



Bore gauges

Special applications

DESCRIPTION

- XTD or XTH instrument equipped with a special measuring head manufactured according to the particular item to be measured
- These instruments are subject to a feasibility analysis and a preliminary price offer based on the design of the component to be measured.
- We can measure the following elements :
 - Grooves, notches
 - Threads from M4 (all types)
 - Splines
 - Deep holes
 - etc.
- Delivery time 4-8 weeks

Grooves and slots head



Threads measuring head



Spherical anvils head



Ball screw head



Built-in
Bluetooth

PROXIMITY

SIS Smart Inductive System

WATER RESISTANT

IP67

HEIGHT GAUGES

Hi_Cal, Hi_Gage ONE & Z5

An indispensable instrument in the workshop, the measuring column allows you to quickly measure heights, distances, internal and external diameters, centre-to-centre distances or even particular points (minimum or maximum). In this chapter you will find a range of columns comprising 3 models, from the simplest to the most complete, all connectable via Bluetooth® for maximum user convenience.

GENERAL CHARACTERISTICS :

- **Powered by a CR2032 lithium battery for Hi_Gage ONE columns 220V power supply for other models**
- **mm/inch conversion on all models**
- **Working temperature +5° to +40°C**

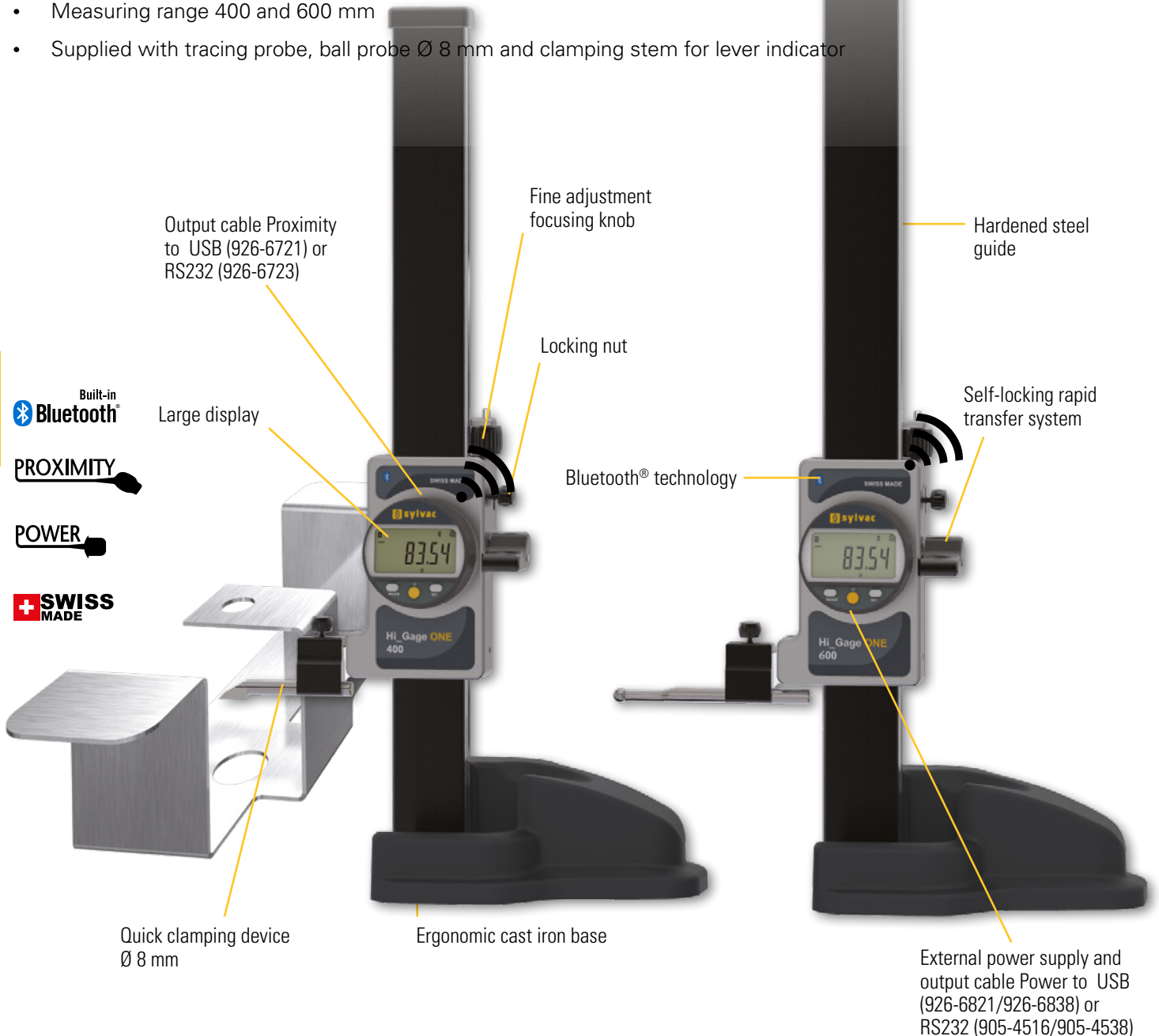


Height gauge

Hi_Gage ONE Smart

DESCRIPTION

- Measuring and tracing column with integrated Bluetooth® system
- Ergonomic cast iron base for good sitting posture
- Self-locking rapid transfer system and fine adjustment screws
- New, very robust double guide system
- Case Ø 59.5 mm with display resolution 0.01 mm
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Possibility to enter the key constant for measuring diameters and centre-to-centre distances
- Light indication validating the probing
- Additional data outputs Power and Proximity
- Measuring range 400 and 600 mm
- Supplied with tracing probe, ball probe Ø 8 mm and clamping stem for lever indicator

