



Ultrasonic transmitter SonarFox® UST 10

- Non-contact level measurement of liquid and solid media
- Maintenance-free, not subject to wear and tear
- Integrated flow calculation with 32-point linearisation
- Optional switching relay for level contact or flow function



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Application For continuous, non-contact level measurement of media with a variety of consistencies and surface characteristics. Ideal for level measurement of liquids and bulk solids.

Description The SonarFox® UST 10 level indicator uses the physical properties of ultrasonic waves to determine the level. An ultrasonic wave is emitted which is reflected by objects in the cone. The time up to the reception of the reflected echo is a measure of the distance. Since the mounting position is defined, it is possible to calculate the filling level of the medium. Type, density and temperature of the medium have no effect on the measurement – the only prerequisite is a reflecting surface. Acoustically diffuse surfaces such as foam or uneven surfaces of bulk solids are not suitable or should be tested with regard to the application. Installations or stirrers below a plane surface of the medium do not affect the measurement.

Probe selection

Probe type	01, 02	11, 12	21, 22
Measuring range	0.2 – 4 m	0.25 – 6 m	0.35 – 8 m
Low tanks < 1,000 mm	+	-	-
Tanks between 1,000 mm and 4,000 mm	+	+	-
Tanks between 4,000 mm and 6,000 mm	-	+	+
Tanks between 6,000 mm and 8,000 mm	-	-	+
High tanks > 6,000 mm	-	-	+
Liquids	+	+	+
Solids	+	+	+
High-viscosity or adhesive media	+	+	+
Low-viscosity media	+	+	+
Corrosive media	+	+	+
Conductive media	+	+	+
Non-conductive media	+	+	+
Foam on the medium	-	-	-

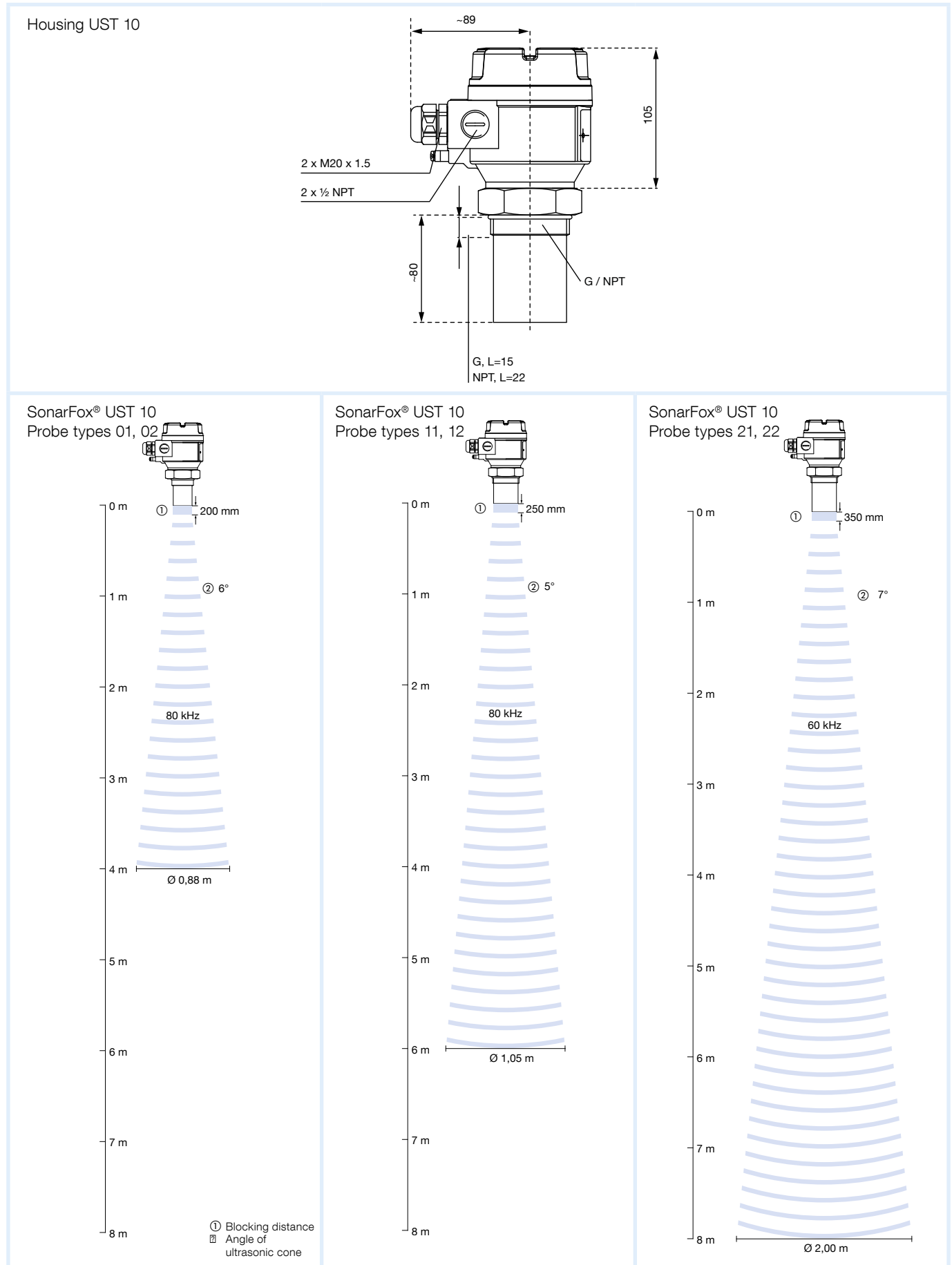
- Not suitable
- Limited suitability
- + Suitable



