The essential guide of Detection

helping you easily select the right product

2009



Schneider Electric

Detection

A selection of 1430 products, with the top 560 selling products referenced in bold characters.

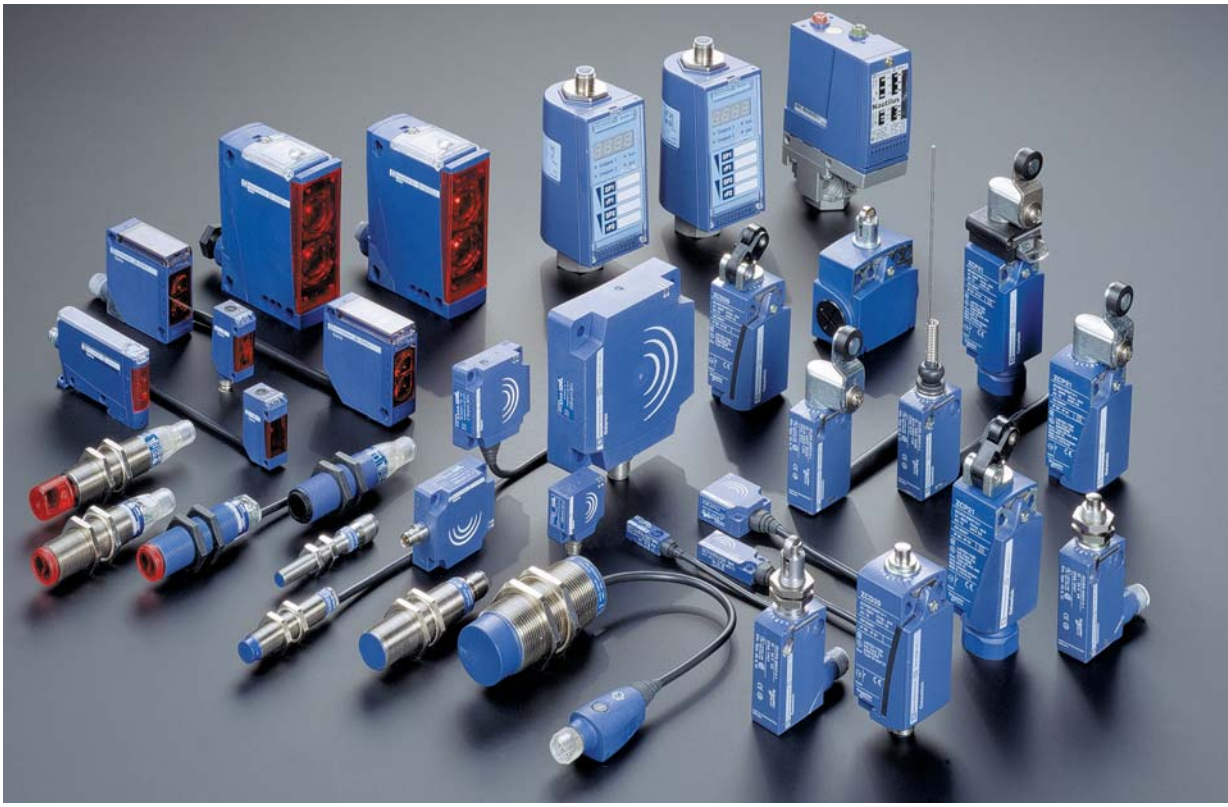
OsiSense

It's the schneider Electric range name of all the detection products.

A worldwide detection first for improving productivity.
A complete offer for resolving your most commonly encountered detection problems:

- product selection simplified
- product availability simplified
- installation and setting-up simplified
- maintenance simplified
- detection simplified using a single supplier.

Improved simplicity for improved productivity.



Select the sensor according to your specific requirements

"Universal" series:
Multi-purpose products providing multiple functions.

"Optimum" series:
Designed for essential and repetitive functions.

"Application" series:
Offers functions specifically for specialist needs, thus providing the ideal solution for your more complex applications.

Contents

> A single product that automatically adapts to all conditions



● **OsiSense XU** Photo-electric sensors ..... *2 to 15*

Detection without contact of objects whatever their shape or material
> Detection from a few millimetres to several tens of metres
> 3D adjustable fixing accessories
> Specific products for particular applications

> A single product that automatically adapts to all installation environments



● **OsiSense XS** Inductive proximity sensors ..... *16 to 26*

Detection without contact of metal objects
> Sensor / object distance ≤ 60 mm
> Generic cylindrical and flat form products
> Specific products for particular applications

> A single product that automatically learns both its detection mode and detection zone



● **OsiSense XX** Ultrasonic sensors ..... *28 and 29*

Detection without contact of any object of any material
> Detection from a few millimetres up to 8 metres
> Extra large range to ensure finding the right product
> Specific products for particular applications

> Simple parametering of many different resolutions on the same product



● **OsiSense XCC** Rotary encoders..... *30 and 31*

Opto-electronic detection
> Incremental
> Absolute - single turn and multiturn
> PROFIBUS and CANopen fieldbus communicating

> Availability of more than 5,000 interchangeable configurations within 24 hours



● **OsiSense XC** Limit switches ..... *32 to 41*

Detection by contact of rigid objects
> Positive opening operation of electrical contacts
> Object speed ≤ 1.5 m/s
> Specific products for particular applications

> A user-friendly product at last; easy to parameter prior to installation and to modify during operation



● **OsiSense XM** Sensors for pressure control ..... *42 to 47*

Detection by contact with fluid
> Electronic pressure and vacuum switches
> Analogue pressure sensors
> Electromechanical pressure and vacuum switches

> 13.56 MHz RFID that is open to the majority of ISO electronic tags



● **OsiSense XG** Radio frequency identification ..... *48 to 49*

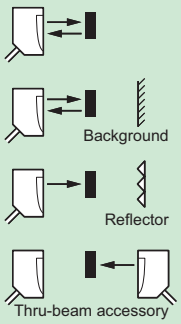
13.56 MHz RFID detection
Complete range of RFID tags and compact stations

Other detection technologies

● **OsiSense XT** Capacitive proximity sensors *27*

OsiSense XU Photo-electric sensors

Universal



A single product that automatically adapts to all conditions.

Programmable NO / NC
NO: object present = output ON
NC: no object present = output ON





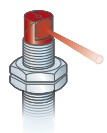
		Design 18 plastic	Design 18 metal Brass	Design 18 metal Stainless steel
Max. / usable sensing distance	without accessory	**0.4 / 0.3** m	**0.4 / 0.3** m	
	w/o accessory, with background supp.	**0.12 / 0.12** m	**0.12 / 0.12** m	
	with reflector (polarised)	**3 / 2** m	**3 / 2** m	
	with thru-beam accessory	**25 / 18** m	**25 / 18** m	
Fixing (mm)		M18 x 1	M18 x 1	
Case M (metal) P (plastic) / Dimensions (mm) Ø x L or W x H x D		P / M18 x 64	M / M18 x 64	
Product certification		CE - UL - CSA - C-TICK		
Common characteristics		Adjustment of sensing distance: **using teach mode** / Setting-up assistance LEDs (⊗): yes / Temperature		

Sensors for DC applications (solid-state output: transistor)

Connection		**Pre-cabled, PvR (2 m)**		
T / R 3-wire	PNP programmable NO / NC	**XUB0APSNL2**	**XUB0BPSNL2**	**XUB0SPSNL2**
	NPN programmable NO / NC	**XUB0ANSNL2**	**XUB0BNSNL2**	**XUB0SNSNL2**
	PNP / NPN programmable NO / NC	–	–	–
Connection		**M12 connector**		
T / R 3-wire	PNP programmable NO / NC	**XUB0APSNM12**	**XUB0BPSNM12**	**XUB0SPSNM12**
	NPN programmable NO / NC	**XUB0ANSNM12**	**XUB0BNSNM12**	**XUB0SNSNM12**
	PNP / NPN programmable NO / NC	–	–	–
Connection		**Screw terminals**		
T / R 3-wire	PNP / NPN programmable NO / NC	–	–	–
Switching capacity (mA) main output / alarm output		100 / –	100 / –	
Common characteristics		Supply voltage limits, min./max. (V) including ripple: 10...36 (except XUM 10…30) / Switching		
Thru-beam transmitter accessory	pre-cabled (2 m)	**XUB0AKSNL2T**	**XUB0BKSNL2T**	**XUB0SKSNL2T**
	connector	**XUB0AKSNM12T**	**XUB0BKSNM12T**	**XUB0SKSNM12T**
	screw terminals, ISO 16 cable gland	–	–	–

Multi-current/multi-voltage sensors for AC/DC applications 10...36 V DC / 20...264 V AC including ripple on DC (relay output, 1 NC/NO, 3 A)

Connection		**Pre-cabled, PvR (2 m)**	
T / R	programmable, NO/NC with time delay	–	–
Connection		**Screw terminals**	
T / R	programmable, NO/NC with time delay	–	–
LED output state indicator (⊗) / power on LED (⊗)		–	–
Switching frequency (Hz)		–	–
Time delay(s)		–	–
Thru-beam accessory	pre-cabled, PvR (2 m)	–	–
	screw terminals, ISO 16 cable gland	–	–



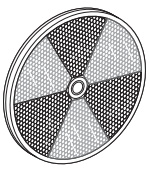
90° head
All the above Osiris Design 18 sensors are available with an integral 90° head.
To order, replace the letter "N" in the reference by "W".
Example: For pre-cabled versions: XUB0APS**N**L2 becomes XUB0APS**W**L2.
For connector versions: XUB0APS**N**M12 becomes XUB0APS**W**M12.
Sensing distances: refer to www.schneider-electric.com

Accessories

Reflectors



XUZC24



XUZC80



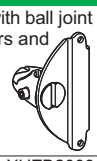
XUZC50

Reflectors (mm)	
Ø 21	XUZC21
24 x 21	**XUZC24**
Ø 31	XUZC31
Ø 39	XUZC39
Ø 80	**XUZC80**
50 x 50	**XUZC50**
100 x 100	**XUZC100**

3D fixings with ball joint

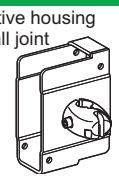


Bracket with ball joint for sensors and reflector XUZC50



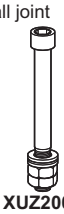
for	
XUB…	XUZB2003
XUM…	XUZM2003
XUK…	XUZK2003
XUX…	XUZX2003

Protective housing with ball joint



for	
XUM…	**XUZM2004**
XUK…	**XUZK2004**
XUX…	**XUZX2004**

M12 rod for ball joint



XUZ2001

Other versions: **please consult your Schneider Electric agency.**



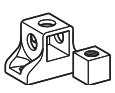




	Miniature design	Compact design 50 x 50	Compact design
	0.55 / 0.4 m	**1.2 / 0.8** m	**3 / 2** m
	0.10 / 0.10 m	**0.3 / 0.3** m	**1.3 / 1.3** m
	4 / 3 m	**5.7 / 4** m	**15 / 11** m
	14 / 10 m	**35 / 30** m	**60 / 40** m
	direct: fixing centres 25.5, M3 screws	direct: fixing centres 40 x 40, M4 screws	direct: fixing centres 30 / 38 to 40 / 50 / 74, M5 screws
	P / 12 x 34 x 20	P / 18 x 50 x 50	P / 30 x 92 x 71
	CE - UL - CSA - C-TICK	CE - UL - CSA - CCC - C-TICK	
	range (°C): - 25…+ 55 / Degree of protection (conforming to IEC 60529): IP 65, IP 67 (XUK: IP 65), (IP 69K: XUB0S…)		
	XUM0APSAL2	–	–
	XUM0ANSAL2	**–**	**–**
	–	**XUK0AKSAL2**	–
	M8 connector - 4 Pin	**M12 connector**	
	XUM0APSAM8	–	–
	XUM0ANSAM8	–	–
	–	**XUK0AKSAM12**	**XUX0AKSAM12**
	–	–	**XUX0AKSAT16**
	100 / –	100 / 50	100 / 100
	frequency (Hz): 250 / Overload and short-circuit protection (★) / LED output state indicator (⊗): yes / power on LED (⊗): yes		
	XUM0AKSAL2T	**XUK0AKSAL2T**	–
	XUM0AKSAM8T	**XUK0AKSAM12T**	**XUX0AKSAM12T**
	–	–	**XUX0AKSAT16T**
	–	**XUK0ARCTL2**	–
	–	–	**XUX0ARCTT16**
	–	⊗ / ⊗	⊗ / ⊗
	–	20	20
	–	Adjustment from 0 to 15 s, on energisation, on de-energisation or monostable	
	–	**XUK0ARCTL2T**	–
	–	–	**XUX0ARCTT16T**

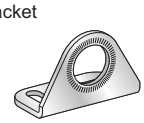
Simple fixings

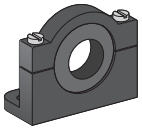
Fixing support for M12 rod



XUZ2003

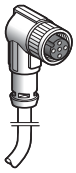
Single bracket

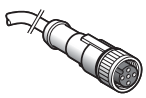


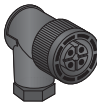


for	standard	with ball joint
XUB...	**XUZA118** (stnls. steel)	**XUZA218** (plastic)
XUM...	**XUZA50**	–
XUK...	**XUZA51**	–
XUX...	**XUZX2000**	–

Suitable female plug-in connectors, including pre-wired versions

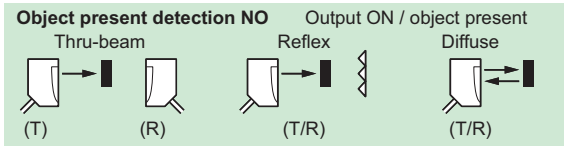


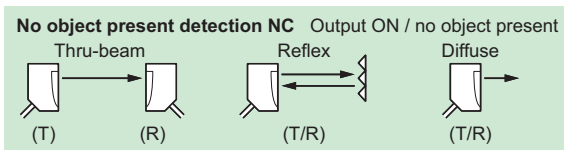




length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8	**XZCP1041L5**	**XZCP0941L5**	XZCC8FCM40S
M12	**XZCP1241L5**	**XZCP1141L5**	**XZCC12FCM40B**

OsiSense XU Photo-electric sensors
Optimum









		Design 18 plastic	Design 18 metal
Max. / usable sensing distance	Diffuse	**0.8 / 0.6** m	**0.8 / 0.6** m
	Polarised reflex	**3 / 2** m	**3 / 2** m
	Reflex	**5.5 / 4** m	**5.5 / 4** m
	Thru-beam	**20 / 15** m	**20 / 15** m
Fixing (mm)		M18 x 1	M18 x 1
Case M (metal) P (plastic) / Dimensions (mm) Ø x L or W x H x D		P / M18 x 46	M / M18 x 46
Setting-up assistance LEDs ⊗		–	–
Product certification		CE - UL - CSA - C-TICK	
Common characteristics		Temperature range (°C): - 25…+ 55 (- 30…+ 60: XUM) / Degree of protection (conforming to	

Sensors for DC applications (solid-state output: transistor)

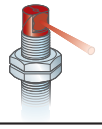
Connection			Pre-cabled, PvR, L = 2 m	M12 connector (1)	Pre-cabled, PvR, L = 2 m	M12 connector (1)
Transmitter for thru-beam			XUB2AKSNL2T	XUB2AKSNM12T	XUB2BKSNL2T	XUB2BKSNM12T
Receiver or T/R, 3-wire PNP (1)	Diffuse, adjustable	NO	**XUB5APANL2**	XUB5APANM12	**XUB5BPANL2**	XUB5BPANM12
		NC	XUB5APBNL2	XUB5APBNM12	XUB5BPBNL2	XUB5BPBNM12
		Programmable NO/NC	–	–	–	–
	Polarised reflex	NO	XUB9APANL2	XUB9APANM12	XUB9BPANL2	XUB9BPANM12
		NC	XUB9APBNL2	XUB9APBNM12	XUB9BPBNL2	XUB9BPBNM12
		Programmable NO/NC	–	–	–	–
	Reflex	NO	**XUB1APANL2**	XUB1APANM12	**XUB1BPANL2**	XUB1BPANM12
		NC	XUB1APBNL2	XUB1APBNM12	XUB1BPBNL2	XUB1BPBNM12
	Thru-beam	NO	XUB2APANL2R	XUB2APANM12R	XUB2BPANL2R	XUB2BPANM12R
		NC	XUB2APBNL2R	XUB2APB NM12R	XUB2BPBNL2R	XUB2BPBNM12R
		Programmable NO/NC	–	–	–	–
Supply voltage limits, min./max. (V) including ripple			10...36	10...36	10...36	10...36
Switching frequency (Hz)			500	500	500	500
Common characteristics for DC versions			Switching capacity, max. (mA): 100 / Overload and short-circuit protection (★) / LED output state			

(1) For versions with NPN output, replace "P" by "N". Example: XUB1A**P**ANL2 becomes XUB1A**N**ANL2.

Multi-current/multi-voltage sensors for AC/DC applications 10…36 V DC / 20…264 V AC including ripple on DC (relay output, 1 NC/NO, 3 A)

Connection			–	–	–	–
Transmitter for thru-beam			–	–	–	–
Receiver or T/R	Diffuse	NO + NC	–	–	–	–
	Polarised reflex	NO + NC	–	–	–	–
	Reflex	NO + NC	–	–	–	–
	Thru-beam	NO + NC	–	–	–	–
Switching frequency (Hz)			–	–	–	–
LED output state indicator (⊗) / power on LED (⊗)			–	–	–	–

Also available in Design 18 metal, 2-wire type multi-current/ multi-voltage a.c./d.c. version. Please refer to www.schneider-electric.com/ automation and control



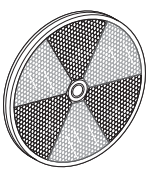
90° head *Sensing distances: refer to www.schneider-electric.com/automation and control*
All the above Osiris Design 18 sensors are available with an integral 90° head.
To order, replace the letter "N" in the reference by "W".
Example: For pre-cabled versions: XUB0APS**N**L2 becomes XUB0APS**W**L2.
For connector versions: XUB0APS**N**M12 becomes XUB0APS**W**M12.

Accessories

Reflectors



XUZC24



XUZC80



XUZC50

Reflectors (mm)	
Ø 21	XUZC21
24 x 21	**XUZC24**
Ø 31	XUZC31
Ø 39	XUZC39
Ø 80	**XUZC80**
50 x 50	**XUZC50**
100 x 100	**XUZC100**

3D fixings with ball joint

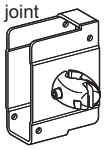


Bracket with ball joint for sensors and reflector XUZC50



for	
XUB…	**XUZB2003**
XUK…	**XUZK2003**
XUX…	**XUZX2003**

Protective housing with ball joint



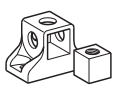
for	
XUK…	**XUZK2004**
XUX…	**XUZX2004**

M12 rod for ball joint



XUZ2001

Fixing support for M12 rod



XUZ2003

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**







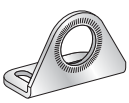
	Miniature design	Compact design 50 x 50	Compact design
	1 m with sensitivity adjustment	**1.5 / 1** m DC or AC with sensitivity adjustment	**3 / 2.1** m with sensitivity adjustment
	5 m with sensitivity adjustment	**7.5 / 5** m DC or **6 / 4** m AC	**15 / 11** m with sensitivity adjustment
	–	**15 / 9** m DC or **10 / 7** m AC	**20 / 14** m with sensitivity adjustment
	15 m with sensitivity adjustment	**45 / 30** m DC or **30 / 20** m AC	**60 / 40** m with sensitivity adjustment
	direct: fixing centres 25.4, M3 screws	direct: fixing centres 40 x 40, M4 screws	direct: fixing centres 30 / 38 to 40 / 50 / 74, M5 screws
	P / 10.8 x 33.4 x 20	P / 18 x 50 x 50	P / 30 x 92 x 71
	⊗	⊗	⊗
	CE - cULus - C-TICK	CE - UL - CSA - CCC - C-TICK	
	IEC 60529): IP 65, IP 67 (XUK: IP 65) / LED output state indicator and power on LED (⊗): yes		

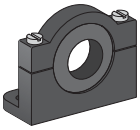
	Pre-cabled, PvR, L = 2 m	M8 connector 4 Pin	Pre-cabled, PvR, L = 2 m	M12 connector (1)	Screw trmls.,ISO 16 cbl.gland	M12 connector (1)
	XUM2AKCNL2T	XUM2AKCNM8T	XUK2AKSNL2T	XUK2AKSNM12T	XUX0AKSAT16T	XUX0AKSAM12T
	–	–	**XUK5APANL2**	XUK5APANM12	**XUX5APANT16**	XUX5APANM12
	–	–	XUK5APBNL2	XUK5APBNM12	XUX5APBNT16	XUX5APBNM12
	XUM5APCNL2	XUM5APCNM8				
	–	–	XUK9APANL2	XUK9APANM12	XUX9APANT16	XUX9APANM12
	–	–	XUK9APBNL2	XUK9APBNM12	XUX9APBNT16	XUX9APBNM12
	XUM9APCNL2	XUM9APCNM8				
	–	–	**XUK1APANL2**	XUK1APANM12	**XUX1APANT16**	XUX1APANM12
	–	–	XUK1APBNL2	XUK1APBNM12	XUX1APBNT16	XUX1APBNM12
	–	–	XUK2APANL2R	XUK2APANM12R	XUX2APANT16R	XUX2APANM12R
	–	–	XUK2APBNL2R	XUK2APBNM12R	XUX2APBNT16R	XUX2APBNM12R
	XUM2APCNL2R	XUM2APCNM8R				
	10...30	10...30	10...30	10...30	10...36	10...36
	1000	1000	500	500	500	500
	indicator (⊗): yes / power on LED (⊗): yes					

	–	–	Pre-cabled, L = 2 m	–	Screw trmls., ISO 16 cbl.gland	–
	–	–	XUK2ARCNL2T	–	XUX0ARCTT16T	–
	–	–	XUK5ARCNL2	–	XUX5ARCNT16	–
	–	–	XUK9ARCNL2	–	XUX9ARCNT16	–
	–	–	XUK1ARCNL2	–	XUX1ARCNT16	–
	–	–	XUK2ARCNL2R	–	XUX2ARCNT16R	–
	–	–	20	–	20	–
	–	–	⊗ / ⊗	–	⊗ / ⊗	–

Other fixings

Single bracket

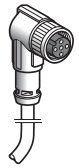


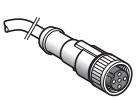


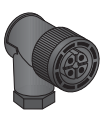


for	standard	with ball joint	with protective cover
XUB...	**XUZA118** (stnls. steel)	**XUZA218** (plastic)	–
XUM...	–	–	**XUZAM02**
XUK...	**XUZA51**	–	–
XUX...	**XUZX2000**	–	–

Suitable female plug-in connectors, including pre-wired versions







length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8	**XZCP1041L5**	**XZCP0941L5**	XZCC8FCM40S
M12	**XZCP1241L5**	**XZCP1141L5**	**XZCC12FCM40B**

Other versions: **please consult your Schneider Electric agency.**

Photo-electric sensors - Application

Optical forks without setting

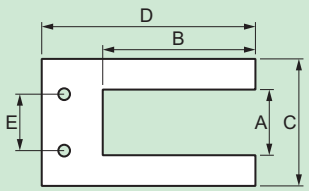
New



System	Thru-beam with modular red LED light source
Sensing distance	**2…180** mm
Fixing (mm)	(see column E below)
Minimum size of objet detected	0,8 mm
Case M (metal)	M
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 10…+ 60 / IP65 & IP67
Product certification	CE - cULus

