

# XMLA020B2S12

Electromechanical pressure sensor, Pressure sensors XM, switch XMLA 20 bar, fixed scale 1 threshold, 1 C/O



## Main

|                                                         |                                                                                                                                                                                                  |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product                                        | OsiSense XM                                                                                                                                                                                      |
| Product or component type                               | Electromechanical pressure sensor                                                                                                                                                                |
| Pressure sensor type                                    | Electromechanical pressure sensor                                                                                                                                                                |
| Device short name                                       | XMLA                                                                                                                                                                                             |
| Pressure rating                                         | 20 bar                                                                                                                                                                                           |
| Controlled fluid                                        | Air (0...160 °C)<br>Fresh water (0...160 °C)<br>Hydraulic oil (0...160 °C)                                                                                                                       |
| Fluid connection type                                   | G 1/4 (female) conforming to ISO 228                                                                                                                                                             |
| Electrical connection                                   | Screw-clamps terminals, 1 x 0.5...2 x 2.5 mm <sup>2</sup>                                                                                                                                        |
| AWG gauge                                               | AWG 20...AWG 14                                                                                                                                                                                  |
| Cable entry                                             | Cable gland 7...13 mm                                                                                                                                                                            |
| Contacts type and composition                           | 1 C/O                                                                                                                                                                                            |
| Product specific application                            | -                                                                                                                                                                                                |
| Pressure switch type of operation                       | Detection of 1 single threshold                                                                                                                                                                  |
| Electrical circuit type                                 | Control circuit                                                                                                                                                                                  |
| Scale type                                              | Fixed differential                                                                                                                                                                               |
| Local display                                           | With                                                                                                                                                                                             |
| Adjustable range of switching point on rising pressure  | 1...20 bar                                                                                                                                                                                       |
| Adjustable range of switching point on falling pressure | 0.6...19 bar                                                                                                                                                                                     |
| Maximum permissible accidental pressure                 | 45 bar                                                                                                                                                                                           |
| Destruction pressure                                    | 90 bar                                                                                                                                                                                           |
| Pressure actuator                                       | Diaphragm                                                                                                                                                                                        |
| Materials in contact with fluid                         | Brass<br>FPM, FKM                                                                                                                                                                                |
| Enclosure material                                      | Zinc alloy                                                                                                                                                                                       |
| [In] rated current                                      | 3 A, B300, AC-15 (Ue = 120 V) conforming to EN/IEC 60947-5-1<br>1.5 A, B300, AC-15 (Ue = 240 V) conforming to EN/IEC 60947-5-1<br>0.1 A, R300, DC-13 (Ue = 250 V) conforming to EN/IEC 60947-5-1 |

## Complementary

|                                          |                       |
|------------------------------------------|-----------------------|
| Natural differential at low setting      | 0.4 bar (+/- 0.2 bar) |
| Natural differential at high setting     | 1 bar (+/- 0.1 bar)   |
| Maximum permissible pressure - per cycle | 25 bar                |
| Terminal block type                      | 4 terminals           |
| Maximum operating rate                   | 120 cyc/mn            |
| Repeat accuracy                          | 2 %                   |

|                                        |                                                                                                         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage          | 300 V conforming to UL 508<br>500 V conforming to EN/IEC 60947-1<br>300 V conforming to CSA C22.2 No 14 |
| [Uimp] rated impulse withstand voltage | 6 kV EN/IEC 60947-1                                                                                     |
| Auxiliary contacts operation           | Snap action                                                                                             |
| Contacts material                      | Silver contacts                                                                                         |
| Maximum resistance across terminals    | 25 MOhm conforming to IEC 255-7 category 3<br>25 mOhm conforming to NF C 93-050 method A                |
| Short-circuit protection               | 10 A cartridge fuse, type gG (gl)                                                                       |
| Mechanical durability                  | 5000000 cycles                                                                                          |
| Setting                                | External                                                                                                |
| Height                                 | 113 mm                                                                                                  |
| Depth                                  | 75 mm                                                                                                   |
| Width                                  | 35 mm                                                                                                   |
| Net weight                             | 0.685 kg                                                                                                |

## Environment

|                                       |                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947-5-1<br>CSA C22.2 No 14<br>CE<br>UL 508                                                  |
| Product certifications                | CCC<br>LROS (Lloyds register of shipping)<br>CSA<br>BV<br>EAC<br>UL                                  |
| Protective treatment                  | TC standard version                                                                                  |
| Ambient air temperature for operation | -25...70 °C                                                                                          |
| Ambient air temperature for storage   | -40...70 °C                                                                                          |
| Operating position                    | Any position                                                                                         |
| Vibration resistance                  | 4 gn conforming to IEC 60068-2-6 (f = 30...500 Hz)                                                   |
| Shock resistance                      | 50 gn conforming to IEC 60068-2-27                                                                   |
| Electrical shock protection class     | Class I conforming to IEC 1140<br>Class I conforming to IEC 536<br>Class I conforming to NF C 20-030 |
| IP degree of protection               | IP66 conforming to EN/IEC 60529                                                                      |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 85 g    |
| Package 1 Height             | 12.5 cm |
| Package 1 width              | 4.2 cm  |
| Package 1 Length             | 8.2 cm  |

## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| 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>                                                                              |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



- (1) 1 fluid entry, tapped G1/4 (BSP female)  
(2) 1 electrical connections entry, tapped M20 x 1.5  
Ø : 2 elongated holes Ø 5.2 x 6.7

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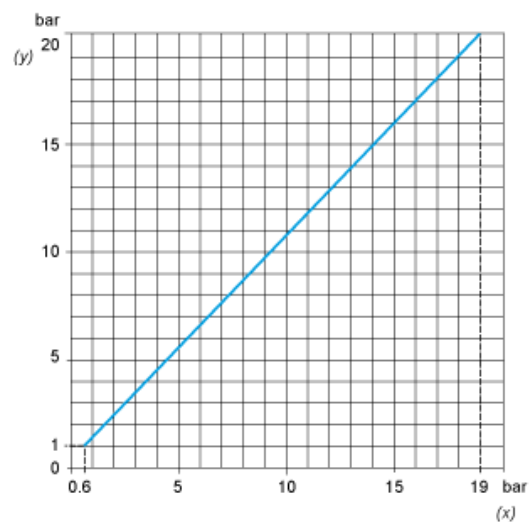
## Wiring Diagram

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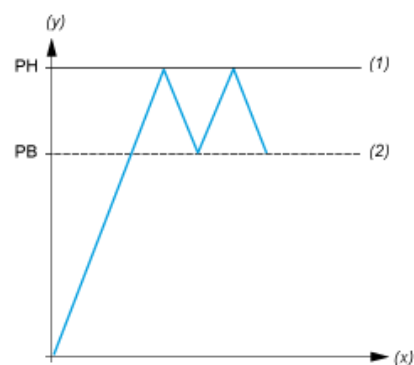
## Terminal Model



## Operating Curves



(y) Rising pressure  
(x) Falling pressure



(y) Pressure  
(x) Time  
(1) Adjustable value  
(2) Non adjustable value  
PH : High point  
PB : Below point