SDT

Tanktest system

Ultrasonic tightness test system for underground fuel tanks

Product Ref. Code: FSTANKST

General Description:



The SDT ultrasonic tank test system is the most efficient, fastest, economical and most reliable method to control the tightness of underground fuel tanks.

A pump creates a gradual vacuum in the tank. As soon as the vacuum created becomes higher than the hydrostatic pressure due to the height of liquid, leaks start to generate ultrasonic sounds or signals. Two ultrasonic sensors placed inside the tank, one above and the other in the liquid, reveal even the smallest leaks and therefore control the tightness of fuel tanks of P₁, P₂, P₃, P₄ as prescribed by the environmental regulations. The most significant advantage of the SDT tank test system is his reliability because the test is not influenced by temperature, humidity, amount of liquid or the angle of the tank. It is effective for tanks in either dry or wet environment. The system is economical and ergonomically (the test takes only a small amount of time and the system is portable and constructed for robust fieldwork) is simple and very easy to use (it needs about 2 hours of training) and ecologically very sound or environment-friendly (in the event of a leak, no fuel is spilled in the ground during the control, due to the used vacuum technique)

The SDT tanktest system is recognised by AIB Vincotte, Lloyd's Register of London, Bureau Veritas, Apragaz, the Ministry of the French Community, the Ministry of the Flemish Community, Aminal AMV/30.06.95/1, US EPA - Dec 14,1995

Technical Data



FUSUIT150/120	briefcase SDT 150/120 + foam		
FU150	SDT 150 unit with battery and user manual		
FUHEADPH2	Headphone SDT 130 dB blue folking type		
FSPRECIND	Precision indicator 101/150/170 (Threaded tip, rubber tip, 2 plast. tubes)		
FUBP150FW2	Battery pack SDT 150 Friwo		
FUPS150EU	Battery loader SDT 150		
FUTOSCRDRIV	Screw driver for battery cover SDT 150, SDT8 or SDT 13		
FSFLEX551/150	Flexible sensor 550mm BNC		
FUCABSPJ3SBNC18	Cable Spiraled - jack 3.5 stereo/BNC – L 60/180		
FUTTSWBOX150V2	Switch box Tanktest for SDT 150 with spiraled cable and jack 3,5 stereo		
FUSTRAP	Shoulder strap for SDT 170, switchbox or Data logger		
FUWATERFIND70	Paste water finding tube 70 gr		
FUSUITTANK	Plastic case (blue) for Tank test probes + foam		
FUTTGNDPI	Earth picket with 5m green-yellow cable		
FSTTKA2FSENSN	Set of camlock 2" and two (red and black) TT sensors Nitrile		
FUTTCONTUB2	Tank connection tube 2"F-camlock 2"M L 50 cm + nipple 2" + o-ring		
FUTANKPIPLI5	Plastic pipe 1" tank to pump 5m		
FUTANKPIPLO5	Plastic pipe 1" with flame buster exhaust 5m		
FUVACPUMPSA	Tank test pump non ex-proof		

Technical Data:

Function:	ultrasonic detector			
Display:	LED bar and digital display			
Keyboard:	3 function key's / 1 potentiometer			
Internal sensor:	internal open ultrasonic sensor dia.20mm			
External sensor:	-external open and closed ultrasonic sensors			
	-contact Probe			
Measuring range:	-9dBµV to 99dBµV			
Accuracy:	± 0.5dBµV			
Measuring resolution:	1dBµV			
Signal to noise ratio:	-5dBµV			
Band width:	(-3dB) 2kHz			
Output:	direct audio output (for scope, spectrum analyzer, etc)			
Battery pack:	-rechargeable NiCa 9.6V(Nickel Cadmium).			
	-autonomy of 5 hours (4 hours with led and digital indication)			
	-reload time: 12 hours			
	-nominal Capacity: 400 mAh			
	-life span: 500 to 1000 charge/discharge cycles			
	-reload only with appropriate charger			
Operating temperature:	: -10 °C to +60°C / 14 °F to 140 °F			
Housing:	aluminum			
Weight:	approx. 980 g / 34.57 oz. (with battery included)			
Dimensions	260 x 79 x 60 mm / 10.2 x 3.1 x 2.4 inches (L x H x W).			

Function:	closed ultrasonic sensor		
Center frequency:	40.0 ±1.0 Khz		
Transmitting sound	115 dB min. (at 40 Khz)		
pressure level			
Receiving sensivity:	-70dB min. (at 40 Khz)		
Band width:	1.0 Khz		
Capacitance at 1 Khz:	2400 pF (±20%)		
Operating temperature:	-30°C tot 80°C		
Housing:	Aluminum		
Max. driving voltage:	20 Vrms		
Total beam angle :	30° typical		

Warranty:

2 years limited warranty on material and labour for the receiver SDT 150, with exception of the battery and accessories (6 months).

Warranty voids if items have been wrongly used, opened or disassembled.



Ultrasonic sensors

SDTInternational n.v. s.a.

Technical Data

DATE	Version	Revision
02 August 2000	1.0	Draft for internet and PDF file
19 September 2000	1.1	English draft
24 January 2001	1.2	English version
28 February 2002	1.3	Product ref. code correction

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The information herein is believed to be accurate to the best of our knowledge. Due to continued research and development specifications of this product can change without prior notice.

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