

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**

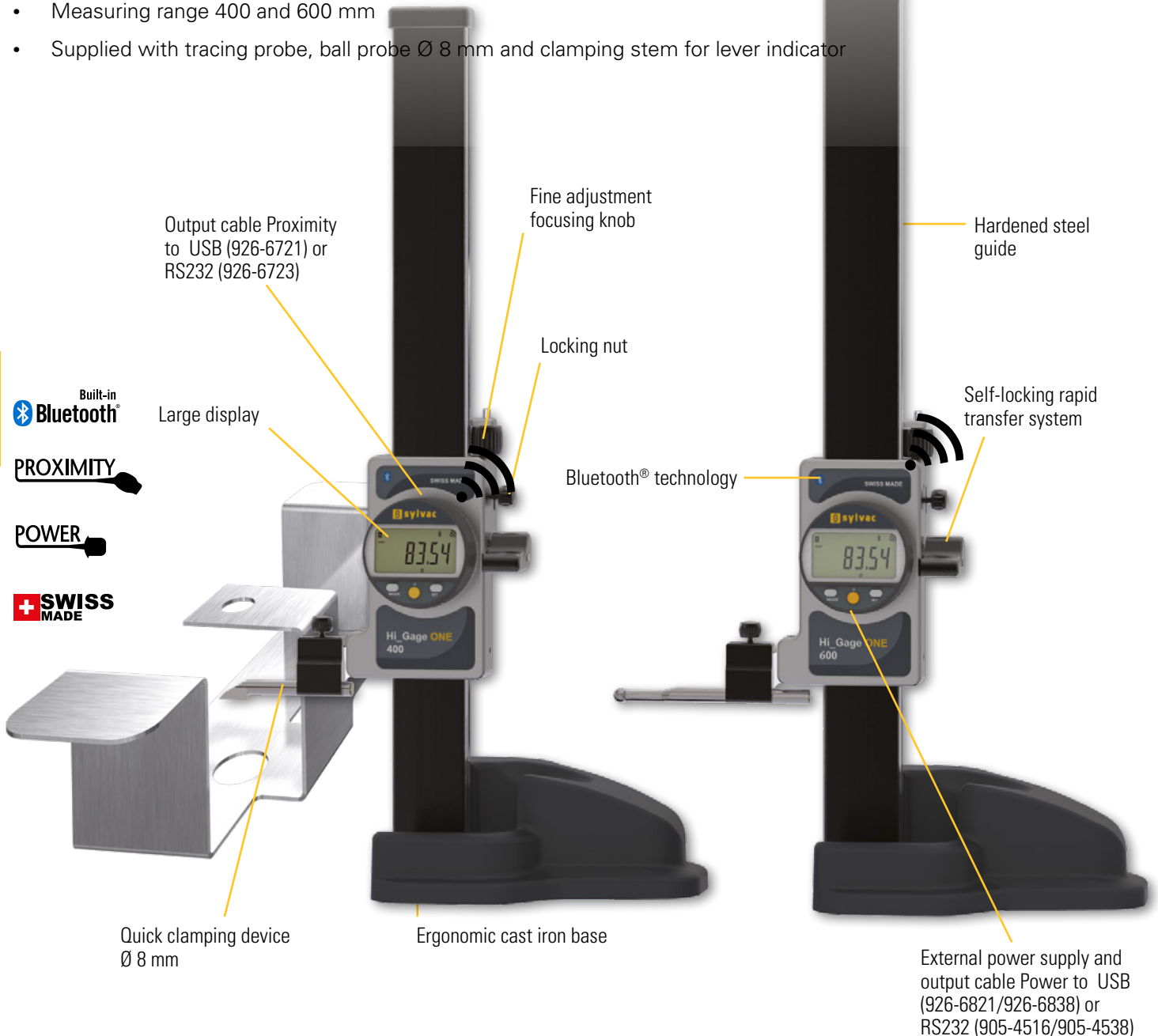


Height gauge

