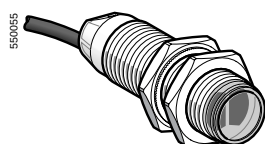


Photo-electric sensors

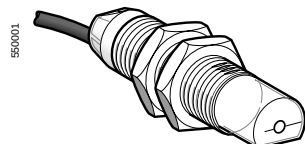
Osiris® Universal, Osiconcept® ⁽¹⁾

Design 18, metal or plastic

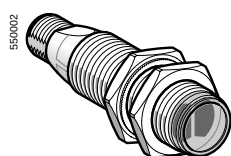
Three-wire, d.c. supply, solid-state output



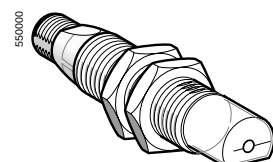
XUB 0...NL2



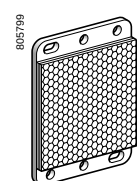
XUB 0...WL2



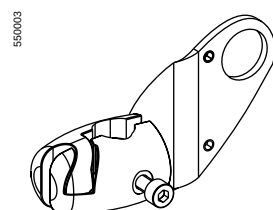
XUB 0...NM12



XUB 0...WM12



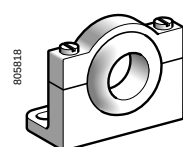
XUZ C50



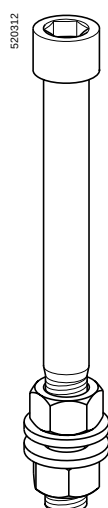
XUZ B2003



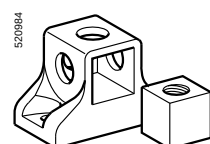
XUZ A118



XUZ A218



XUZ 2001



XUZ 2003

Ø 18 metal

Pre-cabled ⁽²⁾

Sensing distance (Sn) ⁽³⁾ m	Function	Output	Line of sight	Reference	Weight kg
0...15 depending on whether accessories are used	N/O or N/C, using Osiconcept programming	PNP	Along case axis	XUB 0BPSNL2	0.105
			90° to case axis	XUB 0BPSSL2 (5)	0.110
		NPN	Along case axis	XUB 0BNSNL2	0.105
			90° to case axis	XUB 0BNSWL2 (5)	0.110

M12 connector

0...15 depending on whether accessories are used	N/O or N/C, using Osiconcept programming	PNP	Along case axis	XUB 0BPSNM12	0.055
			90° to case axis	XUB 0BPSSWM12 (5)	0.060
		NPN	Along case axis	XUB 0BNSNM12	0.055
			90° to case axis	XUB 0BNSWM12 (5)	0.060

Accessories

Description	Connection	Line of sight	Reference	Weight kg
Thru-beam accessories	Pre-cabled (2)	Along case axis	XUB 0BKSNL2T	0.105
		90° to case axis	XUB 0BKSSL2T (5)	0.110
	M12 connector	Along case axis	XUB 0BKSNM12T	0.055
		90° to case axis	XUB 0BKSSWM12T (5)	0.060
Reflector 50 x 50 mm	—	—	XUZ C50	0.020

Ø 18 plastic

Pre-cabled ⁽²⁾

Sensing distance (Sn) ⁽³⁾ m	Function	Output	Line of sight	Reference	Weight kg
0...15 depending on whether accessories are used	N/O or N/C, using Osiconcept programming	PNP	Along case axis	XUB 0APSNL2	0.095
			90° to case axis	XUB 0APSSL2 (5)	0.100
		NPN	Along case axis	XUB 0ANSNL2	0.095
			90° to case axis	XUB 0ANSWL2 (5)	0.100

M12 connector

0...15 depending on whether accessories are used	N/O or N/C, using Osiconcept programming	PNP	Along case axis	XUB 0APSNM12	0.045
			90° to case axis	XUB 0APSSWM12 (5)	0.050
		NPN	Along case axis	XUB 0ANSNM12	0.045
			90° to case axis	XUB 0ANSWM12 (5)	0.050

Accessories

Description	Connection	Line of sight	Reference	Weight kg
Thru-beam accessories	Pre-cabled (2)	Along case axis	XUB 0AKSNL2T	0.095
		90° to case axis	XUB 0AKSSL2T (5)	0.100
	M12 connector	Along case axis	XUB 0AKSNM12T	0.045
		90° to case axis	XUB 0AKSSWM12T (5)	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
Metal bracket	XUZ A118	0.045
Mounting bracket adjustable with ball-joint	XUZ A218	0.035

⁽¹⁾ For further information on Osiconcept, see page 37011/2.

