Cylindrical type, \emptyset 4 mm plain or M5 x 0.5 threaded Metal case (stainless steel), short d.c. supply

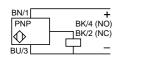
Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) :				
a = Overall b = Threaded or plain section	a = 29 b = 29	a = 41 b = 24		
Nominal sensing distance (Sn)	0.8 mm	0.8 mm		
References				
3-wire PNP NO	XS1-L04PA311	XS1-L04PA311S		
NPN NO	XS1-L04NA311	XS1-L04NA311S		
Weight (kg)	0.025	0.010		
Characteristics				
Connection	Pre-cabled, 3 x 0.11 mm ² , length 2 m (1)	Connector (types 1 to 8) (2)		
Degree of protection	IP 67	Depending on connector (see pages 3/58 and 3/59)		
Operating temperature	- 25+ 70 °C			
Output state indication	LED, side mounted			
Voltage limits (including ripple)	530 V			
Switching capacity	0100 mA with overload and short-circuit pro	otection		
Voltage drop, closed state	≤ 2 V			
Current consumption, no-load	≤ 10 mA	≤ 10 mA		
Maximum switching frequency	5000 Hz			
Wiring schemes				

3-wire ---, NO output



BN/1	+
NPN ↔	BK/4 (NO) BK/2 (NC)
BU/3	

(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	0.030 kg
10 m	L2	0.080 kg
Example : sensor XS1-L04PA311 with 5 m cable	becomes XS1-L04PA311L1	

(2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

a = 29 b = 24 a = 41 b = 24	

0.8 mm	0.8 mm

XS1-N05PA311	XS1-N05PA311S
XS1-N05NA311	XS1-N05NA311S
0.030	0.015

Pre-cabled, 3 x 0.11 mm², length 2 m (1)	Connector (types 1 to 8) (2)
IP 67	Depending on connector (see pages 3/58 and 3/59)
- 25+ 70 °C	
LED, side mounted	
530 V	
0100 mA with overload and short-circuit protection	
≤ 2 V	
≤ 10 mA	
5000 Hz	

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Cylindrical type, Ø 6.5 mm plain Metal case (brass or stainless steel), short d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall	a = 33 (XS1-L06●C410	: a = 50)	a = 42	
b = Plain section	b = 30 (XS1-L06•C410		b = 34	
c = For non flush mounting sensors	,	,		
-	Stainless steel case	Brass case	Stainless steel case	Brass case
		Increased range model	1	Increased range model
Nominal sensing distance (Sn)	1.5 mm	2.5 mm	1.5 mm	2.5 mm
References				

3-wire <u></u>	PNP	NO	XS1-L06PA340	XS1-L06PA349	XS1-L06PA340S	XS1-L06PA349S
	NPN	NO	XS1-L06NA340	XS1-L06NA349	XS1-L06NA340S	XS1-L06NA349S
4-wire <u></u>	PNP	NO + NC	XS1-L06PC410	_	_	_
(complementary outputs)	NPN	NO + NC	XS1-L06NC410	_	_	_
Weight (kg)			0.025	0.025	0.010	0.010

Characteristics

	Pre-cabled,				
Connection		$3 \times 0.11 \text{ mm}^2 \text{ or } 4 \times 0.08 \text{ mm}^2$, L = 2 m (1)		Connector (types 1 to 8) (2)	
		· · · · · · · · · · · · · · · · · · ·	Depending on con	nector	
Degree of protection	IP 67		(see pages 3/58 a	ind 3/59)	
Operating temperature	- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C	- 25+ 50 °C	
Output state indication	LED, annular		LED, 4 viewing po	orts at 90°	
Voltage limits (including ripple)	<u> </u>	\pm 1038 V (\sim 24 V rectified and filtered)			
Switching capacity	0200 mA with	0200 mA with overload and short-circuit protection			
Voltage drop, closed state	≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V	
Current consumption, no-load	≤ 10 mA	≤ 10 mA	≤ 10 mA	≤ 10 mA	
Maximum switching frequency	5000 Hz	350 Hz	5000 Hz	350 Hz	
Wiring schemes					
2 using NO autout			ter est		

3-wire, NO output XS1/XS2-L06ee340/340S/340)D/349/349S/349D	4-wire, NO + NC output X\$1-L06ee410	
BN/1 + PNP BK/4 (NO) → BK/2 (NC) BU/3 -	BN/1 + NPN BK/4 (NO) ₩/3 BK/2 (NC)	BN/1 BK/4 (NO) + PNP WH/2 (NC) BU/3	BN/1 NPN BK/4 (NO) WH/2 (NC) BU/3
Note : for XSe-L06e e34eS se	ensors, NO or NC output on terminal 4		
(1) Sensors pre-cabled with of	ther cable lengths :		
Length of cable	Suffix to be added to	references stated above for 2 m pre-cabled sensors	Weight increase
5 m	L1		0.030 kg
10 m	12		0.080 kg

Example : sensor XS1-L06PA340 with 5 m cable becomes XS1-L06PA340L1

(2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

Non flush mountable in metal

a = 45		a = 33	a = 42	a = 45
b = 24		b = 27	b = 31	b = 21
		c = 3	c = 3	c = 3
Stainless steel case	Brass case	Stainless steel case	Stainless steel case	Stainless steel case
	Increased range model			
1.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm

XS1-L06PA340D	XS1-L06PA349D	XS2-L06PA340	XS2-L06PA340S	XS2-L06PA340D
XS1-L06NA340D	XS1-L06NA349D	XS2-L06NA340	XS2-L06NA340S	XS2-L06NA340D
_	_	_	_	_
_	_	_	_	_
0.015	0.015	0.025	0.010	0.015

Connector (types 9, 10, 11/12, 15, 16) (2)	Connector (types 9, 10, 11, 12, 15, 16) (2)	Pre-cabled, 3 x 0.11 or 4 x 0.08 mm ² , L = 2 m (1)	Connector (types 1 to 8) (2)	Connector (types 9, 10, 11/12, 15, 16) (2)
Depending on connector (see pages 3/58 and 3/59)		IP 67	Depending on connector (see	
- 25+ 70 °C - 25+ 50 °C		- 25+ 70 °C		
LED, 4 viewing ports at 90°		LED, annular	LED, 4 viewing ports at 90°	
<u></u> 1038 V (~ 24 V rectified	d and filtered)			
0200 mA with overload a	nd short-circuit protection			
≤ 2 V	≤ 2.6 V	≤2 V		
≤ 10 mA	≤ 10 mA	≤ 10 mA		
5000 Hz	350 Hz	5000 Hz		

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Cylindrical type, M8 x 1 threaded Metal case (brass), short d.c. supply

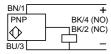
Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

	¢					
Lengths (mm) : a = Overall b = Threaded sec c = For non flush		ors	a = 33 b = 26		a = 42 b = 26	
Nominal sensing	distance (Sn)		1.5 mm	Increased range model 2.5 mm	1.5 mm	Increased range model 2.5 mm
References						
3-wire	PNP	NO	XS1-N08PA340	XS1-N08PA349	XS1-N08PA340S	XS1-N08PA349S
	NPN	NO	XS1-N08NA340	XS1-N08NA349	XS1-N08NA340S	XS1-N08NA349S
Weight (kg)			0.035	0.035	0.015	0.015
Characterist	ics					
Connection			Pre-cabled, 3 x 0.11 mm ² or 4 x 0.02	8 mm², L = 2 m (1)	Connector (types 1 to	
Degree of protec	tion		IP 67		Depending on connecto (see pages 3/58 and 3/5	
Operating tempe	erature		- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C	- 25+ 50 °C
Output state indication		LED, annular LED, 4 viewing ports at 90°		90°		
Voltage limits (including ripple)		$=$ 1038 V (\sim 24 V rectified and filtered)				
Switching capacity		0200 mA with overload and short-circuit protection				
Voltage drop, clo	osed state		≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consum	ption, no-load		≤ 10 mA	≤ 10 mA	≤ 10 mA	≤ 10 mA
Maximum switch	ing frequency		5000 Hz	350 Hz	5000 Hz	350 Hz
Wiring schei	mes					

3-wire ---, NO output XS1/XS2-N08+340/340S/340D/349/349S/349D



BN/1	+
NPN	BK/4 (NO)
BU/3	BK/2 (NC)