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



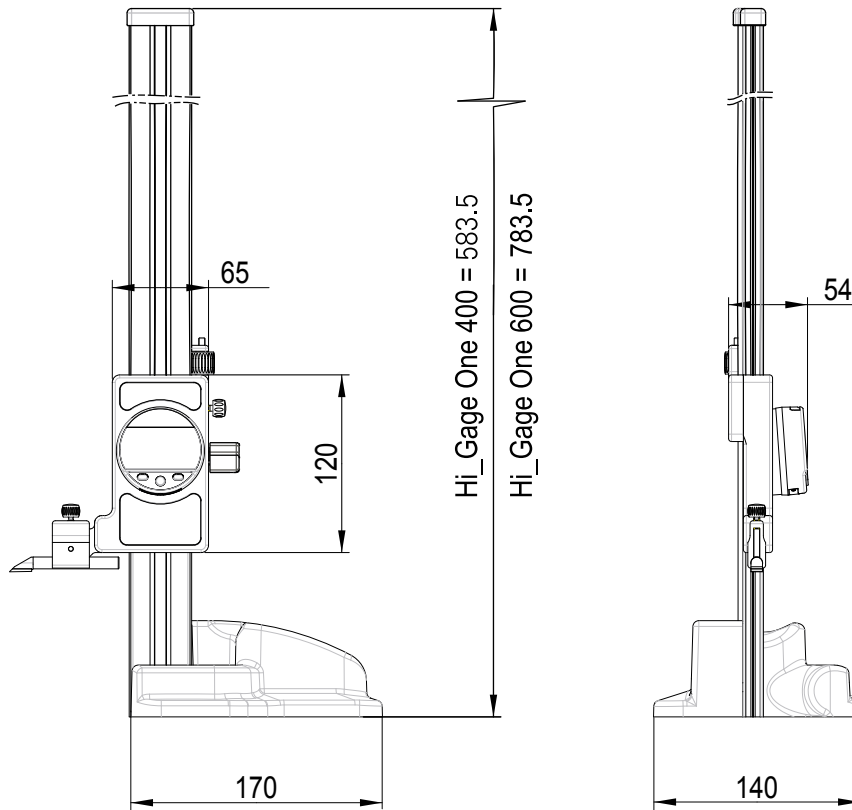
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Height gauge