⁽²⁾ For a 5 m long cable, replace L2 with L5.

For example, XUB 0BPSNL2 becomes XUB 0BPSNL5.

⁽³⁾ For further information, see page 37000/3.

⁽⁴⁾ For further information, see page 37012/2.

⁽⁵⁾ For line of sight 90° to case axis versions, see the sensing distances on page 37000/3.

Characteristics

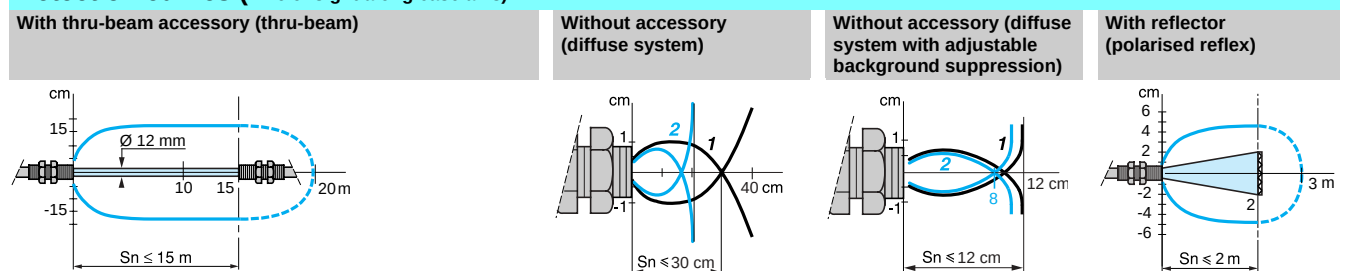
Sensor type		XUB 0●●●●M12, XUB 0●●●●M12T	XUB 0●●●●L2, XUB 0●●●●L2T
Product certifications		UL, CSA, C€	
Connection	Connector	M12	—
	Pre-cabled	—	Length 2 m
Sensing distance nominal Sn / maximum (excess gain = 2) (excess gain = 1)		Line of sight along case axis	Line of sight 90° to case axis
		m	0.12 / 0.12
		m	0.3 / 0.4
		m	2 / 3
		m	15 / 20
			Accessory
			Without (diffuse system with adjustable background suppression)
			Without (diffuse system)
			With reflector (polarised reflex)
			With thru-beam accessory (thru-beam)
Type of transmission		Infrared, except for polarised reflex (red)	
Degree of protection	Conforming to IEC 60529	IP 67, double insulation □	
Storage temperature range	°C	- 40...+ 70	
Operating temperature range	°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	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 XUB 0●●●●●T)	
	Supply on	Green LED	
	Instability	Red LED (except for XUB 0●●●●●T)	
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	
Delays	First-up	ms	< 200
	Response	ms	< 2
	Recovery	ms	< 2

Connections

M12 connector	Pre-cabled	PNP	NPN	Thru-beam accessory
	(-) BU (Blue) (+) BN (Brown) OUT/Output BK (Black) Beam break test VI (Violet)			

See connection on page 30210/2.

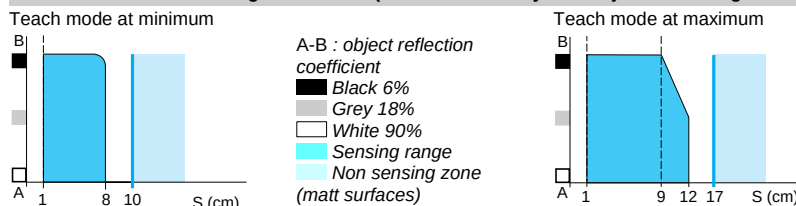
Detection curves (Line of sight along case axis)



Object: 10 x 10 cm, 1: white 90%, (2) grey 18%

With reflector XUZ C50

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



Dimensions

XUB		Pre-cabled (mm)	Plug-in connector (mm)
		a	b
	Ø 18 line of sight along case axis	64 (2)	78 (2)
	Ø 18 line of sight to case axis	78	92

(1) For further information on Osiconcept, see page 37011/2.

(2) For XUB 0●●●●●T, 64 becomes 62 mm and 78 becomes 76 mm.