



Main

| | |
|---|--|
| Range of product | OsiSense XM |
| Product or component type | Electronic pressure sensors |
| Pressure sensor type | Pressure transmitter |
| Pressure switch type of operation | Pressure switch with 2 switching outputs |
| Device short name | XMLR |
| Pressure sensor size | 580.15 psi (40 bar) 580 psi (3998.96 kPa) |
| Maximum permissible accidental pressure | 2175 psi (14996.10 kPa) 2175.57 psi (150 bar) 15 MPa |
| Destruction pressure | 2175.57 psi (150 bar) 2175 psi (14996.10 kPa) 15 MPa |
| Controlled fluid | Fresh water 32...176 °F (0...80 °C)) Air -4...176 °F (-20...80 °C)) Hydraulic oil -4...176 °F (-20...80 °C)) Refrigeration fluid -4...176 °F (-20...80 °C)) |
| Fluid connection type | G 1/4 (female) DIN 3852-Y |
| [Us] rated supply voltage | 24 V DC SELV 17...33 V) |

Complementary

| | |
|---|--|
| Current consumption | <= 50 mA |
| Electrical connection | Male connector M12, 4 pins |
| Type of output signal | Discrete |
| Discrete output type | Solid state PNP, 2 NO/NC programmable |
| Maximum switching current | 250 mA |
| Contacts type and composition | 2 NO/NC programmable |
| Scale type | Fixed differential |
| Maximum voltage drop | 2 V |
| Adjustable range of switching point on rising pressure | 46.4...580 psi (319.92...3998.96 kPa) 0.32...4 MPa 46.41...580.15 psi (3.2...40 bar) |
| Adjustable range of switching point on falling pressure | 0.2...3.88 MPa 29.01...562.75 psi (2...38.8 bar) |

29...563 psi (199.95...3881.75 kPa)

| | |
|--|--|
| Minimum differential travel | 17.40 psi (1.2 bar) 17.4 psi (119.97 kPa) 17.40 psi (120 kPa) |
| Materials in contact with fluid | Fluorocarbon FKM (Viton) Ceramic 316L stainless steel |
| Front material | Polyester |
| Housing material | Polyacrylamide 316L stainless steel |
| Operating position | Any position, but disposals can falsified the measurement in case of upside down mounting |
| Protection type | Reverse polarity Overvoltage protection Short-circuit protection Overload protection |
| Response time on output | <= 5 ms discrete output |
| Switching output time delay | 0...50 s in steps of 1 second |
| Display type | 4 digits 7 segments |
| Local signalling | Light ON when switch is actuated 2 LEDs yellow) |
| Display response time type | Fast 50 ms Normal 200 ms Slow 600 ms |
| Maximum delay first up | 300 ms |
| Overall accuracy | <= 1 % of the measuring range |
| Measurement accuracy on switching output | <= 0.6 % of the measuring range |
| Repeat accuracy | <= 0.2 % of the measuring range |
| Drift of the sensitivity | +/- 0.03 % of measuring range/°C |
| Drift of the zero point | +/- 0.1 % of measuring range/°C |
| Display accuracy | <= 1 % of the measuring range |
| Mechanical durability | 10000000 cycles |
| Depth | 1.65 in (42 mm) |
| Height | 3.66 in (93 mm) |
| Width | 1.61 in (41 mm) |
| Net weight | 0.42 lb(US) (0.19 kg) |
| [Uimp] rated impulse withstand voltage | 0.5 kV DC |
| Electromagnetic compatibility | Susceptibility to electromagnetic fields 10 V/m 80...2000 MHz EN/IEC 61000-4-3 Immunity to conducted RF disturbances 10 V 0.15...80 MHz EN/IEC 61000-4-6 Surge immunity test 1 kV EN/IEC 61000-4-5 Electrical fast transient/burst immunity test 2 kV EN/IEC 61000-4-4 Electrostatic discharge immunity test 8 kV air, 4 kV contact EN/IEC 61000-4-2 |

Environment

| | |
|---------------------------------------|--|
| Marking | CE |
| Product certifications | EAC CULus |
| Standards | UL 61010-1 EN/IEC 61326-2-3 |
| Ambient air temperature for operation | -4...176 °F (-20...80 °C) |
| Ambient air temperature for storage | -40...176 °F (-40...80 °C) |
| IP degree of protection | IP65 conforming to EN/IEC 60529 IP67 EN/IEC 60529 |
| Vibration resistance | 20 gn 10...2000 Hz)EN/IEC 60068-2-6 |
| Shock resistance | 50 gn EN/IEC 60068-2-27 |

Packing Units

| | |
|------------------------------|-----|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |

| | |
|------------------------------|-----------------------|
| Package 1 Weight | 6.70 oz (190 g) |
| Package 1 Height | 2.83 in (7.2 cm) |
| Package 1 width | 5.12 in (13 cm) |
| Package 1 Length | 2.68 in (6.8 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 20 |
| Package 2 Weight | 8.86 lb(US) (4.02 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |

Offer Sustainability

| | |
|----------------------------|---|
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

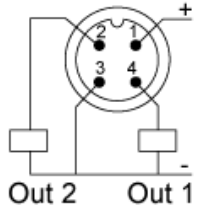
Dimensions



(1) Fluid entry: G 1/4 A female

Connections and Schema

Connector Wiring



Switching Output Description. Hysteresis Mode

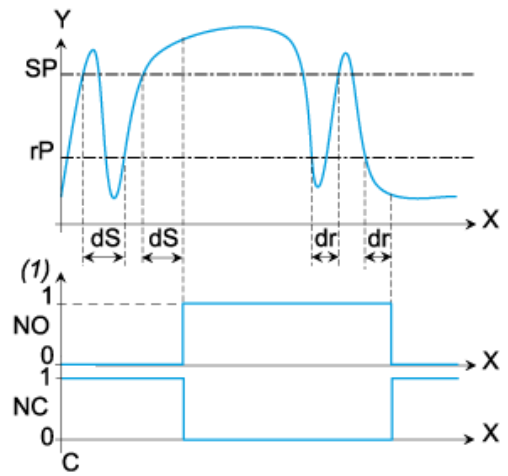
The hysteresis switching mode is typically used for the “pumping and/or emptying applications”.



- X : Time
- Y : Pressure
- (1) Output
- NP : Nominal Pressure
- SP : Set point (adjustable from 8 % to 100 % NP)
- rP : Reset point (adjustable from 5 % to 97 % NP)

Switching Output Description. Time Delay

The Time Delay is typically used to filter out the fast pressure transients.
The output only switches after a time “dS” and “dr” adjustable from 0 to 50 seconds.



X : Time
 Y : Pressure
 (1) : Output
 SP : Set point
 rP : Reset point
 dS : Time delay on the set point
 dr : Time delay on the reset point