

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 | $-14.5 \mathrm{psi}(-1$ bar) |
|  | -14.5 psi |

Maximum permissible accidental 43.51 psi (3 bar)
pressure 43 psi

|  | 300 kPa |
| :--- | :--- |
| Destruction pressure | $43.51 \mathrm{psi}(3 \mathrm{bar})$ |
|  | 43 psi |
|  | 300 kPa |
| Controlled fluid | Fresh water $\left(32 \ldots . .176^{\circ} \mathrm{F}\left(0 \ldots 80^{\circ} \mathrm{C}\right)\right)$ |
|  | Air $\left(-20 \ldots 80^{\circ} \mathrm{C}\right)$ |
|  | Hydraulic oil $\left(-20 \ldots 80^{\circ} \mathrm{C}\right)$ |
|  | Refrigeration fluid $\left(-20 \ldots 80^{\circ} \mathrm{C}\right)$ |
| Fluid connection type | $\mathrm{G} 1 / 4$ (female) conforming to DIN $3852-\mathrm{Y}$ |
| [Us] rated supply voltage | 24 V DC SELV, voltage limits: $17 \ldots 33 \mathrm{~V}$ |

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 | $2 \mathrm{NO} / \mathrm{NC}$ programmable |
| Scale type | Fixed differential |
| Voltage drop | <= 2 V |
| Adjustable range of switching point on rising pressure | $\begin{aligned} & -14.5 \ldots-1.16 \mathrm{psi}(-1 \ldots-0.08 \mathrm{bar}) \\ & -14.5 \ldots-1.16 \mathrm{psi} \\ & -100 \ldots-8 \mathrm{kPa} \end{aligned}$ |
| Adjustable range of switching point on falling pressure | $\begin{aligned} & -14.07 \ldots-0.73 \mathrm{psi}(-0.97 \ldots-0.05 \mathrm{bar}) \\ & -14.1 \ldots-0.73 \mathrm{psi} \\ & -97 \ldots 5 \mathrm{kPa} \end{aligned}$ |
| Minimum differential travel | $\begin{aligned} & 0.44 \mathrm{psi} \text { ( } 0.03 \mathrm{bar} \text { ) } \\ & 0.43 \mathrm{psi} \\ & 3 \mathrm{kPa} \end{aligned}$ |
| 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 | $0 . .50 \mathrm{~s}$ 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 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 $/{ }^{\circ} \mathrm{C}$ |
| Drift of the zero point | +/- 0.1 \% of measuring range $/{ }^{\circ} \mathrm{C}$ |
| 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 | $0.42 \mathrm{lb}(\mathrm{US})(0.19 \mathrm{~kg}$ ) |
| [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 $10 \mathrm{~V} / \mathrm{m}(80 \ldots 2000 \mathrm{MHz})$ 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 Immunity to conducted RF disturbances - test level $10 \mathrm{~V}(0.15 \ldots 80 \mathrm{MHz})$ 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 | $-4 \ldots .176^{\circ} \mathrm{F}\left(-20 \ldots 80^{\circ} \mathrm{C}\right)$ |
| ambient air temperature for storage | $-40 \ldots .176{ }^{\circ} \mathrm{F}\left(-40 \ldots 80^{\circ} \mathrm{C}\right)$ |
| IP degree of protection | IP65 conforming to EN/IEC 60529 |
|  | IP67 conforming to EN/IEC 60529 |
| vibration resistance | 20 gn (f = $10 \ldots 2000 \mathrm{~Hz})$ conforming to EN/IEC $60068-2-6$ |
| shock resistance | 50 gn conforming to EN/IEC $60068-2-27$ |

Offer Sustainability
Not Green Premium product $\quad$ Not Green Premium product

Compliant - since 1351-Schneider Electric declaration Compliant - since 1351-Schneider Electric declaration of conformity of conformity

| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| :--- | :--- |
| WARNING: This product can expose you to chemicals | WARNING: This product can expose you to chemicals including: | including:

Diisononyl phthalate (DINP), which is known to the State Diisononyl phthalate (DINP), which is known to the State of California to cause of California to cause cancer, and 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. harm.
For more information go to www.p65warnings.ca.gov For more information go to www.p65warnings.ca.gov

## Dimensions


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

## Connections and Schema

## Connector Wiring



Out 2 Out 1

## Analogue Output Description


$\mathbf{X}$ : 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: 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
$\mathbf{Y}$ : Pressure
(1) Output

SP : Set point
rP: Reset point
dS : Time delay on the set point
dr : Time delay on the reset point