Note : for XSe-N08ee34eS sensors, NO output on terminal 4

 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	0.030 kg	
10 m	L2	0.080 kg	

Example : sensor XS1-N08PA340 with 5 m cable becomes XS1-N08PA340L1 (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

Non flush mountable in metal

a = 45 b = 24		a = 33 b = 22 c = 4	a = 42 b = 23 c = 4	a = 45 b = 20 c = 4
1.5 mm	Increased range model 2.5 mm	2.5 mm	2.5 mm	2.5 mm

XS1	1-N08PA340D	XS1-N08PA349D	XS2-N08PA340	XS2-N08PA340S	XS2-N08PA340D
XS1	1-N08NA340D	XS1-N08NA349D	XS2-N08NA340	XS2-N08NA340S	XS2-N08NA340D
0.02	20	0.020	0.035	0.015	0.020

Connector	Connector	Pre-cabled, 3 x 0.11 or	Connector	Connector
(types 9, 10, 11/12, 15, 16) (2)	(types 9, 10, 11/12, 15, 16) (2)	4 x 0.08 mm ² , L = 2 m (1)	(types 1 to 8) (2)	(types 9, 10, 11/12, 15, 16) (2)
Depending on connector (see pages 3/58 and 3/59)		IP 67	Depending on connector (see p	pages 3/58 and 3/59)
- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C		
LED, 4 viewing ports at 90°		LED, annular	LED, 4 viewing ports at 90°	
$=$ 1038 V (\sim 24 V rectified and filtered)				
0200 mA with overload an	nd short-circuit protection			
≤ 2 V	≤ 2.6 V	≤ 2 V		
≤ 10 mA	≤ 10 mA	≤ 10 mA		
5000 Hz	350 Hz	800 Hz		

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Cylindrical type, M8 x 1 threaded Metal case (stainless steel), form A d.c. supply

Accessories: page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

						1
Lengths (mm) : a = Overall b = Threaded s			a = 50 b = 40		a = 61 b = 40	
Nominal sensi	ing distance (Sn)	1.5 mm		1.5 mm	
Reference					·	
3-wire	PNP	NO	XS1-M08PA370	-	XS1-M08PA370D	_
		NC	XS1-M08PB370	_	XS1-M08PB370D	_
	NPN	NO	XS1-M08NA370	_	XS1-M08NA370D	_
2-wire (non Supply to :	Terminals	3-4 NO	_	_	_	_
4-wire <u></u> (com outputs)	plementary PNP	NO + NC	_	XS1-M08PC410	_	XS1-M08PC410D
Weight (kg)			0.035	0.035	0.025	0.025
Characteri	stics					
Connection			Pre-cabled, 3 x 0.11 m	m², length 2 m (1)	Connector (types 9, 1	
Degree of pro	tection		IP 67		Depending on connec (see pages 3/58 and 3	
Operating tem	perature		- 25+ 80 °C			
Output state i	ndication		LED annular		LED, 4 viewing ports a	t 90°
Voltage limits	(including ripp	le)	1058 V	1038 V	1058 V	<u></u> 1038 V
Switching cap	acity		0200 mA with overlo	ad and short-circuit	protection	
Voltage drop,	closed state		≤ 2 V			
Current consu	umption, no-lo	bad	≤ 10 mA			
Maximum swit	tching freque	ncy	5000 Hz			
Wiring sch	iemes					
3-wire <u>—,</u> NO o XS1-M08●●370	0/370D		2-wire non polarised, I XS1-M08De210/210D/21		4-wire, NO + NC ou XS1-M08●●410/410D	utput
BN/1 PNP BU/3	+ BN/1 BK/4 (NO) NPN BK/2 (NC) BU/3	+ BK/4 (NO) BK/2 (NC)	BN/3 +/- BN/1 BU/4 -/+	BN/1 +/- → NC BU/2 -/+	BN/1 + PNP BK/4 (NO) + WH/2 (NC) BU/3 − −	BN/1 + NPN BK/4 (NO) WH/2 (NC) BU/3 −
Length of cable 5 m 10 m	9	L1 L2	e added to references state	d above for 2 m pre-ca	bled sensors	Weight increase 0.030 kg 0.080 kg

10 m L2 Example: sensor XS1-M08PA370 with 5 m cable becomes XS1-M08PA370L1 (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

a = 50 b = 40	a = 61 b = 40	a = 50 b = 40 Length of cable: 0.8 m

1.5 mm	1.5 mm	1.5 mm	
1.5 mm	n.o mm	1.0 mm	

_	-	-
_	-	-
_	-	-
XS1-M08DA210	XS1-M08DA210D	XS1-M08DA210LD
_	-	-

Pre-cabled, 2 x 0.11 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)	Connector (types 9, 10, 15, 16) or splitter boxes (2)		
IP 67	Dpg. on connector (see pages 3/58 and 3/59)			
- 25+ 80 °C				
LED, annular	LED, 4 viewing ports at 90°	LED, annular		
1058 V				
1,5100 mA with overload and short-circuit protection				
≤ 5.2 V				
_				
800 Hz				

Cylindrical type, M8 x 1 threaded Metal case (stainless steel), form A a.c. or d.c. supply

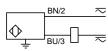
Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section c = For non flush mounting	sensors	a = 50 b = 40	
Nominal sensing distance	e (Sn)	1.5 mm	
References			
2-wire \sim or $=$	NO	XS1-M08MA230	
	NC	XS1-M08MB230	
Weight (kg)		0.035	
Characteristics			
Connection		Pre-cabled, 2 x 0.11 mm ² , length 2 m (1)	
Degree of protection		IP 67	
Operating temperature		- 25+ 80 °C	
Output state indication		LED, annular	
Voltage limits (including ripple)		\sim or <u></u> 20264 V	
Switching capacity		5100 mA (2)	
Voltage drop, closed state		≤5.5 V	
Current consumption, no-load		_	
Maximum switching frequency		(∼) 25 Hz or () 650 Hz	
Wiring schemes			
NO - NO			

2-wire \sim or <u>—</u>, NO or NC output



For connector version sensors

 Sensors pre-cabled with 	o 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	0.030 kg
10 m	L2	0.080 kg
Evenuela : conserved MOG	MA220 with 5 m apple becomes VC1 MORMA2201.1	

Example : sensor XS1-M08MA230 with 5 m cable becomes XS1-M08MA230L1 (2) 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.

Non flush mountable in metal



XS2-M08MA230	
XS2-M08MB230	
0.035	

Pre-cabled, 2 x 0.11 mm ² , length 2 m (1)
IP 67
- 25+ 80 °C
LED, annular
~ or == 20264 V
5100 mA (2)
≤ 5.5 V
_
(~) 25 Hz or () 400 Hz

Cylindrical type, M12 x 1 threaded Metal case (brass), short d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section c = For non flush mounting sensors	a = 33 b = 26		a = 45 b = 25		
Nominal sensing distance (Sn)	2 mm	Increased range mode 4 mm	2 mm	Increased range model 4 mm	
References					
3-wire PNP NO	XS1-N12PA340	XS1-N12PA349	XS1-N12PA340D	XS1-N12PA349D	
NPN NO	XS1-N12NA340	XS1-N12NA349	XS1-N12NA340D	XS1-N12NA349D	
4-wire (complementary outputs) PNP NO + NC	XS1-N12PC410	_	XS1-N12PC410D	_	
Weight (kg)	0.070	0.070	0.020	0.020	
Characteristics					
Connection	Pre-cabled, 3 x 0.34 mr length 2 m (1)	n² or 4 x 0.22 mm²,	Connector (types 9, 10, 15, 16) (2)		
Degree of protection	IP 67		Depending on connector (see pages 3/58 and 3/59)		
Operating temperature	- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C	- 25+ 50 °C	
Output state indication	LED, annular		LED, 4 viewing ports at	90°	
Voltage limits (including ripple)	1038 V (~ 24 V red	ctified and filtered)			
Switching capacity	0…200 mA with overlo	ad and short-circuit pro	tection		
Voltage drop, closed state	≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V	
Current consumption, no-load	≤ 10 mA				
Maximum switching frequency	5000 Hz	300 Hz	5000 Hz	300 Hz	
Wiring schemes					
3-wire, NO output 4-wire, NO + NC output XS1/XS2-N12ee340/340D/349/349D XS1-N12ee410/410D					
	+ BK/4 (NO) BK/2 (NC)		√/4 (NO) + +/2 (NC)	BN/1 + NPN BK/4 (NO) BU/3 WH/2 (NC) −	
(1) Sensors pre-cabled with other cable lengths : Length of cable Suffix to be a	added to references stated	above for 2 m pre-cabled	l sensors	Weight increase	
5 m L1 10 m L2				0.090 kg 0.240 kg	
Example : sensor XS1-N12PA340 with 5 m cable becomes XS1-N12PA340L1 (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.					

