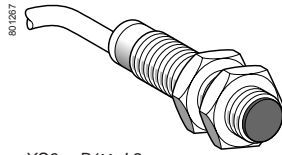


# OsiSense® XS

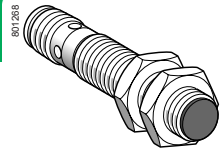
## Inductive proximity sensors

General purpose  
Cylindrical, increased range, flush mountable  
Two-wire AC or DC <sup>(2)</sup>

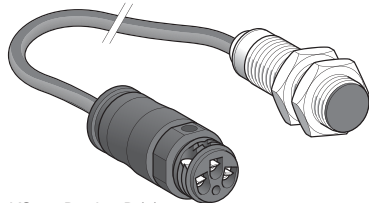
2



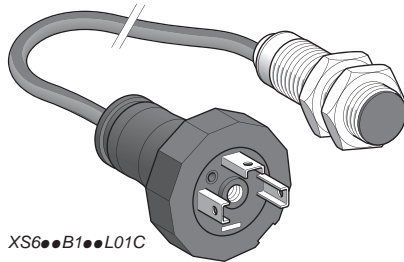
XS6●●B1M●L2



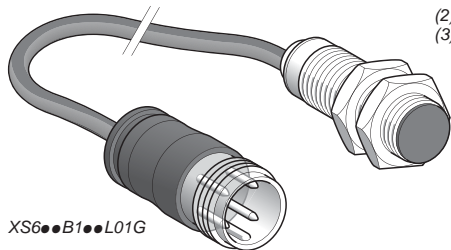
XS6●●B1●●U20



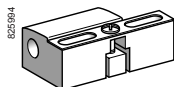
XS6●●B1●L01B (2)



XS6●●B1●●L01C



XS6●●B1●●L01G



XSZB1●●

### Sensors, 2-wire 24-240 V ~, long case model

Sensing distance Sn, mm (in.)	Function	Connection	Catalog Number	Weight kg (lb)
<b>Ø 12, threaded M12 x 1</b>				
4 (0.16)	NO	Pre-cabled (L = 2 m) (1)	<b>XS612B1MAL2</b>	0.075 (0.17)
		1/2"-20UNF connector	<b>XS612B1MAU20</b>	0.025 (0.06)
	NC	Pre-cabled (L = 2 m) (1)	<b>XS612B1MBL2</b>	0.075 (0.17)
		1/2"-20UNF connector	<b>XS612B1MBU20</b>	0.025 (0.06)

<b>Ø 18, threaded M18 x 1</b>				
8 (0.31)	NO	Pre-cabled (L = 2 m) (1)	<b>XS618B1MAL2</b>	0.100 (0.22)
		1/2"-20UNF connector	<b>XS618B1MAU20</b>	0.060 (0.13)
		Remote screw terminal connector	<b>XS618B1MAL01B (3)</b>	0.100 (0.22)
		Remote DIN 43650A connector	<b>XS618B1MAL01C</b>	0.100 (0.22)
		Remote M18 connector	<b>XS618B1MAL01G</b>	0.100 (0.22)
	NC	Pre-cabled (L = 2 m) (1)	<b>XS618B1MBL2</b>	0.100 (0.22)
		1/2"-20UNF connector	<b>XS618B1MBU20</b>	0.060 (0.13)
		Remote screw terminal connector	<b>XS618B1MBL01B (3)</b>	0.100 (0.22)
		Remote DIN 43650A connector	<b>XS618B1MBL01C</b>	0.100 (0.22)
		Remote M18 connector	<b>XS618B1MBL01G</b>	0.100 (0.22)

<b>Ø 30, threaded M30 x 1.5</b>				
15 (0.59)	NO	Pre-cabled (L = 2 m) (2)	<b>XS630B1MAL2</b>	0.205 (0.45)
		1/2"-20UNF connector	<b>XS630B1MAU20</b>	0.145 (0.32)
		Remote screw terminal connector	<b>XS630B1MAL01B (3)</b>	0.205 (0.45)
		Remote DIN 43650A connector	<b>XS630B1MAL01C</b>	0.205 (0.45)
		Remote M18 connector	<b>XS630B1MAL01G</b>	0.205 (0.45)
	NC	Pre-cabled (L = 2 m) (2)	<b>XS630B1MBL2</b>	0.205 (0.45)
		1/2"-20UNF connector	<b>XS630B1MBU20</b>	0.145 (0.32)
		Remote screw terminal connector	<b>XS6 30B1MBL01B (3)</b>	0.205 (0.45)
		Remote DIN 43650A connector	<b>XS6 30B1MBL01C</b>	0.205 (0.45)
		Remote M18 connector	<b>XS6 30B1MBL01G</b>	0.205 (0.45)

