



SG80 & SG80BDL Sonic Thickness Gauges



Product Description

The SG80 Series sonic thickness gauges have been specially designed for the automotive industry.

The SG80 & SG80BDL are frequently used for measuring the thickness of cylinder walls, intake or exhaust ports, chassis, tubing, body panels, and windscreens. It also has the ability to scan the length of a part to find the minimum thickness.

The time-based B-Scan feature of the SG80BDL displays a cross section of the opposite surface, allowing engine builders the ability to see the contour of the back surface in cylinders while scanning.

Use the Echo-Echo ThruPaint™ feature of the SG80BDL to measure chassis tubing with or without paint and other coatings.

Advantages

- Multi calibration options: 1 point, 2 point and speed of sound for optimal accuracy
- Range of display & measurement options:
- Pulse-Echo, Echo-Echo ThruPaint™ technology
- Multiple calibration and material selection options
- Adjustable gain: -30dB to 70dB range
- Automatic gain control (AGC)
- 64 User definable setups
- High speed scan: 32 readings per second
- Differential and minimal thickness alarm modes
- Data storage capability: 12,000 readings and waveforms or B-Scans
- Download to Data management software



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Technical Specification

	SG80 Sonic Gauge	SG80BDL Sonic Gauge
Model & Part Number	•	•
Material thickness digits display	•	•
Measurement Mode	PE	PE & EE (ThruPaint™)
Measurement Rate:		
Manual:	4 readings per second	4 readings per second
Scan Mode:	16 readings per second	32 readings per second
Measuring Range	0.63 - 500mm	PE 0.63 - 254mm, EE 1.27 - 102 mm
Measurement Accuracy		±0.01mm
Measurement Resolution		0.01mm
Velocity Calibration Range		1250 - 10,000m/s
Additional Features:		
High speed scan mode	•	•
Limit alarm mode		•
Data logging		12,000 readings (+ B Scans)
Calibration Options	1 & 2 point	1 & 2 point, velocity and material selection
Transducer Probe Type		dual element
Transducer Frequency Range		1 - 10MHz
V-path / dual path error correction		automatic
Display	LCD with 12.7mm high digits	1/8 VGA
Units (selectable)	mm or inches ; m/s or in/μs	mm or inches
LED Backlight		on / off / auto
Repeatability / Stability Indicator	•	•
Battery Type	2 x AA alkaline	3 x AA alkaline
Battery Life (approximate)	200 hours	150 hours
Low Battery Indicator	•	•
Battery Save Mode		auto
Operating Temperature	-30 to 50°C	-10 to 60°C
Size (w x h x d)	63.5 x 114.3 x 31.5mm	63.5 x 165 x 31.5mm
Weight (including batteries)	284g	383g
Aluminium case design with gasket sealed end caps, waterproof membrane keypad	•	•
Transducer Connector Type		LEMO
RS232 Interface		•

Packing List

- Elcometer NDT CG70BDL gauge / Elcometer NDT CG70ABDL gauge
- Couplant
- Carry Case
- User Manual
- Test Certificate
- 2 x AA Batteries (SG80 Sonic Gauge) 3 x AA Batteries (SG80BDL Sonic Gauge)
- Software (for Elcometer NDT SG80BDL Sonic Gauge unit only)
- Transfer Cable (for Elcometer NDT SG80BDL Sonic Gauge unit only)

Accessories

Cables & Adaptors

TL-24031 RS232 Cable (6'); DB-9 to Lemo

TL-24032 USB to Serial Adapter

Other Accessories

TZ-24038 Spring Loaded Probe Holder (V-Block)

TZ-24039 Hammer Transducer (Cylinder Kit)

Couplant

TC-24034-1 Couplant: Standard; 4oz Bottle

TC-24034-2 Couplant: Standard; 12oz Bottle

TC-24034-3 Couplant: Standard; 1 Gallon