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

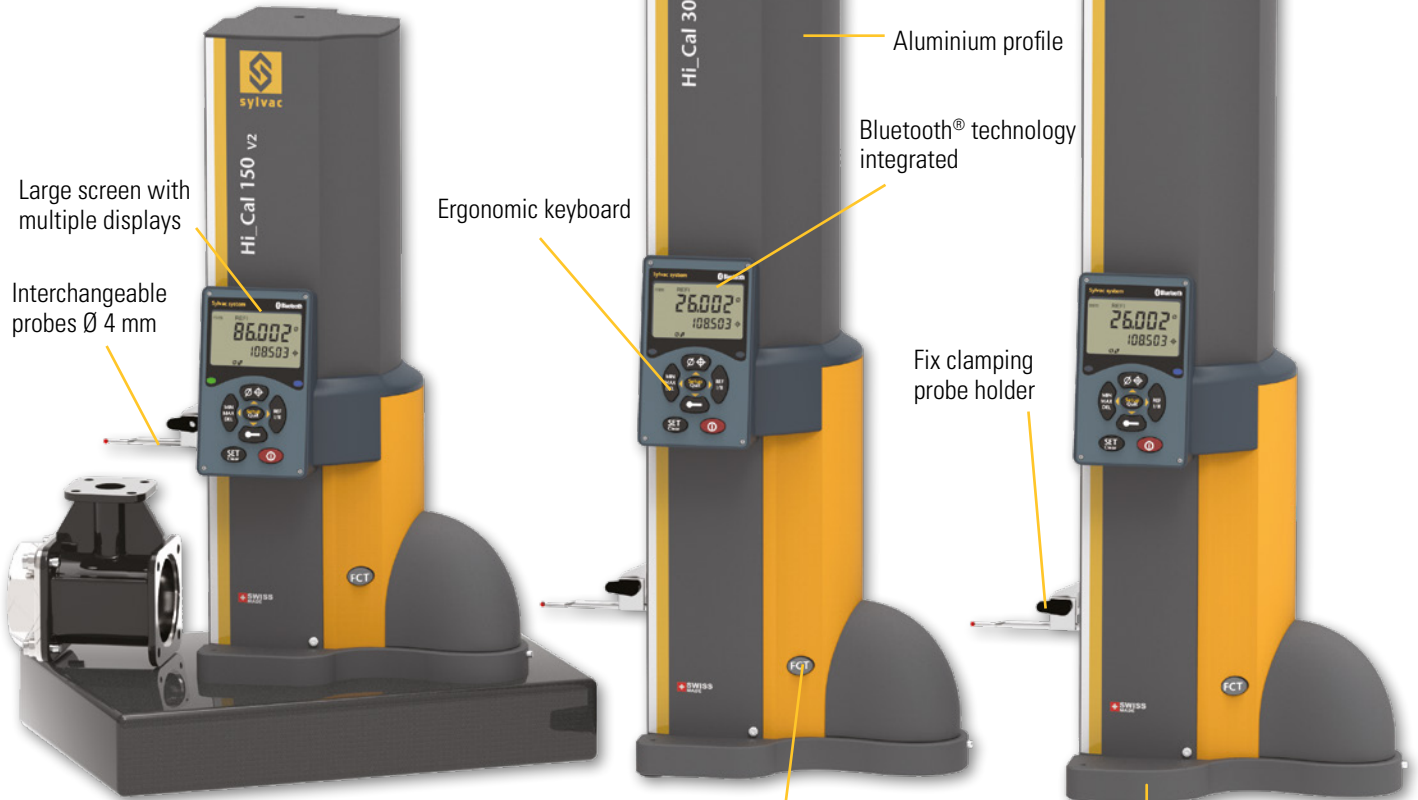
- Tracing probe (840-9002)
- Calibration certificate
- Quickstart

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



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Large screen with multiple displays
Interchangeable probes Ø 4 mm

