

Inductive proximity sensors

XS range, Application

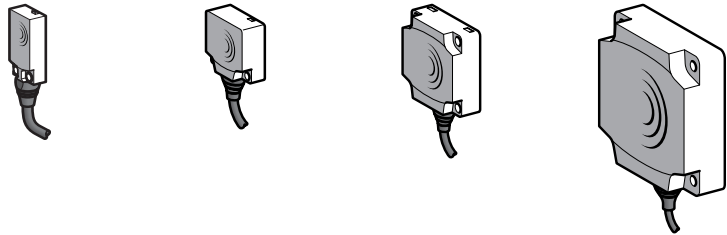
Sensors with analogue output signal 4...20 mA

For position, displacement and deformation control/monitoring

Flush mountable in metal



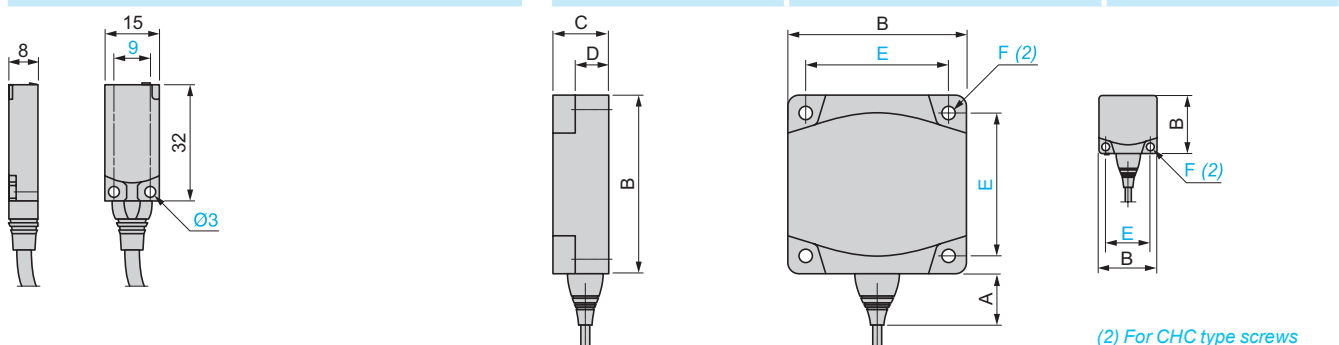
PBT case



Nominal sensing distance (Sn)		5 mm	10 mm	15 mm	40 mm
References					
2-wire $\overline{\text{---}}$	Pre-cabled (L = 2 m) (1)	XS9F111A2L2	XS9E111A2L2	XS9C111A2L2	XS9D111A2L2
4...20 mA	Connector	XS9F111A2L01M8	XS9E111A2L01M12	XS9C111A2L01M12	XS9D111A2M12
Weight (kg)	Pre-cabled (L = 2 m)	0.060	0.075	0.095	0.340
	Connector	0.040	0.055	0.075	0.320

Characteristics					
Product certifications		UL, CSA, CE	UL, CSA, CE, ECOLAB		
Connection	Pre-cabled	PvR 3 x 0.34 mm ² , length 2 m for XS9●111A●L2			
	Connector	0.15 m flying lead with M8 connector	0.15 m flying lead with M12 connector		M12
Operating zone		1...5 mm	1...10 mm	2...15 mm	5...40 mm
Degree of protection Conforming to IEC 60529	Pre-cabled	IP 68	IP 68, double insulation \square		
	Connector	IP 67	IP 67, double insulation \square		
Storage temperature		- 40...+ 85 °C			
Operating temperature		- 25...+ 60 °C		- 25...+ 70 °C	
Materials		PBT case			
Vibration resistance	Conforming to IEC 60068-2-6	25 gn, amplitude \pm 2 mm (f = 10 to 55 Hz)			
Shock resistance	Conforming to IEC 60068-2-27	50 gn, duration 11 ms			
Output state indication		No			
Rated supply voltage		$\overline{\text{---}}$ 12...24 V			
Voltage limits (including ripple)		$\overline{\text{---}}$ 10...36 V			
Repeat accuracy		\pm 3 %			
Linearity error		\pm 2 mA			
Current consumption, no-load		\leq 4 mA with overload and short-circuit protection			
Maximum operating frequency		2000 Hz	1000 Hz	100 Hz	
Output current drift		\leq 10 % (throughout the operating temperature range)			

Dimensions



Type	A (L2)	A (M12)	B	C	D	E	F
XS9E	14	–	26	13	8.8	20	3.5
XS9C	14	–	40	15	9.8	33	4.5
XS9D	23	14	80	26	16	65	5.5

Setting-up (Minimum mounting distances (mm))

Type	Side by side	Face to face	Facing a metal object
XS9F	$e \geq 15$	$e \geq 36$	$e \geq 15$
XS9E	$e \geq 30$	$e \geq 72$	$e \geq 30$
XS9C	$e \geq 45$	$e \geq 110$	$e \geq 45$
XS9D	$e \geq 120$	$e \geq 300$	$e \geq 120$

(1) For a 5 m long cable replace L2 by L5; for a 10 m long cable replace L2 by L10.
Example: XS9F111A2L2 becomes XS9F111A2L5 with a 5 m long cable.