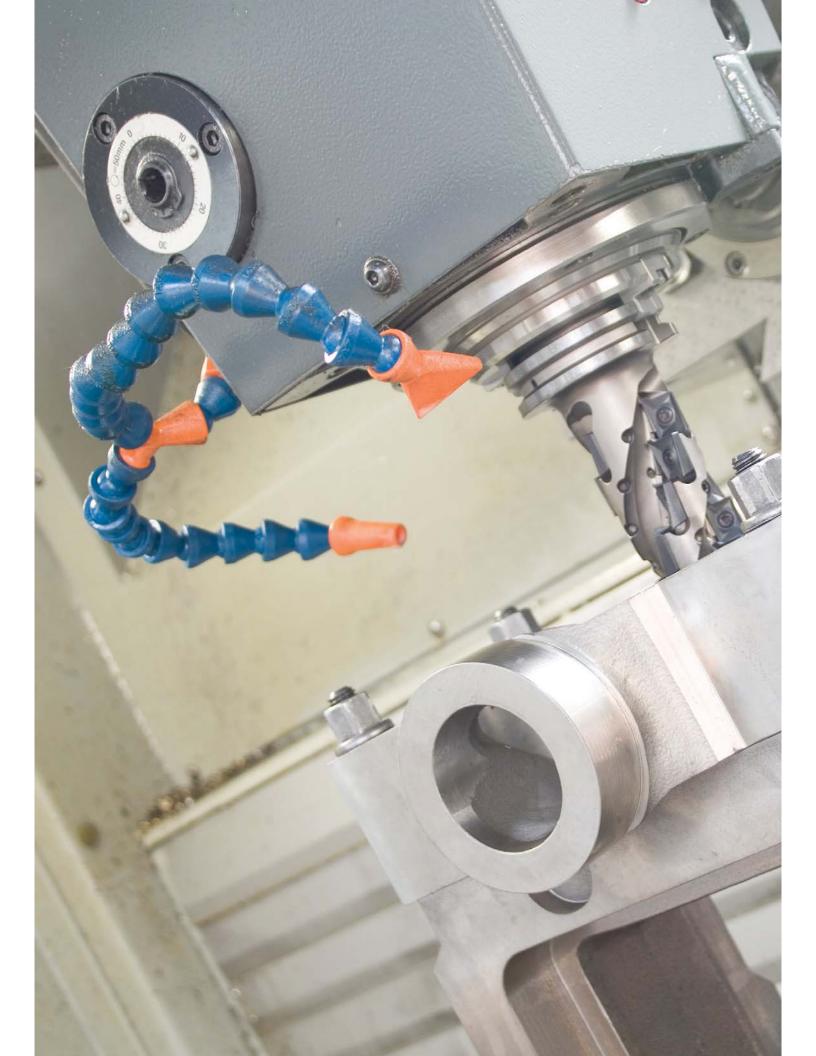
OsiSense® XS Inductive sensors

General purpose with increased range







Helping you to find the most efficient solution

The inductive detection function that performs and lasts

A new offer to meet the demands of machine manufacturers for increased range in inductive sensing.

>Easy to install

Contributes to machine compactness Wider adjustment range



Solutions that last

> Readily available

Contributes to machine performance

Contents

Cylindrical inductive proximity sensors

Introduction	p 1 and 2
Selection guide	p 3 to 6
Three-wire DC, flush mountable, standard range	p 7 to 10
Two-wire DC, flush mountable, standard range	p 11 to 14
Two-wire AC or DC, flush mountable, standard range	p 15 and 16
Three-wire DC, flush mountable, increased range	p 17 to 20
Two-wire DC, flush mountable, increased range	p 21 and 22
Two-wire AC or DC, flush mountable, increased range	p 23 and 24
Three-wire DC, non-flush mountable, increased range	p 25 and 26
Two-wire AC or DC, non-flush mountable, increased range	p 27 and 28

Make the most of your energySM

NOTE: Sensors described in this catalog are designed to be used for standard industrial presence sensing applications. These sensors do not include the self-checking redundant circuitry necessary to allow for their use in safety applications.

i

Contributes to machine compactness

Easy to install:

Compact product (short), easier integration in the machine

- Increased range (x2), sensing distance easier to adjust
- All standard diameters (complete range, from Ø 6.5 to Ø 30 mm)
- Long and short product lengths to meet the most demanding dimension standards on the market
- DC and AC/DC versions available for maximum flexibility

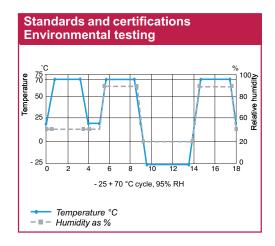
+100% of the sensing distance for flush mountable models



Increase the reliability of your solution

Quality by design:

- Subjected to climatic cycle tests: -25 to +70 °C (-13 to 158 °F) cycle, 95% RH for 3,000 hours under power to verify their ability to maintain specifications over time.
- Resistance to electromagnetic interference-immune to high levels of EMC
- Resistance to environment–IP 65, IP 67 and IP 68 for pre-cabled versions, IP 69K for 12 and 30 mm diameter sensors



> Contributes to machine performance

Readily available:

- Robust products to meet your needs
- Particularly well-suited for your machines used in sectors such as machine tooling, assembly, packaging, conveying and the automotive industry.









Materials handling Machine Tooling

- Proven tried-and-tested performance with worldwide product availability
- You export your machines throughout the world. Schneider Electric has locations in 190 countries.



General purpose flush or non-flush mountable, standard or increased range:

A global offer of high-performance inductive sensors to meet your individual needs







3-wire DC Metal Standard range 1.5 to 10 mm (0.06 to 0.39 in.) Flush mountable



2-wire AC or DC Metal Standard range 2.0 to 10 mm (0.04 to 0.39 in.) Flush mountable



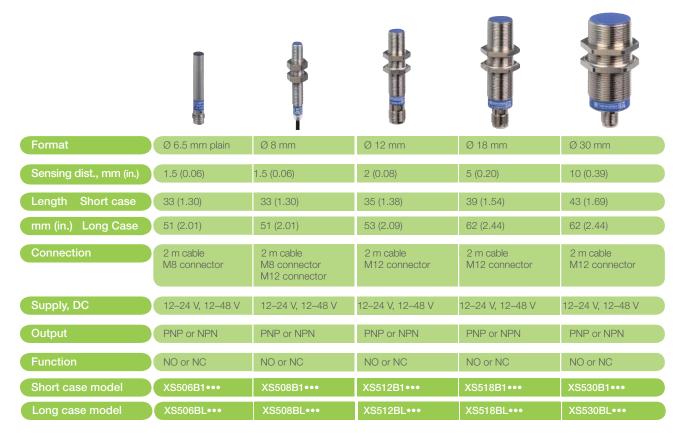
XS1... range
3-wire DC
Metal
Increased range
2.5 to 15 mm
(0.10 to 0.59 in.)
Flush mountable

>Selection guide-General purpose inductive sensors

Flush mountable, standard range 1.5 to 10 mm (0.06 to 0.39 in.)

(Metal)

3-wire DC



Flush mountable, standard range 1.5 to 10 mm (0.06 to 0.39 in.)

Metal

2-wire DC











		*			
Format	Ø 6.5 mm	Ø 8 mm	Ø 12 mm	Ø 18 mm	Ø 30 mm
Sensing dist., mm (in.)	1.5 (0.06)	1.5 (0.06)	2 (0.08)	5 (0.20)	10 (0.39)
Length Short Case	33 (1.30)	33 (1.30)	35 (1.38)	39 (1.54)	43 (1.69)
mm (in.) Long Case	-	51 (2.01)	53 (2.09)	62 (2.44)	62 (2.44)
Connection	2 m cable M12 connector				
Supply, DC	12–24 V, 12–48 V				
Function	NO or NC				
Short case model	XS506BS•••	XS508BS•••	XS512BS•••	XS518BS•••	XS530BS•••
Long case model	-	XS508B1•••	XS512B1•••	XS518B1•••	XS530B1•••

Flush mountable, increased range 2.5 to 15 mm (0.10 to 0.59 in.)

Metal

3-wire DC



Flush mountable, increased range 2 to 15 mm (0.08 to 0.59 in.)



2-wire DC











Format	Ø 6.5 mm plain	Ø8 mm	Ø 12 mm	Ø 18 mm	Ø 30 mm
Sensing dist., mm (in.)	2.5 (0.10)	2.5 (0.10)	4 (0.16)	8 (0.31)	15 (0.59)
Length Short case	33 (1.30)	33 (1.30)	35 (1.38)	39 (1.54)	43 (1.69)
mm (in.) Long Case	51 (2.01)	51 (2.01)	53 (2.09)	62 (2.44)	62 (2.44)
Connection	2 m cable M12 connector	2 m cable M8 connector M12 connector	2 m cable M12 connector	2 m cable M12 connector	2 m cable M12 connector
Supply, DC	12–24 V, 12–48 V	12-24 V, 12-48 V	12–24 V, 12–48 V	12–24 V, 12–48 V	12-24 V, 12-48 V
Function	NO or NC	NO or NC	NO or NC	NO or NC	NO or NC
Short case model	XS606B3•••	XS608B3•••	XS612B3•••	XS618B3•••	XS630B3•••
Long case model	XS606B1•••	XS608B1•••	XS612B1•••	XS618B1•••	XS630B1•••

>Selection guide-continued



Non-flush mountable, increased range 7 to 22 mm (0.28 to 0.87 in.)

Metal

3-wire DC



Flush mountable, increased range 4 to 15 mm (0.16 to 0.59 in.)

Metal) (

2-wire AC or DC



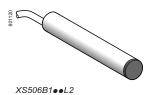
Non-flush mountable, increased range 12 to 22 mm (0.47 to 0.87 in.)

