



UTS™

Ultrasonic Level Switch



Product data sheet



UTS IP67



UTS IP68

Main features:

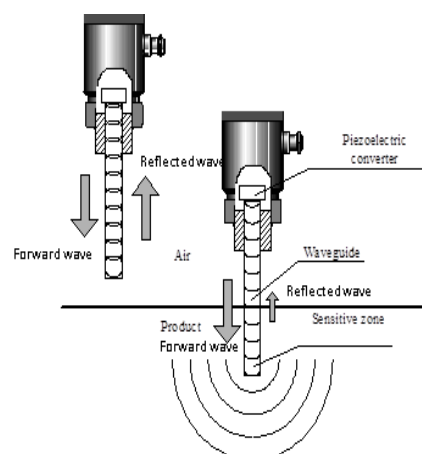
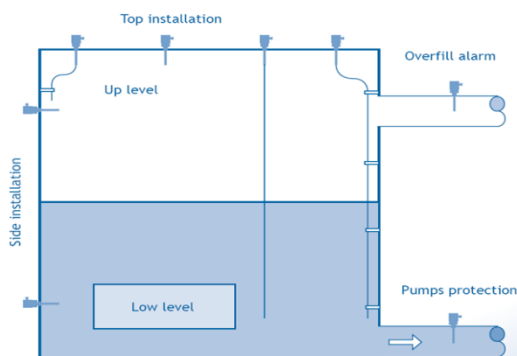
- Any type of liquid
- Only a steel rod inside the tank (electronics and connections outside)
- No moving parts
- No maintenance required
- No sensitivity to foam

General description

The UTS™ has operating temperature range of -55°C to +100°C and is designed for level detection in cargo holds, wells and service tanks in sea and river ships, oil tankers, chemical tankers, gas carriers and offshore drilling platforms.

The operating principle of the UTS™ is based on a breakthrough patented acoustic wave technology, providing outstanding results in extreme operating temperature. The accuracy of measurement is ensured regardless of the shape of the tank, type of liquid or liquid temperature.

The UTS™ is installed outside the tank/pipe with only a metal rod inside the tank/pipe. The UTS™ can be easily installed in vertical, horizontal or any inclined position and is tested for operation in a wide range of media. Can be installed indoors, as well as outdoors, including explosive environments and harsh arctic conditions. The UTS™ is characterized by a high resistance to sticky products, high robustness and shock resistance and increased reliability under dynamic load and vibrations due to a reinforced rod and electronic unit of new generation.





Technical specifications

Output signal:	
a) Current:	7mA/14mA
b) Dry contact:	NO/NC, current limit 200mA, max. switching voltage 200V
Repetition of actuation level:	Vertical installation: 3 mm Horizontal installation: 1 mm
Power supply voltage:	18 – 30 V DC
Power consumption:	less than 0,5 W
Ambient operating temperature:	-40°C to +85°C, (-55°C to +85°C), for IS -40°C to +57°C
Product temperature:	-55°C to +100°C
Length of rod:	Standard length 115 mm (minimum) Other length on request
Relative ambient humidity:	up to 100% at 50°C
Working pressure:	Std. up to 40 bar (special version up to 400 bar)
Response time:	1 sec. subject to actual programming
Protection rate:	IP67, IP68
MTBF:	50000 hrs
Housing type:	Stainless steel AISI 316L
Wetted parts:	Stainless steel AISI 316L (hastelloy on request)
Process connection:	
a) Thread:	From G1, 1NPT, M27x 1,5
b) Flange:	From DN 25 Others on request
Ex protection:	Ex ia IIC T5 (T6)