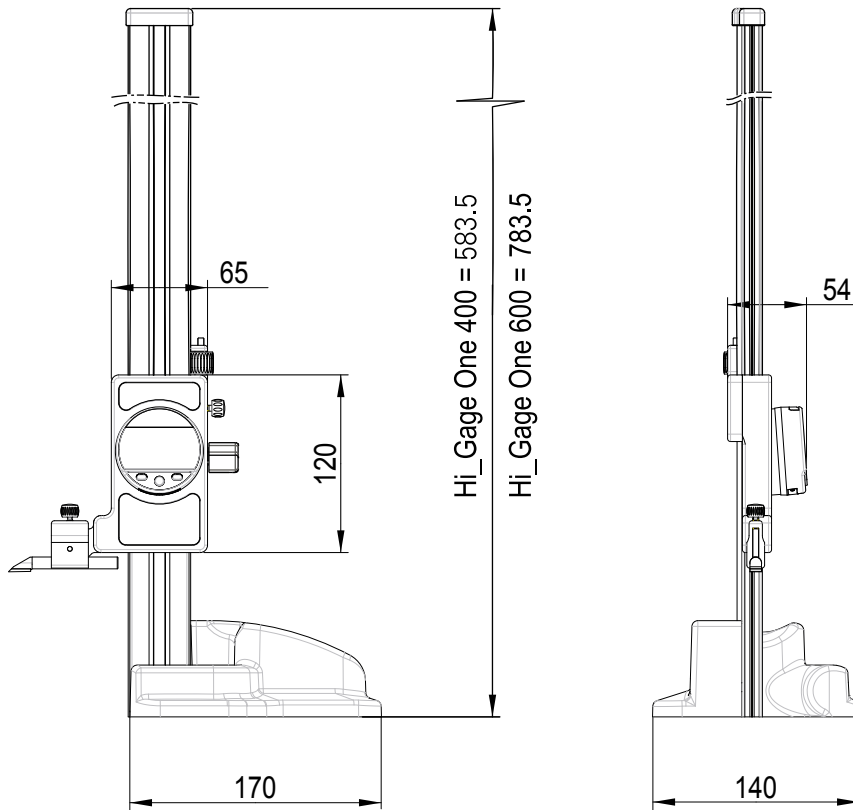




Height gauge

Hi_Gage ONE Smart

DIMENSIONAL DRAWINGS



TECHNICAL SPECIFICATIONS

| | 840-0406 | 840-0606 |
|----------------------------------|---|------------------|
| Measurement range mm | 400 | 600 |
| Resolution mm | 0.01 | 0.01 |
| Max. error μm | 40 | 50 |
| Repeatability μm | 10 ¹⁾ | 10 ¹⁾ |
| 2 references | • | • |
| PRESET | 9999.99 | |
| Selection of measuring direction | • | |
| Smart Inductive Sensor (S.I.S) | • | |
| Output data | Tracing probe (840.9002) | |
| | Bluetooth® wireless technology* / RS232 / USB | |

