XMLR600M2P05

Electronic pressure sensors, Pressure sensors XM, XMLR 600 bar, G 1/4, 24 VDC, 2xPNP, M12



Main

Range of product	OsiSense XM
Product or component type	Electronic pressure sensors
Pressure sensor type	Pressure transmitter
Pressure switch type of operation	Pressure switch with 2 switching outputs
Device short name	XMLR
Pressure rating	59984.39 KPa 600 bar
Maximum permissible accidental pressure	149960.96 KPa 150 MPa 1500 bar
Destruction pressure	250 MPa 249934.94 KPa 2500 bar
Controlled fluid	Fresh water (080 °C) Air (-2080 °C) Hydraulic oil (-2080 °C) Refrigeration fluid (-2080 °C)
Fluid connection type	G 1/4 (female) conforming to DIN 3852-Y
[Us] rated supply voltage	24 V DC SELV (voltage limits: 1733 V)

Complementary

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	4.860 MPa 48600 Bar 4798.7559984.39 kPa
Adjustable range of switching point on falling pressure	2999.2258184.85 KPa 30582 Bar 358.2 MPa
Minimum differential travel	1799.53 KPa 1.8 MPa 18 bar
Materials in contact with fluid	316L stainless steel
Front material	Polyester
Housing material	316L stainless steel Polyacrylamide
Operating position	Any position, but disposals can falsified the measurement in case of upside down mounting
Protection type	Overvoltage protection Short-circuit protection Reverse polarity Overload protection
Response time on output	<= 5 ms for discrete output

Switching output time delay	050 s in steps of 1 second
Display type	4 digits 7 segments
Local signalling	2 LEDs (yellow) for light ON when switch is actuated
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	42 mm
Height	88 mm
Width	41 mm
Net weight	0.186 kg
[Uimp] rated impulse withstand voltage	0.5 kV DC
Electromagnetic compatibility	Susceptibility to electromagnetic fields: 10 V/m 802000 MHz conforming to EN/ IEC 61000-4-3 Immunity to conducted RF disturbances: 10 V 0.1580 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 Electrostatic discharge immunity test: 8 kV air, 4 kV contact conforming to EN/IEC 61000-4-2

Environment

Marking	CE	
Product certifications	EAC CULus	
Standards	UL 61010-1 EN/IEC 61326-2-3	
Ambient air temperature for operation	-2080 °C	
Ambient air temperature for storage	-4080 °C	
IP degree of protection	IP65 conforming to EN/IEC 60529 IP67 conforming to EN/IEC 60529	
Vibration resistance	20 gn (f= 102000 Hz) conforming to EN/IEC 60068-2-6	
Shock resistance	50 gn conforming to EN/IEC 60068-2-27	

Packing Units

PCE
1
184 g
6.5 cm
7.5 cm
13 cm
S02
20
4.02 kg
15 cm
30 cm
40 cm

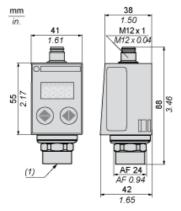
Offer Sustainability

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

Product data sheet Dimensions Drawings

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Dimensions



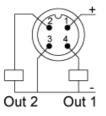
(1) Fluid entry: G 1/4 A female

Product data sheet Connections and Schema

XMLR600M2P05

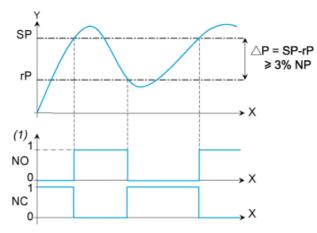
Connections and Schema

Connector Wiring



Switching Output Description. Hysteresis Mode

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



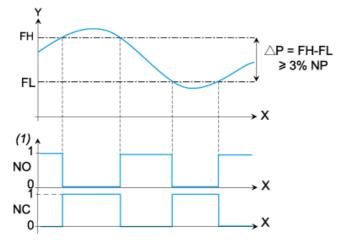
X: Time Y: Pressure (1) Output

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: Time
Y: Pressure
(1) Output

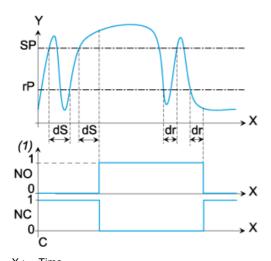
NP: Nominal pressure

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