

Electronic pressure sensors, Pressure sensors
XM, Display & switch ZMLP, 24 VDC, 2 PNP,
hysteresis, M12



Main

| | |
|---------------------------|-----------------------------|
| Range of product | OsiSense XM |
| Product or component type | Electronic pressure sensors |
| Device short name | ZMLP |

Complementary

| | |
|--|---|
| Display range | -14.5...6000 |
| [Us] rated supply voltage | 24 V DC SELV (voltage limits: 17...33 V) |
| Current consumption | <= 50 mA |
| Electrical connection | Female connector M12, 2 pins Male connector M12, 4 pins |
| Type of output signal | Discrete |
| Discrete output type | Solid state PNP, 2 NO/NC programmable |
| Switching function | Hysteresis |
| Maximum switching current | 200 mA |
| Maximum voltage drop | 2 V |
| Adjustable range of switching point on rising pressure | 5...98 % of selected display range |
| Minimum differential travel | 10 % of selected display range |
| Marking | CE |
| Front material | Polyester |
| Housing material | PBT Valox |
| Operating position | Any position |
| Protection type | Short-circuit protection Overload protection Reverse polarity Overvoltage protection |
| Response time on output | <= 3 ms for discrete output |
| Display type | 4 digits 7 segments |
| Local signalling | 2 LEDs (yellow) for light ON when switch is actuated |
| Response time | 300 ms |
| Maximum delay first up | 100 ms |
| Accuracy | <= - 0.1 % of the measuring range |
| Measurement accuracy | <= 1 % of the measuring range |
| Display accuracy | <= 1 % of the measuring range |
| Mechanical durability | 10000000 cycles |
| Depth | 42 mm |
| Height | 77 mm |
| Width | 41 mm |
| Net weight | 0.103 kg |
| [Uimp] rated impulse withstand voltage | 0.5 kV DC |

Environment

| | |
|---------------------------------------|--|
| Product certifications | cULus |
| Standards | IEC 61000-6-2 IEC 61000-6-4 UL 508 |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -30...80 °C |
| IP degree of protection | IP67 conforming to IEC 60529 IP65 conforming to IEC 60529 IP69K conforming to DIN 40050 |
| Vibration resistance | 5 gn (f= 10...2000 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 25 gn conforming to IEC 60068-2-27 |
| Electromagnetic compatibility | Immunity to conducted RF disturbances: 10 V 0.15...80 MHz conforming to IEC 61000-4-6 Surge immunity test: 1 kV conforming to IEC 61000-4-5 Electrical fast transient/burst immunity test: 2 kV conforming to IEC 61000-4-4 Susceptibility to electromagnetic fields: 10 V/m 80...2000 MHz conforming to IEC 61000-4-3 Electrostatic discharge immunity test: 8 kV air, 4 kV contact conforming to IEC 61000-4-2 |

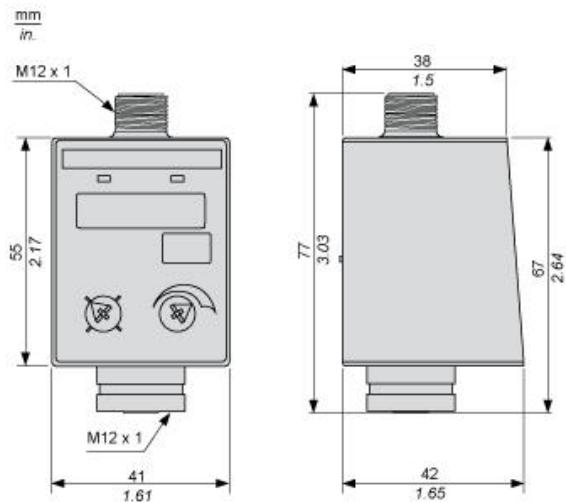
Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.700 cm |
| Package 1 Width | 4.300 cm |
| Package 1 Length | 4.700 cm |
| Package 1 Weight | 105.000 g |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 24 |
| Package 2 Height | 15 cm |
| Package 2 Width | 15 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 2.709 kg |