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¹⁾ ± 1 digit

STANDARD DELIVERY

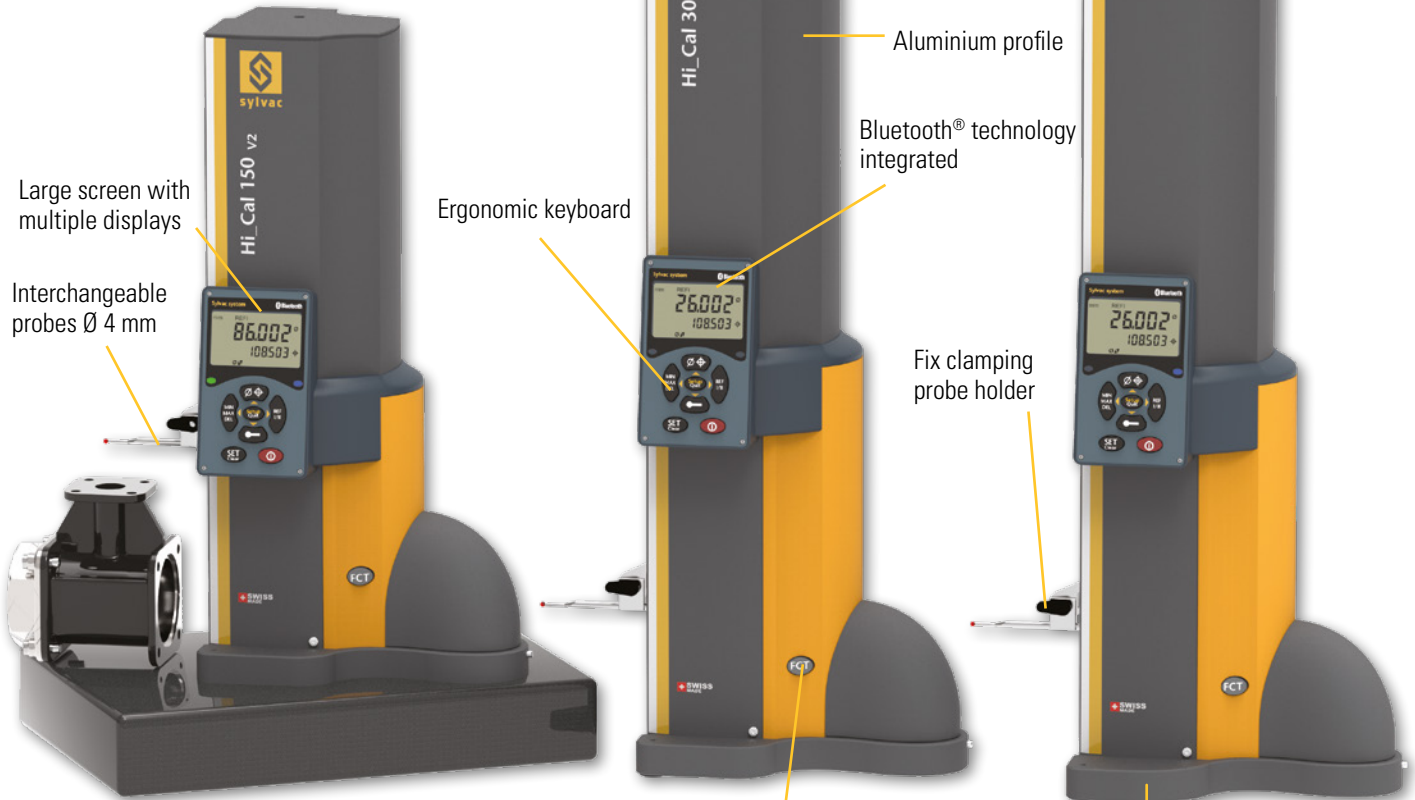
- Tracing probe (840-9002)
- Calibration certificate
- Quickstart

Height gauge

Hi_Cal V2 Smart

DESCRIPTION

- 1D workshop measuring columns with integrated Bluetooth® system and battery
- Perfectly suited for the rapid measurement of heights, depths, thicknesses, internal and external diameters, centre-to-centre distances, etc.
- Value of the key constant stored in memory even after the instrument is switched off.
- Compact and lightweight columns are easy to handle and do not require an air cushion.
- New construction with simplified guidance systems to ensure reliability
- Motorised measuring button movement with encoder integrated in the system eliminating operator influence
- Variable and progressive displacement speed according to the pressure exerted on the paddle
- Automatic pre-positioning of the key by the Sylcom software, allowing a reliable and fast measuring sequence
- Fixed key holder system with interchangeable Ø 3 mm ruby ball button
- Display resolution 0.01 / 0.001 / 0.0005mm
- Very small cast iron base equipped with 3 ground hard metal runners, requiring only a small working space
- Lower button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Light and sound indication to validate the probing process



Built-in Bluetooth

mini-USB

RS232

SWISS MADE



Output cable RS232 to USB (925-1142) or RS232 (925-5609) or output cable mini-USB to USB (926-6001)

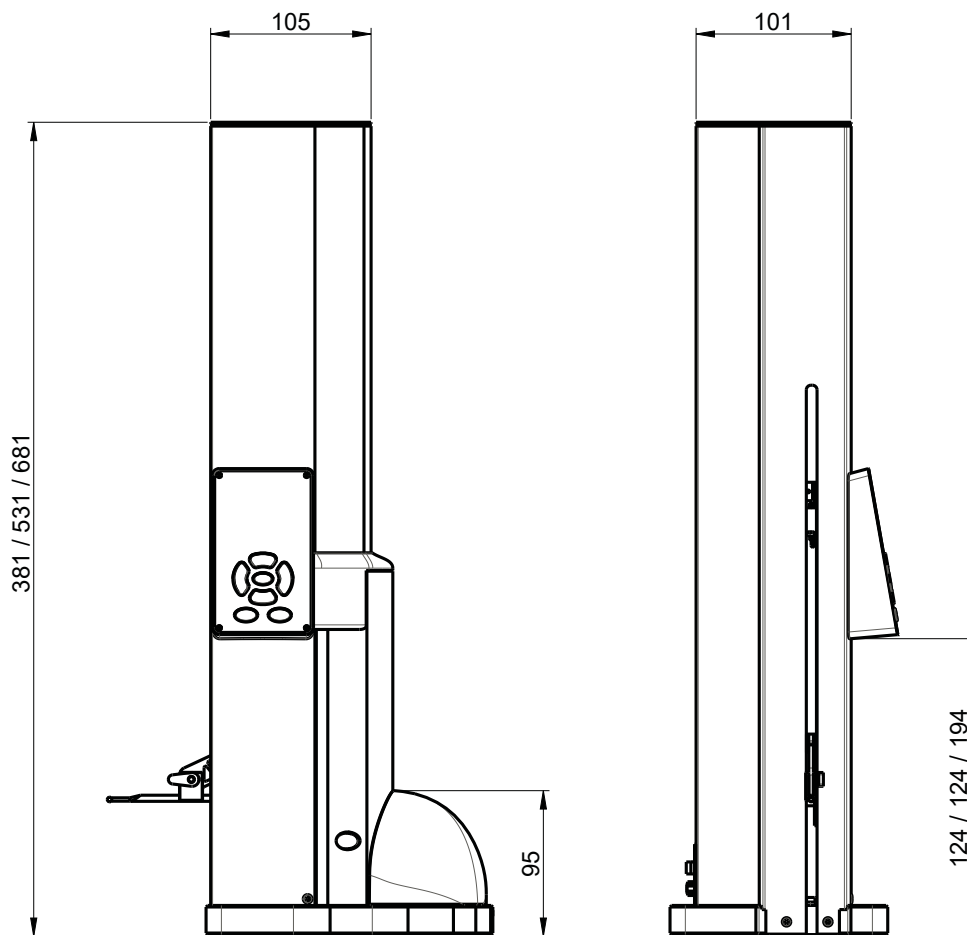
Switch on and measure!