Ergonomic keyboard

Aluminium profile

Bluetooth® technology integrated

Fix clamping probe holder

Programmable multi-functional key

Reduced base area for effective use close to the machine

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)

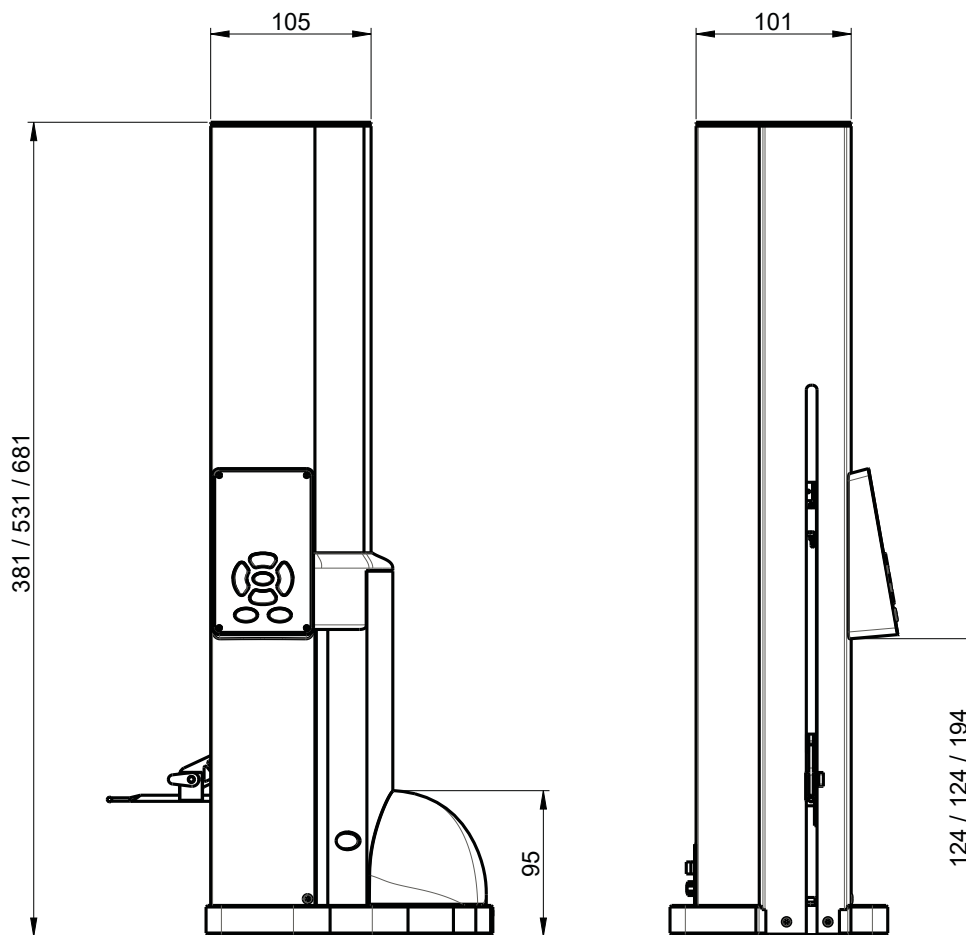
Switch on and measure!



