The Essential Guide to Sensor Selection

🗊 Telemecanique

Osiprox Inductive Proximity Sensors

non flush mountal flush mountable in	n metal	DSICONCEPT®	-			
	to 🖉	all metal environments	Q_	4	The	
†		curate position detection via ach mode.	Osi concept [®]	Osi concept [®]	Osi concept [®]	Osi concept [®]
			Type E (26 x 26)	Type C (40 x 40)	Type D (80 x 80)	Ø 12
Nominal Sensing	Distance Sn		15 mm	25 mm	60 mm	5 mm
Usable sensing dis		d/non-sheilded	010/015	015 / 025	040 / 060	03.4 / 05
Precision adjustme	ent range (mm) sh	nielded/non-shielded	510 / 515	815 / 825	2040 / 2060	1.73.4 / 1.75
Mounting in metal	<u> </u>			shielded or non-shielded v	via Osiconcept teach mode	
Enclosure M (meta	al) P (plastic)		Р	Р	Р	М
Temperature range	e °F (°C)		- 13158 (- 2570)	- 13158 (- 2570)	- 13158 (- 2570)	- 13158 (- 2570)
Degree of protection		IEC 60 529)		pre-cabled: IP68 (w	vith connector: IP67)	1
Sensors for	DC applica	ations (3-wire)	•			
Connection: pr		. ,				
Dimensions (mm)		🗅	26 x 26 x 13	40 x 40 x 15	80 x 80 x 26	M12 x 54
Dimensions (mm)	PNP	NO	XS8E1A1PAL2	XS8C1A1PAL2	XS8D1A1PAL2	WI12 X 34
	PNP	NC	XS8E1A1PBL2	XS8C1A1PBL2	XS8D1A1PBL2	_
3-wire	NPN	NO	XS8E1A1NAL2	XS8C1A1PBL2	XS8D1A1PBL2 XS8D1A1NAL2	_
	NPN	NC	XS8E1A1NBL2	XS8C1A1NBL2	XS8D1A1NBL2	_
Connection: M				AGOCIATINEEZ	X30DTATINDE2	_
	PNP		XS8E1A1PAM8	XS8C1A1PAM8	XS8D1A1PAM12	XS612B2PAL01M12 (2)
	PNP	NC	XS8E1A1PBM8	XS8C1A1PBM8	XS8D1A1PBM12	XS612B2PBL01M12 (2)
3-wire	NPN	NO	XS8E1A1NAM8	XS8C1A1NAM8	XS8D1A11 BM12 XS8D1A1NAM12	XS612B2NAL01M12 (2)
			XS8E1A1NBM8	XS8C1A1NBM8	XS8D1A1NBM12	XS612B2NBL01M12 (2)
	NPN	NC			ROODTAILDIILE	
	NPN	NC cluding ripple	10 36	10 36	10 36	10 36
	its min/max (V) in		1036	1036	1036	1036
Switching capacity	its min/max (V) in /, max (mA)		100	200	200	200
Switching capacity Short-circuit protect	its min/max (V) in , max (mA) ction (♦)	cluding ripple	100 ◆	200	200 ♦	200 ♦
Switching capacity Short-circuit protect LED output state in	its min/max (V) in , max (mA) ction (♠) ndication (♣) and	cluding ripple	100 ♦ ¥/★	200 ♦ ¥/★	200 ♦ ¥/★	200 ♦ ¥/★
Switching capacity Short-circuit protect LED output state in Voltage drop, close	its min/max (V) in , max (mA) ction (♠) ndication (♣) and ed state (V) at I no	cluding ripple	100 ◆ X /★ ≤ 2	200 ◆ X /★ ≤ 2	200 ◆ X /★ ≤2	200 ◆ X /★ ≤ 2
Switching capacity Short-circuit protect LED output state in Voltage drop, close Switching frequence	its min/max (V) in , max (mA) ction (♠) ndication (♣) and ed state (V) at I no cy (Hz)	cluding ripple power on LED (★) pominal	100 ◆ X/★ ≤ 2 1000	200 ♦ ¥/★	200 ♦ ¥/★	200 ♦ ¥/★
Switching capacity Short-circuit protect ED output state in /oltage drop, close Switching frequence Sensors for	its min/max (V) in , max (mA) ction (♦) ndication (¥) and ed state (V) at I no cy (Hz) AC or DC	cluding ripple power on LED (*) ominal applications ~ / (2	100 ◆ X/★ ≤ 2 1000	200 ◆ X /★ ≤ 2	200 ◆ X /★ ≤2	200 ◆ X /★ ≤ 2
Switching capacity Short-circuit protect _ED output state in Voltage drop, close Switching frequenct Sensors for Connection: pr	its min/max (V) in , max (mA) ction (�) ndication (¥) and ed state (V) at I no cy (Hz) r AC or DC re-cabled PvR	power on LED (*) pominal applications ~ / (2 (2 m)	100	200	200 ◆ X /★ ≤ 2 100	200 ★ X/★ ≤ 2 1000
Switching capacity Short-circuit protect LED output state in Voltage drop, close Switching frequence Sensors for Connection: pr Dimensions (mm)	its min/max (V) in , max (mA) ction (♦) ndication (♣) and ed state (V) at I no cy (Hz) r AC or DC re-cabled PvR Ø x L or H x W x	power on LED (*) pominal applications ~ / (2 (2 m)	100 ★ X/★ ≤ 2 1000 26 x 26 x 13	200 ★ */★ ≤ 2 1000 40 x 40 x 15	200 ★ */★ ≤ 2 100 80 x 80 x 26	200 ◆ X/★ ≤ 2 1000
