



# Catalogue **Edition 9.1**

# Catalogue



**PRIX  
SVC<sup>+</sup>  
GAGNANT 2016**

SUISSE ROMANDE



Changes without prior notice  
Images may differ from reality

EN



# Presentation

## SYLVAC CATALOGUE

Dear Customer, Dear Reader,

Welcome to edition 9 of our Sylvac general catalogue. This new edition is considered necessary because of the many new items that have recently been added to our product range.

The major new feature is undoubtedly the optical measurement section, which brings together our Sylvac SCAN contactless inspection instruments and our Sylvac VISIO video measurement systems. These devices have diversified and strengthened our product range in response to the growing needs of the manufacturing industries.

The new catalogue also features other more conventional but no less important instruments, such as:

- A new range of calipers and depth gauges, including some special models
- A family of products based on our large-caliper UL4 instruments, comprising our ULH universal instruments, our ULV depth gauges and our ULD rules, all for measuring larger dimensions
- Our S\_Dial WORK PLC digital test indicators can be connected directly to programmable logic controllers
- Two important accessories (a battery pack and a pedal) to support our Bluetooth® range
- A series of updated PS measuring benches, redesigned to meet more and more exacting requirements for measuring small components
- Our new Probes P12D of 12mm measuring range and our display unit D62S
- Plus many other surprises...

This catalogue showcases all of Sylvac's dynamism, as illustrated by the incredible number of new, innovative products added to our manufacturing program in recent months. Other exciting projects are in the pipeline and will be presented to you in a future edition, highlighting our passion for innovation and our boundless imagination!

**Discover other surprises that await you in our new catalogue now!**

### Why should you choose our products?

There are many sound arguments in our favour, particularly:

- More than 40 years' expertise and experience in the area of dimensional measurement.
- Products developed and made in Switzerland with the «Swiss Made» label, representing acknowledged proof of quality throughout the world.
- Innovative, ergonomic, durable instruments designed by professional designers.
- A global presence based on a network of efficient agents who are able to provide you with local support in more than 40 countries.
- Products that meet international standards (a number of them are instruments protected in accordance with IP67).

In order to meet an increasing demand for traceability of controls, our instruments are fitted with a data output for wired or wireless connection.

dial gauges with data transmission by Bluetooth® signal, developed by Sylvac mark the start of a new era in the area of quality control and confirm our position as leaders in this market.

We hope that you will enjoy looking through our catalogue and using our Sylvac instruments.  
Thank you for your confidence in us. We remain faithfully at your service



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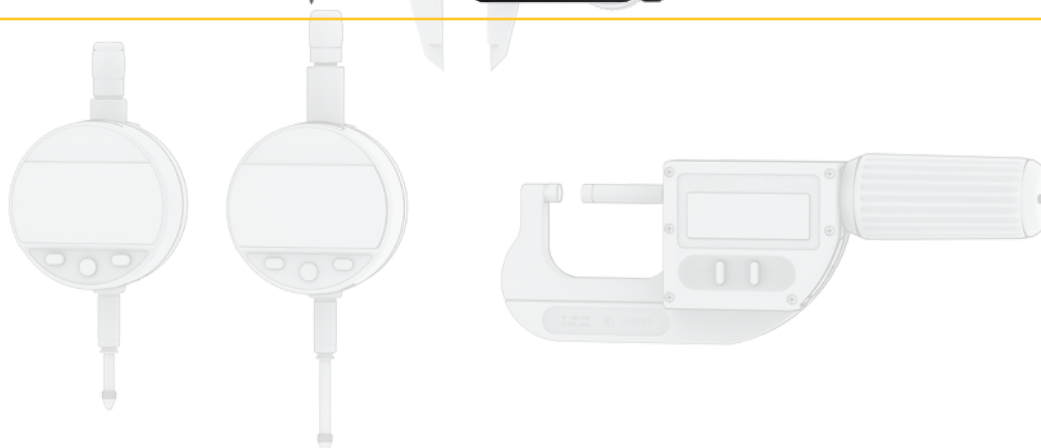
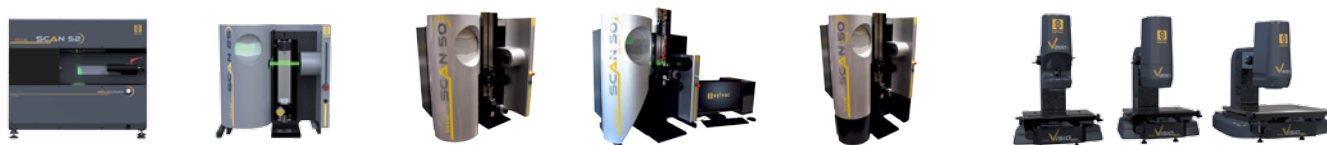


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# Content

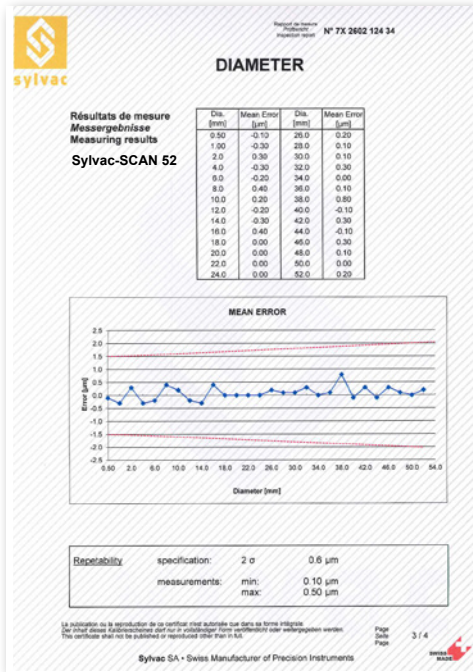


<b>A) Hand tools</b>	<b>7 - 76</b>	Calipers, micron caliper, Ultra light calipers, digital scales, micrometers, micrometer screws, depth gauges, protractor
<b>B) Digital indicators</b>	<b>77 - 118</b>	Test indicators S234, Mini-dial gauges S233, S_Dial PRO, S_Dial WORK and dial gauge testing stand M3
<b>C) Internal measuring instruments</b>	<b>119 - 132</b>	Internal measuring instruments with micrometer screw and pistol type
<b>D) Height gauges</b>	<b>133 - 146</b>	Hi_Cal and Hi_Gage ONE
<b>E) Probes and digital display units</b>	<b>147 - 212</b>	Probes, digital display units D50S, D70S/H/I, D80S, D200S, D300S, D302 / 304 and MBUS
<b>F) Measuring benches</b>	<b>213 - 238</b>	Measuring benches PS15, PS16, PS17
<b>G) Optical measurement</b>	<b>239 - 258</b>	Sylvac-SCAN and Sylvac-VISIO
<b>H) Cables and softwares</b>	<b>259 - 276</b>	Wireless transmission, cables, accessories, softwares



# Certificates

## SYLVAC PRODUCTS



**SYLVAC named best SMEs in western Switzerland in 2016 !**



### 3-year guarantee :

The Sylvac brand is built on leading edge know-how in electronics, micro-electronics and micro-mechanics. Confident in the quality of its products, Sylvac offers a 3-year guarantee on its product range.

### Error max :

The total error mentioned in our technical specifications corresponds to the maximum difference between the highest and lowest deviation from the true position within the instrument's measuring range.

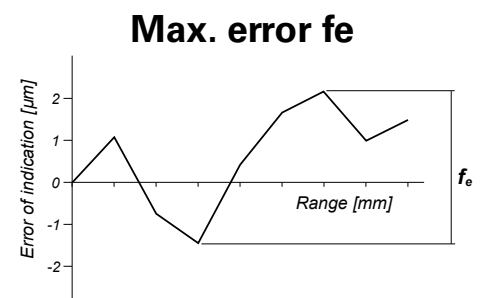
A certificate of calibration is delivered for all our instruments with a resolution of 1 µm and indicates the effective maximum error of the instrument, controlled in our laboratory.

The repeatability is defined as the maximum spread of series of measurements taken at the same position by the same operator and under the same conditions.

As for now, there is no standard for digital dial indicators. The Sylvac internal standard is derived from existing standards for mechanical dial indicators.

### Web site :

Up to date information as well as updated files and software can be downloaded on [www.sylvac.ch](http://www.sylvac.ch)





# General information

## SYLVAC PRODUCTS

### SYLVAC PRODUCTS :

The Sylvac patented inductive measuring system is insensitive to magnetic fields and liquids on the sensor or on the measuring scale. A very low consumption system keeps the zero setting even when switched "off". This system is particularly well adapted for measuring instruments such as calipers, indicators etc...

The Sylvac patented capacitive measuring system is used for the linear probe type of instruments where the sensor is integrated in the probe. As opposed to inductive half bridge and LVDT probes, the capacitive Sylvac system can be used over a large measuring range (up to 50mm) while preserving an excellent linearity (1µm/25mm) and repeatability (0.2µm).



Characterizes the instruments whose the electronic module and the measuring system are protected against liquids. The IPXX degree defines the protection rating of the instruments.



Characterizes instruments equipped with a Smart Inductive Sensor with an extremely low power sleeping mode, which keeps its origin (last zero setting) and automatically wakes up when a movement is detected.

### IP54 / IP65 / IP67

Characterizes instruments whose electronic module and measuring system are protected against liquids. The IPXX degree defines the protection rating according to IEC 60529.

**IP54** : protected against dust. Protected against water spray from all directions

**IP65** : completely sealed against dust, protected against water jets from all directions

**IP67** : completely sealed against dust, protected against temporary total immersion

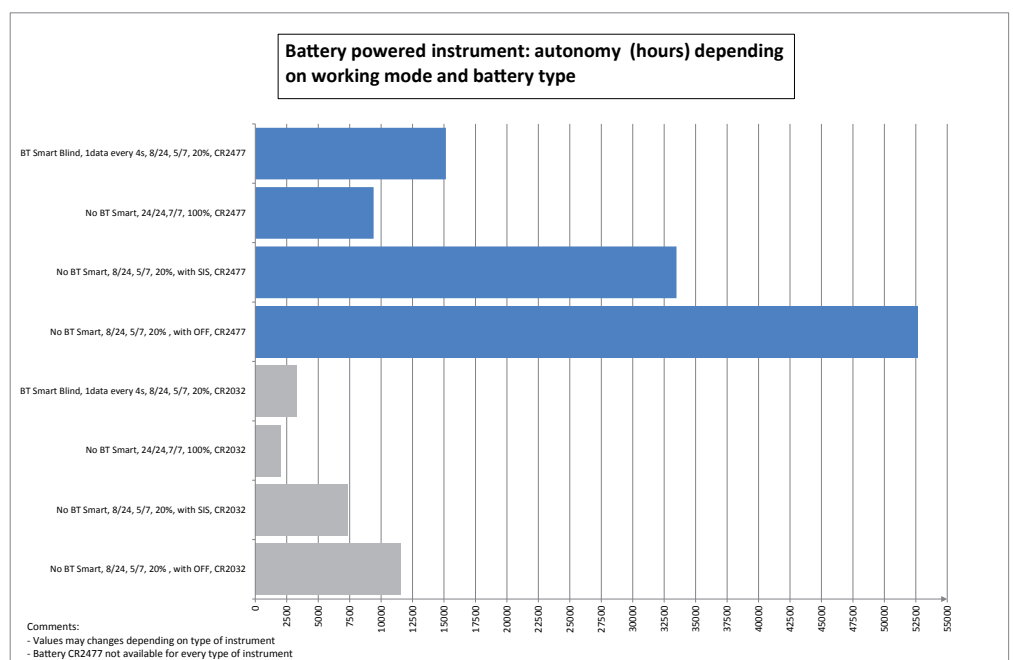
### Power and battery life

All the handtools, indicators, scales and micrometer heads are powered with a Lithium battery CR2032. If equipped with a «Power» output, the connector replaces the battery and the power is given by the PC or the display unit.

### Bluetooth® Technology

Our Bluetooth® Smart instruments are equipped with the Low Energy technology and have a 15m scope. In terms of wave emissions, the Bluetooth® technology have a transmission about 1mW, which corresponds of 1/100 of the Wifi and 1/40 of the GSM/3G transmission from the smartphones.

With a working distance of at least 20cm, the effect on the human body is a million times smaller than a mobile phone worn on the ear.



# General information

## SYLVAC PRODUCTS

### Data output types

Instruments equipped with a Proximity data output. Contactless data transfer by inductive coupling through the plastic casing

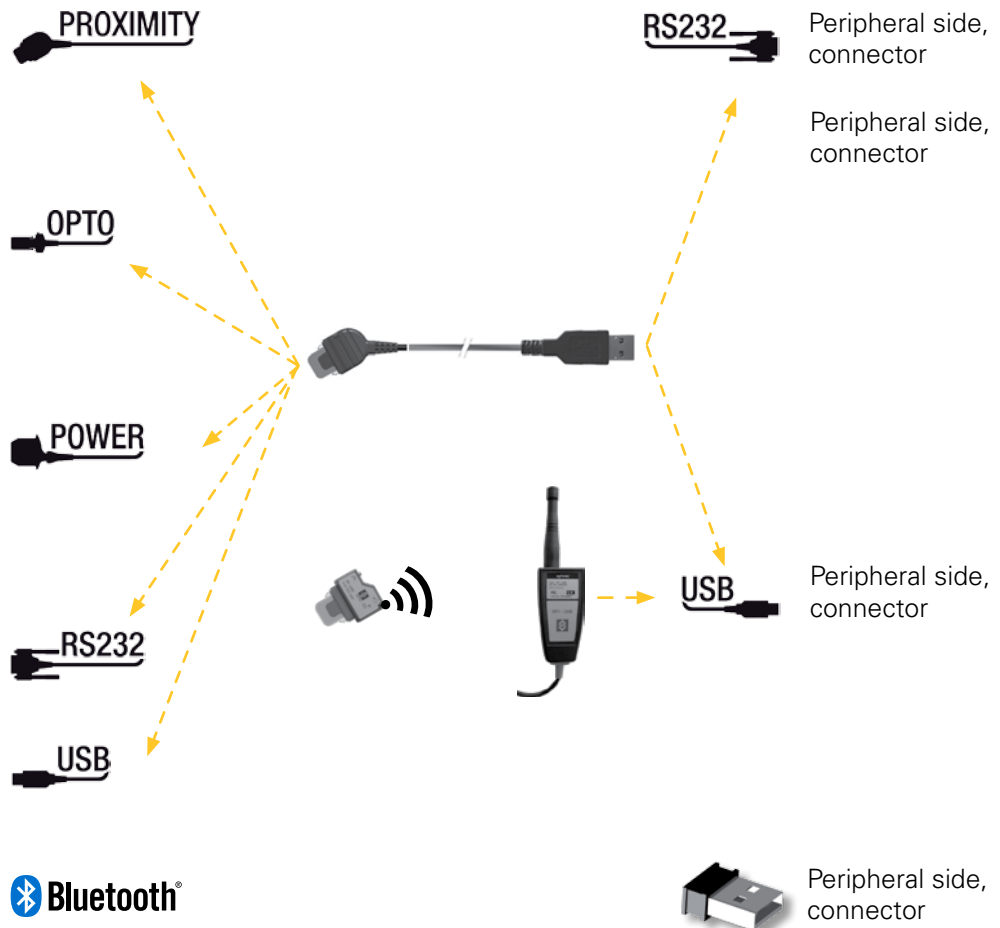
Instruments equipped with an Opto type data output. Contactless optical data transfer through a recessed window in the casing

Instruments equipped with a Power and Data connector. Data transfer is done by galvanic coupling, with power supplied to the instrument.

Instruments equipped with an RS232 data output (Sub-D9 pole connector)

Instruments equipped with an USB data output

Instruments with BLUETOOTH® technology output <sup>1)</sup>



<sup>1)</sup> Note: BLUETOOTH® instruments and accessories are only available in countries for which certification has been obtained (UE, USA, JP, CN, TW etc.). Look at our website, [www.sylvac.ch](http://www.sylvac.ch), for the list of countries that have obtained certification. If your country is not on the list, please contact your local Sylvac reseller.