Height gauge

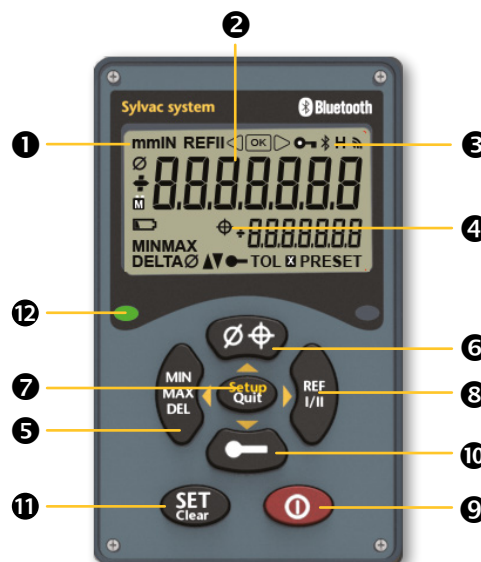
Hi_Cal V2 Smart

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

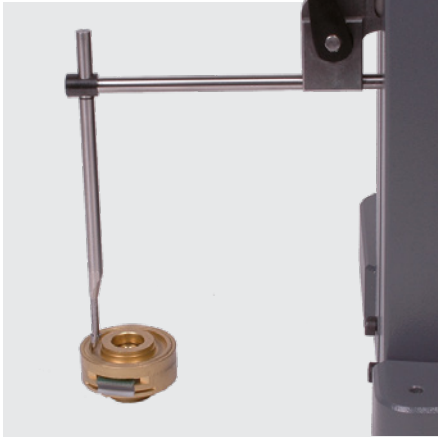
¹⁾ according to country



Height gauge

Hi_Cal V2 Smart

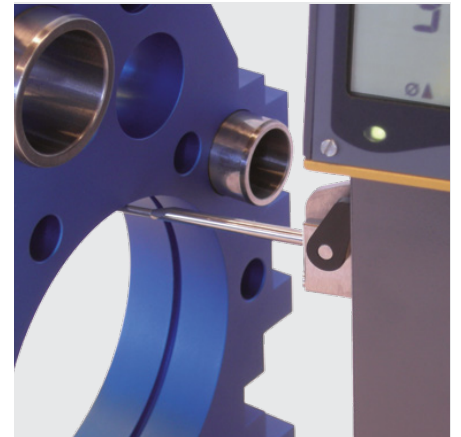
APPLICATIONS



Depth measurement with accessories 930-2108 and 930-2105



Depth measurement with accessories 930-2108 and 905-2204



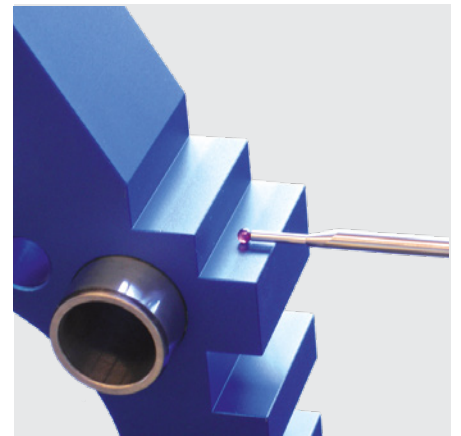
Internal measurement with ruby ball probe Ø 3 mm, 930-2101 (standard)



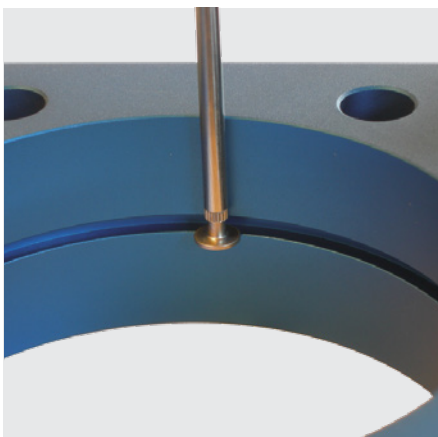
Internal groove measurement with accessories 930-2108, 930-2110 and 905-2207



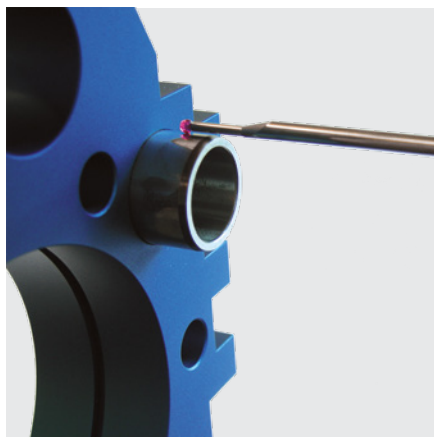
Taking the probe constant value with the setting bloc 930-2002 (standard)



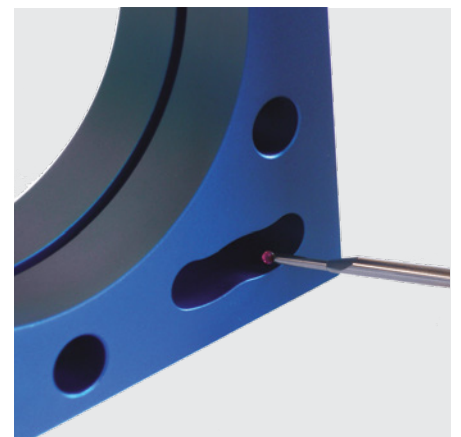
Heights and thicknesses measurements with the standard probe 930-2101



