

## Intrinsically-Safe Ultrasonic Wall Thickness Gauge 1071-Ex

For checking minimum wall thickness of pipes and tanks in Ex-hazardous areas.

With the 1071-Ex measurements of wall thicknesses can be made quickly and accurately in the range of 0.7 to 400 mm.

There are three different probes available to cover this wide measuring range, each of which can be easily and conveniently changed inside the hazardous area.

- standard probe: 1.5 to 250 mm
- mini probe: 0.7 to 25 mm
- low frequency probe: 5 to 400 mm

Due to its compact size and operating time of over 200 hours, this easy to use instrument is essential whenever the continuous supervision of minimum wall thicknesses is required.

For example, it is possible to check the thickness of protective coats or for the erosion of pipe or tank walls even while the plant is operating.

By using the limit value guides, minimum and maximum values can be set and are registered by an audible signal.

The calibration functionality of the instrument means that adjustments can be made to compensate for the type of material being measured, this is done by one of two ways:

1. entering the sound velocity of the corresponding material
2. measuring a material with known thickness and adjusting the instrument to that reference.

These adjusted parameters then stay in the memory even when switching off the instrument. Display resolution and sensitivity are also fully adjustable and as with all the other functions, are easily selected from the straightforward menu.

### Ex-data:

Ex designation:  
 Ⓜ II 2 (1) G EEx ia IIC T4

EC-Certificate of conformity:  
 PTB 97 ATEX 2231 X

### Ranges:

- standard probe: 1.5 to 250 mm
- mini probe: 0.7 to 25 mm
- low frequency probe: 5 to 400 mm

Probes can be changed in Ex-zones

Accuracy  $\pm 0.05$  mm

### Functions:

- limit value guides and monitoring
- adjustable sensitivity
- easy to use
- energy saving mode

### Standard delivery:

- 1071-Ex
- primary cells
- case
- 100 ml of ultrasound couplant gel
- leather case
- instruction manual

### Options & Accessories:

- Standard probe DSE 10,4 / 6 PB 4
- Handle-collar for standard probe
- Vulcollan films (10 pcs.) for DSE 10,4 / 6 PB 4



- Low frequency probe DSE 18 / 25 PB 1,5
- Handle-collar for low frequency probe
- Vulcollan films (10 pcs.) for DSE 18 / 25 PB 1,5
- Mini probe DSE 4,2 / 4 PB 8
- Vulcollan films (10 pcs.) for DSE 4,2 / 4 PB 8
- ECHOTRACE ultrasound couplant gel 500 ml

### Technical data:

Ingress protection:	IP 54
Dimensions:	120 x 65 x 25 mm
Weight:	150 g
Operating temperature:	-10° C ... 40° C
Storage temperature:	- 20° C ... 60° C (without batteries)
Power supply:	2 x AA to IEC LR6, type approved
Operating time:	200 hours continuous operation 1-2 years stand-by

### Instrument:

- Probes:
  - operation permitted in Zone I
  - can be exchanged in hazardous areas
  - standard sensor; operating temperature up to 200°C for a short time