Metal

2-wire AC or DC



proximity sensors
General purpose
Cylindrical, standard range, flush mountable
Three-wire DC, solid-state output





XS508B1••L2



XS512B1••M12



XS518B1●●M12



XS530B1••L2



Sensing dist.	Function	Output	Connection	Catalog	Weigh	t
Sn, mm (in.)	T GITOLIOTI	Output	Commodian	Number	kg	(lb
Ø 6.5, plain						
.5	NO	PNP	Pre-cabled (1)	XS506B1PAL2	0.035	(0.0
0.06)			M8 connector	XS506B1PAM8	0.025	(0.0
			M12 connector	XS506B1PAM12	0.025	(0.0
		NPN	Pre-cabled (1)	XS506B1NAL2	0.035	(0.0
			M8 connector	XS506B1NAM8	0.025	(0.0
	NC	PNP	Pre-cabled (1)	XS506B1PBL2	0.035	(0.0
			M8 connector	XS506B1PBM8	0.025	(0.0
		NPN	Pre-cabled (1)	XS506B1NBL2	0.035	(0.0
		INFIN	M8 connector	XS506B1NBM8	0.035	•
			IVIO COTTIECTOI	VOORDING	0.025	(0.0
Ø 8, threaded						
.5).06)	NO	PNP	Pre-cabled (1)	XS508B1PAL2	0.035	(0.0
5.00)			M8 connector	XS508B1PAM8	0.025	(0.0
			M12 connector	XS508B1PAM12	0.025	(0.0
		NPN	Pre-cabled (1)	XS508B1NAL2	0.035	(0.0
			M8 connector	XS508B1NAM8	0.025	(0.0
			M12 connector	XS508B1NAM12	0.025	(0.0
	NC	PNP	Pre-cabled (1)	XS508B1PBL2	0.035	(0.0
			M8 connector	XS508B1PBM8	0.025	(0.0
			M12 connector	XS508B1PBM12	0.025	(0.0
		NPN	Pre-cabled (1)	XS508B1NBL2	0.035	(0.0
			M8 connector	XS508B1NBM8	0.025	(0.0
C 40 (l	LM40 4		M12 connector	XS508B1NBM12	0.025	(0.0
Ø 12, threaded		DND	D 11 1 (1)	VOE (OD (DA) O	0.075	(0.
2 0.08)	NO	PNP	Pre-cabled (1)	XS512B1PAL2	0.075	(0.1
		NIDNI	M12 connector	XS512B1PAM12	0.035	(0.0
		NPN	Pre-cabled (1)	XS512B1NAL2	0.075	(0.1
	NO	DND	M12 connector	XS512B1NAM12	0.035	(0.0
	NC	PNP	Pre-cabled (1)	XS512B1PBL2	0.075	(0.1
		NIDNI	M12 connector	XS512B1PBM12	0.035	(0.0
		NPN	Pre-cabled (1)	XS512B1NBL2	0.075	(0.1
			M12 connector	XS512B1NBM12	0.035	(0.0
Ø 18, threaded						
20)	NO	PNP	Pre-cabled (1)	XS518B1PAL2	0.120	(0.2
).20)			M12 connector	XS518B1PAM12	0.060	(0.1
		NPN	Pre-cabled (1)	XS518B1NAL2	0.120	(0.2
		DND	M12 connector	XS518B1NAM12	0.060	(0.1
	NC	PNP	Pre-cabled (1)	XS518B1PBL2	0.120	(0.2
		NIDNI	M12 connector	XS518B1PBM12	0.060	(0.1
		NPN	Pre-cabled (1)	XS518B1NBL2	0.120	(0.2
			M12 connector	XS518B1NBM12	0.060	(0.1
Ø 30, threaded	I №30 x 1.5					
0	NO	PNP	Pre-cabled (1)	XS530B1PAL2	0.205	(0.4
).39)			M12 connector	XS530B1PAM12	0.145	(0.3
		NPN	Pre-cabled (1)	XS530B1NAL2	0.205	(0.4
			M12 connector	XS530B1NAM12	0.145	(0.3
	NC	PNP	Pre-cabled (1)	XS530B1PBL2	0.205	(0.4
			M12 connector	XS530B1PBM12	0.145	(0.3
		NPN	Pre-cabled (1)	XS530B1NBL2	0.205	(0.4
			M12 connector	XS530B1NBM12	0.145	(0.3

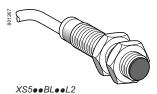
Accessories				
Description	For use with sensors	Catalog Number	Weigl kg	nt (lb)
Mounting	Ø 6.5 (plain)	XSZ B165	0.005	(0.01)
clamps	Ø 8	XSZB108	0.006	(0.01)
	Ø 12	XSZB112	0.006	(0.01)
	Ø 18	XSZB118	0.010	(0.02)
	Ø 30	XSZB130	0.020	(0.02)

⁽¹⁾ For a 5 m long cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS508B1PAL2 becomes XS508B1PAL5 with a 5 m cable.

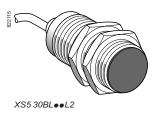
OsiSense® Inductive **proximity sensors**General purpose

Cylindrical, standard range, flush mountable Three-wire DC, solid-state output









			, long case m		VA/- 1 - 1	-4
Sensing dist. Sn, mm (in.)	Function	Output	Connection	Catalog Number	Weigl kg	nt (lb)
Ø 6.5, plain 1.5	NO	PNP	Dra pabled (1)	XS506BLPAL2	0.035	(0.00
(0.06)	NO		Pre-cabled (1)			(0.08
(0.00)		NPN	Pre-cabled (1)	XS506BLNAL2	0.035	(0.08
Ø 8, threaded						
1.5	NO	PNP	Pre-cabled (1)	XS508BLPAL2	0.035	(0.08
(0.06)			M12 connector	XS508BLPAM12	0.025	(0.0
		NPN	Pre-cabled (1)	XS508BLNAL2	0.035	(0.0
			M12 connector	XS508BLNAM12	0.025	(0.0)
	NC	PNP	Pre-cabled (1)	XS508BLPBL2	0.035	(0.0
			M12 connector	XS508BLPBM12	0.025	(0.0)
		NPN	Pre-cabled (1)	XS508BLNBL2	0.035	(0.0)
			M12 connector	XS508BLNBM12	0.025	(0.0)
Ø 12, threaded	d M12 x 1					
2	NO	PNP	Pre-cabled (1)	XS512BLPAL2	0.075	(0.1
(0.08)			M12 connector	XS512BLPAM12	0.035	(0.0)
		NPN	Pre-cabled (1)	XS512BLNAL2	0.075	(0.1
			M12 connector	XS512BLNAM12	0.035	(0.0)
	NC	PNP	Pre-cabled (1)	XS512BLPBL2	0.075	(0.1
			M12 connector	XS512BLPBM12	0.035	(0.0)
		NPN	Pre-cabled (1)	XS512BLNBL2	0.075	(0.1
			M12 connector	XS512BLNBM12	0.035	(0.0)
Ø 18, threaded	M18 x 1					
5	NO	PNP	Pre-cabled (1)	XS518BLPAL2	0.120	(0.2
(0.20)			M12 connector	XS518BLPAM12	0.060	(0.1
		NPN	Pre-cabled (1)	XS518BLNAL2	0.120	(0.2
			M12 connector	XS518BLNAM12	0.060	(0.1
	NC	PNP	Pre-cabled (1)	XS518BLPBL2	0.120	(0.2
			M12 connector	XS518BLPBM12	0.060	(0.1
		NPN	Pre-cabled (1)	XS518BLNBL2	0.120	(0.2
			M12 connector	XS518BLNBM12	0.060	(0.1
Ø 30, threaded	M30 x 1.5					
10	NO	PNP	Pre-cabled (1)	XS530BLPAL2	0.205	(0.4
(0.39)			M12 connector	XS530BLPAM12	0.145	(0.3
		NPN	Pre-cabled (1)	XS530BLNAL2	0.205	(0.4
			M12 connector	XS530BLNAM12	0.145	(0.3
	NC	PNP	Pre-cabled (1)	XS530BLPBL2	0.205	(0.4
			M12 connector	XS530BLPBM12	0.145	(0.3
		NPN	Pre-cabled (1)	XS530BLNBL2	0.205	(0.4
			M12 connector	XS530BLNBM12	0.145	(0.3
Accessories						
Description		For use	with	Catalog	Weigl	
		sensors		Number	kg	(lb
Mounting		Ø 6.5 (pla	ain)	XSZ B165	0.005	(0.0)
clamps		Ø8		XSZB108	0.006	(0.0
		Ø 12		XSZB112	0.006	(0.0
		Ø 18		XSZB118	0.010	(0.02

⁽¹⁾ For a 5 m cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS508BLPAL2 becomes XS508BLPAL5 with a 5 m cable.

XSZB130

Ø 30

0.020 (0.04)

proximity sensors
General purpose
Cylindrical, standard range, flush mountable
Three-wire DC, solid-state output

Sensor type			XS500B100M8, XS500B100M12 XS500BL00M8, XS500BL00M12	XS5eeB1eeL2 XS5eeBLeeL2	
Product certifications			UL, CSA, C€		
Connection	Connector		M8 on Ø 6.5 and Ø 8, M12 on Ø 8, Ø 12, Ø 18 and Ø 30	-	
	Pre-cabled		-	Length 2 m	
Operating zone	Ø 6.5 and Ø 8	mm	0–1.2 (0–0.05 in.)		
	Ø 12	mm	0-1.6 (0-0.06 in.)		
	Ø 18	mm	0-4 (0-0.28 in.)		
	Ø 30	mm	0–8 (0–0.31 in.)		
Differential travel		%	1–15 of effective sensing distance (Sr)		
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68, double insulation (except Ø 6.5 and Ø 8: IP 67)	
	Conforming to DIN 40050		IP 69K for Ø 12 to Ø 30		
Storage temperature		°C	-40 to +85 (-40 to +185 °F)		
Operating temperature		°C	-25 to +70 (-13 to +158 °F)		
Materials	Case		Nickel plated brass (except XS5 06 and	XS5 08BL: stainless steel, grade 303)	
	Sensing face		PPS		
	Cable		-	PvR 3 x 0.34 mm² (22 AWG) except XS50 and XS508 : 3 x 0.11 mm² (27 AWG)	
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 50 Hz	z)	
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms	·	
Output state indication	-		Yellow LED: 4 viewing ports at 90°	Yellow LED: circular	
Rated supply voltage		V	12–48 for XS5●eBL, 12–24 for XS5●eB1 with protection against reverse polarity		
Voltage limits (including r	ripple)	٧	10–58 for XS5●●BL, 10–36 for XS5●●B1		
Switching capacity		mA	≤ 200 with overload and short-circuit pro	otection	
Voltage drop, closed state	9	V	≤2		
Current consumption, no	-load	mA	≤ 10		
Maximum switching	XS506, XS508, XS512	Hz	5000		
frequency	XS518	Hz	2000		
	XS530	Hz	1000		
Delays	First-up	ms	≤ 10		
•	Response	ms	≤ 0.1 : XS506 , XS508 and XS512 ≤ 0.15 : XS518 ≤ 0.3 : XS530		
	Recovery	ms	≤ 0.1 : XS506, XS508 and XS512 ≤ 0.35 : XS518 ≤ 0.7 : XS530		