# HAND TOOLS

In 1981, Sylvac launched the first caliper with digital read-out on the market. Quickly, other models followed and the market of these handtools took an incredible rise.

Today, Sylvac remains a leader in this market and offers a range of calipers with digital read-out of a measurement capacity from 150 to 3000 mm. Other handtools complete this range.

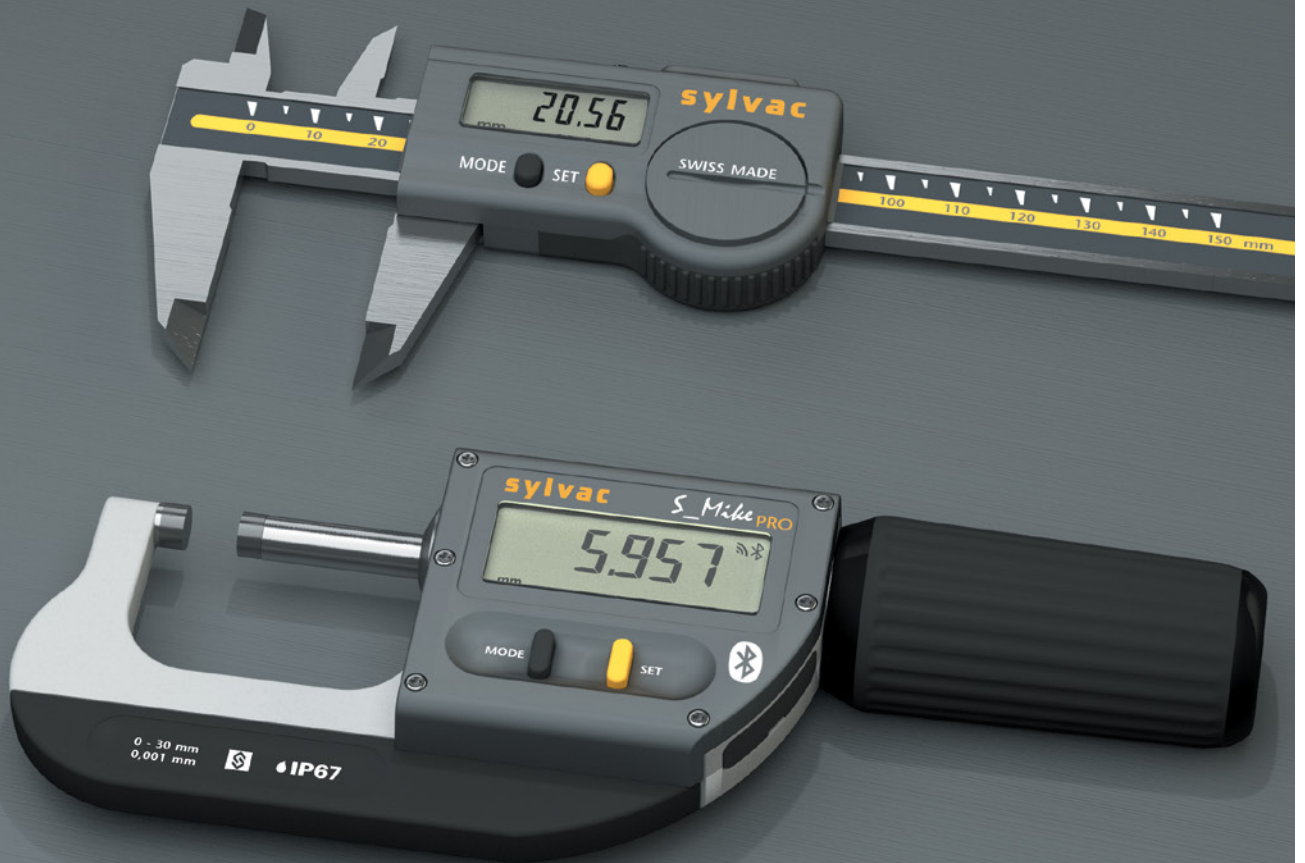
**Sylvac inductive measuring system (patented)**

**Data output**

**Power supply: Lithium battery 3V, Type CR 2032**

**Operational temperature: +5 to +40°C**

**mm/inch selection**





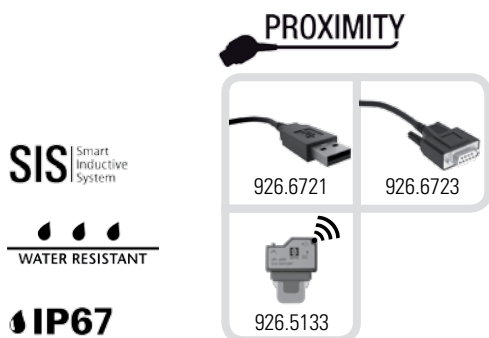
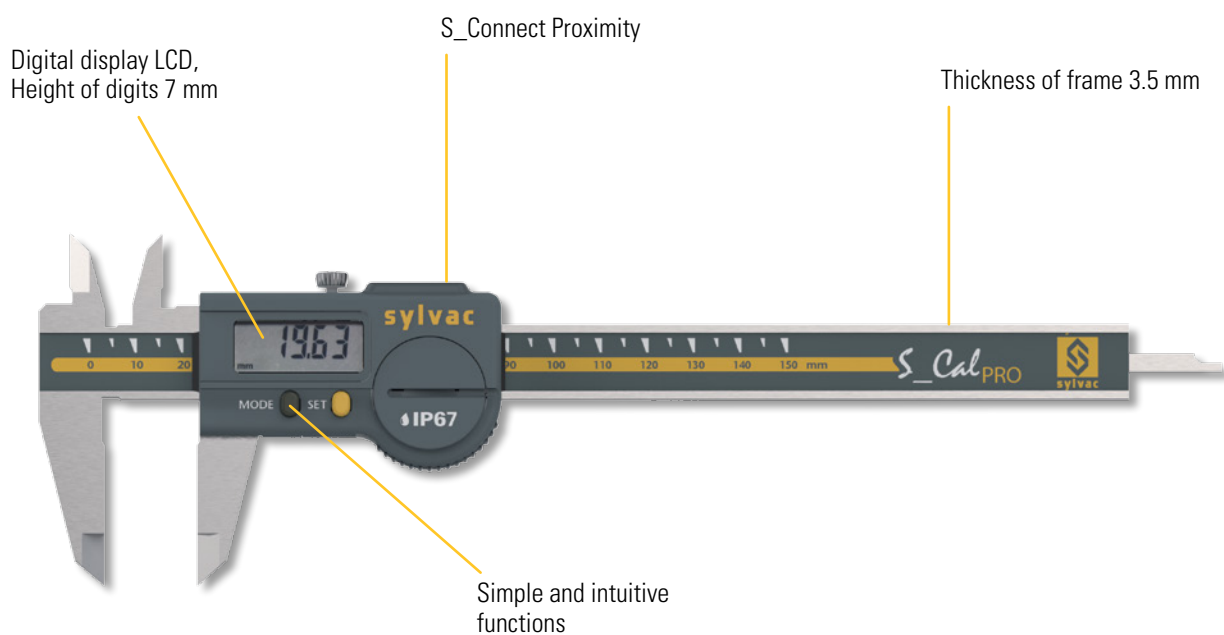
# Caliper

# S\_Cal PRO

## DESCRIPTION

## PROXIMITY

- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529, **even connected**
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and ground
- Thumb wheel on request (see accessories)
- Great comfort of use thanks to its ergonomic frame



**Proximity output data !**

\* SIS description on page 5

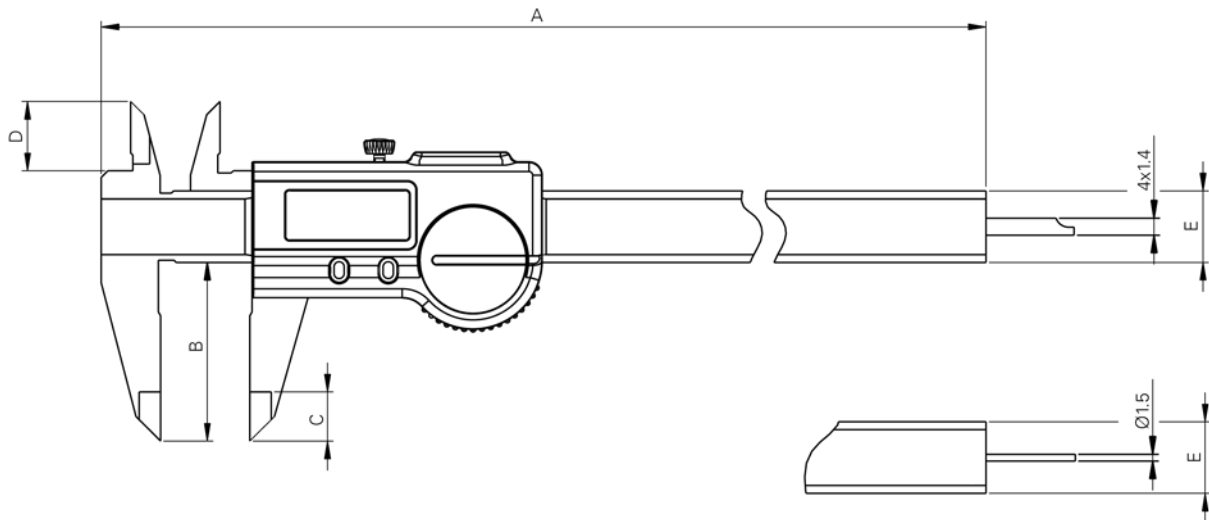
# Caliper

# S\_Cal PRO

## DIMENSIONAL DRAWING

## PROXIMITY

A



## TECHNICAL SPECIFICATIONS

		910.1502	910.1507	910.1522	910.1532
Measuring range	mm	150	150	200	300
Max. Error G	µm	20 <sup>1)</sup>	20 <sup>1)</sup>	30	30
A	mm	234.5	234.5	290.5	388
B	mm	40	40	50	64
C	mm	11	11	14	14
D	mm	16	16	19	19
E	mm	16 x 3.5	16 x 3.5	16 x 3.5	16 x 4
Depth rod	mm	■ 4 x 1.4	Ø 1.5	■ 4 x 1.4	---
Protection rating according to IEC 60529		IP67 with or without connector			
S_Connect : Proximity		USB / RS232 / Wireless <sup>2)</sup>			
Functions		Zero setting, mm/inch, Data			
Smart Inductive Sensor		●			

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

<sup>2)</sup> see cables chapter

# Micron Caliper

# S\_Cal PRO $\mu\text{m}$

## DESCRIPTION

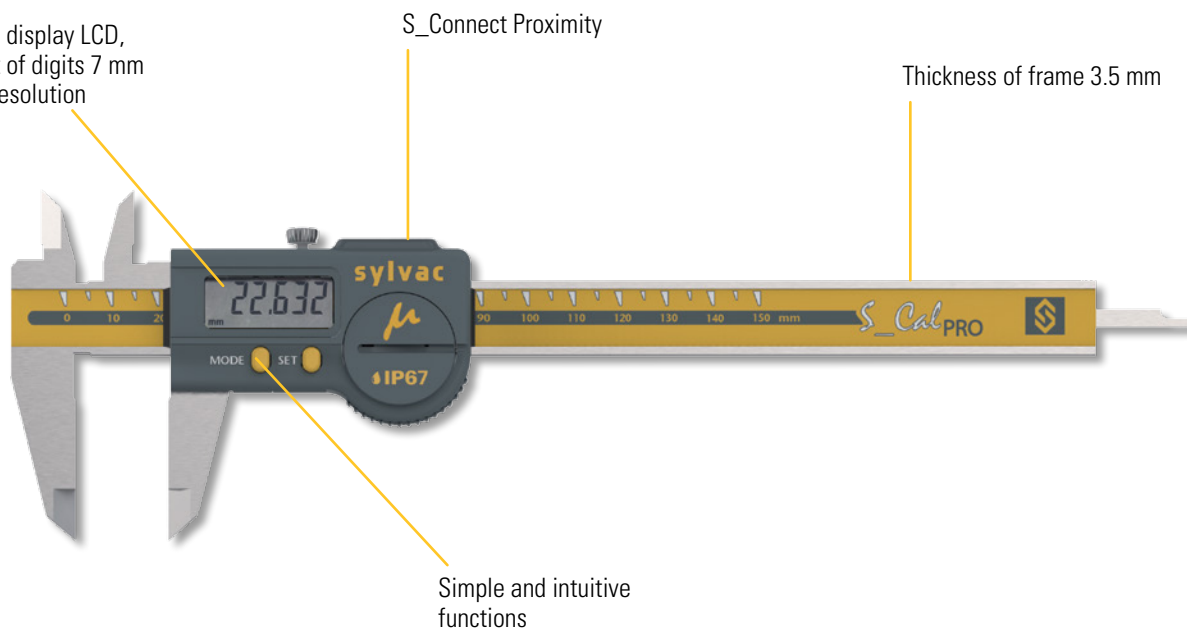
## PROXIMITY MICRON

- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529, **even connected**
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Thumb wheel on request (see accessories)
- Mechanical frame in stainless steel, hardened and ground
- Improved parallelism of internal jaws compared to version S\_Cal PRO
- **Preset**
- **Resolution 0,001mm or 0,00005"**
- **4 $\mu\text{m}$  repeatability**

Digital display LCD,  
Height of digits 7 mm  
1  $\mu\text{m}$  resolution

S\_Connect Proximity

Thickness of frame 3.5 mm



Simple and intuitive  
functions

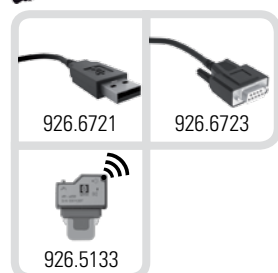
**SWISS  
MADE**

**SIS** | Smart  
Inductive  
System

**WATER RESISTANT**

**IP67**

**PROXIMITY**



**Proximity output data !**  
**4 $\mu\text{m}$  repeatability**

\* SIS description on page 5



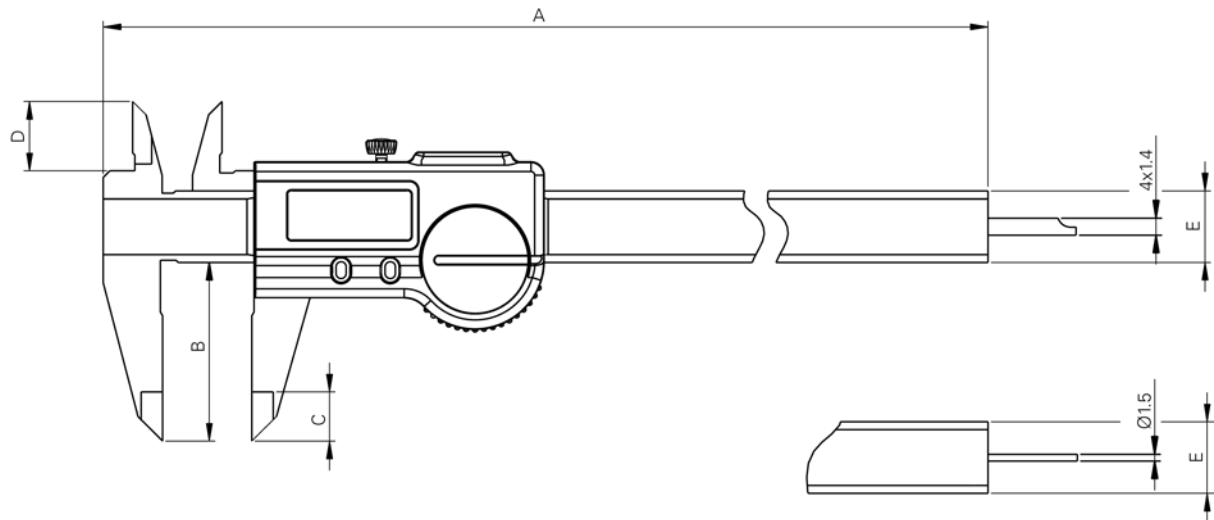
# Micron Caliper

# S\_Cal PRO $\mu\text{m}$

## DIMENSIONAL DRAWING

## PROXIMITY MICRON

A



## TECHNICAL SPECIFICATIONS

		910.9502	910.9507
Measuring range	mm	150	150
Max. Error G	$\mu\text{m}$	15 <sup>1)</sup>	15 <sup>1)</sup>
Resolution	mm	0.001	
A	mm	234.5	234.5
B	mm	40	40
C	mm	11	11
D	mm	16	16
E	mm	16 x 3.5	16 x 3.5
Depth rod	mm	4 x 1.4	Ø1.5
Protection rating according to IEC 60529		IP67 with or without connector	
S_Connect : Proximity		USB / RS232 / Wireless <sup>2)</sup>	
Functions		mm/inch, preset, zero setting, Data	
Smart Inductive Sensor		●	

