



QU series

Cubic through beam high range
Ultrasonic Sensors



Cubic through beam
high range

features

- Working area adjusting by external Teach-In to avoid tampering of the sensing distance
- Current or voltage analogue output
- Complete protection against electrical damages
- Plastic housing
- IP65 protection degree
- Approvals: CE



web contents



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code description

QU 6 / D 1 - 0 E

series	QU	Cubic Ultrasonic Sensor
nominal sensing distance Sn	6	600...6,000 mm
	D	Sensitivity adjustment by external Teach-In
output	1	0...10 V voltage analogue output
	2	4...20 mA current analogue output
housing type	0	Plastic housing
cable output	E	M12 plug cable exit

available models

dimension (mm)	distance (mm)	output	analogue output 0...10 V	digital output 4...20 mA
80 x 67 x 50	600...6,000	connettore M12	QU6/D1- 0E	QU6/D2- 0E



technical specifications

Cubic through beam
high range

	QU6/D1- 0E	QU6/D2- 0E
maximum sensing distance	6,000 mm	
minimum sensing distance	600 mm	
beam angle	± 8° ± 9°	
switching frequency (digital output)	-	
response time (digital output)	700 ms	
hysteresis	-	
repeatability	0.2 % ± 2 mm	
linearity error	< 0.5 %	
temperature range	- 20°C...+ 70°C	
temperature compensation	●	
operating voltage	15 - 30 Vcc	
temperature drift	< 1 %	
ripple	< 10%	
leakage current	< 10 µA	
no-load supply current	< 30 mA	
output current (digital output)	0...10 V	4...20 mA
output current (analogue output)	< 5 mA	-
maximum load resistance	-	
set point adjustment	Teach-In button	
power on delay	<1 s	
power supply protections	polarity reversal, transient	
digital output protections	short circuit (auto reset)	
analogical output protections	-	
EMC	conforming to EMC Directive, according to EN 60947-5-2	
protection degree	IP67 (EN60529) ⁽¹⁾ IP67 (EN 60529) ⁽³⁾	
housing material	PBTP PBT	
active head material	ceramics	
weight	450 g	

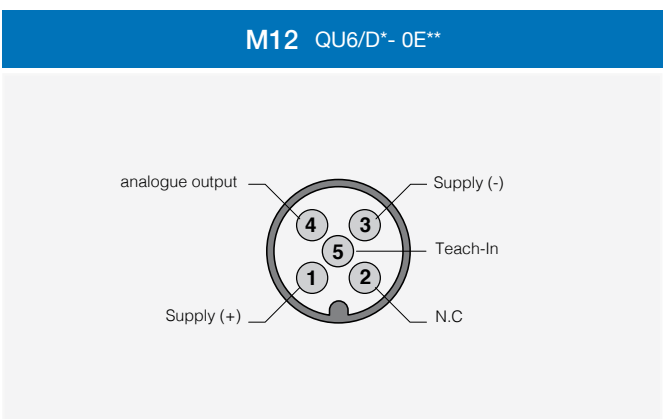
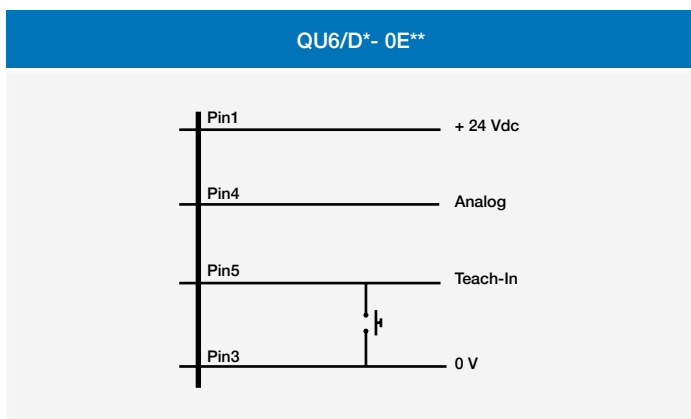
⁽¹⁾ Protection guaranteed only with plug cable well mounted

