

LST400

Open channel flow transmitter



The next generation of ultrasonic level

Measurement made easy

LST400
Open channel flow
transmitter

Introduction

The LST400 is an ultrasonic level transmitter capable of measuring liquid level or solid applications up to 15 m (50 ft.) or flow rates in all types of open channel flow applications. The transmitter has a single 4 to 20 mA DC analog output with HART 7 and five (5) relay outputs. A transducer is fitted to the top of a silo or tank, facing down towards the material being measured.

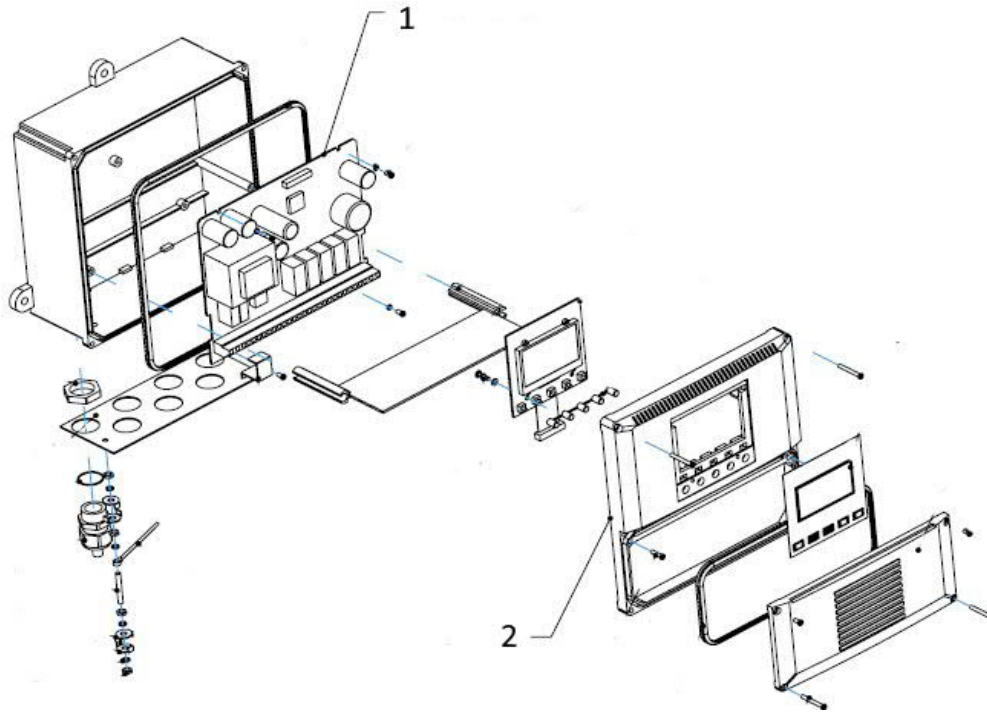
The transmitter's microprocessor simultaneously fires an electronic pulse the transducer and starts a timer. The transducer converts this electronic pulse to an acoustic pulse, which is directed toward the surface of the material being measured. When the acoustic pulse contacts the surface of the material, energy is reflected back to the transducer, which converts this reflected energy back to an electronic pulse. This pulse is sent back to the microprocessor, which stops the timer and determines the 'time of flight' of the signal. By combining the speed of sound through air and the 'time of flight' of the pulse, the microprocessor accurately determines the level of the product. Powerful software removes false echoes from the signal and electronic filters remove ambient noise.

For more information

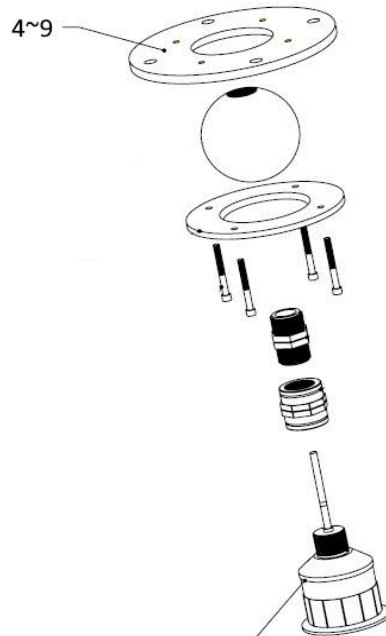
Further publications for the LST400 are available for free download from:
www.abb.com/level
or by scanning this code:



LST400 Exploded View












Transducer Exploded View



TRANSDUCER	
TRANSDUCERS AIRMAR	TRANSDUCERS FOAM
T15S010M	T15F010M
T15S020M	T15F020M
T15S030M	T15F030M
T15S040M	T15F040M
T15S050M	T15F050M

Spare Parts List of LST400

Item	Part Number	Description	Picture
1	3KXLO65053U0100	Main PCBA For LST400	
2	3KXLO65053U0200	LST400 LCD PCBA	
3	TRANS10064	DIN 80mm PVC Flange For LST400	
4	TRANS10065	DIN 100mm PVC Flange For LST400	
5	TRANS10066	DIN 150mm PVC Flange For LST400	
6	TRANS10060	ANSI 4" PVC Flange For LST400	
7	TRANS10062	ANSI 3" PVC Flange For LST400	
8	TRANS10063	ANSI 6" PVC Flange For LST400	

9	T15F010M	F15 Transducer 10M cables	
10	T15F020M	F15 Transducer 20M cables	
11	T15F030M	F15 Transducer 30M cables	
12	T15F040M	F15 Transducer 40M cables	
13	T15F050M	F15 Transducer 50M cables	
14	T15S010M	S15 Transducer 10M cables	
15	T15S020M	S15 Transducer 20M cables	
16	T15S030M	S15 Transducer 30M cables	
17	T15S040M	S15 Transducer 40M cables	

18	T15S050M	S15 Transducer 50M cables	
19	T15C010M	C15 Transducer 10m cables	
20	T15C020M	C15 Transducer 20m cables	
21	T15C030M	C15 Transducer 30m cables	
22	T15C040M	C15 Transducer 40m cables	
23	T15C050M	C15 Transducer 50m cables	
24	AIMING KIT	SEK Aiming Kit For LST400	

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