

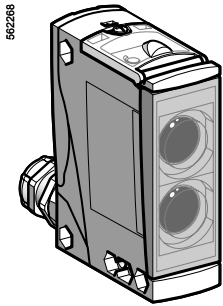
Photo-electric sensors

OsiSense XU, general purpose, single mode function

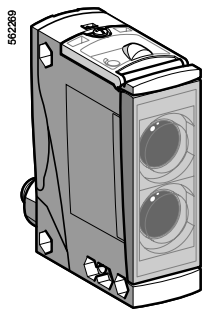
Compact design

Five-wire AC or DC, 1 CO relay output

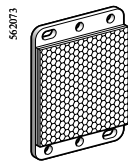
Three-wire DC, solid-state output



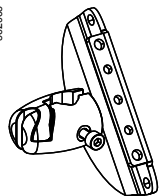
XUX ●A●●●T16



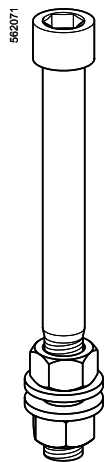
XUX ●A●●●M12



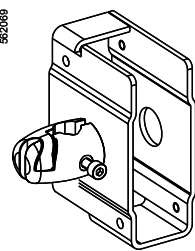
XUZ C50



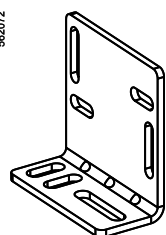
XUZ X2003



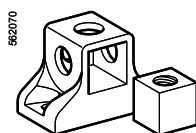
XUZ 2001



XUZ X2004



XUZ X2000



XUZ 2003

Sensing distance (Sn) m	Function	Output	Connection	Reference	Weight kg
Diffuse system (1)					
DC					

2.1	NO	PNP	Screw terminals (3)	XUX 5APANT16	0.200	
			M12 connector	XUX 5APANM12	0.200	
		NPN		Screw terminals (3)	XUX 5ANANT16	0.200
				M12 connector	XUX 5ANANM12	0.200
	NC	PNP		Screw terminals (3)	XUX 5APBNT16	0.200
				M12 connector	XUX 5APBNM12	0.200
	NPN		Screw terminals (3)	XUX 5ANBNT16	0.200	
			M12 connector	XUX 5ANBNM12	0.200	

AC or DC

2.1	NO + NC	Relay	Screw terminals (3)	XUX 5ARCNT16	0.200
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Polarised reflex system (1)

DC

11	NO	PNP	Screw terminals (3)	XUX 9APANT16	0.200	
			M12 connector	XUX 9APANM12	0.200	
		NPN		Screw terminals (3)	XUX 9ANANT16	0.200
				M12 connector	XUX 9ANANM12	0.200
	NC	PNP		Screw terminals (3)	XUX 9APBNT16	0.200
				M12 connector	XUX 9APBNM12	0.200
	NPN		Screw terminals (3)	XUX 9ANBNT16	0.200	
			M12 connector	XUX 9ANBNM12	0.200	

AC or DC

11	NO + NC	Relay	Screw terminals (3)	XUX 9ARCNT16	0.200
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Reflector 50 x 50 mm (2)	-	-	-	XUZ C50	0.020
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Reflex system (1)

DC

14	NO	PNP	Screw terminals (3)	XUX 1APANT16	0.200	
			M12 connector	XUX 1APANM12	0.200	
		NPN		Screw terminals (3)	XUX 1ANANT16	0.200
				M12 connector	XUX 1ANANM12	0.200
	NC	PNP		Screw terminals (3)	XUX 1APBNT16	0.200
				M12 connector	XUX 1APBNM12	0.200
	NPN		Screw terminals (3)	XUX 1ANBNT16	0.200	
			M12 connector	XUX 1ANBNM12	0.200	

AC or DC

14	NO + NC	Relay	Screw terminals (3)	XUX 1ARCNT16	0.200
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Reflector 50 x 50 mm (2)	-	-	-	XUZ C50	0.020
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Thru-beam system (1)

DC

Transmitter 40			Screw terminals (3)	XUX 0AKSAT16T	0.200	
			M12 connector	XUX 0AKSAM12T	0.200	
Receiver 40	NO	PNP	Screw terminals (3)	XUX 2APANT16R	0.200	
			M12 connector	XUX 2APANM12R	0.200	
		NPN		Screw terminals (3)	XUX 2ANANT16R	0.200
				M12 connector	XUX 2ANANM12R	0.200
	NC	PNP		Screw terminals (3)	XUX 2APBNT16R	0.200
				M12 connector	XUX 2APBNM12R	0.200
	NPN		Screw terminals (3)	XUX 2ANBNT16R	0.200	
			M12 connector	XUX 2ANBNM12R	0.200	

AC or DC

Transmitter 40			Screw terminals (3)	XUX 0ARCNT16T	0.200
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Receiver 40	NO + NC	Relay	Screw terminals (3)	XUX 2ARCNT16R	0.200
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Fixing accessories (2)

Description	Reference	Weight kg
3D fixing kit for use on M12 rod, for XUX or XUZ C50	XUZ X2003	0.220
3D fixing kit for use on M12 rod, with protective cover for XUX	XUZ X2004	0.420
M12 rod	XUZ 2001	0.050
Support for M12 rod	XUZ 2003	0.150
Fixing bracket	XUZ X2000	0.120

(1) With adjustable sensitivity.

