

ZMLPA1N2SH

Electronic pressure sensors, Pressure sensors XM, Display & switch ZMLP, 24 VDC, 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 17...33 V)
Current Consumption	<= 50 mA
Electrical connection	Female connector M12, 2 pins Male connector M12, 4 pins
Type of output signal	Analogue + discrete
Analogue output function	4...20 mA
Discrete output type	Solid state NPN, 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
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	Short-circuit protection Overload protection Reverse polarity Overvoltage protection
Response time on output	<= 3 ms analog output <= 3 ms discrete output
Display Type	4 digits 7 segments
Local signalling	For light ON when switch is actuated 1 LED (yellow)
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	1.65 in (42 mm)

Height	3.03 in (77 mm)
Width	1.61 in (41 mm)
Net Weight	0.23 lb(US) (0.103 kg)
[Uimp] rated impulse withstand voltage	0.5 kV DC

Environment

Product Certifications	EAC cULus
Standards	EN/IEC 61000-6-4 UL 508 EN/IEC 61000-6-2
Ambient Air Temperature for Operation	-13...158 °F (-25...70 °C)
Ambient Air Temperature for Storage	-22...176 °F (-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 10...2000 Hz)EN/IEC 60068-2-6
Shock resistance	25 gn EN/IEC 60068-2-27
Electromagnetic compatibility	Immunity to conducted RF disturbances 10 V 0.15...80 MHz EN/IEC 61000-4-6 Surge immunity test 1 kV EN/IEC 61000-4-5 Electrical fast transient/burst immunity test 2 kV EN/IEC 61000-4-4 Susceptibility to electromagnetic fields 10 V/m 80...2000 MHz EN/IEC 61000-4-3 Electrostatic discharge immunity test 8 kV air, 4 kV contact EN/IEC 61000-4-2




Ordering and shipping details

Category	22661-XMLA,B,C,D PRESSURE SWITCHES
Discount Schedule	DS2
GTIN	3389119617949
Nbr. of units in pkg.	1
Package weight(Lbs)	3.70 oz (105.0 g)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.69 in (4.3 cm)
Package 1 width	1.85 in (4.7 cm)
Package 1 Length	3.43 in (8.7 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	24
Package 2 Weight	5.97 lb(US) (2.706 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl 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
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

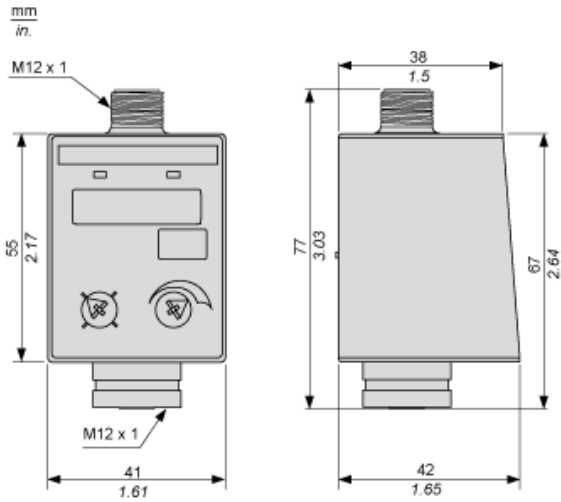
Environmental Disclosure

 [Product Environmental Profile](#)

Circularity Profile

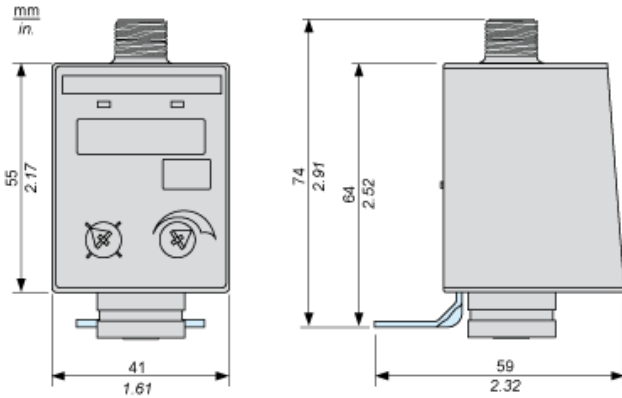
 [End Of Life Information](#)