<sup>1)</sup> < 100 mm: 15  $\mu\text{m}$  / > 100 mm : 30  $\mu\text{m}$  / DIN 862

<sup>2)</sup> see cables chapter

# Caliper

## S\_Cal EVO

### DESCRIPTION

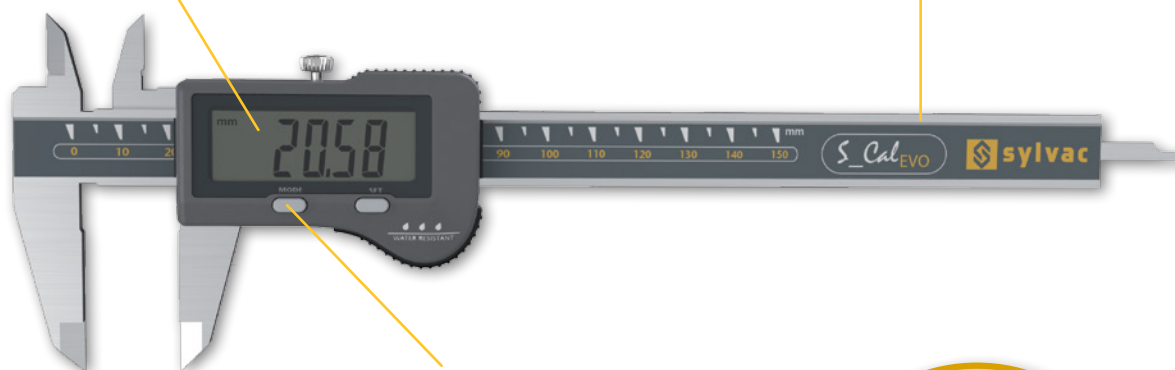
### STANDARD

#### • Standard professional caliper

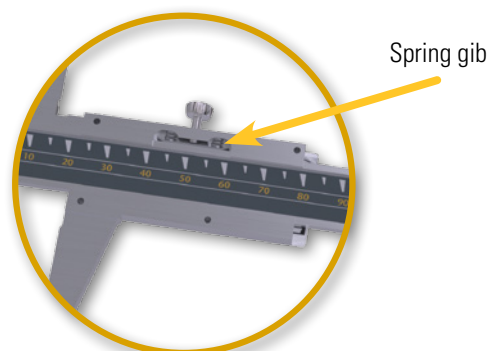
- New extra-large display
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame
- Thumb wheel on request (see accessories)

Digital display LCD,  
Height of digits 11.5 mm

Thickness of frame 3.5 mm



Simple and intuitive  
functions



Spring gib

Sliding mechanism

SIS | Smart  
Inductive  
System

WATER RESISTANT

IP54

Coolant and lubricant resistant

\* SIS | Smart Inductive System description on page 5

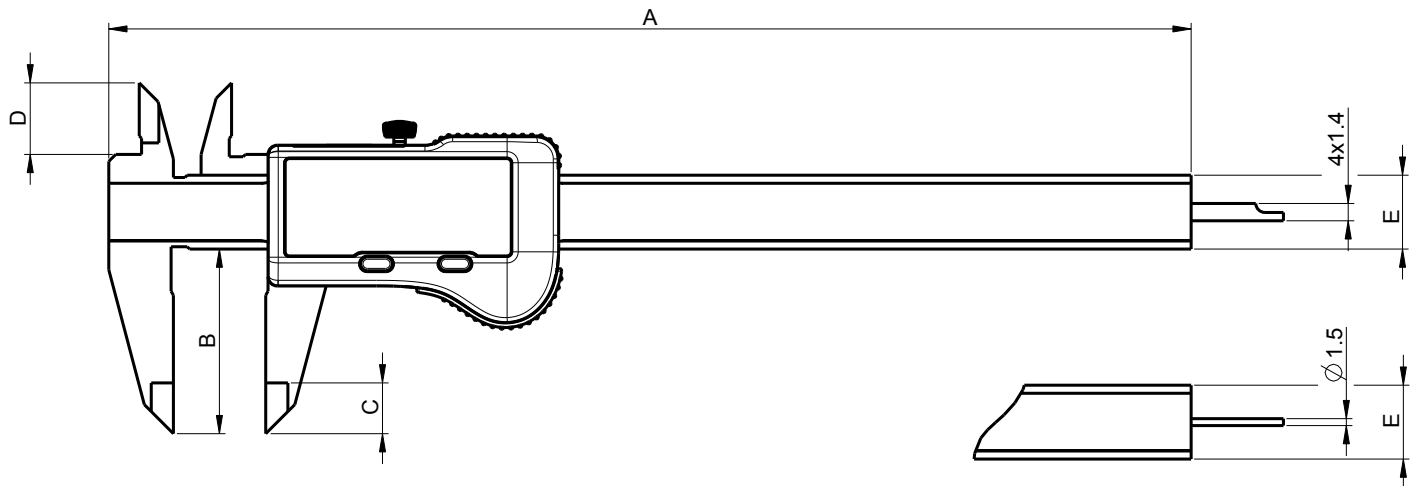
# Caliper

# S\_Cal EVO

## DIMENSIONAL DRAWING

## STANDARD

A



## TECHNICAL SPECIFICATIONS

		810.1402	810.1407	810.1422	810.1432
Measuring range	mm	150	150	200	300
Max. Error G	µm	20 <sup>1)</sup>	20 <sup>1)</sup>	30	30
A	mm	234.5	234.5	290.5	388
B	mm	40	40	50	64
C	mm	11	11	14	14
D	mm	16	16	19	19
E	mm	16 x 3.5	16 x 3.5	16 x 3.5	16 x 4
Depth rod	mm	■ 4 x 1.4	Ø 1.5	■ 4 x 1.4	---
Protection rating according to IEC 60529		IP54			
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold			
Smart Inductive Sensor		●			

<sup>1)</sup> > 100 mm : 30 µm / DIN 862



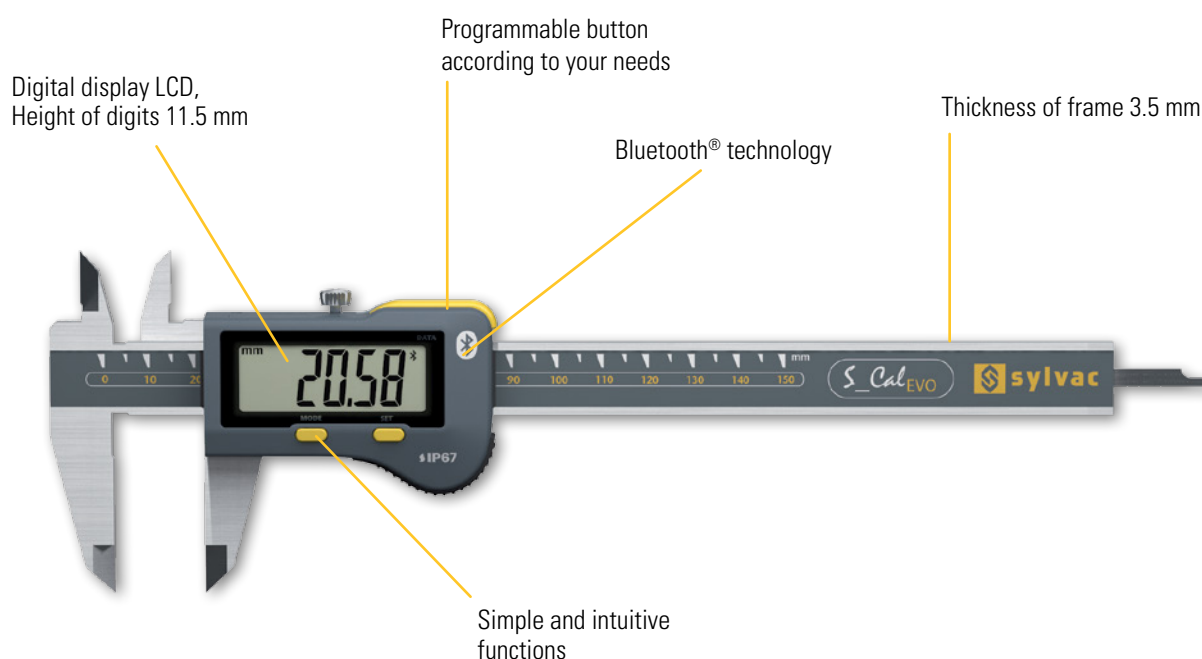
# Caliper

# S\_Cal EVO BT

## DESCRIPTION

BLUETOOTH®

- **Integrated Bluetooth® technology**
- New extra-large display
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame
- Thumb wheel on request (see accessories)



**Bluetooth® wireless technology and IP67 protection rating!**

**SIS** Smart Inductive System

**WATER RESISTANT**

**IP67**

\* SIS description on page 5



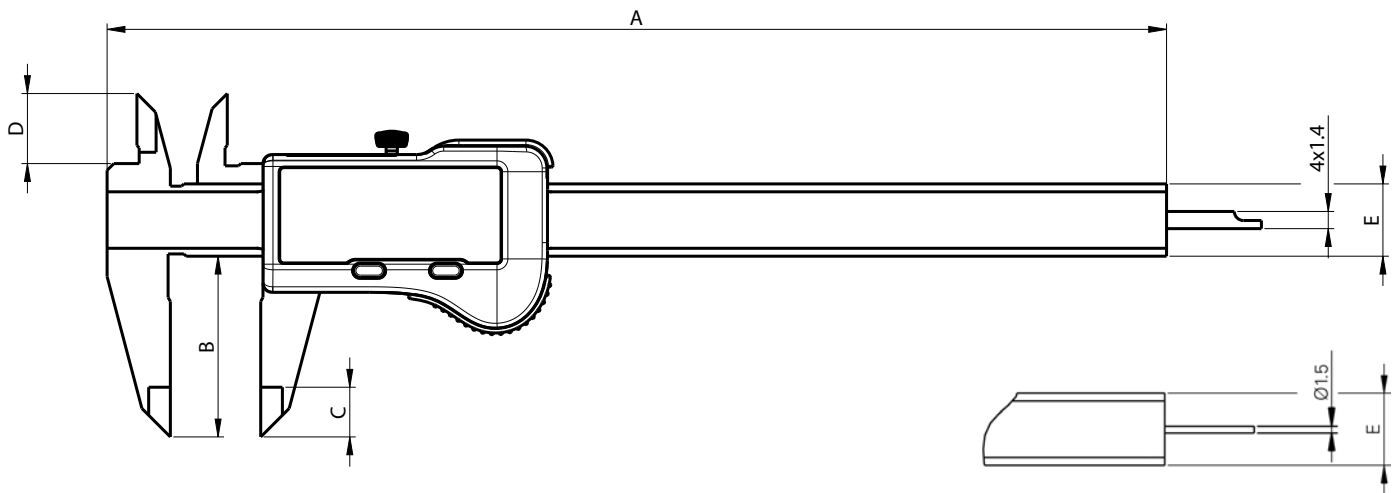
# Caliper

# S\_Cal EVO BT

## DIMENSIONAL DRAWING

## BLUETOOTH®

A



## TECHNICAL SPECIFICATIONS

		810.1506	810.1516	810.1526	810.1536
Measuring range	mm	150	150	200	300
Max. Error G	µm	20 <sup>1)</sup>	20 <sup>1)</sup>	30	30
A	mm	234.5	234.5	290.5	388
B	mm	40	40	50	64
C	mm	11	11	14	14
D	mm	16	16	19	19
E	mm	16 x 3.5	16 x 3.5	16 x 3.5	16 x 4
Depth rod	mm	■ 4 x 1.4	Ø 1.5	■ 4 x 1.4	---
Protection rating according to IEC 60529		IP67			
Connection		Bluetooth® wireless technology*			
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data			
Smart Inductive Sensor		●			

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

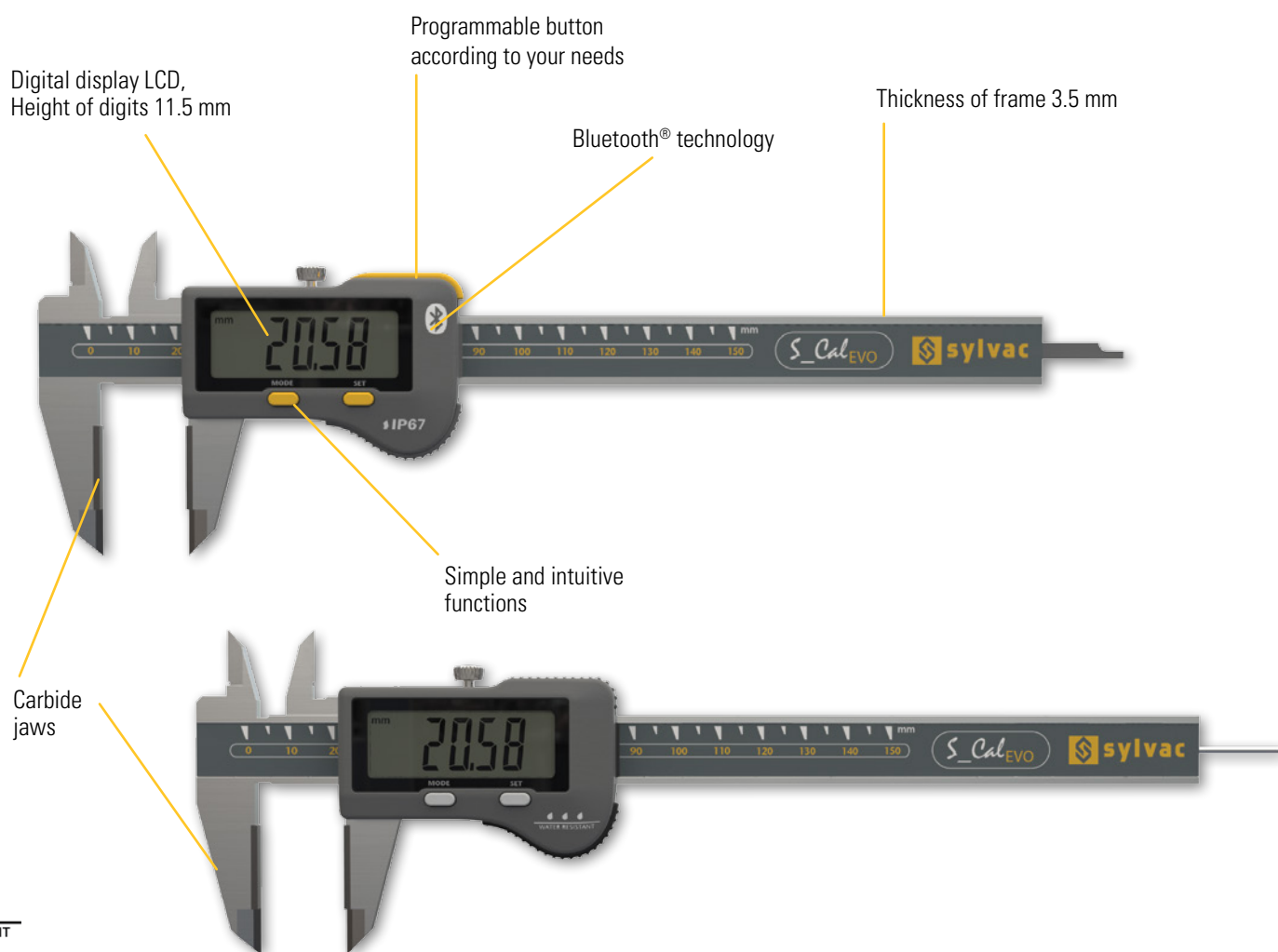
# Caliper

# S\_Cal EVO

## DESCRIPTION

CARBIDE

- **Integrated Bluetooth® technology (depends on model)**
- **Carbide jaws**
- New extra-large display
- Programmable button according to your needs (depends on model)
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame
- Thumb wheel on request (see accessories)



