

DIGITAL/ANALOG PRESSURE SWITCH SERIES PRDA

This series of switches has been expressly designed for the pressure detection of a wide range of fluids with elevate accuracy and resolution. This series has both digital and/or analog outputs and an integrated display with a frontal interface including three buttons to programme different functions (all described in the documentation that goes with the item) among which:

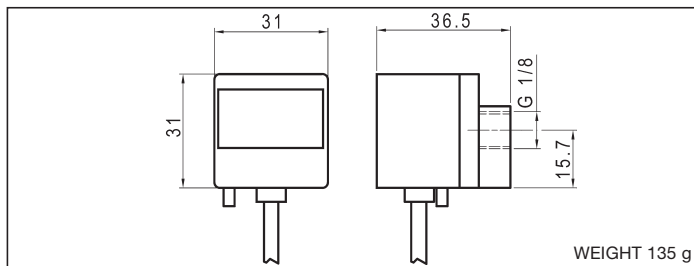
- setting the unit of measurement of the pressure;
- managing the outputs No.1 and No.2, depending on the set pressures.

This pressure switch, thanks to the very compact dimensions and to the 3 1/2 digit led display, is a very versatile item and suitable for the majority of the applications with not corrosive and incombustible gases, and with air. It is supplied completed with front protection cover and panel mounting system type SFPR.

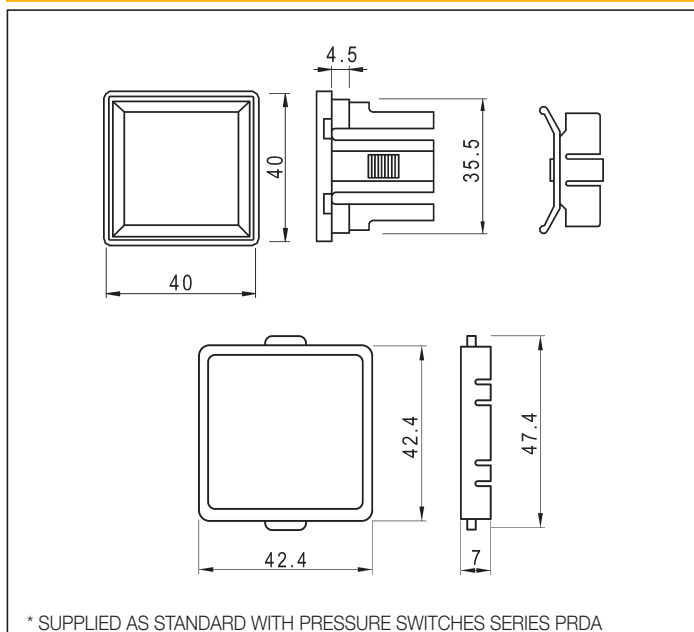
TECHNICAL DATA

| | |
|-----------------------------|--|
| Working temperature | 0 ÷ +50 °C |
| Operating/setting pressure | -1 ÷ 10 bar (0 ÷ 10 bar recommended) |
| Power supply voltage | DC: 12 ÷ 24 V ± 10% |
| Fluid | Air; not corrosive and incombustible gases |
| Max. load current | 80 mA |
| Average current consumption | 55 mA |
| Protection class | IP 50 |
| Response time | < 2.5 ms |
| Display accuracy | <± 2% F.S. ± 1 digit with ambient temperature of 25 ± 3 °C |
| Analog output | 1 ÷ 5 V < ± 2.5% |
| Linearity analog output | ± 1% F.S. |
| Display resolution | 3 1/2 digit 7 segments LED (sampling frequency: 5 Hz) |
| Switch output | PNP; (NPN on request) |
| Unit of measurement | kPa, MPa, Bar, Psi |
| Hysteresis | Manually adjustable between the 1 to 10% of the rated pressure, or automatically arranged approximately to the 3% F.S. |

DIMENSIONS AND WEIGHT - PRDA



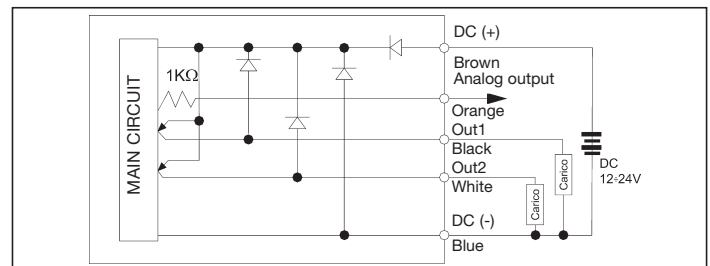
PROTECTION COVER AND PANEL MOUNTING SYSTEM SFPR*



