

XUB Tubular Sensors

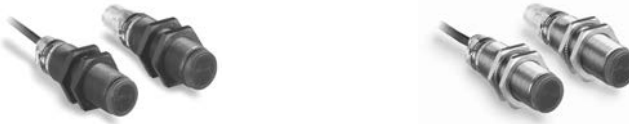


Table 20.1: XUB Tubular Sensors

XUB Tubular Sensors		XUB-A 18 mm plastic	XUB-B 18 mm metal
Usable sensing distance	Proximity diffuse (adjustable)	0.6 m (2.0 ft)	0.6 m (2.0 ft)
	Polarized retroreflective	2 m (6.6 ft)	2 m (6.6 ft)
	Retroreflective	4 m (13.1 ft)	4 m (13.1 ft)
	Thru-beam	15 m (49 ft)	15 m (49 ft)
Mounting (mm)		M 18 x 1	M 18 x 1
Enclosure: M (metal), P (plastic) / Dimensions (mm) Ø x L or W x H x D		P / M 18 x 46	P / M 18 x 46
Setup LEDs		—	—
Temperature range		-25 to +55 °C (-13 to +131 °F)	
Degree of protection (conforming to IEC 60529):		IP65; IP67 double insulation; IP69K double insulation (M12 only)	

Table 20.2: Sensors for DC Applications (Solid State Output: Transistor)

Connection		Precabled, PvR, 2 m [1]	M12 connector	Precabled, PvR, 2 m [1]	M12 connector	
		Catalog No.	Catalog No.	Catalog No.	Catalog No.	
Receiver or Transmitter/Receiver, 3-wire PNP [2]	Proximity diffuse, adjustable	N.O.	XUB5APANL2	XUB5APANM12	XUB5BPANL2	XUB5BPANM12
		N.C.	XUB5APBNL2	XUB5APBNM12	XUB5BPNL2	XUB5BPNM12
	Polarized retroreflective	N.O.	XUB9APANL2	XUB9APANM12	XUB9BPANL2	XUB9BPANM12
		N.C.	XUB9APBNL2	XUB9APBNM12	XUB9BPNL2	XUB9BPNM12
	Retroreflective	N.O.	XUB1APANL2	XUB1APANM12	XUB1BPANL2	XUB1BPANM12
		N.C.	XUB1APBNL2	XUB1APBNM12	XUB1BPNL2	XUB1BPNM12
	Thru-beam	N.O.	XUB2APANL2R	XUB2APANM12R	XUB2BPANL2R	XUB2BPANM12R
		N.C.	XUB2APBNL2R	XUB2APBNM12R	XUB2BPNL2R	XUB2BPNM12R
Transmitter		XUB2AKSNL2T	XUB2AKSNM12T	XUB2AKSNL2T	XUB2AKSNM12T	
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				

Table 20.3: Metal Body Sensors for Two-Wire AC [3] or DC Applications (Solid-State Output: Transistor)

Connection		Precabled, PvR, 2 m [1]	1/2"-20UNF Connector	
		Catalog No.	Catalog No.	
System	Diffuse with adjustable background suppression	NO	XU8M18MA230	XU8M18MA230K
		NC	XU8M18MB230	XU8M18MB230K
	Diffuse	NO	XU5M18MA230	XU5M18MA230K
		NC	XU5M18MB230	XU5M18MB230K
	Polarized retroreflective [4]	NO	XU9M18MA230	XU9M18MA230K
		NC	XU9M18MB230	XU9M18MB230K
	Thru-beam[5]	NO	XU2M18MA230	XU2M18MA230K
		NC	XU2M18MB230	XU2M18MB230K
Rated supply voltage (Vac/Vdc)		24–240	24–240	
Switching frequency (Hz)		25	25	
Switching capacity (mA) [3]		10–200	10–200	

Table 20.4: Accessories

	mm	Catalog No.	
Reflectors	24 x 21	XUZC24	
	Ø 80	XUZC80	
	50 x 50	XUZC50	
	100 x 100	XUZC100	
Mounting brackets for XUB	Material	Catalog No.	
	Die Cast Zinc	XUZA118	
	Plastic	XUZA218	
Cables, 2 m, without LED [6]	90°	Straight	
	Catalog No.	Catalog No.	
	M8 (4-Pin)	XZCP1041L2	XZCP0941L2
	M12 (4-pin)	XZCP1241L2	XZCP1141L2
Suitable plug-in female connectors, including pre-wired versions	1/2"-20UNF	XZCP1965L2	XZCP1865L2

[1] For a 5 m cable, change L2 to L5. For example, XUB5APANL2 becomes XUB5APANL5.
 [2] For version with NPN output, change "P" to "N". For example: XUB1APANL2 would become XUB1ANANL2.
 [3] These sensors do not incorporate overload or short-circuit protection. A 0.4 A fast-acting fuse should be connected in series with the load.
 [4] A 50 x 50 mm reflector XUZC50 is included with a polarized retroreflective system.
 [5] Includes a thru-beam transmitter and receiver.
 [6] For 5 or 10 meter lengths, replace 2 in the cable catalog number with 5 or 10.