Sensors for DC applications (solid-state output: transistor)

Connection				**M8 connector** 3-pin							**Pre-cabled** L = 2 m.					
Dimensions (mm)					A	B	C	D	E			A	B	C	D	E
Transmitter / Receiver	3 wire	NO function	PNP	**XUVR0605PANM8**	50	60	74	77,5	40		**XUVR0303PANL2**	30	40	54	57,5	30
			NPN	**XUVR0605NANM8**												
		NC function	PNP	**XUVR0605PBNM8**												
			NPN	**XUVR0605NBNM8**												
		NO function	PNP	**XUVR0608PANM8**	80	60	104	77,5	70							
			NPN	**XUVR0608NANM8**												
		NC function	PNP	**XUVR0608PBNM8**												
			NPN	**XUVR0608NBNM8**												
		NO function	PNP	**XUVR1212PANM8**	120	120	144	142	100							
			NPN	**XUVR1212NANM8**												
		NC function	PNP	**XUVR1212PBNM8**												
			NPN	**XUVR1212NBNM8**												
		NO function	PNP	**XUVR1218PANM8**	180	120	204	142	152							
			NPN	**XUVR1218NANM8**												
		NC function	PNP	**XUVR1218PBNM8**												
			NPN	**XUVR1218NBNM8**												
Supply voltage limits, min./max. (V) including ripple				10…30												
Switching capacity, max. (mA) / Switching frequency (Hz)				100/4kHz												
Overload and short-circuit protection (★) / LED output state indicator (⊗)				★ / ⊗												

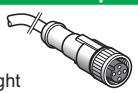


Accessories

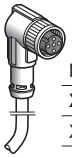
For optical forks without setting (3 Pin)

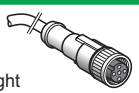
For forks with teach mode (4 Pin)

Suitable female pre-wired plug-in connectors

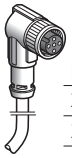


M8 straight	M8 elbowed
XZCP0566L2	**XZCP0666L2**
XZCP0566L5	XZCP0666L5





without LED	M8 straight	M8 elbowed
2 m	**XZCP0941L2**	**XZCP1041L2**
5 m	XZCP0941L5	XZCP1041L5



Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

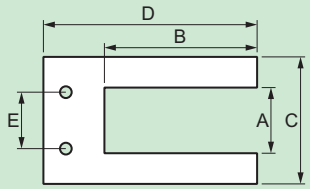
Forks with teach mode (1)





System, with teach mode	Thru-beam	Thru-beam laser
Sensing distance	**2…120** mm	**2…120** mm
Fixing (mm)	(see column E below)	
Minimum size of objet detected	0,2 mm	0,05 mm
Case M (metal) / Setting-up assistance LEDs ⊗	M / ⊗	
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 60 / IP 65	
Product certification	CE - cULus	

Sensors for DC applications (solid-state output: transistor)

Connection	**M8 connector** - 4 Pin												
Type of output	3-wire PNP/NPN programmable NO/NC												
Dimensions (mm)		A	B	C	D	E		A	B	C	D	E	
Transmitter / Receiver 	**XUYFANEP40002**	2	42	32	57	14	XUYFALNEP40002	2	42	41	57	14
	XUYFANEP60002	2	59		77		XUYFALNEP60002	2	59		77	
	XUYFANEP100002	2	95		110		XUYFALNEP100002	2	95		110	
	XUYFANEP40005	5	42	35	57	14	XUYFALNEP40005	5	42	44	57	14
	XUYFANEP60005	5	59		77		**XUYFALNEP60005**	5	59		77	
	XUYFANEP100005	5	95		110		XUYFALNEP100005	5	95		110	
	XUYFANEP40015	15	42	45	57	27	**XUYFALNEP40015**	15	42	54	57	27
	XUYFANEP60015	15	59		77		XUYFALNEP60015	15	59		77	
	XUYFANEP100015	15	95		110		XUYFALNEP100015	15	95		110	
	XUYFANEP40030	30	42	60	57	42	XUYFALNEP40030	30	42	69	57	42
	XUYFANEP60030	30	59		77		XUYFALNEP60030	30	59		77	
	XUYFANEP100030	30	95		110		XUYFALNEP100030	30	95		110	
	XUYFANEP40050	50	42	80	57	40	XUYFALNEP40050	50	42	89	57	40
	XUYFANEP60050	50	59		77		XUYFALNEP60050	50	59		77	
	XUYFANEP100050	50	95		110		XUYFALNEP100050	50	95		110	
	XUYFANEP40080	80	42	110	57	70	XUYFALNEP40080	80	42	119	57	70
	XUYFANEP60080	80	59		77		XUYFALNEP60080	80	59		77	
	XUYFANEP100080	80	95		110		XUYFALNEP100080	80	95		110	
	XUYFANEP40120	120	42	150	57	110	XUYFALNEP40120	120	42	159	57	110
	XUYFANEP60120	120	59		77		XUYFALNEP60120	120	59		77	
	XUYFANEP100120	120	95		110		XUYFALNEP100120	120	95		110	
Supply voltage limits, min./max. (V) including ripple	10…30						10…30					
Switching capacity, max. (mA) / Switching frequency (Hz)	100/10 kHz						100/10 kHz					
Overload and short-circuit protection (★) / LED output state indicator (⊗)	★ / ⊗						★ / ⊗					

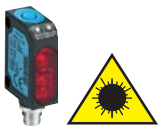
(1) To order a fork without teach mode, delete **A** of the reference. Ex: XUYF**A**NEP40002 becomes XUYFNEP40002





System		Ultrasonic thru-beam	Thru-beam
Main application		Special transparent labels	For all other opaque labels
Sensing distance	3 mm version	XUVU06M3KCNM8	XUYFA983003COS
	5 mm version	–	XUYFA983005COS
Fixing (mm)		6/14	
Sensitivity adjustment		Numerical +/- button	Teach button
Case M (metal) / Setting-up assistance LEDs ⊗		M / ⊗	
Temperature range (°C) / Degree of protection (conforming to IEC 60529)		- 5…+ 55 / IP 65	- 20…+ 60 / IP 65
Product certification		CE	CE - cULus



Robustness and compactness

System	Diffuse	Diffuse (1)	Reflex	Diffuse contrast
Max. / usable sensing distance	**0.07 / 0.05** m	**0.07** m	**10…1000** mm (2)	**40…150** mm
Fixing (mm)	M8 x 1	Direct, 2 M3 holes, fxg. ctrs. 20 mm	Direct, 2 M3 holes, fixing centres 24 mm	
Sensitivity adjustment	–	Potentiometer	Teach mode	
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	M / –	M / ⊗	P	
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 55 / IP 67	- 25…+ 60 / IP 67, IP 69K	- 20…+ 60°C / IP 67	
Product certification	CE - cULus	CE - cULus - C-TICK	CE - cULus	
Dimensions (mm) Ø x L or H x W x D	Ø 8 x 40	40.8 x 16.2 x 29.5	35.8 x 12 x 20	

Sensors for DC applications (solid-state output: transistor)

Connection			**Pre-cabled, PVC (2 m)**			
Transmitter / Receiver	3-wire PNP	NO function	**XUAH0515**	**XUM5BPANL2**	–	–
Connection			**M8 connector** 4-pin			
Transmitter / Receiver	3-wire PNP	NO function	**XUAH0515S**	–	–	–
	3-wire PNP	programmable NO / NC	–	–	XUYBCO929LSP	XUYPCCO929LSP
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	10…30	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 700	100 / 1000	100 / 1000	100 / 1000
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗

(1) Reflex and thru-beam systems also available.
(2) With specific micro prism precision reflector XUZC50HP, format 50 x 50 mm. To be ordered separately.




Accurate detection or very long sensing distance



Optical frames for detection of passage of objects

System	Thru-beam	Thru-beam 200 x 120 mm passageway (3)
Max. / usable sensing distance	**100** m or min. size of object: 0.2 mm	**0.12 x 0.20** m
Fixing (mm)	M18 x 1	direct: 222.5, M5 screws
Sensitivity adjustment	Teach mode	Potentiometer
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	M / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 10…+ 45°C / IP 67	0…+ 60 / IP 65
Product certification	CE - UL - CSA	CE - cULus
Dimensions (mm) Ø x L or H x W x D	Ø 18 x 64	205 x 25 x 230

Sensors for DC applications (solid-state output: transistor)

Connection			**M12 connector**	**M12 connector**
Transmitter / Receiver	3-wire PNP / NPN	programmable NO / NC	–	XUVF120M12
	PNP	programmable NO / NC	**XUBLAPCNM12**	–
	NPN	programmable NO / NC	XUBLANCNM12	–
Supply voltage limits, min./max. (V) including ripple			10…30	18…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 1500	400 / 500
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗

(3) Different passageway sizes; 200 x 180: XUVF180M12, 200 x 250: XUVF250M12 and “U” form models available.

Materials handing series



Analogue output
Position control





High access gain for resistance to accumulation of dirt

System	Diffuse	Diffuse	Thru-beam
Max. / usable sensing distance	**0.20...0.80** m	**0.05...0.40** m	**70 / 50** m
Fixing (mm)	fixing ctrs: 30 - 11P cable gland	M18 x 1	M18 x 1
Sensitivity adjustment	–	Potentiometer	Potentiometer
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	M / ⊗	M / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 60 / IP 67	- 25…+ 55 / IP 67	- 25…+ 55 / IP 67
Product certification	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA - C-TICK
Dimensions (mm) Ø x L or H x W x D	86 x 27 x 83	M18 x 95	M18 x 95

Sensors for DC applications

Connection			Screw terminals	M12 connector	M12 connector
Transmitter / Receiver	3-wire PNP / NPN	programmable NO / NC	XUJK803538 (5)	–	–
	3-wire PNP	programmable NO / NC	–	–	XU2M18AP20D (5)
	3-wire PNP	Analogue	–	XU5M18AB20D (5)	–
Supply voltage limits, min./max. (V) including ripple			20…30	10…30	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			max: 20, min: 4 / 10000	max: 20, min: 4 / 20	100 / 30
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗

(5) With 4…20 mA analogue output.







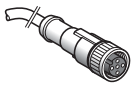
System	Diffuse, 0-10 V analogue output		Diffuse,
	Sensing distance 1	Sensing distance 2	4-20 mA analogue output
Sensing distance	**40...60** mm	**45...85** mm	**80...300** mm
Minimum size of object	1 mm	0.8 mm	1.5 x 3.5 mm
Fixing (mm)	direct: 3 M4 holes, fixing centres 40 mm		
Sensitivity adjustment	Potentiometer		
Case P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗		
Temperature range (°C)	0…+ 45°		
Product certification	CE - cULus		
Dimensions (mm) H x W x D	50 x 17 x 50		

Sensors for DC applications (solid-state output: transistor)

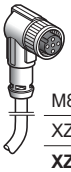
Connection		M12 connector	M12 connector	M12 connector
Transmitter / Receiver	0…10 V	XUYPCO925L1ANSP	XUYPCO925L2ANSP	XUYPCO925L3ANSP
Supply voltage limits, min./max (V) including ripple		18…28		18…28
Switching capacity, max.		3 mA / 0…10 V analogue output		3 mA / 4…20 mA analogue output
Switching frequency (Hz)		40		40
Overload and short-circuit protection (★) / LED output state indicator (⊗)		★ / ⊗		★ / ⊗

Accessories

Suitable female pre-wired plug-in connectors

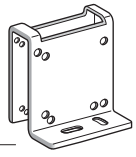


	M8 straight	M12 straight
2 m	XZCP0941L2	XZCP1141L2
5 m	**XZCP0941L5**	**XZCP1141L5**



M8 elbowed	M12 elbowed
XZCP1041L2	XZCP1241L2
XZCP1041L5	**XZCP1241L5**

Fixing, for XUYPCO925



With protective cover
XUY 9251-DF525567



Simple
XUY 925-DF525568

Photo-electric sensors - Application
Packaging series





Contrast sensors

	Diffuse	Sensor with plastic fibre optics (1)	Diffuse (with teach mode)
Max. / usable sensing distance	19 mm	18 mm	9 mm (2)
Fixing (mm)	direct: fixing centres 40 x 40	DIN rail	direct: 21 x 28, M5 screws
Sensitivity adjustment	Teach button	Teach button	Teach button
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	P / ⊗	M / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 10…+ 55 / IP 65	0 … + 40 / IP 65	- 10…+ 55 / IP 67
Product certification	CE - cULus	CE - cULus	CE
Dimensions (mm) Ø x L or H x W x D	50 x 15 x 50	30 x 13 x 60	96 x 31 x 64

Sensors for DC applications (solid-state output: transistor)

Connection			M12 connector	M8 connector	M12 connector
Transmitter / Receiver	3-wire PNP	NO function	XUKR1PSMM12	–	–
	3-wire NPN	NO function	XUKR1NSMM12	–	–
	3-wire PNP / NPN	programmable NO / NC	–	–	**XURK1KSMM12**
	NPN	NO function		XUYDCFCO966S	–
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 5000	100 / 20 k	200 / 10000

(1) Suitable fibre optics, to be ordered separately:
Sensing distance: 18 mm (L = 0.6 m: XUYFPDC61),
60 mm (L = 1 m: XUYFPDC101)
18 mm (L = 0.6 m / M8: XUYFPDCM861),
60 mm (L = 1 m / M8: XUYFPDCM8101).

(2) 7 mm with XURZ02; 18 mm with XURZ01.






Luminescence sensors

Detection of transparent materials

	Diffuse (manual)	Lum. detection via fibre optics	Reflex (with teach mode) (50 x 50 reflector included)	
Max. / usable sensing distance	0.02…0.08 m	dpg. on fibre & fitting (3)	0…1.4 m (4)	1.5 m
Fixing (mm)	M18 x 1	DIN rail	M18 x 1 (5)	direct: fixing ctrs. 40 x 40
Sensitivity adjustment	Potentiometer	+/- numeric potentiometer	Teach button	
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	M / ⊗	P / ⊗	P / ⊗	
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 55 / IP 67	0 … + 60 / IP 65	0…+ 55 / IP 67	- 25…+ 55 / IP 65
Product certification	CE - CSA - UL	CE - cULus	CE - UL - CSA - C-TICK	
Dimensions (mm) Ø x L or H x W x D	Ø 18 x 95	30 x 13 x 60	Ø 18 x 64	50 x 18 x 50

Sensors for DC applications (solid-state output: transistor)

Connection			Pre-cabled, PVC (2 m)			
Transmitter / Receiver	3-wire PNP	programmable NO / NC	–	–	**XUBTAPSNL2**	–
	3-wire NPN	programmable NO / NC	–	–	XUBTANSNL2	–
	3-wire PNP / NPN	programmable NO / NC	–	–	–	XUKT1KSML2
Connection			**M12 connector**	**M8 connector**	**M12 connector**	**M12 connector**
Transmitter / Receiver	3-wire PNP	fonction NO	XU5M18U1D	–	–	–
	3-wire PNP	programmable NO / NC	–	–	**XUBTAPSNM12**	–
	3-wire NPN	programmable NO / NC	–	–	XUBTANSNM12	–
	3-wire PNP / NPN	programmable NO / NC	–	XUYAFLCO966S	–	**XUKT1KSMM12**
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	10…32	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 1000	100 / 5	100 / 1000	100 / 1500

(3) Suitable fibre optics, to be ordered separately (usable Ø 1 mm): (L = 10 m: XUFZ910) (L = 20 m: XUFZ920) (L = 50 m: XUFZ920).

(4) 0…0.8 m for versions with 90° head.

(5) Also available in stainless steel for food and beverage processing applications. To order, replace the letter **A** by **S** in the ref. Example: XUBT**A**PSNL2 becomes XUBT**S**PSNL2.

Accessories

Suitable female plug-in connectors, including pre-wired versions

L = 5 m, without LED	Wired, elbowed	Wired, straight	Screw terminal
M8 (or S)	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12 (or D) 4-pin	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
M12 8-pin	–	XSZMCR03 (3 m)	–
U20 (or K)	XZCP1965L5	XZCP1865L5	XZCC20FCM30B





Lenses for colour mark or luminescence detection

Lens for doubling sensing distance



XURZ01

Ring for fixed focusing



XURZ02

Other versions: **please consult your Schneider Electric agency.**

Packaging series







Colour sensors

Detection of aqueous liquids

	Diffuse	**Diffuse** (with integral amplifier)	**Thru-beam infrared**
Max. / usable sensing distance	**0.02** m	**0.040...0.060** m	**0.2** m (1)
Fixing (mm)	direct: fixing ctrs. 40x40	drct: fxg ctrs. 68x42, M5 screws	direct: fixing ctrs. 20
Sensitivity adjustment	Teach button	Teach button	Potentiometer
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	M / ⊗	P / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 10…+ 55 / IP 65	- 10…+ 55 / IP 67	0…+ 40 / IP 65
Product certification	CE - cULus	CE	CE
Dimensions (mm) Ø x L or H x W x D	50 x 25 x 50	80 x 30 x 57	47 x 13 x 33

Sensors for DC applications (solid-state output: transistor)

Connection			**M12 connector** - 8 pin	**Pre-cabled (2 m)**	**Pre-cabled (2 m)**
Transmitter / Receiver	3-wire PNP	NO function	XUKC1PSMM12	**XURC3PPML2**	–
	3-wire NPN	NO function	XUKC1NSMM12	XURC3NPML2	–
	3-wire PNP / NPN	programmable NO / NC	–	–	XUMW1KSNL2
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	10.8…26.4
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 1500	100 / 1200	100 / 1000

(1) Nominal sensing distance 50 m. Use between 10 and 20 cm, depending on application.

Food/beverage processing series







Stainless steel version for resistance to harsh agents

	Polarised relex (2)	**Diffuse** (2)	**Thru-beam** (2)
Max. / usable sensing distance	**3 / 2** m	**0.15 / 0.10** m	**20 / 15** m
Fixing (mm)	M18 x 1	M18 x 1	M18 x 1
Case M (metal)	M (stainless steel)	M (stainless steel)	M (stainless steel)
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 55 / IP 67	- 25…+ 55 / IP 67	- 25…+ 55 / IP 67
Product certification	CE - UL - CSA - C-TICK		
Dimensions (mm) Ø x L	Ø 18 x 62	Ø 18 x 62	Ø 18 x 64

Sensors for DC applications (solid-state output: transistor)

Connection			**Pre-cabled, PvR (2 m)**	**Pre-cabled, PvR (2 m)**	**Pre-cabled, PvR (2 m)**
Transmitter / Receiver	3-wire PNP	programmable NO / NC	XU9N18PP341	XU5N18PP341	XU2N18PP341
	3-wire NPN	programmable NO / NC	XU9N18NP341	XU5N18NP341	XU2N18NP341
Connection			**M12 connector**	**M12 connector**	**M12 connector**
Transmitter / Receiver	3-wire PNP	programmable NO / NC	XU9N18PP341D	XU5N18PP341D	XU2N18PP341D
	3-wire NPN	programmable NO / NC	XU9N18NP341D	XU5N18NP341D	XU2N18NP341D
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 500	100 / 500	

(2) Also available with 90° head. To order, add the letter **W** after the numbers 341 in the reference. Example: XU9N18PP341 becomes XU9N18PP341**W** or XU9N18PP341D**W**.

Accessories

***Suitable fibre optics**

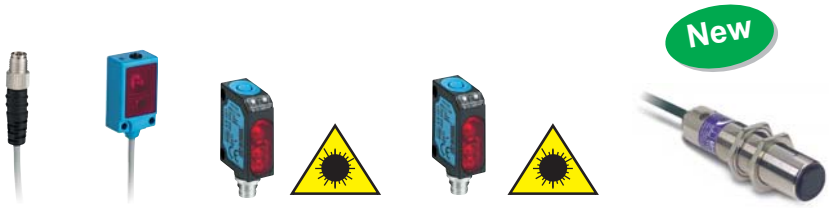


Special high performance colour fibres

Sensing distance	Spot	Length	Reference
25 mm	Ø 2	600	XUYFLCLHR2561
70 mm	Ø 6	600	XUYFLCLHR7061

OsiSense XU

Photo-electric sensors
with background suppression



System	Background suppression	Diffuse with background suppression		
		Sensing distance 1	Sensing distance 2	Adjustable
Sensing distance	**1.5…80** mm	**10…60** mm	**30…110** mm	**70…120** mm
Minium size of object	–	0.3 mm	0.7 mm	–
Fixing (mm)	2 x Ø 3 holes / fxg. ctrs. 14.5	direct: 2 M3 holes, fixing centres 24 mm		M18 x 1
Sensitivity adjustment	Potentiometer	Teach mode		Potentiometer
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	P		M / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	0…+ 50 / IP 65 & IP 67	- 20…+ 60°C / IP 67		- 25…+ 55°C / IP 67
Product certification	CE - cULus	CE - cULus		CE - UL - CSA
Dimensions (mm) Ø x L or H x W x D	32 x 13 x 20	35.8 x 12 x 20		M18 x 82

Sensors for DC applications (solid-state output: transistor) AC/DC

Connection			M8 connector (1) - 4 Pin	M8 connector- 4 Pin	M8 connector- 4 Pin	Pre-cabled, L = 2 m
Transmitter / Receiver	**PNP**	**NO** function	XUYPSCO989SP	–	–	–
	NPN	**NO** function	XUYPSCO989SN	–	–	–
	PNP	programmable **NO / NC**	–	XUYPSCO929L1SP	XUYPSCO929L2SP	–
	AC/DC	**NO** function	–	–	–	XU8M18MA230
Supply voltage limits, min./max. (V) including ripple			10…30	10…30	10…30	20…264
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 500	100 / 1000	100 / 1000	200 / 25
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗	(2) / ⊗

(1) For 2 m pre-cabled connection delete CO from the reference. Example: XUYPS**CO**989SP becomes XUYPS989SP.
(2) Sensor not short-circuit protected. Therefore, it is essential to connect a 0.4 A quick-blow fuse in series with the load.



