XMLR250M2N09

Pressure sensors XMLR 250bar - SAE 7/16-20UNF-2B - 24VDC - 2xNPN - M12

Product availability: Non-Stock - Not normally stocked in distribution facility



Main

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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 sensor size	3620 psi 3625.94 psi (250 bar)
Maximum permissible accidental pressure	10877.83 psi (750 bar) 10875 psi 75 MPa
Destruction pressure	21750 psi 150 MPa 21755.66 psi (1500 bar)
Controlled fluid	Fresh water (32176 °F (080 °C)) Air (-2080 °C) Hydraulic oil (-2080 °C) Refrigeration fluid (-2080 °C)
Fluid connection type	SAE 7/16-20UNF-2B (female)
[Us] rated supply voltage	24 V DC SELV, voltage limits: 1733 V

Complementary

Complementary	
Current consumption	<= 50 mA
Electrical connection	4 pins M12 male connector
Type of output signal	Discrete
Discrete output type	Solid state NPN, 2 NO/NC programmable
Maximum switching current	250 mA
Contacts type and composition	2 NO/NC programmable
Scale type	Fixed differential
Voltage drop	<= 2 V
Adjustable range of switching point on rising pressure	2903625 psi 290.083625.94 psi (20250 bar) 225 MPa
Adjustable range of switching point on falling pressure	1.2524.2 MPa 1813516 psi 181.33509.91 psi (12.5242 bar)
Minimum differential travel	0.75 MPa 108.78 psi (7.5 bar) 109 psi
Materials in contact with fluid	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	Overvoltage protection Reverse polarity Overload protection Short-circuit protection
Response time on output	<= 5 ms discrete output
Switching output time delay	050 s in steps of 1 second

Display type	4 digits 7 segments
Local signalling	2 LEDs yellow light ON when switch is actuated
Display response time type	Fast 50 ms Normal 200 ms Slow 600 ms
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	3.7 in (94 mm)
Width	1.61 in (41 mm)
Product weight	0.47 lb(US) (0.212 kg)
[Uimp] rated impulse withstand voltage	0.5 kV DC
Electromagnetic compatibility	Electrostatic discharge immunity test - test level 8 kV air, 4 kV contact conforming to EN/IEC 61000-4-2 Susceptibility to electromagnetic fields - test level 10 V/m (802000 MHz) conforming to EN/IEC 61000-4-3 Electrical fast transient/burst immunity test - test level 2 kV conforming to EN/IEC 61000-4-4 Surge immunity test - test level 1 kV conforming to EN/IEC 61000-4-5 Immunity to conducted RF disturbances - test level 10 V (0.1580 MHz) conforming to EN/IEC 61000-4-6

Environment

Marking	CE	
Product certifications	CULus 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 (f = 102000 Hz) conforming to EN/IEC 60068-2-6	
Shock resistance	50 gn conforming to EN/IEC 60068-2-27	

Ordering and shipping details

Category	21551 - XMLE,XMLF,XMLG PRESSURE SENSORS
Discount Schedule	DS2
GTIN	003389119611794
Nbr. of units in pkg.	1
Package weight(Lbs)	0.4700000000000003
Returnability	N
Country of origin	СН

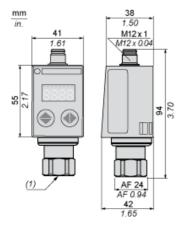
Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 1351 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and
Substance 2	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
More information	For more information go to www.p65warnings.ca.gov

Product data sheet Dimensions Drawings

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Dimensions



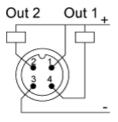
(1) Fluid entry: SAE 7/16-20UNF female

Product data sheet Connections and Schema

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Connections and Schema

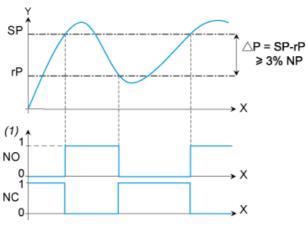
Connector Wiring



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Switching Output Description. Hysteresis Mode

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



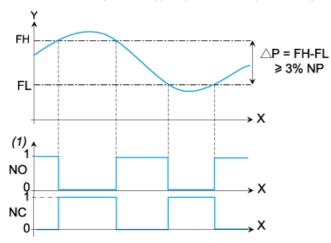
X: Time Y: Pressure (1) Output

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: Time
Y: Pressure
(1) Output

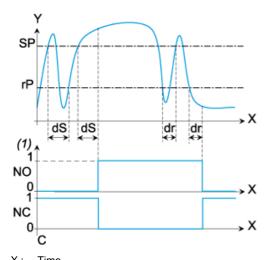
NP : Nominal pressure

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

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