

**TQC ULTRASONIC THICKNESS GAUGE BASIC AND PRO**

LD7015, LD7016

DATASHEET

**PRODUCT DESCRIPTION**

Ultrasonic thickness gauges specifically designed to measure the thickness of metallic and non-metallic materials e.g. aluminium, titanium, plastics, ceramics, glass and plastics. It can also be used to monitor all types of pipes and pressure vessels for loss of thickness due to corrosion or erosion. The gauge is easy to use and will give accurate readings to an accuracy of 1%. This unit is not suitable for cast iron due to its big crystalline composition. Available in 2 models, Basic and Pro. The Pro version allows you to store data and perform a sound velocity measurement (with a known material thickness), this model is also supplied with an extra probe (5.0MHz) The Basic version has 10 preset sound velocities and does not have the possibility to store data.

**BUSINESS**

Protective Coatings, Corrosion Control, Decorative Coatings, Building Maintenance

**FEATURES**

- Large LCD screen
- Battery indicator
- Automatic power shut down
- Auto calibration
- Coupling indicator
- Small in size; light in weight; easy to use
- Simple calibration procedure
- 10 preset sound velocities (model LD7015)
- 10 data storage units (model LD7016)
- Sound velocity measurement (with a known thickness of material) (model LD7016)

**SCOPE OF SUPPLY**

- TQC Ultrasonic Thickness Gauge
- Ultrasonic gel 60ml
- Probe 10mm - 5.0MHz
- Probe 10mm – 2.5MHz (Extra supplied with model LD7016)
- Calibration block (Extra supplied with model LD7016)
- Manual

**ORDERING INFORMATION**

LD7015 – TQC Ultrasonic Thickness Gauge Basic

LD7016 – TQC Ultrasonic Thickness Gauge Pro

## ACCESSORIES

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LD7025 – TQC ultrasonic gel 50ml  
LD7030 – TQC ultrasonic gel 250ml

## SPECIFICATIONS

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### LD7015

Measuring method: Ultrasonic pulse echo  
Measuring frequency: 5MHz  
Measuring range: 1.20 - 220 mm (steel); (deviation possible with use of other materials)  
Measuring range (tubes): 20x3mm (steel)  
Accuracy: +/- (1%H ± 0.1) mm  
Display: LCD  
Resolution: 0.1mm  
Operation temperature: 0 °C ~ 40 °C  
Batteries: 3x AAA alkaline batteries (total 5V)  
Size: 70x135x38mm

### LD7016

Measuring method: Ultrasonic pulse echo  
Measuring frequency: 5MHz / 2.5MHz  
Measuring range: 1.20 - 220 mm (steel); Actual range varies with the type of material measured  
Measuring range (tubes): 20x3mm (steel)  
Accuracy: +/- (1%H ± 0.1) mm, H denotes the measured thickness  
Sound velocity: 1000 - 9999 m/s.  
Display: LCD  
Resolution: 0.1mm  
Working temperature 0 °C ~ 40 °C  
Power Supply: 3x AAA alkaline batteries (total 5V)  
Size: 70x135x38mm

Measuring sound velocity with a given thickness: Measuring range: 1000 to 9999 m/s. When the given thickness is over 20mm, the accuracy is +/-5%; when the given thickness is less than 20mm, the accuracy is +/- 1 mm/H\*100%

## USE

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Please see our detailed manual

## SPECIAL CARE

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- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.

- We recommend annual calibration

#### **SAFETY PRECAUTIONS**

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- Avoid using it in over-high or over-low temperature environment
- Avoid humidity

#### **DISCLAIMER**

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The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.