SIS Smart Inductive System

WATER RESISTANT

IP67 IP54

Carbide jaws

\* SIS description on page 5

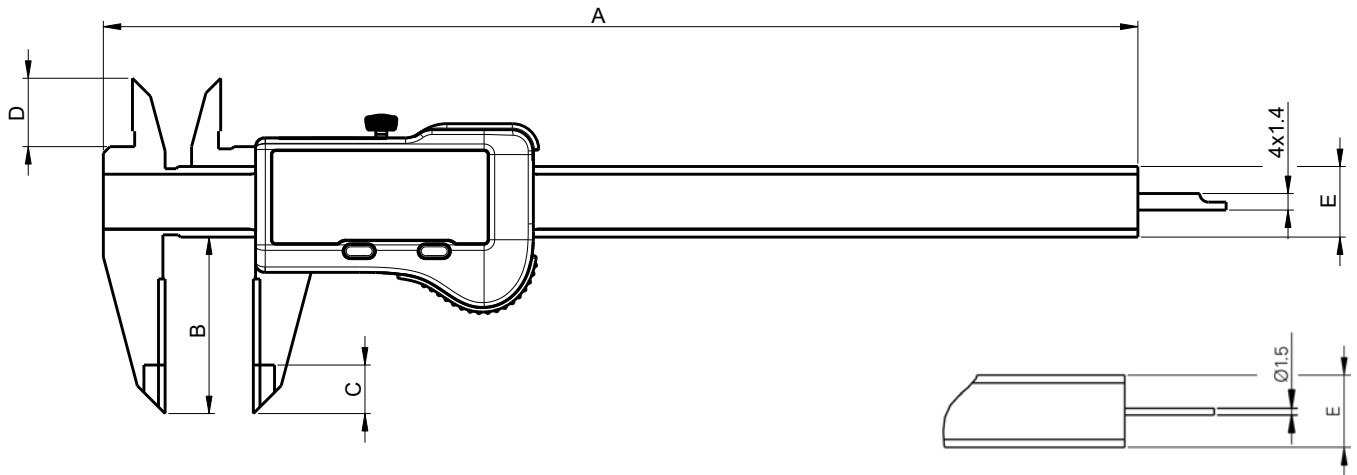
# Caliper

# S\_Cal EVO

## DIMENSIONAL DRAWING

## CARBIDE

A



## TECHNICAL SPECIFICATIONS

		810.1409	810.1509
Measuring range	mm	150	150
Max. Error G	µm	20 <sup>1)</sup>	20 <sup>1)</sup>
A	mm	234.5	234.5
B	mm	40	40
C	mm	11	11
D	mm	16	16
E	mm	16 x 3.5	16 x 3.5
Depth rod	mm	Ø 1.5	4 x 1.4
Protection rating according to IEC 60529		IP54	IP67
Connection		-	Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

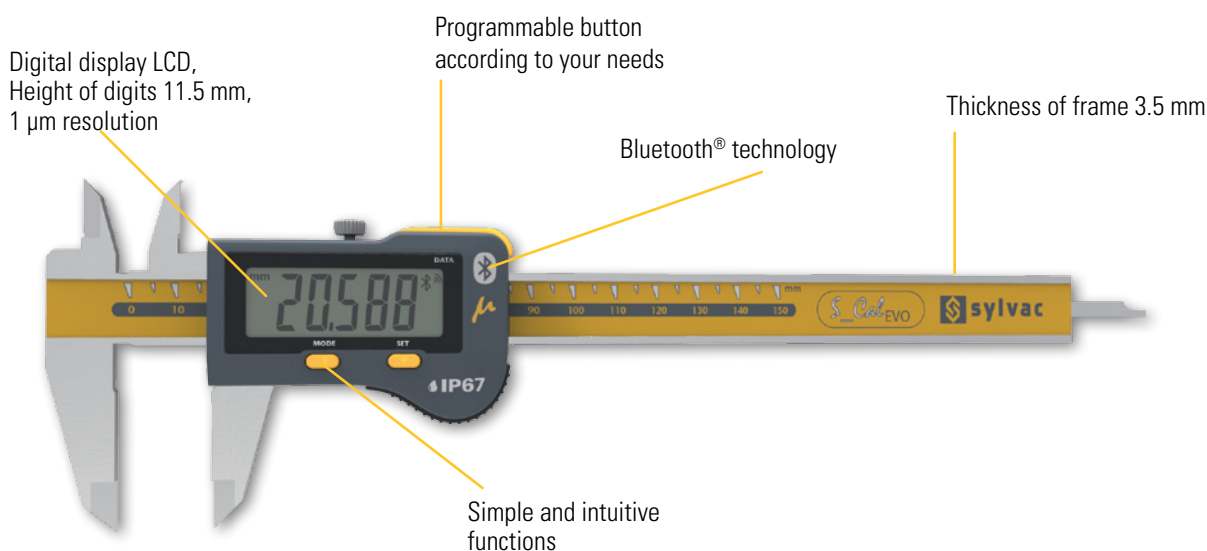
# Micron Caliper

# S\_Cal EVO BT $\mu\text{m}$

## DESCRIPTION

MICRON

- **Integrated Bluetooth® technology**
- New extra-large micron display
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame
- Thumb wheel on request (see accessories)



SIS Smart Inductive System

WATER RESISTANT

IP67

4 $\mu\text{m}$  repeatability



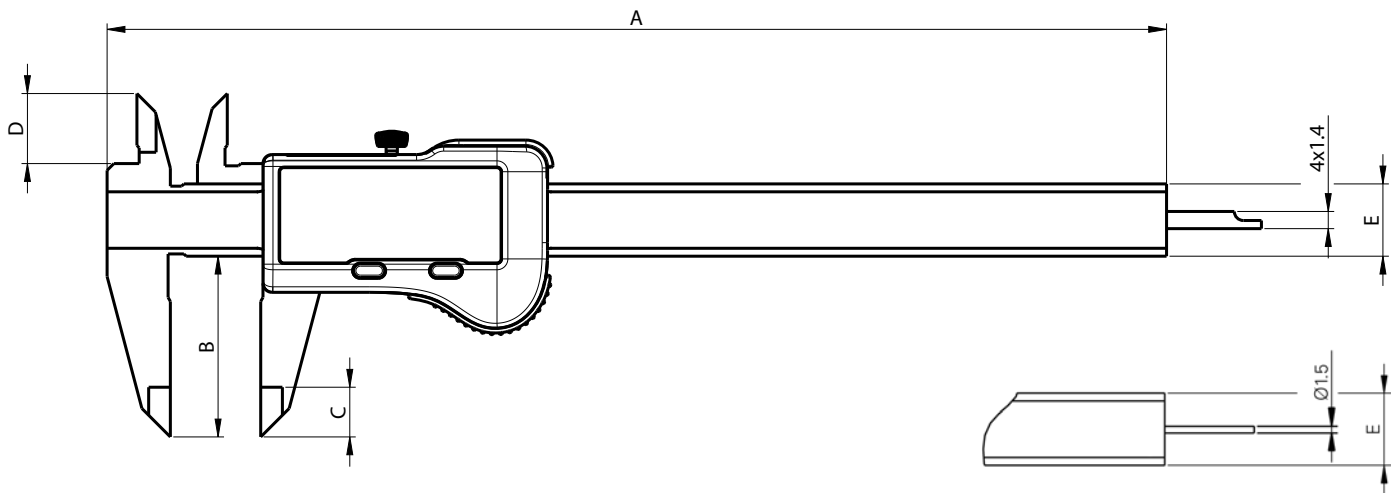
\* SIS description on page 5

# Micron Caliper

# S\_Cal EVO BT $\mu$ m

## DIMENSIONAL DRAWING

## MICRON



## TECHNICAL SPECIFICATIONS

		810.9506	810.9516
Measuring range	mm	150	150
Max. Error G	$\mu$ m	15 <sup>1)</sup>	15 <sup>1)</sup>
Resolution	mm	0.001	
A	mm	234.5	234.5
B	mm	40	40
C	mm	11	11
D	mm	16	16
E	mm	16 x 3.5	16 x 3.5
Depth rod	mm	4 x 1.4	$\varnothing$ 1.5
Protection rating according to IEC 60529		IP67	IP67
Connection		Bluetooth® wireless technology*	
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

<sup>1)</sup> < 100 mm: 15  $\mu$ m / > 100 mm : 30  $\mu$ m / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT



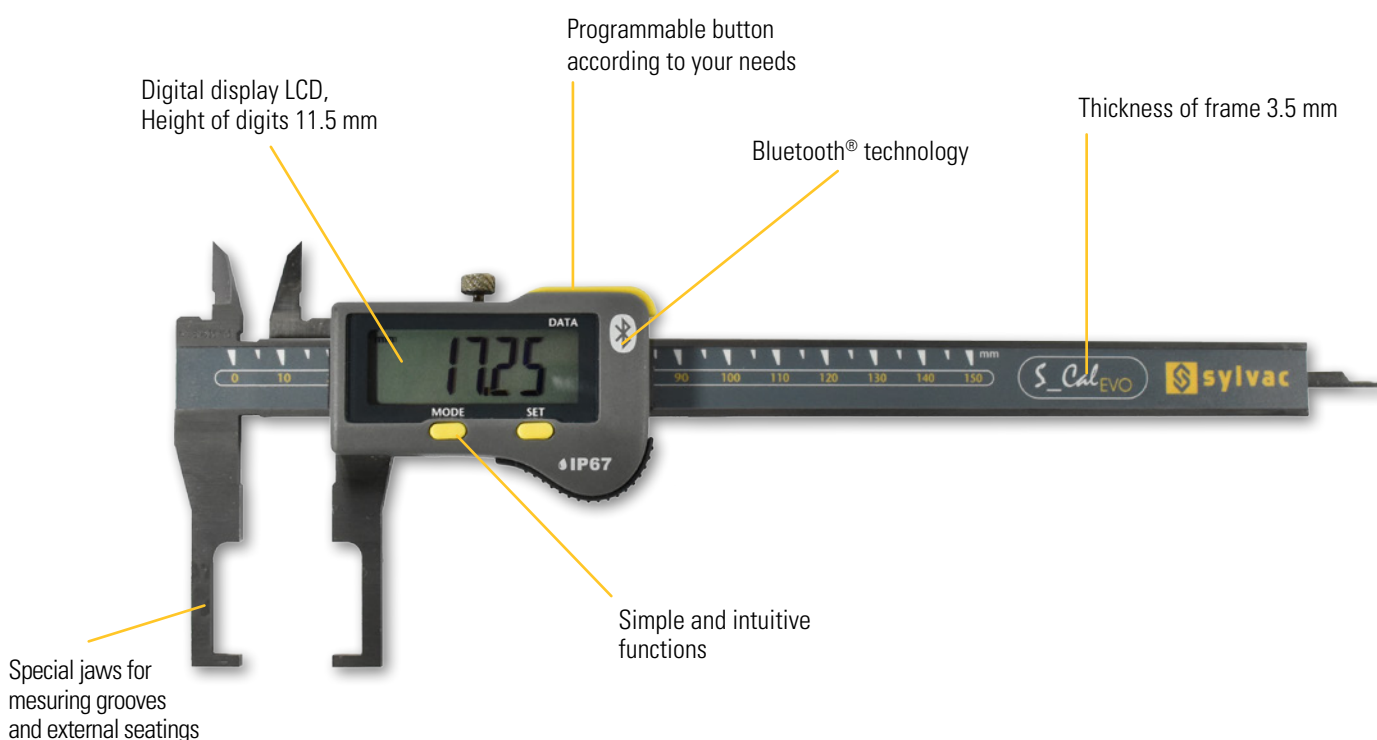
# Special caliper

# S\_Cal EVO BT EG

## DESCRIPTION

## EXTERNAL GROOVE

- **Integrated Bluetooth® technology**
- Special jaws for measuring grooves and external seatings
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



SIS Smart Inductive System



IP67

## For measuring grooves and external seatings

\* SIS description on page 5

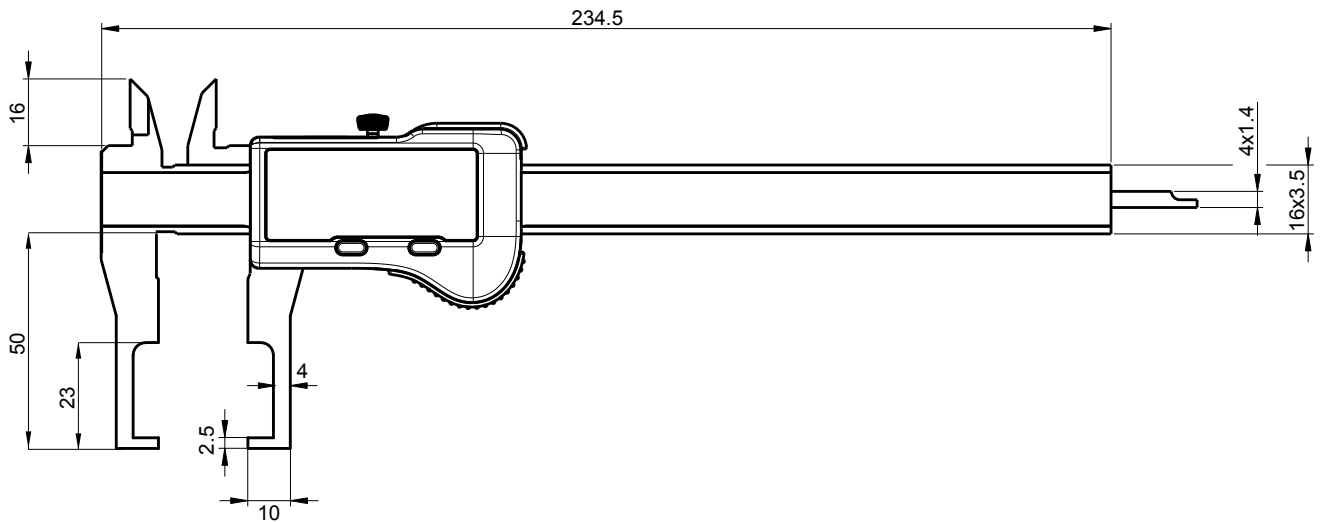
# Special caliper

# S\_Cal EVO BT EG

## DIMENSIONAL DRAWING

## EXTERNAL GROOVE

A



## TECHNICAL SPECIFICATIONS

		810.1602
Measuring range	mm	150
Max. Error G	µm	20 <sup>1)</sup>
Depth rod	mm	4 x 1.4
Protection rating according to IEC 60529		IP67
Connection		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

