

Ultrasonic Thru Scan, PNP Output Types UA18CLS..POM1, UA30CLS25POM1

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- Cylindrical M18 and M30 polyester housing
- Sensing distance: 100-600 mm, 200-1500 mm or 300-2500 mm
- Power supply: 18 to 30 VDC
- Output: Transistor PNP, normally open, 500 mA
- 8° beam angle
- Protection: Short-circuit, reverse polarity, transients
- Protection degree IP 67
- Pig tail M12 (UA18) or plug M12 (UA30)

Product Description

A family of thru scan ultrasonic sensors with sensing range from 100-600 mm, 200-1500 mm and 300-2500 mm with repeatability as low as 0.2 %. Set point is adjustable by potentiometer and output is PNP with NO switching. The family is ideal to use in defining if objects are within defined window and is ideal

for detection of any material independent of material, colour, light or smoke. Due to use of microprocessor control the digital filtering makes the sensor immune to most electromagnetic interferences. The control input enables synchronisation in an easy way.

Ordering Key

UA 18 CLS 15 PO M1

Ultrasonic sensor	_____
Housing style	_____
Housing size	_____
Housing material	_____
Housing length	_____
Detection principle	_____
Sensing distance	_____
Output type	_____
Output configuration	_____
Connection	_____

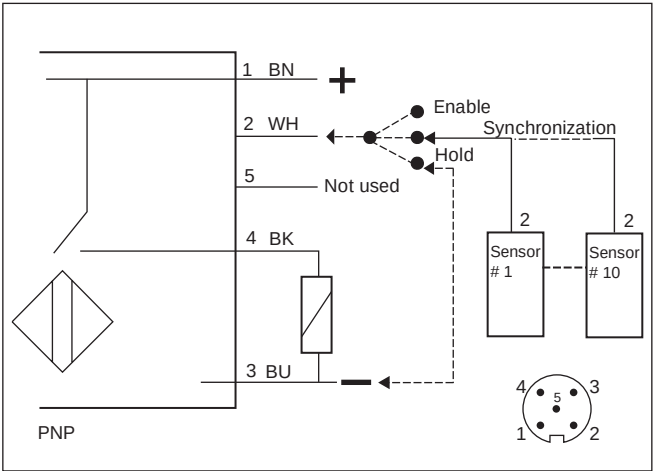
Type Selection

Housing diameter	Body style	Connec-tion	Rated operating dist. (S _n)	Ordering no. Transistor PNP, normally open
M18	Long	Pig tail, M12	100-600 mm	UA 18 CLS 06 PO M1
M18	Long	Pig tail, M12	200-1500 mm	UA 18 CLS 15 PO M1
M30	Long	Plug M12	300-2500 mm	UA 30 CLS 25 PO M1

