# XS8C4A4PCP20

Inductive proximity sensors XS, inductive sensor XS8 40x40x117, PBT, Sn40 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	Non flush mountable
Material	Plastic
Enclosure material	PBT
Type of output signal	Discrete
Wiring technique	4-wire
[Sn] nominal sensing distance	40 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 mm²
[Us] rated supply voltage	1248 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 IP65 conforming to IEC 60529 IP69K conforming to DIN 40050

Safety level  SIL 2 conforming to IEC 61508 PL = d conforming to ISO 13849-1 SILCD 2 conforming to IEC 62061  Safety reliability data  MTTFd = 1546 years PFHd = 7.4E-8 1/h SFF = 92 % DC = 75 % with appropriate safety controller  Detection face  5 positions turret head  Front material  PBT  Operating zone  032 mm  Differential travel  315% 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) Output state: 1 LED (yellow)  Supply voltage limits  1058 V DC  Switching frequency  <= 200 Hz  Maximum voltage drop  Current consumption  015 mA no-load  Maximum delay first up  7.5 ms	Complementary	
PFHd = 7.4E-8 1/h SFF = 92 % DC = 75 % with appropriate safety controller  Detection face 5 positions turret head  Front material PBT  Operating zone 032 mm  Differential travel 315% 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) Output state: 1 LED (yellow)  Supply voltage limits 1058 V DC  Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Safety level	PL = d conforming to ISO 13849-1
Front material PBT  Operating zone 032 mm  Differential travel 315% 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) Output state: 1 LED (yellow)  Supply voltage limits 1058 V DC  Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Safety reliability data	PFHd = 7.4E-8 1/h SFF = 92 %
Operating zone  Differential travel  315% 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) Output state: 1 LED (yellow)  Supply voltage limits  1058 V DC  Switching frequency  <= 200 Hz  Maximum voltage drop  Current consumption  015 mA no-load	Detection face	5 positions turret head
Differential travel 315% 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) Output state: 1 LED (yellow)  Supply voltage limits 1058 V DC  Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Front material	PBT
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) Output state: 1 LED (yellow)  Supply voltage limits 1058 V DC  Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Operating zone	032 mm
Cable entry number  1 tapped entry for M20 x 1.5 cable gland  Status LED  Supply on: 1 LED (green) Output state: 1 LED (yellow)  Supply voltage limits  1058 V DC  Switching frequency  <= 200 Hz  Maximum voltage drop  Current consumption  1 tapped entry for M20 x 1.5 cable gland  Supply on: 1 LED (green) Output state: 1 LED (yellow)  Cutput state: 1 LED (yellow)  1058 V DC  Cutput state: 1 LED (yellow)  015 mA no-load	Differential travel	315% of Sr
Status LED  Supply on: 1 LED (green) Output state: 1 LED (yellow)  Supply voltage limits  1058 V DC  Switching frequency  <= 200 Hz  Maximum voltage drop  Current consumption  015 mA no-load	Repeat accuracy	<= 3% of Sr
Output state: 1 LED (yellow)  Supply voltage limits 1058 V DC  Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Cable entry number	1 tapped entry for M20 x 1.5 cable gland
Switching frequency <= 200 Hz  Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Status LED	
Maximum voltage drop <2 V (closed)  Current consumption 015 mA no-load	Supply voltage limits	1058 V DC
Current consumption 015 mA no-load	Switching frequency	<= 200 Hz
<u> </u>	Maximum voltage drop	<2 V (closed)
Maximum delay first up 7.5 ms	Current consumption	015 mA no-load
·	Maximum delay first up	7.5 ms

Maximum delay response	1.4 ms
Maximum delay recovery	2.5 ms
Marking	CE
Height	40 mm
Length	40 mm
Width	117 mm
Net weight	0.244 kg

### Environment

Product certifications	TÜV[RETURN]UL[RETURN]CSA[RETURN]E2[RETURN]CCC
Ambient air temperature for operation	-2570 °C
Ambient air temperature for storage	-4085 °C
Vibration resistance	25 gn amplitude = +/- 2 mm (f = 1055 Hz) conforming to IEC 60068-2-6
Shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27

# Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	14.5 cm	
Package 1 Width	5 cm	
Package 1 Length	5 cm	
Package 1 Weight	264 g	

#### Offer Sustainability

Sustainable offer status	Green Premium product
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 www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

### Contractual warranty

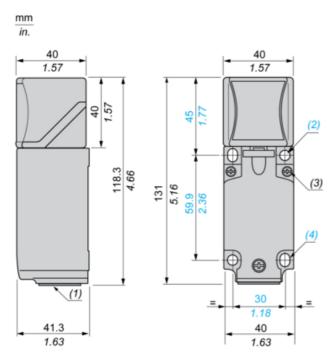
Warranty	18 months



# Product data sheet Dimensions Drawings

# XS8C4A4PCP20

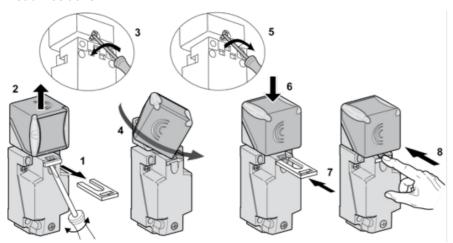
#### **Dimensions**



- (1): M20 x 1.5 cable gland.
- (2) : 2 holes Ø 5,45 mm / Ø 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 alongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in".

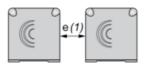
#### Mounting

#### **Head Positions**

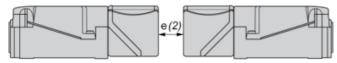


## Setting-up Precautions

#### Side by Side

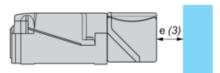


e (1) ≥ 160 Face to Face



e (2) ≥ 320

Facing a Metal Object



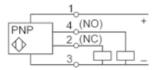
e (3) ≥ 120

# Product data sheet Connections and Schema

# XS8C4A4PCP20

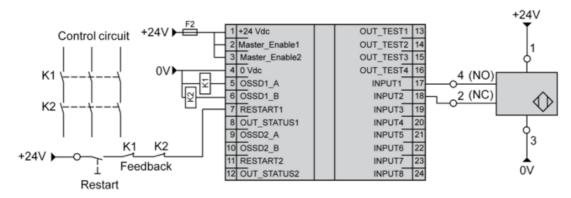
#### Wiring Schemes

#### 4-Wire DC



#### SIL 2 Wiring Scheme

#### With Preventa XPSMF40 Safety PLC



SFF : (Safe Failure Fraction): 92,68 % DC : (Diagnosis Coverage): 75,8 %