

## WALL THICKNESS GAUGE CV-CG500™

Handheld gauge for wall and coating thickness testing of metals, glass and plastics



- New: Considerably improved measuring properties through SIDSP !
- Non-destructive wall thickness measurement up to 4mm and/or 10mm
- Up to 20 measurements per second
- For all non-magnetic materials such as plastics, wood, glass, ceramics, glass fiber, carbon fiber laminates, non-ferrous metals, etc.
- For hollow parts and containers of all kinds such as bottles, cans, injection moulding products, etc.
- Also for plastic sheets, automotive body parts, glass panes, SMC plastics other large-sized components, etc.
- Complete measuring technique is integrated in the sensor

With this totally new SIDSP procedure, all necessary measuring signals are created and completely processed in the sensor itself. Only the completely processed digital readings are transferred to the base unit for display, statistical evaluation and data storage. Unlike the commonly used analogue procedures, the new SIDSP procedure excludes any error influences on the measuring data during transfer over the probe cable. The result is a measuring accuracy and constancy of readings, unmatched so far. Further innovations to increase measuring accuracy: the new process technology manufacture the reference balls used to results an increased reproducibility of over 0.5% and the calibration method enabling up to 5 calibration points. Calibration can be done over the complete range or over defined ranges.

### Innovative menu control and data filing system

The new CV-CG500 is very easy to operate. The menu-controlled user surface offers a user-friendly data filing system similar to common PC applications and a contextsensitive on-line help.

### Data processing

The gauge features display of minimum and maximum readings, an offset mode (related to the set value), automatic storage of readings into the statistics as well as visual display of the continuously taken readings (real-time diagram).

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## Technical specifications

Measuring principle	Magneto-static
Measuring rate	Up to 20 readings per second
Number of readings memorized in the statistics	1, 2, 5, 10, 20 readings/sec to choice
Measuring range FH4 probe	0...1.5mm with 1.5mm reference ball 0...2.5mm with 2.5mm reference ball 0...4.0mm with 4.0mm reference ball
Measuring range FH10 probe	0...2.5mm with 2.5mm reference ball 0...4.0mm with 4.0mm reference ball 0...10.0mm with 6.0mm reference ball
Low range sensitivity	0.1µm
Measuring tolerance of FH4 probe	0...1.5mm : ± (5µm + 1 % of reading) 0...2.5mm : ± (5µm + 1 % of reading) 0...4.0mm : ± (10µm + 1 % of reading)
Measuring tolerance of FH 10 probe	0...2.5mm : ± (5µm + 1 % of reading) 0...4.0mm : ± (10µm + 1 % of reading) 0...10.0mm : ± (20µm + 1 % of reading)
Calibration modes	Zero, 2-point, 3-point, 4-point and 5-point calibration
Display	LCD 160x160 pixel with backlight
Measuring units	Metric (µm, mm), imperial (mils, inch)
Data memory	100,000 readings
Statistical evaluation	Numeric, trend and histogram
Languages	English, German, French
Interface	Cable, (RS232 TTL) and/or combination port for foot switch, external contact, Infrared (IrDA 1.1)
Operating temperature	-10°C ... +60°C
Storing temperature	-20°C ... +80°C
Dimensions and weight of gauge	153mm x 89mm x 32mm / 310 gr (batteries incl.)
Dimensions and weight of FH4 probe	17mm ø x 96mm / 90 gr
Dimensions and weight of FH10 probe	29,5mm ø x 125mm / 300 gr
Dimensions of plastics carrying case	365mm x 450mm x 140mm
Power supply	4 x AA (LR06), power unit (90-240V~ / 48-62Hz)

## Standard delivery

- CV-CG500
- Batteries AA LR06(4 pcs)
- Instruction manual available in German/English/French
- Short manual
- Carrying case
- Magnetic screwdriver

## Optional accessories for CV-CG500

- Portable printer CV-CG550
- Probe FH4 including operating stand
- Probe FH10 including operating stand
- Rubber protection case

## Standard accessories for probe FH4<sup>\*1</sup>

- Calibration cap: 0.3mm, 1mm, 3mm
- 3 zero calibration standards: ø1.5mm, ø2.5mm, ø4mm
- Set of 100 balls ø1.5mm
- Set of 100 balls ø2.5mm
- Set of 50 balls ø4mm

## Standard accessories for probe FH10<sup>\*2</sup>

- Calibration cap: 1mm, 3mm, 8mm
- 4 zero calibration standards: ø2.5mm, ø4mm, ø6mm, ø9mm
- Set of 100 balls ø2.5mm
- Set of 50 balls ø4mm
- Set of 25 balls ø6mm
- Set of 10 balls ø9mm

\*1. Set of standards for 5 points calibration/FH-4 probe and ball diameter 4 mm.  
1 Precision standard in approx. 0.43mm, 0.75mm, 1.3mm, 2.2mm and 3.6mm.

\*2. Set of standards for 5 points calibration/FH-10 probe and ball diameter 6 mm.  
1 Precision standard in approx. 1.0mm, 1.7mm, 3.0mm, 5.2mm and 9.0mm.