


Datasheet FLEX 1 standard and ATEX version

Description:

Flex1 is an airborne ultrasound flexible sensor, compatible with SDT170/200/270 and available in ATEX version for dedicated data collectors. It is delivered with removable transducers, Ø16mm and Ø10 mm, screwed at its end. The rod is bendable to fit your needs. The FlexID1 initial length is 545 mm. It may be increased to 847 mm using the extension tube or up to 1377 mm using the telescopic pole.

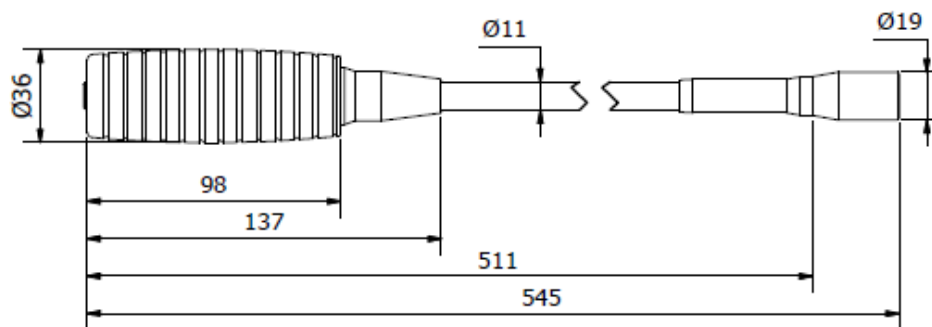


Specifications:

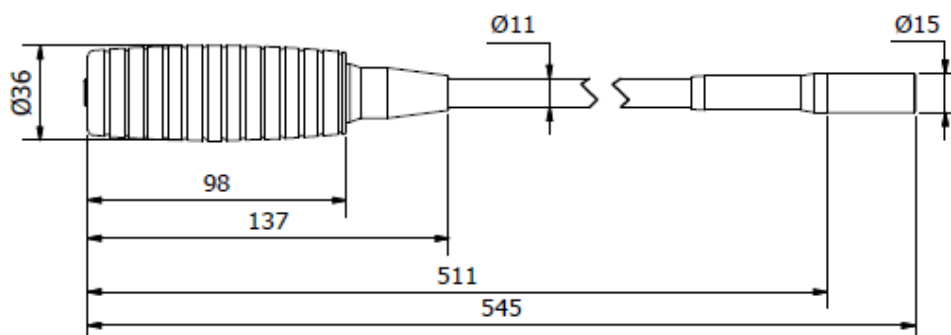
General		
Function		Airborne ultrasound sensor
Model recognition		FU.FLEX.xxx/FU.FLEXEX.xxx (ATEX)
Type		Removable resonance sensor Ø16mm Ø10mm
Compatibilities		SDT 270/200 and SDT 270A/200A
Certifications		EMC, ROHS, ATEX (see DoC)
Useful bandwidth (attenuation of 6 dB)	KHz	2.0 [38.4-40.4]
Sensitivity <i>At 40.0KHz; 0 dB = 1 volt/Pa</i>	dB	-45 with Ø16mm -55 with Ø10mm considering built-in preamplifier (+30 dB)
Typical total beam angle (- 6 dB) *at 25 °C	°	55 with Ø16mm 72 with Ø10mm
Environmental		
Operating temperature range	°C (°F)	-20 to +48 (5 to 118), non-condensing
IP rating		40
ATEX specifications To be used with SDT ATEX devices only		⊕ II(1) G / Ex ia II C T3/T2 Ga
Caution 		Risk of injury when working in electrical environment. <ul style="list-style-type: none"> Respect safety rules in place at your facility

		<ul style="list-style-type: none"> Always wear proper protective clothing and use insulated tools when around electrical hazards
Mechanical		
Housing material		Head : POM, Delrin® Flexible: stainless steel + spiral steel, Kacelit coatings Handle : anodized Aluminium+ screw handle in PVC, Kraton (NBR for ATEX)
Dimensions	mm (in)	545 mm / 21.8 in 847 mm / 32.2 in with Extension Tube 1377 mm / 54.2 in with Telescopic Pool Handle
Weight	g (oz)	336 grams / 11.8 oz 466 grams / 16.4 oz with Extension Tube 604 grams / 21.3 oz with Telescopic Pool Handle
Interface		BNC connector