Wiring diagrams, setup, dimensions

OsiSense® Inductive proximity sensors

General purpose

Cylindrical, standard range, flush mountable Three-wire DC, solid-state output

Wiring diagrams Connector Pre-cabled PNP NPN M8 M12 BU: Blue BN: Brown BK: Black BN/1 + PNP BK/4 (NO) BK/2 (NC) BK/2 (NC) BK/2 (NC) BN/1 + NPN BK/4 (NO) BK/2 (NC) BK/2 (NC)

For M8 connector, NO and NC outputs on terminal 4

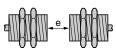
Setup

Minimum mounting distances (mm)

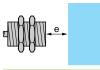


 $\frac{e \ge 10}{e \ge 20}$

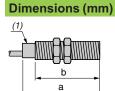








Facing a metal object	
e ≥ 4.5	
e ≥ 4.5	
e ≥ 6	
e ≥ 15	
e ≥ 30	



Sensors Ø 6.5

Ø8

Ø 12

Ø 18

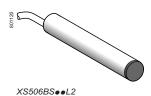
Ø 30

(1)	I FD
('/	

Sensors			Pre-ca	abled (mm)	М8 со	nnector (mm)	M12 co	nnector (mm)
Short cas	e model		а	b	а	b	а	b
	Ø 6.5	XS506B1	33	_	42	_	45	-
	Ø8	XS508B1	33	25	42	26	45	24
	Ø 12	XS512B1	35	25		_	50	30
	Ø 18	XS518B1	39	28		_	50	28
	Ø 30	XS530B1	43	32		-	55	32
Sensors			Pre-ca	abled (mm)	M12 co	onnector (mm)		
Long case	e model		а	b	а	b		
	Ø 6.5	XS506BL	51	_	-	_		
	Ø8	XS508BL	51	42	62	40		
	Ø 12	XS512BL	53	42	62	42		
	Ø 18	XS518BL	62	52	74	52		
	Ø 30	XS530BL	62	52	<u>74</u>	52		

e ≥ 120

proximity sensors
General purpose
Cylindrical, standard range, flush mountable Two-wire DC









Sensing dist.	Eupotion	Connection	Catalog	Weig	ht
Sensing dist. Sn, mm (in.)	Function	Connection	Number	kg	nt (lb)
Ø 6.5, plain				9	()
1.5 (0.06)	NO	Pre-cabled (1)	XS506BSCAL2	0.035	(0.08
	terminals 1 & 4 (2)	Remote M12 connector	XS506BSCAL01M12	0.050	(0.11
	NC	Pre-cabled (1)	XS506BSCBL2	0.035	(0.08
Ø 8, threaded	M8 x 1				
1.5 (0.06)	NO	Pre-cabled (1)	XS508BSCAL2	0.035	(0.08
	terminals 1 & 4 (2)	Remote M12 connector	XS508BSCAL01M12	0.050	(0.11
		Remote M12 connector	XS508BSCAL08M12	0.050	(0.11
	NC	Pre-cabled (1)	XS508BSCBL2	0.035	(0.08
		Remote M12 connector	XS508BSCBL01M12	0.050	(0.11
Ø 12, threaded	d M12 x 1				
2 (0.08)	NO	Pre-cabled (1)	XS512BSDAL2	0.075	(0.17
İ		M12 connector	XS512BSDAM12	0.035	(0.08
	NO	M12 connector	XS512BSCAM12	0.035	(0.08
	terminals 1 & 4 (2)	Remote M12 connector	XS512BSCAL08M12	0.060	(0.13
	NC	Pre-cabled (1)	XS512BSDBL2	0.075	(0.17
		M12 connector	XS512BSDBM12	0.035	(0.08
Ø 18, threaded	d M18 x 1				
5 (0.20)	NO	Pre-cabled (1)	XS518BSDAL2	0.120	(0.26
		M12 connector	XS518BSDAM12	0.060	(0.13
	NO	M12 connector	XS518BSCAM12	0.060	(0.13
	terminals 1 & 4 (2)	Remote M12 connector	XS518BSCAL08M12	0.085	(0.19
	NC	Pre-cabled (1)	XS518BSDBL2	0.120	(0.26
		M12 connector	XS518BSDBM12	0.060	(0.13
Ø 30, threaded	d M30 x 1.5				
10 (0.39)	NO	Pre-cabled (1)	XS530BSDAL2	0.205	(0.45
		M12 connector	XS530BSDAM12	0.145	(0.32
	NO	M12 connector	XS530BSCAM12	0.145	(0.32
	terminals 1 & 4 (2)	Remote M12 connector	XS530BSCAL08M12	0.170	(0.37
	NC	Pre-cabled (1)	XS530BSDBL2	0.205	(0.45
		M12 connector	XS530BSDBM12	0.145	(0.32

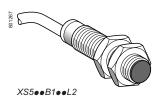
Accessories				
Description	For use with sensors	Catalog Number	Weight kg	(lb)
Mounting	Ø 6.5 (plain)	XSZ B165	0.005	(0.01)
clamps	Ø 8	XSZB108	0.006	(0.01)
	Ø 12	XSZB112	0.006	(0.01)
	Ø 18	XSZB118	0.010	(0.02)
	Ø 30	XSZB130	0.020	(0.04)

 ⁽¹⁾ For a 5 m long cable replace L2 with L5; for a 10 m cable replace L2 with L10.
 Example: XS508BSCAL2 becomes XS508BSCAL5 with a 5 m cable.

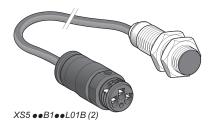
 (2) The NO output is connected to terminals 1 and 4 of the M12 connector.

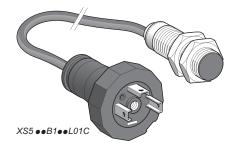
OsiSense® Inductive **proximity sensors**General purpose Cylindrical, standard range, flush mountable

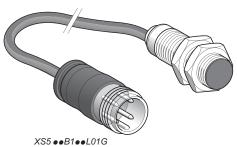
Two-wire DC













		-48 V, long case mod		18/at-1	- t
Sensing	Function	Connection	Catalog Number	Weigh kg	nt (lb
Sn, mm			Trumber	"9	(
(in.)	1 1110 4				
	aded M8 x 1				
1.5 (0.06)	NO	Pre-cabled (1)	XS508B1DAL2	0.035	(0.0
		Remote M12 connector	XS508B1DAL08M12		(0.1
		M12 connector	XS508B1DAM12	0.025	(0.0
	NO	M12 connector	XS508B1CAM12	0.025	(0.0
		Remote M12 connector	XS508B1CAL08M12		(0.1
	NC	Pre-cabled (1)	XS508B1DBL2	0.035	(0.0
		M12 connector	XS508B1DBM12	0.025	0.0)
Ø 12, thre	eaded M12 x 1				
2 (0.08)	NO	Pre-cabled (1)	XS512B1DAL2	0.075	(0.1
		Remote 7/8" connector	XS512B1DAL08U78	0.050	(0.1
		M12 connector	XS512B1DAM12	0.035	(0.0
	NO	M12 connector	XS512B1CAM12	0.035	(0.0
	terminals 1 & 4 (3)	Remote M12 connector	XS512B1CAL08M12	0.060	(0.1
	NC	Pre-cabled (1)	XS512B1DBL2	0.075	(0.1
		M12 connector	XS512B1DBM12	0.035	(0.0
		Remote M12 connector	XS512B1DBL08M12	0.060	(0.
Ø 18, thre	eaded M18 x 1				
(0.20)	NO	Pre-cabled (1)	XS518B1DAL2	0.120	(0.2
(/		Low temperature version (- 40 °C)			(0.2
		Remote screw terminal connector (2)	1 /	0.085	(0.1
		Remote DIN 43650A connector	XS518B1DAL01C	0.085	(0.
		Remote M18 connector	XS518B1DAL01G	0.085	(0.
		M12 connector	XS518B1DAM12	0.060	(0.
	NO	M12 connector	XS518B1CAM12	0.060	(0.
		Remote M12 connector	XS518B1CAL08M12		(0.
	NC	Pre-cabled (1)	XS518B1DBL2	0.120	(0.2
	140	M12 connector	XS518B1DBM12	0.060	(0.2
		Remote M12 connector	XS518B1DBL08M12		(0.
		Remote screw terminal connector (2)		0.120	(0.2
Ø 30 thr	eaded M30 x 1.5	Remote screw terminal connector (2)	A3310B1DBL01B	0.120	(0.2
0 (0.39)	NO	Pre-cabled (1)	XS530B1DAL2	0.205	(0.4
0 (0.39)	NO	Low temperature version (- 40 °C)			(0.2
		M12 connector	XS530B1DAL21F (4)	0.120	(0.2
		Remote screw terminal connector (2)		0.145	_ `
		Remote DIN 43650A connector	XS530B1DAL01B	0.205	(0.4
					(0.4
		Remote M18 connector	XS530B1DAL01G	0.205	(0.4
	NO terminals 1 & 4 (3)	M12 connector	XS530B1CAM12	0.145	(0.3
		Remote M12 connector	XS530B1CAL08M12		(0.3
	NC	Pre-cabled (1)	XS530B1DBL2	0.205	(0.4
		M12 connector	XS530B1DBM12	0.145	(0.3
			XS530B1DBL01B	0.205	(0.3)
		Remote screw terminal connector (2)	7.00002.12220.12		
		· ·			
Accesso Descripti		For use with	Catalog	Weigh	
Descripti	ion	For use with sensors	Catalog Number	Weigh kg	(II
Descripti	ion	For use with sensors	Catalog Number XSZB108	Weigh kg 0.006	(0.0
	ion	For use with sensors	Catalog Number	Weigh kg	(0.0 (0.0 (0.0

⁽¹⁾ For a 5 m cable replace L2 with L5; for a 10 m long cable replace L2 with L10. Example: XS508B1DAL2 becomes XS508B1DAL5 with a 5 m long cable.

Example: XS518B1DAL2TF becomes XS518B1DAL5TF with a 5 m long cable.

For PUR cable, replace the letter L in the reference with P.

Example: XS518B1DAL2TF becomes XS518B1DAP2TF with PUR cable.

For a 5 m long PUR cable replace P2 with P5.

Example: XS518B1DAP2TF becomes XS518B1DAP5TF with a 5 m long PUR cable.

⁽²⁾ Protective cable gland included with remote screw terminal connector.

⁽³⁾ The NO output is connected to terminals 1 and 4 of the M12 connector.

⁽⁴⁾ For a 5 m long cable replace L2 with L5.