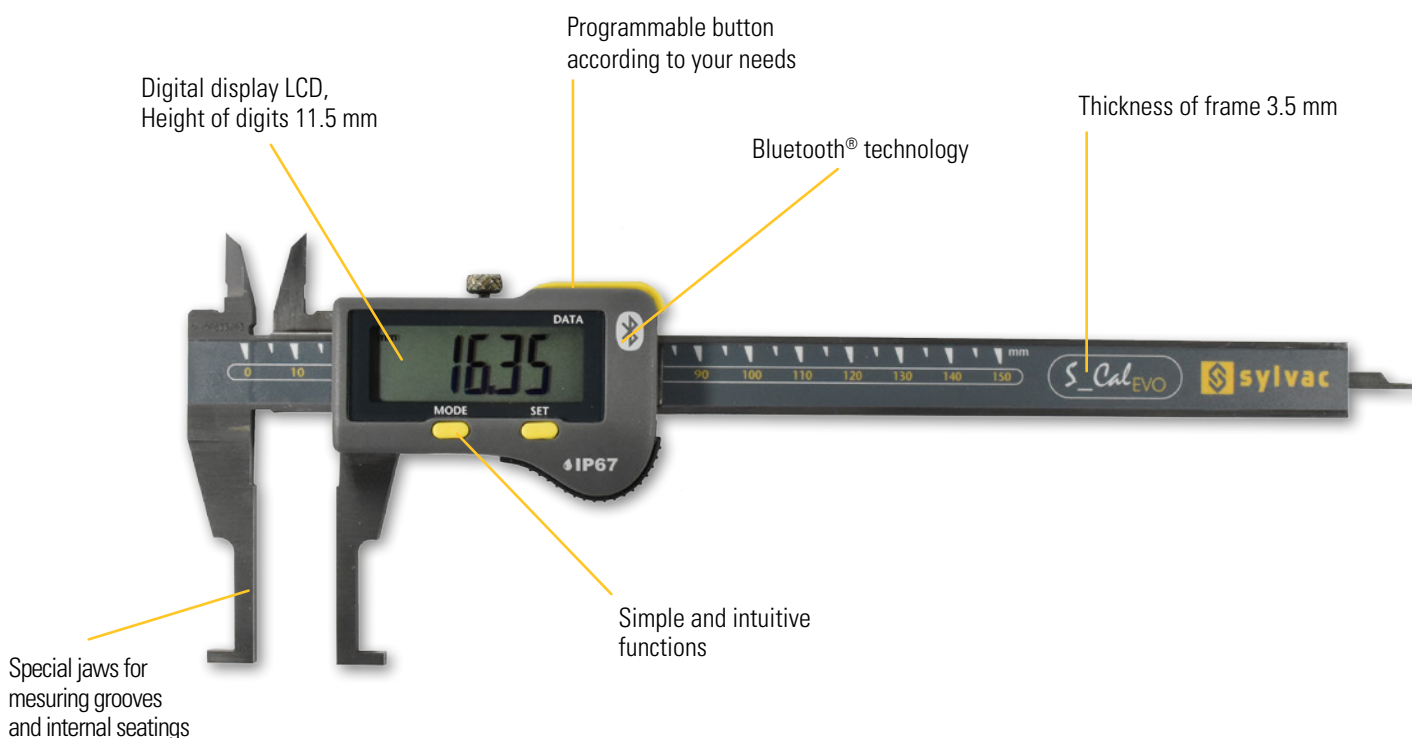
# Special caliper

# S\_Cal EVO BT IG

## DESCRIPTION

## INTERNAL GROOVE

- **Integrated Bluetooth® technology**
- Special jaws for measuring grooves and internal seatings
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



SIS Smart Inductive System

WATER RESISTANT

IP67

**For measuring grooves and internal seatings**

\* SIS description on page 5

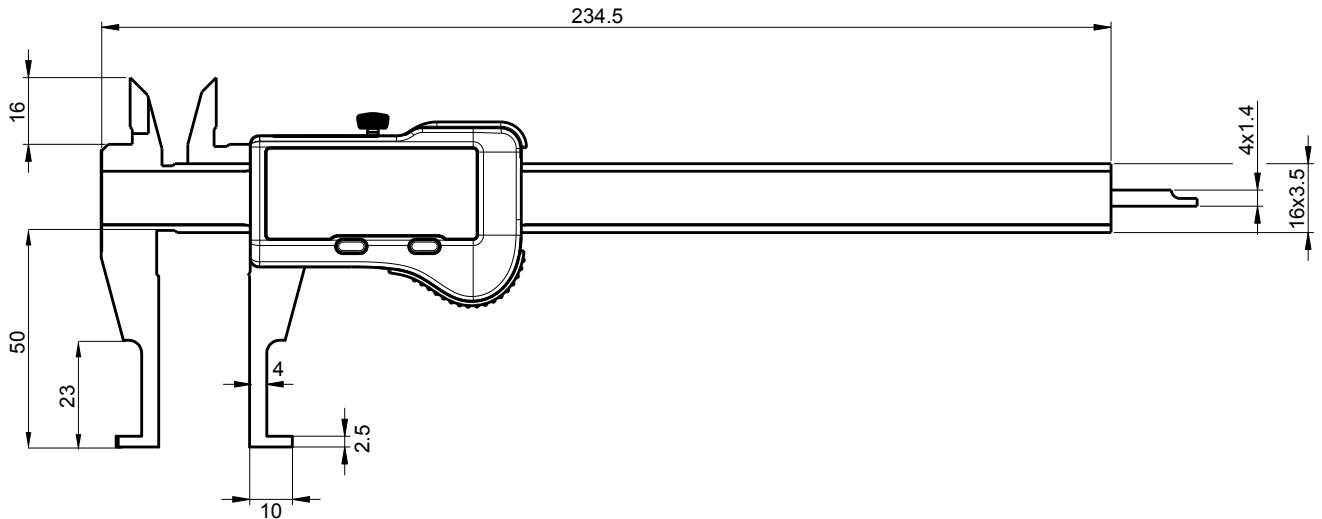
# Special caliper

# S\_Cal EVO BT IG

## DIMENSIONAL DRAWING

## INTERNAL GROOVE

A



## TECHNICAL SPECIFICATIONS

		810.1600
Measuring range	mm	150
Max. Error G	µm	20 <sup>1)</sup>
Depth rod	mm	4 x 1.4
Protection rating according to IEC 60529		IP67
Connection		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

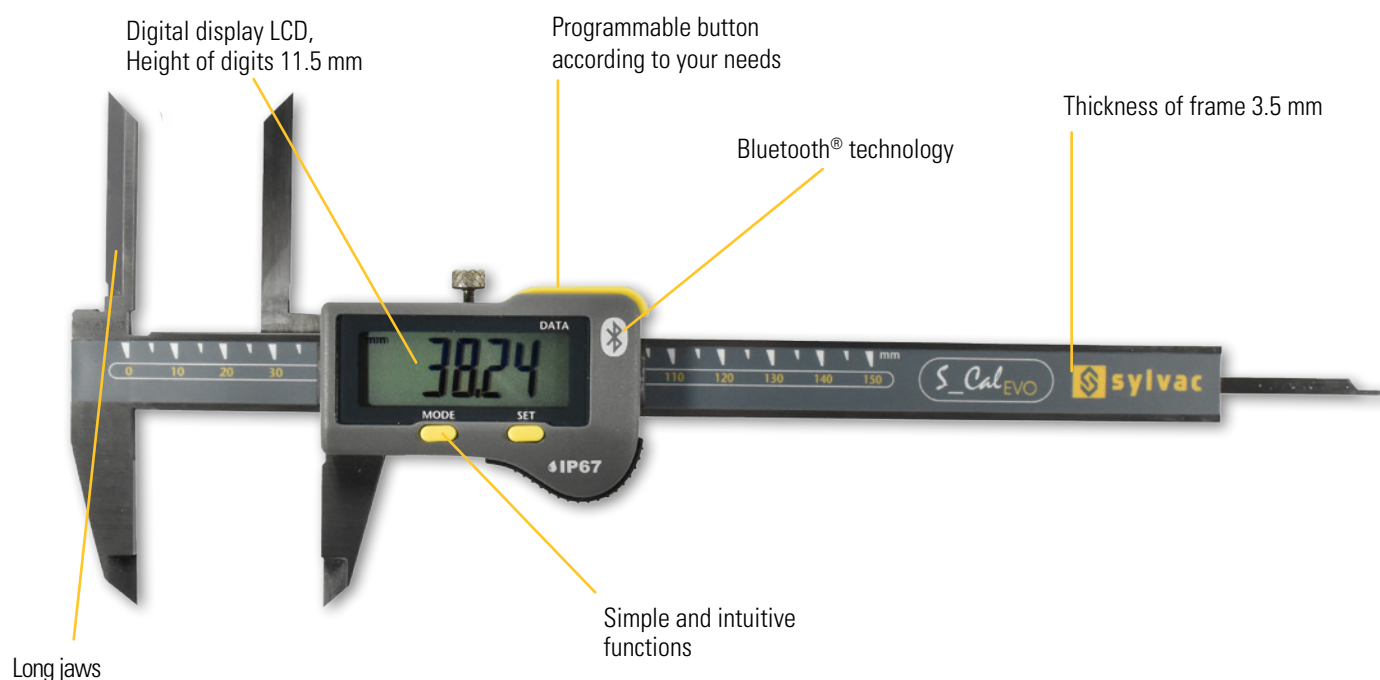
# Special caliper

# S\_Cal EVO BT DM

## DESCRIPTION

## DEEP MEASUREMENT

- **Integrated Bluetooth® technology**
- Long internal jaws for deep measurements
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



SIS Smart Inductive System

WATER RESISTANT

IP67

## Long internal jaws for deep measurements

\* SIS description on page 5

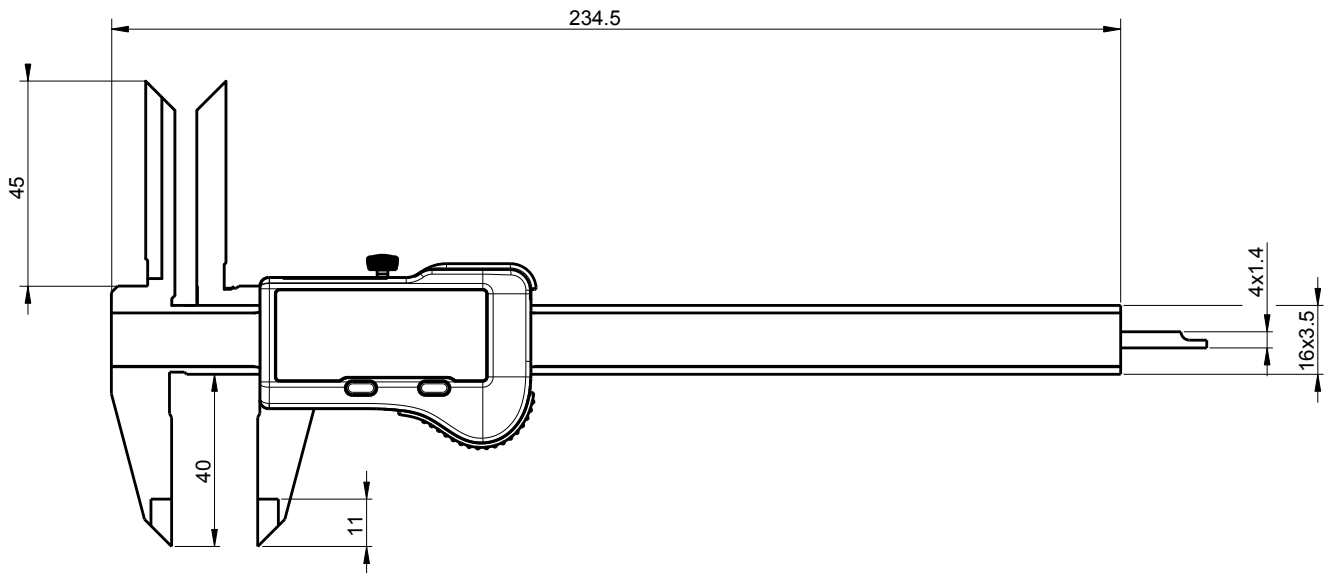
# Special caliper

# S\_Cal EVO BT DM

## DIMENSIONAL DRAWING

## DEEP MEASUREMENT

A



## TECHNICAL SPECIFICATIONS

		810.1603
Measuring range	mm	150
Max. Error G	µm	20 <sup>1)</sup>
Depth rod	mm	4 x 1.4
Protection rating according to IEC 60529		IP67
Connection		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT



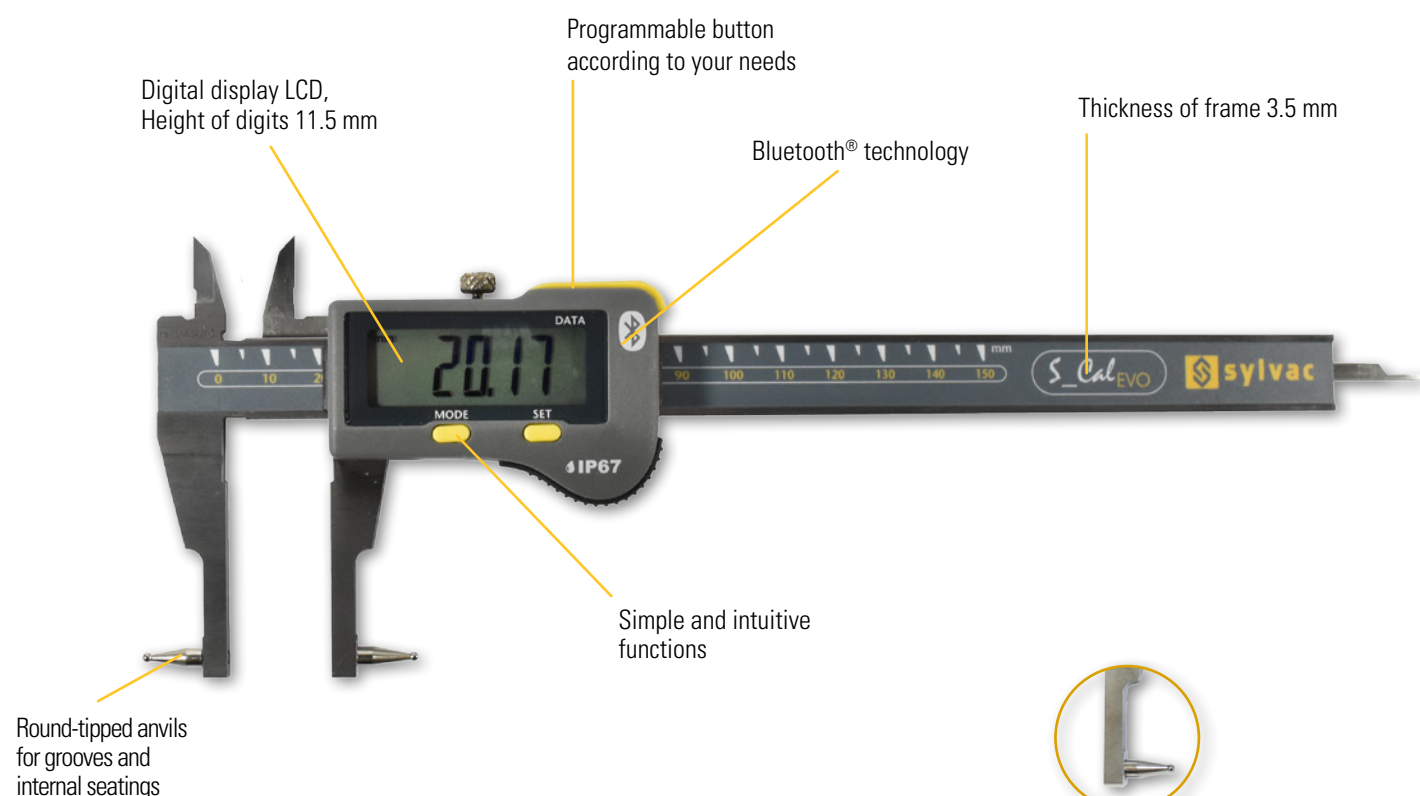
# Special caliper

# S\_Cal EVO BT PJ

## DESCRIPTION

## POINTS JAWS

- **Integrated Bluetooth® technology**
- Interchangeable round polished anvils for measuring internal grooves
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