(2) For further information, see page 5/158.

(3) Screw terminals with ISO 16 cable gland for cable Ø 7 to 10 mm.

Photo-electric sensors

OsiSense XU, general purpose, single mode function


Compact design

Five-wire AC or DC, 1 CO relay output

Three-wire DC, solid-state output

Characteristics		XUX●●●●●M12	XUX●AN●NT16, ●AP●NT16	XUX●ARC●T16
Sensor type		UL, CSA, CE		
Product certifications		M12 connector Screw terminals, ISO 16 cable gland		
Connection		M12 connector Screw terminals, ISO 16 cable gland		
Sensing distance		2.1 / 3 diffuse with adjustable sensitivity		
nominal Sn / maximum		11 / 15 polarised reflex with adjustable sensitivity		
(excess gain = 2) (excess gain = 1)		14 / 20 reflex with adjustable sensitivity		
		40 / 60 thru-beam with adjustable sensitivity		
Type of transmission		Infrared, except polarised reflex (red)		
Degree of protection		Conforming to IEC 60529 IP 65, IP 67, double insulation		
Storage temperature		°C -40...+70		
Operating temperature		°C -25...+55		
Materials		Case PBT		
		Lens PMMA		
Vibration resistance		Conforming to IEC 60068-2-6 7 gn, amplitude ± 1.5 mm (f = 10 to 55 Hz)		
Shock resistance		Conforming to IEC 60068-2-27 30 gn, duration 11 ms		
Indicator lights		Output state Yellow LED (transmission present for XUX 0●●●●●T c)		
		Supply on Green LED		
Rated supply voltage		PNP/NPN V 12...24 with protection against reverse polarity		
		Relay output V -		24...240 ~ or ---
Voltage limits (including ripple)		PNP/NPN V --- 10...36		
		Relay output V -		20...264 ~ or ---
Current consumption, no-load		PNP/NPN mA ≤ 35 (20 for XUX 0●●●●●T)		
Power consumption		Relay output W -		2 ~ or ---
Switching capacity		PNP/NPN mA ≤ 100 with overload and short-circuit protection		
		Relay output A -		500 000 operating cycles 3 A: cos φ = 1/0.5 A: cos φ = 0.4
Voltage drop, closed state		V ≤ 1.5		
Maximum switching frequency		PNP/NPN Hz 250		
		Relay output Hz -		20
Delays		First-up ms < 15 (PNP/NPN); < 60 (relay output)		
		Response ms < 2 (PNP/NPN); < 25 (relay output)		
		Recovery ms < 2 (PNP/NPN); < 25 (relay output)		

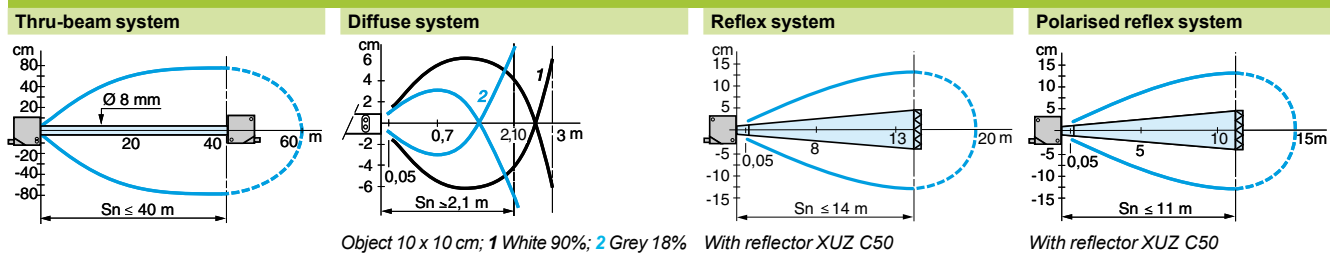
Wiring schemes

M12 connector	Relay output ~	PNP/NPN ---	Transmitter ---	Transmitter ~
	Terminals	M12 Terminals	M12 Terminals	Terminals
	1 ⊗ ~	1 ● 1 ⊗ +	1 ● 1 ⊗ +	1 ⊗ ~
	2 ⊗ ~	3 ● 2 ⊗ -	3 ● 2 ⊗ -	2 ⊗ ~
	3 ⊗ NO	4 ● 3 ⊗ Output	2 ● 3 ⊗ Beam break input (1)	
	4 ⊗ Relay common		(1) Input not connected: beam made.	
	5 ⊗ NC		Input connected to -: beam broken.	

See connection on page 9/44.

Maximum permissible conductor c.s.a.: 1 x 1.5 mm² or 1 x 0.75 mm² with cable end.

Detection curves



Dimensions