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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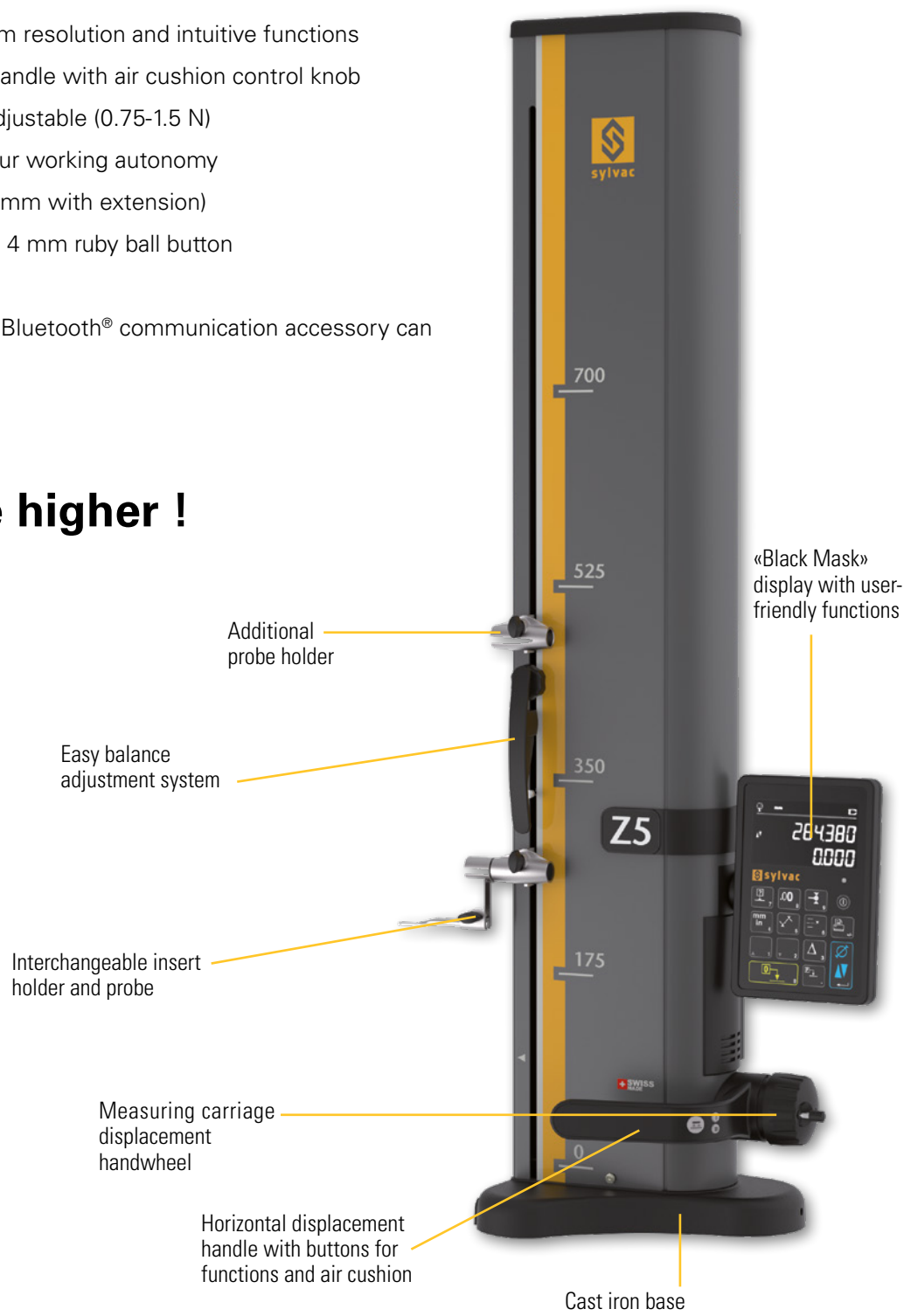
mini-USB