SIS | Smart Inductive System



IP67

## Interchangeable anvils

\* SIS description on page 5

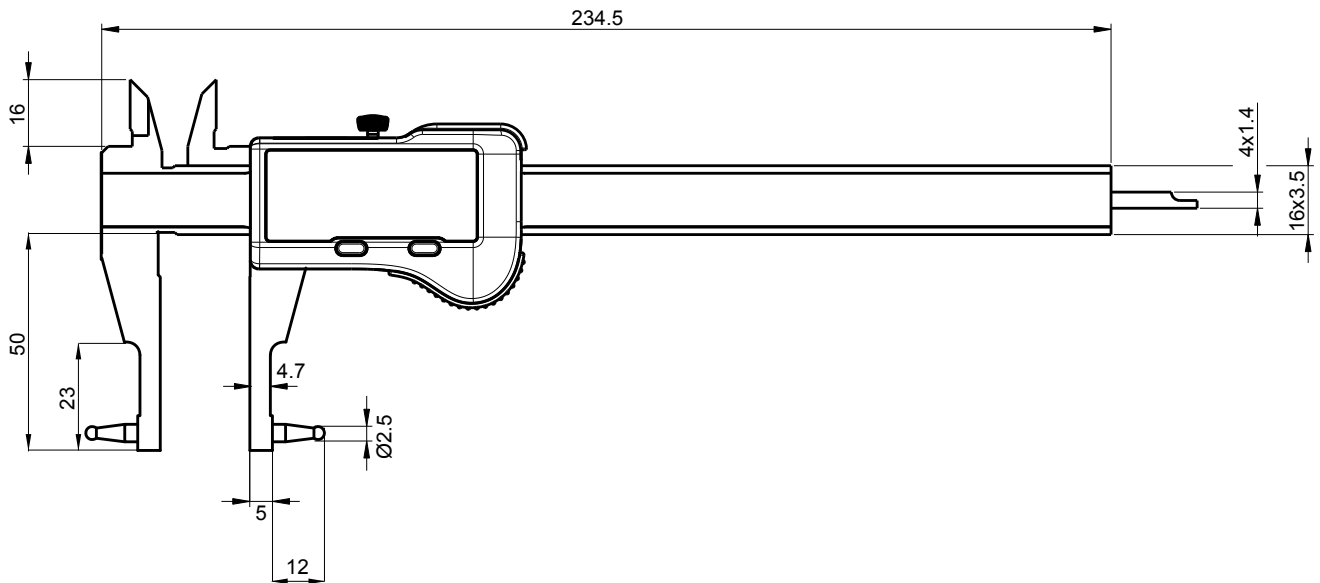
# Special caliper

# S\_Cal EVO BT PJ

## DIMENSIONAL DRAWING

## POINTS JAWS

A



## TECHNICAL SPECIFICATIONS

		810.1601
Measuring range	mm	150
Max. Error G	µm	20 <sup>1)</sup>
Depth rod	mm	4 x 1.4
Protection rating according to IEC 60529		IP67
Connection		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

<sup>1)</sup> > 100 mm : 30 µm / DIN 862

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

# Caliper mid size

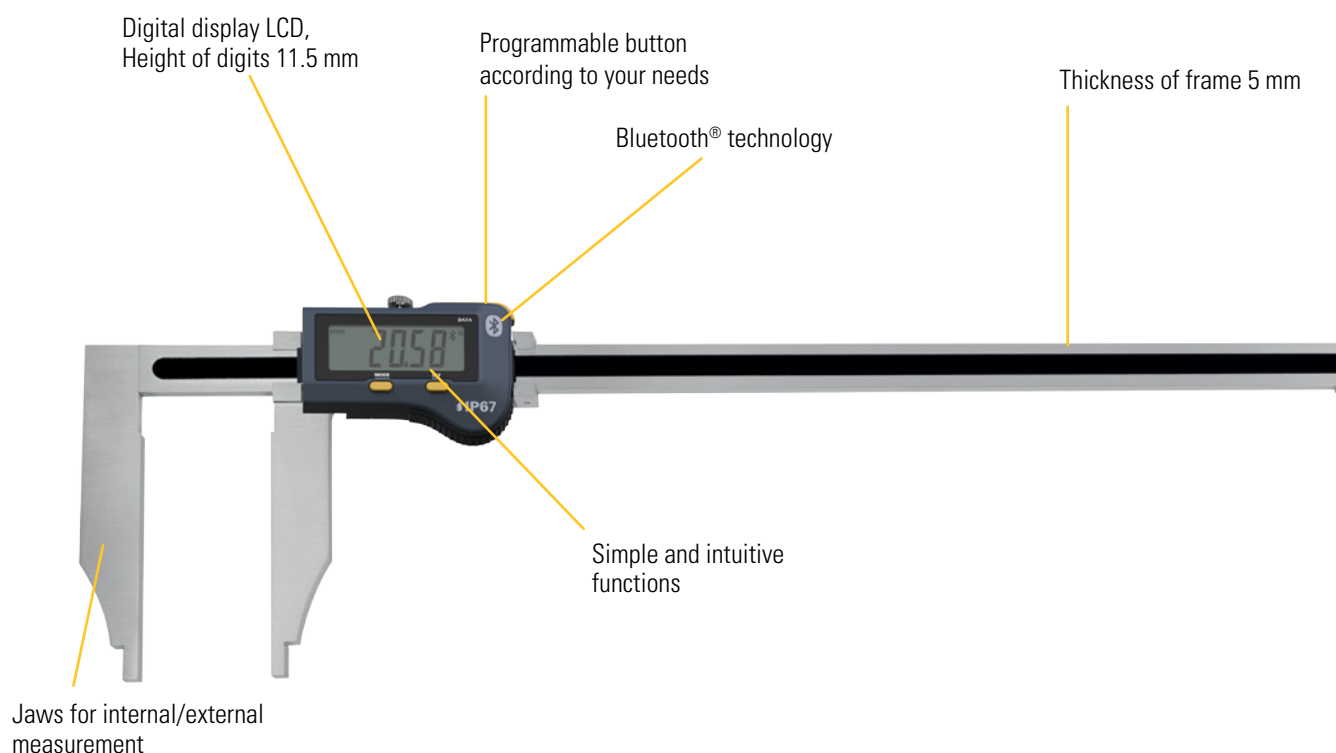
# S\_Cal EVO Form E

## DESCRIPTION

## MID SIZE CALIPER R5

### • Integrated **Bluetooth®** technology

- Mid size caliper r5 for internal/external measurement
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



SIS | Smart Inductive System

WATER RESISTANT

IP67

## Mid size caliper

\* SIS description on page 5

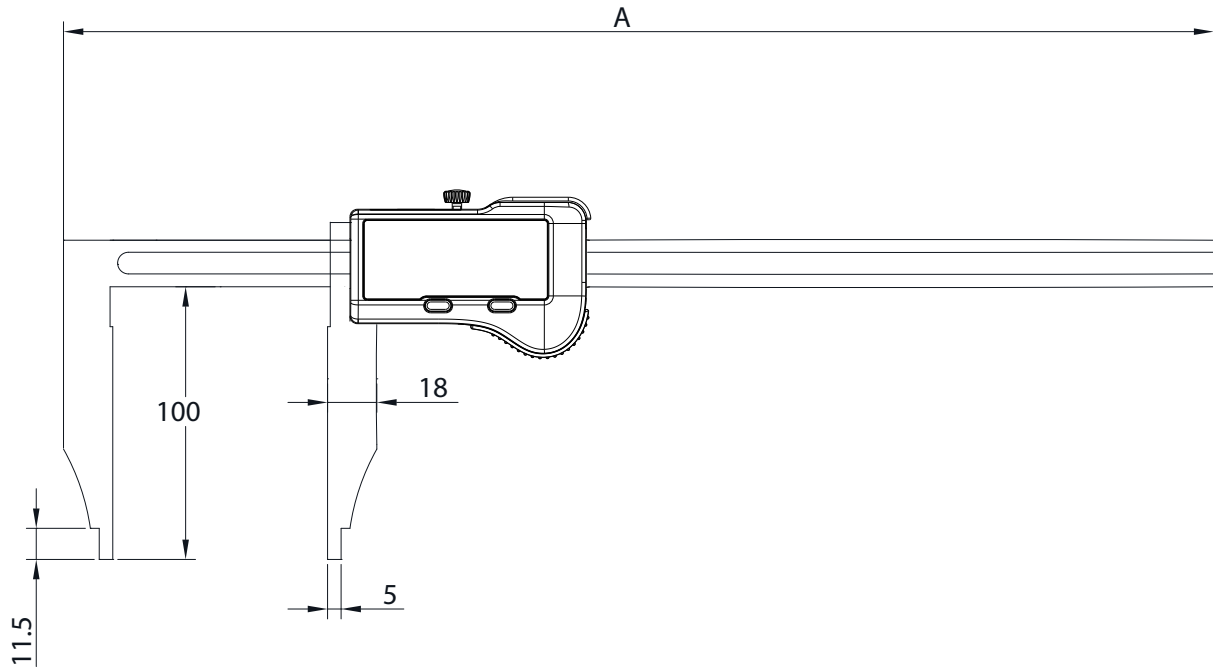
# Caliper mid size

# S\_Cal EVO Form E

## DIMENSIONAL DRAWING

## MID SIZE CALIPER R5

A



## TECHNICAL SPECIFICATIONS

		810.1546
Measuring range	mm	300
Accuracy	mm	0.03
Resolution	mm	0.01
A	mm	495
Bar section	mm	17x5
Protection rating according to IEC 60529		IP67
Connection		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

# Caliper mid size

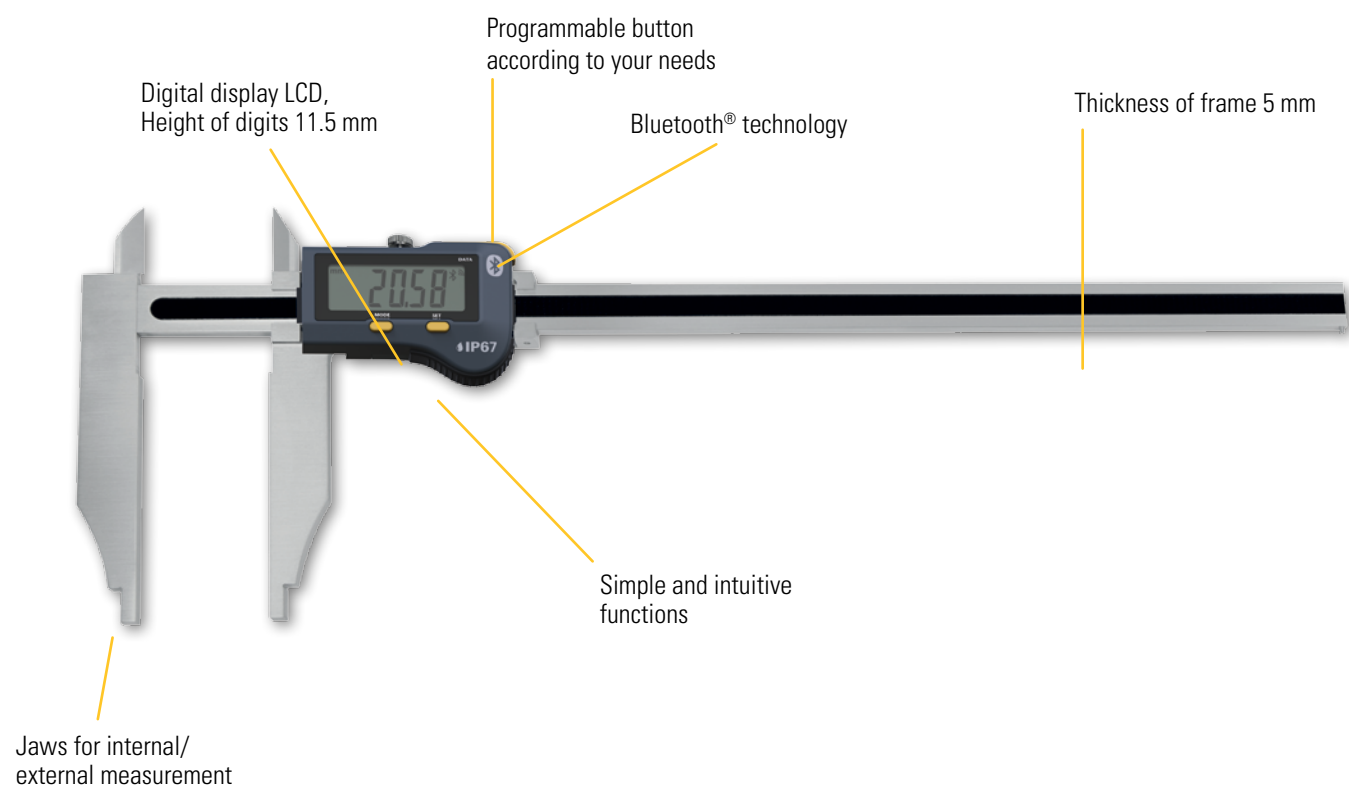
# S\_Cal EVO Form B

## DESCRIPTION

## MID SIZE CALIPER R5 WITH UPPER JAWS

### • Integrated **Bluetooth®** technology

- Mid size caliper r5 for internal/external measurement
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded
- Great comfort of use thanks to its ergonomic frame



**SIS** Smart Inductive System



**IP67**

## Mid size caliper with upper jaws

\* SIS description on page 5

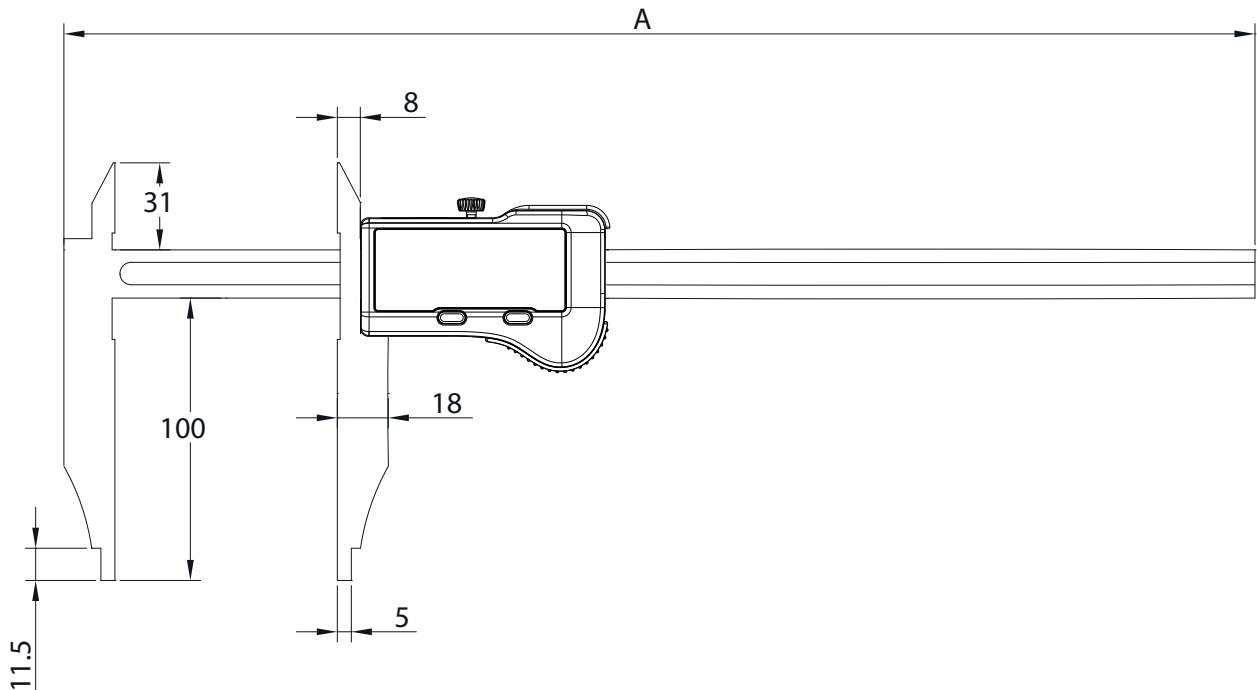
# Caliper mid size

# S\_Cal EVO Form B

## DIMENSIONAL DRAWING

## MID SIZE CALIPER R5 WITH UPPER JAWS

A



## TECHNICAL SPECIFICATIONS

		810.1556	810.1558
Measuring range	mm	300	500
Accuracy	mm	0.03	
Resolution	mm	0.01	
A	mm	495	595
Bar section	mm	17x5	
Protection rating according to IEC 60529		IP67	
Connection		Bluetooth® wireless technology*	
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