Switching capacity Short-circuit protect ED output state in /oltage drop, close Switching frequend Sensors for Connection: pr Dimensions (mm)	its min/max (V) in , max (mA) ction (●) ndication (●) and a ed state (V) at I no cy (Hz) r AC or DC re-cabled PvR Ø x L or H x W x C without	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) NO	100 ★ */★ ≤ 2 1000 2-wire) 26 × 26 × 13 XS8E1A1MAL2	200 ★ */★ ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2	200 ★ */★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2	200 ★ X/★ ≤ 2 1000
Switching capacity Short-circuit protect LED output state in Voltage drop, close Switching frequenct Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short-	its min/max (V) in a, max (mA) ction (\bullet) ndication (\bullet) and a ed state (V) at 1 m cy (Hz) r AC or DC re-cabled PvR $\emptyset x L \text{ or } H x W x$ C without circuit protection	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L I NO (1)	100 ★ X/★ ≤ 2 1000 26 x 26 x 13	200 ★ */★ ≤ 2 1000 40 x 40 x 15	200 ★ */★ ≤ 2 100 80 x 80 x 26	200 ◆ X/★ ≤ 2 1000
Switching capacity Short-circuit protect ED output state in /oltage drop, closet Switching frequend Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/	its min/max (V) in (x, max (mA)) ction (\bullet) ndication (\bullet) and ed state (V) at 1 nd cy (Hz) AC or DC re-cabled PvR $\emptyset x L \text{ or } H x W x$ C without circuit protection (2^{*} 20 UNF cor	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) (2 m) L NO (1) NC onnector	100 ★ */★ ≤ 2 1000 2-wire) 26 x 26 x 13 XS8E1A1MBL2 XS8E1A1MBL2	200 ★ / ★ ≤ 2 1000 40 x 40 x 15 XS8C1A1MAL2 XS8C1A1MBL2	200 ★/★ ≤ 2 100 80 x 80 x 26 XS8D1A1MAL2 XS8D1A1MBL2	200 ★ X/★ ≤ 2 1000 - - -
Switching capacity Short-circuit protect ED output state in foltage drop, closes Switching frequence Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC AC/DC AC/DC	its min/max (V) in , max (mA) ction (●) ndication (♥) and ed state (V) at I no cy (Hz) r AC or DC re-cabled PvR Ø x L or H x W x C without circuit protection 2" 20 UNF cor C without	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L NO (1) NC nnector	100 ★ */★ ≤ 2 1000 2-wire) 26 × 26 × 13 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MAL01U20	200 ★ */* ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MAL01U20	200 ★ ★/★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MAU20	200 ★ */★ ≤ 2 1000 - - - -
Switching capacity Short-circuit protect ED output state in /oltage drop, close Switching frequend Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/ 2-wire AC/DC short-	its min/max (V) in , max (mA) ction (●) ndication (♥) and , ed state (V) at 1 no cy (Hz) r AC or DC re-cabled PvR Ø x L or H x W x C without circuit protection in 2" 20 UNF cor C without circuit protection in 2" 20 UNF cor	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L NO (1) NC anector	100 ★ */* ≤ 2 1000 2-wire) 26 × 26 × 13 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL2 XS8E1A1MBL201U20	200 ★ / ★ ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MBL2 XS8C1A1MBL01U20	200 ★ */ ★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MBL2 XS8D1A1MBU20	200 ★ X/★ ≤ 2 1000 - - -
Switching capacity Short-circuit protect ED output state in /oltage drop, close Switching frequend Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC 2-wire AC/DC short- Supply voltage lim	its min/max (V) in , max (mA) ction (●) ndication (♣) and ed state (V) at I no cy (Hz) re-cabled PvR Ø x L or H x W x C without circuit protection (2" 20 UNF cor C without circuit protection (its min/max (V) in	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L NO (1) NC nnector	100 ★ ★/★ ≤ 2 1000 2:-wire) 26 × 26 × 13 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL2 XS8E1A1MBL01U20 XS8E1A1MBL01U20 20264	200 ★ */* ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MBL01U20 XS8C1A1MBL01U20 20264	200 ★ ★/★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MBL2 XS8D1A1MBU20 XS8D1A1MBU20 20264	200 ★ */★ ≤ 2 1000 - - - - - - - - -
