

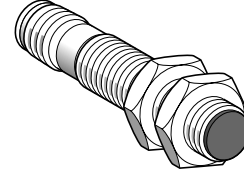
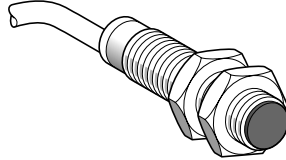
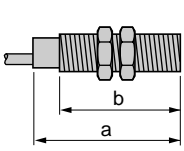
Inductive proximity sensors

Cylindrical type, M12 x 1 threaded
Plastic case, form A
a.c. or d.c. supply

Accessories :
page 3/0

References, characteristics, dimensions, schemes

Flush mountable in metal



Lengths (mm) :
a = Overall
b = Threaded section

a = 50
b = 42

a = 61
b = 42

AC/DC

AC/DC

Nominal sensing distance (S_n)

2 mm

2 mm

References

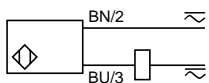
2-wire ~ or ---	NO	XS3-P12MA230	XS3-P12MA230K
	NC	XS3-P12MB230	XS3-P12MB230K
2-wire ~	NO	–	–
	NC	–	–
Weight (kg)		0.065	0.030

Characteristics

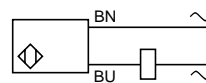
Connection	Pre-cabled, 2 x 0.34 mm², length 2 m (1)	Connector (types 13 and 14) (2)
Degree of protection	IP 67	Depending on connector (see page 3/5)
Operating zone	0...1.6 mm	
Repeat accuracy	3 % of S _r	
Differential travel	1...15 % of S _r	
Operating temperature	- 25...+ 80 °C	
Output state indication	LED, annular	
Rated supply voltage	~ 24...240 V (50/60 Hz) or --- 24...210 V	
Voltage limits (including ripple)	~ or --- 20...264 V	
Switching capacity	5...200 mA (3)	
Voltage drop, closed state	≤ 5.5 V	
Residual current, open state	≤ 0.8 mA / 24 V or ≤ 1.5 mA / 120 V	
Current consumption, no-load	–	
Maximum switching frequency	(~) 25 Hz or (---) 400 Hz	
Delays	first-up	≤ 40 ms
	response	≤ 1 ms
	recovery	≤ 2 ms

Wiring schemes

2-wire ~ or ---, NO or NC output
XS3/XS4-P12●●230/230K



2-wire ~, NO or NC output
XS4-P12F●260



(1) Sensors pre-cabled with other cable lengths :

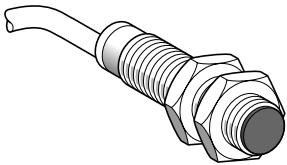
Length of cable	Suffix to be added to references stated above for 2 m pre-cabled sensors	Weight increase
5 m	L1	0.090 kg
10 m	L2	0.240 kg

Example : sensor **XS3-P12MA230** with 5 m cable becomes **XS3-P12MA230L1**

(2) The type numbers refer to suitable female extension cables, see page 3/5.

(3) These sensors do not incorporate overload or short-circuit protection and therefore, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load. See page 3/0.

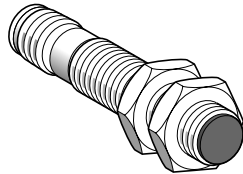
Non flush mountable in metal



a = 50
b = 42

AC/DC

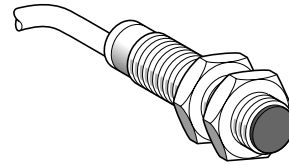
4 mm



a = 61
b = 42

AC/DC

4 mm



a = 50
b = 42

AC

4 mm

XS4-P12MA230	XS4-P12MA230K	–
XS4-P12MB230	XS4-P12MB230K	–
–	–	XS4-P12FA260
–	–	XS4-P12FB260
0.065	0.030	0.065

Pre-cabled, 2 x 0.34 mm ² , length 2 m (1)	Connector (types 13 and 14) (2)	Pre-cabled, 2 x 0.34 mm ² , length 2 m (1)
IP 68	Depending on connector (see page 3/5)	IP 68
0...3.2 mm		0...3.2 mm
3 % of Sr		3 % of Sr
1...15 % of Sr		1...15 % of Sr
- 25... + 80 °C		- 25... + 80 °C
LED, annular		LED, annular
~ 24...240 V (50/60 Hz) or = 24 ...210 V		~ 24...240 V (50/60 Hz)
~ or = 20...264 V		20...264 V
5...200 mA (3)		5...200 mA (3) (2 A inrush)
≤ 5.5 V		≤ 7 V
≤ 0.8 mA / 24 V or ≤ 1.5 mA / 120 V		≤ 1.5 mA
–		–
(~) 25 Hz or (=) 300 Hz		25 Hz
≤ 40 ms		≤ 40 ms
≤ 1 ms		≤ 10 ms
≤ 2 ms		≤ 15 ms

Setting-up

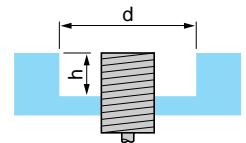
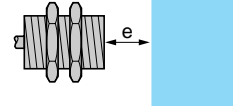
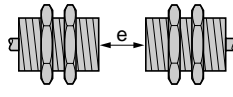
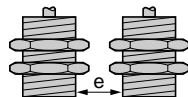
Minimum mounting distances (mm)

Side by side

Face to face

Facing a metal object

Mounted in a metal support



XS3 flush mountable in metal	e ≥ 4	e ≥ 24	e ≥ 6	d ≥ 12, h ≥ 0
XS4 non flush mountable in metal	e ≥ 16	e ≥ 48	e ≥ 12	d ≥ 36, h ≥ 8
Fixing nut tightening torque :	< 2 N.m			

Other versions

Inductive proximity sensors specifically designed for other ambient operating temperatures. Please consult your local Customer support centre.