UQ1 series

Cubic Ultrasonic Sensor with M18 head

features

- **Models with digital and analog output**
- **Models with IO-Link output**
- **Working area adjusting by Teach-in button**
- **Complete protection against electrical damages**
- **Plastic housing, M12 plug exit**



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IO-Link CE cULus

code description

UQ 1 A / G 4 - 0 E IO

series	UQ	M18 Ultrasonic Cubic Sensor
function	1	Standard housing
nominal sensing distance Sn	A	40...300 mm
	C	60...800 mm
	D	80...1.200 mm
adjustment	G	Adjustment by Teach-In button
output	4	NPN - NO/NC digital output + 4 ... 20 mA current analogue output
	6	PNP - NO/NC digital output + 4 ... 20 mA current analogue output
	7	PNP - NO/NC digital output + 0 ... 10 V voltage analogue output
	9	NPN - NO/NC digital output + 0 ... 10 V voltage analogue output
	P	IO-Link output
housing materials	0	Plastic housing
cable exit / connector	E	M12 plug cable exit
IO-Link	IO	IO-Link models

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Instrumentación | Proyectos | Servicios

available models

digital + analog mixed outputs

output	distance (mm)	adjusting	PNP + 4...20 mA	NPN + 4...20 mA	PNP + 0...10 V	NPN + 0...10 V
direct diffuse	300	yes	UQ1A/G6-0E	UQ1A/G4-0E	UQ1A/G7-0E	UQ1A/G9-0E
	800		UQ1C/G6-0E	UQ1C/G4-0E	UQ1C/G7-0E	UQ1C/G9-0E
	1.200		UQ1D/G6-0E	UQ1D/G4-0E	UQ1D/G7-0E	UQ1D/G9-0E

available models

single digital output (IO-Link models)

output	distance (mm)	adjusting	IO-Link
direct diffuse	300	yes	UQ1A/GP-0EIO
	800		UQ1C/GP-0EIO
	1.200		UQ1D/GP-0EIO

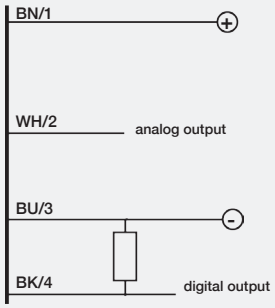
technical specifications

	UQ1A	UQ1C	UQ1D
nominal sensing distance	300 mm (1)	800 mm(2)	1.200 mm (2)
minimum sensing distance	40 mm	60 mm	80 mm
sensing range	40...300 mm	60...800 mm	80...1.200 mm
beam angle	7° ± 2°	8° ± 2°	
switching frequency	8 Hz	5 Hz	3 Hz
hysteresis	1%		
repeatibility	1%		
linearity error	< 1 %		
temperature range	- 20°...+70° C		
temperature compensation	●		
temperature drift of Sr	± 5%		
operating voltage	10…30 V		
max. ripple content	5%		
leakage current	≤ 10 µA @ 30 Vcc		
output voltage drop	≤ 2,2 V (@ IL = 100mA)		
no-load supply current	≤ 35 mA		
ouput current (digital output)	100 mA		
response time analogue output	≤ 400 ms		
power on delay (digital output)	≤ 400 ms		
short-circuit protection	● (autoreset)		
induction protection	●		
voltage reversal protection	●		
EMC	conforming to EMC Directive, according to EN 60947-5-2		
weight	30 g		
LEDs	green: echo - yellow: output		
protection degree	IP67 (EN 60529)		
housing material	PBT or PA12		
active head material	epoxy glass resin		
storage temperature	- 30°C...+ 80°		