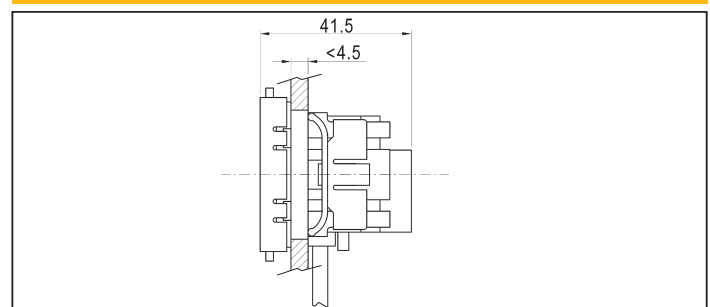
MATERIALS

| | |
|--------------------------------------|--|
| Parts in contact with measured fluid | Carbon steel |
| Lead wire | 5-conductors oil-proof cable |
| Electric connections | Brown: DC + Blue: DC - Black: OUT 1 White: OUT 2 Orange: Analog output |

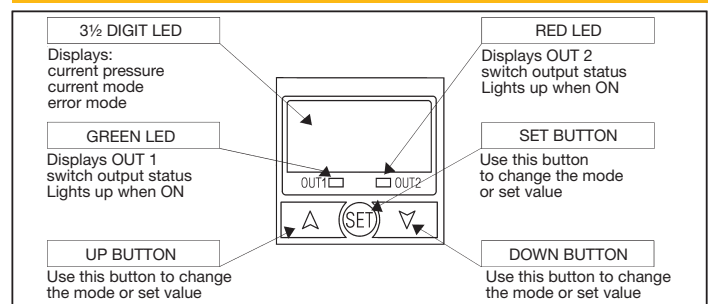
INTERNAL CIRCUIT AND WIRING - PNP



TOTAL DIMENSIONS WITH SFPR

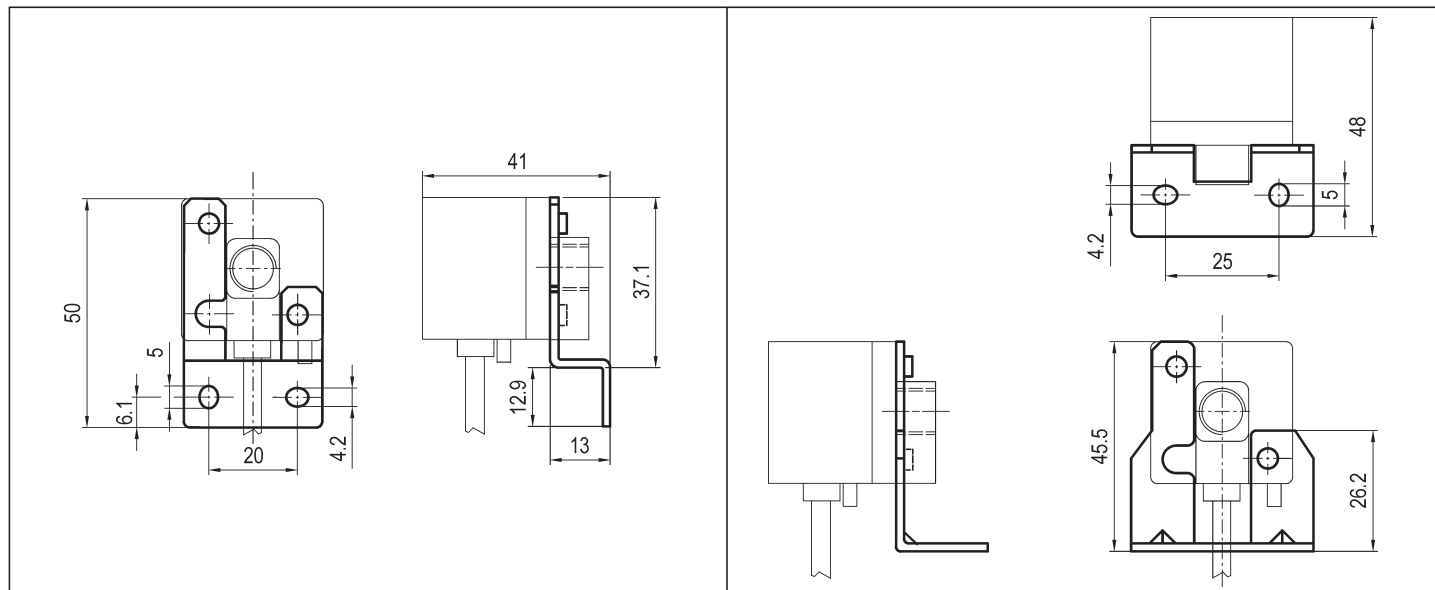


FRONTAL INTERFACE PRDA



4

FIXING BRACKETS STPR (pair)



DIAPHRAGM PRESSURE SWITCH SERIES PRC-PRA

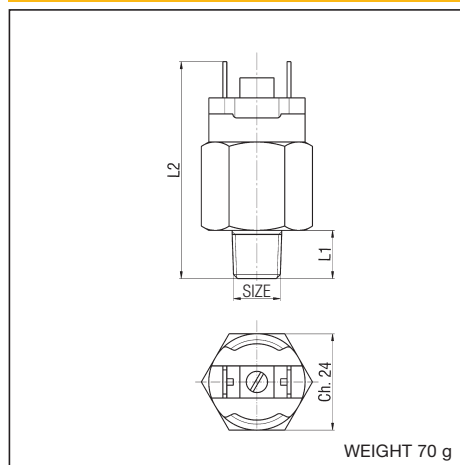
TECHNICAL DATA

| | |
|---------------------------|--------------------------|
| Max. switched voltage | 48 V AC - DC |
| Max. switched current | 0,5 A |
| Max. fluid temperature | 80 ÷ 120 °C |
| Adjusting range | 1 ÷ 10 bar |
| Static overpressure | 80 bar |
| Tolerance at 20 °C | 0,5 bar |
| Hysteresis | 6 ÷ 10% of setting value |
| Max. number of insertions | 200 per minute |