Non flush mountable in metal

a = 33 b = 21 c = 5	a = 45 b = 20 c = 5
4 mm	4 mm

XS2-N12PA340	XS2-N12PA340D
XS2-N12NA340	XS2-N12NA340D
-	-
0.070	0.020

Pre-cabled, 3 x 0.34 mm ² or 4 x 0.22 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)
IP 67	Depending on connector (see pages 3/58 and 3/59)
- 25+ 70 °C	
LED, annular	LED, 4 viewing ports at 90°
\pm 1038 V (\sim 24 V rectified and filtered)	
0200 mA with overload and short-circuit protection	
≤ 2 V	
≤ 10 mA	
5000 Hz	

Cylindrical type, M12 x 1 threaded Metal case (brass), form A d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

	c c)		
Lengths (mm) : a = Overall b = Threaded section c = For non flush m		ors	a = 50 b = 42	1	a = 61 b = 40	
Nominal sensing o	listance (Sn)		2 mm	2 mm	2 mm	2 mm
References						
3-wire	PNP	NO	XS1-M12PA370	_	XS1-M12PA370D	-
	NPN	NO	XS1-M12NA370	_	XS1-M12NA370D	_
4-wire universal model	PNP/NPN programm		-	XS1-M12KP340	-	XS1-M12KP340D
Weight (kg)			0.075	0.075	0.025	0.025
Characteristic	S					
Connection			Pre-cabled, 3 x 0.34 mr	n², length 2 m (1)	1	
Degree of protecti	on		IP 68 Depending on connector (see pages 3/58 and 3/59)			
Operating tempera	ture		- 25+ 80 °C			
Output state indic	ation		LED, annular		LED, 4 viewing ports at	90°
Voltage limits (inclu	ding ripple)		<u></u> 1058 V (3)	<u> </u>	<u></u> 1058 V (3)	<u></u> 1038 V (4)
Switching capacity	/		0200 mA with overloa	ad and short-circuit pro	tection	
Voltage drop, clos	ed state		≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consumpt	ion, no-load		≤ 10 mA			
Maximum switchir	g frequency		5000 Hz			
Wiring schem	es					
3-wire, NO output 4-wire programmable, NO or NC output XS1/XS2-M12ee370/370D XS1/XS2-M12KP340/340D						
ВU/3	$\begin{array}{c c} PNP & BK/4 (NO) \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $				NPN WH/2 BK/4	
(1) Sensors pre-cab Length of cable 5 m 10 m	oled with othe		added to references stated	above for 2 m pre-cable	d sensors	Weight increase 0.090 kg 0.240 kg
Example : sensor X	S1-M12PA37	0 with 5 m cable be	comes XS1-M12PA370L1 ctors and extension cables.	see pages 3/58 and 3/59	9.	0.270 Ng
(3) Can be supplied				,	-	

(3) Can be supplied with rectified ~ 24 V. (4) ~ 24 V rectified and filtered.

Telemecanique

Non flush mountable in metal

a = 50 b = 37		a = 61	
D = 37		b = 35	
c = 5		c = 5	
4 mm	4 mm	4 mm	4 mm

XS2-M12PA370 XS2-M12NA370		XS2-M12PA370D XS2-M12NA370D	_
-	XS2-M12KP340	-	XS2-M12KP340D
0.075	0.075	0.025	0.075

Pre-cabled, 3 x 0.34 mm², length 2 m (1)		Connector (types 9, 10, 15, 16) (2)		
IP 68		Depending on connector (see pages 3/58 and 3/59)		
- 25+ 80 °C				
LED, annular		LED, 4 viewing ports at 90°		
<u></u> 1058 V (3)	<u></u> 1038 V (4)	1038 V (4)		
0200 mA with overload and short	-circuit protection			
≤ 2 V ≤ 2.6 V ≤ 2.6 V				
≤ 10 mA				
5000 Hz				

Cylindrical type, M12 x 1 threaded Metal case (brass), form A d.c. supply (continued)

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section	a = 50 b = 42	a = 61 b = 40		
Nominal sensing distance (Sn)	2 mm	2 mm		
References				
2-wire (non polarised) Supply to : <u>Terminals 3-4 NO</u>	XS1-M12DA210	XS1-M12DA210D		
Terminals 1-2 NC	XS1-M12DB210	XS1-M12DB210D		
Weight (kg)	0.075	0.025		
Characteristics				
Connection	Pre-cabled, 2 x 0.34 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)		
Degree of protection	IP 68	Depending on connector (see pages 3/58 and 3/59)		
Operating temperature	- 25+ 80 °C			
Output state indication	LED, annular	LED, 4 viewing ports at 90°		
Voltage limits (including ripple)	1058 V			
Switching capacity	1.5100 mA with overload and short-circuit	protection		
Voltage drop, closed state	≤ 5.2 V			
Current consumption, no-load	-			
Maximum switching frequency	800 Hz			
Wiring schemes				
2-wire non polarised, NO or NC output XS1-M12DA210/DA210D	XS1-M12DB210/210D/2	0LD		
BN/3 +/- BN/1 +/- BU/4 -/+ BU/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 0.090 kg 10 m L2 0.240 kg Example : sensor XS1-M12DA210 with 5 m cable becomes XS1-M12DA210L1 0.240 kg				

Example : sensor XS1-M12DA210 with 5 m cable becomes XS1-M12DA210L1 (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

3

Cylindrical type, M12 x 1 threaded Metal case (brass), form A a.c. or d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal			Non flush mountable in metal
Lengths (mm) : a = Overall b = Threaded section c = For non flush mounting		a = 50 b = 42 AC/DC	a = 50 b = 37 c = 5 AC/DC
Nominal sensing distance	e (Sn)	2 mm	4 mm
References			
2-wire \sim or —	NO	XS1-M12MA230	XS2-M12MA230
2-wire \sim or (protected against short-circuits)	NC NO NC	XS1-M12MB230 XS1-M12MA250 XS1-M12MB250	XS2-M12MB230 XS2-M12MA250 XS2-M12MB250
Weight (kg)	NC	0.075	0.075
Characteristics			
Connection		Pre-cabled, 2 x 0.34 mm ² , L = 2 m (1)	
Degree of protection		IP 68	
Operating temperature		- 25+ 80 °C	
Output state indication		LED, annular	
Voltage limits (including ripp	ole)	∼ or <u></u> 20264 V	
Switching capacity		5200 mA (3)	
Voltage drop, closed state	e	≤ 5.5 V	
Current consumption, no-	-load	-	
Maximum switching frequ	iency	(∼) 25 Hz or (<u></u>) 350 Hz	
Wiring schemes			
2-wire ∼ or —, NO or NC o XS1/XS2-M12●●230/250	putput		

For connector version sensors

(1) Sensors pre-cabled with other cable lengths	S:			
Length of cable	Suffix to be added to references stated above for 2 m pre-cabled sensors	Weight increase		
5 m	L1	0.075 kg		
10 m	L2	0.200 kg		
Example : sensor XS1-M12MA230 with 5 m cable becomes XS1-M12MA230L1				

(2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

(3) For the sensors not incorporating overload or short-circuit protection, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load.

