|--|
| SWITCHING V | OLTAGE 10 to 30 V DC | | | | | | | |
| MAX. SWITCH | | 200 mA | | | | | | |
| | א סר | | | | | | | |
| | | < 1.1 VOIL (I = 50 mA) | | | | | | |
| MAXIFAKAG | E CUBBENT | < 1.4 VOIL (I = 200 MA) | | | | | | |
| MAX ALLOWA | | 50 Volt (10 seconds) | | | | | | |
| INSULATION F | RESISTANCE | 10 ¹⁰ ohm | | | | | | |
| SENSITIVITY | | min. 3 mTesla (30 Gauss) | | | | | | |
| RESPONSE T | IME opening | 0.2 ms | | | | | | |
| closina | | 0.1 ms | | | | | | |
| REPEATABILITY | | ± 0.1 mm | | | | | | |
| WORKING TE | MPERATURE | -20°C , +70°C | | | | | | |
| ELECTRICAL | PROTECTION | Polarized detector, protectec against short-circuits and overloads (see opposite) | | | | | | |
| | | and incorporated recovery diode | | | | | | |
| HOUSING | | Thermoplastic housing (PPS) with epoxy resin encapsulated printed circuit | | | | | | |
| DEGREE OF F | PROTECTION (CE I 529) | IP67 | | | | | | |
| SIGNAL INDIC | CATION | Green diode (LED) which lights up during switching | | | | | | |
| | | Integrated connector | | 45° lead | outlet protected b | y feed-through sle | eeve | |
| CONNECTION | Ν | 3-pin screw-type PVC lead, 2 or 5 m long, 0.8 m PVC lead + 3-pin 5 m PVC lead + 3-pi | | | | 5 m PVC lead + 3-pin | 0.8 m PVC lead + 3-pin | |
| (5 possibilities | / 6 types at option) | male connector, 3 wires 0.14 mm ² , | | plug-in male | screw-type male | screw-type male | | |
| | | Ø M8 stripped ends | | | connector, Ø 8 | connector, Ø M8 | 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 (3- wire) type class 6 especially intented for this purpose (specific accessory: consult us) | | | 2 metres | 5 metres | | | | |
| Weight (g) | | 6 | 30 | 70 | 22 | 86 | 35 | |
| Compatible | - | - | | | | | | |
| cylinders | Description | | 1 | 1 | CODES | | | |
| CAS - CIS CIB | Magneto-resistive type UNI detector only | | | | | | | |
| PES-PES Ω 450 PCN TUB R - RS | the mounting kit for each cylinder is ordered separately (see following pages) | 88100141 | 88100143 | 88100145 | 88100147 | 88100595 | 88100149 | |
| K KN | Magneto-resistive type UNI detector + mounting kit (*) | | | | | | | |
| PEC P2L - P2B PES-PES Ω 453 | (for direct mounting on cylinders with swallow tail grooves) | 88100192 | 88100193 | 88100194 | 88100195 | 88100593 | 88100196 | |
| * Detector supp | lied with mounting kit (spe | cial nut + screw) fo | or direct fittir | ng to cylinde | er grooves | | | |

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



JOUCOMATIC

Polarities

ELECTRICAL PROTECTION

- Output protected against short-circuit as long as the output current is restricted to 0.2 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 (PNP)





CONNECTION OF MAGNETO-RESISTIVE DETECTORS: 5 possibilities



ACCESSORIES

| Description | | | | |
|---|---------------------------------------|----------|--|--|
| 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) | 5 m | 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) | 5 m $br = 1$ $blu = 3$ $blk = 4$ 4 | 88100238 | | |
| Straiht 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 wire = +, blue wire = -, black wire = load