Height gauge

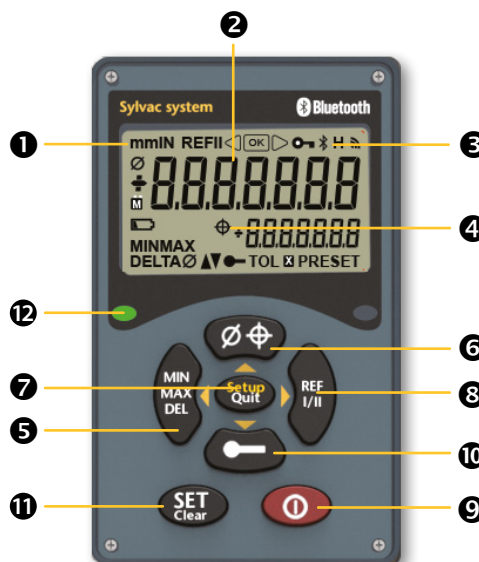
Hi_Cal V2 Smart

DIMENSIONAL DRAWINGS



DISPLAYS

- ❶ Measuring unit and actives reference
- ❷ Display of measuring value
- ❸ Bluetooth® Technology
- ❹ Centerline display
- ❺ Dynamic measuring mode
- ❻ Diameter / surface measurement
- ❼ Access to setting menu
- ❽ Selection of reference Ref I / Ref II
- ❾ ON / Standby / OFF Switch
- ❿ Ball probe constant
- ⓫ Zero / Initialization of min, max mode
- ⓬ Luminous indication of valide measurement



Height gauge

Hi_Cal V2 Smart

TECHNICAL SPECIFICATIONS

| | | 830-0156 | 830-0306 | 830-0456 |
|---------------------------------------|------|---|----------|----------|
| Measuring range | mm | 150 | 300 | 450 |
| Max. Error | µm | 2.0 + L / 200 ¹⁾ | | |
| Repeatability | µm | 1 | | |
| Resolution | mm | 0.01 / 0.001 / 0.0005 | | |
| Velocity | mm/s | 100 | | |
| Measuring force | N | 0.25 - 0.35 | | |
| Autonomy of the battery | h | < 40 ⁴⁾ | | |
| Height | mm | 381 | 531 | 681 |
| Weight | kg | 4.0 | 4.7 | 6.8 |
| Weight of the standard probe | | 7.5g, possibility of using 0-15g or 10-25g ²⁾ probes | | |
| Output data | | USB / RS232 / Bluetooth ^{® 3)} | | |
| Programmable by PC | | ● | | |
| Zero setting | | ● | | |
| Min / max / delta | | ● | | |
| PRESET function | | ● | | |
| 2 references | | ● | | |
| Height measurement, Ø and centerlines | | ● | | |
| 1 type of progressive speed | | ● | | |

¹⁾ With standard probe, in laboratory conditions

²⁾ With adjustment of the measuring force

³⁾ See cables chapter

⁴⁾ 8h/d at 20% use, 16h/d sby

STANDARD DELIVERY

- Loose cover Hi_Cal 150 (930-6001)
- Loose cover Hi_Cal 300 (930-6002)
- Loose cover Hi_Cal 450 (930-6005)
- Charging set (904-4200¹⁾ / 01/03/04/05)
- Ruby ball probe Ø 3 mm
- Setting gauge
- Calibration certificate
- Instruction manual

