

Ultrasonic Sensor Head, Diffuse, 8 m Type UC 80 CND 80 FS M1, for separate Amplifier



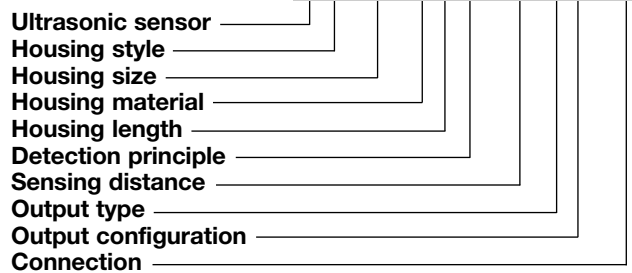
- 80 x 80 x 43 mm PET housing with thread DIN 2999R2"/11
- Sensing distance: 800-8000 mm
- Outputs: Distance to target (1. echo) and temperature
- Power supply: 19 to 30 VDC
- 30° beam angle
- Protection: Short-circuit, reverse polarity, transients
- Protection degree IP 67
- M12 plug, 5 pin

Product Description

A two-part diffuse ultrasonic sensor with a sensing range of 800-8000 mm. The sensor head requires a connection to a separate evaluation unit from which all settings can be programmed. The sensor has an extreme wide beam angle of 30° and has a high precision and repeatability as well. Both the housing and the sen-

sor are designed for tough environments. A high carrier frequency secures a precise measuring and high noise immunity. Due to use of microprocessor control the digital filtering makes the sensor very immune against most electromagnetic interferences and enables synchronisation in an easy way.

Ordering Key **UC 80 CND 80 FS M1**



Type Selection

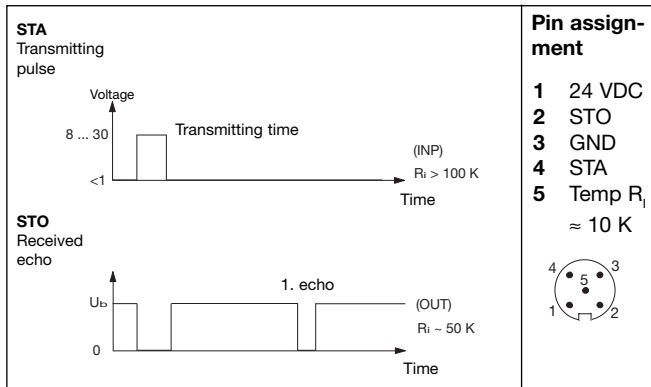
Housing dimensions	Connection	Rated operating dist. (S _r)	Outputs	Ordering no.
80 x 80 x 43 mm	Plug M12, 5 pin	800-8000 mm	Distance, temperature	UC 80 CND 80 FS M1

Specifications

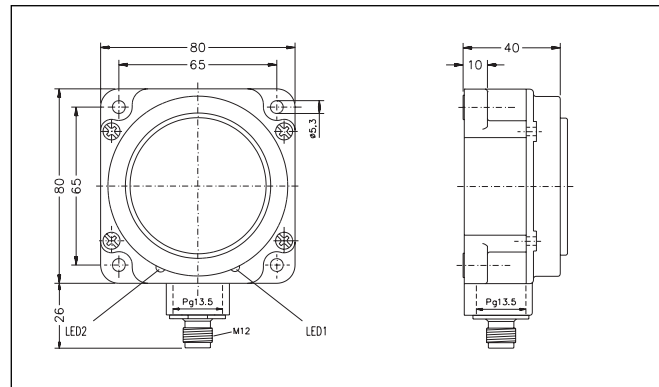
Rated operational volt. (U_e)	19 to 30 VDC (ripple included)	Temperature compensation	Yes
Ripple	≤ 10%	Beam angle	30°
No-load supply current (I_e)	≤ 50 mA	Ambient temperature	Operating: 0° to +70°C (32° to +158°F) Storage: -20° to +80°C (-40° to +176°F)
Protection	Short-circuit, transients and reverse polarity	Degree of protection	IP 67
Rated insulation voltage	> 1 kV	Housing material	PET
Input Pin 4	Transmitting pulse 8-30 VDC Ri > 100 kohm	Housing dimensions	80 x 80 x 43 mm
Output Pin 2 Distance to target Pin 5 Temperature	To apply UCEU80-1 2.93 VDC @ 20°C 10 mV/°C	Connection Plug	M12, 5-pin
Carrier frequency	65 kHz	Weight	390 g
Resolution	min. 20 mm	CE-marking	Yes
Repeatability	0.5%		
Linearity	0.5%		
Temperature deviation	1%		
Rated operating distance	800-8000 mm		



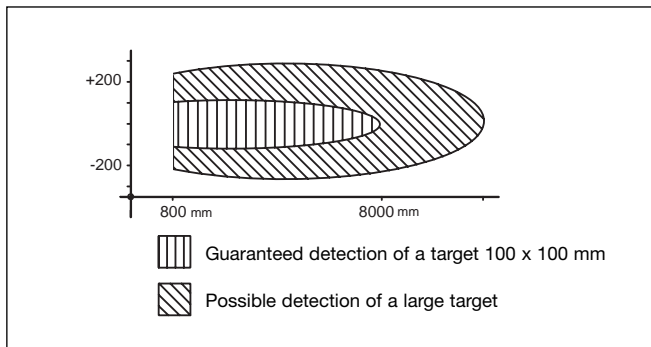
Wiring Diagram



Dimensions



Detection Range



Amplifier/Evaluation Unit

Evaluation Unit: > UCEU 80-1

Installation Hints

<p><i>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</i></p>	<p><i>Relief of cable strain</i></p> <p>Incorrect</p> <p>Correct</p> <p>The cable should not be pulled</p>	<p><i>Protection of the sensing face</i></p> <p>A proximity switch should not serve as mechanical stop</p>	<p><i>Switch mounted on mobile carrier</i></p> <p>Any repetitive flexing of the cable should be avoided</p>
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