Product data sheet
Characteristics

ZMLPA2P0SH
Display & switch ZMLP - 24VDC - 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)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

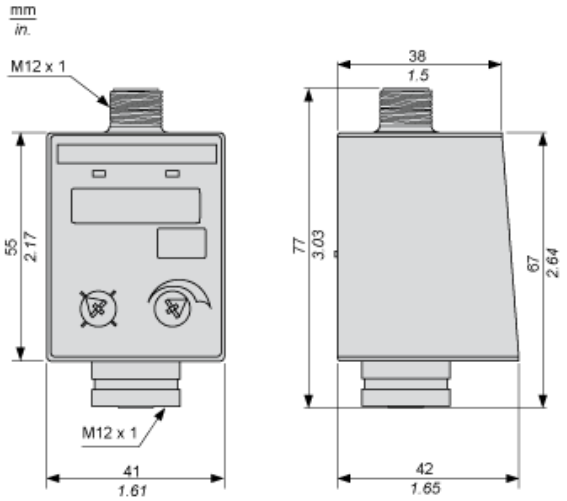
Product certifications	EAC CULus
Standards	EN/IEC 61000-6-2 EN/IEC 61000-6-4 UL 508
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-30…80 °C
IP degree of protection	IP67 conforming to EN/IEC 60529 IP65 conforming to EN/IEC 60529 IP69K conforming to DIN 40050
Vibration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

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

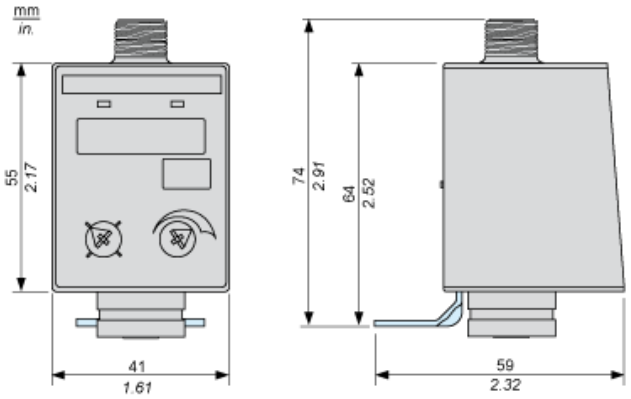
ZMLPA2P0SH

Dimensions



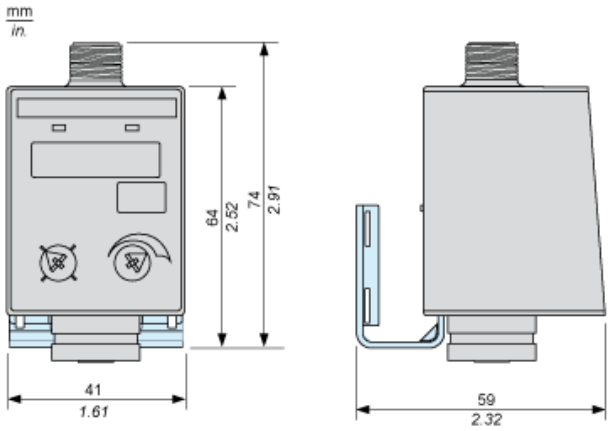
Dimensions

Switch with Metal Bracket for Fixing Horizontally



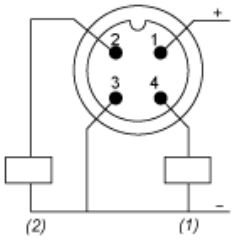
Dimensions

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



Connections and Schema

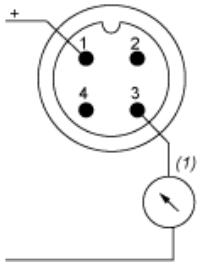
Output M12 Male Connector Wiring



(1) Out 1
(2) Out 2

Connections and Schema

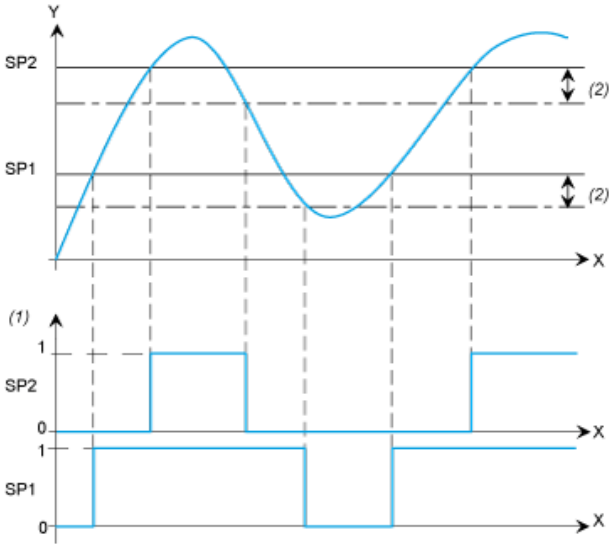
Input M12 Female Connector Wiring



(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/SP2 Set points (adjustable from 11% to 98% nominal pressure)