Objets sur convoyeur

System	Diffuse with adjustable background suppression			Background suppression	Background suppression, 2 chnls.
Max. / usable sensing distance	**0…1** m	**1.2** m	**2** m	**50…300** mm	**50…600** mm
Minimum size of object	–	–	–	0.5 mm	–
Fixing (mm)	direct: fixing ctrs. 40 x 40	M30 x 1.5 or M5, fixing ctrs. 30	direct: fixing ctrs. 30/38 to 40/50/74 M5 screw	direct: 2 M4 holes, ctrs. 54 mm	2 x Ø 4 holes, fixing ctrs. 54
Sensitivity adjustment	–	Potentiometer	–	Potentiometer	Potentiometer
Case M (metal) P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	P / ⊗	P / ⊗	P / ⊗	P / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 55 / IP 65	- 25…+ 55 / IP 67, Nema 4X	- 25…+ 55 / IP 67	0…+ 50 / IP 65	0…+ 60 / IP 40
Product certification	CE - UL - CSA	CE - UL - CSA	CE - UL - CSA	CE - cULus	
Dimensions (mm) Ø x L or H x W x D	50 x 18 x 50	95 x 45 x 44	92 x 30,5 x 71	60 x 18 x 60	60 x 18 x 60

Sensors for DC applications (solid-state output: transistor). Sensors with overload and short-circuit protection

Connection			Pre-cabled, PVC (2 m)		Screw terminals	Pre-cabled, PVC (2 m)	
Transmitter / Receiver	3-wire PNP / NPN	programmable NO / NC	XUK8AKSNL2	XUC8AKSNL2 (3)	XUX8AKSAT16 (3)	–	–
Connection			**M12 conector**			**M8 connector**	
Transmitter / Receiver	3-wire PNP / NPN	programmable NO / NC	**XUK8AKSNM12**	XUC8AKSNM12 (3)	XUX8AKSAM12	XUYPS1LCO965S	XUYPS2CO945S
Supply voltage limits, min./max. (V) including ripple			10…30	10…38 (3)	10…36 (3)	10…30	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 250	100 / 500	100 / 150	100 / 5000	100 / 370

(3) Also available in AC/DC version: 20...264 V

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Other formats, general usage



System	Thru-beam	Reflex	Polarised reflex	Diffuse	Diffuse with background suppression
Max. / usable sensing distance	**11 / 8** m	**9 / 6** m	**6 / 4** m	**0.9 / 0.7** m	**0.25** m fixed range
Fixing (mm)	direct: fixing centres 28 mm, M3 screws				
Sensitivity adjustment	–	–	–	Potentiometer	Potentiometer
Case P (plastic)	P				
Product certification	CE - special H7 version UL - CSA - UR - CCC				
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	- 25…+ 55 / IP 67				

Sensors for DC applications (solid-state output: transistor)

Connection			**Pre-cabled, PVC (2 m)**				
Dimensions (mm) H x W x D			70 x 18 x 35				
References	3-wire **PNP**	programmable **NO / NC**	XULH083534	XULH06353	XULH043539	XULH703535	–
	3-wire **NPN**	programmable **NO / NC**	XULJ083534	XULJ06353	XULJ043539	XULJ703535	–
	Transmitter		XULK0830	–	–	–	–
Connection			**M12 connector**				
References	3-wire **PNP**	programmable **NO / NC**	XULH083534D	XULH06353D	XULH043539D	XULH703535D	–
	3-wire **NPN**	programmable **NO / NC**	XULJ083534D	XULJ06353D	XULJ043539D	XULJ703535D	–
	Transmitter		XULK0830D	–	–	–	–
Supply voltage limits, min./max. (V) including ripple			10…30				
Switching capacity, max. / Switching frequency (Hz)			≤ 200 mA with short-circuit protection / 250				
LED output state indicator (⊗) / power on LED (⊗)			⊗ / –	⊗ / –	⊗ / –	⊗ / –	–

Multi-current/multi-voltage sensors for AC/DC applications 10…36 V DC / 20…264 V AC including ripple on DC, NC/NO relay output

Connection			**Pre-cabled, PVC (2 m)**				
Dimensions (mm) H x W x D			70 x 18 x 45				
References	3-wire **PNP**	programmable **NO / NC**	XULM080314	XULM06031	XULM040319	–	XULM300318
	Transmitter		XULM0600	–	–	–	–
Switching capacity, max. / Switching frequency (Hz)			2000 mA (cos φ = 1), 500 mA (cos φ = 0.4) / 20				
LED output state indicator (⊗) / power on LED (⊗)			⊗ / –	⊗ / –	⊗ / –	– / –	⊗ / –



Miniature series sensors

System	Polarised reflex 50 x 50 reflector included	Thru-beam
Sensing distance	**1…1.5** m	**4** m
Fixing (mm)	2 x Ø 3 holes / fixing centres 9.5	3 x Ø 3 holes / fixing centres 9.5
Sensitivity adjustment	Potentiometer	Potentiometer
Case P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	P / ⊗
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	0…+ 50 / IP 65 & IP 67	0…+ 50 / IP 65 & IP 67
Product certification	CE - cULus	CE - cULus
Dimensions (mm) H x W x D	40 x 10 x 13.5	40 x 10 x 13.5

Sensors for DC applications (solid-state output: transistor)

Connection			**M8 connector** (1) - 4 Pin	
	PNP	**NO** function	XUYBCO989SP	XUYRCO989SP (receiver)
	NPN	**NO** function	XUYBCO989SN	XUYRCO989SN (receiver)
	PNP/NPN	programmable **NO / NC**	–	XUYECO989 (transmitter)
Supply voltage limits, min./max. (V) including ripple			10…30	10…30
Switching capacity, max. (mA) / Switching frequency (Hz)			100 / 500	100 / 500
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗

(1) For 2 m pre-cabled version delete CO from the reference. Example: XUYPS**CO**989SP becomes XUYPS989SP.

OsiSense XU Photo-electric sensors, fibre optic

Amplifier



	Optimum		Universal	
	+/- potentiometer	Teach	Teach + Timer	Teach+Timer+Speed dsply.
Max. / usable sensing distance	Depending on fibre used, plastic only			
Fixing (mm)	DIN rail or direct: fixing centres 25, M3 screws			
Sensitivity adjustment	+/- numeric potentiometer	using teach mode	+/- numeric potentiometer	using teach mode
Case P (plastic) / Setting-up assistance LEDs ⊗	P / ⊗	P / ⊗	P / ⊗	P / ⊗ and 4-digit display
Temperature range (°C) / Degree of protection (conforming to IEC 60529)	0…+ 60 / IP 65	- 10…+ 55 / IP 65 (1)	0…+ 60 / IP 65	- 10…+ 55 / IP 65 (1)
Product certification	CE - cULus	CE - cULus - cURus	CE - cULus	CE - cULus - cURus
Dimensions (mm) L x H x W	60 x 30 x 13	65 x 40 x 10	60 x 30 x 13	65 x 40 x 10

Sensors for DC applications (solid-state output: transistor)

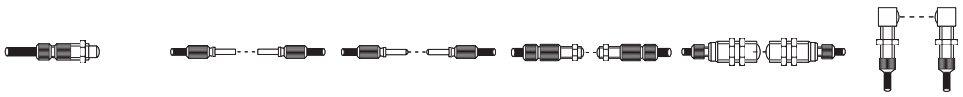
Connection				**Pre-cabled, PVC (2 m)**			
References	3-wire **PNP**	programmable	**NO / NC**	–	**XUDA1PSML2**	–	**XUDA2PSML2**
Amplifier	3-wire **NPN**	programmable	**NO / NC**	–	**XUDA1NSML2**	–	**XUDA2NSML2**
Connection				**M8 connector** - 4 Pin			
References	3-wire **PNP**	programmable	**NO / NC**	–	**XUDA1PSMM8**	–	**XUDA2PSMM8**
Amplifier	3-wire **NPN**	programmable	**NO / NC**	–	**XUDA1NSMM8**	–	**XUDA2NSMM8**
	3-wire **PNP/NPN**	programmable	**NO / NC**	**XUYAFVCO966S** (Glass)	–	XUYAFVCO946S (Glass)	–
				XUYAFPCO966S (Plastic)	–	XUYAFPCO946S (Plastic)	–
Supply voltage limits, min./max. (V) including ripple				10…30	10.8...26.4	10…30	10.8...26.4
Switching capacity, max. (mA) / Switching frequency (Hz)				100 / 1000	100 / 1000	100 / 1000 time delayable	100 / 1000 time delayable
Overload and short-circuit protection (★) / LED output state indicator (⊗)				★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗

(1) IP 65 with Ø 1 fibre/ IP 64 with Ø 0.5 fibre.

Ecofibre system, assemble your own fibres



Fibre	
Ø 1 mm Length = 20 m	**XUFZ920**



End fittings						
Sensing distance (mm)	70	200	800	1200	4000	1200
Type	with threaded end fitting	with plain end fitting, Ø 3, L = 9 mm	with plain end fitting, Ø 3, L = 9 mm	with threaded end fitting	with threaded end fitting	90° mirror, with threaded end fitting
Thread	M8 x 1, L = 10 mm	–	–	M6 x 1, L = 10 mm	M6 x 1, L = 10 mm	M6 x 1, L = 3 to 10 mm
Lens	yes	no	yes	yes	yes	yes
References	XUYA110	XUYA210	XUYA211	XUYA212	XUYA212	XUYA220

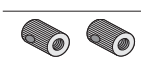
Accessories

For thru-beam system plastic fibre optics

Lenses

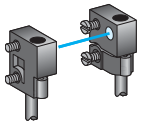


For increasing sensing distance (pair) **XUFZ01**



With 90° mirror (pair) **XUFZ02**

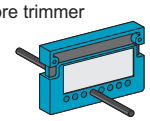
Fixing clamp with lens (set of 2)



Front screw fixing for fibre optics XUFZ920 **XUFZ04**

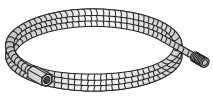
For all system plastic fibre optics

Fibre trimmer



For trimming fibres to length (included with all fibre optics) **XUFZ11**

Protective metal tubing



Length 1 m, for fibres with threaded end fittings

For M4 thread **XUFZ210**

For M6 thread **XUFZ310**

Plug-in pre-wired female connectors

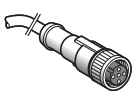
Cable length 5 m, without LED

pre-wired, elbowed



XZCP1041L5

pre-wired, straight



XZCP0941L5

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Plastic fibre optic light guides (length 2 m)



	M4 / M2.6 (1)	M4 / L = 90 mm	M3 / M2.6 (1)	Long range fibres with integrated lens M8 / L = 20 mm	Long range fibres M4 / M2.6 (1)	Flexible fibres M4 / M2.6 (1)
System	**Thru-beam**					
Sensing distance (mm)	**200 or 1500** (1)	**180**	**50 or 1000** (1)	**2500**	**300 or 2000** (1)	**100 or 750** (1)
Fibre cross-section						
Fibre Ø (mm)	Ø 1	Ø 1	Ø 0.5	Ø 1	Ø 1.5	Ø 1
Sheath Ø (mm)	Ø 2.2	Ø 2.2	Ø 1	Ø 2.2	Ø 2.2	Ø 2.2
Temperature range (°C)	- 25...+ 60	- 25...+ 60	- 25...+ 60	- 25...+ 60	- 25...+ 60	- 25...+ 60
References	**XUFN12301**	**XUFN12311**	**XUFN35301**	**XUFN2L01L2**	**XUFN2P01L2**	**XUFN2S01L2**
Fixing	M4 x 0.7	M4 x 0.7	M3 x 0.5	M8 x 1.25	M2.6 x 0.45 / M4 x 0.7	M2.6 x 0.45 / M4 x 0.7

(1) All models except XUFZ01 and XUFZ02.

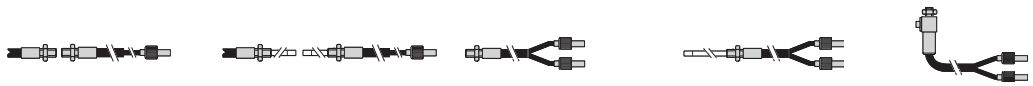


	M6	M4 / M6	M6/L = 90 mm	M4 / M2.6
System	**Diffuse**			
Sensing distance (mm)	**70**	**60**	**60**	**15**
Fibre cross-section				
Fibre Ø (mm)	Ø 1	Ø 1+16 Ø 0.265	Ø 1	Ø 0.5 + 4 Ø 0.23
Sheath Ø (mm)	Ø 2.2 x 2	Ø 2.2 x 2	Ø 2.2 x 2	Ø 1 x 2
Temperature range (°C)	- 25...+ 60	- 25...+ 60	- 25...+ 60	- 25...+ 60
References	**XUFN05321**	**XUFN05323**	**XUFN05331**	**XUFN02323**
Fixing	M6 x 0.75	M6 x 0.75 / M4 x 0.7	M6 x 0.75	M4 x 0.7



	M4 / L = 90 mm	M4 / M2.6	Long range fibres M6 / L = 15 mm
System	**Diffuse**		
Sensing distance (mm)	**18**	**18**	**95**
Fibre cross-section			
Fibre Ø (mm)	Ø 0.5	Ø 0.5	Ø 1.5
Sheath Ø (mm)	Ø 1 x 2	Ø 1 x 2	Ø 2.2 x 2
Temperature range (°C)	- 25...+ 60	- 25...+ 60	- 25...+ 60
References	**XUFN01331**	**XUFN01321**	**XUFN5P01L2**
Fixing	M4 x 0.7	M4 x 0.7	M6 x 0.75

Glass fibre optic light guides (length 0.6 m)

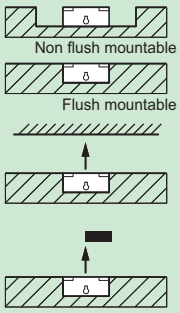


		M4	M4 / Ø 2.5 x 89	M4	M4 / Ø 2.5 x 89	M4
System		**Thru-beam**		**Diffuse**		
Sensing distance (mm)		**200**		**80**		
Fibre cross- section						
End fitting		Straight	Adaptable	Straight	Adaptable	90°
Fibre Ø (mm)		1		1		
Sheath Ø (mm)		2.2		2.2		
Temperature range (°C)		PVC sheath: - 25…+ 60 / Metal wound: - 25…+ 120 / Flexible stainless steel: - 25…+ 200				
References	PVC sheath	XUYFVERSD61	XUYFVERSC61	XUYFVPSD61	XUYFVPSC61	XUYFVPSL61
	Metal wound	XUYFVERMD61	XUYFVERSC61	XUYFVPMD61	XUYFVPMC61	XUYFVPML61
	Flexible stnl. steel	XUYFVERTD61	XUYFVERTC61	XUYFVPTD61	XUYFVPTC61	XUYFVPTL61

OsiSense XS

Inductive proximity sensors

Universal cylindrical



A single product that automatically adapts to all installation environments.

Accurate position detection using teach mode

New IP 69K



	M8	M12	M18	M30
Nominal sensing distance Sn	**2.5** mm	**4** mm	**8** mm	**15** mm
Usable sensing distance S (mm) flush mountable / non flush mountable	0…2	0…3.2	0…6.4	0…12
Fine adjustment zone (mm) flush mountable / non flush mountable	–	–	–	–
Suitability for flush mounting (metal environment)	flush mountable	flush mountable	flush mountable	flush mountable
Case M (metal) P (plastic)	M	M	M	M
Temperature range (°C)	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70
Product certification	CE - UL - CSA - CCC - C-TICK			
Degree of protection (conforming to IEC 60529)	IP 67	pre-cabled: IP 68, IP 69K conforming to DIN 40050 (with connector: IP 67)		

Sensors for DC applications

Connection			**Pre-cabled, PvR (2 m)**			
Dimensions (mm) Ø x L or W x H x D			M8 x 51	M12 x 53	M18 x 62	M30 x 62
3-wire	**PNP**	NO function	**XS608B1PAL2**	**XS612B1PAL2**	**XS618B1PAL2**	**XS630B1PAL2**
		NC function	XS608B1PBL2	XS612B1PBL2	XS618B1PBL2	XS630B1PBL2
	NPN	NO function	**XS608B1NAL2**	**XS612B1NAL2**	**XS618B1NAL2**	**XS630B1NAL2**
		NC function	XS608B1NBL2	XS612B1NBL2	XS618B1NBL2	XS630B1NBL2
Connection			**M12 connector**			
Dimensions (mm) Ø x L or W x H x D			M12 x 62	M12 x 62	M18 x 74	M30 x 74
3-wire	**PNP**	NO function	**XS608B1PAM12**	**XS612B1PAM12**	**XS618B1PAM12**	**XS630B1PAM12**
		NC function	XS608B1PBM12	XS612B1PBM12	XS618B1PBM12	XS630B1PBM12
	NPN	NO function	**XS608B1NAM12**	**XS612B1NAM12**	**XS618B1NAM12**	**XS630B1NAM12**
		NC function	XS608B1NBM12	XS612B1NBM12	XS618B1NBM12	XS630B1NBM12
Supply voltage limits, min./max. (V) including ripple			10…58	10…58	10…58	10…58
Switching capacity, max. (mA)			200	200	200	200
Overload and short-circuit protection (★)			★	★	★	★
LED output state indicator (⊗) and power on LED (⊗)			⊗ / –	⊗ / –	⊗ / –	⊗ / –
Voltage drop, closed state (V) at I nominal			≤ 2	≤ 2	≤ 2	≤ 2
Switching frequency (Hz)			2500	2500	1000	500

Multi-current/multi-voltage sensors for AC/DC applications

Connection			**Pre-cabled, PvR (2 m)**			
Dimensions (mm)			–	M12 x 53	M18 x 62	M30 x 62
2-wire	**AC/DC**	NO function	–	**XS612B1MAL2**	**XS618B1MAL2**	**XS630B1MAL2**
not short-circuit protected (1)		NC function	–	**XS612B1MBL2**	**XS618B1MBL2**	**XS630B1MBL2**
Connection			**1/2"-20 UNF connector**			
Dimensions (mm) Ø x L or W x H x D			–	M12 x 61	M18 x 73	M30 x 73
2-wire	**AC/DC**	NO function	–	**XS612B1MAU20**	**XS618B1MAU20**	**XS630B1MAU20**
not short-circuit protected (1)		NC function	–	**XS612B1MBU20**	**XS618B1MBU20**	**XS630B1MBU20**
Supply voltage limits, min./max. (V) including ripple			–	20…264	20…264	20…264
Switching capacity, max. (mA)			–	200	300 AC / 200 DC	300 AC / 200 DC
LED output state indicator (⊗) / power on LED (⊗)				–	⊗ / –	⊗ / – ⊗ / –
Residual current, open state (mA)			–	≤ 1.5	≤ 1.5	≤ 1.5
Voltage drop, closed state (V) at I nominal			–	≤ 5.5	≤ 5.5	≤ 5.5
Switching frequency (Hz)			–	25 AC / 1000 DC	25 AC / 1000 DC	25 AC / 500 DC

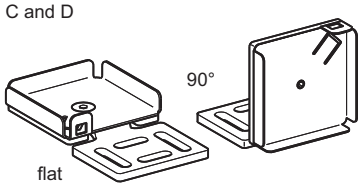
(1) For these sensors without short-circuit protection, it is essential to connect a 0.4 A quick-blow fuse in series with the load.

Accessories

Fixing

For flat sensors, forms E, C and D





	flat	90°	substitution of block type sensors XSE / XSC / XSD
Form E	**XSZBE00**	**XSZBE90**	**XSZBE10**
Form C	**XSZBC00**	**XSZBC90**	**XSZBC10**
Form D	–	–	**XSZBD10**

Fixing clamp with indexing pin for cylindrical sensors



M8	**XSZB108**
M12	**XSZB112**
M18	**XSZB118**
M30	**XSZB130**

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

New
IP 69K

Universal rectangular



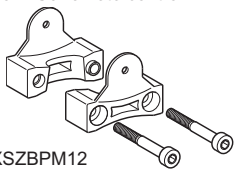





	Increased range			Form E	Form C	Form D
	M12	**M18**	**M30**	26 x 26	40 x 40	80 x 80
	7 mm	**12** mm	**22** mm	**15** mm	**25** mm	**60** mm
	0 …5.6	0 … 9.6	0 … 17.6	0…8 / 0...12	0…12 / 0...20	0…32 / 0...48
				5...10 / 5...15	8...15 / 8...25	20...40 / 20...60
	non flush mountable			flush mountable or non flush mountable via teach mode		
	M			P	P	P
	- 25…+ 70			- 25…+ 70	- 25…+ 70	- 25…+ 70
	CE - UL - CSA - CCC - C-TICK			CE - UL - CSA - CCC - C-TICK		
	pre-cabled: IP 68, IP 69K (with connector: IP 67)			pre-cabled: IP 68 (with connector: IP 67)		
	Pre-cabled (2 m)					
	M12 x 55	M18 x 62	M30 x 62	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
	XS612B4PAL2	XS618B4PAL2	XS630B4PAL2	**XS8E1A1PAL2**	**XS8C1A1PAL2**	**XS8D1A1PAL2**
	XS612B4PBL2	XS618B4PBL2	XS630B4PBL2	XS8E1A1PBL2	XS8C1A1PBL2	XS8D1A1PBL2
	XS612B4NAL2	XS618B4NAL2	XS630B4NAL2	**XS8E1A1NAL2**	**XS8C1A1NAL2**	**XS8D1A1NAL2**
	XS612B4NBL2	XS618B4NBL2	XS630B4NBL2	XS8E1A1NBL2	XS8C1A1NBL2	XS8D1A1NBL2
	M12 connector			**M8 connector**		**M12 connector**
	M12 x 65	M18 x 74	M30 x 74	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
	XS612B4PAM12	XS618B4PAM12	XS630B4PAM12	**XS8E1A1PAM8**	**XS8C1A1PAM8**	**XS8D1A1PAM12**
	XS612B4PBM12	XS618B4PBM12	XS630B4PBM12	XS8E1A1PBM8	XS8C1A1PBM8	XS8D1A1PBM12
	XS612B4NAM12	XS618B4NAM12	XS630B4NAM12	**XS8E1A1NAM8**	**XS8C1A1NAM8**	**XS8D1A1NAM12**
	XS612B4NBM12	XS618B4NBM12	XS630B4NBM12	XS8E1A1NBM8	XS8C1A1NBM8	XS8D1A1NBM12
	10…58	10…58	10…58	10…36	10…36	10…36
	200	200	200	100	200	200
	★	★	★	★	★	★
	⊗ / –	⊗ / –	⊗ / –	⊗ / ⊗	⊗ / ⊗	⊗ / ⊗
	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
	2500	1000	500	2000	1000	150
	Pre-cabled (2 m)					
	–	M18 x 62	M30 x 62	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
	–	XS618B4MAL2	XS630B4MAL2	**XS8E1A1MAL2**	**XS8C1A1MAL2**	**XS8D1A1MAL2**
	–	XS618B4MBL2	XS630B4MBL2	**XS8E1A1MBL2**	**XS8C1A1MBL2**	**XS8D1A1MBL2**
	1/2"-20 UNF connector					
	–	M18 x 73	M30 x 73	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
	–	XS618B4MAU20	XS630B4MAU20	**XS8E1A1MAL01U20**	**XS8C1A1MAL01U20**	**XS8D1A1MAU20**
	–	XS618B4MBU20	XS630B4MBU20	**XS8E1A1MBL01U20**	**XS8C1A1MBL01U20**	**XS8D1A1MBU20**
	–	20…264	20…264	20…264	20…264	20…264
	–	300 AC / 200 DC	300 AC / 200 DC	200 AC or DC	300 AC / 200 DC	300 AC / 200 DC
	–	⊗ / –	⊗ / –	⊗ / ⊗	⊗ / ⊗	⊗ / ⊗
	–	≤ 0.8	≤ 0.8	≤ 1.5	≤ 1.5	≤ 1.5
	–	≤ 5.5	≤ 5.5	≤ 5.5	≤ 5.5	≤ 5.5
	–	25 AC / 1000 DC	25 AC / 300 DC	2000	1000	150

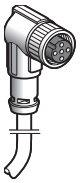
Suitable female plug-in connectors, including pre-wired versions

For XS6 remote control



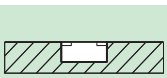
XSZBPM12

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
U20	XZCP1965L5	XZCP1865L5	XZCC20FCM30B





Inductive proximity sensors
Optimum





	Form J 8 x 22	Form F 15 x 32	Form E 26 x 26	Form C 40 x 40	Form D 80 x 80
Nominal sensing distance Sn	**2.5** mm	**5** mm	**10** mm	**15** mm	**40** mm
Operating zone (mm)	0...2	0...4	0…8	0…12	0…32
Suitability for flush mounting (metal environment)	flush mountable	flush mountable	flush mountable	flush mountable	flush mountable
Case M (metal) P (plastic)	P	P	P	P	P
Temperature range (°C)	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70
Product certification	CE	CE - UL - CSA - C-TICK			
Degree of protection (conforming to IEC 60529)	pre-cabled: IP 68 (with connector: IP 67)				