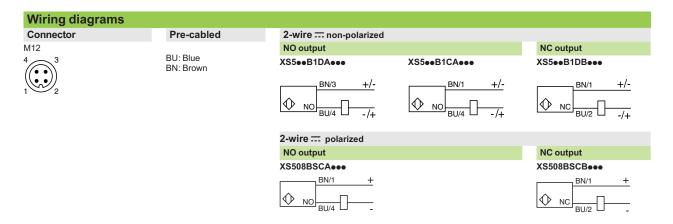
proximity sensors
General purpose
Cylindrical, standard range, flush mountable Two-wire DC

Sensor type			XS5eeB1eeM12, XS5eeBSeeM12	XS5eeB1DeL2, XS5eeBSDeL2		
Product certifications		-	UL, CSA, (€	ASSEED IDELZ, ASSEEDSDELZ		
Connection	Connector		M12			
Connection	Connector		WIZ	_		
	Pre-cabled		-	Length 2 m		
	Remote connector		Remote M12 connector (L01M12), screv remote M18 connector (L01G) on 0.15 n Remote M12 (L08M12) or 7/8" (L08U78			
Operating zone	Ø 6.5	mm	0–1.2 (0–0.05 in.)			
	Ø 8	mm	0–1.2 (0–0.05 in.)			
	Ø 12	mm	0–1.6 (0–0.06 in.)			
	Ø 18	mm	0-4 (0-0.16 in.)			
	Ø 30	mm	0–8 (0–0.31 in.)			
Differential travel		%	1–15 of effective sensing distance (Sr)			
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and □ IP 68, double insulation (except Ø 6.5 and Ø 8: IP 67)		
Storage temperature		°C	-40 to +85 (-40 to +185 °F)			
Operating temperature		°C	-25 to +70 (-13 to +158 °F); TF products	: - 40 to + 70 (-40 to +158°F)		
Materials .	Case		Nickel plated brass (except XS506 and XS508B1: stainless steel, grade 303)			
	Sensing face		PPS			
	Cable		-	PvR 2 x 0.34 mm² (22 AWG) except XS506 and XS508: 2 x 0.11 mm (27 AWG) PUR available (1)		
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz	:)		
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms			
Output state indication			Yellow LED: 4 viewing ports at 90°	Yellow LED: circular		
Rated supply voltage		V	12–48 non-polarized for XS5••B1D, 12–24 non-polarized for XS5••BS (except Ø 6.5 and Ø 8 short case models, whare polarized) with protection against reverse polarity			
Voltage limits (including	ripple)	V	: 10–58 for XS5●B1D, : 10–36 for XS5●BS			
Switching capacity		mA	1.5-100 with overload and short-circuit	protection		
Voltage drop, closed stat	te	٧	≤4			
Residual current, open s	tate	mA	≤ 0.5			
Maximum switching	XS506, XS508, XS512	Hz	4000			
requency	XS518	Hz	3000			
	XS530	Hz	2000			
Delays	First-up	ms	≤ 10			
	Response	ms	≤ 0.2 : XS506, XS508 and XS512 ≤ 0.15 : XS518 ≤ 0.3 : XS530			
	Recovery	ms	≤ 0.2 (except XS530B1 : ≤ 0.3)			

⁽¹⁾ For PUR cable, replace the letter L in the reference with P. Example: XS506BSDAL2 becomes XS5 06BSDAP2 with PUR cable.

OsiSense® Inductive proximity sensors

General purpose Cylindrical, standard range, flush mountable Two-wire DC



Remote connectors LO1B, LO1C, LO1G

Screw terminal (LO1B)

The terminal numbering differs according to the version ($\overline{...}$ 2-wire, $\overline{...}$ 3-wire, $\overline{\sim}$ 2-wire).

DIN 43650 A (LO1C)



The NO or NC outputs are connected to terminal 2.

M18 (LO1G)



Setup

Minimum mounting distances (mm)



Ø 6.5

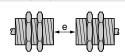
Ø8

Ø 12

Ø 18

Ø 30



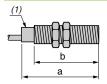


Face to face
e ≥ 18
e ≥ 18
e ≥ 24
e ≥ 60
e ≥ 120



racing a metal object
e ≥ 4.5
e ≥ 4.5
e ≥ 6
e ≥ 15
e ≥ 30

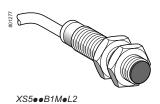
Dimensions (mm)



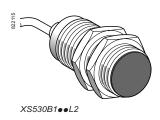
(1) LED

Sensors		Pre-ca	Pre-cabled (mm)		M8 connector (mm)		nnector (mm)	
Short ca	se model		а	b	а	b	а	b
	Ø 6.5	XS506BS	33	_	42	_	45	-
	Ø8	XS508BS	33	25	42	26	45	24
	Ø 12	XS512BS	35	25		_	50	30
	Ø 18	XS518BS	39	28		_	50	28
	Ø 30	XS530BS	43	32		_	55	32
Sensors			Pre-ca	abled (mm)	M12 c	onnector (mm)		
Long cas	se model		а	b	а	b		
	Ø8	XS508B1	51	42	62	40		
	Ø 12	XS512B1	53	42	62	42		
	Ø 18	XS518B1	62	52	74	52		
	Ø 30	XS530B1	62	52	74	52		

proximity sensors
General purpose
Cylindrical, standard range, flush mountable Two-wire AC or DC (1)









Sensors, 2-w	ire 24–24	0 V ≂, long case mo	odel		
Ø 12, threaded M12	2 x 1				
Sensing distance Sn, mm (in.)	Function	Connection	Catalog Number	Weig kg	ht (lb)
2 (0.08)	NO	Pre-cabled (1)	XS512B1MAL2	0.075	(0.17)
		1/2"-20UNF connector	XS512B1MAU20	0.025	(0.06)
	NC	Pre-cabled (1)	XS512B1MBL2	0.075	(0.17)
		1/2"-20UNF connector	XS512B1MBU20	0.025	(0.06)

Ø 18, threaded M18	3 x 1				
Sensing distance Sn, mm (in.)	Function	Connection	Catalog Number	Weigl kg	nt (lb)
5 (0.20)	NO	Pre-cabled (1)	XS518B1MAL2	0.100	(0.22)
		1/2"-20UNF connector	XS518B1MAU20	0.060	(0.13)
	NC	Pre-cabled (1)	XS518B1MBL2	0.100	(0.22)
		1/2"-20UNF connector	XS518B1MBU20	0.060	(0.13)

Ø 30, threaded M30) x 1.5				
Sensing distance Sn, mm (in.)	Function	Connection	Catalog Number	Weig kg	ht (lb)
10 (0.39)	NO	Pre-cabled (1)	XS530B1MAL2	0.205	(0.45)
		1/2"-20UNF connector	XS530B1MAU20	0.145	(0.32)
	NC	Pre-cabled (1)	XS530B1MBL2	0.205	(0.45)
		1/2"-20UNF connector	XS530B1MBU20	0.145	(0.32)

Accessories				
Description	For use with	Catalog	Weig	
	sensors	Number	kg	(lb)
Mounting clamps	Ø 12	XSZB112	0.006	(0.01)
	Ø 18	XSZB118	0.010	(0.02)
	Ø 30	XSZB130	0.020	(0.04)

⁽¹⁾ For a 5 m long cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS512B1MAL2 becomes XS512B1MAL5 with a 5 m cable.

Specifications, wiring diagrams, setup, dimensions

OsiSense® Inductive **proximity sensors**General purpose

Cylindrical, standard range, flush mountable Two-wire AC or DC

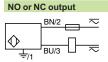
Sensor type			XS5eeB1MeU20	XS5eeB1MeL2	
Product certifications			UL, CSA, C€		
Connection	Connector		1/2"-20UNF	-	
	Pre-cabled		_	Length 2 m	
Operating zone	Ø 12	mm	0–1.6 (0–0.05 in.)	•	
	Ø 18	mm	0–4 (0–0.16 in.)		
	Ø 30	mm	0–8 (0–0.31 in.)		
Differential travel		%	1–15 of effective sensing distance (Sr)		
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68, double insulation	
	Conforming to DIN 40050		IP 69K	•	
Storage temperature		°C	-40 to +85 (-40 to +185 °F)		
Operating temperature		°C	-25 to +70 (-13 to +158 °F)		
Materials	Case		Nickel plated brass		
	Sensing face		PPS		
	Cable		_	PvR 2 x 0.34 mm ² (22 AWG)	
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)		
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms		
Output state indication			Yellow LED: 4 viewing ports at 90°	Yellow LED: circular	
Rated supply voltage		٧	~ or == 24–240 (~ 50/60 Hz)		
Voltage limits (including	g ripple)	V	∼ or === 20–264		
Switching capacity	XS512B1Meee	mA	5–200 (1)		
	XS518B1Meee, XS530B1Meee	mA	∼ 5–300 or == 5–200 (1)		
Voltage drop, closed sta	ite	V	≤5.5		
Residual current, open	state	mA	≤0.8		
Maximum switching	XS512B1 • • • , XS518B1M • • •	Hz	~ 25 or == 1000		
frequency	XS530B1Meee	Hz	~ 25 or == 500		
Delays	First-up	ms	≤ 20 XS512B1Meee, ≤ 25 XS518B1Meee and XS530B1Meee		
	Response	ms	≤0.5		
	Recovery	ms	≤ 0.2 XS512B1Meee, ≤ 0.5 XS518B1Meee, ≤ 2 XS530B1Meee		

Wiring diagrams

Connector 1/2"-20UNF

≂:2 ≟:1 ≂:3

Pre-cabled BU: Blue BN: Brown



2-wire \sim or $\overline{...}$

≟: on connector models only

Setup

Minimum mounting distances (mm)





e e

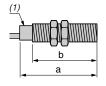
Sensor	
Ø 12	
Ø 18	
Ø 30	

Side by side
e≥8
e ≥ 16
e > 30

e≥48 e ≥ 100 e ≥ 180

Facing a metal object e ≥ 12 e ≥ 25 e ≥ 45

Dimensions (mm)



	Ser	nsor		
1	XS5	12B	1M	
1	XS5	18B	1M	
7	XS5	30B	1 M	

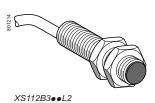
Pre-cal	oled (mm)	
а	b	
53	42	
62	52	
62	52	

Connector (mm)								
а	b							
62	42							
73	52							
73	52							

proximity sensors
General purpose
Cylindrical, increased range, flush mountable
Three-wire DC, solid-state output