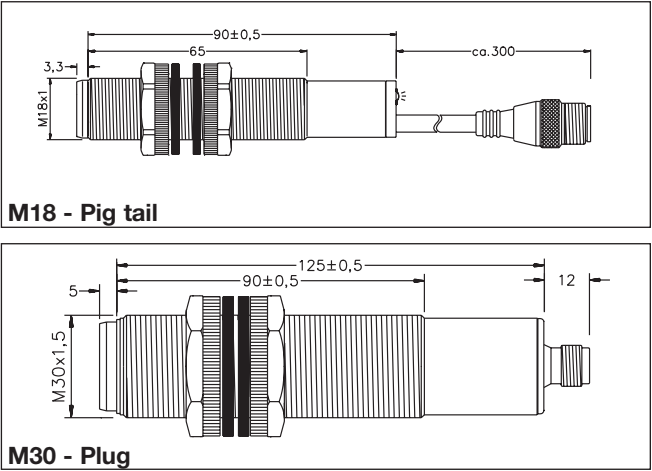
Specifications

Rated operational volt. (U_e)	18 to 30 VDC (ripple included)	Voltage drop (U_d)	2.5 V
Ripple	≤ 10%	Off-state current (I_r)	300 μA
Output current (I_o)	max. 500 mA (continuous)	Hysteresis (H) (differential travel)	Approx. 2%
No-load supply current (I_o)	≤ 35 mA	Temperature compensation	Yes
Protection	Short-circuit, transients and reverse polarity	Beam angle	8°
Rated insulation voltage	> 1 kV	Ambient temperature Operating Storage	-15° to +70°C (5° to +158°F) -25° to +75°C (-13° to +167°F)
Rated operating distance		Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
UA18CLS06 ...	100-600 mm	Housing material	Polyester PBTP
UA18CLS15 ...	200-1500 mm	Connection	
UA30CLS25 ...	300-2500 mm	Pig tail	M12, 4-pin
Adjustment of position	Potentiometer	Plug	M12, 4-pin
Output	Transistor PNP, normally open (NO)	Cables for plug (M1)	CONB14NF series
Operating frequency		Weight	
UA18CLS06 ...	25 Hz	UA18	57 g
UA18CLS15 ...	8 Hz	UA30	140 g
UA30CLS25 ...	1 Hz	Tightening torque	
Power-on delay	< 10 ms	UA18	2.6 Nm
Carrier frequency	180 KHz	UA30	7.5 Nm
		CE-marking	Yes

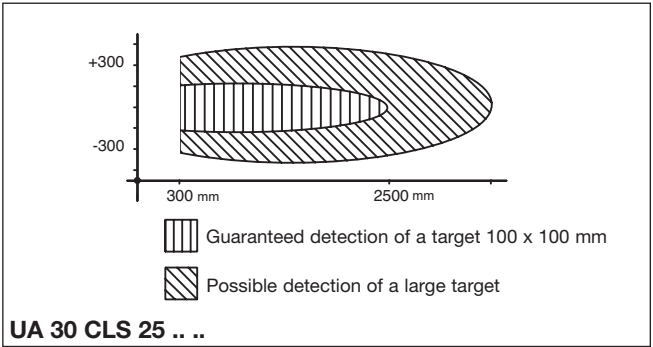
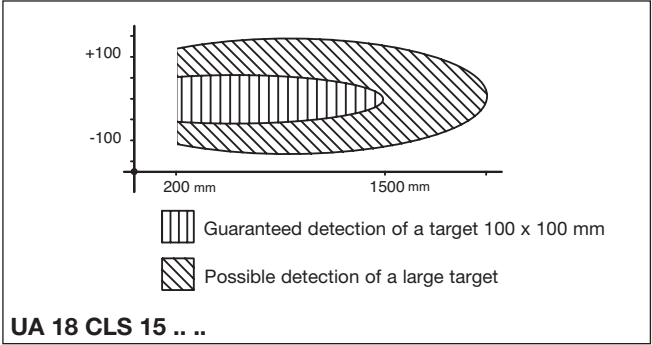
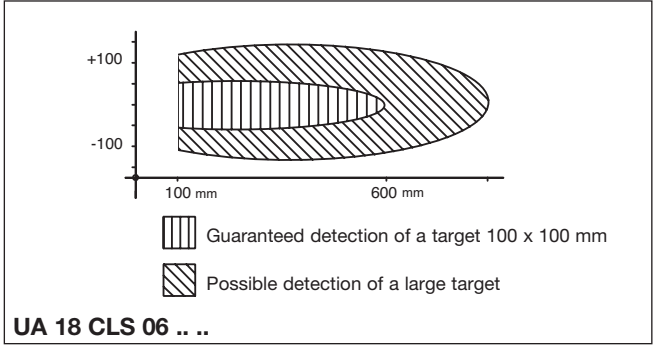
Wiring Diagram



Dimensions



Detection Range



Installation Hints

To avoid interference from inductive voltage/ current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables	Relief of cable strain Incorrect Correct The cable should not be pulled	Protection of the sensing face A proximity switch should not serve as mechanical stop	Switch mounted on mobile carrier Any repetitive flexing of the cable should be avoided
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