Sensors for DC applications

Connection			**Pre-cabled, PvR (2 m)**				
Dimensions (mm) Ø x L or W x H x D			8 x 22 x 8	15 x 32 x 8	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
3-wire	**PNP**	NO function	**XS7J1A1PAL2**	**XS7F1A1PAL2**	XS7E1A1PAL2	XS7C1A1PAL2	XS7D1A1PAL2
		NC function	XS7J1A1PBL2	XS7F1A1PBL2	XS7E1A1PBL2	XS7C1A1PBL2	XS7D1A1PBL2
	NPN	NO function	**XS7J1A1NAL2**	**XS7F1A1NAL2**	XS7E1A1NAL2	XS7C1A1NAL2	XS7D1A1NAL2
		NC function	XS7J1A1NBL2	XS7F1A1NBL2	XS7E1A1NBL2	XS7C1A1NBL2	XS7D1A1NBL2
Connection			**M8 connector**				**M12 connector**
Dimensions (mm) Ø x L or W x H x D			8 x 22 x 8	15 x 32 x 8	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
3-wire	**PNP**	NO function	**XS7J1A1PAL01M8** (1)	**XS7F1A1PAL01M8** (1)	XS7E1A1PAM8	XS7C1A1PAM8	XS7D1A1PAM12
		NC function	XS7J1A1PBL01M8 (1)	XS7F1A1PBL01M8 (1)	XS7E1A1PBM8	XS7C1A1PBM8	XS7D1A1PBM12
	NPN	NO function	**XS7J1A1NAL01M8** (1)	**XS7F1A1NAL01M8** (1)	XS7E1A1NAM8	XS7C1A1NAM8	XS7D1A1NAM12
		NC function	XS7J1A1NBL01M8 (1)	XS7F1A1NBL01M8 (1)	XS7E1A1NBM8	XS7C1A1NBM8	XS7D1A1NBM12
Supply voltage limits, min./max. (V) including ripple			10…36	10…36	10…36	10…36	10…36
Switching capacity, max. (mA)			100	100	100	100	100
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗
Voltage drop, closed state (V) at I nominal			≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Switching frequency (Hz)			2000	2000	1000	1000	100

Sensors for DC applications

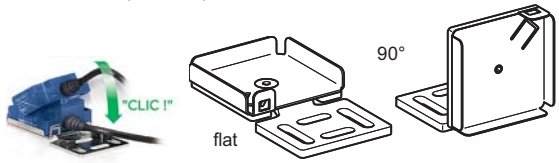
Connection			**Pre-cabled, PvR (2 m)**				
Dimensions (mm) Ø x L or W x H x D			8 x 22 x 8	15 x 32 x 8	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
2-wire	**non polarised**	NO function	XS7J1A1DAL2	XS7F1A1DAL2	XS7E1A1DAL2	XS7C1A1DAL2	XS7D1A1DAL2
		NC function	XS7J1A1DBL2	XS7F1A1DBL2	XS7E1A1DBL2	XS7C1A1DBL2	XS7D1A1DBL2
Connection			**M8 connector**				**M12 connector**
Dimensions (mm) Ø x L or W x H x D			8 x 22 x 8	15 x 32 x 8	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26
2-wire	**non polarised**	NO function	XS7J1A1DAL01M8 (1)	XS7F1A1DAL01M8 (1)	XS7E1A1DAM8	XS7C1A1DAM8	XS7D1A1DAM12
		NC function	XS7J1A1DBL01M8 (1)	XS7F1A1DBL01M8 (1)	XS7E1A1DBM8	XS7C1A1DBM8	XS7D1A1DBM12
Supply voltage limits, min./max. (V) including ripple			10…36	10…36	10…36	10…36	10…36
Switching capacity, max. (mA)			100	100	100	100	100
Overload and short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗
Residual current, open state (mA)			≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Voltage drop, closed state (V) at I nominal			≤ 4	≤ 4	≤ 4	≤ 4	≤ 4
Switching frequency (Hz)			4000	5000	1000	1000	100

(1) M8 connector on flying lead (L = 0.15 m).

Accessories

Fixing

For flat sensors, forms E, C and D



	flat	90°	substitution of block type sensors XSE / XSC / XSD
Form E	**XSZBE00**	**XSZBE90**	**XSZBE10**
Form C	**XSZBC00**	**XSZBC90**	**XSZBC10**
Form D	–	–	**XSZBD10**

Fixing clamp with indexing pin for cylindrical sensors



M8	**XSZB108**
M12	**XSZB112**
M18	**XSZB118**
M30	**XSZB130**

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**



Increased range				Standard range			
M8	**M12**	**M18**	**M30**	**M8**	**M12**	**M18**	**M30**
2.5 mm	**4** mm	**10** mm	**20** mm	**1.5** mm	**2** mm	**5** mm	**10** mm
0…2	0…3.2	0…8	0…16	0…1.2	0…1.6	0…4	0…8
almost flush mountable	almost flush mountable	almost flush mountable	almost flush mountable	flush mountable	flush mountable	flush mountable	flush mountable
M	M	M	M	M	M	M	M
- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70
CE - UL - CSA - CCC - C-TICK				CE - UL - CSA - CCC - C-TICK			
IP 67	IP 68, IP 69K conforming to DIN 40050 (with connector: IP 67)			IP 67	pre-cabled: IP 68, IP 69K conforming to DIN 40050 (with connector: IP 67)		

Short case

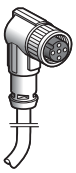
Pre-cabled, PvR (2 m)				**Pre-cabled, PvR (2 m)**			
M8 x 33	M12 x 35	M18 x 39	M30 x 43	M8 x 33	M12 x 35	M18 x 39	M30 x 43
XS1N08PA349	**XS1N12PA349**	**XS1N18PA349**	**XS1N30PA349**	**XS508B1PAL2**	**XS512B1PAL2**	**XS518B1PAL2**	**XS530B1PAL2**
XS1N08PB349	XS1N12PB349	XS1N18PB349	XS1N30PB349	XS508B1PBL2	XS512B1PBL2	XS518B1PBL2	XS530B1PBL2
XS1N08NA349	XS1N12NA349	XS1N18NA349	XS1N30NA349	**XS508B1NAL2**	**XS512B1NAL2**	**XS518B1NAL2**	**XS530B1NAL2**
XS1N08NB349	XS1N12NB349	XS1N18NB349	XS1N30NB349	XS508B1NBL2	XS512B1NBL2	XS518B1NBL2	XS530B1NBL2
M8 connector	**M12 connector**			**M8 connector**	**M12 connector**		
M8 x 42	M12 x 50	M18 x 50	M30 x 55	M8 x 42	M12 x 50	M18 x 50	M30 x 55
XS1N08PA349S	**XS1N12PA349D**	**XS1N18PA349D**	**XS1N30PA349D**	**XS508B1PAM8**	**XS512B1PAM12**	**XS518B1PAM12**	**XS530B1PAM12**
XS1N08PB349S	XS1N12PB349D	XS1N18PB349D	XS1N30PB349D	XS508B1PBM8	XS512B1PBM12	XS518B1PBM12	XS530B1PBM12
XS1N08NA349S	XS1N12NA349D	XS1N18NA349D	XS1N30NA349D	**XS508B1NAM8**	**XS512B1NAM12**	**XS518B1NAM12**	**XS530B1NAM12**
XS1N08NB349S	XS1N12NB349D	XS1N18NB349D	XS1N30NB349D	XS508B1NBM8	XS512B1NBM12	XS518B1NBM12	XS530B1NBM12
10…36	10…36	10…36	10…36	10…36	10…36	10…36	10…36
200	200	200	200	200	200	200	200
★ / –	★ / –	★ / –	★ / –	★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗
≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
2500	2500	1000	500	5000	5000	2000	1000

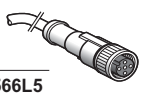
Long case

				Pre-cabled, PvR (2 m)			
–	–	–	–	M8 x 51	M12 x 53	M18 x 53	M30 x 51
–	–	–	–	XS508B1DAL2	XS512B1DAL2	XS518B1DAL2	XS530B1DAL2
–	–	–	–	XS508B1DBL2	XS512B1DBL2	XS518B1DBL2	XS530B1DBL2
				M12 connector			
				M8 x 62	M12 x 62	M18 x 65	M30 x 63
–	–	–	–	XS508B1DAM12	XS512B1DAM12	XS518B1DAM12	XS530B1DAM12
–	–	–	–	XS508B1DBM12	XS512B1DBM12	XS518B1DBM12	XS530B1DBM12
–	–	–	–	10…58	10…58	10…58	10…58
–	–	–	–	100	100	100	100
–	–	–	–	★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗
–	–	–	–	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
–	–	–	–	≤ 4	≤ 4	≤ 4	≤ 4
–	–	–	–	4000	4000	3000	2000

Suitable female plug-in connectors, including pre-wired versions

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8 (or S)	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12 (or D)	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
U20 (or K)	XZCP1965L5	XZCP1865L5	XZCC20FCM30B

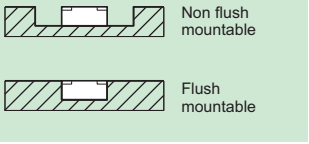






Inductive proximity sensors - Application

Plastic cylindrical





	M8	M12	M18	M30
Nominal sensing distance Sn	**2.5** mm	**4** mm	**8** mm	**15** mm
Operating zone (mm)	0…2	0…3.2	0…6.4	0…12
Suitability for flush mounting (metal environment)	non flush mountable			
Case M (metal) P (plastic)	P			
Temperature range (°C)	- 25…+ 70			
Product certification	CE - UL - CSA - CCC - C-TICK			
Degree of protection (conforming to IEC 60529)	IP 67	pre-cabled: IP 68 (with connector: IP 67)		

Sensors for DC applications

Connection				**Pre-cabled, PvR (2 m)**			
Dimensions (mm) Ø x L or W x H x D				M8 x 33	M12 x 33	M18 x 33.5	M30 x 40.5
2-wire (non polarised)		**NO or NC**	programmable	–	–	–	–
4-wire	**PNP**	**NO + NC**	complementary outputs	–	–	–	–
	NPN	**NO + NC**	complementary outputs	–	–	–	–
3-wire	**PNP**	**NO** function		XS4P08PA340	XS4P12PA340	XS4P18PA340	XS4P30PA340
		NC function		XS4P08PB340	XS4P12PB340	XS4P18PB340	XS4P30PB340
	NPN	**NO** function		XS4P08NA340	XS4P12NA340	XS4P18NA340	XS4P30NA340
		NC function		XS4P08NB340	XS4P12NB340	XS4P18NB340	XS4P30NB340
Connection				**M8 connector**	**M12 connector**		
Dimensions (mm) Ø x L or W x H x D				M8 x 42	M12 x 48	M18 x 48	M30 x 50
3-wire	**PNP**	**NO** function		XS4P08PA340S	XS4P12PA340D	XS4P18PA340D	XS4P30PA340D
		NC function		XS4P08PB340S	XS4P12PB340D	XS4P18PB340D	XS4P30PB340D
	NPN	**NO** function		XS4P08NA340S	XS4P12NA340D	XS4P18NA340D	XS4P30NA340D
		NC function		XS4P08NB340S	XS4P12NB340D	XS4P18NB340D	XS4P30NB340D
Supply voltage limits, min./max. (V) including ripple				10…38	10…38	10…38	10…38
Switching capacity, max. (mA)				200	200	200	200
Short-circuit protect. (★) / LED output state indicator (⊗) / Power on LED (⊗)				★ / ⊗ / –	★ / ⊗ / –	★ / ⊗ / –	★ / ⊗ / –
Voltage drop, closed state (V) at I nominal				≤ 2	≤ 2	≤ 2	≤ 2
Switching frequency (Hz)				5000	5000	2000	1000

Multi-current/multi-voltage sensors for AC/DC applications

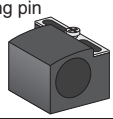
Connection				**Pre-cabled, PvR (2 m)**			
Dimensions (mm) Ø x L or W x D x H				M8 x 50	M12 x 50	M18 x 60	M30 x 60
2-wire	**AC/DC**	**NO** function		XS4P08MA230	XS4P12MA230	XS4P18MA230	XS4P30MA230
not short-circuit protected (1)		**NC** function		XS4P08MB230	XS4P12MB230	XS4P18MB230	XS4P30MB230
	AC	**NO** or **NC** programmable		–	–	–	–
	AC/DC	**NO** or **NC** programmable		–	–	–	–
Connection				**U20 connector**			
Dimensions (mm) Ø x L or W x H x D				M8 x 61	M12 x 61	M18 x 70	M30 x 70
2-wire	AC/DC	**NO** function		XS4P08MA230K	XS4P12MA230K	XS4P18MA230K	XS4P30MA230K
not short-circuit protected (1)		**NC** function		XS4P08MB230K	XS4P12MB230K	XS4P18MB230K	XS4P30MB230K
Supply voltage limits, min./max. (V) including ripple				20…264	20…264	20…264	20…264
Switching capacity, max. (mA)				100	200	300 AC / 200 DC	300 AC / 200 DC
LED output state indicator (⊗)				⊗	⊗	⊗	⊗
Residual current, open state (mA)				≤ 0.6	≤ 0.6	≤ 0.6	≤ 0.6
Voltage drop, closed state (V) at I nominal				≤ 5.5	≤ 5.5	≤ 5.5	≤ 5.5
Switching frequency (Hz)				25 AC / 3000 DC	25 AC / 3000 DC	25 AC / 2000 DC	25 AC / 1000 DC

(1) For these sensors without short-circuit protection, it is essential to connect a 0.4 A quick-blow fuse in series with the load.

Accessories

Fixing clamps

Fixing clamp with indexing pin for cylindrical sensors



M4	**XSZB104**
M5	**XSZB105**
M6.5	**XSZB165**
M8	**XSZB108**
M12	**XSZB112**
M18	**XSZB118**
M30	**XSZB130**

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Miniature cylindrical (assembly)



Rectangular Form C





	Ø 4	M5	Ø 6.5	Form C			
	1 mm	1 mm	1.5 mm	15 mm	20 mm increased range	20 mm	40 mm increased range
	0...0.8	0...0.8	0...1.2	0…12	0…16	0…16	0…32
	flush mountable			flush mountable		non flush mountable	
	M			P			
	- 25…+ 70			- 25…+ 70			
	CE - UL - CSA - CCC - C-TICK			CE - UL - CSA - CCC - C-TICK			
	IP 67			IP 67			

	Pre-cabled, PvR (2 m)			Screw terminals (3)			
	Ø 4 x 29	M5 x 29	Ø6,5 x 33	40 x 40 x 117			
	–	–	–	XS7C40DP210	–	XS8C40DP210	–
	–	–	–	XS7C40PC440	XS7C40PC449	XS8C40PC440	XS8C40PC449
	–	–	–	XS7C40NC440	XS7C40NC449	XS8C40NC440	XS8C40NC449
	XS1L04PA310	**XS1N05PA310**	**XS1L06PA340**	–	–	–	–
	–	–	–	–	–	–	–
	XS1L04NA310	XS1N05NA310	XS1L06NA340	–	–	–	–
	–	–	–	–	–	–	–
	M8 connector						
	Ø4 x 41	M5 x 41	Ø6,5 x 42				
	XS1L04PA310S	**XS1N05PA311S** (2)	**XS1L06PA340S**	–	–	–	–
	–	–	–	–	–	–	–
	XS1L04NA310S	XS1N05NA311S (2)	XS1L06NA340S	–	–	–	–
	–	–	–	–	–	–	–
	5...30	5...30	10...38	12…48			
	100	100	200	4-wire version = 200 – 2-wire version = 1.5…100			
	★ / ⊗ / –	★ / ⊗ / –	★ / ⊗ / –	4-wire version = ★ / ⊗ / ⊗ – 2-wire version = ★ / ⊗ / –			
	≤ 2	≤ 2	≤ 2	4-wire version = ≤ 2 – 2-wire version = ≤ 4			
	5000	5000	2500	2-wire = 1500 / 4-wire = 1000		2-wire = 800 / 4-wire = 1000 (20mm) 500 (40mm)	

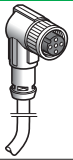
				Screw terminals (3)			
	–	–	–	40 x 40 x 117			
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	XS7C40FP260	–	XS8C40FP260	–
	–	–	–	XS7C40MP230	–	XS8C40MP230	–
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	20…264			
	–	–	–	AC version = 500 – AC/DC version = 300 / 200			
	–	–	–	⊗			
	–	–	–	AC version = ≤ 1.5 – AC/DC version = ≤ 0.8 / 1.5			
	–	–	–	≤ 5.5			
	–	–	–	25 AC / 50 DC			

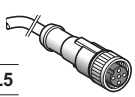
(2) Stainless steel sensors, Sn = 0.8 mm.

(3) Sensors supplied without cable gland. Suitable cable gland: 13P.

Suitable female plug-in connectors, including pre-wired versions

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8 (or S)	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12 (or D)	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
U20 (or K)	XZCP1965L5	XZCP1865L5	XZCC20FCM30B

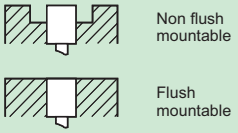






Inductive proximity sensors - Technology

Multi-voltage with short-circuit protection





		M12	M18	M30
Sensing distance Sn	flush mountable	**2** mm	**5** mm	**10** mm
	non flush mountable	**4** mm	**8** mm	**15** mm
Operating zone (mm)	flush mountable	0…1.6	0…4	0…8
	non flush mountable	0…3.2	0…6.4	0…12
Suitability for flush mounting (metal environment)		flush mountable or non flush mountable depending on model		
Case M (metal) P (plastic)		M		
Temperature range (°C)		- 25…+ 70		
Degree of protection (conforming to IEC 60529)		IP 68 (with connector: IP 67)		
Product certification		CE - UL - CSA - CCC - C-TICK		
Dimensions (mm) Ø x L Cable (Connector)		M12 x 55 (M12 x 66)	M18 x 60 (M18 x 72)	M30 x 60 (M30 x 72)

Sensors for DC applications

Connection						
4-wire	**PNP**	**NO + NC**	flush mountable	–	–	–
			non flush mountable	–	–	–
	NPN	**NO + NC**	flush mountable	–	–	–
			non flush mountable	–	–	–
	PNP+NPN	**NO/NC**	flush mountable (metal)	–	–	–
	programmable		non flush mntbl. (metal)	–	–	–
			non flush mntbl. (plastic)	–	–	–
Connection						
4-wire	**PNP**	**NO + NC**	flush mountable	–	–	–
			non flush mountable	–	–	–
	NPN	**NO + NC**	flush mountable	–	–	–
			non flush mountable	–	–	–
	PNP+NPN	**NO/NC**	flush mountable (metal)	–	–	–
	programmable		non flush mntbl. (metal)	–	–	–
			non flush mntbl. (plastic)	–	–	–
Supply voltage limits, min./max. (V) including ripple				–	–	–
Switching capacity, max. (mA)				–	–	–
Short-circuit protection (★) / LED output state indicator (⊗)				–	–	–
Voltage drop, closed state (V) at I nominal				–	–	–
Switching frequency (Hz)				–	–	–

Multi-current/multi-voltage sensors for AC/DC applications

Connection			**Pre-cabled, PvR (2 m)**		
2-wire AC/DC	**NO** function	flush mountable	**XS1M12MA250**	**XS1M18MA250**	**XS1M30MA250**
		non flush mountable	XS2M12MA250	XS2M18MA250	**XS2M30MA250**
	NC function	flush mountable	XS1M12MB250	**XS1M18MB250**	**XS1M30MB250**
		non flush mountable	XS2M12MB250	XS2M18MB250	XS2M30MB250
Connection			**1/2"-20 UNF connector**		
2-wire AC/DC	**NO** function	flush mountable	XS1M12MA250K	**XS1M18MA250K**	XS1M30MA250K
		non flush mountable	XS2M12MA250K	XS2M18MA250K	**XS2M30MA250K**
	NC function	flush mountable	XS1M12MB250K	XS1M18MB250K	XS1M30MB250K
		non flush mountable	XS2M12MB250K	XS2M18MB250K	XS2M30MB250K
Supply voltage limits, min./max. (V) 50-60 Hz			20…264		
Switching capacity, max. (mA)			5…200	5…200 AC, 5…300 DC	
LED output state indicator (⊗) / Power on LED (⊗)			⊗ / ⊗		
Residual current, open state (mA)			≤ 1.5		
Voltage drop, closed state (V) at I nominal			≤ 5.5		
Switching frequency (Hz)			25 AC, 4000 DC	25 AC, 2000 DC	25 AC, 2000 DC (1)

(1) 25 AC, 1000 DC for non flush mountable Ø 30 mm.