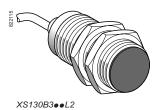
Senso	ors, <u>3-w</u>	ire <u>12</u> -	-24 V , short c	ase mo	odel		
			Connection	Sold in	Catalog	Weig	ht
distance Sn, mm (in.)				lots of	Number	kg	(lb)
Ø 6.5, pla	ain						
2.5 (0.10)	NO	PNP	Pre-cabled (1)	1	XS106B3PAL2	0.060	(0.13
			M8 connector	1	XS106B3PAM8	0.030	(0.07
			M12 connector	1	XS106B3PAM12	0.050	(0.11
			Pre-cabled	20	XS106B3PAL2TQ	0.980	(2.16
			M8 connector	20	XS106B3PAM8TQ	0.320	(0.71
		NPN	Pre-cabled	1	XS106B3NAL2	0.060	(0.13
			M8 connector	1	XS106B3NAM8	0.030	(0.07
	NC	PNP	Pre-cabled (1)	1	XS106B3PBL2	0.060	(0.13
			M8 connector	1	XS106B3PBM8	0.030	(0.07
		NPN	Pre-cabled	1	XS106B3NBL2	0.060	(0.13
			M8 connector	1	XS106B3NBM8	0.030	(0.07
Ø 8, thre	aded M8 x	1					
2.5 (0.10)	NO	PNP	Pre-cabled (1)	1	XS108B3PAL2	0.070	(0.15
			M8 connector	1	XS108B3PAM8	0.030	(0.07
			M12 connector	1	XS108B3PAM12	0.060	(0.13
			Pre-cabled	20	XS108B3PAL2TQ	1.120	(2.47
			M8 connector	20	XS108B3PAM8TQ	0.460	(1.01
			M12 connector	20	XS108B3PAM12TQ	0.940	(2.07
		NPN	Pre-cabled (1)	1	XS108B3NAL2	0.070	(0.15
			M8 connector	1	XS108B3NAM8	0.030	(0.07
			M12 connector	1	XS108B3NAM12	0.060	(0.13
			Pre-cabled	20	XS108B3NAL2TQ	1.120	(2.47
			M8 connector	20	XS108B3NAM8TQ	0.460	(1.01
	NC	PNP	Pre-cabled (1)	1	XS108B3PBL2	0.070	(0.15
			M8 connector	1	XS108B3PBM8	0.030	(0.07
			M12 connector	1	XS108B3PBM12	0.060	(0.13
		NPN	Pre-cabled (1)	1	XS108B3NBL2	0.070	(0.15
			M8 connector	1	XS108B3NBM8	0.030	(0.07
			M12 connector	1	XS108B3NBM12	0.060	(0.13
	eaded M12						
4 (0.16)	NO	PNP	Pre-cabled (1)	1	XS112B3PAL2	0.090	(0.20
			M12 connector	1	XS112B3PAM12	0.030	(0.07
			Pre-cabled	20	XS112B3PAL2TQ	1.600	(3.53
			M12 connector	20	XS112B3PAM12TQ	0.470	(1.04
		NPN	Pre-cabled (1)	1	XS112B3NAL2	0.090	(0.20
			M12 connector	1	XS112B3NAM12	0.030	(0.07
			Pre-cabled	20	XS112B3NAL2TQ	1.600	(3.53
	NO	DND	M12 connector	20	XS112B3NAM12TQ		(1.04
	NC	PNP	Pre-cabled (1)	1	XS112B3PBL2	0.090	(0.20
			M12 connector	1	XS112B3PBM12	0.030	(0.07
		NIDA	M12 connector	20	XS112B3PBM12TQ	0.470	(1.04
		NPN	Pre-cabled (1)	1	XS112B3NBL2	0.090	(0.20
			M12 connector	1	XS112B3NBM12	0.030	(0.07

(1) For a 5 m cable replace L2 with L5. Example: XS106B3PAL2 becomes XS106B3PAL5 with a 5 m cable.

proximity sensors
General purpose
Cylindrical, increased range, flush mountable
Three-wire DC, solid-state output









Senso	rs 3-wi	re 12-	-24 V, short cas	se mod	el (continued)		
	Function		Connection	Sold in lots of	Catalog Number	Weigh kg	t (lb)
(in.)							
,	eaded M18						
8 (0.31)	NO	PNP	Pre-cabled (1)	1	XS118B3PAL2	0.110	(0.24)
			M12 connector	1	XS118B3PAM12	0.060	(0.13)
			Pre-cabled	20	XS118B3PAL2TQ	2.000	(4.41)
			M12 connector	20	XS118B3PAM12TQ	1.140	(2.51)
		NPN	Pre-cabled (1)	1	XS118B3NAL2	0.110	(0.24)
			M12 connector	1	XS118B3NAM12	0.060	(0.13)
			Pre-cabled	20	XS118B3NAL2TQ	2.000	(4.41)
			M12 connector	20	XS118B3NAM12TQ	1.140	(2.51)
	NC	PNP	Pre-cabled (1)	1	XS118B3PBL2	0.110	(0.24)
			M12 connector	1	XS118B3PBM12	0.060	(0.13)
		NPN	Pre-cabled (1)	1	XS118B3NBL2	0.110	(0.24)
			M12 connector	1	XS118B3NBM12	0.060	(0.13)
Ø 30, thre	eaded M30	x 1.5					
15 (0.59)	NO	PNP	Pre-cabled (1)	1	XS130B3PAL2	0.180	(0.40)
			M12 connector	1	XS130B3PAM12	0.130	(0.29)
			Pre-cabled	20	XS130B3PAL2TQ	3.360	(7.41)
			M12 connector	20	XS130B3PAM12TQ	2.000	(4.41)
		NPN	Pre-cabled (1)	1	XS130B3NAL2	0.180	(0.40)
			M12 connector	1	XS130B3NAM12	0.130	(0.29)
			M12 connector	20	XS130B3NAM12TQ	2.000	(4.41)
	NC	PNP	Pre-cabled (1)	1	XS130B3PBL2	0.180	(0.40)
			M12 connector	1	XS130B3PBM12	0.130	(0.29)
		NPN	Pre-cabled (1)	1	XS130B3NBL2	0.180	(0.40)
			M12 connector	1	XS130B3NBM12	0.130	(0.29)
Accesso	ries						
Descripti	ion		For use with sensors		Catalog Number	Weigh kg	t (lb)
Mounting	clamps		Ø 6.5 (plain)		XSZB165	0.005	(0.01)
_			Ø 8 (M8 x 1)		XSZB108	0.006	(0.01)
			Ø 12 (M12 x 1)		XSZB112	0.006	(0.01)
			Ø 18 (M18 x 1)		XSZB118	0.010	(0.02)
			Ø 30 (M30 x 1.5)		XSZB130	0.020	(0.04)

(1) For a 5 m long cable replace L2 with L5. Example: XS118B3PAL2 becomes XS118B3PAL5 with a 5 m long cable.

OsiSense® Inductive proximity sensors General purpose Cylindrical, increased range, flush mountable

