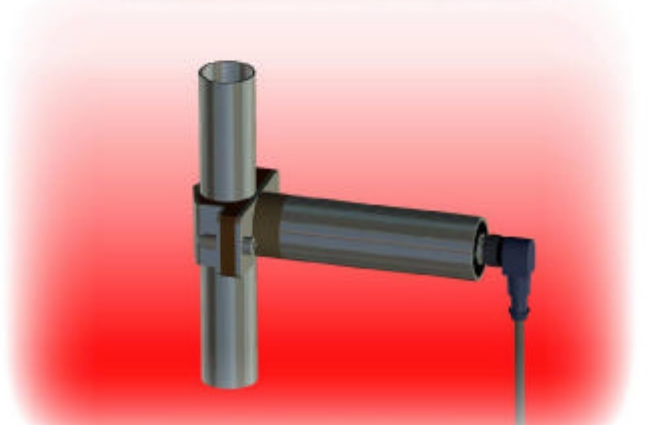


**NEW !**

## LIMIT SWITCH FOR LIQUIDS AT SMALL DIAMETER PIPES

*non-contact  
easy to use  
adjustable*

## ULTRASONIC SENSING



**SONOCONTROL 15**

*short response time  
safe  
economical*



SONOTEC 

# SONOCONTROL 15

## LIMIT SWITCH FOR LIQUIDS



With the new ultrasonic pipe detector it is easy to detect if a pipeline is full or empty. Filling the pipe with the liquid causes the reliable switching.

### The advantages

- Easy installation; sensor is mounted externally on the outside of the pipe.
- No downtime or process interruption required for detector installation.
- Short response time.
- No wear and tear.
- No moving parts.
- Optional possible in Hazard Areas.
- Fast start-up of the equipment:
  1. Installation
  2. Self-programmable sensor
  3. Sensor is ready to operate.
 The self-programmable function can be repeated at each start-up.

### Application Example

Detection of empty / full pipeline at small diameter pipes

The sensor is mounted at the side of the pipe. In this position it will distinguish between liquid and gas. The detection point is set up on the vertical pipe.



SONOCONTROL 15 with cable

### Technical data (Standard type)

<b>Type of instrument</b>	Two-wire-detector as empty/ full limit switch at pipes with small nominal diameters for the detection of liquids and as pump protection
<b>Construction of sensor</b>	Compact sensor
<b>Measuring principle</b>	Ultrasound through the pipe wall, no contact of sensor with the liquid, mounting the sensor no structural changes at the pipe are required
<b>Mounting</b>	at a pipe by an integrated clamp in 3 different sizes with coupling
<b>Material of the pipe</b>	Steel, stainless steel, plastic, glass Outside metallic polished or lacquer Size 1 10...27 mm Size 2 > 27...38 mm Size 3 > 38...50 mm
<b>Liquid</b>	Water or water like liquids
<b>Temperature range</b>	Pipe temperature: -40°C ... 140°C Ambient temperature: -40°C ... 80°C Storage temperature: -40°C ... 85°C
<b>Power supply</b>	Standard: 12 - 40 VDC/ EX-Type: 12-33-VDC, max. 16 mA, max. Ripple 5% peak value maximum St:40V / Ex:33V
<b>Output</b>	Condition is represented by the current draw of the sensor. 2 LED indicators are in the enclosure LED - green: switched on sensor measures: LED on, error LED off, current about 0,2 mA LED - yellow: switch condition „full“: LED on, current 16 mA ± 2% „empty“: LED off, current 8 mA ± 2% „error“: LED off, current ca. 0,2 mA reaction time: 500 ms
<b>Connections</b>	4-cores M12-plug connection (2 contacts connected)
<b>Protection</b>	IP 67, waterproof and oil resistant
<b>Ex-protection (optional)</b>	II 2 G EEb ib IIC T6
<b>Housing</b>	Stainless steel with mounting Max. L x W x H: 200 x 92 x 30 mm
<b>Maintenance</b>	None

### Order codes:

Code	Description																				
<b>01301304</b>	Empty/full limit switch for liquids in pipes																				
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