Telemecanique

Cylindrical type, M18 x 1 threaded Metal case (brass), short d.c. supply

Accessories : page 3/59

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References, characteristics, dimensions, schemes

Flush mountable in metal

	■ ■ ■					
Lengths (mm) : a = Overall b = Threaded section c = For non flush m		s	a = 33.5 b = 26		a = 45 b = 26	
Nominal sensing of	distance (Sn)		5 mm	Increased range model 10 mm	5 mm	Increased range model 10 mm
References						
3-wire	PNP	NO	XS1-N18PA340	XS1-N18PA349	XS1-N18PA340D	XS1-N18PA349D
	NPN	NO	XS1-N18NA340	XS1-N18NA349	XS1-N18NA340D	XS1-N18NA349D
4-wire	PNP	NO + NC	XS1-N18PC410	-	XS1-N18PC410D	_
(complementary outputs)	NPN	NO + NC	XS1-N18NC410	-	XS1-N18NC410D	-
Weight (kg)			0.100	0.100	0.040	0.040
Characteristic	S					
Connection			Pre-cabled, 3 x 0.34 mm ² or 4 x 0.34 mm ² , length 2 m (1)		Connector (types 9, 10, 15, 16) (2) Depending on connector	
Degree of protecti	on		IP 67	1	(see pages 3/58 and 3/59)	
Operating tempera	ature		- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C	- 25+ 50 °C
Output state indic	ation		LED, annular		LED, 4 viewing ports at 9	90°
Voltage limits (inclu	iding ripple)		<u></u> 1038 V (~ 24 V ree	ctified and filtered)		
Switching capacity	у		0200 mA with overloa	ad and short-circuit prot	ection	
Voltage drop, clos	ed state		≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consumpt	tion, no-load		≤ 10 mA			
Maximum switchir	ng frequency		2000 Hz	60 Hz	2000 Hz	60 Hz
Wiring schem	ies					
3-wire, NO output 4-wire, NO + NC output XS1/XS2-N18••340/340D/349/349D XS1/XS2-N18••410/410D						
] + 3K/4 (NO) 3K/2 (NC) 		4 (NO) + /2 (NC) -	BN/1 + NPN BK/4 (NO) BU/3 WH/2 (NC) −	
(1) Sensors pre-cat Length of cable	oled with other		added to references stated	above for 2 m pre-cabled	sensors	Weight increase
5 m L1 0.120 kg						
Example : sensor X		with 5 m cable bed	comes XS1-N18PA340L1 ctors and extension cables,	, see pages 3/58 and 3/59		

Non flush mountable in metal

a = 33.5	a = 45
b = 18	b = 18
a = 33.5 b = 18 c = 8	c = 8
8 mm	8 mm

XS2-N18PA340	XS2-N18PA340D
XS2-N18NA340	XS2-N18NA340D
-	-
-	-
0.100	0.030

Pre-cabled, 3 x 0.34 mm ² or 4 x 0.34 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)
IP 67	Depending on connector (see pages 3/58 and 3/59)
- 25+ 70 °C	
LED, annular	LED, 4 viewing ports at 90°
= 1038 V (\sim 24 V rectified and filtered)	
0200 mA with overload and short-circuit protection	
≤ 2 V	
≤ 10 mA	
2000 Hz	

Cylindrical type, M18 x 1 threaded Metal case (brass), form A d.c. supply

Accessories : page 3/59

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References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section		a = 60 b = 51.5				
Nominal sensing di	stance (Sn)		5 mm	5 mm	5 mm	5 mm
References						
3-wire <u></u>	PNP	NO	XS1-M18PA370	_	XS1-M18PA370D	_
	NPN	NO	XS1-M18NA370	_	XS1-M18NA370D	_
4-wire <u></u> universal model	PNP/NPN programm	NO/NC able	_	XS1-M18KP340	-	XS1-M18KP340D
Weight (kg)			0.120	0.120	0.060	0.060
Characteristics	5					
Connection	Connection		Pre-cabled, 3 x 0.34 mm ² , length 2 m (1)		Connector (types 9, 10, 15, 16) (2) Depending on connector	
Degree of protection			IP 68 (see pages 3/58 and 3/59)			3/59)
Operating temperat			- 25+ 80 °C			
Output state indicat			LED, annular		LED, 4 viewing ports a	
Voltage limits (includ	ing ripple)		<u></u> 1058 V (3)	1038 V (4)	<u></u> 1058 V (3)	<u> </u>
Switching capacity	• • •			rload and short-circuit pro		10.01/
Voltage drop, close			≤2 V	≤ 2.6 V	≤2 V	≤ 2.6 V
Current consumptic			≤ 10 mA 2000 Hz			
			2000 H2			
3-wire, NO output	Wiring schemes 3-wire, NO output XS1-M18ee370/370D 4-wire programmable, NO or NC output XS1-M18KP340/340D					
PNP BK/4 (N	BN/1 (NO), BU/3 (NC) BK/4 (NO) BK/2 (NC) BU/3 BK/2 (NC) BU/3 BK/2 (NC) BU/3 BK/2 (NC) BU/3 BK/2 (NC) BU/3 (NO), BN/1 (NC)			4 4 -	BN/1 (NO), BU/3 (NC) + NPN WH/2 BK/4 BU/3 (NO), BN/1 (NC)	
(1) Sensors pre-cabled with other cable lengths : Ueight increase 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 0.320 kg (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59. (3) Can be supplied with rectified ~ 24 V.						

(3) Can be supplied with rectified \sim 24 V. (4) \sim 24 V rectified and filtered.

Cylindrical type, M18 x 1 threaded Metal case (brass), form A d.c. supply (continued)

Accessories : page 3/59

References, characteristics, dimensions, schemes

Non flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section c = For non flush mou		5	a = 60 b = 43.5 c = 8			
Nominal sensing dis	stance (Sn)		8 mm		8 mm	
References						
3-wire <u></u>	PNP N	NO	XS2-M18PA370		_	
	NPN M	NO	XS2-M18NA370		_	
4-wire <u></u> universal model	PNP/NPN N programma		-		XS2-M18KP340	
Weight (kg)			0.120		0.120	
Characteristics						
Connection			Pre-cabled, 3 x 0.34 mm ² , length 2 m (1)			
Degree of protection	<u> </u>		IP 68			
Operating temperati	ıre		- 25+ 80 °C			
Output state indicat	ion		LED, annular			
Voltage limits (includi	ng ripple)		<u></u> 1058 V (2)		<u> </u>	
Switching capacity			0200 mA with overload and short-circuit protection			
Voltage drop, closed	d state		≤ 2 V		≤ 2.6 V	
Current consumptio	n, no-load		≤ 10 mA			
Maximum switching	frequency		2000 Hz			
Wiring scheme	S					
	+	BN/1	→ + BK/4 (NO) BK/2 (NC)	XS2-M18 BN/1 (NO), E	38U/3 (NC) NH/2 + 3K/4 -	C output BN/1 (NO), BU/3 (NC) NPN WH/2 BK/4 BU/3 (NO), BN/1 (NC)
(1) Sensors pre-cable Length of cable 5 m 10 m Example : sensor XS (2) Can be supplied w (3) \sim 24 V rectified a	2-M18PA370 vith rectified ~	Suffix to be a L1 L2 with 5 m cable bee	added to references stated above for 2 m pr	re-cabled	sensors	Weight increase 0.120 kg 0.320 kg

(3) \sim 24 V rectified and filtered.

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Telemecanique

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Cylindrical type, M18 x 1 threaded Metal case (brass), form A d.c. supply (continued)

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall	a = 50	a = 60			
b = Threaded section	b = 42	b = 42			
Nominal sensing distance (Sn)	5 mm	5 mm			
References					
2-wire (non polarised) Supply to : <u>Terminals 3-4 NO</u>	XS1-M18DA210	XS1-M18DA210D			
Terminals 1-2 NC	XS1-M18DB210	-			
Weight (kg)	0.120	0.060			
Characteristics					
Connection	Pre-cabled, 2 x 0.5 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)			
Degree of protection	IP 68	Depending. on connector (see pages 3/58 and 3/59)			
Operating temperature	- 25+ 80 °C				
Output state indication	LED, annular	LED, 4 viewing ports at 90°			
Voltage limits (including ripple)	1058 V				
Switching capacity	1.5100 mA with overload and short-circuit pr	rotection			
Voltage drop, closed state	≤ 5.2 V				
Current consumption, no-load	-				
Maximum switching frequency	350 Hz				
Wiring schemes					
2-wire, non polarised, NO or NC output XS1-M18DA210/DA210D XS1-M18DB210					
BN/3 +/- BN/1 BN/4 -/+	BN/1 +/- BU/2 -/+				
(1) Sensors pre-cabled with other cable lengths :	(1) Sensors pre-cabled with other cable lengths :				

(1) Sensors pre-cabled with		
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-M18DA210 with 5 m cable becomes XS1-M18DA210L1 (2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

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Cylindrical type, M18 x 1 threaded Metal case (brass), form A a.c. or d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) :		
a = Overall b = Threaded section		a = 60 b = 51.5
		AC/DC
Nominal sensing distance (S	n)	5 mm
References		
2-wire \sim or $=$	NO	XS1-M18MA230
	NC	XS1-M18MB230
2-wire \sim or ==	NO	XS1-M18MA250
(protected against short-circuits)	NC	XS1-M18MB250
Weight (kg)		0.120
Characteristics		
Connection		Pre-cabled, 2 x 0.5 mm ² , length 2 m (1)
Degree of protection		IP 68
Operating temperature		- 25+ 80 °C
Output state non protect	ted model	LED, annular
indication protected	model	1 red LED (output state), 1 green LED (supply and short-circuit indication)
Voltage limits (including ripple)		\sim or \pm 20264 V
Switching capacity		(∼) 5300 mA or () 5200 mA (2)
Voltage drop, closed state		≤ 5.5 V
Current consumption, no-loa	d	-
Maximum switching frequency		(∼) 25 Hz or (<u></u>) 200 Hz
Wiring schemes		
2-wire ∼ or, NO or NC outp XS1-M18M●230/250	ut	

For connector version sensors Ŧ

 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 : concer VS1 M19MA220 with 5 m coble becomes VS1 M19MA2201 1				

Example : sensor XS1-M18MA230 with 5 m cable becomes XS1-M18MA230L1 (2) For the sensors not incorporating overload or short-circuit protection, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load.