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Other versions: **please consult your Schneider Electric agency.**

Complementary outputs NO + NC

PNP + NPN outputs, NO/NC programmable



	M8	M12	M18	M30	M12	M18	M30
	1.5 mm	2 mm	5 mm	10 mm	2 mm	5 mm	10 mm
	2.5 mm	4 mm	8 mm	15 mm	4 mm	8 mm	15 mm
	0…1.2	0…1.6	0…4	0…8	0…1.6	0…4	0…8
	0…2	0…3.2	0…6.4	0…12	0…3.2	0…6.4	0…12
	flush mountable or non flush mountable depending on model				flush mountable or non flush mountable depending on model		
	M				M or P depending on model		
	- 25…+ 70				- 25…+ 70		
	IP 67	IP 68 (with connector: IP 67)			IP 68 (with connector: IP 67)		
	CE - UL - CSA - CCC - C-TICK				CE - UL - CSA - CCC - C-TICK		
	M8 x 50 (M8 x 61)	M12 x 33 (M12 x 48)	M18 x 36.5 (M18 x 49)	M30 x 40.5 (M30 x 53)	M12 x 50 (M12 x 61)	M18 x 60 (M18 x 72)	M30 x 60 (M30 x 72)
	Pre-cabled, PvR (2 m)				**Pre-cabled, PvR (2 m)**		
	XS1M08PC410	**XS1N12PC410**	**XS1N18PC410**	XS1N30PC410	–	–	–
	XS2M08PC410	XS2N12PC410	XS2N18PC410	XS2N30PC410	–	–	–
	XS1NM08NC410	XS1N12NC410	XS1N18NC410	XS1N30NC410	–	–	–
	XS2M08NC410	XS2N12NC410	XS2N18NC410	XS2N30NC410	–		
	–	–	–	–	**XS1M12KP340**	**XS1M18KP340**	**XS1M30KP340**
	–	–	–	–	**XS2M12KP340**	XS2M18KP340	XS2M30KP340
	–	–	–	–	**XS4P12KP340**	**XS4P18KP340**	XS4P30KP340
	M12 connector				**M12 connector**		
	XS1M08PC410D	**XS1N12PC410D**	**XS1N18PC410D**	**XS1N30PC410D**	–	–	–
	XS2M08PC410D	**XS2N12PC410D**	**XS2N18PC410D**	XS2N30PC410D	–	–	–
	XS1M08NC410D	XS1N12NC410D	XS1N18NC410D	XS1N30NC410D	–	–	–
	XS2M08NC410D	XS2N12NC410D	XS2N18NC410D	XS2N30NC410D	–	–	–
	–	–	–	–	**XS1M12KP340D**	**XS1M18KP340D**	**XS1M30KP340D**
	–	–	–	–	**XS2M12KP340D**	XS2M18KP340D	XS2M30KP340D
	–	–	–	–	XS4P12KP340D	XS4P18KP340D	XS4P30KP340D
	10…36				10…36		
	200				200		
	★ / ⊗				★ / –		
	≤ 2				≤ 2.6		
	5000	5000	2000	1000	5000	2000	1000

Accessories

Fixing clamps

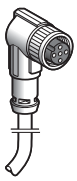
With indexing pin for cylindrical sensors

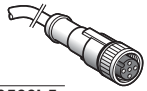


M12	**XSZB112**
M18	**XSZB118**
M30	**XSZB130**

Suitable female plug-in connectors, including pre-wired versions

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8 (or S)	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12 (or D)	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
U20 (or K)	XZCP1965L5	XZCP1865L5	XZCC20FCM30B



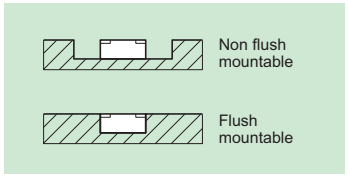




OsiSense XS — Inductive proximity sensors - Application

Rotation control

Fixed sensing distance
(for ferrous or non ferrous materials)





	Form E 26 x 26	Form C 40 x 40	M30	M18	M30
Nominal sensing distance Sn	**10** mm	**15** mm	**10** mm	**5** mm	**10** mm
Operating zone (mm)	0...8	0...12	0...8	0...4	0...8
Suitability for flush mounting (metal environment)	flush mountable			flush mountable	
Case M (metal) P (plastic)	P	P	M	M	M
Temperature range (°C)	- 25…+ 70			0…+ 50	
Degree of protection (conforming to IEC 60529)	IP 67			pre-cabled: IP 68 (with connector: IP 67)	
Product certification	CE - UL - CSA - CCC - C-TICK			CE - UL - CSA - CCC - C-TICK	
Dimensions (mm) Ø x L or W x H x D Cable (Connector)	26 x 26 x 13	40 x 40 x 15	M30 x 81	M18 x 60 (M18 x 70)	M30 x 60
Maximum speed of passing object (impulses/min)	48000	48000	6000...48000 (1)	–	–
Adjustable frequency range (impulses/min)	6...6000	6...6000	6...150 / 120...3000 (1)	–	–

Sensors for DC applications

Connection			**Pre-cabled, PvR (2 m)**				
4-wire	**PNP/NPN NO/NC**	programmable	–	–	–	XS1M18KPM40	XS1M30KPM40
3-wire	**PNP** **NC** function	slow version	–	–	**XSAV11373**	–	–
		fast version	–	–	**XSAV12373**	–	–
	0…10 V output	plastic	–	–	–	–	–
	4…20 mA output	metal, flush mountable	–	–	–	–	–
		plastic, flush mountable	–	–	–	–	–
		plastic, non flush mountable	–	–	–	–	–
Connection			**M8 or M12 connector**				**M12** on 0.8 m flying lead
4-wire	**PNP/NPN NO/NC**	programmable	–	–	–	XS1M18KPM40D	XS1M30KPM40LD
3-wire	**PNP** **NC** function		**XS9E11RPBL01M12** (3)	**XS9C11RPBL01M12** (3)	–	–	–
	0…10 V output		–	–	–	–	–
	4…20 mA output		–	–	–	–	–
Supply voltage limits, min./max. (V) including ripple			10...36	10...36	10...58	10...38	
Switching capacity, max. (mA)			100	200	200	200	
Short-circuit protect. (★) / LED output state indicator (⊗) / Power on LED (⊗)			(⊗)	★ / ⊗ / ⊗	★ / ⊗ / ⊗	★ / ⊗ / –	★ / ⊗ / –
Linearity error			–	–	–	–	
Voltage drop, closed state (V) at I nominal			≤ 2	≤ 2	≤ 2	≤ 2.6	
Switching frequency (Hz)			–	–	–	1000	
Operating frequency (Hz)			–	–	–	–	

Multi-current/multi-voltage sensors for AC/DC applications

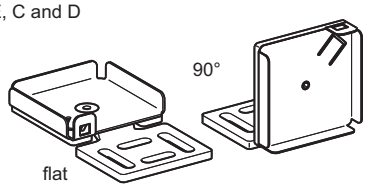
Connection			**Pre-cabled, PvR (2 m)**				
2-wire	**AC/DC** **NC** function		**XS9E11RMBL01U20** (5)	**XS9C11RMBL01U20** (5)	–	–	–
not short-circuit protected (2)	**NC** function	slow version	–	–	**XSAV11801**	–	–
		fast version	–	–	**XSAV12801**	–	–
Supply voltage limits, min./max. (V) 50-60 Hz			20...264	20...264	20...264	–	–
Switching capacity, max. (mA)			100	300 AC / 200 DC	300 AC / 200 DC	–	–
LED output state indicator (⊗) / Power on LED (⊗)			⊗ / ⊗	⊗ / ⊗	⊗ / –	–	–
Residual current, open state (mA)			≤ 1.5	≤ 1.5	≤ 1.5	–	–
Voltage drop, closed state (V) at I nominal			≤ 5.5	≤ 5.5	≤ 5.7	–	–
Switching frequency (Hz)			–	–	–	–	–

Accessories

Fixing

For flat sensors, forms E, C and D





	flat	90°	substitution of block type sensors XSE / XSC / XSD
Form E	**XSZBE00**	**XSZBE90**	**XSZBE10**
Form C	**XSZBC00**	**XSZBC90**	**XSZBC10**
Form D	–	–	**XSZBD10**

Fixing clamp with indexing pin for cylindrical sensors



M12	**XSZB112**
M18	**XSZB118**
M30	**XSZB130**

Other versions: **please consult your Schneider Electric agency.**

Schneider Electric

Analogue (Position control)



	Form F 8 x 32	Form E 26 x 26	Form C 40 x 40	Form D 80 x 80	M12	M18	M30
	5 mm	10 mm	15 mm	40 mm	M: 2 mm / P: 4 mm	M: 5 mm / P: 8 mm	M: 10 mm / P: 15 mm
	1...4	1...10	2...15	5...40	M: 0.2…2 / P: 0.4…4	M: 0.5…5 / P: 0.8…8	M: 1…10 / P: 1.5…15
	flush mountable	flush mountable	flush mountable	flush mountable	flush / non flush mountable	flush / non flush mountable	flush / non flush mountable
	P	P	P	P	M or P	M or P	M or P
	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70	- 25…+ 70
	pre-cabled: IP 68 (with connector: IP 67)				IP 67		
	CE - UL - CSA - CCC - C-TICK						
	15 x 32 x 8	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26	Ø 12 x 50	Ø 18 x 50	Ø 30 x 52.5
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	XS9F111A1L2	XS9E111A1L2	XS9C111A1L2	XS9D111A1L2	XS4P12AB110	XS4P18AB110	XS4P30AB110
	–	–	–	–	XS1M12AB120	XS1M18AB120	XS1M30AB120
	XS9F111A2L2	XS9E111A2L2	XS9C111A2L2	XS9D111A2L2	–	–	–
	–	–	–	–	**XS4P12AB120**	**XS4P18AB120**	**XS4P30AB120**
	M8 or M12 connector						
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	XS9F111A1L01M8 (4)	XS9E111A1L01M12 (4)	XS9C111A1L01M12 (4)	XS9D111A1M12	–	–	–
	XS9F111A2L01M8 (4)	**XS9E111A2L01M12** (4)	**XS9C111A2L01M12** (4)	**XS9D111A2M12**	–	–	–
	10...36	10...36	10...36	10...36	10…38	10…38	10…38
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	± 1 V for 0…10 V version / ± 2 mA for 4…20 mA version						
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	2000	1000	1000	100	1500	500	300

(1) 6...150 and 6000 impulses/min for XSAV11373 and XSAV11801 (slow version); 120...3000 and 48000 impulses/min for XSAV12373 and XSAV12801 (fast version).

(2) For these sensors without short-circuit protection, it is essential to connect a 0.4 A quick-blow fuse in series with the load.

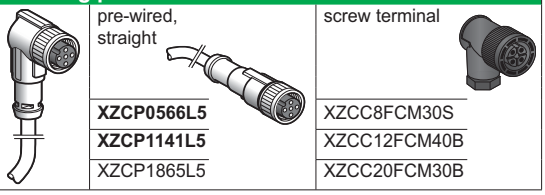
(3) Flying lead (L = 0.15 m) with end mounted remote control incorporating M12 connector.

(4) Flying lead (L = 0.15 m) with end connector.

(5) Flying lead (L = 0.15 m) with end mounted remote control incorporating 1/2"-20 UNF connector.

Suitable female plug-in connectors, including pre-wired versions

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M8	XZCP0666L5	**XZCP0566L5**	XZCC8FCM30S
M12 (or D)	XZCP1241L5	**XZCP1141L5**	XZCC12FCM40B
U20	XZCP1965L5	XZCP1865L5	XZCC20FCM30B



Inductive proximity sensors - Application
Food and beverage processing



Type	M12	M18	Ø 18 plain	M30
Nominal sensing distance Sn	**7** mm	**12** mm	**12** mm	**22** mm
Operating zone (mm)	0 …5.6	0 … 9.6	0 … 9.6	0 … 17.6
Suitability for flush mounting (metal environment)	non flush mountable			
Case M (metal) (1)	M stainless steel 316 L			
Product certification	CE - UL - CSA - CCC - C-TICK			
Temperature range (°C)	- 25…+ 85			
Degree of protection (conforming to IEC 60529)	pre-cabled: IP 68 (with connector: IP 67) and IP 69K conforming to DIN 40050			

Sensors for DC applications (solid-state output: transistor)

Connection			**Pre-cabled, non poisonous PVC (2 m)**			
Dimensions (mm)			M12 x 55	M18 x 60	Ø 18 x 60	M30 x 62
3-wire	**PNP**	**NO** function	XS212SAPAL2	XS218SAPAL2	XS2L2SAPAL2	XS230SAPAL2
	NPN	**NO** function	XS212SANAL2	XS218SANAL2	XS2L2SANAL2	XS230SANAL2
Connection			**M12 connector**			
Dimensions (mm)			M12 x 61	M18 x 70	Ø 18 x 70	M30 x 70
3-wire	**PNP**	**NO** function	XS212SAPAM12	XS218SAPAM12	XS2L2SAPAM12	XS230SAPAM12
	NPN	**NO** function	XS212SANAM12	XS218SANAM12	XS2L2SANAM12	XS230SANAM12
Supply voltage limits, min./max. (V) including ripple			10…36			
Switching capacity, max. (mA)			≤ 200			
Switching frequency (Hz)			2500	1000	1000	500
Short-circuit protection (★) / LED output state indicator (⊗)			★ / ⊗	★ / ⊗	★ / ⊗	★ / ⊗
Voltage drop, closed state (V) at I nominal			≤ 2			

Multi-current/multi-voltage sensors for AC/DC applications

Connection			**Pre-cabled, non poisonous PVC (2 m)**			
Dimensions (mm)			–	M18 x 60	–	M30 x 62
2-wire (2)	**AC/DC**	**NO** function	–	XS218SAMAL2	–	XS230SAMAL2
Connection			**1/2"-20 UNF connector**			
Dimensions (mm)			–	M18 x 72	–	M30 x 74
2-wire (2)	**AC/DC**	**NO** function	–	XS218SAMAU20	–	XS230SAMAU20
Supply voltage limits, min./max. (V) 50-60 HZ			–	20 … 264	–	20 … 264
Switching capacity, max. (mA)			–	300 AC / 200 DC	–	300 AC / 200 DC
Switching frequency (Hz)			–	25 AC / 1000 DC	–	25 AC / 300 DC
LED output state indicator (⊗)			–	⊗	–	⊗
Voltage drop, closed state (V) at I nominal			–	≤ 5.5	–	≤ 5.5
Residual current, open state (mA)			–	≤ 0.8	–	≤ 0.8



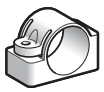
(1) Plastic range available. M12, M18, M30:
To order, replace the second letter **S** in the reference by **A**
(example: XS212**S**APAL2 becomes XS212**A**APAL2).

(2) For these sensors without short-circuit protection, it is essential to connect a 0.4 A quick-blow fuse in series with the load.

Accessories

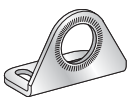
Fixing clamps

Plastic fixing centres 24.1 mm, with locking screw



for sensor	
Ø 18 plain	XUZB2005

Stainless steel

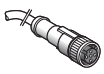


for sensor	
Ø 12	XSZBS12
Ø 18	XUZA118
Ø 30	XSZBS30

M12 pre-wired connector

female, 4-pin, stainless steel clamping ring

Straight connector



5 m cable	XZCPA1141L5

Elbowed connector



5 m cable	XZCPA1241L5

M12 jumper cable

male, 3-pin, stainless steel clamping ring

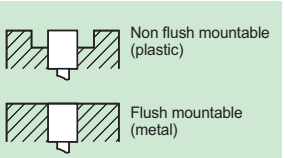
Straight connector	5 m	XZCRA151140A5

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

OsiSense XT — Capacitive proximity sensors

Detection of insulating materials or conductive materials





	Suitability for flush mtg. (metal environment)	M12	M18	M30	Ø 32	40 x 40
Nominal sensing distance Sn	flush mountable	**2** mm	**4** mm	**10** mm	**15** mm	**15** mm
	non flush mountable	**–**	**8** mm	**15** mm	**20** mm	**–**
Operating zone Sa (mm) (2)	flush mountable	0…1.44	0…3.6	0…7.2	0…10	0…11
	non flush mountable	–	0…5.8	0…11	0…15	–
Case M (metal) P (plastic)	flush mountable	M	M	M	M	P
	non flush mountable	–	P	P	P	–
Product certification		CE				CE - UL - CSA
Temperature range (°C)		- 25…+ 70				
Degree of protection (conforming to IEC 60529)		IP 67				
Dimensions (mm) Ø x L or H x W x D		M12 x 70	M18 x 80	M30 x 80	M32 x 80	117 x 40 x 40

Sensors for DC applications

Connection				**Pre-cabled, PVC (2 m)**				
3-wire	**PNP**	**NO** function	flush mountable	XT112S1PAL2	XT118B1PAL2	XT130B1PAL2	–	–
			non flush mountable	–	XT218A1PAL2	XT230A1PAL2	–	–
		NO + NC functions	flush mountable	XT112S1PCL2	XT118B1PCL2	XT130B1PCL2	–	–
			non flush mountable	–	–	–	–	–
	NPN	**NO** function	flush mountable	XT112S1NAL2	XT118B1NAL2	XT130B1NAL2	–	–
			non flush mountable	–	XT218A1NAL2	XT230A1NAL2	–	–
Connection				**M12 connector**				**Screw terminals**
3-wire	**PNP**	**NO + NC** functions	flush mountable	XT112S1PCM12	XT118B1PCM12	XT130B1PCM12	–	XT7C40PC440 (3)
			non flush mountable	–	XT218A1PCM12	XT230A1PCM12	–	–
	NPN	**NO + NC** functions	flush mountable	–	–	–	–	XT7C40NC440 (3)
Supply voltage limits, min./max. (V) including ripple				10...38				10...58
Switching capacity, max. (mA)				200				200
Short circuit-protection (★) / LED output state indicator (⊗)				★ / ⊗				★ / ⊗
Voltage drop, closed state (V) at I nominal				≤ 2				≤ 2
Switching frequency (Hz)				300	100 (XT2) / 200 (XT1)	100 (XT2) / 150 (XT1)	–	100

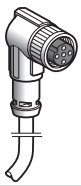
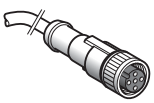
Multi-current/multi-voltage sensors for AC applications

Connection			**Pre-cabled, PVC (2 m)**				
2-wire AC (1)	**NO** function	flush mountable	–	XT118B1FAL2	XT130B1FAL2	XT132B1FAL2	–
		non flush mountable	–	XT218A1FAL2	XT230A1FAL2	XT232A1FAL2	–
	NO function	flush mountable	–	XT118B1FBL2	XT130B1FBL2	XT132B1FBL2	–
		non flush mountable	–	–	XT230A1FBL2	XT232A1FBL2	–
Connection							**Screw terminals**
2-wire AC (1)	**NO or NC** programmable	flush mountable	–	–	–	–	XT7C40FP262
Supply voltage limits, min./max. (V) 50-60 Hz			–	20…264	20…264	20…264	20…264
Switching capacity, max. (mA)			–	300			350
LED output state indicator (⊗) / Power on LED (⊗)			⊗ / –				
Voltage drop, closed state (V) at I nominal			–	≤ 5.5	≤ 5.5	≤ 9	≤ 5.5
Switching frequency (Hz)			–	25	25	25	25

(1) For these sensors without short-circuit protection, it is essential to connect a 0.4 A quick-blow fuse in series with the load.
(2) The operating distance depends on the objet material.
(3) Only for detecting insulating materials.

Accessoires

Suitable female plug-in connectors, including pre-wired versions

length 5 m without LED	pre-wired, elbowed	pre-wired, straight	screw terminal
M12	**XZCP1241L5** 	**XZCP1141L5** 	**XZCC12FCM40B** 

OsiSense XX — Ultrasonic sensors

Detection of any material

New






	Mini flat	Flat	Combined multi-fixing	Flat 80 x 80
Nominal sensing distance Sn	**10** cm	**25** cm	**50** cm	**1** m
Operating zone (cm)	0.62…10.2	5.1…25.4	5.1…50.8	10…100
	–	–	–	–
Sensitivity adjustment	Fixed	Fixed	Adjustable using remote control	Adjustable using remote control
Case P (plastic)	P	P	P	P
Product certification	CE	CE	CE	CE
Temperature range (°C)	- 20…+ 65	0…+ 50	- 20…+ 65	0…+ 70
Degree of protection (conforming to IEC 60529)	IP 67			
Dimensions (mm) Ø x L or H x W x D	33 x 19 x 7.6	74 x 30 x 16	60 x 33 x 18 / M 18 x 60	80 x 80 x 34

Sensors with “Digital” output for DC applications (24 V)

Connection			**M12** on 0.15 m flying lead	**M12 connector**		
3-wire	**PNP**	**NO** function	**XX7F1A2PAL01M12**	**XX7K1A2PAM12**	**XX7V1A1PAM12**	**XX8D1A1PAM12**
	NPN	**NO** function	XX7F1A2NAL01M12	XX7K1A2NAM12	XX7V1A1NAM12	XX8D1A1NAM12
4-wire	**PNP/NPN**	**NO** function	–	–	–	–
	PNP	**NO + NC** function	–	–	–	–
	NPN	**NO + NC** function	–	–	–	–
Application - monitoring levels						
	2 emptying levels	**PNP NO** function	–	–	–	–
	2 filling levels	**PNP NO** function	–	–	–	–
Supply voltage limits, min./max. (V) including ripple			10…28			
Switching capacity, max. (mA)			<100			
Short-circuit protection (★)			★			
LED output state indicator (⊗) / Power on LED (⊗)			⊗ / ⊗			
Voltage drop, closed state (V) at I nominal			<1			
Switching frequency (Hz)			100	80	40	70
Transmission frequency (Hz)			500	500	300	180

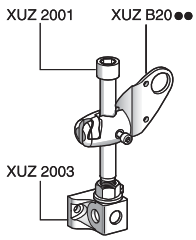
Sensors with “Analogue” output for DC applications (24 V)

Connection			–	**M12 connector**	
4-wire	**Analogue**	**0…10 V** output	–	**XX9V1A1F1M12**	**XX9D1A1F1M12**
		4…20 mA output	–	XX9V1A1C2M12	XX9D1A1C2M12
Supply voltage limits, min./max. (V) including ripple			–	10…28	10…28
Short-circuit protection (★)			–	★	★
LED output state indicator (⊗) / Power on LED (⊗)			–	⊗ / ⊗	⊗ / ⊗
Transmission frequency (Hz)			–	300	180

Accessories

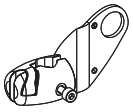
Fixings

3D fixings with ball joint



3D kit example

Bracket with ball joint for cylindrical sensors



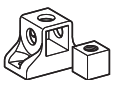
for	
Ø 12	**XUZB2012**
Ø 18	**XUZB2003**
Ø 30	**XUZB2030**

M12 rod for ball joint



XUZ2001

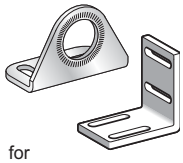
Fixing support for M12 rod



XUZ2003

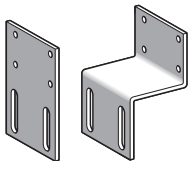
Simple fixings

90° fixing brackets



for	
Ø 12	**XXZ12**
Ø 18	**XUZA118**
Ø 30	**XXZ30**
XX7F	**XXZ1933**

Mounting plates for XX7K



flat	**XXZ3074F**
cranked	**XXZ3074S**

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**



	M12	M18	M30			M30 Long range
	5 or **10** cm depending on model	**15** or **50** cm depending on model	**1** m	**1** m	**2** m	**8** m
	0.64…5.1 (XX512A1…)	1.9…15.2 (XX518A1…)	10…100	5.1…99.1	12…200	20.3…800
	0.64…10.2 (XX512A2…)	5.1…50.8 (XX518A3…)	–	–		–
	Fixed	Adjustable using remote control	Adjustable using teach mode			Adjustable using teach mode
	P	P	P			P
	CE	CE	CE			CE
	- 20…+ 65	0…+ 50 (XX518A1…) / - 20…+ 65 (XX518A3…)	0…+ 70	0…+ 70		- 20…+ 60
	IP 67		IP 67	IP 65		
	M12 x 50	M18 x 65	M30 x 78	M30 x 85		M30 x 106

	M8 connector	M12 connector	Pre-cabled, PVC (2 m)	M12 connector			M12 connector
	XX512A2PAM8 (10 cm)	**XX518A3PAM12** (50 cm)	**XX518A3PAL2**	**XX6V3A1PAM12**	–	–	–
	XX512A2NAM8 (10 cm)	XX518A3NAM12 (50 cm)	XX518A3NAL2	XX6V3A1NAM12	–	–	–
	XX512A1KAM8 (5 cm)	XX518A1KAM12 (15 cm)	–	–	XX630A1KAM12	–	–
	–	–	–	–	**XX630A1PCM12** (1)	–	**XX630A3PCM12**
	–	–	–	–	XX630A1NCM12 (1)	–	XX630A3NCM12
	–	XX218A3PHM12 (3)	–	–	XX230A10PA00M12 (2)	XX230A20PA00M12 (2)	–
	–	XX218A3PFM12 (3)	–	–	XX230A11PA00M12 (2)	XX230A21PA00M12 (2)	–
	10...28						
	<100						
	★						
	⊗ / ⊗	⊗ / ⊗ except XX518A1.. (- / -)		⊗ / ⊗	⊗ / ⊗		⊗ / ⊗
	<1						
	125	40 / 80 (XX518A1..)		70	10		2
	500	300		180	200		75

	M12 connector						
	–	**XX918A3F1M12**	–	**XX9V3A1F1M12**	**XX930A1A1M12**	–	**XX930A3A1M12**
	–	XX918A3C2M12	–	XX9V3A1C2M12	XX930A1A2M12	–	XX930A3A2M12
	–	10…28	–	10…28	10…28	–	10…28
	–	★	–	★	★	–	★
	–	⊗ / ⊗	–	⊗ / ⊗	⊗ / ⊗	–	⊗ / ⊗
	–	300	–	180	200	–	75

(1) Stainless steel 303 version also available. To order, replace the first letter **A** in the reference by **S**. Example: XX630**A**1PCM12 becomes XX630**S**1PCM12.