RS232

SWISS MADE



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

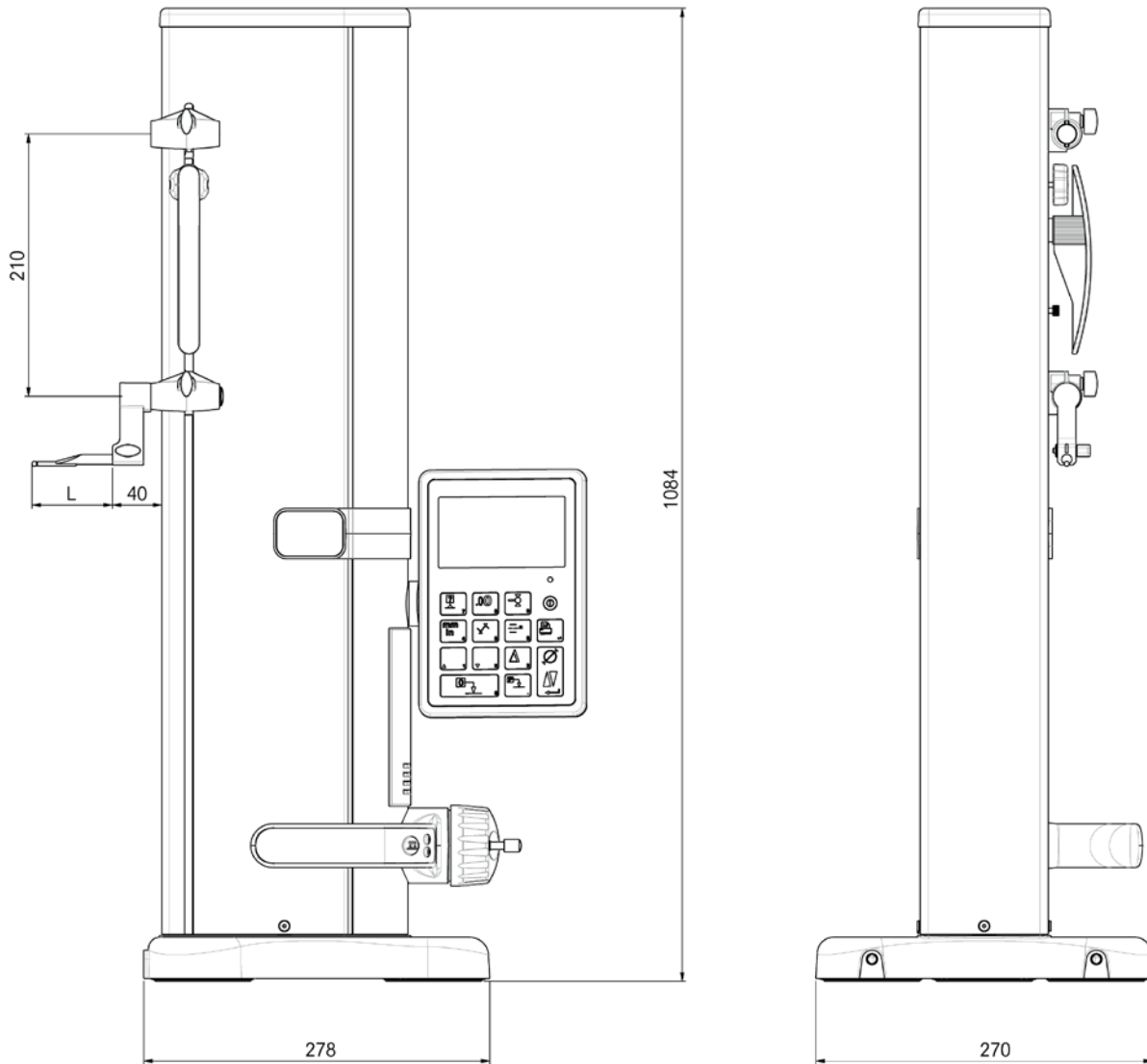




Height gauge

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

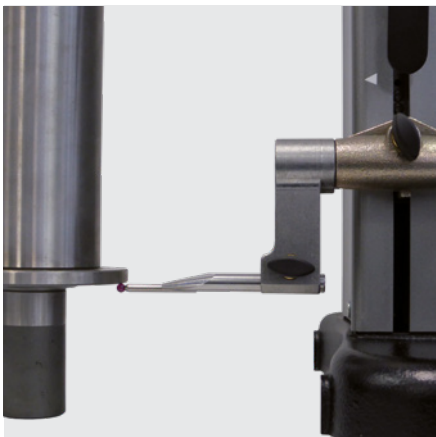
TECHNICAL SPECIFICATIONS

		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		•

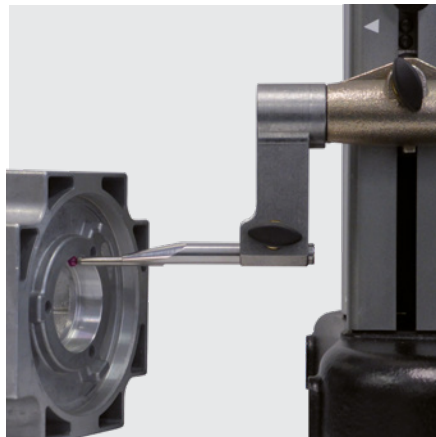
The above values have been determined according to ISO 13225, with the standard measuring insert.