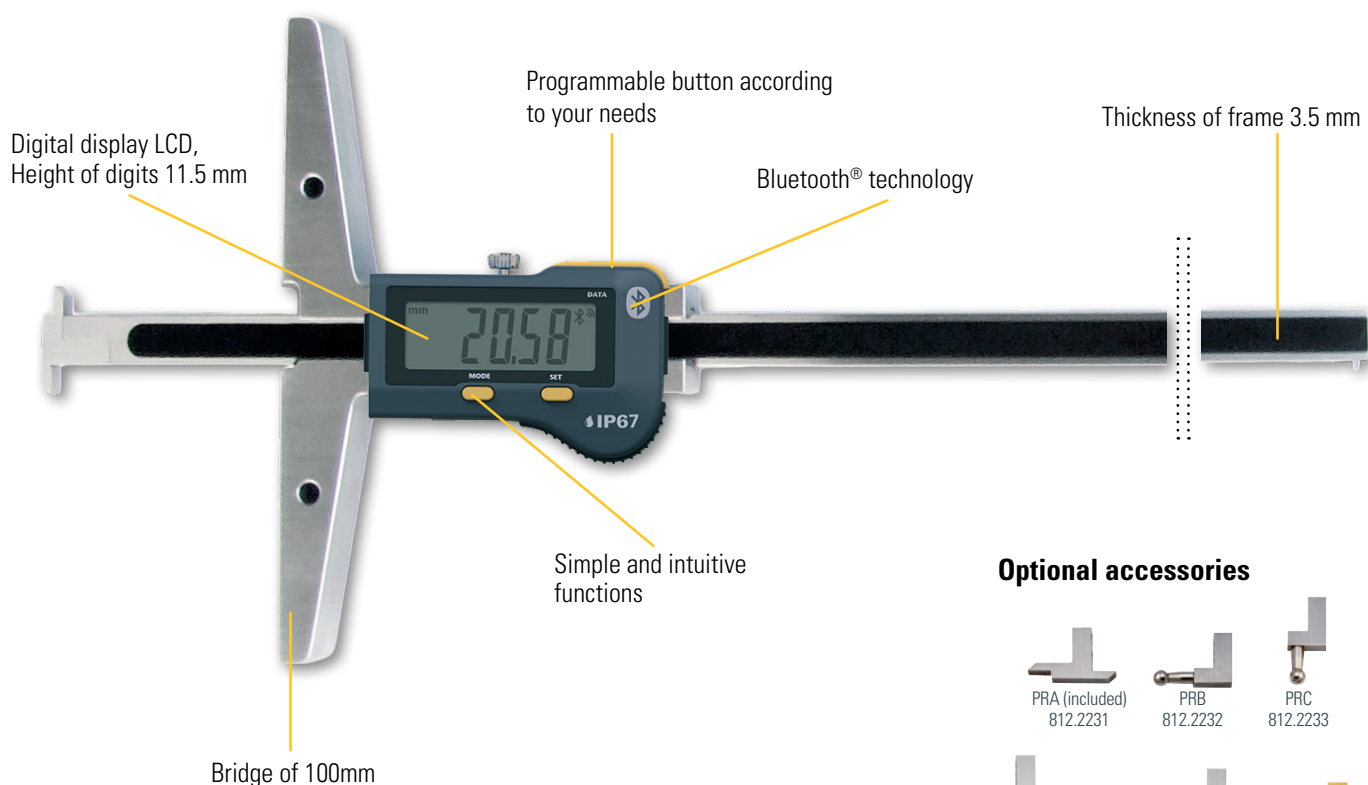
# Depth gauge

## S\_Depth EVO BTTJ

### DESCRIPTION

### TWO FIXED MEASURING JAWS

- **Integrated Bluetooth® technology**
- Special depth gauge with bridge 100mm and clamping screw
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded



### Optional accessories



SIS Smart Inductive System



IP67

### Interchangeable anvils

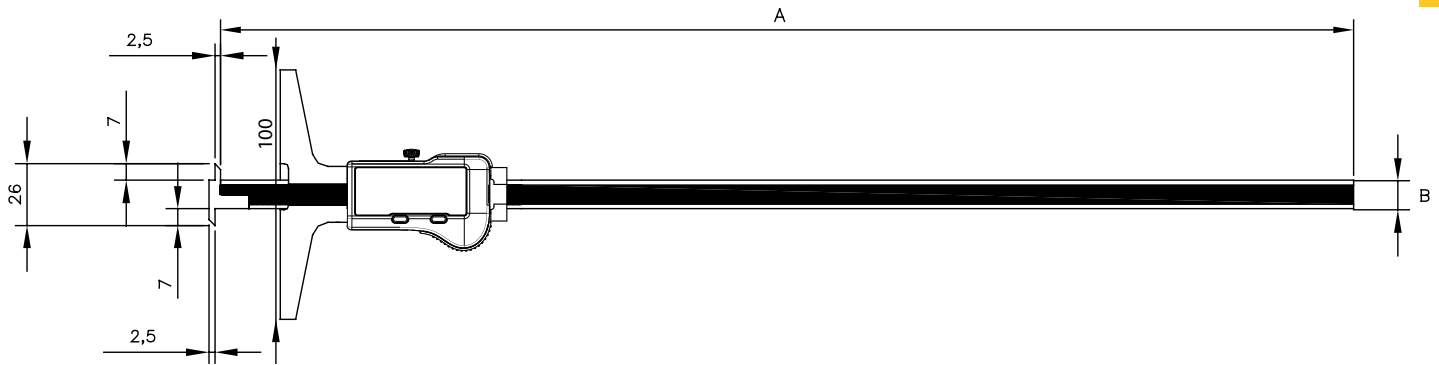


# Depth gauge

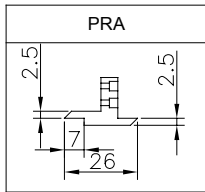
# S\_Depth EVO BTTJ

## DIMENSIONAL DRAWING

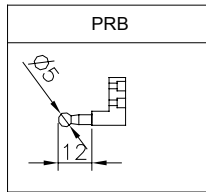
## TWO FIXED MEASURING JAWS



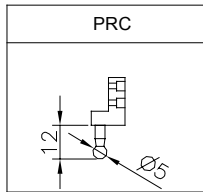
812.2231/812.2237



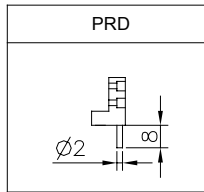
812.2232



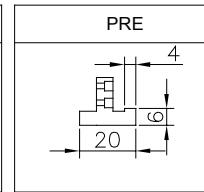
812.2233



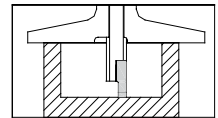
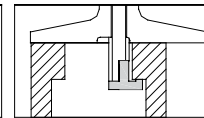
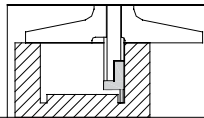
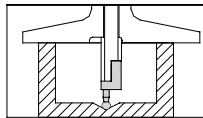
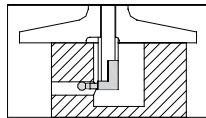
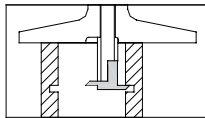
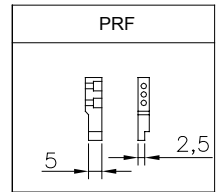
812.2234



812.2235



812.2236



## TECHNICAL SPECIFICATIONS

		812.1601	812.1603	812.1605
Measuring range	mm	200	300	500
Max. Error	µm	30	30	50
Resolution	mm	0.01		
A	mm	300	400	600
B	mm	16x3.5		
Connexion		Bluetooth® wireless technology*		
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data		
Smart Inductive Sensor		●		

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

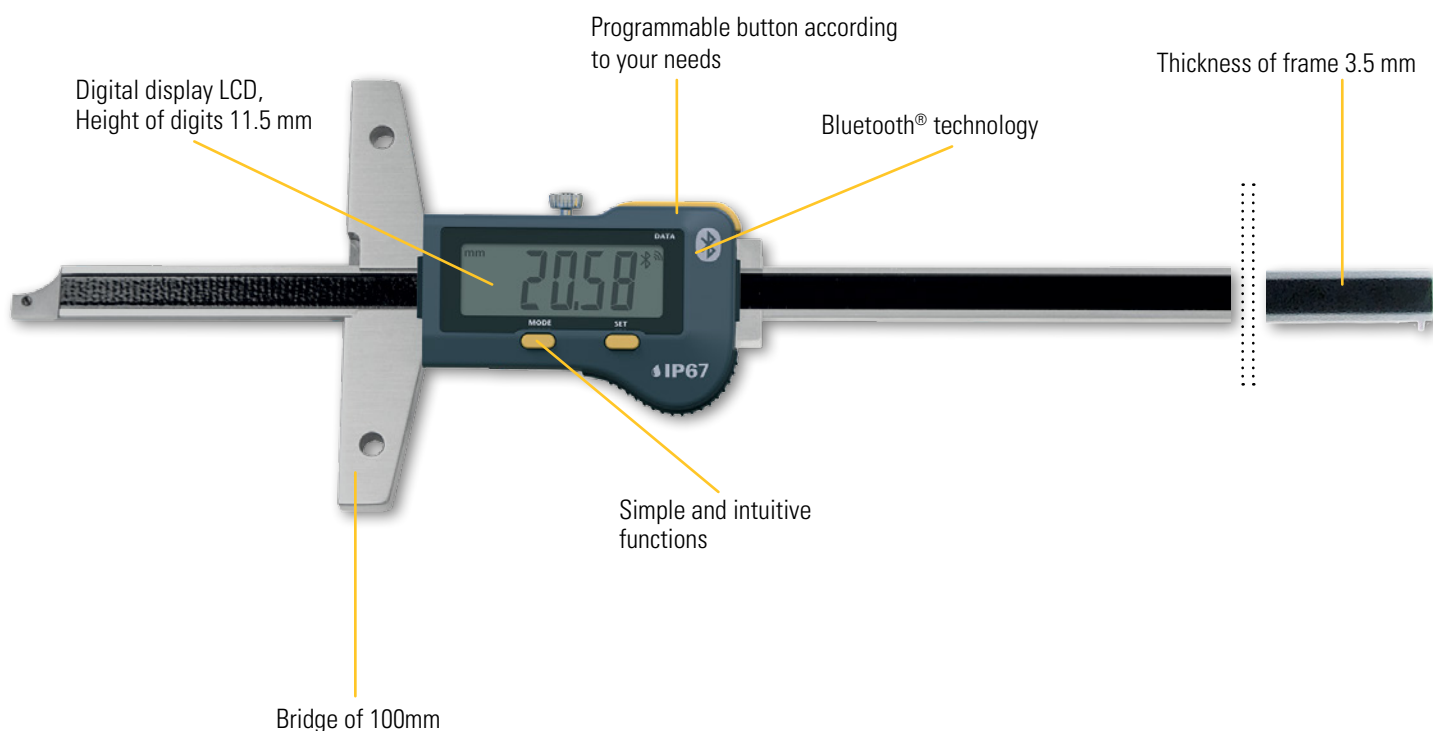
# Depth gauge

# S\_Depth EVO BT SF

## DESCRIPTION

## SHORTCUT MEASURING FACE

- **Integrated Bluetooth® technology**
- Special depth gauge with bridge 100mm and clamping screw
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded



SIS | Smart Inductive System

WATER RESISTANT

IP67

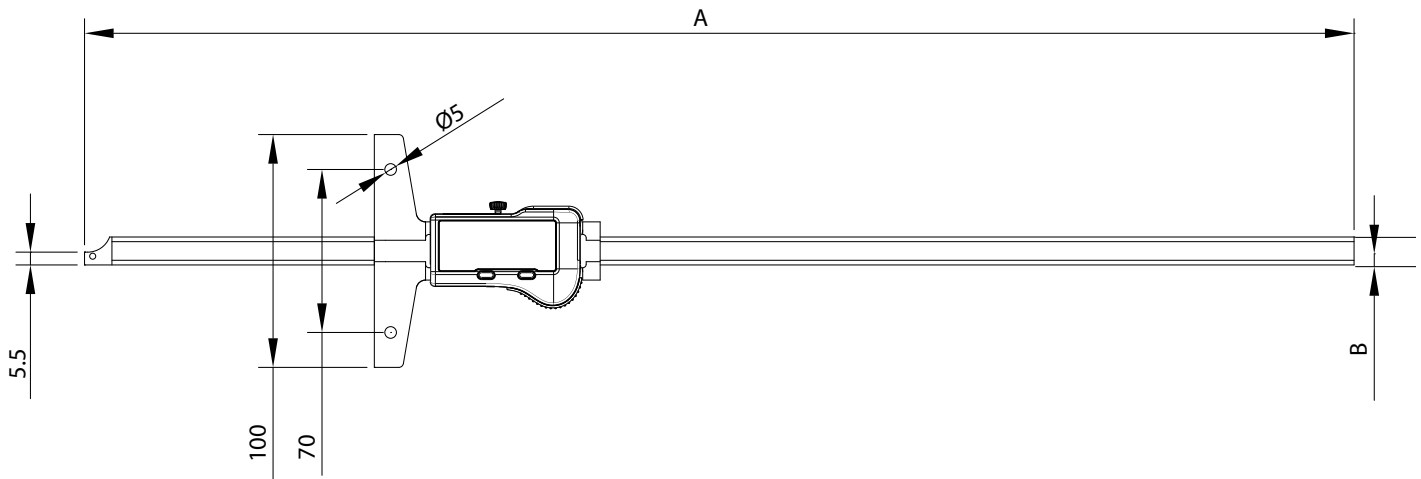
**Bridge of 100mm with clamping screw**

# Depth gauge

# S\_Depth EVO BT SF

## DIMENSIONAL DRAWING

## SHORTCUT MEASURING FACE



## TECHNICAL SPECIFICATIONS

		812.1611	812.1613	812.1615
Measuring range	mm	200	300	500
Max. Error	µm	30	30	50
Resolution	mm	0.01		
A	mm	300	400	600
B	mm	16x3.5		
Connexion		Bluetooth® wireless technology*		
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data		
Smart Inductive Sensor		●		

