

## Threaded RS2T Datasheet (both IP versions)

### Description:

RS2T sensors are advanced ultrasound-sensitive contact probes designed for handheld use with compatible SDT instruments. The core component of the RS2T sensor is a piezoelectric ceramic transducer, which is adhered to a mechanical resonant structure. Thanks to its embedded conditioning electronics, this configuration allows the sensor to effectively detect and convert ultrasound vibrations into measurable electrical signals. The sensor interface is a 7-pin female LEMO connector mounted in an aluminum cover, offering two IP ratings. The sensor is mounted on an asset using provided accessories

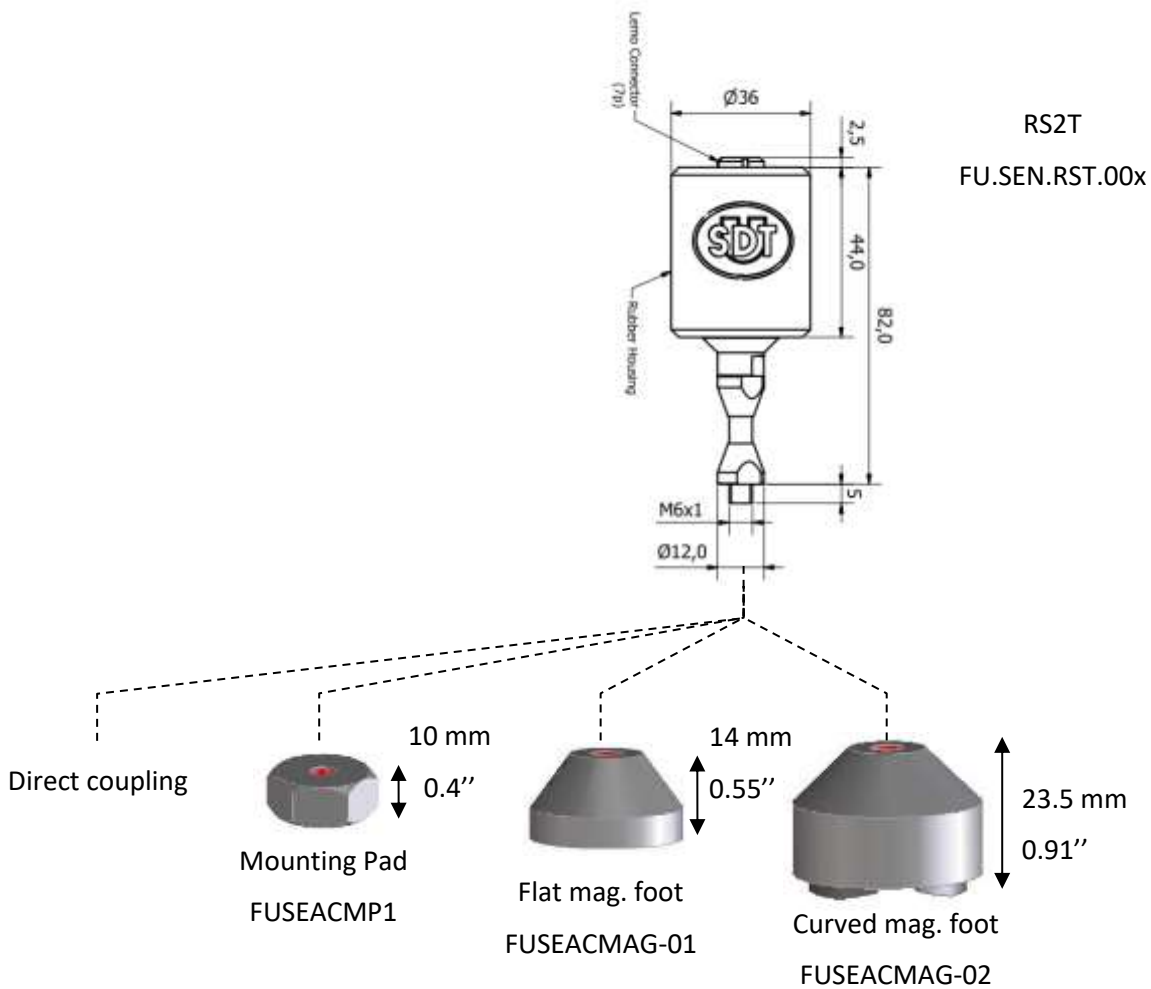
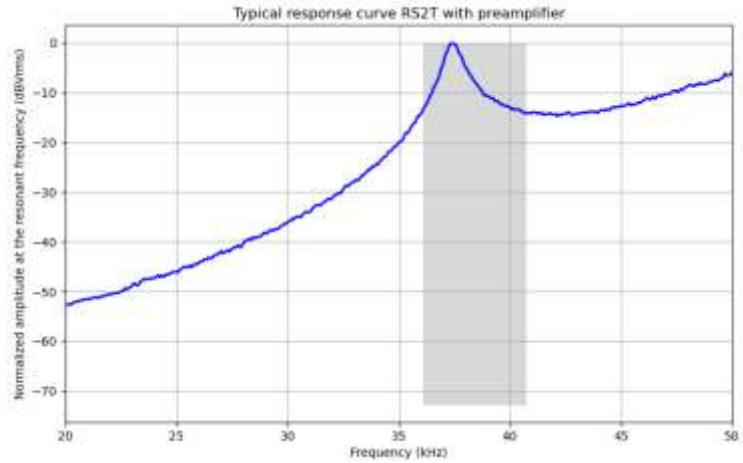
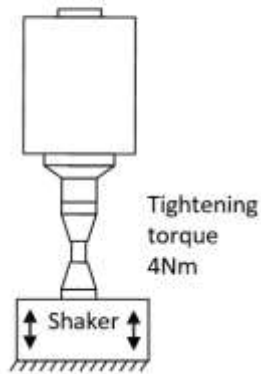