Dimensions



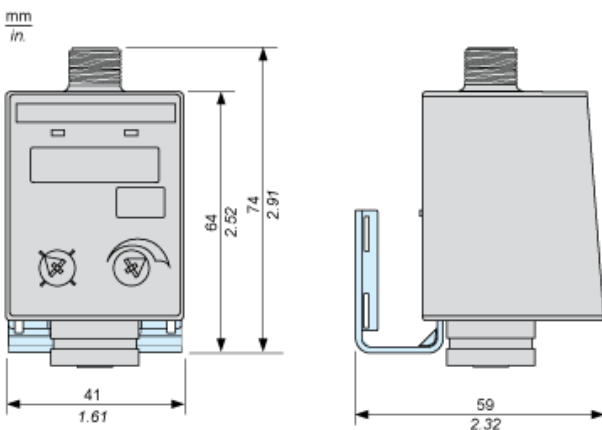
Dimensions

Switch with Metal Bracket for Fixing Horizontally



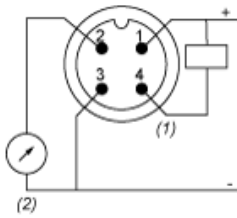
Dimensions

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



Connections and Schema

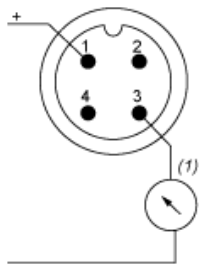
Output M12 Male Connector Wiring



- (1) Out
- (2) I Out

Connections and Schema

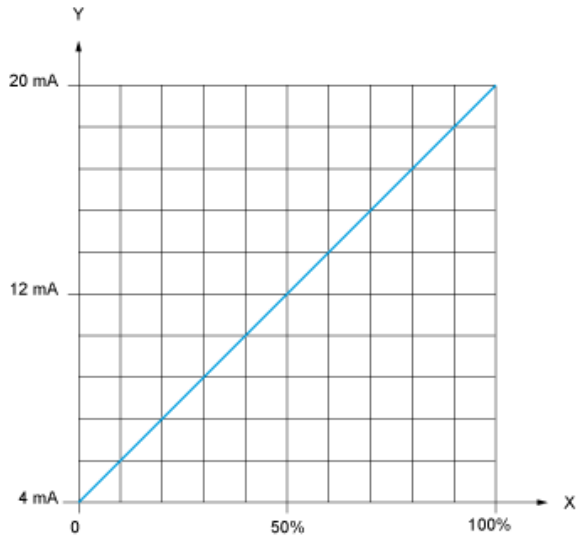
Input M12 Female Connector Wiring



- (1) I in = 4-20 mA

Analog Output Description

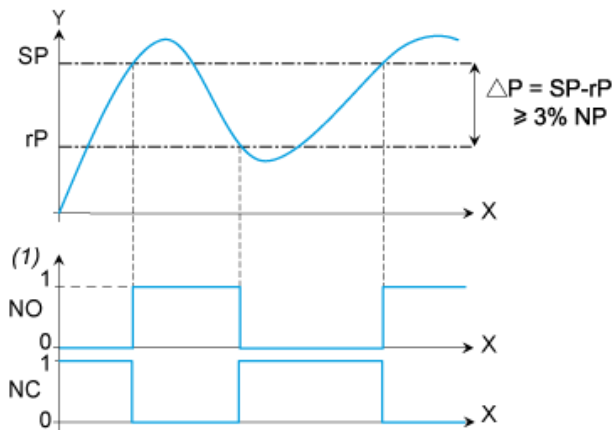
The 4...20 mA analog output is strictly the image of the pressure transmitter output signal.



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)