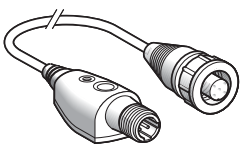
(2) 2 NO

(3) 1 NO

Programming

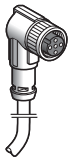
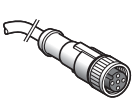
Remote control

teach button for use with sensors XX518A3●●●, XX7V1●●● and XX8D1A1●●●



XXZPB100

Suitable female plug-in connectors

		Pre-wired connectors elbowed	Pre-wired connectors straight	Other connectors screw terminal
				
L = 5 m (without LED)				
M8	for XX512A1…	**XZCP1041L5**	**XZCP0941L5**	**XZCC8FCM40V**
	for XX512A2…	XZCP0666L5	XZCP0566L5	XZCC8FCM30V
M12	for all sensors except XX512...	**XZCP1241L5**	**XZCP1141L5**	**XZCC12FCM40B**

OsiSense XCC — Opto-electronic rotary encoders
Incremental







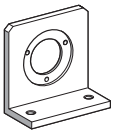
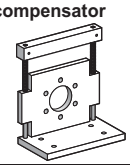

Diameter of housing (mm)		**Ø 40**	**Ø 40**	**Ø 58**	**Ø 58**	**Ø 58 Parametrable**	**Ø 90**
Shaft Ø (mm)		**Ø 6**	**Ø 6**	**Ø 6**	**Ø 10**	**Ø 14** (1)	**Ø 12**
Type of shaft (2)		**solid shaft**	**through shaft**	**solid shaft**	**solid shaft**	**through shaft**	**solid shaft**
Maximum rotational speed (rpm)		9000	9000	9000	9000	6000	6000
Maximum frequency (kHz)		100	100	300	300	300	100
Maximum load (daN)		2	2	10	10	5	20
Torque (N.cm)		0.2	0.25	0.4	0.4	0.6	1
Product certification		CE	CE	CE	CE	CE	CE
Temperature range (°C)		- 20…+ 80	- 20…+ 80	- 30…+ 100	- 30…+ 100	- 30…+ 70	- 20…+ 80
Degree of protection (conforming to IEC 60529)		IP 54	IP 52	IP 65 / IP 67 (3)	IP 65 / IP 67 (3)	IP 65	IP 66
Supply voltage	5 V, RS 422	4.5…5.5 V	4.5…5.5 V	4.75…30 V	4.75…30 V	4.75…30 V	4.5…5.5 V
	Push-pull	11…30 V	11…30 V	5…30 V	5…30 V	5…30 V	11…30 V
Connection		**Pre-cabled (2 m)**, radial		**M23 male connector**, radial			
Resolution (Points)	Output stage						
100	5 V, RS 422	XCC1406PR01R	XCC1406TR01R	XCC1506PS01X	XCC1510PS01X	–	XCC1912PS01RN
	Push-pull	**XCC1406PR01K**	**XCC1406TR01K**	**XCC1506PS01Y**	**XCC1510PS01Y**	–	XCC1912PS01KN
360	5 V, RS 422	XCC1406PR03R	XCC1406TR03R	XCC1506PS03X	XCC1510PS03X	–	XCC1912PS03RN
	Push-pull	**XCC1406PR03K**	**XCC1406TR03K**	**XCC1506PS03Y**	**XCC1510PS03Y**	–	XCC1912PS03KN
500	5 V, RS 422	XCC1406PR05R	XCC1406TR05R	**XCC1506PS05X**	XCC1510PS05X	–	XCC1912PS05RN
	Push-pull	**XCC1406PR05K**	XCC1406TR05K	**XCC1506PS05Y**	**XCC1510PS05Y**	–	XCC1912PS05KN
1000	5 V, RS 422	**XCC1406PR10R**	XCC1406TR10R	XCC1506PS10X	XCC1510PS10X	–	XCC1912PS10RN
	Push-pull	**XCC1406PR10K**	**XCC1406TR10K**	**XCC1506PS10Y**	**XCC1510PS10Y**	–	**XCC1912PS10KN**
1024	5 V, RS 422	**XCC1406PR11R**	XCC1406TR11R	XCC1506PS11X	XCC1510PS11X	–	XCC1912PS11RN
	Push-pull	**XCC1406PR11K**	XCC1406TR11K	XCC1506PS11Y	XCC1510PS11Y	–	XCC1912PS11KN
2500	5 V, RS 422	–	–	XCC1506PS25X	XCC1510PS25X	–	XCC1912PS25RN
	Push-pull	–	–	XCC1506PS25Y	XCC1510PS25Y	–	**XCC1912PS25KN**
3600	5 V, RS 422	–	–	–	–	–	XCC1912PS36RN
	Push-pull	–	–	–	–	–	XCC1912PS36KN
256…4096	5 V, RS 422	–	–	–	–	XCC1514TSM02X	–
	Push-pull	–	–	–	–	XCC1514TSM02Y	–
5000	5 V, RS 422	–	–	XCC1506PS50X	XCC1510PS50X	–	XCC1912PS50RN
	Push-pull	–	–	XCC1506PS50Y	XCC1510PS50Y	–	XCC1912PS50KN
360…5760	5 V, RS 422	–	–	–	–	XCC1514TSM03X	–
	Push-pull	–	–	–	–	**XCC1514TSM03Y**	–
500…8000	5 V, RS 422	–	–	–	–	XCC1514TSM05X	–
	Push-pull	–	–	–	–	**XCC1514TSM05Y**	–
10 000	5 V, RS 422	–	–	–	–	–	XCC1912PS00RN
	Push-pull	–	–	–	–	–	XCC1912PS00KN
1024…16 384	5 V, RS 422	–	–	–	–	**XCC1514TSM11X**	–
	Push-pull	–	–	–	–	XCC1514TSM11Y	–
5000…80 000	5 V, RS 422	–	–	–	–	XCC1514TSM50X	–
	Push-pull	–	–	–	–	XCC1514TSM50Y	–

Accessories

Shaft couplings

		Bore diameter (encoder side)	Bore diameter (machine side)	Reference
with spring		6 mm	6 mm	**XCCRAR0606**
		6 mm	8 mm	XCCRAR0608
		6 mm	10 mm	**XCCRAR0610**
		10 mm	10 mm	**XCCRAR1010**
		10 mm	12 mm	XCCRAR1012
elastic		6 mm	6 mm	**XCCRAE0606**

Fixing brackets

Plain bracket		for Ø 58 mm	**XCCRE5SN**
		for Ø 90 mm	XCCRE9SN
Bracket with play compensator		for Ø 58 mm	XCCRE5RN
		for Ø 90 mm	XCCRE9RN

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Absolute - single turn

Absolute - multiturn

Communicating multiturn absolute



Diameter of housing (mm)			**Ø 58**	**Ø 90**	**Ø 58**	**Ø 90**	**Ø 58 CANopen**	**Ø 58 PROFIBUS-DP**
Shaft Ø (mm)			**Ø 6**	**Ø 12**	**Ø 10**	**Ø 12**	**Ø 10**	**Ø 10**
Type of shaft (2)			**solid shaft**	**solid shaft**	**solid shaft**	**solid shaft**	**solid shaft** (4)	**solid shaft** (4)
Maximum rotational speed (rpm)			9000	6000	6000	6000	6000	6000
Maximum frequency (kHz)			100	100 (1000 SSI)	100 (500 SSI)	100 (500 SSI)	800	800
Maximum load (daN)			10	20	10	20	11	11
Torque (N.cm)			0.4	1	0.4	1	0.3	0.3
Product certification			CE	CE	CE	CE	CE	CE
Temperature range (°C)			- 20…+ 90	- 20…+ 85	- 20…+ 85	- 20…+ 85	- 40…+ 85	- 40…+ 85
Degree of protection (conforming to IEC 60529)			IP 65	IP 66	IP 65 / IP 67 (3)	IP 66	IP 64	IP 64
Supply voltage			11…30 V					
Connection			**M23 male connector**, radial				**2** x **M12** + **1** x **Pg 9**	**3** x **Pg 9**
Resolution	Output stage	Code						
… 8192 points	Push-pull	Binary	XCC2506PS81KB	XCC2912PS81KBN	–	–	–	–
		Gray	**XCC2506PS81KGN**	XCC2912PS81KGN	–	–	–	–
	SSI, 13-bit	Binary	XCC2506PS81SBN	XCC2912PS81SBN	–	–	–	–
		Gray	XCC2506PS81SGN	XCC2912PS81SGN	–	–	–	–
4096 points / 8192 turns	SSI, 25-bit (5)	Gray	–	–	**XCC3510PS48SGN**	–	–	–
8192 points / 4096 turns	SSI, 25-bit (5)	Binary			XCC3510PS84SBN	XCC3912PS84SBN		
		Gray	–	–	**XCC3510PS84SGN**	**XCC3912PS84SGN**		
8192 points / 4096 turns	CANopen, 25-bit	Binary			–	–	**XCC3510PS84CB**	–
	PROFIBUS-DP, 25-bit	Binary	–	–	–	–	–	**XCC3510PV84FB**

(1) Anti-rotation device included with through shaft version encoders. To achieve Ø 6, 8, 10 or 12 mm through shafts, use the reduction collars.

(2) All versions are also available with through shaft and anti-rotation device.

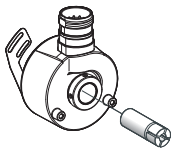
(3) IP 67 with sealed collar XCCRB3.

(4) Versions available with hollow shaft and anti-rotation device.

(5) “Parallel” outputs possible for multiturn absolute encoders using derserialisation jumper cables XCCRM23SUB37●●.

Reduction collars

For Ø 58 mm incremental encoders with through shaft



Ø 14 to Ø 6 mm	XCCR158RDA06
Ø 14 to Ø 8 mm	XCCR158RDA08
Ø 14 to Ø 10 mm	XCCR158RDA10
Ø 14 to Ø 12 mm	XCCR158RDA12

IP 67 sealed collar

For encoders XCC1510, 2510, 3510

Ø 58 mm	**XCCRB3**

Pre-wired connectors and jumper cables

Pre-wired M23 female connectors (cable length 5 m)



8-wire for SSI encoders	XCCPM23122L5
10-wire for incremental encoders	XCCPM23121L5
16-wire for parallel single turn absolute encoders	XCCPM23161L5

Deserialisation jumper cables (M23 F - SUB-D37 M) (L = 0.5 m)



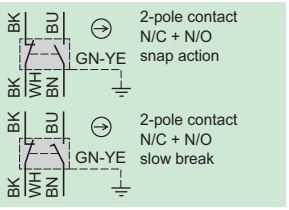
SSI Gray - // Gray PNP	XCCRM23SUB37PG
SSI binary - // binary NPN	XCCRM23SUB37PB

Limit switches

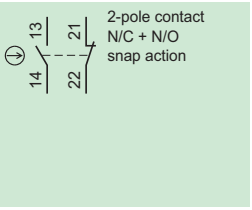
Universal, complete switches

(variable composition, see pages 34-35)

XCMD



XCKT





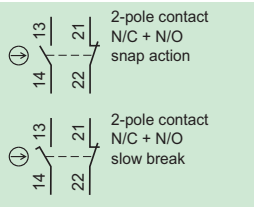
Miniature XCMD metal, pre-cabled; fixing by the body or by the head

Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Variable length thermoplastic roller lever	M12 head metal end plunger
Mechanical durability (millions of operating cycles)	10	10	10	10	10
Actuation speed (in m/s)	0.5	0.5	1.5	1.5	0.5
Switches conforming to standard IEC 947-5-1 section 3 ⊖	⊖	⊖	⊖	⊖	⊖
Product certification	CE - UL - CSA - CCC				
Degree of protection conforming to IEC 60529	IP 66 and IP 67				
Rated operational characteristics	AC-15; B300 (Ue = 240 V, Ie = 1.5 A) / DC-13; R300 (Ue = 250 V, Ie = 0.1 A)				
Cable entry	Pre-cabled, adjustable direction, length = 1 m (other lengths available on request)				
Fixing centres (mm)	20				M12 x 1
Body dimensions (mm) W x D x H	30 x 16 x 50				
Complete switch (2-pole N/C + N/O snap action)	**XCMD2110L1**	**XCMD2102L1**	**XCMD2115L1**	XCMD2145L1	**XCMD21F0L1**
(2-pole N/C + N/O break before make, slow break)	XCMD2510L1	XCMD2502L1	XCMD2515L1	XCMD2545L1	XCMD25F0L1

⊖ Positive opening operation.

ISO entry (to EN 50262)

XCKP/XCKD





Compact XCKD metal and XCKP plastic conforming to standard EN 50047

Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	M18 head metal end plunger	M18 head steel roller plunger
Mechanical durability (millions of operating cycles)	15	10	15	10	10
Actuation speed (in m/s)	0.5	0.5	1	0.5	0.5
Switches conforming to standard IEC 947-5-1 section 3 ⊖	⊖	⊖	⊖	⊖	⊖
Product certification	CE - CSA - CCC - GOST				
Degree of protection conforming to IEC 60529	IP 66 and IP 67				
Rated operational characteristics	AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
Cable entry	1 tapped entry for ISO M16 x 1.5 cable gland (2)				
Fixing centres (mm)	20	20	20	M18 x 1	M18 x 1
Body dimensions (mm) W x D x H	31 x 30 x 65				
Metal switches					
Complete switch (2-pole N/C + N/O snap action)	**XCKD2110P16**	**XCKD2102P16**	**XCKD2121P16**	**XCKD21H0P16**	**XCKD21H2P16**
(2-pole N/C + N/O break before make, slow break)	XCKD2510P16	XCKD2502P16	XCKD2521P16	XCKD25H0P16	XCKD25H2P16
Plastic, double insulated switches					
Complete switch (2-pole N/C + N/O snap action)	**XCKP2110P16**	**XCKP2102P16**	**XCKP2121P16**	**XCKP21H0P16**	**XCKP21H2P16**
(2-pole N/C + N/O break before make, slow break)	XCKP2510P16	XCKP2502P16	XCKP2521P16	XCKP25H0P16	XCKP25H2P16

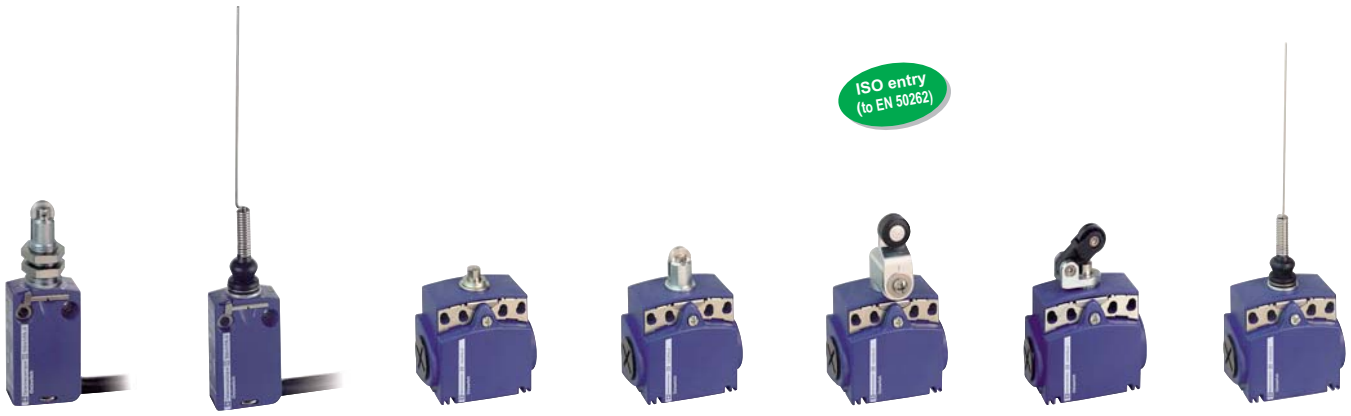
(2) For Pg 11 cable entries, replace P16 by G11. Example: XCKD2110**P16** becomes XCKD2110**G11**.

For other cable entries, see customised assembly on page 1/34.

⊖ Positive opening operation.

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**



		Compact XCKT plastic, 2 cable entries				
M12 head steel roller plunger	"Cat's whisker"	Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Thermoplastic roller lever plunger, horizontal actuation	"Cat's whisker"
10	5	15	10	10	15	5
0.1	1	0.5	0.5	1.5	1	1
⊖	–	⊖	⊖	⊖	⊖	–
		CE - CSA - CCC - GOST				
		IP 66 and IP 67				
		AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
		2 tapped entries for ISO M16 x 1.5 cable gland (1)				
	20	20 or 40				
		58 x 30 x 51				
XCMD21F2L1	XCMD2106L1	**XCKT2110P16**	**XCKT2102P16**	**XCKT2118P16**	**XCKT2121P16**	XCKT2106P16
XCMD25F2L1	XCMD2506L1	–	–	–	–	–

(1) For Pg 11 cable entries, replace P16 by G11. Example: XCKT2110**P16** becomes XCKT2110**G11**.



				Application - XCPR and XCDR with manual reset				
Thermoplastic roller lever	Variable length Thermoplastic roller lever	Thermoplastic roller lever Ø 50 mm	"Cat's whisker"	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever plunger, vertical actuation in 1 direction	Thermoplastic roller lever
10	10	10	5	1	1	1	1	1
1.5	1.5	1.5	1	0.5	0.5	1	1	1.5
⊖	⊖	⊖	–	⊖	⊖	⊖	⊖	⊖
				CE - CSA - CCC - GOST				
				IP 66 and IP 67				
				AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
				1 tapped entry for ISO M20 x 1.5 cable gland (3)				
20	20	20	20	20	20	20	20	20
				31 x 30 x 95				
XCKD2118P16	XCKD2145P16	XCKD2139P16	XCKD2106P16	XCDR2110P20	XCDR2102P20	XCDR2121P20	XCDR2127P20	XCDR2118P20
XCKD2518P16	XCKD2545P16	XCKD2539P16	XCKD2506P16	XCDR2510P20	XCDR2502P20	XCDR2521P20	XCDR2527P20	XCDR2518P20
XCKP2118P16	XCKP2145P16	XCKP2139P16	XCKP2106P16	XCPR2110P20	XCPR2102P20	XCPR2121P20	XCPR2127P20	XCPR2118P20
XCKP2518P16	XCKP2545P16	XCKP2539P16	XCKP2506P16	XCPR2510P20	XCPR2502P20	XCPR2521P20	XCPR2527P20	XCPR2518P20

(3) For Pg 13.5 cable entries, replace P20 by G13. Example: XCDR2110**P20** becomes XCDR2110**G13**.

For other cable entries, see customised assembly on page 1/34.

Limit switches
Universal
Customised assembly of miniature and compact

Heads - common to miniature and compact bodies

Metal plunger and multi-directional heads

Description	Metal end plunger	Metal end plunger with protective elastomer boot	Steel roller plunger	Retractable steel roller lever plunger	Thermoplastic roller lever plunger, horizontal actuation
					
Reference	⊖ **ZCE10**	⊖ ZCE11	⊖ **ZCE02**	⊖ ZCE24 (2)	⊖ **ZCE21**

Metal rotary heads and levers

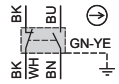
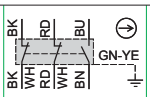
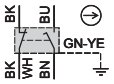
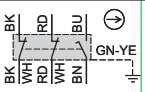
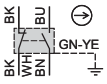
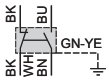
Description	Rotary head without lever, spring return, for actuation from LH or RH side	Thermoplastic roller lever, track: 24/31 mm (ZCMD) 29/36 mm (ZCD/P/T)	Steel roller lever, track: 24/31 mm (ZCMD) 29/36 mm (ZCD/P/T)	Thermoplastic roller lever, track: 16/39 mm (ZCMD) 21/44 mm (ZCD/P/T)	Steel roller lever, track: 16/39 mm (ZCMD) 21/44 mm (ZCD/P/T)
					
Reference	⊖ **ZCE01**	⊖ **ZCY15** (2)	⊖ ZCY16 (2)	⊖ ZCY25 (2)	⊖ ZCY26 (2)

(1) Recommended for use with bodies: **ZCD... / ZCP... / ZCT...** (2) Recommended for use with bodies: **ZCMD...**

Bodies

Miniature




Type of contact	 2-pole N/C + N/O Snap action	 3-pole N/C+N/C+N/O Snap action	 2-pole N/C + N/O Slow break	 3-pole N/C+N/C+N/O Slow break	 2-pole N/C + N/O Snap action M12 5-pin connector	 1 C/O single-pole Snap action M12 4-pin connector
Reference of metal body	**ZCMD21**	**ZCMD39**	**ZCMD25**	**ZCMD37**	**ZCMD21C12**	**ZCMD21M12**
Reference of plastic body	–	–	–	–	–	–

Connection of miniature bodies

Specific pre-cabled connection components	 for ZCMD21	 for ZCMD39	 for ZCMD25	 for ZCMD37	Option: pre-wired M12 connector, L = 2 m 5-pin  XZCP1164L2	4-pin  XZCP1169L2
L = 1 m	**ZCMC21L1**	**ZCMC39L1**	**ZCMC25L1**	**ZCMC37L1**		
L = 2 m	**ZCMC21L2**	**ZCMC39L2**	**ZCMC25L2**	**ZCMC37L2**		
L = 5 m	**ZCMC21L5**	**ZCMC39L5**	**ZCMC25L5**	**ZCMC37L5**		

⊖ Positive opening operation.

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Thermoplastic roller lever plunger, vertical actuation	M12 head metal end plunger	M18 head metal end plunger	M12 head steel roller plunger	M18 head steel roller plunger	Spring rod	Spring rod with plastic end	"Cat's whisker"
							
ZCE27	ZCEF0 (2)	ZCEH0 (1)	ZCEF2 (2)	ZCEH2 (1)	ZCE08	ZCE07	ZCE06

Thermoplastic roller lever, track: 20/36 mm (ZCMD) 24/40 mm (ZCD/P/T)	Steel roller lever, track: 20/36 mm (ZCMD) 24/40 mm (ZCD/P/T)	Ceramic roller lever	Variable length thermoplastic roller lever	Round, glass fibre rod lever Ø 3 mm L = 125 mm	Metal spring-rod lever	Thermoplastic roller lever Ø 50 mm	Adjustable thermo-plastic roller lever Ø 50 mm
							
ZCY18 (1)	ZCY19 (1)	ZCY22	ZCY45	ZCY55	ZCY91	ZCY39	ZCY49

Compact






Type of contact	2-pole N/C + N/O Snap action	3-pole N/C + N/C + N/O Snap action	2-pole N/C + N/O Slow break	3-pole N/C + N/C + N/O Slow break	2-pole N/C + N/O - Snap action 5-pin connector	2-pole N/C + N/O - Snap action 4-pin connector	2-pole N/C + N/O Snap action	2-pole N/C+N/O Slow break
Ref. metal body	**ZCD21**	**ZCD39**	**ZCD25**	**ZCD37**	**ZCD21M12**	–	–	–
Ref. plastic body	**ZCP21**	**ZCP39**	**ZCP25**	**ZCP37**	–	**ZCP21M12**	**ZCT21P16**	**ZCT25P16**

Connection of compact bodies

Interchangeable outlet for cable gland						
Description	For ISO M16 cable gland	For ISO M20 cable gland	For Pg 11 cable gland	For Pg 13.5 cable gland	For 1/2" NPT cable gland	For PF 1/2 (G12) cable gland
Metal	**ZCDEP16**	**ZCDEP20**	**ZCDEG11**	ZCDEG13	ZCDEN12	ZCDEF12
Plastic	**ZCPEP16**	**ZCPEP20**	**ZCPEG11**	ZCPEG13	ZCPEN12	ZCPEF12

Option: pre-wired M12 connector, L = 2 m

5-pin  XZCP1164L2

4-pin  XZCP1141L2

ZCT Pg 11 cable gland versions: replace the suffix P16 by G11. Example: ZCT21**P16** becomes ZCT21**G11**

ZCT 1/2" NPT versions: replace the suffix P16 by N12 (adaptor). Example: ZCT21**P16** becomes ZCT21**N12**

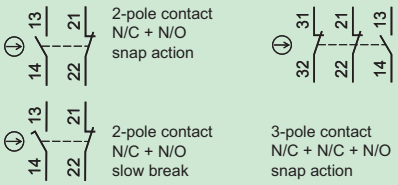
Limit switches

Classic - XCKM, complete switches

ISO entry (to EN 50262)



XCKM



Type XCKM metal, 3 cable entries

Type of operator	Metal end plunger	Steel roller plunger	Roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever	"Cat's whisker"
Mechanical durability (millions of operating cycles)	20	20	20	15	10
Actuation speed (in m/s)	0.5	0.5	1.5	1.5	0.5
Product certification	CE - UL - CSA - CCC - GOST - C-TICK - BV				
Degree of protection conforming to IEC 60529	IP 665				
Rated operational characteristics	AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
Cable entry (1)	3 tapped entries for ISO M20 x 1.5 cable gland (2 entries fitted with blanking plugs)				
Fixing centres (mm)	41				
Body dimensions (mm) W x D x H	63 x 30 x 64				

Complete switch						
	(2-pole N/C + N/O snap action)	⊖ **XCKM110H29**	⊖ **XCKM102H29**	⊖ **XCKM121H29**	⊖ **XCKM115H29**	**XCKM106H29**
	(2-pole N/C + N/O, break before make, slow break)	⊖ **XCKM510H29**	⊖ **XCKM502H29**	⊖ **XCKM521H29**	⊖ **XCKM515H29**	–

(1) For Pg 13.5 cable entry delete the reference suffix H29. Example: XCKM110**H29** becomes XCKM110.