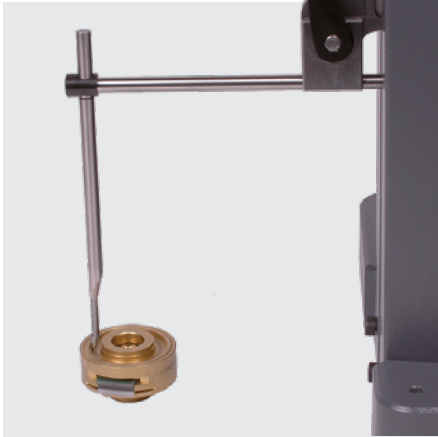
¹⁾ according to country



Height gauge

Hi_Cal V2 Smart

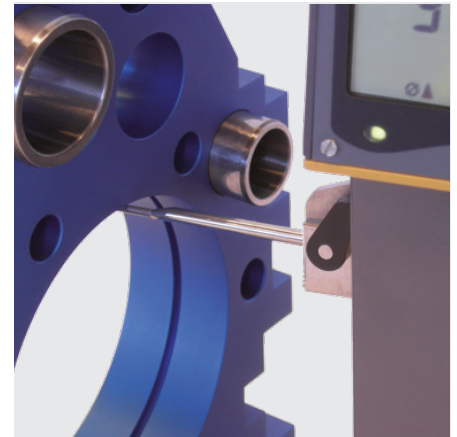
APPLICATIONS



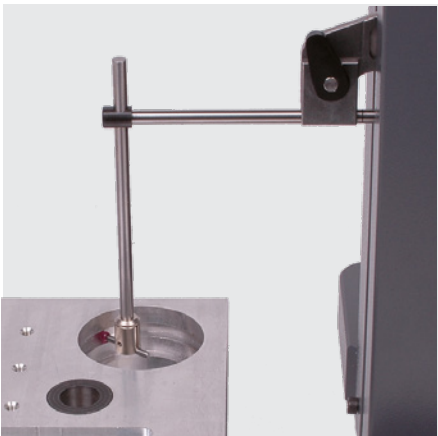
Depth measurement with accessories 930-2108 and 930-2105



Depth measurement with accessories 930-2108 and 905-2204



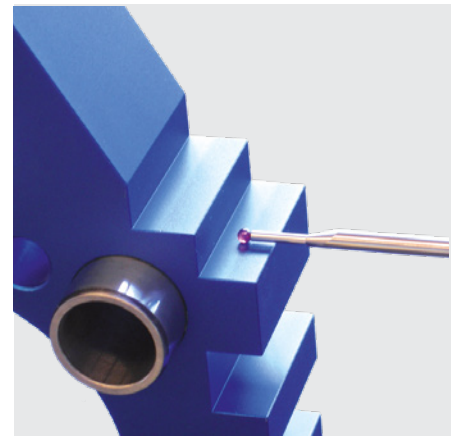
Internal measurement with ruby ball probe Ø 3 mm, 930-2101 (standard)



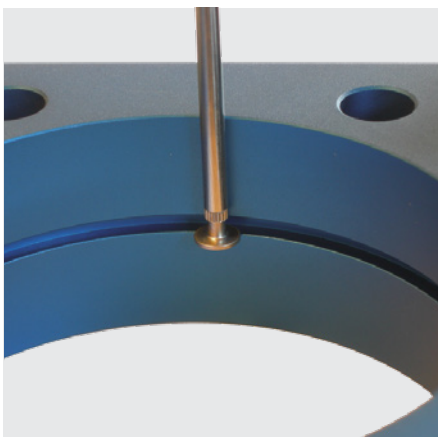
Internal groove measurement with accessories 930-2108, 930-2110 and 905-2207



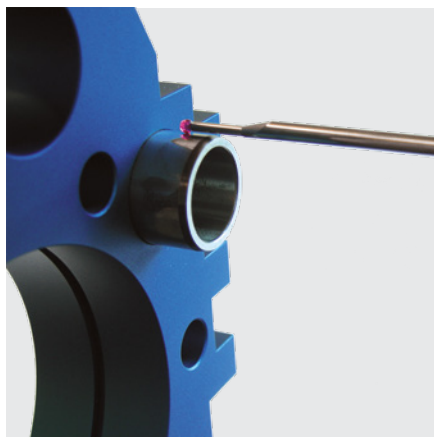
Taking the probe constant value with the setting bloc 930-2002 (standard)



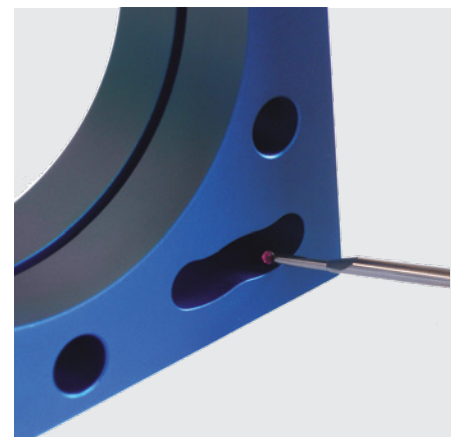
Heights and thicknesses measurements with the standard probe 930-2101



Internal groove measurement with accessories 930-2108, 930-2110 and 905-2205



External diameter measurement with the standard probe 930-2101



Min/Max/Delta measurements

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Height gauge

Z5

DESCRIPTION

- 1D workshop measuring column with Trimos technology
- Perfectly suited for the rapid measurement of heights, depths, thicknesses, internal and external diameters, centre-to-centre distances, etc.
- Revolutionary crank handle offering the user the choice of manual or motorised carriage movement
- Lateral probe holder allows the use of extra-long keys (up to 400 mm) with excellent repeatability
- XL display module with 0.001 mm resolution and intuitive functions
- Cast iron base with ergonomic handle with air cushion control knob
- Measuring force electronically adjustable (0.75-1.5 N)
- Rechargeable battery with 12-hour working autonomy
- Measuring range 711 mm (1023 mm with extension)
- Supplied with interchangeable Ø 4 mm ruby ball button
- USB/RS232 data output
- Optionally, a Sylcom-compatible Bluetooth® communication accessory can be ordered as an accessory

Let's measure higher !

