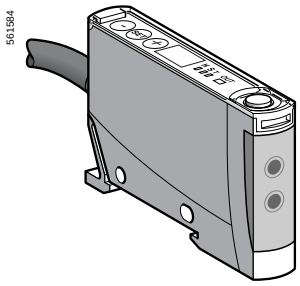
Photo-electric sensors

Osiris® Universal and Optimum

Fibre design, amplifiers

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

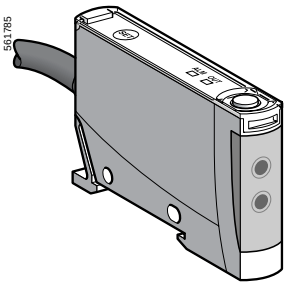
Teach mode



XUD A2

Universal amplifiers (with fine adjustment and 4-digit screen)

Sensing distance (Sn) m	Function	Output	Connection (pre-cabled or connector)	Reference	Weight kg
Depending on fibre used	NO/NC Programmable switching	PNP	Pre-cabled	**XUD A2PSML2**	0.040
			M8 connector	**XUD A2PSMM8**	0.040
		NPN	Pre-cabled	**XUD A2NSML2**	0.040
			M8 connector	**XUD A2NSMM8**	0.040



XUD A1

Optimum amplifiers

Sensing distance (Sn) m	Function	Output	Connection (pre-cabled or connector)	Reference	Weight kg
Depending on fibre used	NO/NC Programmable switching	PNP	Pre-cabled	**XUD A1PSML2**	0.040
			M8 connector	**XUD A1PSMM8**	0.040
		NPN	Pre-cabled	**XUD A1NSML2**	0.040
			M8 connector	**XUD A1NSMM8**	0.040

Photo-electric sensors

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Teach mode

Characteristics

Sensor type			XUD A1●●SMM8, XUD A2●●SMM8	XUD A1●●SML2, XUD A2●●SML2
Product certifications			CE, cURus	
Connection	Connector		M8	–
	Pre-cabled		–	Length 2 m
Sensing distance (Sn)			**Depending on fibre used**, see page 30131/2 and sensing distance divided by 2 for **XUD A2** configured for rapid frequency	
Adjustable sensitivity			Teach mode on **XUD A1**, Teach mode and fine adjustable by +/- key and 4-digit screen on **XUD A2**	
Type of transmission			Red	
Degree of protection	Conforming to IEC 529		IP 65 with Ø 2 mm fibre (IP 64 with Ø 1 mm fibre)	
Storage temperature range		**°C**	- 30…+ 70	
Operating temperature range		**°C**	- 10…+ 55 for **XUD A1** - 10…+ 40 for **XUD A2**	
Vibration resistance	Conforming to IEC 60068-2-6		7 gn, amplitude ± 0.5 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	
	Instability		Red LED for **XUD A1**	
	Stability		Green LED for **XUD A2**	
Signal level			By 7-segment / 4 digit display for **XUD A2**	
Rated supply voltage		**V**	⎓ 12…24 with protection against reverse polarity	
Voltage limits (including ripple)		**V**	⎓ 10.8…26.4	
Current consumption, no-load		**mA**	⩽ 50	
Switching capacity		**mA**	⩽ 100 mA with overload and short-circuit protection	
Alarm output		**mA**	⩽ 50 mA for **XUD A2** with overload and short-circuit protection	
Protection against mutual interferences			Yes for **XUD A2**	
Voltage drop, closed state		**V**	⩽ 2 for **XUD A●P●●●●**, ⩽ 1 for **XUD A●N●●●●●**	
Maximum switching frequency		**kHz**	1 kHz for **XUD A1**, 1 or 5 kHz configurable for **XUD A2**	
Time delay		**ms**	0 or 40 on recovery for **XUD A2**	
Delays	First-up	**ms**	< 120	
	Response	**ms**	< 0.5 (0.1 for **XUD A2** in rapid frequency mode)	
	Recovery	**ms**	< 0.5 (0.1 for **XUD A2** in rapid frequency mode)	

XUD A2 connections

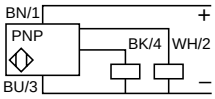
M8 connector

1(+)
3 (-)
4 (OUT/output)
2 (alarm)

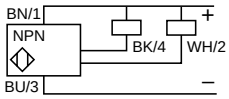
Pre-cabled

BN Brown (+)
BU Blue (-)
BK Black (output)
WH White (alarm)
(WH only on **XUD A2**)

PNP



NPN



XUD A1 connections

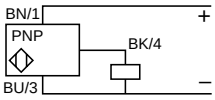
M8 connector

1(+)
3 (-)
4 (OUT/output)
2

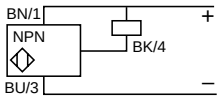
Pre-cabled

BN Brown (+)
BU Blue (-)
BK Black (Output)

PNP



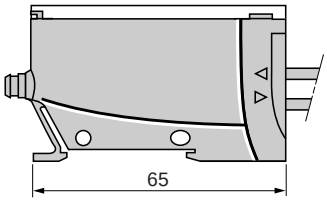
NPN



See connection on page 30210/2

Dimensions

XUD A●



XUD A1

XUD A2