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Cylindrical type, M30 x 1.5 threaded Metal case (brass), short d.c. supply

Accessories : page 3/59

3

References, characteristics, dimensions, schemes

Flush mountable in metal

	C					
Lengths (mm) : a = Overall b = Threaded section c = For non flush m		rs	a = 40.5 b = 32		a = 50 b = 30	
Nominal sensing of	distance (Sn)		10 mm	Increased range model 20 mm	10 mm	Increased range model 20 mm
References						
3-wire	PNP	NO	XS1-N30PA340	XS1-N30PA349	XS1-N30PA340D	XS1-N30PA349D
	NPN	NO	XS1-N30NA340	XS1-N30NA349	XS1-N30NA340D	XS1-N30NA349D
Weight (kg)			0.160	0.160	0.100	0.100
Characteristic	S					
Connection			Pre-cabled, 3 or 4 x 0.34	4 mm ² . length 2 m (1)	Connector (types 9, 10, 15, 16) (2)	Connector (types 9, 10, 11/12, 15, 16) (2)
Degree of protecti	on		IP 67		Depending on connector (see pages 3/58 and 3/59)	
Operating tempera	ature		- 25+ 70 °C	- 25+ 50 °C	- 25+ 70 °C	- 25+ 50 °C
Output state indic	ation		LED, annular		LED, 4 viewing ports at 90°	
Voltage limits (inclu	iding ripple)		== 1038 V (\sim 24 V rectified and filtered)			
Switching capacity	у		0200 mA with overload and short-circuit protection			
Voltage drop, clos	ed state		≤2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consumpt	Current consumption, no-load		≤ 10 mA			
Maximum switching frequency		1000 Hz	15 Hz	1000 Hz	15 Hz	
Wiring schemes						
	3-wire, NO output XS1/XS2-N30●340/340D/349/349D					
X01/X02 11000040/	/340D/349/349	0				

(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-N30PA340 with 5 m cabl	e becomes XS1-N30PA340L1	0

(2) The type numbers refer to suitable female connectors and extension cables, see pages 3/58 and 3/59.

Non flush mountable in metal

a = 40.5 b = 19	a = 50
b = 19	b = 19
c = 13	c = 13
15 mm	15 mm

XS2-N30PA340	XS2-N30PA340D
XS2-N30NA340	XS2-N30NA340D
0.160	0.100

Pre-cabled, 3 or 4 x 0.34 mm ² , length 2 m (1)	Connector (types 9, 10, 15, 16) (2)
IP 67	Depending on connector (see pages 3/58 and 3/59)
- 25+ 70 °C	
LED, annular	LED, 4 viewing ports at 90°
0200 mA with overload and short-circuit protection	
≤ 2 V	
≤ 10 mA	
1000 Hz	

Cylindrical type, M30 x 1.5 threaded Metal case (brass), form A d.c. supply

Accessories : page 3/59

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References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section	on		a = 60 b = 51.5)	a = 70 b = 51.5	
Nominal sensing	distance (Sn)		10 mm	10 mm	10 mm	10 mm
References						
3-wire	PNP	NO	XS1-M30PA370	_	XS1-M30PA370D	_
	NPN	NO	XS1-M30NA370	_	XS1-M30NA370D	_
4-wire universal model	PNP/NPN programma	NO/NC ble	-	XS1-M30KP340	-	XS1-M30KP340D
Weight (kg)			0.205	0.205	0.145	0.145
Characteristic	cs					
Connection			Pre-cabled, 3 x 0.34 mm ² , length 2 m (1)		Connector (types 9, 10, 15, 16) (2)	
Degree of protect	ion		IP 68		Depending on connector (see pages 3/58 and 3/59)	
Operating temper	ature		- 25+ 80 °C			
Output state indic	ation		LED, annular		LED, 4 viewing ports	at 90°
Voltage limits (inclu	uding ripple)		<u> </u>	1038 V (4)	<u></u> 1058 V (3)	1038 V (4)
Switching capacit	у		0200 mA with overlo	ad and short-circuit pro	otection	
Voltage drop, clos	sed state		≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consump	tion, no-load		≤ 10 mA			
Maximum switchi	ng frequency		1000 Hz			
Wiring schem	nes					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				BN/1 (NO), BU/3 (NC)		
(1) Sensors pre-ca Length of cable 5 m 10 m Example : sensor X (2) The type number	(S1-M30PA37	Suffix to be a L1 L2 0 with 5 m cable be	added to references state comes XS1-M30PA370L1 ctors and extension cables			Weight increase 0.120 kg 0.320 kg

(4) \sim 24 V rectified and filtered.

Cylindrical type, M30 x 1.5 threaded Metal case (brass), form A d.c. supply (continued)

Accessories : page 3/59

References, characteristics, dimensions, schemes

Non flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section c = For non flush mounting sensors	a = 60 b = 38.5 c = 13		a = 70 b = 38.5 c = 13	
Nominal sensing distance (Sn)	15 mm	15 mm	15 mm	15 mm
References				
3-wire <u> </u>	XS2-M30PA370	_	XS2-M30PA370D	_
NPN NO	XS2-M30NA370	_	XS2-M30NA370D	_
4-wire PNP/NPN NO/NC universal model programmable	-	XS2-M30KP340	-	XS2-M30KP340D
Weight (kg)	0.205	0.205	0.145	0.145
Characteristics				
Connection	Pre-cabled, 3 x 0.34 mm ² , length 2 m (1)		Connector (types 9, 10, 15, 16) (2) Depending on connector	
Degree of protection	IP 68	IP 68 (see pages 3/58 and 3/59)		59)
Operating temperature	- 25+ 80 °C			
Output state indication	LED, annular		LED, 4 viewing ports at	90°
Voltage limits (including ripple)	<u></u> 1058 V (3)	<u></u> 1038 V (4)	<u></u> 1058 V (3)	1038 V (4)
Switching capacity	0200 mA with overlo	ad and short-circuit pro	tection	
Voltage drop, closed state	≤ 2 V	≤ 2.6 V	≤ 2 V	≤ 2.6 V
Current consumption, no-load	≤ 10 mA			
Maximum switching frequency	1000 Hz			
Wiring schemes				
3-wire, NO output XS2-M30●●370/370D		4-wire <u></u> prog XS2-M30KP3	grammable, NO or NC out 40/340D	put
	+ K/4 (NO) K/2 (NC) BU/3 (NO), BU/3 PNP BK/4 BU/3 (NO), BN/1		<u>+</u> -	BN/1 (NO), BU/3 (NC) + WH/2 BK/4 BU/3 (NO), BN/1 (NC)
(1) Sensors pre-cabled with other cable lengths : Length of cable Suffix to be 5 m L1 10 m L2 Example : sensor XS2-M30PA370 with 5 m cable be (2) The type numbers refer to suitable female connert		· · ·		Weight increase 0.120 kg 0.320 kg

(3) Can be supplied with rectified ~ 24 V. (4) ~ 24 V rectified and filtered.