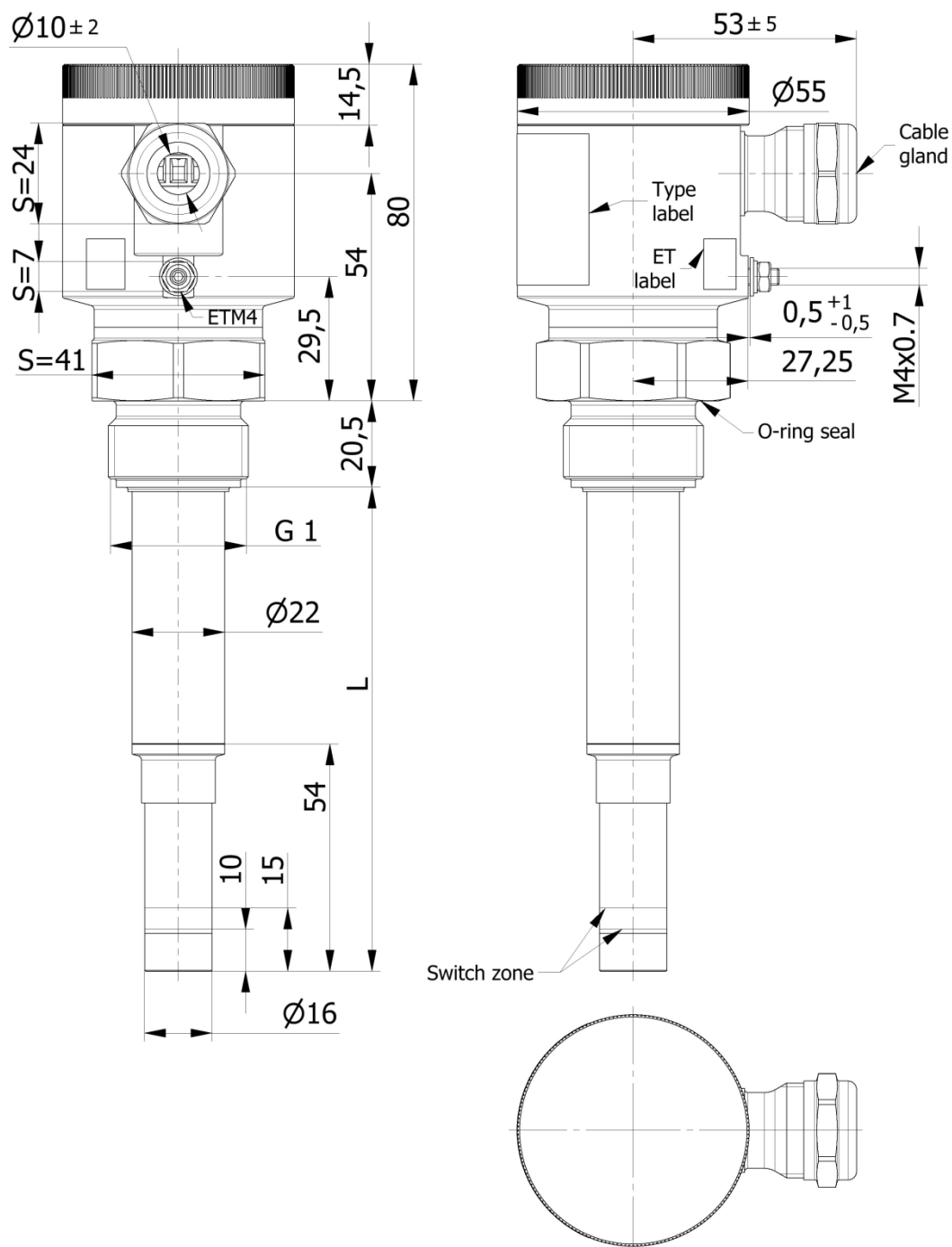


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Drawings



(Example/illustrations only)



UTS™

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Order codes

UTS - - - - - - - - () - ()

Type of Housing

IP67 Standard	67
IP68 Submersible	68

Length of Rod

Standard length 115mm	0 1 1 5
Length on request (specify length in mm)	X X X X

Process Connection

Thread M27x1.5	M 2 7
Thread BSP 1"-M	0 1 G
Flange DN 25 PN10-40	F 2 5
On request	x x x

Output Signal

Current 14 mA ("dry")/ 7 mA ("wet")	C 1
Current 7 mA ("dry")/ 14 mA ("wet")	C 2
Dry contact: open ("dry")/closed ("wet")	R 1
Dry contact: closed ("dry")/open ("wet")	R 2

Cable Inlet

Cable gland PG13	P 1 3
Cable inlet M24x1.5 inner thread	M 2 4
Cable inlet M20x1.5 inner thread	M 2 0
Special for IP68, specify cable length in meters	x x x

Media Temperature Range

Standard (-55°C - +100°C)	L
High temperature 1 (-55°C - +200°C)	M
High temperature 2 (-55°C - +325°C)	N
High temperature 3 (-55°C - +450°C)	H
Low temperature (-200°C - + 100°C)	C

Explosion Protection

Standard type	N
Ex ia IIC T5-T6 Ga	I

Test Button - if not needed, this section is left out

Yes	1
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Certification - if not needed, this section is left out

Det Norske Veritas & Germanischer Lloyd (DNVGL)	D
Lloyd's Register (LR)	L
Bureau Veritas (BV)	B
Russian Maritime Register of Shipping (RMRS)	M
American Bureau of Shipping (ABS)	U
Other Certification - please specify	X