Three-wire DC, solid-state output

	00110010	, 3-wire	12–48 \	/ <mark>, long case mode</mark> l			
	Sensing dist. Sn, mm (in.)	Function	Output	Connection	Catalog Number	Weig kg	ht (
	Ø 8, threade	d M8 x 1					
	2.5 (0.10)	NO	PNP	Pre-cabled (1)	XS608B1PAL2	0.035	(0
	2.0 (0.10)	110		M12 connector	XS608B1PAM12	0.015	(0
			NPN	Pre-cabled (1)	XS608B1NAL2	0.035	(0
				M12 connector	XS608B1NAM12	0.015	(0
		NC	PNP	Pre-cabled (1)	XS608B1PBL2	0.035	(0
		110		M12 connector	XS608B1PBM12	0.015	((
			NPN	Pre-cabled (1)	XS608B1NBL2	0.035	((
S600B100L2			INFIN	M12 connector	XS608B1NBM12	0.035	()
	Ø 12, thread	ed M12 x 1		W12 COTTIECTO	A3000BTNBW12	0.013	(,
	4 (0.16)	NO	PNP	Pre-cabled (1)	XS612B1PAL2	0.075	((
				M12 connector	XS612B1PAM12	0.020	(
			NPN	Pre-cabled (1)	XS612B1NAL2	0.075	(
				M12 connector	XS612B1NAM12	0.020	(
		NC	PNP	Pre-cabled (1)	XS612B1PBL2	0.075	(
		110		M12 connector	XS612B1PBM12	0.020	((
66••B1••M12			NPN	Pre-cabled (1)	XS612B1NBL2	0.020	(
			INI IN	M12 connector	XS612B1NBM12	0.073	(
//	Ø 18. thread	ed M18 x 1		W12 connector	A3012DTNDW12	0.020	
	8 (0.31)	NO	PNP	Pre-cabled (1)	XS618B1PAL2	0.100	(
	0 (0.31)	110	1 141	M12 connector	XS618B1PAM12	0.100	(
				Remote screw term. connector		0.040	(
				Remote DIN 43650 connector		0.100	(
				Remote M18 connector	XS618B1PAL01G	0.100	(
			NPN	Pre-cabled (1)	XS618B1NAL2	0.100	(
				M12 connector	XS618B1NAM12	0.040	(
6 ••B1••L01B (2)				Remote screw term. connector	XS618B1NAL01B (2)	0.100	(
				Remote DIN 43650 connector	XS618B1NAL01C	0.100	(
		NC	PNP	Pre-cabled (1)	XS618B1PBL2	0.100	(
				M12 connector	XS618B1PBM12	0.040	(
				Remote screw term. connector	XS618B1PBL01B (2)	0.100	(
	\geqslant			Remote DIN 43650 connector	XS618B1PBL01C	0.100	(
			NPN	Pre-cabled (1)	XS618B1NBL2	0.100	(
	ď			M12 connector	XS618B1NBM12	0.040	(
				Remote screw term. connector			(
				Remote DIN 43650 connector	. ,	0.100	_ \
				Remote Din 43030 connector	XS618B1NBL01C	0.100	(
	Ø 30, thread	ed M30 x 1.	5	Remote DIN 43030 connector	XS618B1NBL01C		(
	Ø 30, thread	ed M30 x 1. NO	5 PNP	Pre-cabled (1)	XS618B1NBL01C XS630B1PAL2		Ì
66 e B1 e 1 01C						0.100	(
66 •• B1 •• L01C				Pre-cabled (1) M12 connector	XS630B1PAL2 XS630B1PAM12	0.100 0.205 0.145	(
6 •• B1•• L01C				Pre-cabled (1) M12 connector Remote screw term. connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2)	0.100 0.205 0.145 0.205	(
6 ••B1••L01C				Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C	0.100 0.205 0.145 0.205 0.205	(
6 •• B1••L01C			PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G	0.100 0.205 0.145 0.205 0.205 0.205	(
6 • • B1 • • L01C				Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1)	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2	0.100 0.205 0.145 0.205 0.205 0.205 0.205	(((
6 •• B1••L01C			PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145	(((((((((((((((((((((
6 •• B1••L01C			PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205	(((((((((((((((((((((
6 •• B1••L01C		NO	PNP NPN	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205	
6 • • B1 • • L01C			PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1)	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL2	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205	
6 • • B1 • • L01C		NO	PNP NPN	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL2 XS630B1PBM12	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205	
		NO	PNP NPN	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Pre-cabled (1) M12 connector Remote screw term. connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL2 XS630B1PBM12 XS630B1PBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205	
		NO	PNP NPN	Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote Screw term. connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL2 XS630B1PBL2 XS630B1PBL01B (2) XS630B1PBL01C	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.145 0.205 0.205 0.205 0.205	
		NO	NPN PNP	Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01B (2) XS630B1PAL01C XS630B1PBL2 XS630B1PBL2 XS630B1PBL01B (2) XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01G	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
		NO	PNP NPN	Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote DIN 43650 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1)	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL2 XS630B1PBL2 XS630B1PBL01B (2) XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01C XS630B1PBL01G	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
		NO	NPN PNP	Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL2 XS630B1PBL2 XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01G XS630B1PBL01G XS630B1NBL2 XS630B1NBL2 XS630B1NBM12	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
		NO	NPN PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term.connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL01C XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1NBL01B (2) XS630B1NBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
	15 (0.59)	NO NC	NPN PNP	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL01C XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1PBL01G XS630B1NBL01B (2) XS630B1NBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
66 •• B1 •• L01G	15 (0.59)	NO NC	PNP NPN NPN	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Remote M18 connector Remote Screw term. connector Remote Screw term. connector Remote Screw term. connector Remote Screw term. connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL01C XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01G XS630B1PBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01B (2) XS630B1NBL01B (2) XS630B1NBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	
66 •• B1 •• L01G	15 (0.59)	NO NC	PNP NPN NPN For use	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote Screw term.connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL2 XS630B1PBL01B (2) XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1NBL01C XS630B1NBL01 XS630B1NBL01 XS630B1NBL01B (2) XS630B1NBL01B (2) XS630B1NBL01C XS630B1NBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	(((((((((((((((((((((((((((
G6 •• B1••L01G	Accessories Description	NO NC	PNP NPN NPN For use sensors	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote Screw term.connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C Catalog Number	0.100 0.205 0.145 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205	((((() (() (() (() (() (() (() (() (()
SG •• B1•• L01G	15 (0.59)	NO NC	PNP NPN NPN For use sensors Ø 8	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote Screw term.connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAM12 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1NAL2 XS630B1NAL01B (2) XS630B1NAL01B (2) XS630B1NAL01C XS630B1NAL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01G XS630B1PBL01G XS630B1NBL01C XS630B1NBL01C XS630B1NBL01B (2)	0.100 0.205 0.145 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205 0.205	((
S6 •• B1•• L01G	Accessories Description Mounting	NO NC	PNP NPN NPN For use sensors	Pre-cabled (1) M12 connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote screw term. connector Remote DIN 43650 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote DIN 43650 connector Remote DIN 43650 connector Remote M18 connector Pre-cabled (1) M12 connector Remote Screw term. connector Remote Screw term. connector Remote DIN 43650 connector Remote Screw term.connector Remote DIN 43650 connector	XS630B1PAL2 XS630B1PAL01B (2) XS630B1PAL01C XS630B1PAL01G XS630B1PAL01G XS630B1NAL2 XS630B1NAM12 XS630B1NAL01B (2) XS630B1NAL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1PBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C XS630B1NBL01C Catalog Number	0.100 0.205 0.145 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.145 0.205 0.205 0.205 0.205 0.205 0.205 0.205	(() (() (() (() (() (() (() (() (() (()

⁽¹⁾ For a $\overline{5}$ m cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS608B1PAL2 becomes XS608B1PAL5 with a 5 m cable.

⁽²⁾ Protective cable gland included with remote screw terminal connector.

Specifications, wiring diagrams, setup, dimensions

OsiSense® Inductive **proximity sensors**General purpose

Cylindrical, increased range, flush mountable Three-wire DC, solid-state output

Specifications Sensor type			XS1/XS6eeBeeeM8	XS1/XS6eeBeeeM12	XS1/XS6eeBeeeL2				
Product certifications			UL, CSA, CE	XO II XOOOOOOOOOO	XO II/XOOOODOODE				
Connection	Connector		M8	M12					
	Pre-cabled		_	_	Length 2 m				
	Remote connector		Remote screw terminal (L01 flying lead	B), DIN 43650 (L01C) or M1	8 connector (L01G) on 0.15 m				
Operating zone	Ø 6.5 and Ø 8	mm	0–2 (0–0.08 in.)						
	Ø 12	mm							
	Ø 18	mm	0-6.4 (0-0.25 in.)						
	Ø 30	mm	0-12 (0-0.47 in.)						
Differential travel		%	1–15 of effective sensing dis	tance (Sr)					
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67		IP 65 and IP 68, double insulation ☐ except Ø 6.5 and Ø 8: IP 67				
Conforming to DIN 40050			IP 69K for Ø 12, 18 and 30 sensors						
Storage temperature			-40 to +85 (-40 to +185 °F)						
Operating temperature			-25 to +70 (-13 to +158 °F)						
Materials Case			Nickel plated brass (except XS608: stainless steel, grade 303)						
	Sensing face		PPS						
	Cable		_		PvR 3 x 0.34 mm ² (22 AWG except Ø 6.5 and 8: 3 x 0.11 mm (27 AWG) ²				
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f =	10 to 55 Hz)					
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms						
Output state indication			Yellow LED, 4 viewing ports	at 90°	Yellow LED, circular				
Rated supply voltage		٧	XS1:: 12–24 with protection against reverse polarity XS6:: 12–48 with protection against reverse polarity						
Voltage limits (including ripple)		٧	XS1 : 10–36; XS6 : 10–58						
Switching capacity		mΑ	≤ 200 with overload and sho	rt-circuit protection					
Voltage drop, closed state		٧	≤2						
Current consumption, no-load		mΑ	≤10						
Maximum switching frequency	Ø 6.5, Ø 8 and Ø 12	Hz	2500						
	Ø 18	Hz	1000						
	Ø 30	Hz	500						
Delays	First-up	ms	≤10						
	Response	ms	≤ 0.2 for Ø 6.5, Ø 8 and Ø 12	2, ≤ 0.3 for Ø 18, ≤ 0.6 for Ø 3	30				
	Recovery	ms	≤ 0.2 for Ø 6.5, Ø 8 and Ø 12	2, ≤ 0.7 for Ø 18, ≤ 1.4 for Ø 3	30				

Wiring diagrams

Connector



DND



Pre-cabled BU: Blue BN: Brown BK: Black

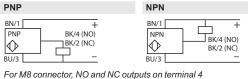
Setup







FINE	
BN/1	+
PNP	BK/4 (NO)
\Diamond	BK/2 (NC)
BU/3	



Sensors	Side by side	Face to face	Facing a metal object
Ø 6.5	e ≥ 5	e≥30	e≥8
Ø8	e ≥ 5	e≥30	e≥8
Ø 12	e ≥ 8	e ≥ 50	e ≥ 12
Ø 18	e ≥ 16	e ≥ 100	e ≥ 24
Ø 30	e ≥ 30	e ≥ 180	e ≥ 45

Dimensions (mm)								
(1)	Sensors		Pre-ca	Pre-cabled (mm)		M8 connector (mm)		onnector (mm)
	Short case model			b	а	b	а	b
	Ø 6.5	XS106B3	33	_	42	_	45	-
	Ø8	XS108B3	33	25	42	26	45	24
 	Ø 12	XS112B3	35	25		_	50	30
a →	Ø 18	XS118B3	39	28		_	_ 50	28
(1) LED	Ø 30	XS130B3	43	32	-	_	55	32
	Sensors	Sensors			M12 cc	M12 connector (mm)		
	Long case model		а	b	а	b		
	Ø 8	XS6 08B1	51	42	62	40		
	Ø 12	XS612B1	53	42	62	42		
	Ø 18	XS618B1	62	52	74	52		
	Ø 30	XS630B1	62	52	74	52		

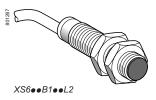
Catalog Numbers

OsiSense® Inductive proximity sensors General purpose Cylindrical, increased range, flush mountable

Two-wire DC, solid-state output











		24 V , short case r			
Sensing dist.	Function	Connection	Catalog	Weigl	
Sn, mm (in.)			Number	kg	(lb)
Ø 6.5, plain					
2.5 (0.10)	NO	Pre-cabled (1)	XS606B3CAL2	0.060	(0.13)
		Remote M12 connector	XS606B3CAL01M12	0.070	(0.15)
	NC	Pre-cabled (1)	XS606B3CBL2	0.060	(0.13)
Ø 8, threaded	d M8 x 1				
2.5 (0.10)	NO	Pre-cabled (1)	XS608B3CAL2	0.070	(0.15)
		Remote M12 connector	XS608B3CAL01M12	0.070	(0.15)
	NC	Pre-cabled (1)	XS608B3CBL2	0.070	(0.15)
		Remote M12 connector	XS608B3CBL01M12	0.070	(0.15)
Ø 12, threade	ed M12 x 1				
4 (0.16)	NO	Pre-cabled (1)	XS612B3DAL2	0.090	(0.20)
		M12 connector	XS612B3DAM12	0.030	(0.07)
	NC	Pre-cabled (1)	XS612B3DBL2	0.090	(0.20)
		M12 connector	XS612B3DBM12	0.030	(0.07)
Ø 18, threade	ed M18 x 1				
8 (0.31)	NO	Pre-cabled (1)	XS618B3DAL2	0.110	(0.24)
		M12 connector	XS618B3DAM12	0.060	(0.13)
	NC	Pre-cabled (1)	XS618B3DBL2	0.110	(0.24)
		M12 connector	XS618B3DBM12	0.060	(0.13)
Ø 30, threade	ed M30 x 1.5				
15 (0.59)	NO	Pre-cabled (1)	XS630B3DAL2	0.180	(0.40)
		M12 connector	XS630B3DAM12	0.130	(0.29)
	NC	Pre-cabled (1)	XS630B3DBL2	0.180	(0.40)

