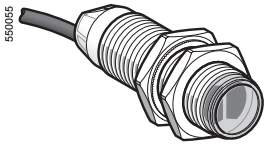


Photo-electric sensors

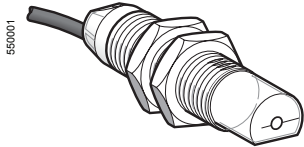
OsiSense XU multimode

Design 18, metal or plastic

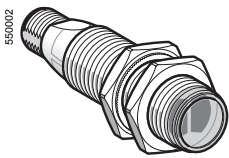
Three-wire DC, solid-state output



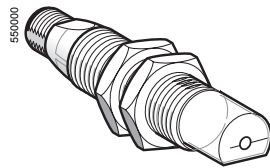
XUB 0...NL2



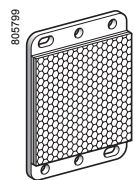
XUB 0...WL2



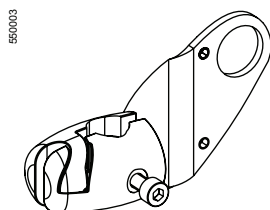
XUB 0...NM12



XUB 0...WM12



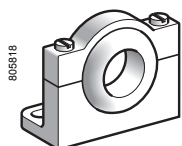
XUZ C50



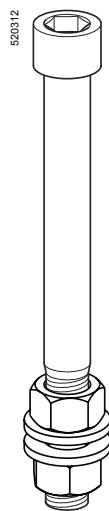
XUZ B2003



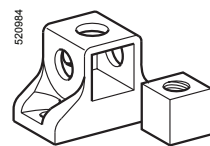
XUZ A118



XUZ A218



XUZ 2001



XUZ 2003

Ø 18 metal

Pre-cabled (1)

Sensing distance (Sn) (2) m	Function	Output	Line of sight	Reference	Weight kg
0...15 depending on whether accessories are used	NO or NC, by programming	PNP	Along case axis	XUB 0BPSNL2	0.105
		NPN	90° to case axis	XUB 0BPSWL2 (3)	0.110
	NPN	Along case axis	XUB 0BNSNL2	0.105	
		90° to case axis	XUB 0BNSWL2 (3)	0.110	

M12 connector

0...15 depending on whether accessories are used	NO or NC, by programming	PNP	Along case axis	XUB 0BPSNM12	0.055
		NPN	90° to case axis	XUB 0BPSWM12 (3)	0.060
	NPN	Along case axis	XUB 0BNSNM12	0.055	
		90° to case axis	XUB 0BNSWM12 (3)	0.060	

Accessories

Description	Connecti- on	Line of sight	Reference	Weight kg
Thru-beam transmitter	Pre-cabled (1)	Along case axis	XUB 0BKSNL2T	0.105
		90° to case axis	XUB 0BKSWL2T (3)	0.110
	M12 connector	Along case axis	XUB 0BKSNM12T	0.055
		90° to case axis	XUB 0BKSWM12T (3)	0.060
Reflector 50 x 50 mm	-	-	XUZ C50	0.020

Ø 18 plastic

Pre-cabled (1)

Sensing distance (Sn) (3) m	Function	Output	Line of sight	Reference	Weight kg
0...15 depending on whether accessories are used	NO or NC, by programming	PNP	Along case axis	XUB 0APSNL2	0.095
		NPN	90° to case axis	XUB 0APSWL2 (3)	0.100
	NPN	Along case axis	XUB 0ANSNL2	0.095	
		90° to case axis	XUB 0ANSWL2 (3)	0.100	

M12 connector

0...15 depending on whether accessories are used	NO or NC, by programming	PNP	Along case axis	XUB 0APSNM12	0.045
		NPN	90° to case axis	XUB 0APSWM12 (3)	0.050
	NPN	Along case axis	XUB 0ANSNM12	0.045	
		90° to case axis	XUB 0ANSWM12 (3)	0.050	

Accessories

Description	Connecti- on	Line of sight	Reference	Weight kg
Thru-beam transmitter	Pre-cabled (1)	Along case axis	XUB 0AKSNL2T	0.095
		90° to case axis	XUB 0AKSWL2T (3)	0.100
	M12 connector	Along case axis	XUB 0AKSNM12T	0.045
		90° to case axis	XUB 0AKSWM12T (3)	0.050
Reflector 50 x 50 mm	-	-	XUZ C50	0.020

Fixing accessories (4)

Description	Reference	Weight kg
3D fixing kit for use on M12 rod, for XUB or XUZ C50	XUZ B2003	0.170
M12 rod	XUZ 2001	0.050
Support for M12 rod	XUZ 2003	0.150
Stainless steel fixing bracket	XUZ A118	0.045
Plastic fixing bracket with adjustable ball-joint	XUZ A218	0.035

(1) For a 5 m long cable, replace L2 by L5.

Example: XUB 0BPSNL2 becomes XUB 0BPSNL5.

For availability, please consult our Customer Care Centre.


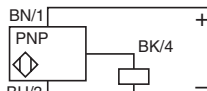
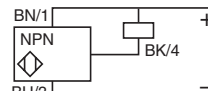
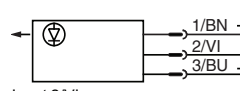
(2) For further information, see page 5/31.

(3) For line of sight 90° to case axis versions, see sensing distances on page 5/31.