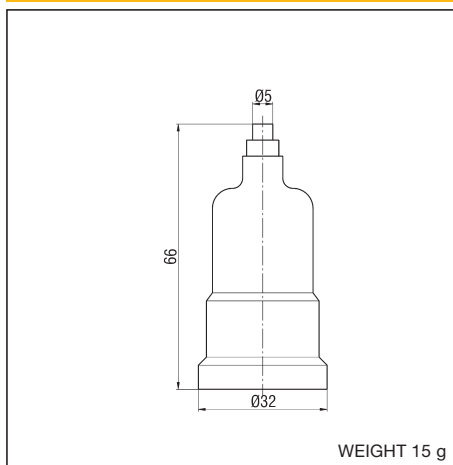
MATERIALS

| | |
|----------------|--|
| Body | Brass |
| Diaphragm | FPM (Viton®) |
| Fixed contact | Silver |
| Moving contact | Phosphorous bronze with silver contact |

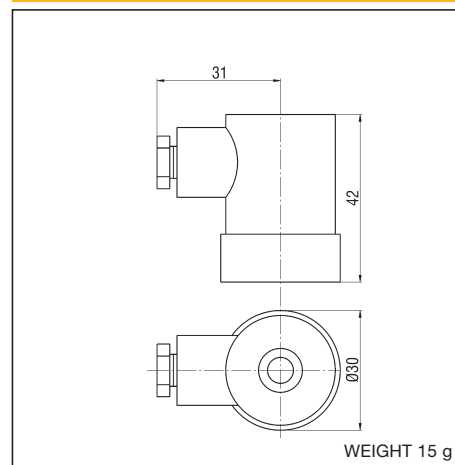
PRC - PRA



CONNECTOR (protection class IP54) - CN/PR54



CONNECTOR (protection class IP65) - CN/PR65



| Symbol N.C. | Size | L1 | L2 | TYPE |
|-------------|-------|----|----|------|
| | G 1/8 | 10 | 51 | PRC8 |
| | G 1/4 | 12 | 53 | PRC4 |

| Symbol N.O. | Size | L1 | L2 | TYPE |
|-------------|-------|----|----|------|
| | G 1/8 | 10 | 51 | PRA8 |
| | G 1/4 | 12 | 53 | PRA4 |

CONTACTS EXCHANGE PRESSURE SWITCH SERIES PRCA

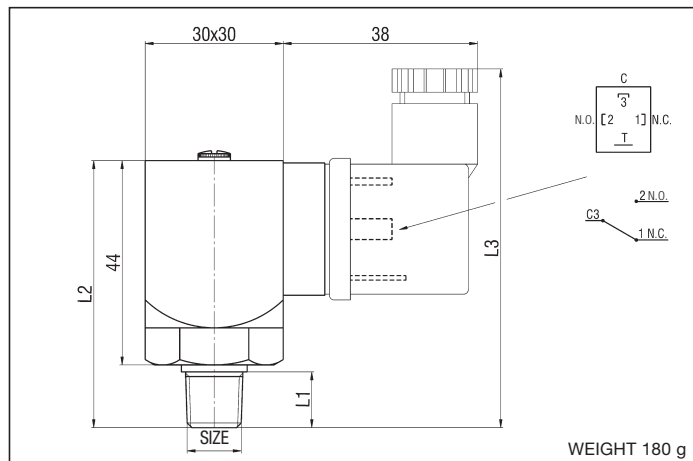
TECHNICAL DATA

| | |
|---------------------------|---------------------------|
| Max. switched voltage | 250 V AC; 30 V DC |
| Max. switched current | 5 A in AC; 4 A in DC |
| Max. fluid temperature | 100 °C |
| Protection class | IP 65 |
| Adjusting range | 0,5 ÷ 10 bar |
| Static overpressure | 150 bar |
| Tolerance at 20 °C | 0,2 bar |
| Hysteresis | 15 ÷ 30% of setting value |
| Max. number of insertions | 200 per minute |
| Connector (included) | ULR4P |

MATERIALS

| | |
|--------------|--------------------------|
| Body | Passivated steel |
| Electric box | Anodized aluminium alloy |
| Diaphragm | FPM (Viton®) |

PRCA



| Symbol N.C. / N.O. | Size | L1 | L2 | L3 | TYPE* |
|--------------------|-------|----|----|----|-------|
| | G 1/8 | 10 | 56 | 74 | PRCA8 |
| | G 1/4 | 12 | 53 | 76 | PRCA4 |

* These switches can rotate of 360°