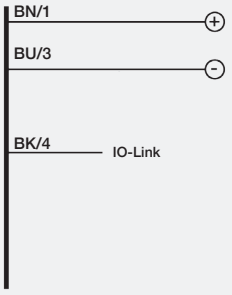
(1) Metallic target 100 x 100 mm (2) Metallic target 200 x 200

electrical diagrams of the connections

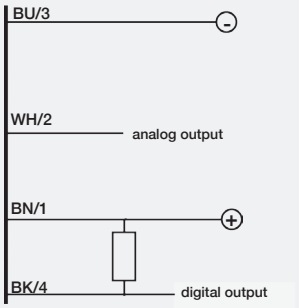
PNP NO/NC models + analog output



IO-Link output models

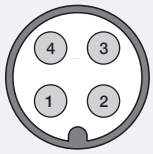


NPN NO/NC models + analog output



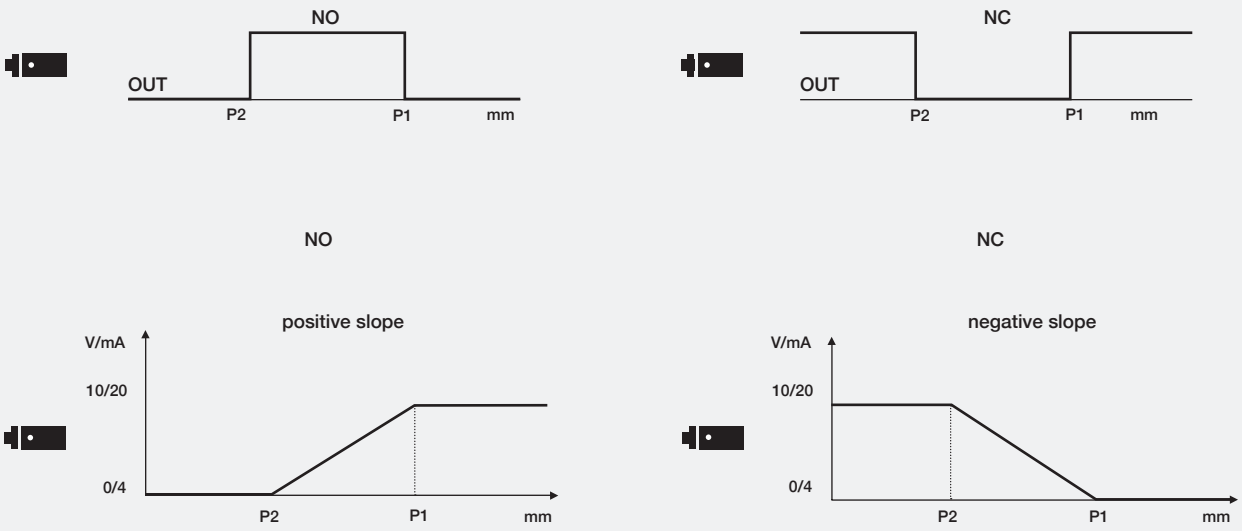
connectors

M12



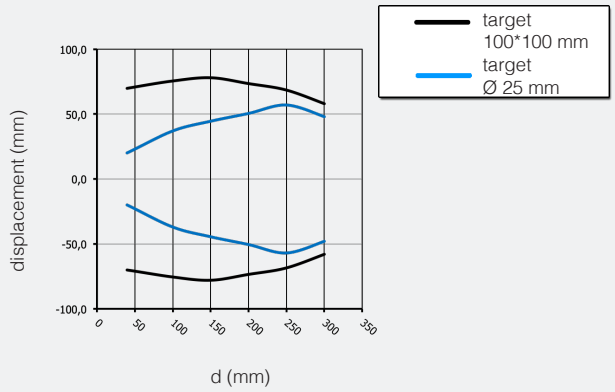
available outputs

