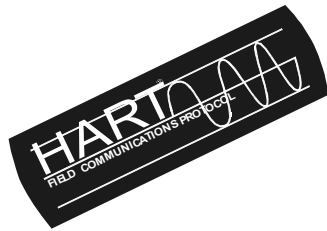




EasyTREK

NON-CONTACT ULTRASONIC
LEVEL TRANSMITTER FOR LIQUIDS



SMART transmitter also with HART

**4 ... 20 mA galvanically isolated output
and with relay output**

6 m and 10 m ranges

Touch-Magnet Programming

**Excellent sensor focusing:
5° total beam angle**

IP 68 protection

1" and 2" process connections

Built-in temperature compensation

GENERAL

The EasyTREK is a SMART liquid level transmitter, measuring by the non-contacting ultrasonic principle.

The EasyTREK is available in two measuring ranges (6 and 10 m) and has a scaleable 4 ... 20 mA output, a programmable relay and HART communication.

Simple touch-magnet programming using the supplied special magnet or detailed set-up via HART helps fast and easy installation.

This intelligent level transmitter incorporating sophisticated digital signal processing is suited to measure most non-combustible liquids under various process conditions.

Level measurement technology based on the non-contacting ultrasonic principle is especially suited for applications where, for any reason, no physical contact can be established to the surface of the material to be measured.

Such reasons may include corrosive attack by the process medium against the measuring device material (acids), possible contamination (sewage) or particles of the process medium adhering to the measuring device (adhesive materials).

TECHNICAL DATA

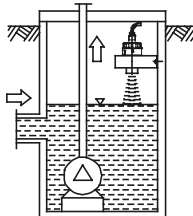
Type	SCA-36□-□	SCA-38□-□
Measuring range	0,35 ... 10m	0,25 ... 6 m
Transducer material	Polypropylene (PP)	
Total beam angle	5°	
Ambient temperature	-30 C ... +60 C	-30 C ... +60 C
Process temperature	-30 C ... +60 C	1"-mount: -30 ... +60 C 2"-mount: -30 ... +80 C
Pressure (absolute)	0,03 ... 0,3 MPa (0,3 ... 3 bar)	
Power supply / Consumption	10,5 ... 40 V DC / 3,6 W and 10,5 ... 28 V AC / 4 VA	
Outputs	Analog scalable	4...20 mA 600 , galvanically isolated, (max. 250V), with secondary lighting protection. Error indication by the current output (programmable): 3,6mA; 22mA; hold last value.
	Contact	SPST (NO) 48 V AC/ 5 A; AC12 For indication of echo loss or differential level control
Digital communication	HART	
Repeatability	(0,2 % of the measured distance +0,05% of the range)	
Accuracy of the setting	With Touch-Magnetic Programming 20 mm	
Resolution	<2 m: 1 mm	2...5 m: 2 mm
Damping	10 sec, 30 sec, 60 sec (programmable)	
Electrical connection	6x0,5 mm ² shielded cable, 7,5 mm, loop resistance 75,6 m /m length: 3m (can be ordered up to 30m)	
Electrical protection	Class III	
Ingress protection	IP 68	
Weight	1,2 kg	

INSTALLATION

Use 2 nuts of 1" (provided) when mounted on plate
For simple and easy programming of units not ordered with HART communication we recommend that programming be carried out before mounting the device in its final position. In this case a flat surface (e.g.: table or wall) can be used as a reflecting target to aid the setting of the outputs. If the EasyTREK is mounted by the 1" process connection and the touch-magnet programming will be performed after the unit has been mounted, the use of the transparent connection gland (SAA-110, see drawing beside) is required in order to observe the LEDs during programming.

POSITIONING

Use mounting bracket in wastewater shafts. The optimal mounting location of the unit is between $r=(0,2...0,4)d$ of a round tank. The sensor face must be parallel with the surface of the liquid within 2°.



WIND

Intense movement of the air may effect the ultrasonic measurement and cause inaccuracy or eventual failure.

VAPORS, FUMES

Vapors and fumes of gases may radically reduce the measuring range of the device (e.g.: chemicals, outdoor tanks under sunshine).

ORDER CODES

EasyTREK S C A - 3 □ □ - □

Measuring range	Code
10 m	6
6 m	8

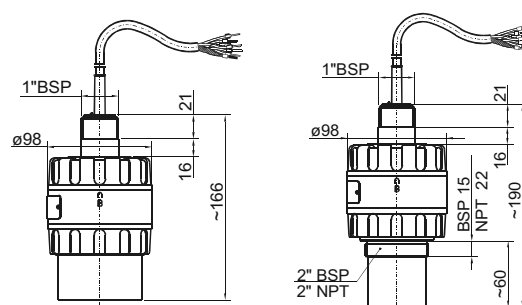
Please note: The EasyTREK has an integrated signal cable that is 3 m long as standard. You can order it up to 30 m!

Mounting	Code
1" BSP or 1" and 2" BSP	0
1" BSP and 2" NPT	N
1" BSP fast connection gland	F
Mounting bracket: 200 mm	K
Mounting bracket: 500 mm	L
Mounting bracket: 750 mm	M

Output	Code
4...20 mA + Relay	2
4...20 mA + HART + Relay	4

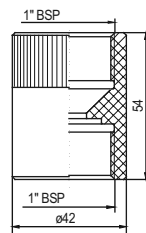
Transparent pipe connector (option)
SAA-110

DIMENSIONS



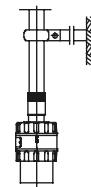
SCA-360

SCA-380



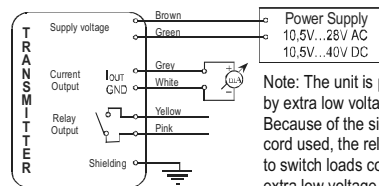
SAA-110

Transparent pipe connector



Mounting with transparent pipe connectors

ELECTRICAL CONNECTIONS



Note: The unit is powered by extra low voltage. Because of the single cable cord used, the relay is limited to switch loads connected to extra low voltage only.

OBSTACLES

No object should protrude into the ultrasonic beam of the device (e.g.: ladder, thermometer, etc.).

FOAM

Foam on the surface of the liquid can make ultrasonic measurement difficult or eventually make it fail.

Mount the unit in a location where foam building is minimal or use a stilling pipe.

STAND-OFF PIPE

The structure of the stand off pipe should be rigid; the inner rim where the ultrasonic beam leaves the pipe should be rounded