### Specifications:

General		
Function		Ultrasound resonant contact sensor
Type		Threaded
Model recognition		FU.SEN.RS2T.00X
Serial number		SN 532/6 YY XXXX
Certifications		EMC, ROHS (see DoC)
Center frequency (at 20°C)	kHz	37.0 ± 0.5
Thermal deviation of the center frequency	Hz/°C	-10
Measurement bandwidth	kHz	[36.1-40.7]
RMS sensitivity	dB, V/g	6.4 dB ±2 dB, ref: 0 dB=1V/g
Built-in gain	dB	+30
Environmental		
Operating temperature range	°C (°F)	-15 to +60 (5 to 140), non-condensing
IP rating ( <b>guaranteed with the compatible provided cables</b> )		50 (FU.SEN.RS2T.001) 65 (FU.SEN.RS2T.002)
Mechanical		
Housing material		303 Stainless steel and Aluminum (front plate)
Holster material		Nitrile Butadiene Rubber
Dimensions	mm (in)	Ø32 (1.26) x 88 (3.46)
Mass	g (oz)	126 (4.44)
Connector		LEMO 7 female
Thread type		M6x1 (length: 5 mm)
Recommended mounting torque	N.m (lbf.in)	4 (35.4)

NB: Additional specifications are available in the download section of SDT web site: [www.sdtultrasound.com](http://www.sdtultrasound.com)

**Test conditions**



**The foot is a part of the resonant structure, please do not disassemble it!**

## Available Accessories:

FUCABLSPLE7LE7	Spiral cable with 2 male 7-pole LEMO connectors
FUSEACMAG-01	Flat Magnetic Foot
FUSEACMAG-02	Curved Magnetic Foot
FUSEACMP1	Mounting pad

## Safety recommendations:

- Risk of injury when working in electrical environment.
- Adhere to all safety rules and regulations in your facility.
- Always wear proper protective clothing and use insulated tools when around electrical hazards.
- Do not expose the equipment to rough handling or heavy impacts.
- Always read and follow the user manual.
- Opening the sensor housing may lead to incorrect measurements and void the warranty.
- The equipment should not be used in areas where there is a risk of explosion.
- Do not expose the equipment to high humidity or direct contact with water.
- All repairs must be performed by either SDT or an authorized service provider.

4	CMA 03/07/2024	Operating T° range + sensitivity curve	CGR
3	CMA 27/01/2021	New layout + additional info	CGR
2	-	Modified version	-
1	-	Original version	-
<b>Ver.</b>	<b>Editor</b>	<b>Nature of modification</b>	<b>Verified</b>

*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.*