UQ1*/**-**

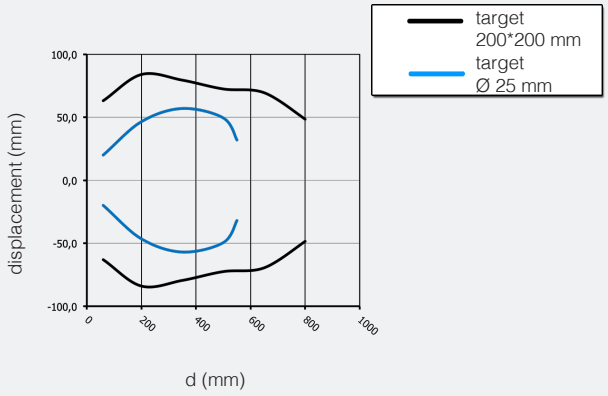


response diagrams

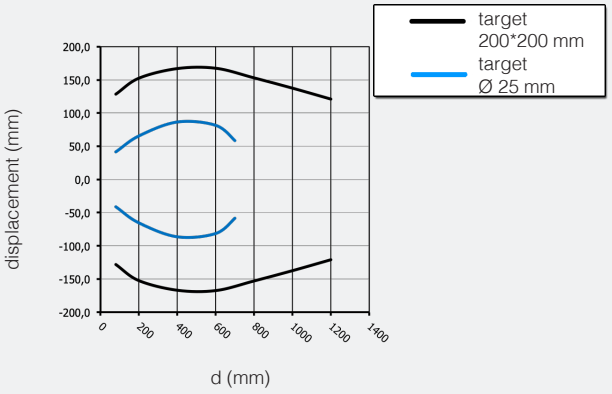
UQ1A/**-** parallel displacement



UQ1C/**-** parallel displacement

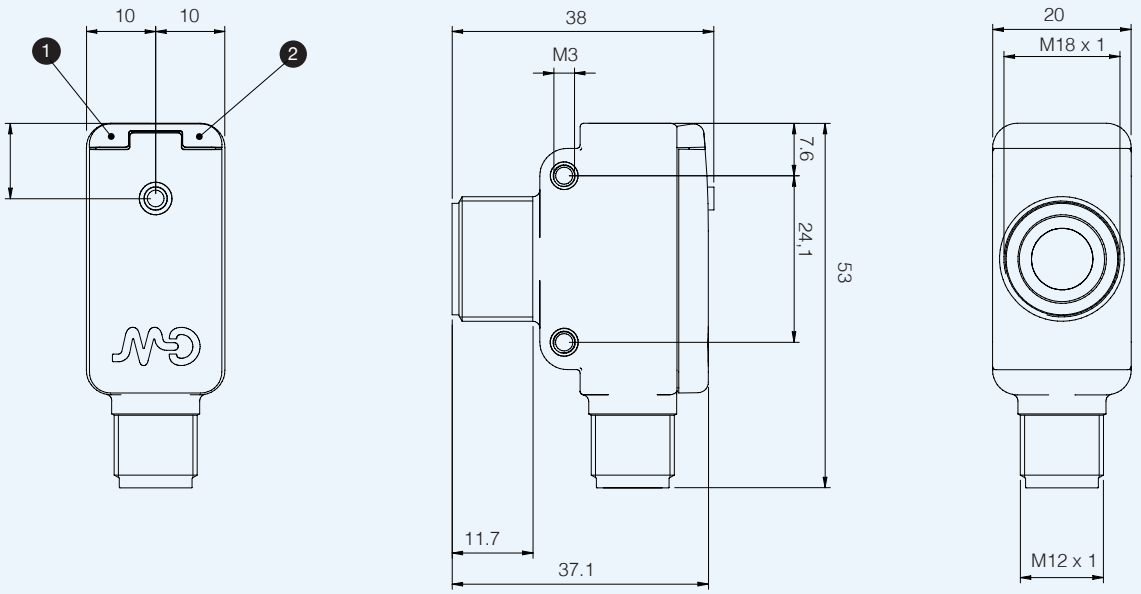


UQ1D/**-** parallel displacement



dimensions (mm)

UQ1*/ - ****

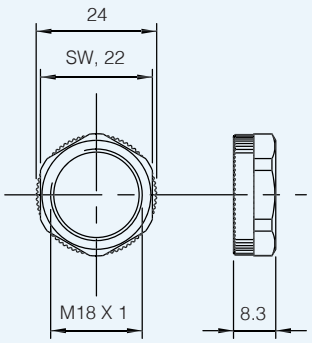


1 green LED

2 yellow LED

dimensions (mm)

included accessories



plastic
clamping ring (1x)