

ZMLPA1N2SH

Display & switch ZMLP - 24VDC - 4..20 mA - NPN
- 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 limit: 17...33 V
Current consumption	<= 50 mA
Electrical connection	M12 female connector with 2 pins M12 male connector with 4 pins
Type of output signal	Analogue + discrete
Analogue output function	4...20 mA
Discrete output type	NPN solid state - NO/NC programmable
Switching function	Hysteresis
Maximum switching current	200 mA
Voltage drop	<= 2 V
Adjustable range of switching point on rising pressure	5...98 % of selected display range
Adjustable range of switching point on falling pressure	2...95 % of selected display range
Minimum differential travel	3 % of selected display range
Marking	CE
Front material	Polyester
Housing material	PBT Valox
Operating position	Any position
Protection type	Reverse polarity Overvoltage protection Short-circuit protection Overload protection

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Response time on output	<= 3 ms for analog output <= 3 ms for discrete output
Display type	4 digits 7 segments
Local signalling	1 LED yellow for light ON when switch is actuated
Response time	300 ms
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
Product weight	0.103 kg
[Uimp] rated impulse withstand voltage	0.5 kV DC

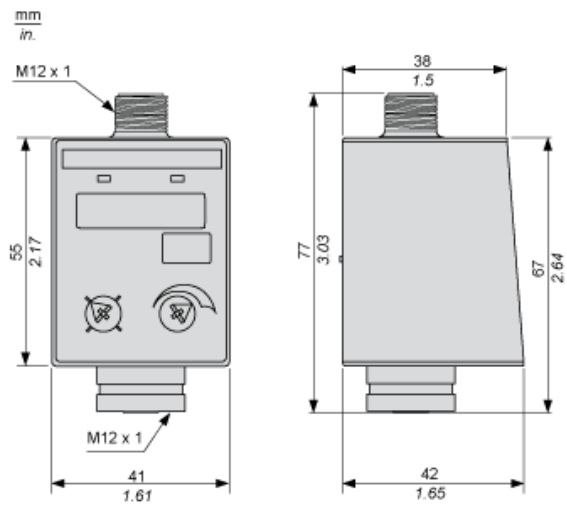
Environment

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

Offer Sustainability

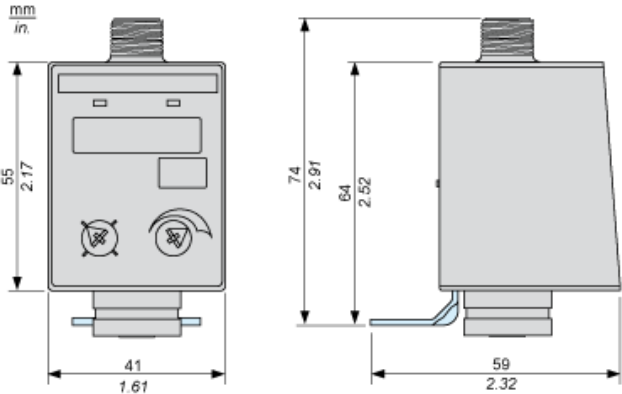
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1406 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product environmental
Product end of life instructions	Available End of life manual

Dimensions



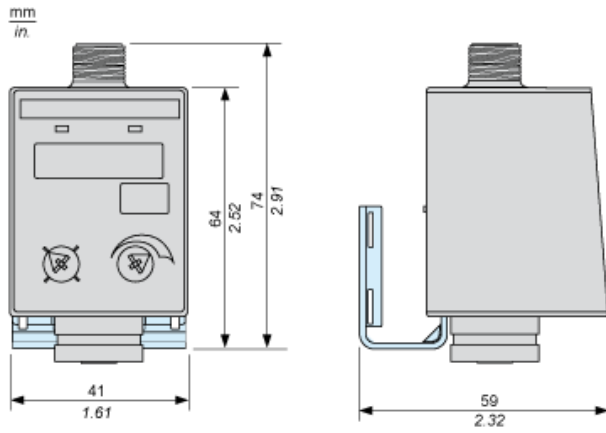
Dimensions

Switch with Metal Bracket for Fixing Horizontally



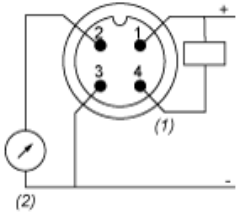
Dimensions

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



Connections and Schema

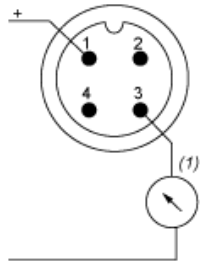
Output M12 Male Connector Wiring



- (1) Out
- (2) I Out

Connections and Schema

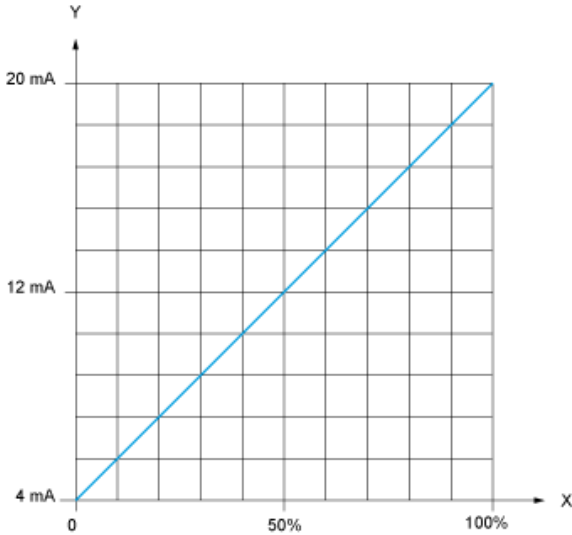
Input M12 Female Connector Wiring



(1) $I_{in} = 4-20 \text{ mA}$

Analog Output Description

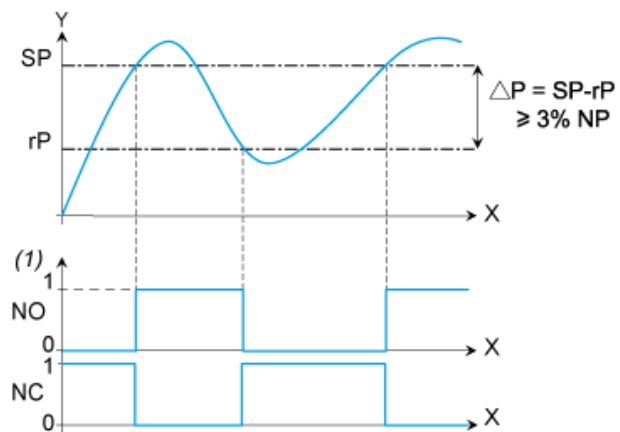
The 4...20 mA analog output is strictly the image of the pressure transmitter output signal.



X : Pressure
Y : Analog output signal

Switching Output Description. Hysteresis Mode

The hysteresis switching mode is typically used for the pumping applications.



X: Time
Y: Pressure
(1) Output
NP: Nominal Pressure
SP: Set point (adjustable from 5 % to 98 % NP)
rP: Reset point (adjustable from 2 % to 95 % NP)