Offer Sustainability

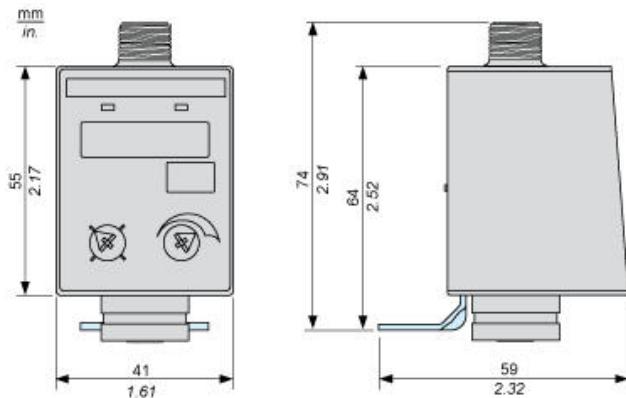
| | |
|--|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| For all Reach RoHS enquiries contact us at | sustainability@tesensors.com |

Dimensions



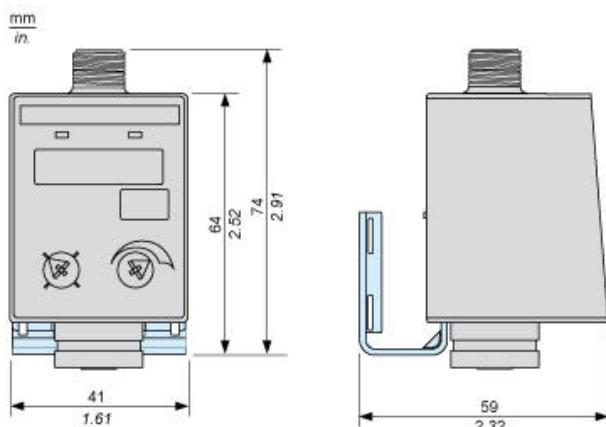
Dimensions

Switch with Metal Bracket for Fixing Horizontally



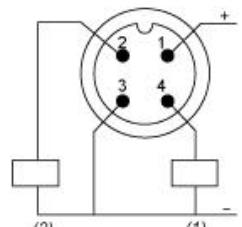
Dimensions

Switch with Metal Bracket for Fixing Vertically or on an Inlet Pipe



Connections and Schema

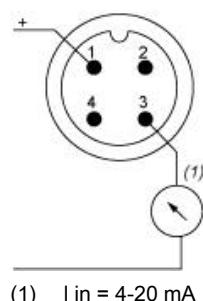
Output M12 Male Connector Wiring



(1) Out 1
(2) Out 2

Connections and Schema

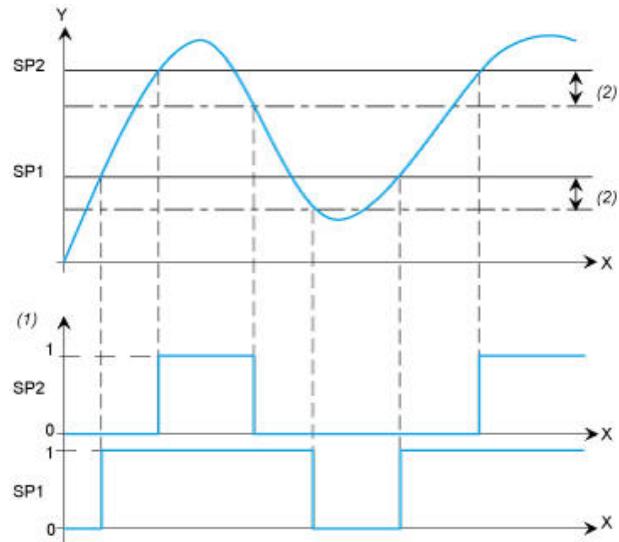
Input M12 Female Connector Wiring



(1) I in = 4-20 mA

Two Switching Outputs Description. Hysteresis Mode

The hysteresis switching mode is typically used for the pumping applications



X : Time

Y : Pressure

(1) Output

(2) Fixed hysteresis = 10% of the selected display range

SP1/ Set points (adjustable from 11% to 98% nominal pressure)

SP2 :