

Inductive proximity sensors

Cylindrical type, M18 x 1 threaded
Metal case (brass or stainless steel), form A
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

	Brass case	Stainless steel case	Brass case
Nominal sensing distance (Sn)	5 mm	5 mm	5 mm

References

3-wire ---	PNP	NO	XS1-M18PA370	XS1-M18PA371	–
		NC	XS1-M18PB370	–	–
	NPN	NO	XS1-M18NA370	XS1-M18NA371	–
		NC	XS1-M18NB370	–	–
4-wire --- universal model	PNP/NPN programmable	NO/NC	–	–	XS1-M18KP340
Weight (kg)			0.120	0.120	0.120

Characteristics

Connection	Pre-cabled, 3 x 0.34 mm ² , length 2 m (1)	
Degree of protection	IP 68	
Operating zone	0...4 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	--- 12...48 V	--- 12...24 V
Voltage limits (including ripple)	--- 10...58 V (3)	--- 10...38 V (4)
Switching capacity	0...200 mA with overload and short-circuit protection	
Voltage drop, closed state	≤ 2 V	≤ 2.6 V
Residual current, open state	–	
Current consumption, no-load	≤ 10 mA	
Maximum switching frequency	2000 Hz	
Delays	First-up : ≤ 5 ms ; response : ≤ 0.15 ms ; recovery : ≤ 0.35 ms	

Wiring schemes

3-wire ---, NO or NC output
XS1-M18●●370/371/370D



4-wire --- programmable, NO or NC output
XS1-M18KP340/340D



Note : for **XS1-M18●●370A** sensors, NO or NC output on terminal 2

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

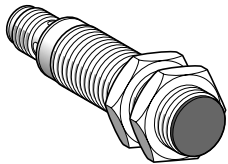
Length of cable	Suffix to be added to references stated above for 2 m pre-cabled sensors	Weight increase
5 m	L1	0.120 kg
10 m	L2	0.320 kg

Example : sensor **XS1-M18PA370** with 5 m cable becomes **XS1-M18PA370L1**

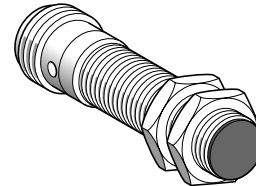
(2) The type numbers refer to suitable female connectors and extension cables, see pages 3/4 to 3/6.

(3) Can be supplied with rectified ~ 24 V.

(4) ~ 24 V rectified and filtered.



a = 70
b = 51.5



a = 75
b = 55

Brass case

Brass case

Brass case

5 mm

5 mm

5 mm

XS1-M18PA370D	–	XS1-M18PA370A
XS1-M18PB370D	–	–
XS1-M18NA370D	–	XS1-M18NA370A
XS1-M18NB370D	–	–
–	XS1-M18KP340D	–
0.060	0.060	0.065

Connector (types 9, 10, 15, 16) (2)		Connector (type 17) (2)
Depending on connector (see pages 3/4 to 3/6)		
0...4 mm		
3 % of Sr		
1...15 % of Sr		
- 25...+ 80 °C		
LED, 4 viewing ports at 90°		LED, side mounted
~ 12...48 V	~ 12...24 V	~ 12...48 V
~ 10...58 V (3)	~ 10...38 V (4)	~ 10...58 V (3)
0...200 mA with overload and short-circuit protection		
≤ 2 V	≤ 2.6 V	≤ 2 V
–		
≤ 10 mA		
2000 Hz		
First-up : ≤ 5 ms ; response : ≤ 0.15 ms ; recovery : ≤ 0.35 ms		

Setting-up

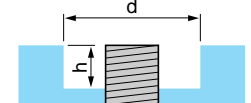
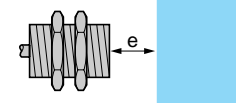
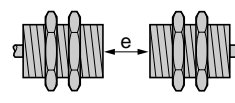
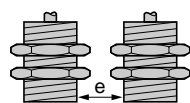
Minimum mounting distances (mm)

Side by side

Face to face

Facing a metal object

Mounted in a metal support



XS1 flush mountable in metal

$e \geq 10$

$e \geq 60$

$e \geq 15$

$d \geq 18, h \geq 0$

Fixing nut tightening torque : < 35 N.m (brass case), < 50 N.m (stainless steel case)

Other versions

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