Cylindrical type, M30 x 1.5 threaded Metal case (brass), form A a.c. or d.c. supply

Accessories : page 3/59

References, characteristics, dimensions, schemes

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section		a = 60		
b = Threaded section		b = 51.5 AC/DC		
Nominal sensing dist		10 mm		
References				
2-wire \sim or <u>—</u>	NO	XS1-M30MA230		
	NC	XS1-M30MB230		
2-wire \sim or $$	NO	XS1-M30MA250		
(protected against short-circuits)	NC	XS1-M30MB250		
Weight (kg)		0.205		
Characteristics				
Connection		Pre-cabled, 2 x 0.5 mm ² , length 2 m (1)		
Degree of protection		IP 68		
Operating temperatur	re	- 25+ 80 °C		
Output state	non protected model	LED, annular		
indication	protected model	1 red LED (output state), 1 green LED (supply and short-circuit indication)		
Voltage limits (including	g ripple)	\sim or <u></u> 20264 V		
Switching capacity		(~) 5300 mA or () 5200 mA (2)		
Voltage drop, closed	state	≤ 5.5 V		
Current consumption	n, no-load	_		
Maximum switching f	frequency	(~) 25 Hz or () 100 Hz		
Wiring schemes	3			
2-wire ∼ or <u>—</u> , NO or XS1-M30M●230/250	NC output			
BU/2 BU/3 EU/3	- 5			
	d 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
	na na ser	

Example : sensor XS1-M30MA230 with 5 m cable becomes XS1-M30MA230L1 (2) For the sensors not incorporating overload or short-circuit protection, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load.

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Cylindrical type, M30 x 1.5 threaded Metal case (brass), form A a.c. or d.c. supply (continued)

Accessories : page 3/59

References, characteristics, dimensions, schemes

Non flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section c = For non flush mounting sensors		a = 60 b = 38.5 c = 13				
Nominal sensing dista		AC/DC	15 mm			
References		13 11111				
2-wire \sim or —	NO	XS2-M30MA230				
	NC	XS2-M30MB230				
2-wire \sim or $=$	NO	XS2-M30MA250				
(protected against short-circuits)	NC	XS2-M30MB250				
Weight (kg)		0.205				
Characteristics						
Connection		Pre-cabled, 2 x 0.5 mm ² , L = 2 m (1)				
Degree of protection		IP 68				
Operating temperatur	e	- 25+ 80 °C				
Output state indication	non protected model	LED, annular 1 red LED (output state) 1 green LED (supply and short-circuit indication)				
Voltage limits (including	ripple)	∼ or 20264 V				
Switching capacity		(∼) 5300 mA or () 5200 mA (2)				
Voltage drop, closed	state	≤ 5.5 V				
Current consumption		_				
Maximum switching f		(∼) 25 Hz or () 75 Hz				
Wiring schemes						
2-wire ~ or, NO or NC output XS2-M30ee2e0						
⊥ For connector version sensors (1) Sensors pre-cabled with other cable lengths :						
Length of cable	Length of cable Suffix to be added to references stated above for 2 m pre-cabled sensors Weight increase					

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 Loopeer VS2 M20	MA220 with 5 m apple becomes XS2 M20MA220L1	

Example : sensor XS2-M30MA230 with 5 m cable becomes XS2-M30MA230L1 (2) For the sensors not incorporating overload or short-circuit protection, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load.

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Compact block (12 x 26 x 40 mm), plastic, type XSG a.c. or d.c. supply

References, characteristics, schemes

Accessories : page 3/59

 Flush mountable in metal	Non flush mountable in metal

Nominal sensing distance (Sn)	2 mm	4 mm

References

4-wire	PNP	NO + NC	XSG-H027330	XSG-H047330
(complementary outputs)	NPN	NO + NC	XSG-J027330	XSG-J047330
Weight (kg)			0.180	0.180

Characteristics

Connection	Pre-cabled, length 2 m (1) 4 x 0.34 mm ²		
Degree of protection	IP 65		
Operating temperature	- 25+ 70 °C		
Output state indication	LED, at rear		
Voltage limits (including ripple)	1058 V		
Switching capacity	acity 0200 mA (2)		
Voltage drop, closed state ≤ 1.8 V			
Current consumption, no-load	≤ 10 mA		
Maximum switching frequency	1000 Hz	800 Hz	

Wiring schemes

4-wire ----NO + NC output + ΒN BN ¢ ſ BK (NO) PNP NPN WH (NC) BK (NO) \Diamond È WH (NC) BU L BU

$\overline{(1)}$ 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	L05	0.120 kg
10 m	L10	0.320 kg
Example : sensor XSG-H027330 with 5 m cable	e becomes XSG-H027330L05	-

(2) With overload and short-circuit protection.

Plug-in compact block (41 x 50 x 76 mm), plastic, type XSB a.c. or d.c. supply

References, characteristics, schemes

Accessories : page 3/59

Non flush mountable in metal





		DC	AC	
Nominal sensing distance (Sn)		25 mm	25 mm	
References				
2-wire	NO	XSB-C25710	_	
2-wire \sim	NO	_	XSB-A25911	
	NC	_	XSB-A25921	
Weight (kg)		0.190	0.190	
Characteristics				
Connection		Screw terminals, capacity : 2 x 1.5 mm ²		
Degree of protection		IP 67		
Operating temperature		- 25 + 70 °C		
Output state indication		_	LED	
Voltage limits (including ripple)		<u></u> 1258 V	\sim 93264 V	
Switching capacity (1)		1.580 mA	20150 mA	
Voltage drop, closed state		≤ 7 V	≤ 9.5 V	
Current consumption, no-load		-	_	
Maximum switching frequency		250 Hz	40 Hz	
Wiring schemes				
2-wire NO output		2-wire \sim NO output	NC output	
		4		

(1) For XSB-A (~) sensors, not incorporating overload or short-circuit protection, it is recommended that a 0.63 A "quick-blow" fuse be connected in series with the load.

Plug-in block form C (41 x 40 x 117 mm), plastic, type XS7 5 position turret head d.c. supply

Accessories : page 3/59 References, characteristics, schemes

Flush mountable in metal





		Increased range model	
Nominal sensing distance (Sn)	15 mm	20 mm	15 mm

References

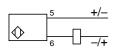
4-wire	PNP	NO + NC	XS7-C40PC440H29	XS7-C40PC449H29	_
(complementary outputs)	NPN	NO + NC	XS7-C40NC440H29	XS7-C40NC449H29	_
2-wire	NO			_	XS7-C40DA210H29
(non polarised)	NO or NO				
	programr	nable	_	_	XS7-C40DP210H29
Weight (kg)			0.220	0.220	0.220

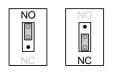
Characteristics

Connection	Screw terminals, capacity : 2 or 4 x 1.5 mm ²			
Degree of protection	IP 67			
Operating temperature	- 25+ 70 °C			
Supply/output state indication	Output LED + Supply LED	Output LED		
Voltage limits (including ripple)				
Switching capacity (with overload and short-circuit protection)	0200 mA	1.5100 mA		
Voltage drop, closed state	≤ 2 V	≤ 5.2 V		
Current consumption, no-load	≤ 10 mA	_		
Maximum switching frequency	1000 Hz	150 Hz		

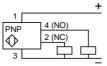
Wiring schemes

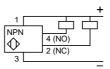
2-wire ---- (non polarised) NO or NC output depending on position of link





4-wire ----NO + NC output



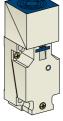


Plug-in block form C (41 x 40 x 117 mm), plastic, type XS8 5 position turret head d.c. supply

Accessories : page 3/59 References, characteristics, schemes

Non flush mountable in metal





		Increased range model	
Nominal sensing distance (Sn)	20 mm	40 mm	20 mm

References

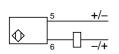
4-wire	PNP	NO + NC	XS8-C40PC440H29	XS8-C40PC449H29	_
(complementary outputs)	NPN	NO + NC	XS8-C40NC440H29	XS8-C40NC449H29	_
2-wire <u></u> (non polarised)	NO or NC programmab	ble	-	_	XS8-C40DP210H29
Weight (kg)			0.220	0.220	0.220

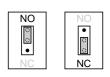
Characteristics

Connection	Screw terminals, capacity : 2 of	Screw terminals, capacity : 2 or 4 x 1.5 mm ²			
Degree of protection	IP 67				
Operating temperature	- 25+ 70 °C				
Supply/output state indication	Output LED + Supply LED Output LED				
Voltage limits (including ripple)					
Switching capacity (with overload and short-circuit protection)	0200 mA 1.5100 mA				
Voltage drop, closed state	≤2 V ≤5.2 V				
Current consumption, no-load	≤ 10 mA –				
Maximum switching frequency	1000 Hz 500 Hz 100 Hz				

