## XMLRM01G2P05

Electronic pressure sensors, Pressure sensors XM, XMLR -1 bar, G 1/4, 24 VDC, 2xPNP, M12



#### Main Range of Product Telemecanique Pressure sensors XM **Product or Component** Electronic pressure sensors Type Pressure sensor type Pressure transmitter Pressure switch type of Pressure switch with 2 switching outputs operation Device short name XMLR -14.5 Psi (-99.97 kPa) Pressure Rating -14.50 psi (-1 bar) Maximum permissible 43.51 Psi (3 bar) accidental pressure 43 Psi (296.47 kPa) 43.51 psi (300 kPa) Destruction pressure 43.51 Psi (300 kPa) 43 Psi (296.47 kPa) 43.51 psi (3 bar) Fresh water 32...176 °F (0...80 °C)) Controlled fluid

Air -4...176 °F (-20...80 °C)) Hydraulic oil -4...176 °F (-20...80 °C)) Refrigeration fluid -4...176 °F (-20...80 °C))

G 1/4 (female) DIN 3852-Y

24 V DC SELV 17...33 V)

## Complementary

Current Consumption	<= 50 mA
Electrical connection	Male connector M12, 4 pins
Type of output signal	Discrete
Discrete output type	Solid state PNP, 2 NO/NC programmable
Maximum switching current	250 mA
Contacts type and composition	2 NO/NC programmable
Scale type	Fixed differential
Maximum voltage drop	2 V
Adjustable range of switching point on rising pressure	-14.501.16 Psi (-10.08 bar) -14.501.16 Psi (-1008 kPa) -14.51.16 psi (-99.978.00 kPa)
Adjustable range of switching point on falling pressure	-14.10.73 Psi (-97.225.03 kPa) -14.070.73 Psi (-975 kPa) -14.070.73 psi (-0.970.05 bar)
Minimum differential travel	0.44 Psi (0.03 bar) 0.43 Psi (2.96 kPa) 0.44 psi (3 kPa)
Materials in contact with fluid	Fluorocarbon FKM (Viton) Ceramic 316L stainless steel
Front material	Polyester
Housing material	Polyacrylamide 316L stainless steel
Operating position	Any position, but disposals can falsified the measurement in case of upside down mounting
Protection Type	Short-circuit protection Overload protection Overvoltage protection Reverse polarity
Response time on output	<= 5 ms discrete output

Fluid connection type

[Us] rated supply voltage

technical characteristics

Switching output time delay	050 s in steps of 1 second
Display Type	4 digits 7 segments
Local signalling	For light ON when switch is actuated 2 LEDs (yellow)
Display response time type	Fast 50 ms Normal 200 ms Slow 600 ms
Maximum delay first up	300 ms
Overall accuracy	<= 1 % of the measuring range
Measurement accuracy on switching output	<= 0.6 % of the measuring range
Repeat accuracy	<= 0.2 % of the measuring range
Drift of the sensitivity	+/- 0.03 % of measuring range/°C
Drift of the zero point	+/- 0.1 % of measuring range/°C
Display accuracy	<= 1 % of the measuring range
Mechanical durability	10000000 cycles
Depth	1.65 in (42 mm)
Height	3.66 in (93 mm)
Width	1.61 in (41 mm)
Net Weight	0.42 lb(US) (0.19 kg)
[Uimp] rated impulse withstand voltage	0.5 kV DC
Electromagnetic compatibility	Susceptibility to electromagnetic fields 10 V/m 802000 MHz EN/IEC 61000-4-3 Immunity to conducted RF disturbances 10 V 0.1580 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 Electrostatic discharge immunity test 8 kV air, 4 kV contact EN/IEC 61000-4-2

### Environment

Marking	CE	
Product Certifications	cULus[RETURN]EAC	
Standards	UL 61010-1 EN/IEC 61326-2-3	
Ambient Air Temperature for Operation	-4176 °F (-2080 °C)	
Ambient Air Temperature for Storage	-40176 °F (-4080 °C)	
IP degree of protection	IP65 conforming to EN/IEC 60529 IP67 conforming to EN/IEC 60529	
Vibration resistance	20 gn 102000 Hz)EN/IEC 60068-2-6	
Shock resistance	50 gn EN/IEC 60068-2-27	

### Ordering and shipping details

0 11 0	
Category	21551-XMLE,XMLF,XMLG PRESSURE SENSORS
Discount Schedule	DS2
GTIN	3389119609852
Returnability	No
Country of origin	CH

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.60 in (6.6 cm)
Package 1 Width	2.91 in (7.4 cm)
Package 1 Length	5.12 in (13 cm)
Package 1 Weight	6.63 oz (188 g)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	8.98 lb(US) (4.075 kg)

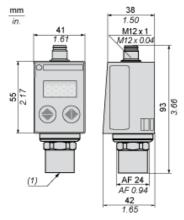
### Offer Sustainability

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
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	₫Yes

# Product data sheet Dimensions Drawings

## XMLRM01G2P05

#### **Dimensions**



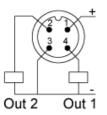
(1) Fluid entry: G 1/4 A female

## Product data sheet Connections and Schema

## XMLRM01G2P05

#### Connections and Schema

## **Connector Wiring**

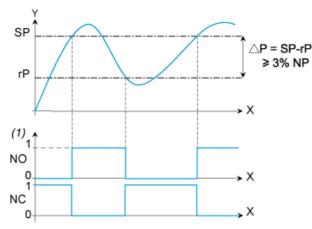


## Product data sheet Performance Curves

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#### Switching Output Description. Hysteresis Mode

The hysteresis switching mode is typically used for the "pumping and/or emptying applications".



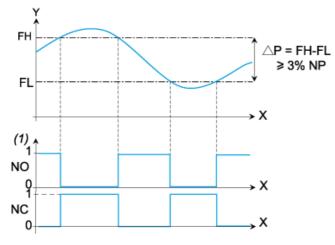
X: Time Y: Pressure (1) Output

NP: Nominal Pressure

SP : Set point (adjustable from 8 % to 100 % NP) rP : Reset point (adjustable from 5 % to 97 % NP)

#### Switching Output Description. Window Mode

The window switching mode is typically used for the "pressure regulation applications"



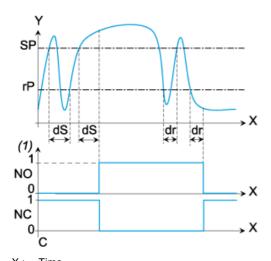
X: TimeY: Pressure(1) OutputNP: Nominal pressure

FH: High switching point (adjustable from 8 % to 100 % NP) FL: Low switching point (adjustable from 5 % to 97 % NP)

## Switching Output Description. Time Delay

The Time Delay is typically used to filter out the fast pressure transients.

The output only switches after a time "dS" and "dr" adjustable from 0 to 50 seconds.



X: Time
Y: Pressure
(1) Output
SP: Set point
rP: Reset point
dS: Time delay on the set point
dr: Time delay on the reset point