

# Product data sheet

## Characteristics

# XMLR040G2P25

Pressure sensors XMLR 40bar - G 1/4 - 24VDC - 4..20 mA - 2xPNP - M12

Product availability : Non-Stock - Not normally stocked in distribution facility

Price\* : 345.00 USD



### 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 2 switching outputs  |
| Device short name                       | XMLR   |
| Pressure sensor size                    | 580.15 psi (40 bar)<br>580 psi   |
| Maximum permissible accidental pressure | 2175.57 psi (150 bar)<br>2175 psi<br>15 MPa  |
| Destruction pressure                    | 2175.57 psi (150 bar)<br>2175 psi<br>15 MPa  |
| Controlled fluid                        | Fresh water (32...176 °F (0...80 °C))<br>Air (-20...80 °C)<br>Hydraulic oil (-20...80 °C)<br>Refrigeration fluid (-20...80 °C) |
| Fluid connection type                   | G 1/4 (female) conforming to DIN 3852-Y  |
| [Us] rated supply voltage               | 24 V DC SELV, voltage limits: 17...33 V  |

### Complementary

|  |   |
|--|---|
| Current consumption                                    | <= 50 mA  |
| Electrical connection                                  | 5 pins M12 male connector                           |
| Analogue output function                               | 4...20 mA   |
| Type of output signal                                  | Analogue + discrete                                 |
| Analogue output function                               | 4...20 mA   |
| 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                                  |
| Voltage drop   | <= 2 V  |
| Adjustable range of switching point on rising pressure | 46.41...580.15 psi (3.2...40 bar)<br>46.4...580 psi |

|   |   |
|---|---|
|   | 0.32...4 MPa  |
| Adjustable range of switching point on falling pressure | 29.01...562.75 psi (2...38.8 bar)<br>29...563 psi<br>0.2...3.88 MPa   |
| Minimum differential travel                             | 17.4 psi (1.2 bar)<br>17.4 psi<br>120 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<br>Overvoltage protection<br>Reverse polarity<br>Short-circuit protection   |
| Response time on output                                 | <= 10 ms analog output<br><= 5 ms discrete output   |
| Switching output time delay                             | 0...50 s in steps of 1 second   |
| Display type  | 4 digits 7 segments   |
| Local signalling  | 2 LEDs 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   |
| Overall accuracy  | <= 1 % of the measuring range   |
| Linearity error on analogue output                      | <= 0.5 % of the measuring range   |
| Hysteresis on analogue output                           | <= 0.2 % 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)   |
| Product weight  | 0.42 lb(US) (0.19 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<br>Susceptibility to electromagnetic fields - test level 10 V/m (80...2000 MHz) conforming to EN/IEC 61000-4-3<br>Electrical fast transient/burst immunity test - test level 2 kV conforming to EN/IEC 61000-4-4<br>Surge immunity test - test level 1 kV conforming to EN/IEC 61000-4-5<br>Immunity to conducted RF disturbances - test level 10 V (0.15...80 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 | -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 (f = 10...2000 Hz) conforming to EN/IEC 60068-2-6 |
| Shock resistance     | 50 gn conforming to EN/IEC 60068-2-27                   |

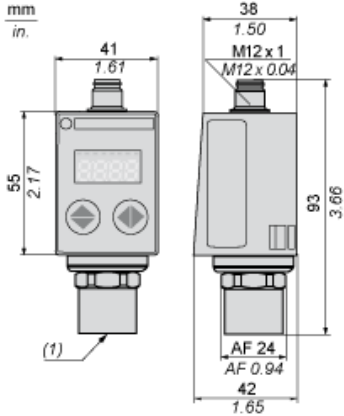
### Ordering and shipping details

|                       |   |
|-----------------------|---|
| Category              | 21551 - XMLE,XMLF,XMLG PRESSURE SENSORS |
| Discount Schedule     | DS2                                     |
| GTIN                  | 003389119611145                         |
| Nbr. of units in pkg. | 1                                       |
| Package weight(Lbs)   | 0.4199999999999998                      |
| Returnability         | N                                       |
| Country of origin     | CH                                      |

