Ultrasound Solutions

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

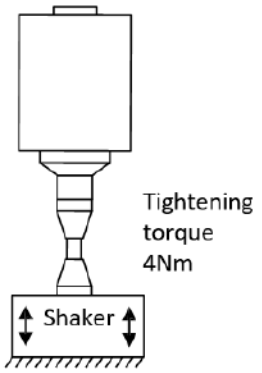
Specifications:

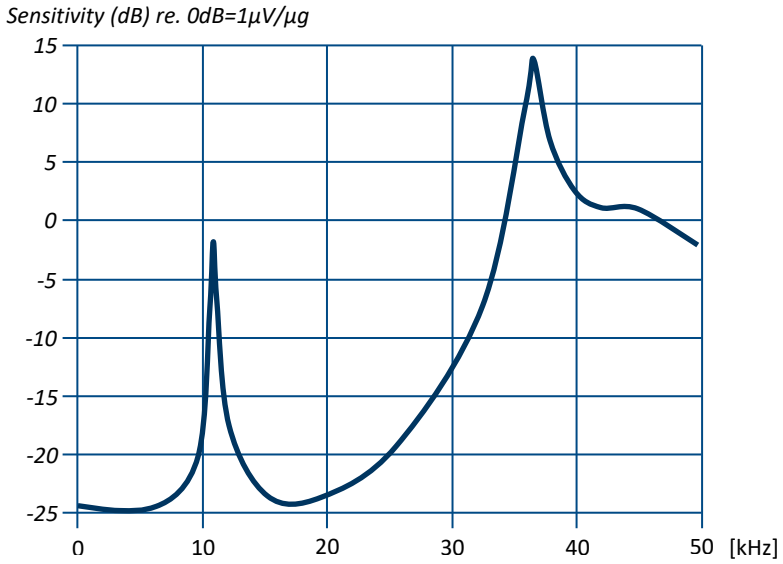
General		
Function		Ultrasound contact sensor
Model recognition		FU.SEN.RS2T.00x
Certifications		EMC, ROHS (see DoC)
Center frequency (at 20°C)	kHz	37.0 ± 0.5
Thermal deviation of the center frequency	Hz/°C	-10
Measurement bandwidth	kHz	[36.1-40.4]
RMS sensitivity within the bandwidth	dB, V/g	6.4 dB ±2 dB, ref = 0 dB=1V/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 (in)	∅32 (1.26) x 88 (3.46)
Weight	g (oz)	126 (4.44)
Connector		LEMO 7 female
Thread type		M6 x 5 mm (~0.2)
Recommended mounting torque	N.m (lbf.in)	4 (35.4)

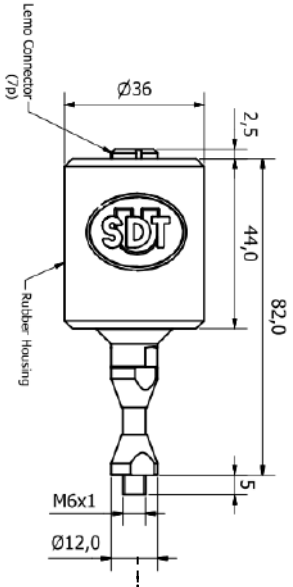
The foot is a part of the resonant structure, please do not disassemble it!

NB: Additional specifications are available from the download section of SDT web site:

Test conditions

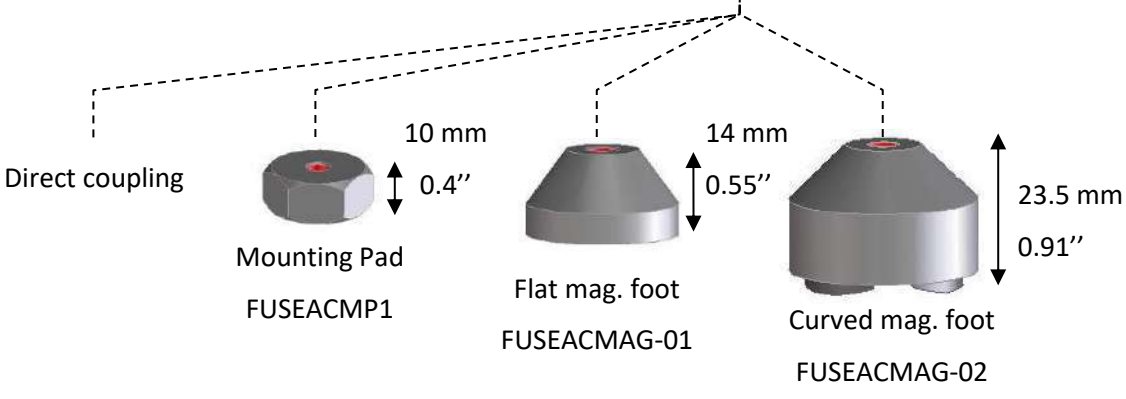






RS2T

FU.SEN.RST.00x



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.