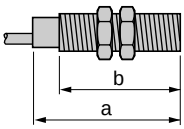
Inductive proximity sensors

Cylindrical type, M30 x 1.5 threaded
Plastic case, form A
a.c. or d.c. supply

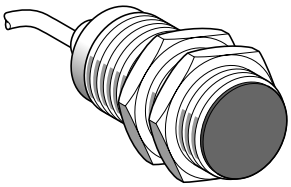
Accessories :
page 3/0

References, characteristics, dimensions, schemes

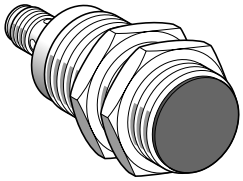
Flush mountable in metal



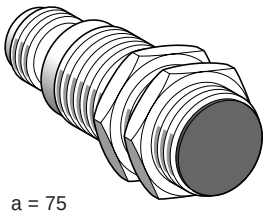
Lengths (mm) :
a = Overall
b = Threaded section



a = 60
b = 51.5



a = 70
b = 51.5



a = 75
b = 54

		AC/DC	AC/DC	AC/DC
Nominal sensing distance (Sn)		**10 mm**	**10 mm**	**10 mm**

References

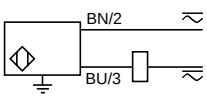
2-wire ∿ or ⎓	NO	**XS3-P30MA230**	**XS3-P30MA230K**	**XS3-P30MA230A**
	NC	**XS3-P30MB230**	**XS3-P30MB230K**	**XS3-P30MB230A**
2-wire ∿	NO	–	–	–
	NC	–	–	–
Weight (kg)		0.140	0.080	0.085

Characteristics

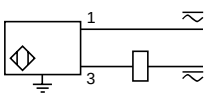
Connection		**Pre-cabled, 2 x 0.5 mm², L = 2 m** (1)	**Connector (types 13 and 14)** (2)	**Connector (type 18)** (2)
Degree of protection		IP 68	Depending on connector (see pages 3/5 and 3/6)	
Operating zone		**0…8 mm**		
Repeat accuracy		3 % of Sr		
Differential travel		1…15 % of Sr		
Operating temperature		- 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…300 mA or (⎓) 5…200 mA** (3)		
Voltage drop, closed state		≤ 5.5 V		
Residual current, open state		≤ 0.8 mA / 24 V, ≤ 1.5 mA / 120 V		
Current consumption, no-load		–		
Maximum switching frequency		(∿) 25 Hz or (⎓) 400 Hz		
Delays	first-up	≤ 40 ms		
	response	≤ 2 ms		
	recovery	≤ 5 ms		

Wiring schemes

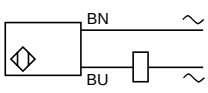
2-wire ∿ or ⎓, NO or NC output
XS3/XS4-P30M●230/230K



XS3/XS4-P30M●230A



2-wire ∿, NO or NC output
XS4-P30F●260



⏚ For connector version sensors

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

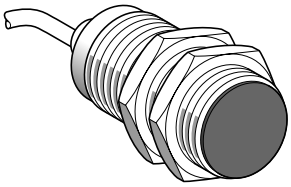
Length of cable	Suffix to be added to references stated above for 2 m pre-cabled sensors	Weight increase
5 m	**L1**	0.120 kg
10 m	**L2**	0.320 kg

Example : sensor **XS3-P30MA230** with 5 m cable becomes **XS3-P30MA230L1**

(2) The type numbers refer to suitable female extension cables, see pages 3/5 and 3/6.

(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.

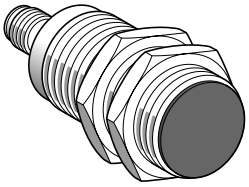
Non flush mountable in metal



a = 60
b = 51.5

AC/DC

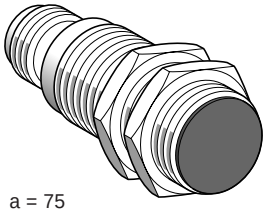
15 mm



a = 70
b = 51.5

AC/DC

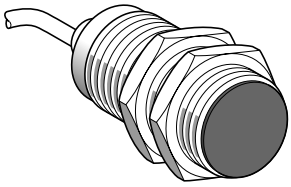
15 mm



a = 75
b = 54

AC/DC

15 mm



a = 60
b = 51.5

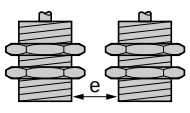
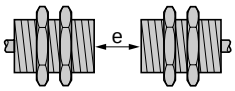
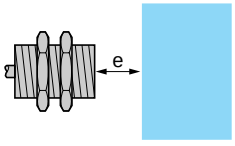
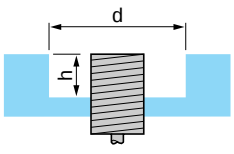
AC

15 mm

XS4-P30MA230	**XS4-P30MA230K**	**XS4-P30MA230A**	**–**
XS4-P30MB230	**XS4-P30MB230K**	**XS4-P30MB230A**	**–**
–	**–**	**–**	**XS4-P30FA260**
–	**–**	**–**	**XS4-P30FB260**
0.140	0.080	0.085	0.140

Pre-cabled, 2 x 0.5 mm², L = 2 m (1)	**Connector (types 13 and 14)** (2)	**Connector (type 18)** (2)	**Pre-cabled, 2 x 0.5 mm², L = 2 m** (1)
IP 68	Depending on connector (see pages 3/5 and 3/6)		IP 68
0…12 mm			**0…12 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… 300 mA or (⎓) 5…200 mA (3)			**5… 300 mA** (3) **(2 A inrush)**
≤ 5.5 V			≤ 4.5 V
≤ 0.8 mA / 24 V, ≤ 1.5 mA / 120 V			≤ 1.5 mA
–			–
(∿) 25 Hz or (⎓) 75 Hz			25 Hz
≤ 40 ms			≤ 40 ms
≤ 2 ms			≤ 10 ms
≤ 10 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 ≥ 20	e ≥ 120	e ≥ 30	d ≥ 30, h ≥ 0
XS4 non flush mountable in metal	e ≥ 60	e ≥ 180	e ≥ 45	d ≥ 90, h ≥ 30
Fixing nut tightening torque :	< 20 N.m			

Other versions

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