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

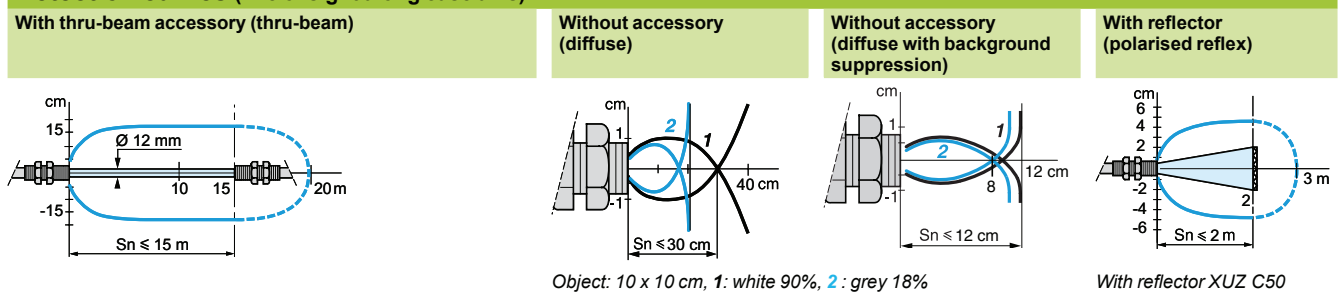
Characteristics		XUB 0●●●●M12, XUB 0●●●●M12T	XUB 0●●●●L2, XUB 0●●●●L2T	
Sensor type		UL, CSA, CE		
Product certifications		UL, CSA, CE		
Connection	Connector	M12	–	
	Pre-cabled	–	Length: 2 m	
Sensing distance nominal S_n / (excess gain = 2)	maximum (excess gain = 1)	Line of sight along case axis	Line of sight 90° to case axis	
	nominal S_n / (excess gain = 2)	m	0.12 / 0.12	0.11 / 0.11
		m	0.3 / 0.4	0.2 / 0.3
		m	2 / 3	1.5 / 2
		m	15 / 20	7 / 10
Type of transmission		Infrared, except for polarised reflex (red)		
Degree of protection		Conforming to IEC 60529		
Storage temperature		°C - 40...+ 70		
Operating temperature		°C - 25...+ 55		
Materials		Case: nickel plated brass for XUB 0B or PBT for XUB 0A; Lens: PMMA; Cable: PvR		
Vibration resistance		Conforming to IEC 60068-2-6		
Shock resistance		Conforming to IEC 60068-2-27		
Indicator lights		Output state		
		Supply on		
		Optical alignment aid/dirty		
Rated supply voltage		V --- 12...24 with protection against reverse polarity		
Voltage limits (including ripple)		V --- 10...36		
Current consumption, no-load		mA 35 (20 for XUB 0●●●●●T)		
Switching capacity		mA ≤ 100 with overload and short-circuit protection		
Voltage drop, closed state		V < 1.5		
Maximum switching frequency		Hz 250 (200 for diffuse with background suppression)		
Delays	First-up	ms < 200		
	Response	ms < 2 (< 2.5 for diffuse with background suppression)		
	Recovery	ms < 2 (< 2.5 for diffuse with background suppression)		

Wiring schemes

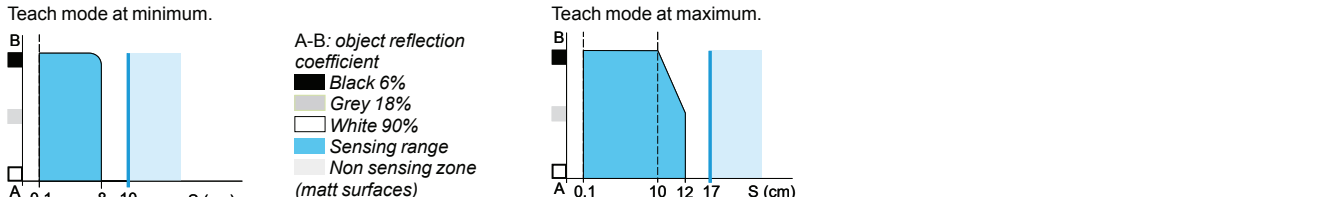
M12 connector	Pre-cabled	Receiver, PNP output	Receiver, NPN output	Thru-beam transmitter
 <p>3 (-) 1 (+) 4 OUT/Output 2 Beam break input (1)</p>	<p>(-) BU (Blue) (+) BN (Brown) OUT/Output BK (Black) Beam break input (1) VI (Violet)</p>	 <p>BN/1 PNP BU/3 BK/4</p>	 <p>BN/1 NPN BU/3 BK/4</p>	 <p>1/BN + 2/VI 3/BU =</p> <p>Input 2/VI: - not connected: beam made - connected to -: beam broken</p>

See connection on page 9/44.

Detection curves (line of sight along case axis)



Variation of usable sensing distance S_u (without accessory, with adjustable background suppression)



Dimensions

XUB	Pre-cabled (mm)		Connector (mm)	
	a	b	a	b
$\varnothing 18$, line of sight along case axis	64 (2)	44	78 (2)	44
$\varnothing 18$, line of sight 90° to case axis	78	44	92	44

(1) Beam break input on thru-beam transmitter only.
 (2) For XUB 0●●●●●T, 64 becomes 62 mm and 78 becomes 76 mm.