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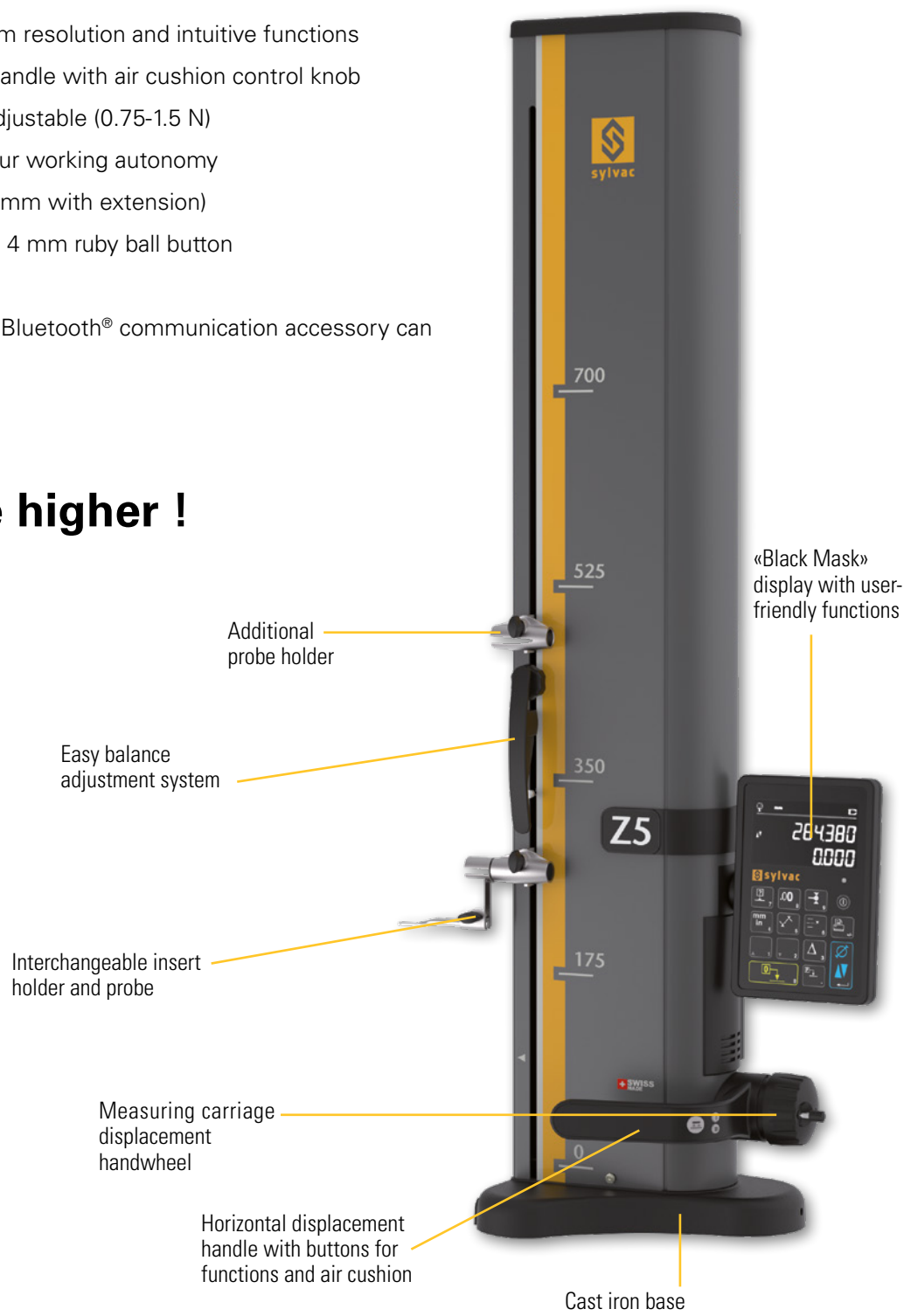
mini-USB

RS232

SWISS MADE



Output cable RS232 to RS232 (926-5505) or output cable mini-USB to USB (926-6001)