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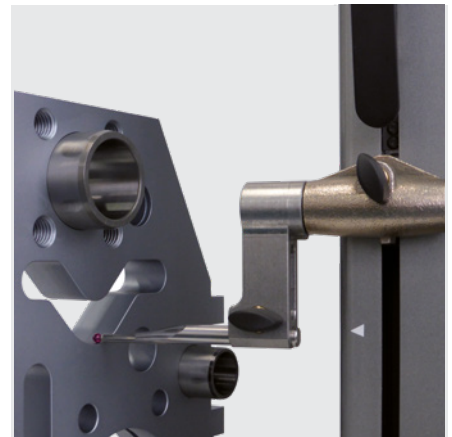
APPLICATIONS



Thickness, chain and height measurements



Simultaneous display of diameters and centerlines



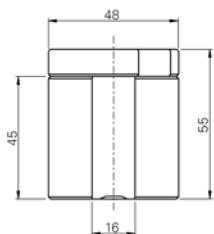
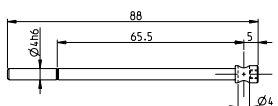
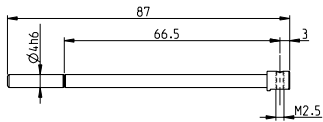
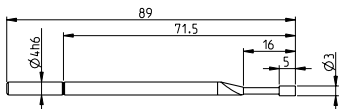
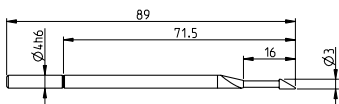
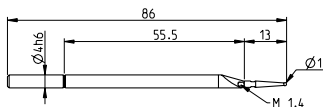
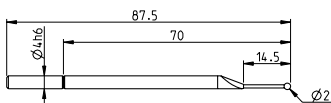
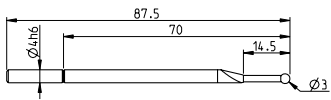
The motorisation guarantees a perfectly constant measuring force

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



Height gauge

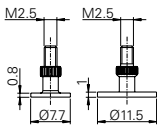
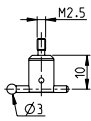
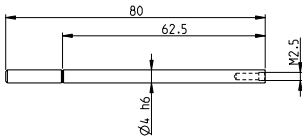
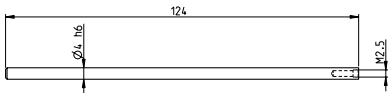
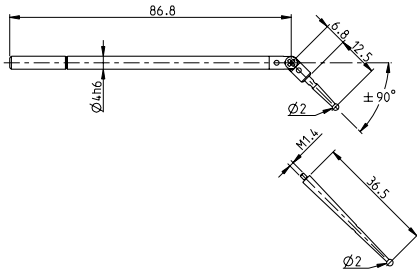
ACCESSORIES



		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)	●		

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Height gauge

ACCESSORIES



930-2111

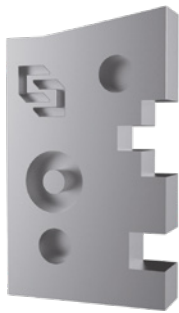
Carbon probe-holder 200mm, Ø4mm

Hi_Cal

Hi_Gage

Z5

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930-2112

Demonstration piece

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840.9001

Ball probe Ø8mm

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840.9002

Tracing probe (standard delivery)

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905-2247

Clamping stem

•



981-7200

Bluetooth® module Z5

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