Switching capacity Short-circuit protect LED output state in Voltage drop, close Switching frequence Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/ 2-wire AC/DC short- Supply voltage lim Switching capacity	its min/max (V) in , max (mA) ction (●) ndication (♥) and ed state (V) at I no cy (Hz) AC or DC re-cabled PvR Ø x L or H x W x C without circuit protection (its min/max (V) in , max (mA)	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L NO (1) NC nnector (1) NC inc construction (1) NC cluding ripple on DC	100 ★/★ ≤ 2 1000 2:-wire) 26 × 26 × 13 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL2 XS8E1A1MBL01U20 XS8E1A1MBL01U20 20264 200	200 ★ */★ ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MAL2 XS8C1A1MAL2 XS8C1A1MAL01U20 XS8C1A1MBL01U20 20264 260	200 ★ ★/★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MBL2 XS8D1A1MBL2 20264 260	200 ★ */★ ≤ 2 1000 - - - - - - - - - -
Switching capacity Short-circuit protect ED output state in Voltage drop, close Switching frequend Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/ 2-wire AC/DC short- Supply voltage lim Switching capacity LED output state in	its min/max (V) in , max (mA) ction (●) ndication (♥) and ed state (V) at I no cy (Hz) AC or DC recabled PvR Ø x L or H x W x C without circuit protection (2" 20 UNF cor C without circuit protection (its min/max (V) in , max (mA) ndication (♥) and	cluding ripple power on LED (*) pominal applications ~ / (2 (2 m) L NO (1) NC anector	100 ★ */* ≤ 2 1000 -wire) 26 x 26 x 13 XS8E1A1MAL2 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL01U20 XS8E1A1MBL01U20 20264 200 */*	200 ★ X/★ ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MBL01U20 XS8C1A1MBL01U20 20264 260 ★/★	200 ★ */ ★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MBU20 20264 260 */ ★	200 ★ */★ ≤ 2 1000 - - - - - - - - - - - - -
Voltage drop, close Switching frequent Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/ 2-wire AC/DC short- Supply voltage lim Switching capacity LED output state in Residual current, c	its min/max (V) in a_{x} , max (mA) ction (\bullet) ndication (\bullet) and ed state (V) at 1 nd cy (Hz) AC or DC re-cabled PvR $\emptyset x L \text{ or } H x W x$ C without circuit protection (\bullet its min/max (V) in , max (mA) ndication (\bullet) and jopen state (mA)	cluding ripple power on LED (*)	100 ★/★ ≤ 2 1000 2-wire) 26 x 26 x 13 XS8E1A1MAL2 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL01U20 20264 200 ★/★ ≤ 1.5	200 ★ / * ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MBL01U20 20264 260 ★ / * ≤ 1.5	200 ★/★ ≤ 2 100 80 x 80 x 26 XS8D1A1MAL2 XS8D1A1MAL2 XS8D1A1MBL2 20264 260 ★/★ ≤1.5	200 ★ */ * ≤ 2 1000 - - - - - - - - - - - - -
Switching capacity Short-circuit protect LED output state in Voltage drop, close Switching frequend Sensors for Connection: pr Dimensions (mm) 2-wire AC/DC short- Connection: 1/ 2-wire AC/DC short- Supply voltage lim Switching capacity LED output state in	its min/max (V) in a_{i} , max (mA) ction (\blacklozenge) ndication (\clubsuit) and a ed state (V) at 1 m cy (Hz) r AC or DC re-cabled PvR $\emptyset x L \text{ or } H x W x I$ C without circuit protection ('z'' 20 UNF cor C without circuit protection ('z'' 20 UNF cor C without circuit protection ('z'' 0 UNF cor C without circuit protection ('a and ' popen state (mA) ed state (V) at 1 m	cluding ripple power on LED (*)	100 ★ */* ≤ 2 1000 -wire) 26 x 26 x 13 XS8E1A1MAL2 XS8E1A1MAL2 XS8E1A1MBL2 XS8E1A1MBL01U20 XS8E1A1MBL01U20 20264 200 */*	200 ★ */* ≤ 2 1000 40 × 40 × 15 XS8C1A1MAL2 XS8C1A1MAL2 XS8C1A1MBL2 XS8C1A1MBL01U20 XS8C1A1MBL01U20 20264 260 */*	200 ★ */ ★ ≤ 2 100 80 × 80 × 26 XS8D1A1MAL2 XS8D1A1MAL2 XS8D1A1MBL2 XS8D1A1MBU20 20264 260 */ ★	200 ★ */* ≤ 2 1000 - - - - - - - - - - - - -