Valid for room temperature 25°C

Attention: do not expose sensor head to hot water (> 50°C) or water steam

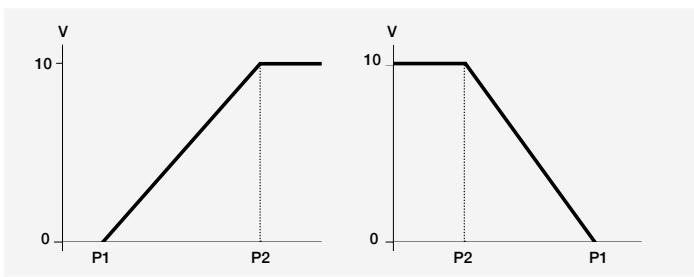
electrical diagrams of connections

plug

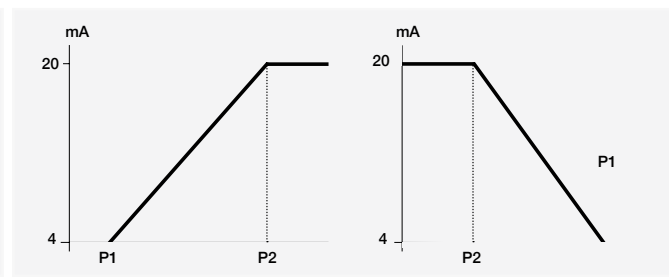


QU

models with voltage analogue output



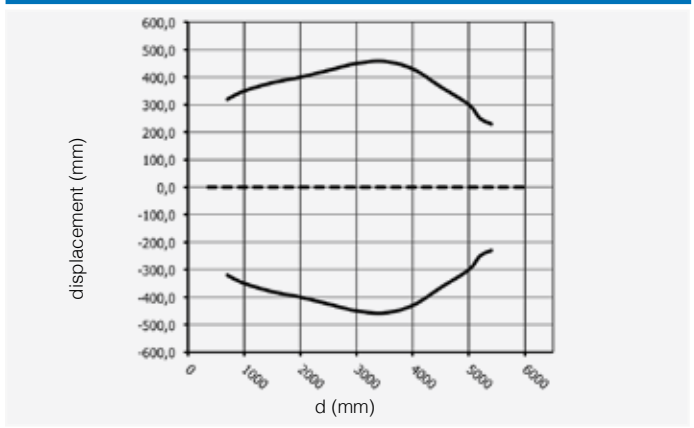
models with current analogue output



P1 e P2 are the switching points set through the Teach-In cable (pin5). The analogue output is on pin4, linear between P1 e P2. By suitably setting P1 and P2, it is possible to select a positive or negative ramp and the NC or NO status of the output.

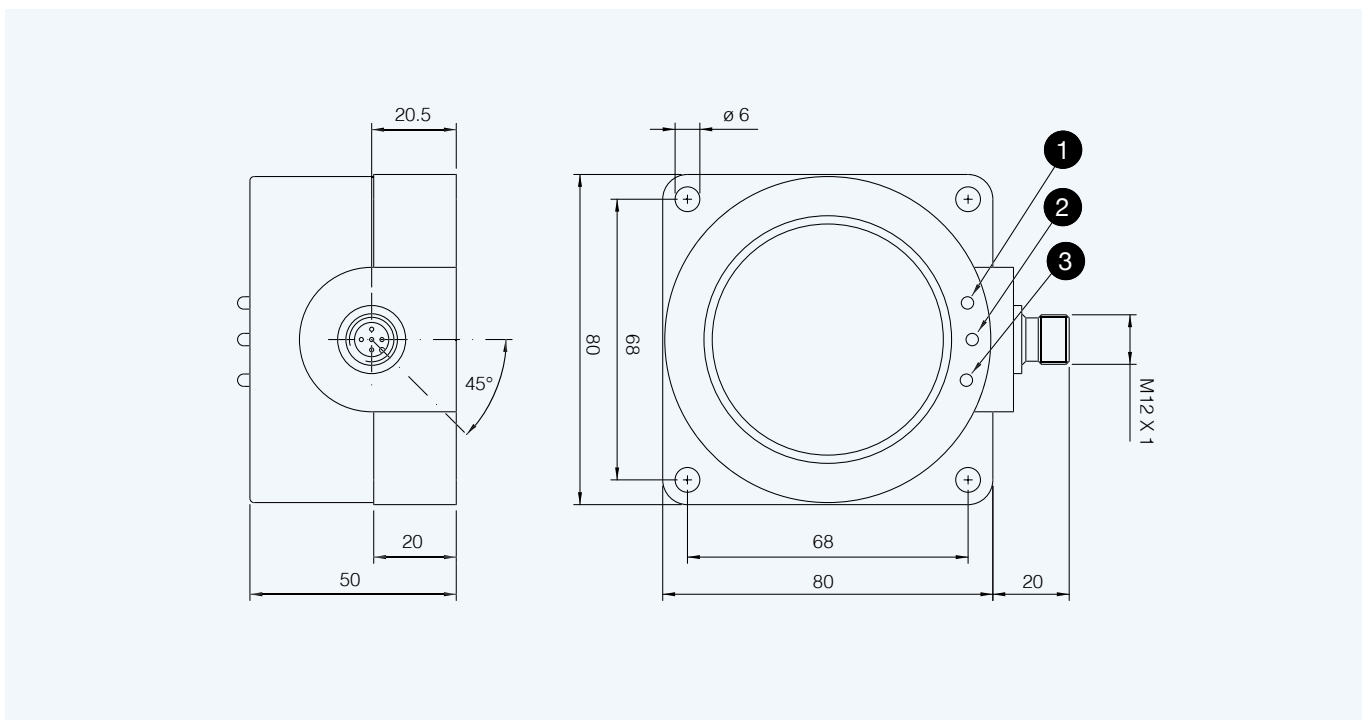
curve di risposta

parallel displacement QU6/**-**



dimensions (mm)

QU6/**-**



- 1 P2
- 2 P1
- 3 ECHO