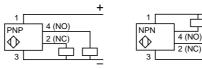
Wiring schemes

2-wire ---- (non polarised) NO or NC output depending on position of link





4-wire ----NO + NC output



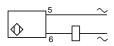
Plug-in block form C (41 x 40 x 117 mm), plastic, types XS7 and XS8 5 position turret head a.c. or d.c. supply

References, characteristics, schemes

		Flush mountable	in metal	Non flush mountable in metal		
		AC	AC/DC	AC	AC/DC	
Nominal sensing distance	(Sn)	15 mm		20 mm		
References						
	/NC grammable	XS7-C40FP260H29	-	XS8-C40FP260H29	-	
	/NC grammable	-	XS7-C40MP230H29	-	XS8-C40MP230H29	
Weight (kg)		0.220	0.220	0.220	0.220	
Characteristics						
Connection		Screw terminals, capac	ity : 2 x 1.5 mm²			
Degree of protection		IP 67				
Operating temperature		- 25+ 70 °C				
Supply/output state indicat	ion	Output LED				
Voltage limits		\sim 20264 V	\sim or <u>—</u> 20264 V	\sim 20264 V	\sim or <u>—</u> 20264 V	
Switching capacity		5500 mA (1)(2 A inrush)	~ 5300 mA or	5500 mA (1)(2 A inrush)		
Voltage drop, open state		≤ 5.5 V				
Current consumption, no-le	oad	_				
Maximum switching freque	ncy	25 Hz	\sim 25 Hz, <u>—</u> 50 Hz	25 Hz	\sim 25 Hz, <u>—</u> 50 Hz	
Wiring schemes	-		· · · ·		· · ·	
2-wire \sim programmable		2-wire \sim or — programm	nable			

 $\ensuremath{\text{2-wire}}\xspace \sim \ensuremath{\text{programmable}}\xspace$ NO or NC output depending on position of link

2-wire \sim or ___ programmable NO or NC output depending on position of link



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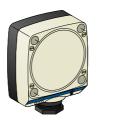
(1) These sensors do not incorporate overload or short-circuit protection and therefore, it is recommended that a 0.8 A "quick-blow" fuse be connected in series with the load.

Accessories : pages 3/59 Plug-in block form D (40 x 80 x 100 mm), plastic, type XSD d.c. supply and a.c./d.c. supply

References, characteristics, schemes

Accessories : page 3/59

Non flush mountable in metal





	DC	AC/DC
Nominal sensing distance (Sn)	3060 mm (1)	

References

4-wire (complementary outputs)	PNP	NO + NC	XSD-H607339	-
2-wire \sim or == universal model		NO or NC programmable	-	XSD-M600539
Weight (kg)			0.480	0.480

Characteristics

Connection	Screw terminals, capacity : 2 x 1.5 mm ²				
Degree of protection	IP 67				
Operating temperature	- 25+ 70 °C				
Supply/output state indication	Output LED	Output LED + Supply LED + Short-circuit LED			
Voltage limits (including ripple)	1058 V	∼ or 20264 V			
Switching capacity (with overload and short-circuit protection)	0200 mA	(<u>—</u>) 5100 mA or (∼) 5500 mA			
Voltage drop, closed state	≤ 1.8 V	≤ 6 V			
Current consumption, no-load	≤ 10 mA	_			
Maximum switching frequency	20 Hz	10 Hz			

Wiring schemes



(1) XSD-e60 sensors incorporate a sensing distance adjustment potentiometer. This enables adjustment to suit the following requirements :

- limiting the effects of surrounding objects (by decreasing the sensing distance),

- increasing the sensing distance up to 48 mm, using a standard mild steel target. Settings above 48 mm are not recommended.

Analogue output models Cylindrical type, M12 x 1 threaded, metal or plastic case Pre-cabled with 2 m cable

Accessories : page 3/59		References, characteristics, dimensions, schemes				schemes
			Flush mountable in metal	9	Non flush mounta	able in metal
Lengths (mm) : a = Overall b = Threaded secti	on		a = 50 b = 42		a = 50 b = 42	a = 50 b = 42
			Metal case		Plastic case	Plastic case
Nominal sensing	distance (Sn)	0.22 mm		0.44 mm	0.44 mm
References						
3-wire <u></u>	Output	010 mA (1) 414 mA (2)	_		_	XS4-P12AB110
	Output	420 mA (2) 016 mA (1)	XS1-M12AB120		XS4-P12AB120	-
Weight (kg)			0.075		0.065	0.065
Characteristi	CS					
Connection			Pre-cabled, 3 x 0.34 m	nm², leng	th 2 m	
Degree of protect	ion		IP 67			
Ambient air temp	erature		Operation : - 25+ 70	°C		
Voltage limits (incl	uding ripple)		<u></u> 1538 V		<u></u> 1538 V	<u></u> 1558 V
Output current dr θ ambient : - 25	ift ⊦ 70 °C		≤ 10 %			
Current consump			4 mA			
		vire" connection, see vire" connection, see				
Wiring schen	nes					
2-wire connection				3-wire	connection	
	3N/1 0c 3K/4 0 3U/3 0 1s −c	+ Output current		\Diamond	mA BK/4	+ Output voltage =R.Is -
Output current 24 V 414 mA		Value of R (R = lo $\leq 640 \Omega$	ad impedance)	Output 24 V		alue of R (R = load impedance) 1800 Ω
414 mA 420 mA 48 V 414 mA		$\leq 040 \Omega \\ \leq 450 \Omega \\ \leq 2350 \Omega$		48 V	016 mA ≤	1125 Ω 4200 Ω

≤ 450 Ω 48 V ≤ 2350 Ω Ensure a minimum of 15 V between the + (1) and - (3) terminals of the sensor

Other versions

"Original equipment" range Ø 12 mm sensors with analogue output (XSP-Heee62). Please consult your Regional customer centre.

Ensure a minimum of 5 V between the + and sensor output (terminal 4)

Analogue output models Cylindrical type, M18 x 1 threaded, metal or plastic case Pre-cabled with 2 m cable

Accessories : page 3/59			References, characteristics, dimensions, schemes			
			Flush mountable in metal	Non flush mountable in	n metal	
Lengths (mm) : a = Overall b = Threaded section c = For non flush me		rs	a = 50 b = 42 c = 0 Metal case	a = 40.6 b = 26 c = 8 Plastic case	a = 40.6 b = 26 c = 8 Plastic case	
Nominal sensing d	listance (Sn)		0.55 mm	0.88 mm	0.88 mm	
References	. /					
3-wire	Output	010 mA (1) 414 mA (2)	-	_	XS4-P18AB110	
	Output	420 mA (2) 016 mA (1)	XS1-M18AB120	XS4-P18AB120	-	
Weight (kg)			0.120	0.080	0.080	
Characteristic	S					
Connection			Pre-cabled, 3 x 0.34 mm ² , leng	th 2 m		
Degree of protection	on		10.07			
Ambient air tempe			Operation : - 25+ 70 °C			
Voltage limits (inclu			= 1558 V			
Output current drif θ ambient : - 25+	ft		≤ 10 %			
Current consumption, no-load 4 mA 1) Output current range for "3-wire" connection, see schemes below. (2) Output current range for "2-wire" connection, see schemes below.						
Wiring schem	Wiring schemes					
2-wire connection						
$ \begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & $						

Output	current	Value of R (R = load impedance)	Outpu	t current	Value of R (R = load impedance)
24 V	414 mA	≤ 640 Ω	24 V	010 mA	≤ 1800 Ω
	420 mA	≤ 450 Ω		016 mA	≤ 1125 Ω
48 V	414 mA	≤ 2350 Ω	48 V	010 mA	≤ 4200 Ω
Ensure	a minimum of 15 V betv	veen the + (1) and - (3) terminals of the sensor	Ensure	e a minimum of 5 \	/ between the + and sensor output (terminal 4)

Ensure a minimum of 15 V between the + (1) and - (3) terminals of the sensor

Other versions

"Original equipment" range Ø 18 mm sensors with analogue output (XSP-Heee62). Please consult your Regional customer centre.