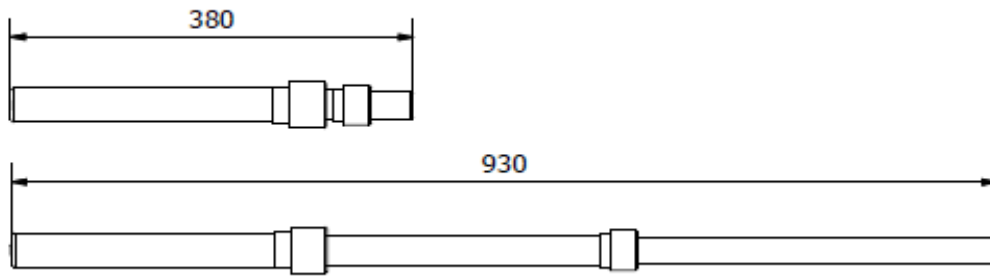
Mechanical drawings:



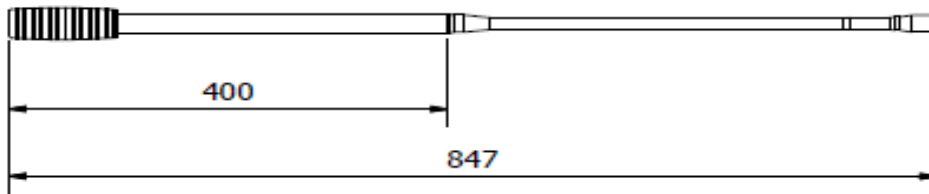
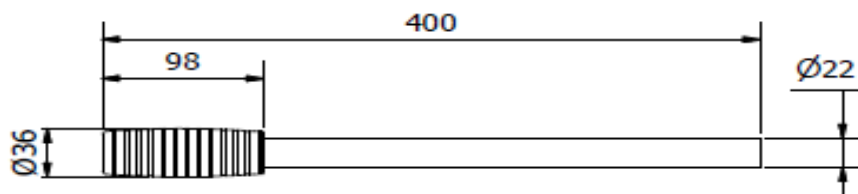
FLEX with transducer \varnothing 16mm



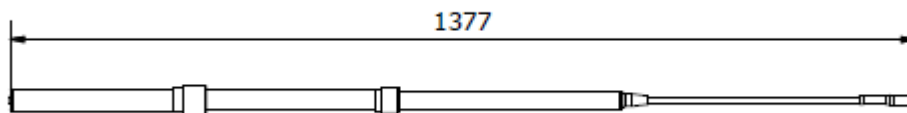
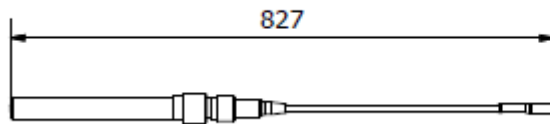
FLEX with transducer \varnothing 10mm



FU.TEP.001 - Telescopic Poolhandle



FU.FLX2.001--01 – Flex mounted on the telescopic pole



FU.FLX2.001--01 – FLeX with Extension Tube

NB: Additional specifications can be found from the download section of SDT web site: www.sdtultrasound.com

Safety recommendations:

- Do not expose the equipment to rough handling or heavy impacts.
- Always read and follow the user manual.
- Opening the housing of the instrument may result in hazardous mishandling and voids warranty.
- The equipment should not be used in areas where there is a risk for explosion.
- Do not expose the equipment to high humidity or direct contact with water.
- All repair work must be performed by SDT
- Using any other headset or any sensor than the one supplied with the instrument can cause internal damage

4	CMA 2021/06/04	General update including ATEX version	CGR
3	CMA 2021/03/01	New layout,	CGR
2	AKP 2017/07/19	New layout, additional picture, adding temperature range & material	CGR
1	AKP 2017/05/19	Original version	CGR
Ver.	Editor	Nature of modification	Verified

*The information herein is believed to be accurate to the best of our knowledge.
Due to continuous research and development, specifications are subject to change without prior notice.*