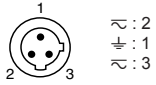
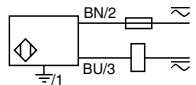
<b>Accessories</b>				
Description	For use with sensors	Catalog Number	Weight kg (lb)	
<b>Mounting clamps</b>	Ø 12	<b>XSZB112</b>	0.006 (0.01)	
	Ø 18	<b>XSZB118</b>	0.010 (0.02)	
	Ø 30	<b>XSZB130</b>	0.020 (0.04)	

(1) For a 5 m cable replace L2 with L5; for a 10 m cable replace L2 with L10.  
Example: XS612B1MAL2 becomes **XS612B1MAL5** with a 5 m cable.  
(2) Available in ø8 plastic with double insulation, see page 2/30.  
(3) Protective cable gland included with remote screw terminal connector.

Specifications		XS6●●B1M●U20	XS6●●B1M●L●
Sensor type			
Product certifications		UL, CSA, CE	
Connection	Connector	1/2" - 20 UNF	–
	Pre-cabled	–	Length 2 m
	Remote connector	Remote screw terminal (L01B), DIN 43650A (L01C) or M18 connector (L01G) on 0.15 m pigtail connector	
Operating zone	Ø 12	mm	0–3.2 (0–0.13 in.)
	Ø 18	mm	0–6.4 (0–0.25 in.)
	Ø 30	mm	0–12 (0–0.47 in.)
Differential travel		%	1–15 of effective sensing distance (Sr)
Degree of protection	Conforming to IEC 60529	IP 65 and IP 67	
	Conforming to DIN 40050	IP 69K	
Storage temperature		°C	–40 to +85 (–40 to +185 °F)
Operating temperature		°C	–25 to +70 (–13 to +158 °F)
Materials	Case	Nickel-plated brass	
	Sensing face	PPS	
	Cable	PvR 2 x 0.34 mm <sup>2</sup> (22 AWG)	
Vibration resistance	To IEC 60068-2-6	25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)	
Shock resistance	To IEC 60068-2-27	50 gn, duration 11 ms	
Output state indication		Yellow LED: annular on pre-cabled version Yellow LED with 4 viewing ports at 90° on connector version	
Rated supply voltage		V	≈ 24–240 (~ 50/60 hZ)
Voltage limits (including ripple)		V	≈ 20–264
Switching capacity	XS612B1M●●●	mA	5–200 (2)
	XS618B1M●●●, XS630B1M●●●	mA	~ 5–300 or ~ 5–200 (1)
Voltage drop, closed state		V	≤ 5.5
Current consumption, no-load		mA	≤ 0.8
Maximum switching frequency (a.c./d.c. supply)	Ø 12	Hz	~ 1000 / ~ 25
	Ø 18	Hz	~ 1000 / ~ 25
	Ø 30	Hz	~ 500 / ~ 25
Delays	First-up	ms	≤ 25 for Ø 18 and Ø 30 sensors; ≤ 20 for Ø 12 sensors
	Response	ms	≤ 0.5
	Recovery	ms	≤ 0.2 for Ø 12 sensors; ≤ 0.5 for Ø 18 sensors; ≤ 2 for Ø 30 sensors

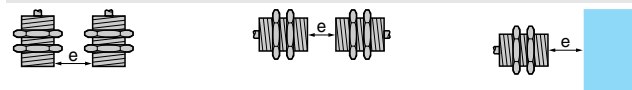
(1) A 0.4 A fast-acting fuse must be connected in series with the load.

### Wiring diagrams

<b>Connector (1)</b> 1/2"-20UNF 	<b>Pre-cabled</b> BU: Blue BN: Brown	<b>2-wire ~ or ---</b> <b>NO or NC output</b> 	<small>± : on connector models only</small>
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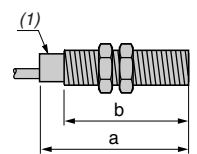
### Setup

#### Minimum mounting distances (mm)



Sensors	Side by side	Face to face	Facing a metal object
Ø 12	e ≥ 8	e ≥ 50	e ≥ 12
Ø 18	e ≥ 16	e ≥ 100	e ≥ 25
Ø 30	e ≥ 30	e ≥ 180	e ≥ 45

### Dimensions (mm)



(1) LED

Sensors	Pre-cabled (mm)		Connector (mm)	
	a	b	a	b
Ø 12 XS612B1M●	53	42	62	42
Ø 18 XS618B1M●	62	52	73	52
Ø 30 XS630B1M●	62	52	73	52