See page 310 for prices.

Ultrasonic transmitter SonarFox® UST 10

Types and dimensions (mm)



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Ultrasonic transmitter

SonarFox® UST 10

Technical specifications

Measuring range

Max. 8,000 mm

Measuring accuracy

0.25 %

Operating temperature range

Ambient: -25/+70 °C

Medium: -30/+90 °C

Process pressure

0.5/3 bar

Supply voltage

4–20 mA, 2-wire (12–36 V)

Power input

48–720 mW

Damping

Adjustable 6, 10 or 30 s

Electrical connection

2 x cable gland

Option

- Local display/programming display PD 10 UST



Plug-in local display/programming display **PD 10 UST**
Part no. **56210**
DG: H, PG: 4

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Ordering data

DG: H, PG: 4

Price €

1 Ultrasonic transmitter		
56200	SonarFox® UST 10	
2 Display		
O	Without local display and with window	0.00
D	With local display and with window	
3 Housing		
K	Impact-resistant plastic IP 67 (EN 60529)	0.00
4 Probe type/measuring range/frequency/process connection		
01	Measuring range 0.2–4 m, 80 kHz, G1½B, PVDF, IP 68	0.00
02	Measuring range 0.2–4 m, 80 kHz, 1½ NPT, PVDF, IP 68	0.00
11	Measuring range 0.25–6 m, 80 kHz, G2B, PVDF, IP 68	0.00
12	Measuring range 0.25–6 m, 80 kHz, 2 NPT, PVDF, IP 68	0.00
21	Measuring range 0.35–8 m, 60 kHz, G2B, PVDF, IP 68	
22	Measuring range 0.35–8 m, 60 kHz, 2 NPT, PVDF, IP 68	
5 Maximum measuring range (L)		
04000	Max. measuring range for types 01, 02 in mm, e.g. 4,000 mm	0.00
06000	Max. measuring range for types 11, 12 in mm, e.g. 6,000 mm	0.00
08000	Max. measuring range for types 21, 22 in mm, e.g. 8,000 mm	0.00
5 Output signal		
N	4–20 mA	0.00
R	4–20 mA, relay contact SPDT, 30 V 1 A DC / 48 V 0.5 A AC	

Ordering code = stock items

56200	O	K	11	06000	R
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