⊖ Positive opening operation.

Customised assembly of Classic XCKM switches
Body/contact sub-assemblies



Type XCKM metal, 3 cable entries

Type of contact



	2-pole N/C + N/O snap action	2-pole N/C + N/O slow break	3-pole N/C + N/C + N/O snap action	3-pole N/C + N/C + N/O slow break
Reference of body with contact block	⊖ **ZCKM1H29**	⊖ **ZCKM5H29**	⊖ ZCKMD39H29	⊖ ZCKMD37H29
Reference of contact block only	⊖ XE2SP2151	⊖ XE2NP2151	⊖ XE3SP2141	⊖ XE3NP2141

Other versions: **please consult your Schneider Electric agency.**

Customised assembly of Classic XCKM switches

Operating heads, complete or for customer assembly



Complete switch

=



Body/contact assembly

+



Head

+



Lever

Rotary or multi-directional heads

	with thermoplastic roller lever (2)	with steel roller lever (2)	with variable length thermoplastic roller lever (2)	with Ø 6 mm thermoplastic rod L = 200 mm (3)	with thermoplastic roller lever (3) for actuation from left **AND** right or left **OR** right	with "Cat's whisker"	with spring rod
							
Reference	**ZCKD15**	ZCKD16	ZCKD41	ZCKD59	ZCKD31	**ZCKD06**	ZCKD08

Plunger heads

	with metal end plunger	with metal end plunger and protective boot	with steel roller plunger	with thermoplastic roller lever plunger, horizontal actuation in 1 direction	with steel roller lever plunger, horizontal actuation in 1 direction
					
Reference	**ZCKD10**	ZCKD109	**ZCKD02**	**ZCKD21**	ZCKD23

Rotary heads and separate levers

	spring return, for actuation from left **AND** right or left **OR** right	lever with thermoplastic roller (2)	lever with steel roller (2)	variable length lever with thermoplastic roller (2)	variable length lever with steel roller (2)	rod, Ø 6 mm thermoplastic L = 200 mm (3)
						
Reference	ZCKD05	ZCKY31	ZCKY33	ZCKY41	ZCKY43	ZCKY59

(2) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.

(3) Adjustable throughout 360° in 5° steps, or in 45° steps by reversing the lever mounting.

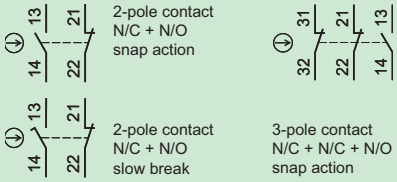
Limit switches

Classic - XCKJ, complete switches

ISO entry (to EN 50262)



XCKJ



Type XCKJ metal, fixed body, conforming to standard EN 50041

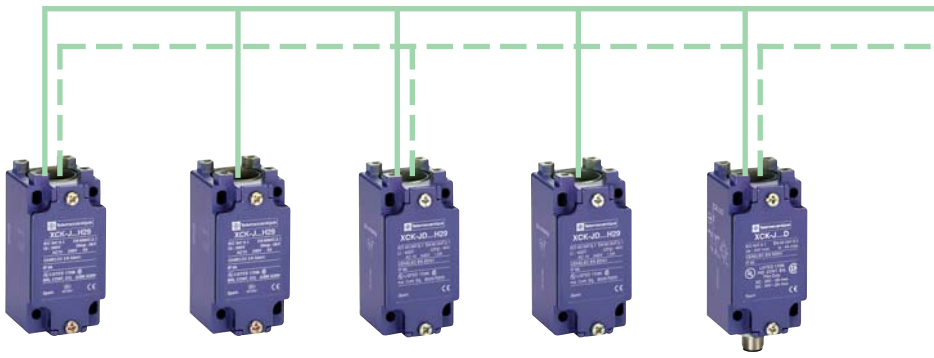
Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Variable length thermoplastic roller lever	Polyamide Ø 6 mm rod lever L = 200 mm
Mechanical durability (millions of operating cycles)	30	25	30	30	30
Actuation speed (in m/s)	0.5	1	1.5	1.5	1.5
Product certification	CE - UL - CSA - CCC - GOST - C-TICK - BV				
Degree of protection conforming to IEC 60529	IP 667				
Rated operational characteristics	AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
Cable entry (1)	1 tapped entry for ISO M20 x 1.5 cable gland				
Fixing centres (mm)	30 x 60				
Body dimensions (mm) W x D x H	40 x 44 x 77				

Complete switch	(2-pole N/C + N/O snap action)	⊖ **XCKJ161H29**	⊖ **XCKJ167H29**	⊖ **XCKJ10511H29**	⊖ **XCKJ10541H29**	⊖ **XCKJ10559H29**
	(2-pole N/C + N/O break before make, slow break)	⊖ XCKJ561H29	⊖ **XCKJ567H29**	⊖ **XCKJ50511H29**	⊖ **XCKJ50541H29**	⊖ **XCKJ50559H29**

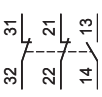
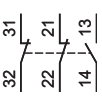
(1) For Pg 13.5 cable entry delete the reference suffix H29. Example: XCKJ161**H29** becomes XCKJ161.

⊖ Positive opening operation.

Customised assembly of Classic XCKJ switches
Body/contact sub-assemblies



Type XCKJ metal, 1 cable entry

Type of contact	 2-pole N/C + N/O snap action	 2-pole N/C + N/O slow break	 3-pole N/C + N/C + N/O snap action	 3-pole N/C + N/C + N/O slow break	 2-pole N/C + N/O snap action
Cable entry (1)	1 tapped entry for ISO M20 x 1.5 cable gland				M12 connector
Reference of body with contact block	⊖ **ZCKJ1H29**	⊖ **ZCKJ5H29**	⊖ ZCKJD39H29	⊖ ZCKJD37H29	⊖ ZCKJ1D
Reference of contact block only	⊖ XE2SP2151	⊖ XE2NP2151	⊖ XE3SP2141	⊖ XE3NP2141	⊖ XE2SP2151

Customised assembly of Classic XCKJ switches

Operating heads, complete or for customer assembly



Complete switch

=



Body/contact assembly

+



Head

+



Lever

Plunger or multi-directional heads

	with reinforced steel roller end plunger	with metal end plunger	with thermoplastic roller lever plunger, 1 direct. of actuation	with steel roller lever plunger, 1 direct. of actuation	with steel roller end plunger	with steel ball bearing end plunger
						
Reference	⊖ **ZCKE67**	⊖ **ZCKE61**	⊖ ZCKE21	⊖ ZCKE23	⊖ ZCKE62	⊖ ZCKE66

	with metal side plunger	with steel roller side plunger	with spring rod	with “Cat’s whisker”
				
Reference	⊖ ZCKE63	⊖ ZCKE64	ZCKE08	ZCKE06

Separate rotary heads and levers

	spring return for actuation from left **AND** right or left **OR** right	lever with thermoplastic roller (2)	lever with steel roller (2)	variable length lever with thermoplastic roller (2)	variable length lever with steel roller (2)	rod, Ø 6 mm thermoplastic L = 200 mm (2)	spring-metal rod lever (3)
							
Reference	⊖ **ZCKE05**	⊖ **ZCKY11**	⊖ ZCKY13	**ZCKY41**	ZCKY43	**ZCKY59**	ZCKY91

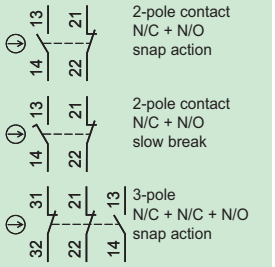
	stay put for actuation from left **AND** right	forked arm lever with thermoplastic rollers, 1 track (2)	forked arm lever with thermoplastic rollers, 2 track (2)
			
Reference	ZCKE09	ZCKY71	ZCKY61

(2) Adjustable throughout 360° in 5° steps, or in 45° steps by reversing the lever mounting.

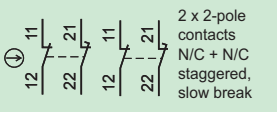
(3) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.

Limit switches
Classic - XCKS, complete switches

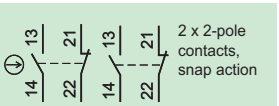
XCKS



XCKMR



XCR





Type XCKS plastic, double insulated, conforming to standard EN 50041

Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Variable length thermoplastic roller lever	Rubber roller lever Ø 50 mm	Polyamide Ø 6 mm rod lever L = 200 mm
Mechanical durability (millions of operating cycles)	25	15	20	20	20	20
Actuation speed (in m/s)	0.5	0.5	1.5	1.5	1	1
Product certification	CE - UL - CSA - CCC - GOST - C-TICK					
Degree of protection conforming to IEC 60529	IP 653					
Rated operational characteristics	AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)					
Cable entry (1)	1 tapped entry for ISO M20 x 1.5 cable gland					
Fixing centres (mm)	30 x 60					
Body dimensions (mm) W x D x H	40 x 36 x 72.5					

Complete switch	(2-pole N/C + N/O snap action)	⊖ **XCKS101H29**	⊖ **XCKS102H29**	⊖ **XCKS131H29**	**XCKS141H29**	**XCKS139H29**	**XCKS159H29**
	(2-pole N/C + N/O break before make, slow break)	⊖ **XCKS501H29**	⊖ **XCKS502H29**	⊖ **XCKS531H29**	XCKS541H29	**XCKS539H29**	XCKS559H29
Body	(2-pole N/C + N/O snap action)	⊖ **ZCKS1H29**	⊖ **ZCKS1H29**	⊖ **ZCKS1H29**	⊖ **ZCKS1H29**	⊖ **ZCKS1H29**	⊖ **ZCKS1H29**
	(2-pole N/C + N/O break before make, slow break)	⊖ **ZCKS5H29**	⊖ **ZCKS5H29**	⊖ **ZCKS5H29**	⊖ **ZCKS5H29**	⊖ **ZCKS5H29**	⊖ **ZCKS5H29**
	(3-pole N/C + N/C + N/O snap action)	⊖ ZCKSD39H29	⊖ ZCKSD39H29	⊖ ZCKSD39H29	⊖ ZCKSD39H29	⊖ ZCKSD39H29	⊖ ZCKSD39H29
Associated head (including operator)		⊖ **ZCKD01**	⊖ **ZCKD02**	⊖ **ZCKD31**	**ZCKD41**	**ZCKD39**	**ZCKD59**
Operating lever for rotary head		–	–	⊖ **ZCKY31**	**ZCKY41**	**ZCKY39**	**ZCKY59**
Complete switch	with 2-pole snap action contacts						
	(2 x N/C + N/O contacts actuated in each direction)	–	–	–	–	–	–
	(1 x N/C + N/O contact actuated in each direction)	–	–	–	–	–	–
Complete switch	(2 x single-pole C/O snap action contacts)	–	–	–	–	–	–
	(2 x 2-pole N/C + N/C staggered, slow break contacts)	–	–	–	–	–	–

⊖ Positive opening operation.

(1) For Pg 13.5 cable entry delete the reference suffix H29. Example: XCKJ161**H29** becomes XCKJ161.

XC2J switches, customised assembly
Body/contact sub-assemblies

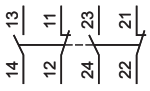


Type XC2J metal, fixed body, 1 cable entry incorporating cable gland

Type of contact



Single-pole
1 C/O contact
snap action



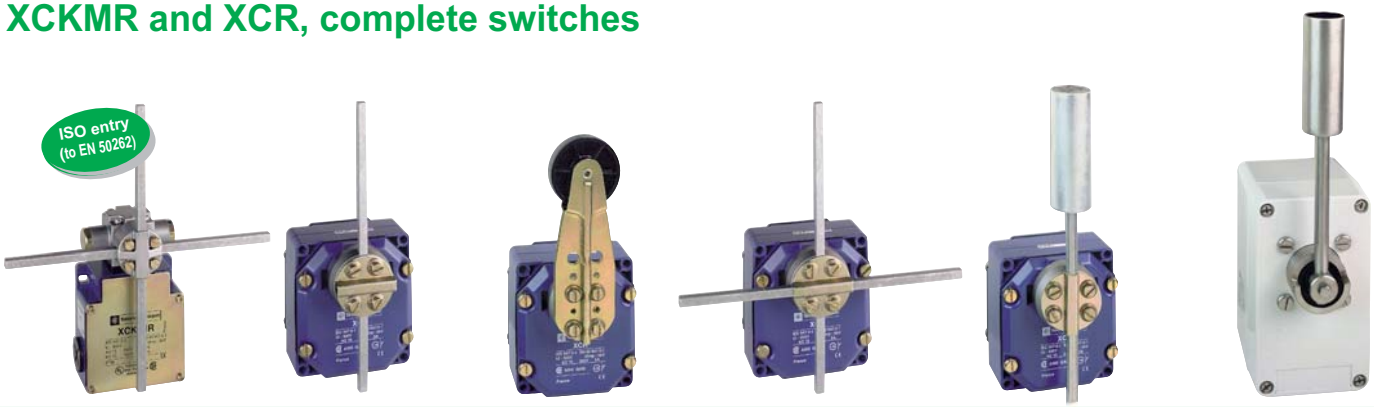
Double-pole
2 C/O simultaneous contacts
snap action

Reference of body with contact block	ZC2JC1	ZC2JC2
Reference of contact block only	XCKZ01	XESP1021

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

XCKMR and XCR, complete switches



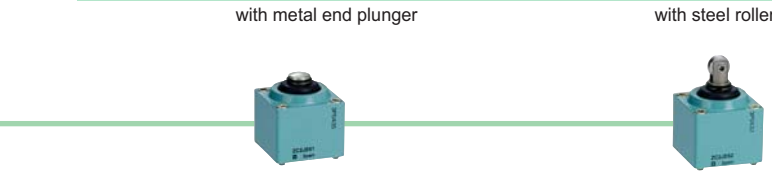
Types XCKMR and XCR “Application - hoisting, materials handling, conveying”

Square rod levers ☐ 6 mm, “crossed”	Square rod lever ☐ 6 mm	Large roller rod lever Ø 50 mm	Square rod levers ☐ 6 mm, “crossed” or “T”	Conveyor belt shift monitoring switches	
				Galvanised steel operating lever	Stainless steel operating lever
2	10	10	10	0.3	0.3
1.5	1.5	1.5	1.5	1.5	1.5
CE - UL - CSA - GOST	CE - CSA - CCC - GOST				
IP 545				IP 665	
AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)					
3 x ISO M20 x 1.5 entries	1 tapped entry for n° 13 cable gland (for ISO M20 x 1.5, adaptor DE9RA1620 must be ordered separately)				
61.5	85 x 75				105 x 70
118 x 59 x 77	85 x 75 x 95				85 x 87 x 146
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	→ XCRA11 (2)	→ XCRA15	→ XCRE18 (2)	–	–
–	→ XCRB11 (2)	–	→ XCRF17 (3)	–	–
–				XCRT115	XCRT315 (4)
XCKMR54D1H29 (2)	–	–	–	–	–

(2) Steel rods, L = 200 mm (3) Steel “T” rods, L = 200 mm, W = 300 mm. (4) Polyester enclosure

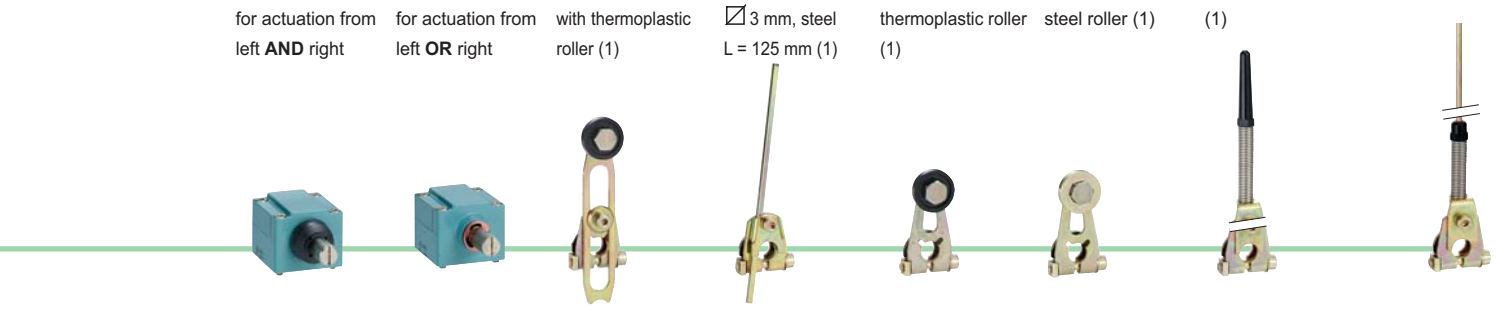
Operating heads, complete or for customer assembly

Plunger heads



	with metal end plunger	with steel roller end plunger
Reference	ZC2JE61	ZC2JE62

Rotary heads and separate levers



	spring return for actuation from left **AND** right	spring return for actuation from left **OR** right	variable length lever with thermoplastic roller (1)	rigid rod ☐ 3 mm, steel L = 125 mm (1)	lever with thermoplastic roller (1)	lever with steel roller (1)	spring lever (1)	spring-rod lever
Reference	ZC2JE01	ZC2JE05	ZC2JY31	ZC2JY51	ZC2JY11	ZC2JY13	ZC2JY81	ZC2JY91

(1) Adjustable throughout 360°.

Sensors for pressure control

Electronic sensors XMLG

Electrical connection by M12 connector



Pressure range (bar) (1)	-1…0	0…1	0…6	0…10	0…16	0…25	0…100	0…250	0…400
Fluids controlled	**Hydraulic oils, air, fresh water, sea water, corrosive fluids from -15…+125°C**								
Ambient air temperature	- 15…+ 85°C								
Degree of protection (conforming to IEC 60529)	IP 66 and IP 67								
Product certification	CE - UL - CSA - GOST								
Voltage limits	12…24 V DC, 8…33 V DC								
Dimensions (mm) Ø x L	Ø 22.8 x 70 (not including connector)								
Fluid connection (2)	1/4" BSP male								
Electrical connection (3)	M12 connector								
Type of output (4)	4…20 mA, 2-wire technique								
Analogue output 4…20 mA	**XMLGM01D21**	**XMLG001D21**	**XMLG006D21**	**XMLG010D21**	**XMLG016D21**	**XMLG025D21**	**XMLG100D21**	**XMLG250D21**	**XMLG400D21**

Available in bulk packs for selling in lots, please consult us.

The XMLG range also includes pressure switches, please consult us.

Electronic sensors XMLE

Electrical connection by DIN 43650 connector



Setting range (bar) (1)		-1…0	0…1	0…10	0…25	0…100	0…250	0…600
Fluids controlled		**Hydraulic oils, air, fresh water, sea water, corrosive fluids from -15…+80°C**						
Ambient air temperature		- 15…+ 80°C						
Degree of protection (conforming to IEC 60529)		IP 65						
Product certification		CE - UL - CSA - GOST						
Voltage limits		24 V DC, 11…33 V DC						
Dimensions (mm) Ø x L		Ø 40 x 90 (not including connector)						
Fluid connection (2)		1/4" BSP male						
Electrical connection (3)		DIN 43650 connector						
Type of output (4)	Transmitter	4…20 mA, 2-wire technique						
	Pressure switch	PNP or NPN, normally closed (NC)						
Analogue output 4…20 mA		**XMLEM01U1C21**	**XMLE001U1C21**	**XMLE010U1C21**	**XMLE025U1C21**	XMLE100U1C21	**XMLE250U1C21**	**XMLE600U1C21**
NPN output		XMLEM01U1C31	XMLE001U1C31	XMLE010U1C31	XMLE025U1C31	XMLE100U1C31	XMLE250U1C31	XMLE600U1C31
PNP output		XMLEM01U1C41	XMLE001U1C41	**XMLE010U1C14**	XMLE025U1C41	XMLE100U1C41	**XMLE250U1C41**	XMLE600U1C41

(1) Other sizes, please consult us.

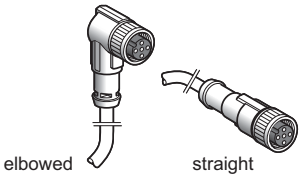
(2) Other fluid connections, please consult us.

(3) Other types of connection, please consult us.

(4) Other types of output; 0…5 V, 0…10 V, etc., please consult us.

