XMLR250M1P76



Main

| Range of product | OsiSense XM |
|---|--|
| Product or component type | Electronic pressure sensors |
| Pressure sensor type | Pressure transmitter |
| Pressure switch type of operation | Pressure transmitter with 1 switching output |
| Device short name | XMLR |
| Pressure sensor size | 3625.94 psi (250 bar) 3620 psi |
| Maximum permissible accidental pressure | l 10877.83 psi (750 bar) 10875 psi 75 MPa |
| Destruction pressure | 21755.66 psi (1500 bar) 21750 psi 150 MPa |
| Controlled fluid | Fresh water (32176 °F (080 °C)) Air (-2080 °C) Hydraulic oil (-2080 °C) Refrigeration fluid (-2080 °C) |
| Fluid connection type | 1/4" - 18 NPT (female) |
| [Us] rated supply voltage | 24 V DC SELV, voltage limits: 1733 V |
| | |

Complementary

| Complementary | |
|---|---|
| Current consumption | <= 50 mA |
| Electrical connection | 4 pins M12 male connector |
| Analogue output function | 010 V |
| Type of output signal | Analogue + discrete |
| Analogue output function | 010 V |
| Discrete output type | Solid state PNP, NO/NC programmable |
| Maximum switching current | 250 mA |
| Contacts type and composition | NO/NC programmable |
| Scale type | Fixed differential |
| Voltage drop | <= 2 V |
| Adjustable range of switching point on rising pressure | 290.083625.94 psi (20250 bar) 2903625 psi 225 MPa |
| Adjustable range of switching point on falling pressure | 1813516 psi 181.33509.91 psi (12.5242 bar) 1.2524.2 MPa |
| Minimum differential travel | 108.78 psi (7.5 bar) 109 psi 0.75 MPa |
| Materials in contact with fluid | 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 | Overload protection Overvoltage protection Reverse polarity Short-circuit protection |
| Response time on output | <= 10 ms analog output <= 5 ms discrete output |
| Time delay range | 050 s in steps of 1 second |
| Display type | 4 digits 7 segments |

| Local signalling | 1 LED yellow light ON when switch is actuated |
|--|---|
| Display response time type | Fast 50 ms Normal 200 ms Slow 600 ms |
| Delay first up | <= 300 ms |
| Accuracy | <= 1 % of the measuring range |
| Linearity error | <= 0.5 % of the measuring range |
| Hysteresis | <= 0.2 % of the measuring range |
| Measurement accuracy | <= 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 | 3.46 in (88 mm) |
| Width | 1.61 in (41 mm) |
| Product weight | 0.41 lb(US) (0.186 kg) |
| [Uimp] rated impulse withstand voltage | 0.5 kV DC |
| Electromagnetic compatibility | Electrostatic discharge immunity test - test level 8 kV air, 4 kV contact conforming to EN/IEC 61000-4-2 Susceptibility to electromagnetic fields - test level 10 V/m (802000 MHz) conforming to EN/IEC 61000-4-3 Electrical fast transient/burst immunity test - test level 2 kV conforming to EN/IEC 61000-4-4 Surge immunity test - test level 1 kV conforming to EN/IEC 61000-4-5 Immunity to conducted RF disturbances - test level 10 V (0.1580 MHz) conforming to EN/IEC 61000-4-6 |

Environment

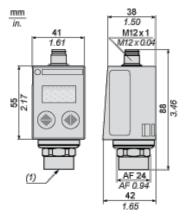
| marking | CE |
|---------------------------------------|---|
| product certifications | CULus EAC |
| standards | UL 61010-1 EN/IEC 61326-2-3 |
| ambient air temperature for operation | -4176 °F (-2080 °C) |
| ambient air temperature for storage | -40176 °F (-4080 °C) |
| IP degree of protection | IP65 conforming to EN/IEC 60529 IP67 conforming to EN/IEC 60529 |
| vibration resistance | 20 gn (f = 102000 Hz) conforming to EN/IEC 60068-2-6 |
| shock resistance | 50 gn conforming to EN/IEC 60068-2-27 |

Offer Sustainability

| Not Green Premium product | Not Green Premium product |
|--|---|
| Compliant - since 1351 - Schneider Electric declaration of conformity | Compliant - since 1351 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| WARNING: This product can expose you to chemicals including: | WARNING: This product can expose you to chemicals including: |
| Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and | 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. | eDi-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 | For more information go to www.p65warnings.ca.gov |

Dimensions

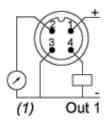




(1) Fluid entry: 1/4"-18NPT female

Connections and Schema

Connector Wiring



(1) I Out or V Out

Analogue Output Description

Analogue Output Signal

75%
125%

5 V

(1)
0 50%
100%
X

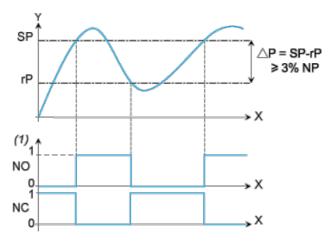
X: Pressure

Y: Analogue output signal

- (1) An offset of +/-5% of nominal pressure can be compensated (with Cof Configuration menu. Cof: Offset Compensation)
- (2) The Analogue curve can be adjusted from -25% to +25% of nominal pressure (with AEP Configuration menu. AEP: analogue end point).

Switching Output Description. Hysteresis Mode

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



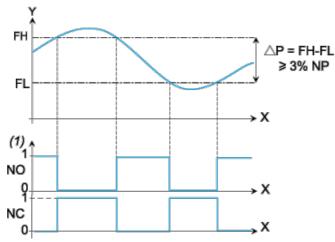
X: TimeY: Pressure(1) Output

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: TimeY: Pressure(1) Output

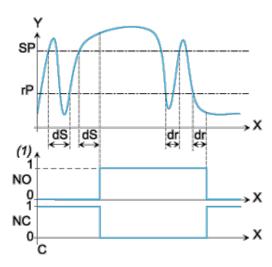
NP: Nominal pressure

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: TimeY: Pressure(1) OutputSP: Set pointrP: Reset point

dS: Time delay on the set pointdr: Time delay on the reset point