

# XS8C4A1PCP20

Inductive proximity sensors XS, inductive sensor XS8 40x40x117, PBT, Sn20 mm, 12...48 VDC, terminals



## Main

|                                    |   |
|------------------------------------|---|
| Range of product                   | Telemecanique Inductive proximity sensors XS  |
| Series name                        | General purpose   |
| Sensor type                        | Inductive proximity sensor  |
| Device application                 | Mobile equipment  |
| Sensor name                        | XS8   |
| Sensor design                      | Form 40 x 40 x 117  |
| Size                               | 117 mm  |
| Body type                          | Fixed   |
| Detector flush mounting acceptance | Flush mountable   |
| Material                           | Plastic   |
| Enclosure material                 | PBT   |
| Type of output signal              | Discrete  |
| Wiring technique                   | 4-wire  |
| [Sn] nominal sensing distance      | 20 mm   |
| Discrete output function           | 1 NO + 1 NC   |
| Output circuit type                | DC  |
| Discrete output type               | PNP   |
| Electrical connection              | Screw-clamp terminals, 4 x 1.5 mm <sup>2</sup>  |
| [Us] rated supply voltage          | 12...48 V DC with reverse polarity protection   |
| Switching capacity in mA           | <= 200 mA with overload and short-circuit protection  |
| IP degree of protection            | IP67 conforming to IEC 60529<br>IP65 conforming to IEC 60529<br>IP69K conforming to DIN 40050 |

## Complementary

|                         |  |
|-------------------------|--|
| Safety level            | SIL 2 conforming to EN/IEC 61508<br>PL = d conforming to EN/ISO 13849-1<br>SILCL 2 conforming to IEC 62061 |
| Safety reliability data | MTTFd = 1546 years<br>PFHd = 7.4E-8 1/h<br>SFF = 92 %<br>DC = 75 % with appropriate safety controller      |
| Detection face          | 5 positions turret head  |
| Front material          | PBT  |
| Operating zone          | 0...16 mm  |
| Differential travel     | 3...15% of Sr  |
| Repeat accuracy         | <= 3% of Sr  |
| Cable entry number      | 1 tapped entry for M20 x 1.5 cable gland   |
| Status LED              | Supply on: 1 LED (green)<br>Output state: 1 LED (yellow)   |
| Supply voltage limits   | 10...58 V DC   |
| Switching frequency     | <= 300 Hz  |
| Maximum voltage drop    | <2 V (closed)  |
| Current consumption     | 0...15 mA no-load  |
| Maximum delay first up  | 7.5 ms   |

|                        |          |
|------------------------|----------|
| Maximum delay response | 1.2 ms   |
| Maximum delay recovery | 1.8 ms   |
| Marking                | CE       |
| Height                 | 40 mm    |
| Length                 | 40 mm    |
| Width                  | 117 mm   |
| Net weight             | 0.244 kg |

## Environment

|                                       |   |
|---------------------------------------|---|
| Product certifications                | E2[RETURN]CCC[RETURN]UL[RETURN]TÜV[RETURN]CSA                           |
| Ambient air temperature for operation | -25...70 °C   |
| Ambient air temperature for storage   | -40...85 °C   |
| Vibration resistance                  | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance                      | 50 gn for 11 ms conforming to EN 60068-2-27                             |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 14.500 cm |
| Package 1 Width              | 5.000 cm  |
| Package 1 Length             | 5.000 cm  |
| Package 1 Weight             | 256.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 14        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 3.840 kg  |

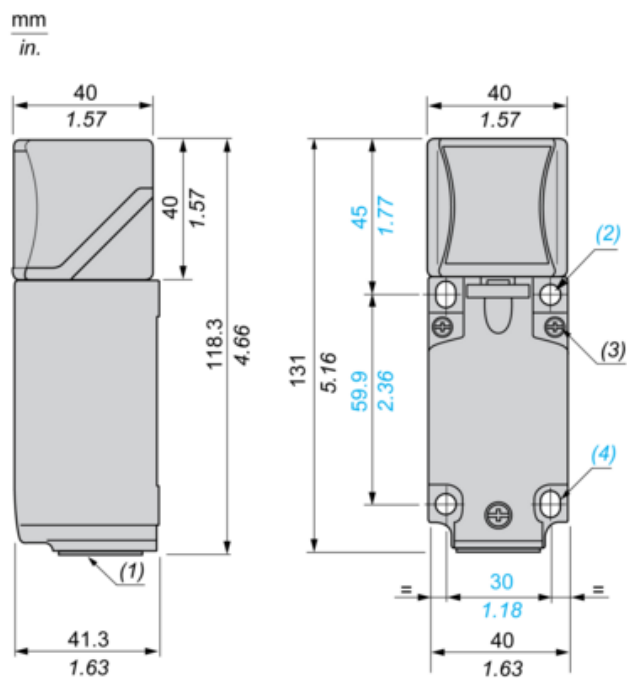
## Offer Sustainability

|  |   |
|--|---|
| Sustainable offer status                   | Green Premium product   |
| Environmental Disclosure                   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile                        | No need of specific recycling operations  |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>  |

## Contractual warranty

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

Dimensions



(1) : M20 x 1.5 cable gland.