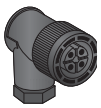
Suitable female plug-in connectors

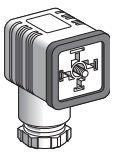
Pre-wired connectors, L = 5 m (without LED)



	elbowed	straight
M12	XZCP1241L5	XZCP1141L5

Other connectors





Screw terminal	DIN 43650A
XZCC12FCM40B	XZCC43FCP40B

Other versions: **please consult your Schneider Electric agency.**

Electronic sensors XMLF





Setting range (bar)	of lower limit (PB): vacuum switches of upper limit (PH): pressure switches	-0.08…-1	0.08...1	0.2…2.5	0.8…10	3.2...40
Fluids controlled		**Hydraulic oils, air, fresh water, sea water, corrosive fluids from -15…+80°C**				
Ambient air temperature		- 25…+ 80°C				
Degree of protection (conforming to IEC 60529)		IP 67				
Product certification		CE - UL - CSA - VIT-SEPRO - GOST				
Voltage limits (V)		24 V DC (17…33 V DC)				
Dimensions (mm) H x W x D		113 x 46 x 58				
Fluid connection		1/4" BSP female (1)				
Electrical connection		M12 connector (2)				
Configurable with digital display, connection by M12 connector (3)						
Universal sensors,	4...20 mA	**XMLFM01D2025**	**XMLF001D2025**	XMLF002D2025	**XMLF010D2025**	XMLF040D2025
solid-state output, 200 mA	0...10 V	XMLFM01D2125	XMLF001D2125	XMLF002D2125	XMLF010D2125	XMLF040D2125
Dual stage pressure switches, solid-state output, 200 mA		**XMLFM01D2035**	**XMLF001D2035**	XMLF002D2035	**XMLF010D2035**	XMLF040D2035
Analogue sensors	4...20 mA	**XMLFM01D2015**	**XMLF001D2015**	XMLF002D2015	**XMLF010D2015**	XMLF040D2015
	0...10 V	XMLFM01D2115	XMLF001D2115	XMLF002D2115	XMLF010D2115	XMLF040D2115
Possible differential (bar)	Min. at low setting	0.03	0.03	0.08	0.3	1.2
(pressure switches)	Min. at high setting	0.03	0.03	0.08	0.3	1.2
	Max. at high setting	0.95	0.95	2.38	9.5	38





Setting range (bar)	of upper limit (PH): pressure switches	8…100	12.8...160	20...250	32...400	48...600
Fluids controlled		**Hydraulic oils, air, fresh water, sea water, corrosive fluids from -15…+80°C**				
Ambient air temperature		- 25…+ 80°C				
Degree of protection (conforming to IEC 60529)		IP 67				
Product certification		CE - UL - CSA - VIT-SEPRO - GOST				
Voltage limits (V)		24 V DC (17…33 V DC)				
Dimensions (mm) H x W x D		113 x 46 x 58				
Fluid connection		1/4" BSP female (1)				
Electrical connection		M12 connector (2)				
Configurable with digital display, connection by M12 connector (3)						
Universal sensors,	4...20 mA	**XMLF100D2025**	XMLF160D2025	**XMLF250D2025**	**XMLF400D2025**	XMLF600D2025
solid-state output, 200 mA	0...10 V	XMLF100D2125	XMLF160D2125	XMLF250D2125	XMLF400D2125	XMLF600D2125
Dual stage pressure switches, solid-state output, 200 mA		**XMLF100D2035**	XMLF160D2035	**XMLF250D2035**	**XMLF400D2035**	XMLF600D2035
Analogue sensors	4...20 mA	**XMLF100D2015**	XMLF160D2015	**XMLF250D2015**	**XMLF400D2015**	XMLF600D2015
	0...10 V	XMLF100D2115	XMLF160D2115	XMLF250D2115	XMLF400D2115	XMLF600D2115
Possible differential (bar)	Min. at low setting	3	4.8	7.5	12	18
(pressure switches)	Min. at high setting	3	4.8	7.5	12	18
	Max. at high setting	95	152	237.5	380	570

(1) Available with other fluid connections: 1/4" NPT female and SAE 7/16-20 UNF.

(2) For M12 connection accessories, see page previous page.

(3) AC 120 V version with 2.5 A relay output and SAE 7/8-16 UN connector also available.

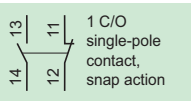
OsiSense XM

Sensors for pressure control

Electromechanical pressure and vacuum switches

XMLA and B

ISO entry (to EN 50262)



1 C/O single-pole contact, snap action

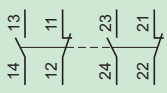


Size (bar)	-1	5	1	2.5
Environmental characteristics	Ambient air temperature (°C): - 25…+ 70 Degree of protection (conforming to IEC 60529): IP 66			
Rated operational characteristics	AC-15; B300 (Ue = 240 V, Ie = 1.5 A - Ue = 120 V, Ie = 3 A) / DC-13; R300 (Ue = 250 V, Ie = 0.1 A)			
Product certification	CE - UL - CSA - CCC - BV - LROS - RINA - GL - DNV - VIT-SEPRO - GOST			
Fluid connection	1/4" BSP female (other connections possible, please consult us)			
Electrical connection	Screw terminals (1), tapped entry for ISO M20 x 1.5 cable gland - **For n° 13 (DIN Pg 13.5) cable gland**			

Fluids controlled	Hydraulic oils, fresh water, sea water, air up to 70°C		Hydraulic oils, air up to 160°C	Hydraulic oils, fresh water, sea water, air up to 70°C
Type XMLA - fixed differential, single threshold detection				
Setting range (bar) of upper limit (PH): pressure switches	-0.28…-1 (4)	–	0.03…1	0.15…2.5
Dimensions (mm) H x W x D	113 x 35 x 75	113 x 35 x 75	162 x 110 x 110	158 x 55 x 77.5
With setting scale 1 C/O single-pole, snap action contact	XMLAM01V2S12	–	XMLA001R2S12	XMLA002A2S12
Natural differential (bar) at low setting	0.24 (2)	–	0.02	0.13
subtract from PH to give PB at high setting	0.24 (2)	–	0.04	0.13
Type XMLB - adjustable differential, regulation between 2 thresholds				
Setting range (bar) of upper limit (PH): pressure switches	-0.14...-1 (4)	-0.5...5	0.05...1	0.3...2.5
With setting scale 1 C/O single-pole, snap action contact	**XMLBM02V2S12**	**XMLBM05A2S12**	**XMLB001R2S12**	**XMLB002A2S12**
Possible differential (bar) Min. at low setting	0.13 (3)	0.5	0.04	0.16
subtract from PH to give PB Min. at high setting	0.13 (3)	0.5	0.06	0.21
Max. at high setting	0.8 (3)	6	0.75	1.75

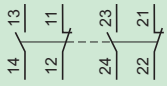
XMLC and D

XMLC



2 C/O single-pole contacts, simultaneous snap action

XMLD



2 C/O single-pole contacts, snap action (1 per stage)

ISO entry (to EN 50262)



Fluids controlled	Hydraulic oils, fresh water, sea water, air up to 70°C		Hydraulic oils, air up to 160°C	Hydraulic oils, fresh water, sea water, air up to 160°C
Type XMLC - adjustable differential, regulation between 2 thresholds				
Setting range (bar) of upper limit (PH): pressure switches	-0.14...-1 (4)	-0.55...5	0.05...1	0.3...2.5
Dimensions (mm) H x W x D	113 x 46 x 85	113 x 46 x 85	175 x 110 x 110	158 x 55 x 90
With setting scale 2 C/O single-pole, snap action contacts	XMLCM02V2S12	XMLCM05A2S12	XMLC001R2S12	XMLC002B2S12
Possible differential (bar) Min. at low setting	0.13 (4)	0.45	0.03	0.13
subtract from PH to give PB Min. at high setting	0.14 (4)	0.45	0.04	0.17
Max. at high setting	0.8 (4)	6	0.8	2
Type XMLD - fixed differential, dual stage, for detection at each threshold				
Setting range 2nd stage switching point (PB2)	-0.12...-1 (4)	–	0.12...1	0.34...2.5
(bar) 1st stage switching point (PB1)	-0.10...-0.98	–	0.04...0.92	0.2...2.36
Spread between 2 stages (PB2 – PB1)	-0.02...-0.88	–	0.08...0.73	0.14...1.5
Without setting scale 2 C/O single-pole, snap action contacts (1 per stage)	XMLDM02V1S12	–	XMLD001R1S12	XMLD002B1S12
Natural differential (bar) at low setting	0.1 (2)	–	0.03	0.14
subtract from PH 1/2 to give PB 1/2 at high setting	0.1 (2)	–	0.07	0.19





	4	10	20	35	70	160	300	500
	conforming to IEC 947-5-1 Appendix A, EN 60 947-5-1							
	tapped entry, replace the last number of the reference (2) by 1 (example: XMLA010A2S1**2** becomes XMLA010A2S1**1**)							
	Hydraulic oils, fresh water, sea water, air up to 70°C				Hydraulic oils up to 160°C			
	0.4…4	0.6…10	1…20	1.5…35	5…70	10…160	20…300	30…500
	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75	113 x 35 x 75
	XMLA004A2S12	**XMLA010A2S12**	**XMLA020A2S12**	XMLA035A2S12	**XMLA070D2S12**	XMLA160D2S12	**XMLA300D2S12**	XMLA500D2S12
	0.35	0.5	0.4	1.25	3	5.5	16.5	20
	0.35	0.5	1	1.25	7.5	18	35	45
	0.25...4	0.7...10	1.3...20	3.5...35	7...70	10...160	22...300	30...500
	XMLB004A2S12	**XMLB010A2S12**	**XMLB020A2S12**	XMLB035A2S12	**XMLB070D2S12**	XMLB160D2S12	**XMLB300D2S12**	XMLB500D2S12
	0.02	0.57	1	1.7	4.7	9.3	19.4	23
	0.25	0.85	1.6	2.55	8.8	20.8	37	52.6
	2.4	7.5	11	20	50	100	200	300

(1) For electrical connection by DIN 43650A connector (IP 65), replace the letter "**S**" in the reference by "**C**". Example: XMLB010A2**S**12 becomes XMLB010A2**C**12.
(2) For vacuum switch: natural differential to be added to PB to give PH.
(3) For vacuum switch: possible differential to be added to PB to give PH.
(4) Setting range (bar) of lower limit (PB): vacuum switch.

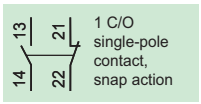




	Hydraulic oils, fresh water, sea water, air up to 160°C				Hydraulic oils up to 160°C			
	0.3...4	0.7...10	1.3...20	3.5...35	7...70	12...160	22...300	30...500
	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85	113 x 46 x 85
	XMLC004B2S12	**XMLC010B2S12**	**XMLC020B2S12**	XMLC035B2S12	XMLC070D2S12	XMLC160D2S12	XMLC300D2S12	XMLC500D2S12
	0.15	0.45	0.7	1	4.5	9	16	19
	0.17	0.7	1	1.5	8.9	21	35	52
	2.5	8	11	22	60	110	240	340
	0.40...4	1.2...10	2.14...20	4.4...35	9.4...70	16.5...160	36...300	41...500
	0.19...3.79	0.52...9.32	0.9...18.76	1.9...32.5	6.6...67.2	10.5...154	25...289	25...484
	0.21...2.18	0.68...5.8	1.24...9.55	2.5...20.4	2.8...46	6...83	11...189	16...244
	XMLD004B1S12	**XMLD010B1S12**	**XMLD020B1S12**	XMLD035B1S12	XMLD070D1S12	XMLD160D1S12	XMLD300D1S12	XMLD500D1S12
	0.15	0.45	0.7	1.5	5	8.8	17	21
	0.19	0.6	1.3	2.6	9.5	20	42	65

Sensors for pressure control

Electromechanical pressure switches XMX, XMA



1 C/O single-pole contact, snap action



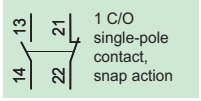




Setting range of upper limit (PH) (bar)	1…6	1.3…12	3.5…25
Fluids controlled	**Air, water** (fresh water, sea water) from 0…+70°C		
Ambient air temperature	- 25…+ 70°C		
Degree of protection (conforming to IEC 60529)	IP 54		
Rated operational characteristics	AC-15; B300 (Ue = 240 V, Ie = 1.5 A - Ue = 120 V, Ie = 3 A) / DC-13; R300 (Ue = 250 V, Ie = 0.1 A)		
Product certification	CE - UL - CSA - CCC		
Dimensions (mm) H x W x D	106 x 57 x 98		126 x 57 x 98
Fluid connection	1/4" BSP female		
Electrical connection	Screw terminals, 2 tapped entries for n° 13 (DIN Pg 13.5) cable gland		

Type XMX with internal setting screw

Without setting scale, screw terminal connections				
1 C/O single-pole, snap action contact		**XMXA06L2135**	**XMXA12L2135**	XMXA25L2135
Possible differential (bar)	Min. at low setting	0.8	1	3.4
subtract from PH to give PB	Min. at high setting	1.2	1.7	4.5
	Max. at high setting	4.2	8.4	20



1 C/O single-pole contact, snap action







Setting range of upper limit (PH) (bar)	1…6	1.3…12	3.5…25
Fluids controlled	**Air, water** (fresh water, sea water) from 0…+70°C		
Ambient air temperature	- 25…+ 70°C		
Degree of protection (conforming to IEC 60529)	IP 54		
Rated operational characteristics	AC-15; B300 (Ue = 240 V, Ie = 1.5 A - Ue = 120 V, Ie = 3 A) / DC-13; R300 (Ue = 250 V, Ie = 0.1 A)		
Product certification	CE - UL - CSA - CCC		
Dimensions (mm) H x W x D	113 x 57 x 98		133 x 57 x 98
Fluid connection	1/4" BSP female		
Electrical connection	Screw terminals, tapped entry for n° 13 (DIN Pg 13.5) cable gland		

Type XMA with external setting screw (transparent cover)

Without setting scale, screw terminal connections				
1 C/O single-pole, snap action contact		**XMAV06L2135**	**XMAV12L2135**	XMAV25L2135
Possible differential (bar)	Min. at low setting	0.8	1	3.4
subtract from PH to give PB	Min. at high setting	1.2	1.7	4.5
	Max. at high setting	4.2	8.4	20

Schneider Electric

Other versions: **please consult your Schneider Electric agency.**

Electromechanical pressure switches for power circuits, adjustable differential for regulation between 2 thresholds

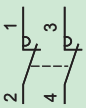


2 N/C 2-pole contact, snap action

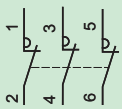




Degree of protection			IP 20			IP 65		
Size (bar)			4.6	7	10.5	4.6	7	10.5
Setting range of upper limit (PH) (bar)			**1.4…4.6**	**2.8…7**	**5.6…10.5**	**1.4…4.6**	**2.8…7**	**5.6…10.5**
Fluids controlled			**Water** (fresh water, sea water) from 0…+55°C					
Electrical connection			Screw terminals, 2 cable entries with grommet			Screw terminals, 2 tapped entries for n° 13 (DIN Pg 13.5) cable gland		
Product certification			CE					
Ambient air temperature			For operation: 0…+ 50°C. For storage: - 30…+ 80°C					
Rated operational characteristics			Ie = 10 A, Ue = 250 V AC					
Power rating of controlled motors	110 V	AC 2-pole, single-phase	0.75 kW (1 HP)			0.75 kW (1 HP)		
		AC 2-pole, 3-phase	1.1 kW (1.5 HP)			1.1 kW (1.5 HP)		
	230 / 400 V	AC 2-pole, single-phase	1.5 kW (2 HP)			1.5 kW (2 HP)		
		AC 2-pole, 3-phase	2.2 kW (3 HP)			2.2 kW (3 HP)		
Dimensions (mm) H x W x D			96/105 x 72 x 102	94 x 72 x 102		115 x 72 x 106	115 x 72 x 106	
Fluid connection	G 1/4 (BSP female)		FSG2	FYG22	FYG32	FSG2NE	FYG22NE	FYG32NE
	R 1/4 (BSP male)		FSG9	FYG29	FYG39	–	–	–
	G 3/8 (BSP female) rotating nut		–	–	–	FSG2NEG	–	–
Possible differential (bar) subtract from PH to give PB		At low setting	1 min. - 2.1 max.	1.2 min. - 2.3 max.	1.9 min. - 3 max.	1 min. - 2.1 max.	1.2 min. - 2.3 max.	1.9 min. - 3 max.
		At middle setting	1.1 min. - 2.2 max.	1.4 min. - 2.5 max.	2.1 min. - 3.2 max.	1.1 min. - 2.2 max.	1.4 min. - 2.5 max.	2.1 min. - 3.2 max.
		At high setting	1.2 min. - 2.3 max.	1.6 min. - 2.7 max.	2.3 min. - 3.4 max.	1.2 min. - 2.3 max.	1.6 min. - 2.7 max.	2.3 min. - 3.4 max.



2 N/C 2-pole contact, snap action



3 N/C 3-pole contact, snap action



Size (bar)			6		12		25
Setting range of upper limit (PH) (bar)			**1…6**		**1.3….12**		**3.5…25**
Fluids controlled			**Air, water** (fresh water, sea water) from 0…+70°C				
Ambient air temperature			For operation: - 25…+ 70°C. For storage: - 40…+ 70°C				
Decompression valve / On/Off knob			without	with	without	with	without
Fluid connection			G 1/4 (BSP female)	4 x G 1/4 (BSP female)	G 1/4 (BSP female)	4 x G 1/4 (BSP female)	G 1/4 (BSP female)
Electrical connection			Screw terminals, 2 tapped entries for n° 13 (DIN Pg 13.5) cable gland				
Degree of protection			IP 54		IP 54		IP 54
Product certification			CE - CCC				
Rated insulation voltage			Ui = 500 V				
Electrical durability	Power	1.5 kW	400 V AC 3-phase: 1 000 000 operating cycles				
			230 V AC 3-phase: 600 000 operating cycles				
		2.2 kW	400 V AC 3-phase: 700 000 operating cycles				
		3 kW	400 V AC 3-phase: 500 000 operating cycles				
Dimensions (mm) H x W x D			106 x 57 x 97.5	138 x 57 x 97.5	106 x 57 x 97.5	138 x 57 x 97.5	126 x 57 x 97.5
Type of contacts	2 N/C 2-pole, snap action contact		XMPA06B2131	XMPE06B2431	XMPA12B2131	XMPE12B2431	XMPA25B2131
	3 N/C 3-pole, snap action contact		XMPA06C2131	XMPE06C2431	XMPA12C2131	XMPE12C2431	XMPA25C2131
Possible differential (bar) subtract from PH to give PB		Min. at low setting	0.8	0.8	1	1	3.4
		Min. at high setting	1.2	1.2	1.7	1.7	4.5
		Max. at high setting	4.2	4.2	8.4	8.4	20

OsiSense XG — Radio frequency identification
13.56 MHz RFID



Presentation
OsiSense XG is open to the majority of ISO 18000-3, ISO 15693 and ISO 14443 electronic tags.
OsiSense XG integrates Modbus RTU, Uni-Telway, Modbus TCP/IP (using Ethernet box XGSZ33ETH) and Profibus DP (with box XGSZ33PDP) protocols.
The OsiSense XG RFID offer comprises:
- 2 models of 13.56 MHz compact stations (read/write)
- 6 models of 13.56 MHz electronic tags
- 1 portable RFID diagnostics terminal
- 3 models of network connection boxes plus connection and mounting accessories.

Setting-up
OsiSense XG compact stations are simple to set-up:
- Integrated RFID and network functions
- No programming
- Automatic detection of the RFID electronic tags (read or write)
- Automatic setting of the communication parameters (speed, format, parity, protocol, etc.)
- Configuration of the network address (1 to 15) using badge included with the station
- Low sensitivity to metal environments.

Installation
OsiSense XG stations easily integrate in flexible manufacturing production lines:
- quick connection using M12 connector
- screw fixing or clip-on mounting.





Compact stations, 13.56 MHz		C format	D format
Dimensions (mm), W x H x D		40 x 40 x 15	80 x 80 x 26
Nominal sensing distance depending on tag (mm)		18 to 70	20 to 100
Type of associated tag		ISO 15693 and ISO 14443 standard tags. Automatic detection of the type of tag.	
Display		1 dual colour LED for the communication network, 1 dual colour LED for the RFID communication	
Conformity to standards		CE, EN 301489-1, EN 301489-3, ETS 300330-1 and ETS 300330-2, FCC part 15 - UL	
Degree of protection conforming to IEC 60529		IP 67	
Serial link	Type	RS 485	
	Protocol	Modbus and Uni-Telway	
	Speed (Bauds)	9600…115 200 (automatic detection)	
Ambient air temperature (°C)		For operation: - 25…+ 70 °C, for storage: - 40…+ 85 °C	
Nominal supply voltage		24 VDC PELV (Protective Extra Low Voltage)	
Connection		M12, 5-pin male, shielded connector on flying lead. Only for connection to the communication network and the supply	
References		**XGCS4901201**	**XGCS8901201**









Electronic tags		C format		ISO badge (1)	Disc	E format	Cylindrical
Dimensions (mm), W x H x D		40 x 40 x 15		54 x 85.5 x 0.8	Ø 30 x 3	26 x 26 x 13	M18 x 1 x 12
Type of memory		EEPROM					
Memory capacity (bytes)		3 408	13 632	256	112	256	256
Nominal sensing distance (mm)	With station XGCS49●	33	30	70	48	40	18
(Read/Write)	With station XGCS89●	48	40	100	65	55	20
Time (ms)	Read	9.25 + 0.375 x n (2)	16.25 + 0.375 x n (2)	12 + 0.825 x n (2)			
	Write	13 + 0.8 x n (2)	20 + 0.8 x n (2)	20 + 11.8 x n (2)	12 + 5.6 x n (2)	20 + 11.8 x n (2)	19 + 4.1 x n (2)
Degree of protection conforming to IEC 60529		IP 68		IP 65		IP 68	
Standard supported		ISO 14443		ISO 15693			
Mounting on metal support		Yes		No		Yes	No
References		**XGHB444345**	**XGHB445345**	**XGHB90E340**	**XGHB320345**	**XGHB221346**	**XGHB211345**

(1) Customised versions on request. (2) n = number of 16-bit words.

Other versions: **please consult your Schneider Electric agency.**



Connection boxes	Ethernet box	Profibus box	Tap-off box
Dimensions (mm), W x H x D	130 x 80 x 51		130 x 80 x 51
Protocols	Modbus TCP/IP	Profibus DP	Modbus, Uni-Telway
Supply voltage	24 VDC PELV. M12, 4-pin male, A coding, connector		
Conformity to standards	CE - UL	CE	CE - UL
Station connection	M12, 5-pin female, A coding, connector		
Degree of protection conforming to IEC 60529	IP 65		
References	**XGSZ33ETH**	**XGSZ33PDP**	**TCSAMT31FP**



Terminal		Portable 13.56 MHz RFID diagnostics terminal
Dimensions (mm), W x H x P		120 x 250 x 62
Function		Read/Write operations on electronic tags and diagnostics on compact stations
Operating system		Microsoft® Windows CE.NET Professional® version 4.2
Conformity to standards		CE, FCC class A, Part 15225
Display		72 x 54 mm colour touchscreen; QVGA TFT, 320 x 240 pixels resolution
Degree of protection conforming to IEC 60529		IP 65
Memory	RAM	64 Mb SDRAM
	Storage	Internal Compact Flash (512 Mb standard, expandable to 128 Mb) + Slot for Compact Flash card
Reference		**XGSTP401** (Battery, battery charger, carrying case and 3 styluses included with terminal)





Connection accessories	for Modbus network			for Profibus	for Ethernet	Pre-wired connector	"T" connector
Description	Modbus connecting cable M12 connectors Male / Female	Pre-wired connector M12 male / Bare wires	Modbus connecting cable M12 male / Mini-DIN 8	Profibus connecting cables M12 connectors Male / Female	Ethernet ConneXium connecting cable M12 male / RJ 45	Pre-wired supply connector M12 female	Network M12 "T" connector 1 male / 2 female
Application	RS485 connection between a compact station and a Modbus box or between 2 Modbus boxes	Connection between a Modbus box and a Modbus / Uni-Telway network	Connection between a Modbus box and a PLC	Connection between Profibus box and Profibus network	Connection between an Ethernet box and the Ethernet network	24 VDC supply to connection boxes	For RS 485 network
L = 2 m	**TCSMCN1M1F2**	**TCSMCN1F2**	**TCSMCN1F9M2P**	**FTXDP1220**	**TCSECL1M3M3S2** (3)	**XGSZ09L2**	**TCSCTN011M11F**
L = 5 m	**TCSMCN1M1F5**	**TCSMCN1F5**	–	**FTXDP1250**	**TCSECL1M3M5S2**	**XGSZ09L5**	

(3) L = 3 m

Field expander

To be associated with a compact station XGCS4901201 for conveying and handling applications



New



50 x 400 mm
XGFEC540

250 x 250 mm
XGFEC2525

RS232/RS485 converter



For connecting a PC to an OsiSense XG station

XGSZ24

Technical documentation



OsiSense XG compact stations guide

DIA4ED3051001

Other versions: **please consult your Schneider Electric agency.**

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