Sensing dist.	Function	Connection	Catalog	Weig	ht
Sn, mm (in.)			Number	kg	(lb)
Ø 6.5, plain					
2.5 (0.10)	NO	Pre-cabled (1)	XS606B1DAL2	0.060	(0.13
	NC	Pre-cabled (1)	XS606B1DBL2	0.060	(0.13
Ø 8, threaded	M8 x 1				
2.5 (0.10)	NO	Pre-cabled (1)	XS608B1DAL2	0.035	(0.08
		M12 connector	XS608B1DAM12	0.015	(0.0
	NC	Pre-cabled (1)	XS608B1DBL2	0.035	(0.08
		M12 connector	XS608B1DBM12	0.015	(0.03
Ø 12, threade	ed M12 x 1				
1 (0.16)	NO	Pre-cabled (1)	XS612B1DAL2	0.180	(0.4
		M12 connector	XS612B1DAM12	0.020	(0.4
	NC	Pre-cabled (1)	XS612B1DBL2	0.075	(0.1
		M12 connector	XS612B1DBM12	0.020	(0.4
Ø 18, threade	ed M18 x 1				
3 (0.31)	NO	Pre-cabled (1)	XS618B1DAL2	0.100	(0.2
		M12 connector	XS618B1DAM12	0.040	(0.0
	NC	Pre-cabled (1)	XS618B1DBL2	0.100	(0.2
		M12 connector	XS618B1DBM12	0.040	(0.0
Ø 30, threade	ed M30 x 1.5				
15 (0.59)	NO	Pre-cabled (1)	XS630B1DAL2	0.205	(0.4
		M12 connector	XS630B1DAM12	0.145	(0.3
	NC	Pre-cabled (1)	XS630B1DBL2	0.205	(0.4
		M12 connector	XS630B1DBM12	0.145	(0.3
Accessories					
Description		For use with sensors	Catalog Number	Weig kg	ht (lb
Mounting clam	os	Ø 6.5 (plain)	XSZB165	0.005	(0.0)
		Ø 8 (M8 x 1)	XSZB108	0.006	(0.0
		Ø 12 (M12 x 1)	XSZB112	0.006	(0.0)
		Ø 18 (M18 x 1)	XSZB118	0.010	(0.02
		Ø 30 (M30 x 1.5)	XSZB130	0.020	(0.04

(1) For a 5 m cable replace L2 with L5.
Example: XS606B3CAL5 with a 5 m cable.

Specifications, wiring diagrams, setup, dimensions

OsiSense® Inductive **proximity sensors**General purpose

Cylindrical, increased range, flush mountable Two-wire DC, solid-state output

Specifications			VCC POP - M40 - VCC P4D - 1440	VCC - POD -LO VCC - P4D -LC	
Sensor type			XS6eeB3DeM12, XS6eeB1DeM12	XS6eeB3DeL2, XS6eeB1DeL2	
Product certifications			UL, CSA, C€		
Connection	Connector		M12 or remote M12 connector (L01M12)	on 0.15 m flying lead	
	Pre-cabled		Length 2 m		
Operating zone	Ø 6.5 and Ø 8	mm	0–2 (0–0.08 in.)		
	Ø 12	mm	0–3.2 (0–0.13 in.)		
	Ø 18	mm	0–6.4 (0–0.25 in.)		
	Ø 30	mm	0–12 (0–0.47 in.)		
Differential travel		%	6 1–15 of effective sensing distance (Sr)		
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68 double isolation ☐ (except Ø 6.5 and Ø 8: IP 67)	
	Conforming to DIN 40050		IP 69K		
Storage temperature		°C	-40 to +85 (-40 to +185 °F)		
Operating temperature		°C	°C -25 to +70 (-13 to +158 °F)		
Materials	Case		Nickel plated brass (except XS606B1D o	r XS608B1D: stainless steel, grade 303)	
	Sensing face		PPS		
	Cable		PvR 2 x 0.34 mm ² (22 AWG) except Ø 6.5 and Ø 8: 2 x 0.11 mm ² (27 AWG)		
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)		
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms		
Output state indication			Yellow LED, 4 viewing ports at 90°		
Rated supply voltage		٧	12–48 non-polarized for XS6••B1D, 12–24 non-polarized for XS6••B3D (e are polarized), with protection against rev	except Ø 6.5 and Ø 8 short case models, which	
Voltage limits (including ripple)		٧	10–58 for XS6••B1D 10–36 for XS6••B3D		
Switching capacity		mA	≤ 100 with overload and short-circuit prot	ection	
Voltage drop, closed state		٧	4		
Current consumption, no-load		mA	≤ 0.5 mA		
Maximum switching frequency	Ø 6.5, Ø 8	Hz	3000		
_ · · · · ·	Ø 12	Hz	2000		
	Ø 18	Hz	1000		
	Ø 30	Hz	500		
Delays	First-up	ms	≤10		
-	Response	ms	≤0.3		
	Recovery	ms	≤0.3		

Pre-cabled BU: Blue

IIIIIII	mounting	uistances

Setting-up





2-wire non-polarized								
NO outpu	ut		NC outp	out				
NO	BN/3 BU/4	<u>+/-</u> -/+	NO	BN/1 BU/2	<u>+/-</u> -/+			
2-wire	polarized							
XS6eeB3	BCA		XS6eeB	3CB				
	BN/1	+		BN/1	+			
				_				

Sensors	Side by side	Face to face	Facing a metal object
Ø 6.5	e≥5	e≥30	e ≥ 8
Ø8	e ≥ 5	e ≥ 30	e ≥ 8
Ø 12	e ≥ 8	e ≥ 50	e ≥ 12
Ø 18	e ≥ 16	e ≥ 100	e ≥ 25
Ø 30	e ≥ 30	e ≥ 180	e ≥ 45

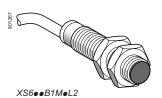
Dimensions (mm)
(1) b a
(1) LED

Wiring diagrams

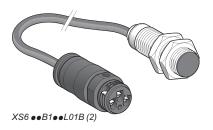
Sensors		Pre-ca	Pre-cabled (mm)		onnector (mm)	
Short case model		а	b	а	b	
Ø 6.5	XS606B3D	33	_	-	_	
Ø8	XS608B3D	33	25	_	24	
Ø 12	XS612B3D	35	25	50	30	
Ø 18	XS618B3D	39	28	50	28	
Ø 30	XS630B3D	43	32	55	32	
Long case model		а	b	а	b	
Ø 6.5	XS606B1D	51	_	-	-	
Ø 8	XS608B1D	51	42	62	40	
Ø 12	XS612B1D	53	42	62	42	
Ø 18	XS618B1D	62	52	74	52	
Ø 30	XS630B1D	62	52	74	52	

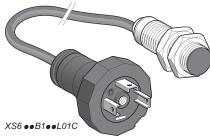
OsiSense® Inductive proximity sensors General purpose Cylindrical, increased range, flush mountable

Two-wire AC or DC (1)









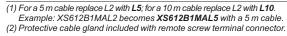


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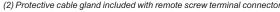
XSZB130

0.020

(0.04)



Ø 30





XS6 ••B1••L01G

Specifications, wiring diagrams, setup, dimensions

OsiSense® Inductive proximity sensors

General purpose Cylindrical, increased range, flush mountable Two-wire AC or DC

Specifications					
Sensor type			XS6●●B1M●U20	XS6••B1M•L•	
Product certifications			UL, CSA, C€	•	
Connection	Connector		1/2" - 20 UNF	-	
	Pre-cabled		-	Length 2 m	
	Remote connector		Remote screw terminal (L01B), DIN 43650 flying lead	A (L01C) or M18 connector (L01G) on 0.15 n	
Operating zone	Ø 12	mm	0-3.2 (0-0.13 in.)		
	Ø 18	mm	0-6.4 (0-0.25 in.)		
	Ø 30	mm	0–12 (0–0.47 in.)		
Differential travel		%	1–15 of effective sensing distance (Sr)		
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68 double isolation	
	Conforming to DIN 40050		IP 69K	•	
Storage temperature		°C	-40 to +85 (-40 to +185 °F)		
Operating temperature		°C	-25 to +70 (-13 to +158 °F)		
Materials	Case		Nickel plated brass		
naterials	Sensing face		PPS		
	Cable		PvR 2 x 0.34 mm ² (22 AWG)		
Vibration resistance	To IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)		
Shock resistance	To IEC 60068-2-27		50 gn, duration 11 ms		
Output state indication			Yellow LED: circular on pre-cabled version Yellow LED with 4 viewing ports at 90° on c		
Rated supply voltage		٧	≂ 24–240 (~ 50/60 hZ)		
Voltage limits (including ripple)		٧	≂20–264		
Switching capacity	XS612B1Meee	mA	5–200 (2)		
	XS618B1M•••, XS630B1M•••	mA	∼ 5–300 or 5–200 <i>(1)</i>		
Voltage drop, closed state		٧	≤ 5.5		
Current consumption, no-load		mA	≤0.8		
Maximum switching frequency	Ø 12	Hz	 1000 / ∼ 25		
(a.c./d.c. supply)	Ø 18	Hz	 1000 / ∼ 25		
	Ø 30	Hz	 500 / ∼ 25		
Delays	First-up	ms	≤ 25 for Ø 18 and Ø 30 sensors; ≤ 20 for Ø	12 sensors	
	Response	ms	≤0.5		
	Recovery	ms	≤ 0.2 for Ø 12 sensors; ≤ 0.5 for Ø 18 sensors	ors: ≤ 2 for Ø 30 sensors	

(1) A 0.4 A "fast-acting" fuse must be connected in series with the load.

