

XMLR025G2N06

Electronic pressure sensors, Pressure sensors
XM, XMLR 25 bar, 1/4" 18 NPT, 24 VDC,
2xNPN, M12



Main

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| 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 Rating | 362.59 Psi (25 bar) 362 psi (2495.90 kPa) |
| Maximum permissible accidental pressure | 1450 Psi (9997.40 kPa) 1450.38 Psi (100 bar) 10 MPa |
| Destruction pressure | 1450 Psi (9997.40 kPa) 10 MPa 1450.38 psi (100 bar) |
| 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 | 1/4" - 18 NPT (female) |
| [Us] rated supply voltage | 24 V DC SELV 17...33 V) |

Complementary

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|---|---|
| Current Consumption | <= 50 mA |
| Electrical connection | Male connector M12, 4 pins |
| Type of output signal | Discrete |
| Discrete output type | Solid state NPN, 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 | 0.2...2.5 MPa 29.01...362.59 Psi (2...25 bar) 29...362 psi (199.95...2495.90 kPa) |
| Adjustable range of switching point on falling pressure | 0.125...2.42 MPa 18.13...350.99 Psi (1.25...24.2 bar) 18.1...352 psi (124.80...2426.95 kPa) |
| Minimum differential travel | 10.88 Psi (0.75 bar) 10.9 Psi (75.15 kPa) 10.88 psi (75 kPa) |
| Materials in contact with fluid | Ceramic Fluorocarbon FKM (Viton) 316L stainless steel |
| Front material | Polyester |
| Housing material | 316L stainless steel Polyacrylamide |
| Operating position | Any position, but disposals can falsified the measurement in case of upside down mounting |
| Protection Type | Overload protection Reverse polarity Short-circuit protection Overvoltage protection |

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| 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 | For 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 | 3.94 in (100 mm) |
| Width | 1.61 in (41 mm) |
| Net Weight | 0.47 lb(US) (0.212 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

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| Marking | CE |
| Product Certifications | CULus EAC |
| 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 conforming to EN/IEC 60529 |
| Vibration resistance | 20 gn 10...2000 Hz)EN/IEC 60068-2-6 |
| Shock resistance | 50 gn EN/IEC 60068-2-27 |

Ordering and shipping details

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|-----------------------|---------------------------------------|
| Category | 21551-XMLE,XMLF,XMLG PRESSURE SENSORS |
| Discount Schedule | DS2 |
| GTIN | 3389119611053 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 6.38 oz (181.0 g) |
| Returnability | No |
| Country of origin | CH |

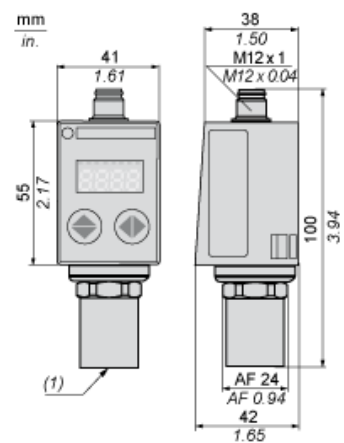
Packing Units

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|------------------------|-------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 2.56 in (6.5 cm) |
| Package 1 width | 2.95 in (7.5 cm) |
| Package 1 Length | 5.00 in (12.7 cm) |

Offer Sustainability

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|----------------------------|---|
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| 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 |

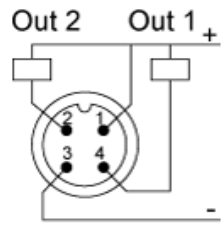
Dimensions



(1) Fluid entry: 1/4"-18NPT female

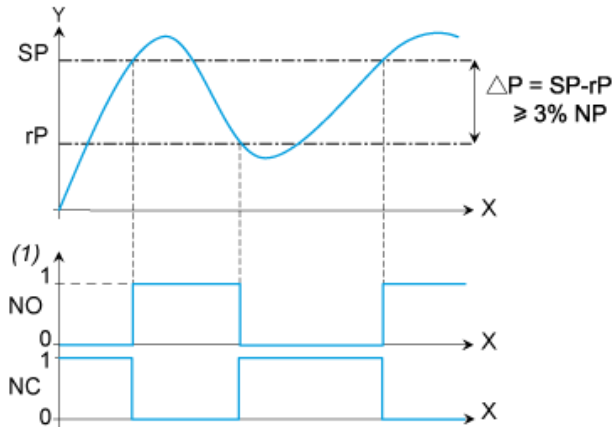
Connections and Schema

Connector Wiring



Switching Output Description. Hysteresis Mode

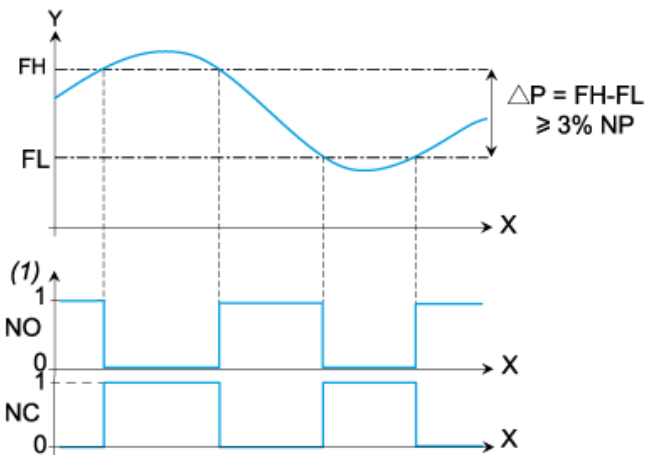
The hysteresis switching mode is typically used for the “pumping and/or emptying applications”.



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. Window Mode

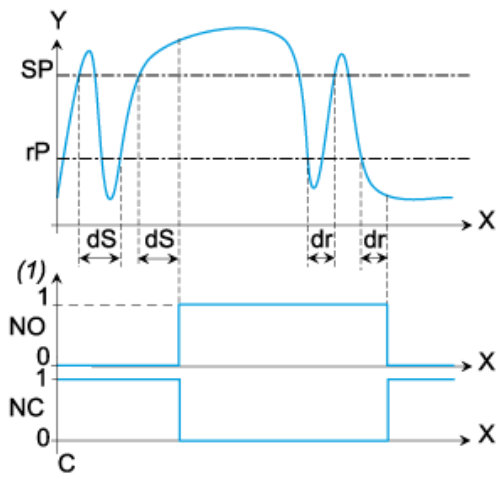
The window switching mode is typically used for the “pressure regulation applications”



X : Time
Y : Pressure
(1) Output
NP : Nominal pressure
FH : High switching point (adjustable from 8 % to 100 % NP)
FL : Low switching 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