# XMLR2D5G1N26



#### 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                   | 36.26 psi (2.5 bar)<br>36 psi<br>250 kPa   |
| Maximum permissible accidenta pressure | l 174.05 psi (12 bar)<br>174 psi<br>1200 kPa   |
| Destruction pressure                   | 174.05 psi (12 bar)<br>174 psi<br>1200 kPa   |
| 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                                | 420 mA  |
| Type of output signal                                   | Analogue + discrete   |
| Analogue output function                                | 420 mA  |
| Discrete output type                                    | Solid state NPN, 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  | 2.936.26 psi (0.22.5 bar)<br>2.936.2 psi<br>20250 kPa                                     |
| Adjustable range of switching point on falling pressure | 1.8935.1 psi (0.132.42 bar)<br>1.8135.2 psi<br>13242 kPa                                  |
| Minimum differential travel                             | 1.16 psi (0.08 bar)<br>1.1 psi<br>8 kPa   |
| Materials in contact with fluid                         | Ceramic<br>Fluorocarbon FKM (Viton)<br>316L stainless steel                               |
| Front material  | Polyester   |
| Housing material  | Polyacrylamide<br>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<br><= 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<br>Normal 200 ms<br>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                                 | 3.94 in (100 mm)  |
| Width                                  | 1.61 in (41 mm)   |
| Product weight                         | 0.47 lb(US) (0.212 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**

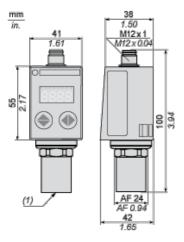
| marking                               | CE   |
|---------------------------------------|--|
| product certifications                | CULus<br>EAC   |
| standards                             | UL 61010-1<br>EN/IEC 61326-2-3                                     |
| ambient air temperature for operation | -4176 °F (-2080 °C)  |
| ambient air temperature for storage   | -40176 °F (-4080 °C)   |
| IP degree of protection               | IP65 conforming to EN/IEC 60529<br>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 StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm. |   |  |
| For more information go to www.p65warnings.ca.gov  | For more information go to www.p65warnings.ca.gov   |  |

## **Dimensions**

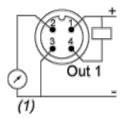




(1) Fluid entry: 1/4"-18NPT female

#### **Connections and Schema**

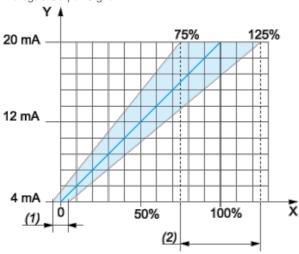
#### **Connector Wiring**



(1) I Out or V Out

## **Analogue Output Description**

Analogue Output Signal



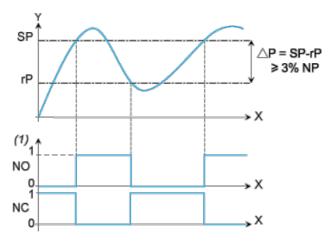
X: Pressure

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".



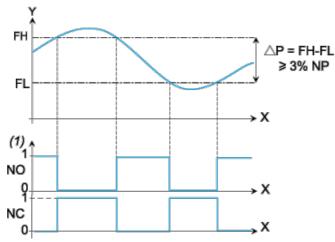
X: TimeY: Pressure(1) Output

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

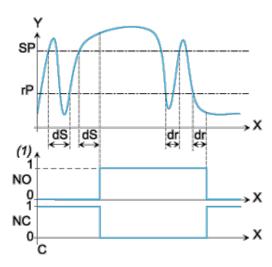
NP: Nominal pressure

**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