

Commercial document

DC.CP2.DAT.004

Threaded RS2T Datasheet (both IP versions)

Description:

RS2T are ultrasound resonant sensors optimized for condition monitoring.RS2T consists of a PZT piezoelectric ceramic glued on a mechanical resonant structure. RS2T is housed in stainless steel and further protected in a Nitrile Butadiene Rubber cover. 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

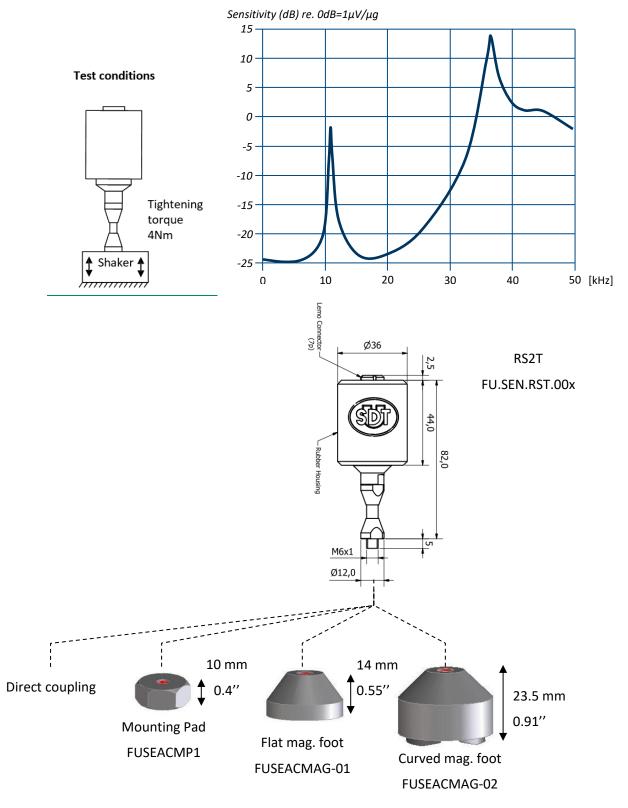


Specifications:

General			
Function		Ultrasound contact sensor	
Model recognition		FU.SEN.RS2T.00x	
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	[36.1-40.4]	
RMS sensitivity within the bandwidth	dB,	6.4 dB ±2 dB, ref = 0 dB=1V/g	
	V/g		
Built-in gain	dB	+30	
Environmental			
Operating temperature range °C (°F)		-10 to 40 (14 to 104)	
IP rating (guarantees with the provided cables)		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	Ø32 (1.26) x 88 (3.46)	
	(in)		
Weight	g (oz)	126 (4.44)	
Connector		LEMO 7 female	
Thread type		M6 x 5 mm (~0.2)	
Recommended mounting torque	N.m	4 (35.4)	
	(lbf.in)		

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

NB: Additional specifications are available from the download section of SDT web site: www.sdtultrasound.com



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.



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:

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

3	CMA 27/01/2021	New layout + additional info	CGR
2	-	Modified version	-
1	-	Original version	-
Ver.	Editor	Nature of modification	Verified

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