

# 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</a>

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Environmental Disclosure

 [Product Environmental Profile](#)

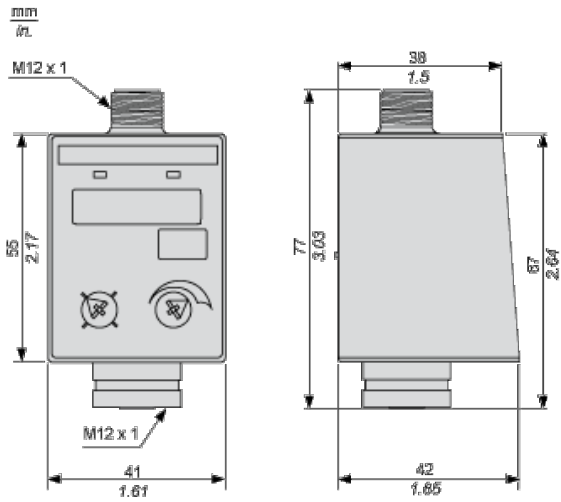
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Circularity Profile

 [End Of Life Information](#)

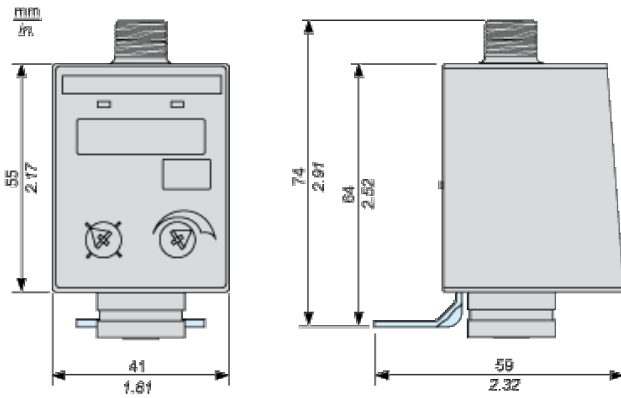
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Dimensions



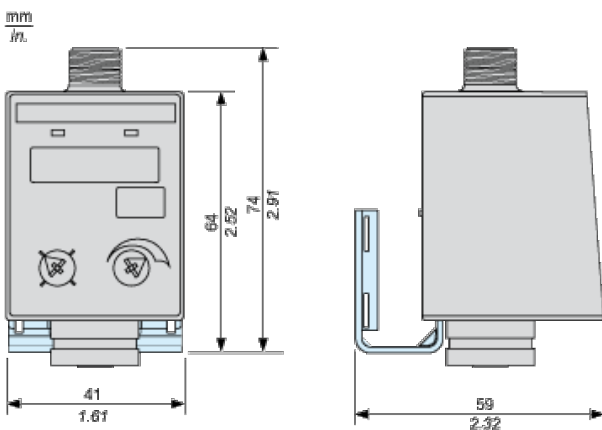
Dimensions

Switch with Metal Bracket for Fixing Horizontally



Dimensions

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

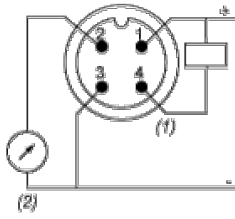


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Connections and Schema

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Output M12 Male Connector Wiring



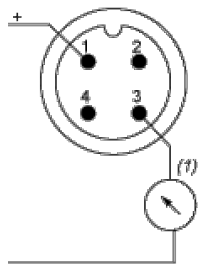
- (1) Out
- (2) I Out

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Connections and Schema

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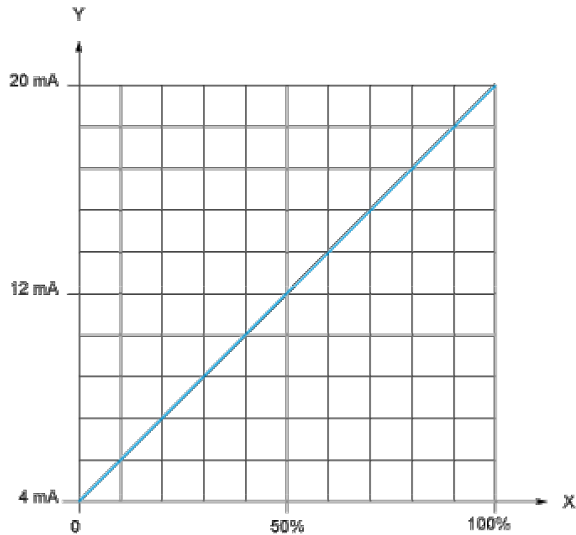
Input M12 Female Connector Wiring



- (1) I in = 4-20 mA

### Analog Output Description

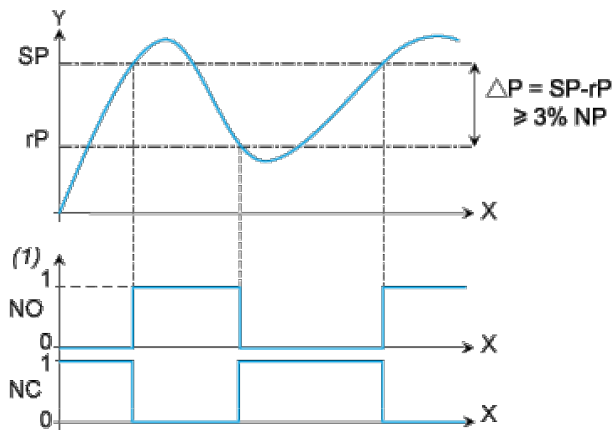
The 4...20 mA analog output is strictly the image of the pressure transmitter output signal.



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)