

Ultrasonic Diffuse, Analogue Frequency Output, NPN Type UC 80 CND 40 EQ

CARLO GAVAZZI



- 80 x 80 x 43 mm polyester housing
- Sensing distance: 40-4000 mm
- Output: Analogue frequency, NPN
- Power supply: 19 to 30 VDC
- 8° beam angle
- Alignment LED
- Protection: Short-circuit, reverse polarity, transients
- Protection degree IP 67

Product Description

A diffuse ultrasonic sensor with a sensing of 400-4000 mm with an analog frequency NPN output in a range 132 Hz to 1.312 kHz. Both the housing and the sensor transducer are designed for tough environment. A high carrier fre-

quency secures a precise measuring and high noise immunity. Due to use of microprocessor control the digital filtering make the sensor very immune against most electromagnetic interferences.

Ordering Key

UC 80 CND 40 EQ

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

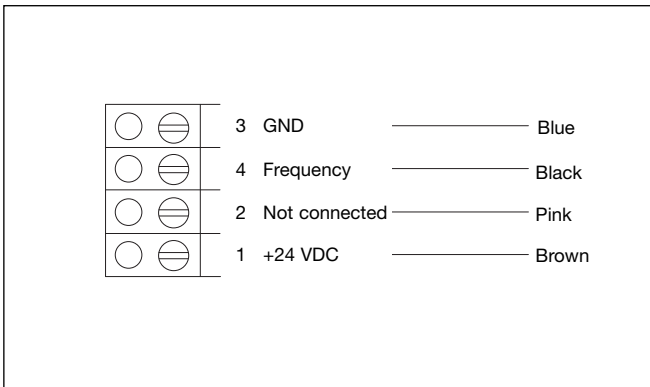
Type Selection

Housing dimensions	Connection	Rated operating dist. (S _n)	Ordering no. Analogue frequency output, NPN
80 x 80 x 43 mm	Screw terminals	400-4000 mm	UC 80 CND 40 EQ

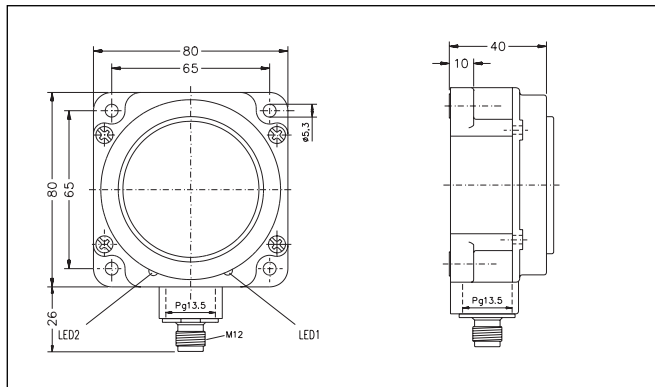
Specifications

Rated operational volt. (U_e)	19 to 30 VDC (ripple included)	Rated operating distance	400-4000 mm
Ripple	≤ 10%	Carrier frequency	120 kHz
No-load supply current (I_o)	≤ 50 mA	Beam angle	8°
Protection	Short-circuit, transients and reverse polarity	Ambient temperature	Operating: 0° to +70°C (32° to +158°F) Storage: -20° to +80°C (-4° to +176°F)
Rated insulation voltage	> 1 kV	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Temperature compensation	Yes	Housing material	Polyester PBTP
Output	Analogue frequency, NPN	Dimensions	80 x 80 x 43 mm
Resolution	min. 20 mm	Connection	Screw terminals, PG 13.5
Linearity	0.5%	Weight	250 g
Repeatability	0.5%	CE-marking	Yes
Temperature deviation	1%		
Indications			
Alignment	LED, green		
Power-on delay	< 10 ms		

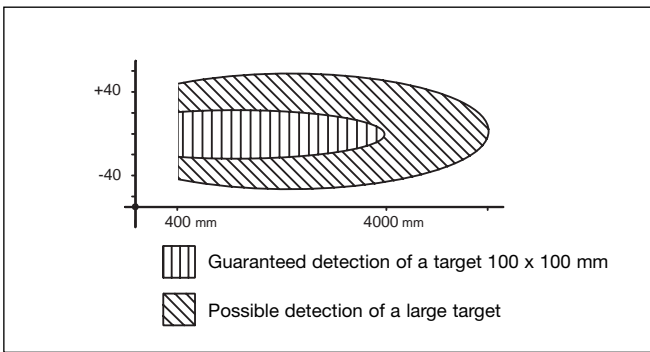
Wiring Diagram



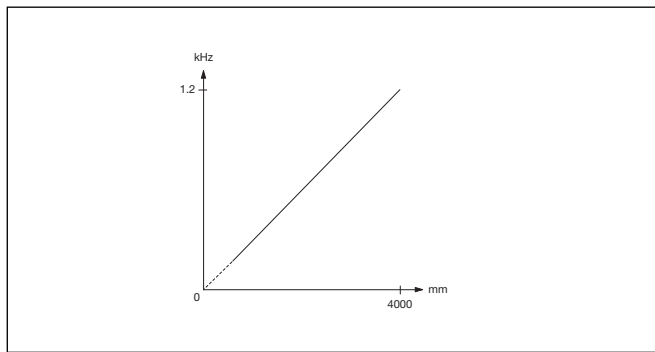
Dimensions



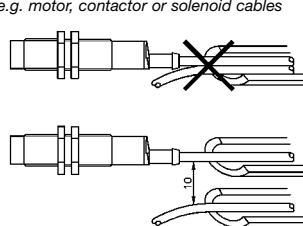
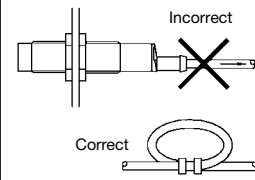
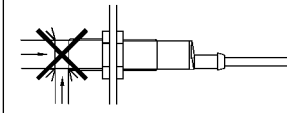
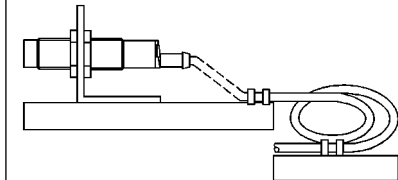
Detection Range



Function Diagram



Installation Hints

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