For flat sensors, forms E, C and D					Mounting bracket with indexing pin for cylindrical sensors			
			straight	90°	Adaptor plate for block type sensors XSE / XSC / XSD		M8	XSZB108
		Type E	XSZBE00	XSZBE90	XSZBE10		M12	XSZB112
() and ()		Type C	XSZBC00	XSZBC90	XSZBC10		M18	XSZB118
\checkmark		Type D	XSZBD00	-	XSZBD10	-	M30	XSZB130

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Osiconcept [®]	Osiconcept*			₽ ₽ ₽	
Ø 18	Ø 30	Ø 8	Ø 12	Ø 18	Ø 30
10 mm	18 mm	2.5 mm	4 mm	8 mm	15 mm
07 / 010	012 / 018	02	03.2	06.4	012
3.5 7 / 3.510	612 / 618	-	_	-	-
	via Osiconcept teach mode	shielded	shielded	shielded	shielded
М	М	М	М	М	М
- 13158 (- 2570)	- 13158 (- 2570)	- 13176 (- 2570)	- 13176 (- 2570)	- 13176 (- 2570)	- 13176 (- 2570)
pre-cabled: IP68 (with connector: IP67)		pre-cabled: IP68 (w	vith connector: IP67)	
M18 x 67	M30 x 71	M8 x 50	M12 x 50	M18 x 60	M30 x 60
-	-	XS608B1PAL2	XS612B1PAL2	XS618B1PAL2	XS630B1PAL2
_		XS608B1PBL2	XS612B1PBL2	XS618B1PBL2	XS630B1PBL2
-	_	XS608B1NAL2	XS612B1NAL2	XS618B1NAL2	XS630B1NAL2
-	_	XS608B1NBL2	XS612B1NBL2	XS618B1NBL2	XS630B1NBL2
XS618B2PAL01M12 (2)	XS630B2PAL01M12 (2)	XS608B1PAM12	XS612B1PAM12	XS618B1PAM12	XS630B1PAM12
XS618B2PBL01M12 (2)	XS630B2PBL01M12 (2)	XS608B1PBM12	XS612B1PBM12	XS618B1PBM12	XS630B1PBM12
XS618B2NAL01M12 (2)	XS630B2NAL01M12 (2)	XS608B1NAM12	XS612B1NAM12	XS618B1NAM12	XS630B1NAM12
XS618B2NBL01M12 (2)	XS630B2NBL01M12 (2)	XS608B1NBM12	XS612B1NBM12	XS618B1NBM12	XS630B1NBM12
1036	1036	1036	1036	1036	1036
200	200	100	200	300	300
◆ ★/ ★	◆	◆ ≭ /−	◆ ≭/-	◆ ≭/-	◆ ★/-
≭ /★ ≤2	≭ /★ ≤2	≭ / – ≤2	≭ / – ≤2	≭ /- ≤2	≭ /- ≤2
1000	<u>≤ 2</u> 1000	2500	≤ 2 2500	≤ 2 1000	≤ 2 500
1000	1000	2300	2300	1000	300
_	-	_	M12 x 50	M18 x 60	M30 x 60
-		-	XS612B1MAL2	XS618B1MAL2	XS630B1MAL2
-		-	XS612B1MBL2	XS618B1MBL2	XS630B1MBL2
-	-	-	XS612B1MAU20	XS618B1MAU20	XS630B1MAU20
-	-	-	XS612B1MBU20	XS618B1MBU20	XS630B1MBU20
-	-	-	20264	20264	20264
-	-	-	200	200	200
	-	-	X /-	X /-	≭/-
-		-	≤ 1.5	≤ 1.5	≤ 1.5
-	-				
			≤ 5.5 25 / 4000	≤ 5.5 25 / 3000	≤ 5.5 25 / 3000

		Plug-in female connectors, including pre-wired versions					
For Osiconcept XS6 remote control				8			
		length 5 m w/o LED	elbowed	straight	Snap-C		
		M8	XSZCS112	XSZCS101	-		
	XSZBPM12	M12	XSZCD112Y	XSZCD102Y	XSCC12FDM40V		
		U20	XSZCA111Y	XSZCA101Y	-		

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