

FISCHERSCOPE® UMP 20, 40, 100 and 150

Determining wall thickness with ultrasound



Ultrasonic measuring devices for corrosion protection

FISCHERSCOPE® UMP 20, 40 and 100

With their exchangeable probes, the ultrasonic gauges of the UMP series are ideal for measuring wall thickness in all aspects of corrosion protection. Whether in the chemical or the transport industry, the handy UMP gauges measure the thickness of metal parts quickly and reliably. There is a device suited to every budget – from entry level models to high-precision instruments. And, should your measuring tasks change over time, you can easily upgrade: many software options and measurement modes can be enabled directly via the keypad.

Features

- Dual-element probes for reliable results even on rough, corroded surfaces
- Range from 0.5–500 mm
- Zero-point adjustment for reliable measurements even after frequent use and/or at fluctuating temperatures
- 2-point calibration function
- Comes with probe DKS-537 (5 MHz); many other probes optionally available, some suitable for use at high temperatures
- Graphic display
- Multi-language menu
- 8–12 hour battery life, 2 AA batteries
- Robust, IP54-rated housing



Robust gauges for fast and reliable measurement of wall thickness

Features of the different models and the upgrades available

Features	Description	FISCHERSCOPE® UMP 20	FISCHERSCOPE® UMP 40	FISCHERSCOPE® UMP 100
Display		Black & white	Black & white	Color
Measuring wall thickness	Range from 0.5–500 mm	✓	✓	✓
Scan mode	20 measurements per second, display of either the highest or the lowest value	Upgrade	✓	✓
Differential mode	Shows deviation (relative or absolute) from target value	Upgrade	✓	✓
Sound velocity mode	Measuring the sound velocity when thickness is a known quantity	Upgrade	✓	✓
Echo-to-echo measurement	Measuring wall thickness underneath a coating layer	Upgrade	✓	✓
B-Scan	Cross-section of the measurement object	–	✓	✓
A-Scan	Waveform analysis with adjustment of all parameters (gain, blanking period, etc.)	Upgrade	Upgrade	✓
Internal data storage	Memory for 100 000 readings, incl. evaluation software	–	✓	✓



Wide range of probes for a variety of measuring tasks



Vibrating alarm and colored LEDs indicate when a threshold has been violated

FISCHERSCOPE® UMP 150

The UMP 150 is a high-precision ultrasound device designed for ultra-fine, non-destructive wall thickness measurement. Whether measuring on glass, plastic, aluminum or gold: the UMP 150 is the right choice for a variety of materials. It uses single-element probes and a high-frequency square wave generator (30 MHz), which ensures an excellent resolution of 1 µm. Besides its wide measuring range of 0.1 to 500 mm, it also offers a variety of modes for highly sensitive measurements.

Features

- Comes equipped with probe DLK-1025 (10 MHz) with delay line; other probes optionally available
- Range from 0.1 – 500 mm
- Bandwidth of 0.5 – 30 MHz (-3 dB)
- Settings for up to 30 different applications can be stored and retrieved
- Different modes for sophisticated applications
- Zero-point adjustment for reliable measurements even after frequent use and/or at fluctuating temperatures
- Vibration and colored LEDs indicate when the thickness is higher or lower than the target value entered
- Software upgrades via the device keypad

Features of the different models and the upgrades available

Features	Description	FISCHERSCOPE® UMP 150
Display		Color
Measuring wall thickness	Range from 0.1 – 500 mm	✓
Scan mode	20 measurements per second, display of either the highest or the lowest value	✓
Differential mode	Shows deviation (relative or absolute) from target value	✓
Echo-to-echo measurement	Measuring wall thickness under a coating layer	✓
Sound velocity mode	Measuring the sound velocity when thickness is a known quantity	✓
B-Scan	Cross-section of measurement object	Upgrade
A-Scan	Waveform analysis with adjustment of all parameters (gain, blanking period, etc.)	Upgrade
Internal data storage	Memory for 100000 readings, incl. evaluation software	Upgrade
Measurement task memory	For saving up to 30 different settings	✓