

Ultrasonic Thickness Meter



TM-8818

Model: TM-8818 (Enhanced Type, Wide Range)
TM-8816 (Functional Type)

Applications

Used for measuring thickness and corrosion of pressure vessels, chemical equipment, boilers, oil storage tanks, etc. in industries of petroleum, shipbuilding, power station, and machine manufacturing. Applicable to measure the thickness of many materials, e.g. Steel, Cast iron, Aluminum, Red copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray cast iron, Nodular cast iron.

Material Selection

Code	Material	Code	Material
cd01	Steel	cd07	Quartz Glass
cd02	Cast Iron	cd08	Polyethylene
cd03	Aluminum	cd09	PVC
cd04	Red Copper	cd10	Gray Cast Iron
cd05	Brass	cd11	Nodular Cast Iron
cd06	Zinc	xxxx	Sound Velocity



Ultrasonic Probe

TM-8816/
TM-8816C

Features

- * With high power of emission and broad band of receiving sensitivity, the gauge can match probes of different frequencies. That makes it easy to measure the rough surface, even cast iron. It is widely used in almost all kinds of industries.
- * The model TM-8818 has bidirectional measurements, materials thickness is measurable with know velocity, Conversely velocity is measurable with know thickness.
- * Automatic memory material code and sound velocity value, convenient to use.
- * Coupling symbol indication when measuring.
- * Manual or automatic power off.
- * Applies USB, RS-232, Bluetooth data output.

Specifications

Model		TM-8818	TM-8816	TM-8816C
Housing Material		Aluminum Alloy	Strong, Light Weight ABS-Plastic	
Display		Large Screen LCD	4 Digit, 10 mm LCD	
Measuring Range		0.75~400 mm (45 # steel, Depend on Probe)	1.0~200 mm / 0.04~8 inch	
Resolution		0.01 mm / 0.1 mm / 0.001 inch	0.1 mm	0.01 mm
Accuracy		$\pm (0.5\%n + 0.05)$		
Sound Velocity		500~9,990 m/s		
Lower Limit of Pipes		$\Phi 15 \times 2.0$ mm $\Phi 20 \times 3.0$ mm Determined By Transducer		
Operating	Temperature	0~40°C		
Conditions	Humidity	< 85%RH		
Power Supply		2x1.5V AA (UM-3) Battery	4x1.5V AAA (UM-4) Battery	
Dimensions		130x76x32mm	135x65x27mm	
Weight		340g (Not Including Batteries)	120g (Not Including Batteries)	

Standard	Main Unit	✓	✓
Accessories	Probe	5M $\Phi 8$ Standard Probe	Built-in Probe
	Coupling Agent	✓	✓
	Carrying Case	B04	B04
	Operation Manual	✓	✓

Optional Accessories	Other Special-purpose Probes	—
	RS-232C Data Cable with Software	
	Bluetooth Data Adapter with Software	

Probe Technical Parameters

Probe Model	Diagram	Measuring Range	Diameter	Frequency	Operating Temp.
5MHz $\Phi 8$ (UTG-ST) Standard Configure Probe		1.5 ~ 200 mm (Steel)	$\Phi 8$ mm	5M Hz	0 ~ 50 ° C
5MHz $\Phi 8$ (UTG-TP) Curved Surface Probe		1.5 ~ 200 mm (Steel)	$\Phi 8$ mm	5M Hz	0 ~ 50 ° C
2MHz $\Phi 10$ Plastics Measurement Probe		1.0 ~ 50 mm (Plastics)	$\Phi 10$ mm	2M Hz	0 ~ 50 ° C
		3.0 ~ 40 mm (Cast Iron)			
5MHz $\Phi 6$ Thin Material Probe		1.0 ~ 50 mm (Steel)	$\Phi 6$ mm	6M Hz	0 ~ 50 ° C
5MHz $\Phi 12$ (UTG-HT) High Temperature Probe		3.0 ~ 200 mm (Steel)	$\Phi 12$ mm	5M Hz	0 ~ 300 ° C