Telemecanique

Analogue output models Cylindrical type, M30 x 1.5 threaded, metal or plastic case Pre-cabled with 2 m cable

Accessories : page 3/59			References, characteristics, dimensions, schemes			
			Flush mountable in metal	Non flush mountable	in metal	
Lengths (mm) : a = Overall b = Threaded section c = For non flush mo		rs	a = 50 b = 42 c = 0 Metal case	a = 52.6 b = 32 c = 13 Plastic case	a = 52.6 b = 32 c = 13 Plastic case	
Nominal sensing d	istance (Sn)		110 mm	1.515 mm	1.515 mm	
References						
3-wire	Output	010 mA (1) 414 mA (2)	-	_	XS4-P30AB110	
	Output	420 mA (2) 016 mA (1)	XS1-M30AB120	XS4-P30AB120	-	
Weight (kg)			0.200	0.100	0.100	
Characteristic	S					
Connection			Pre-cabled, 3 x 0.34 mm ² , leng	gth 2 m		
Degree of protection	on		IP 67			
Ambient air temper	ature		Operation : - 25+ 70 °C			
Voltage limits (inclue	ding ripple)		1538 V 1558 V		<u></u> 1558 V	
Output current drif θ ambient : - 25+	t 70 °C		≤ 10 %			
Current consumption, no-load 4 mA (1) Output current range for "3-wire" connection, see schemes below. (2) Output current range for "2-wire" connection, see schemes below.						
Wiring schemes						
2-wire connection	2-wire connection 3-wire connection					
$ \begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & $						

Output	current	Value of R (R = load impedance)
24 V	414 mA	≤ 640 Ω
	420 mA	≤ 450 Ω
48 V	414 mA	≤ 2350 Ω
Ensure	a minimum of	15 V between the + (1) and - (3) terminals of the sensor

 For specific applications : rotation monitoring Cylindrical type, metal case

References, characteristics, dimensions, schemes

Accessories : page 3/59

Flush mountable in metal

Lengths (mm) : a = Overall b = Threaded section	n v	a = 81 b = 57 Ø = M30 x 1.5				
Nominal sensing di	istance (Sn)	10 mm	10 mm	10 mm		
References						
3-wire PNP	Impulses/minute 6150	XSA-V11373	-	_		
	1203000 Impulses/minute	XSA-V12373	-	-		
2-wire \sim	<u>6150</u> 1203000	_	XSA-V11151 XSA-V12151	XSA-V11161 XSA-V12161		
Weight (kg)		0.300	0.300	0.300		
Characteristics	S					
Connection (2)		Pre-cabled, 3 x 0.34 mm ² , length 2 m	Pre-cabled, 2 x 0.5 mm², length 2 m			
Degree of protection	n	IP 67	IP 67			
Operating temperat	ture (1)	- 25+ 70 °C	- 25+ 70 °C			
Output state indica	tion	LED				
Voltage limits (inclu	ıding ripple)	<u></u> 1058 V	~ 93132 V	\sim 187264 V		
Switching capacity		0200 mA with overload & short-circuit protection	20350 mA (2 A inrush)			
Voltage drop, close	ed state	≤ 1.8 V	≤ 4.5 V			
Current consumpti	on, no-load	≤ 10 mA	_			
Maximum switching	g frequency	6000 impulses/minute (for XSA	A-V11●●●) ; 48,000 impulses/min	ute (for XSA-V12 •••)		
Wiring schem	es					
3-wire BN/1 PNP BK/4	<u>+</u>	2-wire ~				
	=					
	emperature ranges : - 40+ ed with other cable lengths :	70 °C (To order, add suffix TF to ab	ove refs.), - 25+ 85 °C (To orde	er, add suffix TT to above refs.).		
Length of cable 5 m	eu with other cable lengths :	Suffix to be added to reference	es stated above	Weight increase 0.120 kg		
10 m 0.320 kg Example : sensor XSA-V11373 with 5 m cable becomes XSA-V11373L05						

10 m L10 Example : sensor XSA-V11373 with 5 m cable becomes XSA-V11373L05

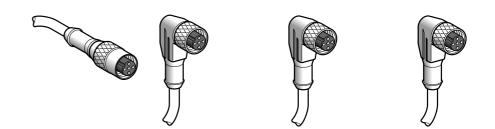
Other versions

Sensors without initial "run-up" delay, or with reduced "run-up" delay on energisation of 3 seconds. SX2-DV units for monitoring overspeed or underspeed conditions, in the range 0 to 6000 impulses/ minute.

Please consult your Regional customer centre.

Female connectors

References, characteristics, dimensions, schemes



Connector type N°	9	10	11	12
Number of pins	4	4	4	4
Female connector version	M12 straight	M12 elbowed	M12 elbowed	M12 elbowed

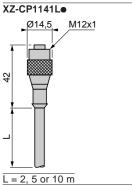
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References
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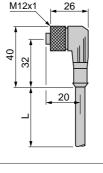
PVR cable connection, Ø 5 mm	<u>L = 2 m</u>	XZ-CP1141L2	XZ-CP1241L2	XZ-CP1340L2	XZ-CP1440L2
2011	L = 5 m	XZ-CP1141L5	XZ-CP1241L5	XZ-CP1340L5	XZ-CP1440L5
	L = 10 m	XZ-CP1141L10	XZ-CP1241L10	XZ-CP1340L10	XZ-CP1440L10
Weight (kg)		0.090 (L = 2 m), 0.190 (L = 5 m), 0.370 (L = 10 m) 0.080 (L = 2 m), 0.180 (L = 5 m), 0.350		<u> </u>	
Charactoristics					

Characteristics

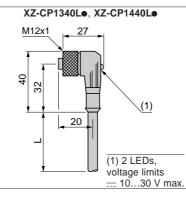
Wiring configuration, PNP/NPN	_	_	PNP wiring	NPN wiring
Degree of protection	IP 67	IP 67	IP 67	IP 67
Ambient air temperature	-35+80 °C	-35+80 °C	-35+80 °C	-35+80 °C
Number of wires and c.s.a.	4 x 0.25 mm ²	4 x 0.25 mm ²	3 x 0.25 mm ²	3 x 0.25 mm ²
LED indication	No	No	2 LEDs	2 LEDs
Associated sensor references	XSe-eeeeeeD	XSe-eeeeeeD	XSe-eeeeeeD	XSe-eeeeeeD

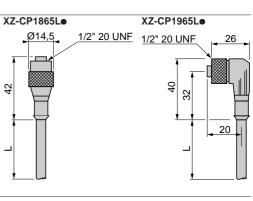
Dimensions



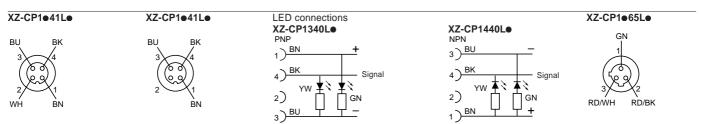


XZ-CP1241Le





Connection schemes



Female connectors (continued) and sensor fixing accessory

References, characteristics, dimensions, schemes





Connector type N°		13	14		
Number of pins		3	3		
Female connector version		1/2" 20 UNF straight	1/2" 20 UNF straight		
References					
PVR cable connection, Ø 5 mm	L = 2 m	XZ-CP1865L2	XZ-CP1965L2		
	L = 5 m	XZ-CP1865L5	XZ-CP1965L5		
	L = 10 m	XZ-CP1865L10	XZ-CP1965L10		
Weight (kg) 0.080 (L = 2 m), 0.180 (L= 5 m), 0.350 (L = 10 m)			(L = 10 m)		
Characteristics					
Wiring configuration, PNP/NPN		_	-		
Degree of protection		IP 67	IP 67		
Ambient air temperature		-35+80 °C	-35+80 °C		
Number of wires and c.s.a.		3 x 0.34 mm ²	3 x 0.34 mm ²		
LED indication		No	No		
Associated sensor references		XSe-eeeeeeK	ХSө-өөөөөөөК		
Dimensions and connection schemes					

Shown on previous page

Saddle clamp fixing accessory for cylindrical type sensors

Description	For use with senso	rs	Reference	Weight
	Туре	Diameter (mm)		kg
Saddle clamps	XS1	4 (plain)	XSZ-B104	0.005
XSZ-B1••		5 (M5 x 0.5)	XSZ-B105	0.005
	<u>XS1, XS2</u>	6.5 (plain)	XSZ-B165	0.005
	XS1, XS2, XS4	8 (M8 x 1)	XSZ-B108	0.006
		<u>12 (M12 x 1)</u>	XSZ-B112	0.006
		18 (M18 x 1)	XSZ-B118	0.010
	XS1, XS2, XS4	30 (M30 x 1.5)	XSZ-B130	0.020