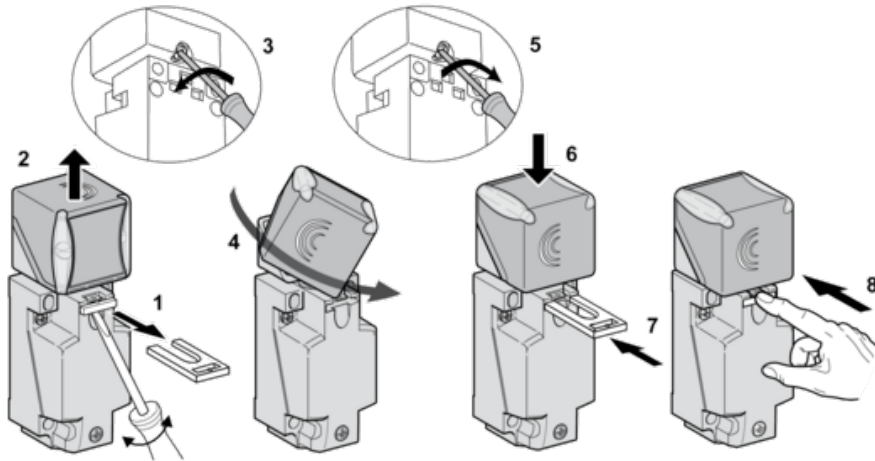
(2) : 2 holes  $\varnothing$  5,45 mm /  $\varnothing$  0.21 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in.

(3) : 3 screws M3,5. Tightening torque: < 1,2 Nm / < 10.6 lb-in.

(4) : 2 elongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in".

## Mounting

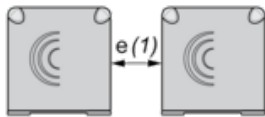
### Head Positions



## Setting-up Precautions

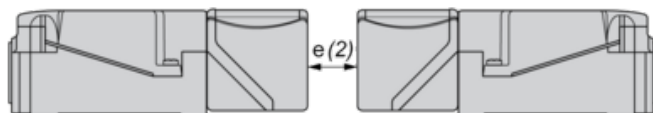
### Minimum Mounting Distances (mm)

Side by Side



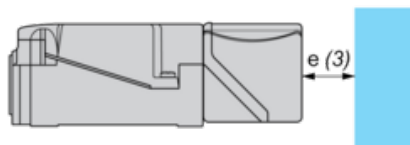
$e(1) \geq 80$

Face to Face



$e(2) \geq 160$

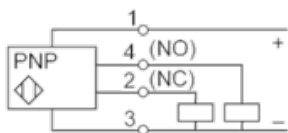
Facing a Metal Object



$e(3) \geq 60$

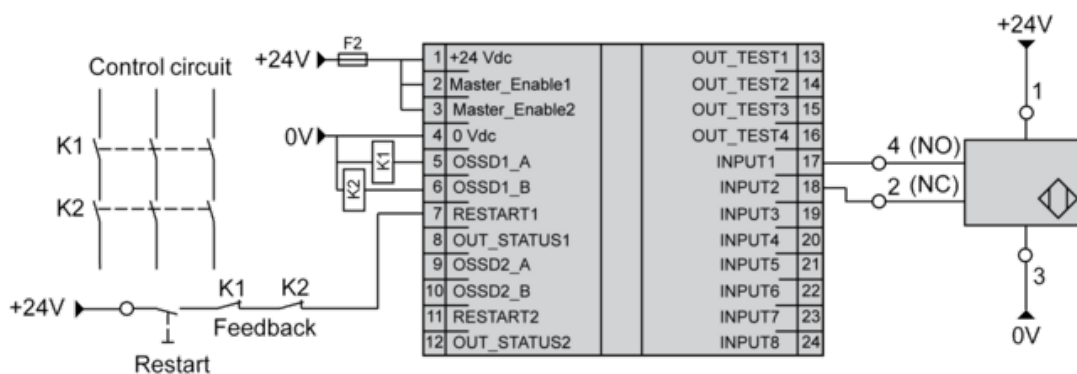
Wiring Schemes

4-Wire DC



SIL 2 Wiring Scheme

With Preventa XPSMF40 Safety PLC



SFF : (Safe Failure Fraction): 92,68 %

DC : (Diagnosis Coverage): 75,8 %