

# Product data sheet

## Characteristics

# XMLA020A2S14

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



## Main

|                                                         |                                                                                                                                                                                         |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product                                        | Telemecanique Pressure sensors 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...70 °C)<br>Fresh water (0...70 °C)<br>Hydraulic oil (0...70 °C)                                                                                                                 |
| Fluid connection type                                   | PT 1/4 (female)                                                                                                                                                                         |
| 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                         | Zinc alloy<br>Brass<br>Nitrile                                                                                                                                                          |
| Enclosure material                                      | Zinc alloy                                                                                                                                                                              |
| [In] rated current                                      | 3 A, B300, AC-15 (Ue = 120 V) conforming to IEC 60947-5-1<br>1.5 A, B300, AC-15 (Ue = 240 V) conforming to IEC 60947-5-1<br>0.1 A, R300, DC-13 (Ue = 250 V) conforming to IEC 60947-5-1 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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 IEC 60947-1<br>300 V conforming to CSA C22.2 No 14 |
| [Uimp] rated impulse withstand voltage   | 6 kV conforming to 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                             | CSA C22.2 No 14<br>UL 508<br>CE<br>IEC 60947-5-1                                                     |
| Product certifications                | UL[RETURN]CSA[RETURN]BV[RETURN]LROS (Lloyds register of shipping)<br>[RETURN]CCC                     |
| 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 IEC 60529                                                                         |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 4.200 cm  |
| Package 1 Width              | 12.200 cm |
| Package 1 Length             | 8.500 cm  |
| Package 1 Weight             | 697.900 g |

## Offer Sustainability

|                            |                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Mercury free               | Yes                                                                                                                                                                  |
| RoHS exemption information |  Yes                                                                              |

## Contractual warranty

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

## Dimensions



- (1) 1 fluid entry, tapped PT 1/4 (JIS B0203)  
 (2) 1 electrical connections entry, tapped 1/2" PF (JIS B0202)  
 Ø : 2 elongated holes Ø 5.2 x 6.7

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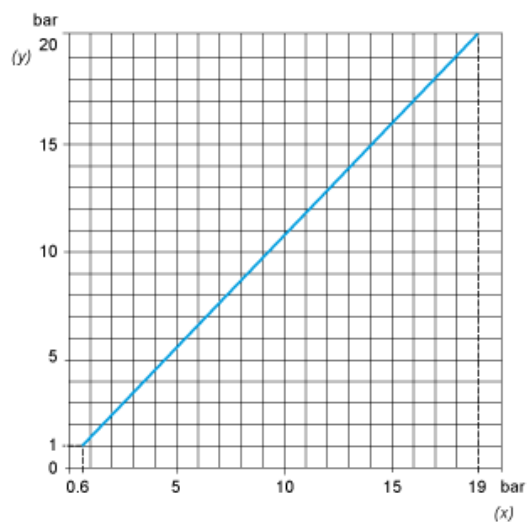
## Wiring Diagram

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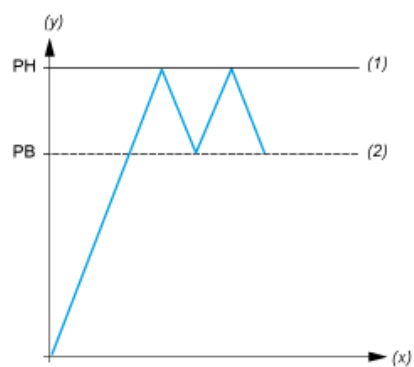
### Terminal Model



## 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