### Offer Sustainability

|                           |   |
|---------------------------|---|
| RoHS (date code: YYWW)    | Compliant - since 1351 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                     | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| California proposition 65 | WARNING: This product can expose you to chemicals including:  |
| ----- Substance 1         | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and   |
| ----- Substance 2         | Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.            |
| ----- More information    | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>   |

Dimensions



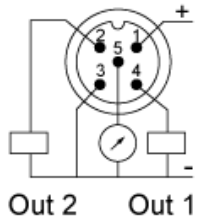
(1) Fluid entry: G 1/4 A female

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Connections and Schema

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Connector Wiring

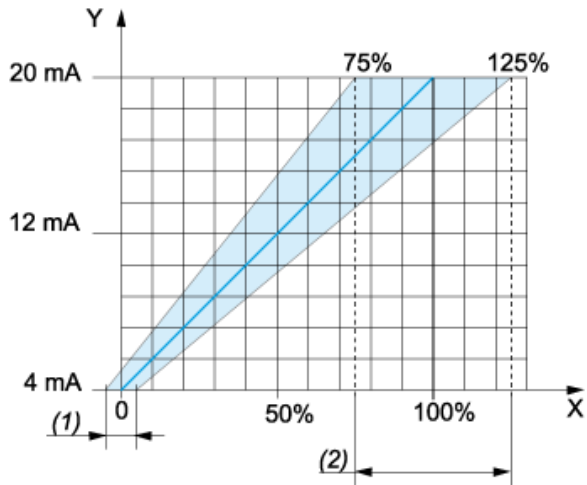


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Analogue Output Description

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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)

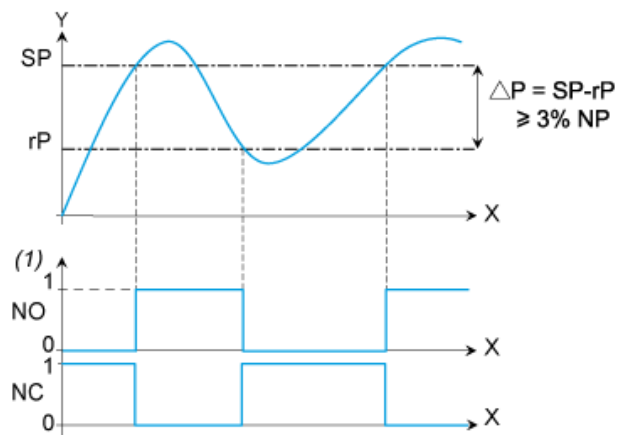
(2) The analogue curve can be adjusted from -25% to +25% of nominal pressure (with AEP Configuration menu. AEP: analogue end point).

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Switching Output Description. Hysteresis Mode

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



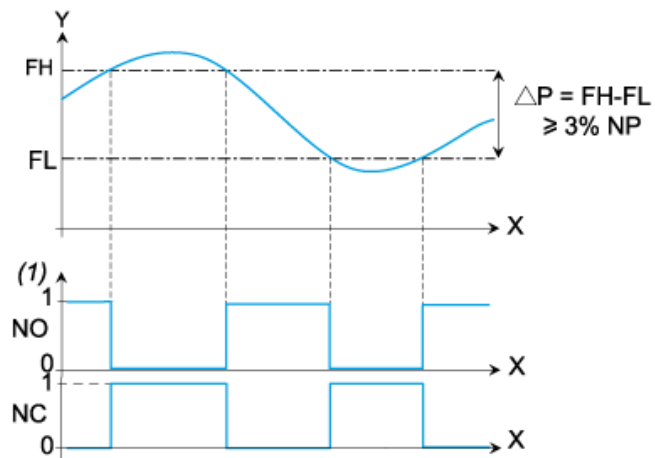
- X : Time
- Y : Pressure
- (1) Output
- NP : Nominal Pressure
- SP : Set point (adjustable from 8 % to 100 % NP)
- rP : Reset point (adjustable from 5 % to 97 % NP)

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Switching Output Description. Window Mode

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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