Wiring diagrams

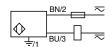
Connector (1) 1/2"-20UNF

1 2 -2001

(1) LED

≂:2 ≟:1 Pre-cabled

BU: Blue BN: Brown



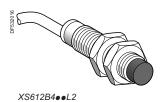
2-wire \sim or =

NO or NC output

±: on connector models only

Setup Minimum mounting distances (mm) Facing a metal object Sensors Side by side Face to face Ø 12 e≥8 e ≥ 50 e ≥ 12 Ø 18 e ≥ 16 e ≥ 100 e ≥ 25 Ø 30 e ≥ 30 e ≥ 180 e ≥ 45 **Dimensions (mm)** Sensors Pre-cabled (mm) Connector (mm) а а XS612B1M● Ø 12 53 42 62 42 Ø 18 XS618B1M● 62 52 73 52 b XS630B1M● 62 73 52 Ø 30 52

proximity sensors
General purpose
Cylindrical, increased range, non-flush mountable
Three-wire DC, solid-state output









Sensors	, 3-wire	 12–4	l8 V, long case	model		
Ø 12, threa	aded M12	x 1				
Sensing distance Sn, mm (in.)	Function	Output	Connection	Catalog Number	Weig kg	ht (lb)
7 (0.28)	NO	PNP	Pre-cabled (1)	XS612B4PAL2	0.075	(0.17)
			M12 connector	XS612B4PAM12	0.020	(0.04)
		NPN	Pre-cabled (1)	XS612B4NAL2	0.075	(0.17)
			M12 connector	XS612B4NAM12	0.020	(0.04)
	NC	PNP	Pre-cabled (1)	XS612B4PBL2	0.075	(0.17)
			M12 connector	XS612B4PBM12	0.020	(0.04)
		NPN	Pre-cabled (1)	XS612B4NBL2	0.075	(0.17)
			M12 connector	XS612B4NBM12	0.020	(0.04)

Ø 18, threa	ided M18	x 1				
Sensing distance Sn, mm (in.)	Function	Output	Connection	Catalog Number	Weig kg	ht (lb)
12 (0.47)	NO	PNP	Pre-cabled (1)	XS618B4PAL2	0.100	(0.22)
			M12 connector	XS618B4PAM12	0.040	(0.09)
		NPN	Pre-cabled (1)	XS618B4NAL2	0.100	(0.22)
			M12 connector	XS618B4NAM12	0.040	(0.09)
	NC	PNP	Pre-cabled (1)	XS618B4PBL2	0.100	(0.22)
			M12 connector	XS618B4PBM12	0.040	(0.09)
		NPN	Pre-cabled (1)	XS618B4NBL2	0.100	(0.22)
			M12 connector	XS618B4NBM12	0.040	(0.09)

Ø 30, threa	ded M30	x 1.5				
Sensing distance Sn, mm (in.)	Function	Output	Connection	Catalog Number	Weig kg	ht (lb)
22 (0.87)	NO	PNP	Pre-cabled (1)	XS630B4PAL2	0.205	(0.45)
			M12 connector	XS630B4PAM12	0.145	(0.32)
		NPN	Pre-cabled (1)	XS630B4NAL2	0.205	(0.45)
			M12 connector	XS630B4NAM12	0.145	(0.32)
	NC	PNP	Pre-cabled (1)	XS630B4PBL2	0.205	(0.45)
			M12 connector	XS630B4PBM12	0.145	(0.32)
		NPN	Pre-cabled (1)	XS630B4NBL2	0.205	(0.45)
			M12 connector	XS630B4NBM12	0.145	(0.32)

Accessories				
Description	For use with	Catalog	Weig	
	sensors	Number	kg	(lb)
Mounting clamps	Ø 12	XSZB112	0.006	(0.01)
	Ø 18	XSZB118	0.010	(0.02)
	Ø 30	XSZB130	0.020	(0.04)

⁽¹⁾ For a 5 m cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS612B4PAL2 becomes XS612B4PAL5 with a 5 m cable.

OsiSense® Inductive **proximity sensors**General purpose

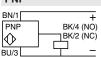
Cylindrical, increased range, non-flush mountable Three-wire DC, solid-state output

Sensor type			XS6eeB4eeM12	XS6eeB4eeL2
Product certifications			UL, CSA, C€	•
Connection	Connector		M12	-
	Pre-cabled		-	Length 2 m
Operating zone	Ø 12	mm	0–5.6 (0–0.22 in.)	•
	Ø 18	mm	0-9.6 (0-0.38 in.)	
	Ø 30	mm	0–17.6 (0–0.69 in.)	
Differential travel		%	1–15 of effective sensing distance (Sr)	
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68, double insulation
Storage temperature		°C	-40 to +85 (-40 to +185 °F)	
Operating temperature		°C	-25 to +70 (-13 to +158 °F)	
Materials	Case		Nickel plated brass	
	Sensing face		PPS	
	Cable		-	PvR 3 x 0.34 mm ² (22 AWG)
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)	
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms	
Output state indication			Yellow LED: 4 viewing ports at 90°	Yellow LED: circular
Rated supply voltage		V	=== 12–48 with protection against reverse polarity	
Voltage limits (including rip	pple)	٧	 10–58	
Switching capacity		mA	≤ 200 with overload and short-circuit protection	
Voltage drop, closed state		V	≤2	
Current consumption, no-lo	oad	mA	≤10	
Maximum switching freque	ncy XS612B4	Hz	2500	
-	XS618B4•••	Hz	1000	
	XS630B4•••	Hz	500	
Delays	First-up	ms	≤ 10	
	Response	ms	≤ 0.2 for Ø 12, ≤ 0.3 for Ø 18, ≤ 0.6 for Ø	30
	Recovery	ms	≤ 0.2 for Ø 12, ≤ 0.7 for Ø 18, ≤ 1.4 for Ø	30



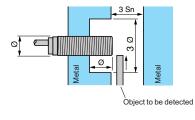


BU: Blue BN: Brown BK: Black

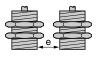


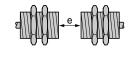
NPN JBK/4 (NO) \Diamond BK/2 (NC)

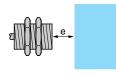
Setup



Minimum mounting distances (mm)





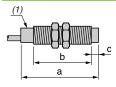


	Side by side	
Ø 12	e ≥ 48	
Ø 18	e ≥ 72	
~ ~ ~	> 100	

Face to face	
e ≥ 84	
e ≥ 144	
e ≥ 264	

Facing a metal object
e≥21
e≥36
-> 00

Dimensions (mm)



XS6 Ø 12 Ø 18 Ø 30

Pre-ca		
а	b	
55	42	
60	44	
63	41	

Connec	tor (mm)		
а	b	С	
66	42	5	
72	44	8	
74	41	13	

(1) LED

proximity sensors
General purpose
Cylindrical, increased range, non-flush mountable Two-wire AC or DC



Sensors,	2-wire ≂ 2	4–240 V, long case m	odel		
Ø 18, thread	ded M18 x 1				
Sensing distance Sn, mm (in.)	Function	Connection	Catalog Number	Weig kg	ht (lb)
12 (0.47)	NO	Pre-cabled (1)	XS618B4MAL2	0.120	(0.26)
		1/2"-20UNF connector	XS618B4MAU20	0.060	(0.13)
	NC	Pre-cabled (1)	XS618B4MBL2	0.120	(0.26)
		1/2"-20UNF connector	XS618B4MBU20	0.060	(0.13)



Sensing	Function	Connection	Catalog	Weig	ht
distance Sn, mm (in.)			Number	kg	(lb)
22 (0.87)	NO	Pre-cabled (1)	XS630B4MAL2	0.205	(0.45)
		1/2"-20UNF connector	XS630B4MAU20	0.145	(0.32)
	NC	Pre-cabled (1)	XS630B4MBL2	0.205	(0.45)
		1/2"-20UNF connector	XS630B4MBU20	0.145	(0.32)



Accessorie	s			
Description	For use with sensors	Catalog Number	Weigl kg	ht (lb)
Mounting clamps	Ø 18	XSZB118	0.010	(0.02)
	Ø 30	XSZB130	0.020	(0.04)

⁽¹⁾ For a 5 m cable replace L2 with L5; for a 10 m cable replace L2 with L10. Example: XS618B4MAL2 becomes XS618B4MAL5 with a 5 m cable.

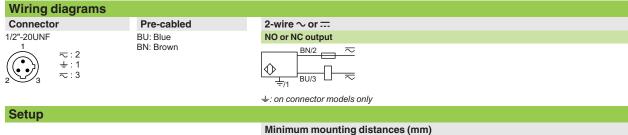
Specifications, wiring diagram, setup, dimensions

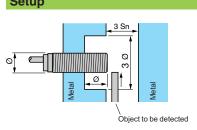
OsiSense® Inductive proximity sensors General purpose

General purpose Cylindrical, increased range, non-flush mountable Two-wire AC or DC

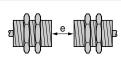
Sensor type			XS6eeB4MeU20	XS6eeB4MeL2
Product certifications			UL, CSA, C€	'
Connection	Connector		1/2"-20UNF	-
	Pre-cabled		-	Length 2 m
Operating zone	Ø 18	mm	0-9.6 (0-0.38 in.)	·
	Ø 30	mm	0–17.6 (0–0.69 in.)	
Differential travel		%	1–15 of effective sensing distance (Sr)	
Degree of protection	Conforming to IEC 60529		IP 65 and IP 67	IP 65 and IP 68, double insulation
Storage temperature		°C	-40 to +85 (-40 to +185 °F)	
Operating temperature		°C	-25 to +70 (-13 to +158 °F)	
Materials	Case		Nickel plated brass	
	Sensing face		PPS	
	Cable		_	PvR 2 x 0.34 mm ² (22 AWG)
Vibration resistance	Conforming to IEC 60068-2-6		25 gn, amplitude ± 2 mm (f = 10 to 55 Hz)	
Shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms	
Output state indication	·		Yellow LED: 4 viewing ports at 90°	Yellow LED: circular
Rated supply voltage		٧	\sim or == 24–240 (\sim 50/60 Hz)	
Voltage limits (including	g ripple)	٧	~ or == 20–264	
Switching capacity		mA	~ 5–300 or ::: 5–200 (1)	
Voltage drop, closed sta	ite	V	≤ 5.5	
Residual current, open	state	mA	≤0.8	
Maximum switching	XS618B4M•••	Hz	~ 25 or == 1000	
frequency	XS630B4M•••	Hz	~ 25 or == 300	
Delays	First-up	ms	≤ 30 XS618B4M●●● and XS630B4M●	•
	Response	ms	≤ 0.5	
	Recovery	ms	≤ 0.5 XS618B4M•••, ≤ 2 XS630B4M•	••

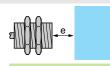
(1) A 0.4 A "fast-acting" fuse must be connected in series with the load.











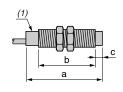
	Side by side
Ø 18	e ≥ 72
Ø 30	e ≥ 120

Face to face
e ≥ 144
e ≥ 264

Facing a metal objecte ≥ 36
e ≥ 66

Dimensions (mm)

(1) LED



	Pre-ca	bled (mm)	Conne
XS6	а	b	а
Ø 18	60	44	72
Ø 30	63	41	74

Connec	ctor (mm)		
а	b	С	
72	44	8	
74	41	13	

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Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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