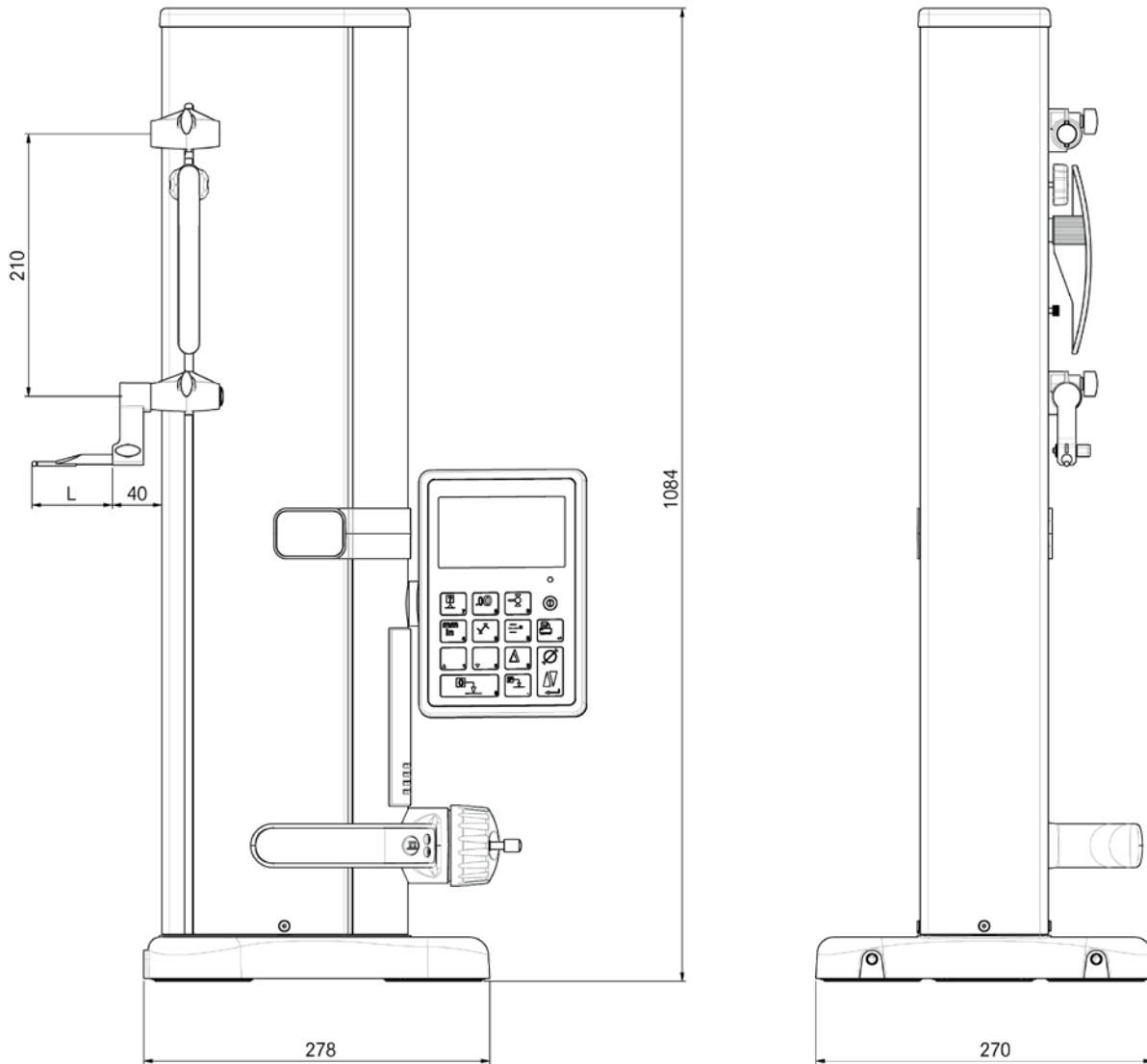




Height gauge

Z5

DIMENSIONAL DRAWINGS



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STANDARD DELIVERY

- Instrument according to technical specifications
- Protection cover
- Charging set (904-4200¹⁾/01/03/04/05)
- Ruby ball probe \varnothing 4 mm
- Setting gauge
- Calibration certificate
- Instruction manual

¹⁾ according to country

Height gauge

Z5

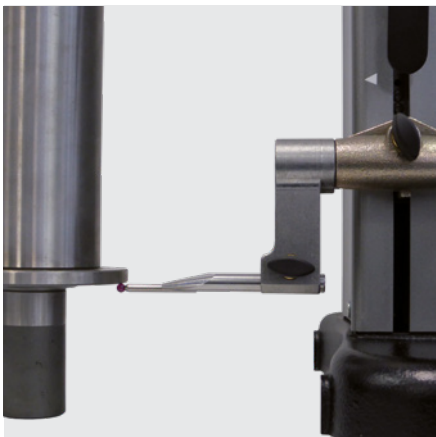
TECHNICAL SPECIFICATIONS

| | | 936-0700 |
|---|----|---------------|
| Measuring range | mm | 711 |
| Measuring range with extension | mm | 1023 |
| Max. Error | µm | 2.5 + L / 300 |
| Repeatability R_{MPE} | µm | 2 |
| Frontal squareness deviation S_{MPE} | µm | 8 |
| Maximum resolution | mm | 0.001 |
| Measuring force | N | 0.75 ÷ 1.5 |
| Autonomy | h | 12 |
| Output data | | USB / RS232 |
| Air cushion | | • |
| Weight | kg | 24 |
| Programmable by PC | | • |
| Zero setting | | • |
| Min / max / delta | | • |
| PRESET function | | • |
| Simultaneous display of diameters and centerlines | | • |
| Thickness, chain and height measurements | | • |
| Manual and motorised displacement | | • |

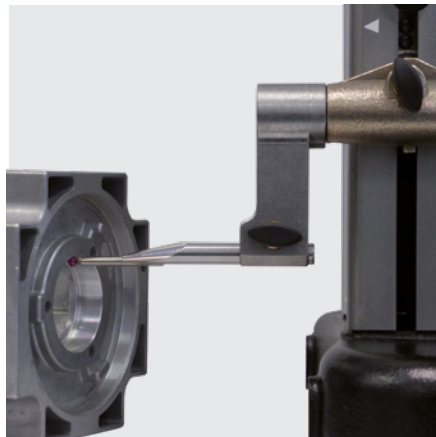
The above values have been determined according to ISO 13225, with the standard measuring insert.

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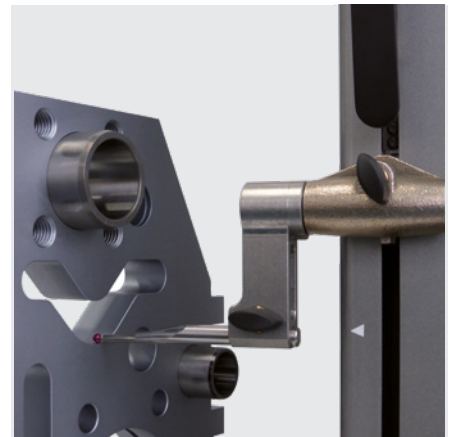
APPLICATIONS



Thickness, chain and height measurements



Simultaneous display of diameters and centerlines



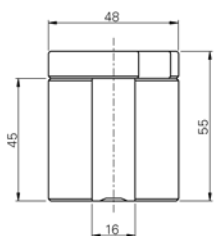
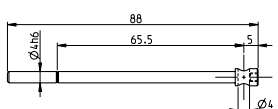
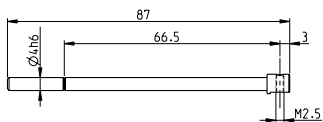
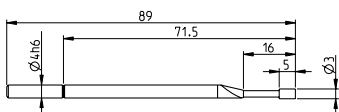
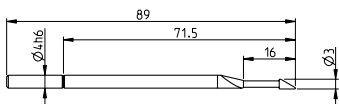
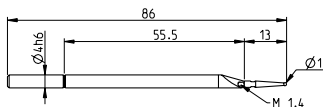
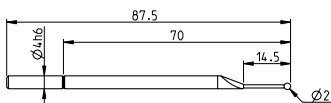
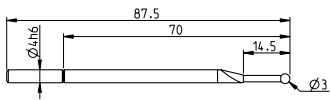
The motorisation guarantees a perfectly constant measuring force

For the accessories, refer to Trimos website : www.trimos.com



Height gauge

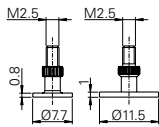
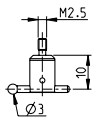
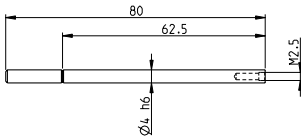
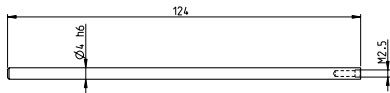
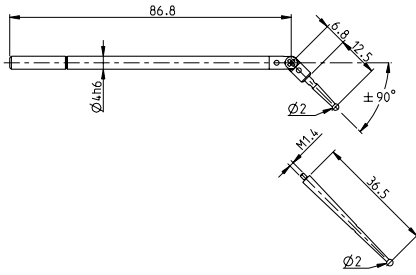
ACCESSORIES



| | | Hi_Cal | Hi_Gage | Z5 |
|-----------------|---|--------|---------|----|
| 930-2101 | Ruby ball probe Ø 3 mm | • | | |
| 930-2103 | Ruby ball probe Ø 2 mm | • | | |
| 930-2104 | Tungsten carbide ball probe Ø 1 mm | • | | |
| 930-2105 | Knife-edged measuring probe TC Ø 3 mm | • | | |
| 930-2106 | Cylindrical measuring probe TC Ø 3 mm | • | | |
| 930-2107 | Probe holder 90° M2.5 | • | | |
| 930-2108 | Probe holder 90° Ø 4 mm | • | | |
| 930-2002 | Setting gauge | • | | |
| 904-4200 | Charging set 100-240V / 9V | • | | |
| 904-4205 | EUR cable, included in 904-4200 (CH - 904-4201) | • | | |
| 904-4204 | UK cable, included in 904-4200 | • | | |
| 904-4203 | USA/JPN cable, included in 904-4200 | • | | |

Height gauge

ACCESSORIES



| | | Hi_Cal | Hi_Gage | Z5 |
|-----------------|--|--------|---------|----|
| 930-2102 | Swivelling tungsten carbide ball probe (M1.4) | ● | | |
| 930-2109 | Extension 124 mm M2.5 | ● | | |
| 930-2110 | Extension 80 mm M2.5 | ● | | |
| 905-2207 | Probe holder and ruby ball probe Ø 3 mm, M2.5 | ● | | |
| 905-2205 | Disk shaped anvils Ø 7.7 mm and Ø 11.5 mm, M2.5 | ● | | |
| 930-2150 | Full accessory set in wooden box Content : 930-2103, 930-2104, 930-2105, 930-2106, 930-2107, 930-2108, 930-2109, 930-2110, 905-2204, 905,2205, 905-2207 | ● | | |
| 930-2151 | Basic accessory set in wooden box Content : 930-2103, 930-2104, 930-2105, 930-2106 | ● | | |
| 904-4101 | External contact (foot-pedal) | ● | | |



Height gauge

ACCESSORIES



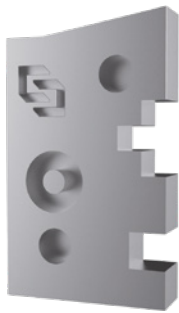
930-2111

Carbon probe-holder 200mm, Ø4mm

Hi_Cal

Hi_Gage

Z5



930-2112

Demonstration piece



840.9001

Ball probe Ø8mm



840.9002

Tracing probe (standard delivery)



905-2247

Clamping stem



981-7200

Bluetooth® module Z5



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