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

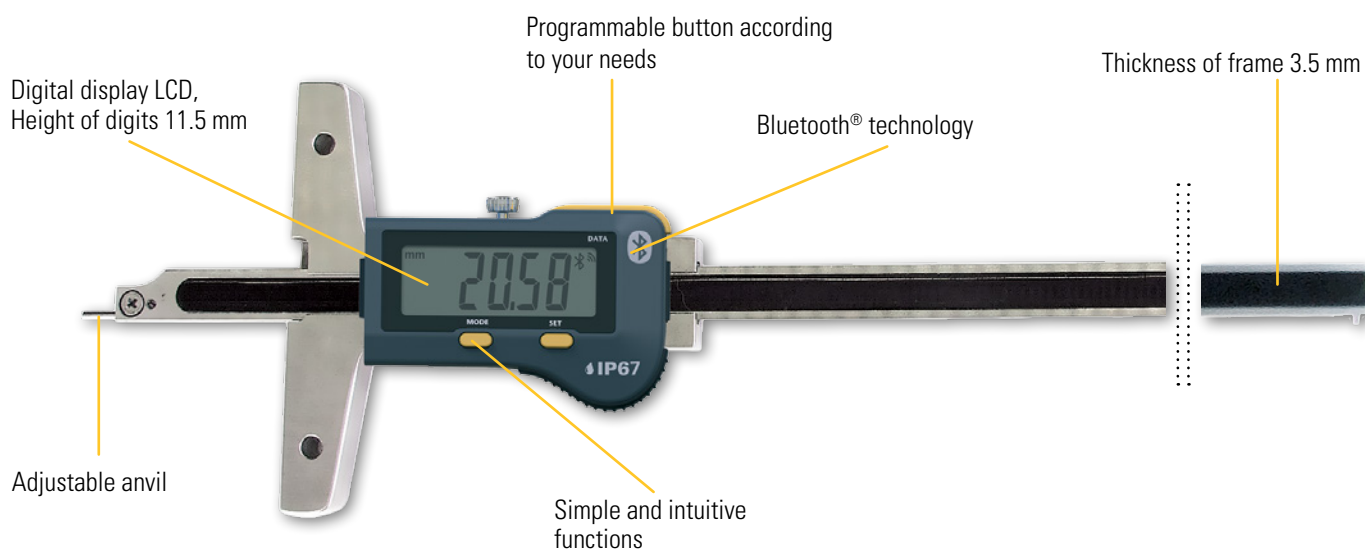
# Depth gauge

## S\_Depth EVO BT RP

### DESCRIPTION

ROTARY PIN

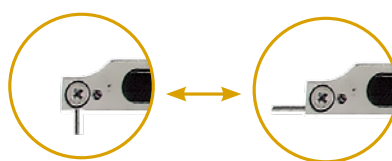
- **Integrated Bluetooth® technology**
- Special depth gauge double with adjustable anvil and clamping screw
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529,
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use. (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Maximum speed of displacement : 2.5 m/sec
- Mechanical frame in stainless steel, hardened and grinded



SIS | Smart Inductive System



IP67



**Adjustable anvil !**

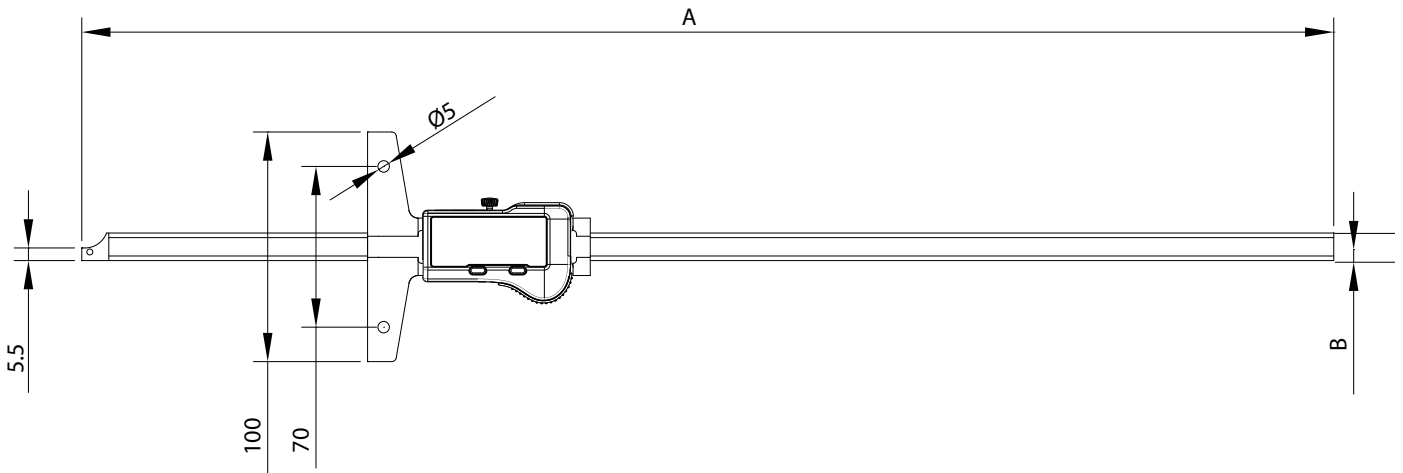
# Depth gauge

# S\_Depth EVO BT RP

## DIMENSIONAL DRAWING

## ROTARY PIN

A



## TECHNICAL SPECIFICATIONS

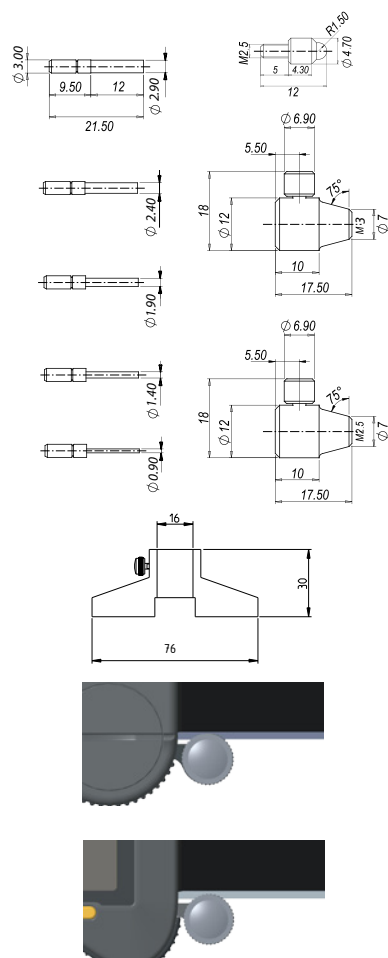
		812.1621	812.1623	812.1625
Measuring range	mm	200	300	500
Max. Error	µm	30	30	50
Resolution	mm	0.01		
A	mm	300	400	600
B	mm	16x3.5		
Connexion		Bluetooth® wireless technology*		
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data		
Smart Inductive Sensor		●		

\* see cables chapter

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

# S\_Cal / S\_Depth

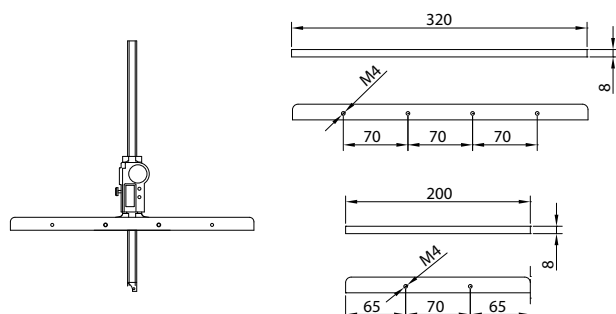
## ACCESSORIES FOR CALIPERS



		S_Cal PRO S_Cal PRO µm	S_Cal EVO	S_Cal EVO BT	S_Cal EVO µm
910.2207	Accessory kit for S_Cal	•	•	•	•
910.2205	Base for Depth Measurement	•	•	•	•
910.2201	Thumb wheel	•			
810.2203	Thumb wheel		•	•	•

See also chapter cables.

## ACCESSORIES FOR SPECIAL DEPTH CALIPER (TJ / SF / RP)



		Length	Thickness
812.2240	Additional base	320	8
812.2241	Additional base	200	8

# S\_Cal / S\_Depth

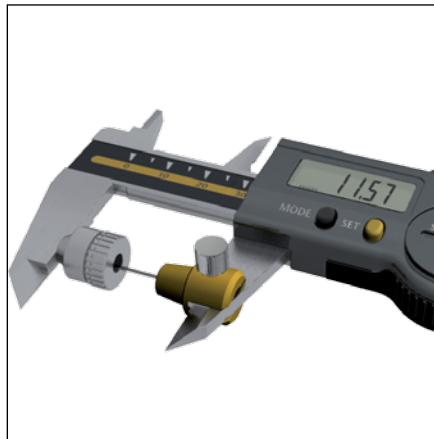
## BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate (S\_Cal PRO et EVO  $\mu\text{m}$ )

## APPLICATIONS



Depth measurement with S\_Cal PRO and base 910.2205.



S\_Cal with kit 910.2207  
Depth measurement of small internal  $\varnothing$



S\_Cal PRO  $\mu\text{m}$   
Comparison measurement



Part measurement with S\_Cal  $\mu\text{m}$



Part measurement with sending data

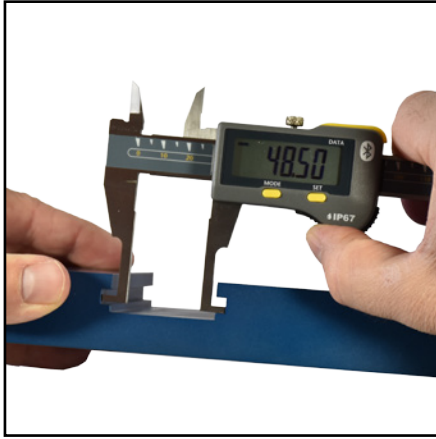


Depth measurement with S\_Cal EVO  $\mu\text{m}$

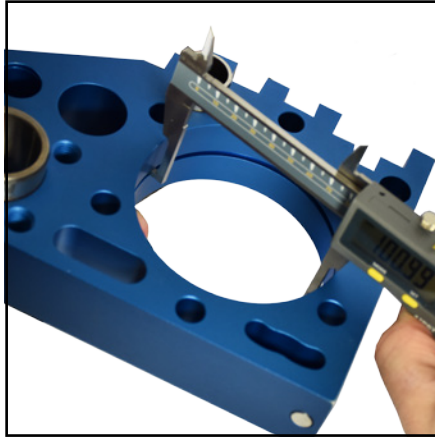


# Special S\_Cal & S\_Depth

## APPLICATIONS



Internal groove measurement with S\_Cal EVO BT IG



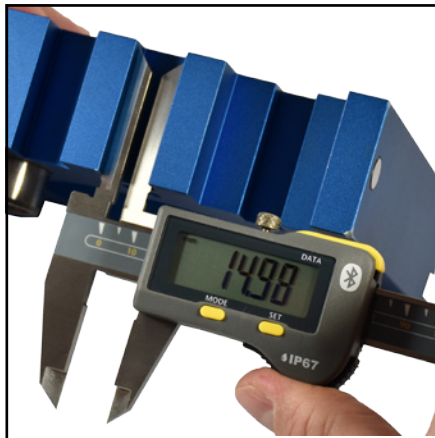
Internal groove measurement with S\_Cal EVO BT IG



Internal measurement with S\_Cal EVO BT PJ



Deep measurement with S\_Cal EVO BT DM



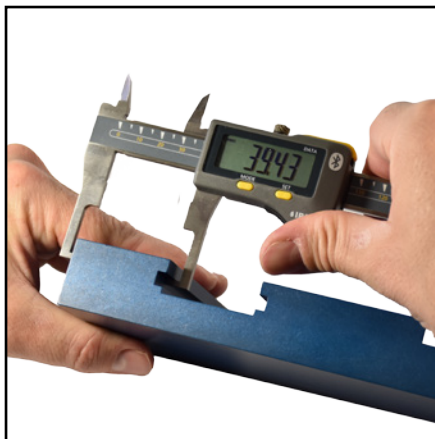
Deep measurement with S\_Cal EVO BT DM



External groove measurement with S\_Cal EVO BT EG



External groove measurement with S\_Cal EVO BT EG



External groove measurement with S\_Cal EVO BT EG



S\_Depth EVO BT TJ communicating with Sylvac BT Smart App on touchpad

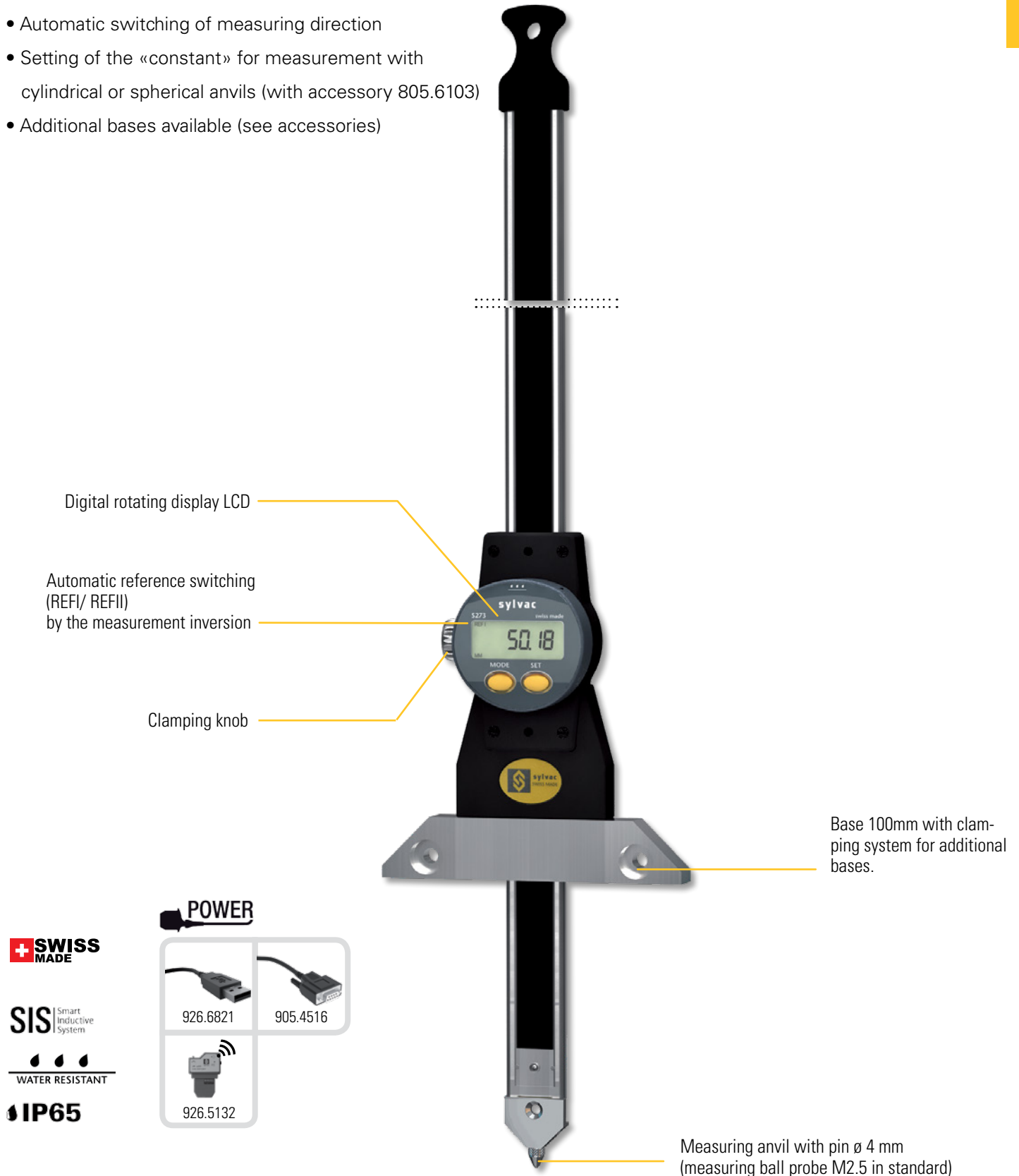
# Depth gauge

## S\_Depth PRO

### DESCRIPTION

- PRESET function
- Automatic switching of measuring direction
- Setting of the «constant» for measurement with cylindrical or spherical anvils (with accessory 805.6103)
- Additional bases available (see accessories)

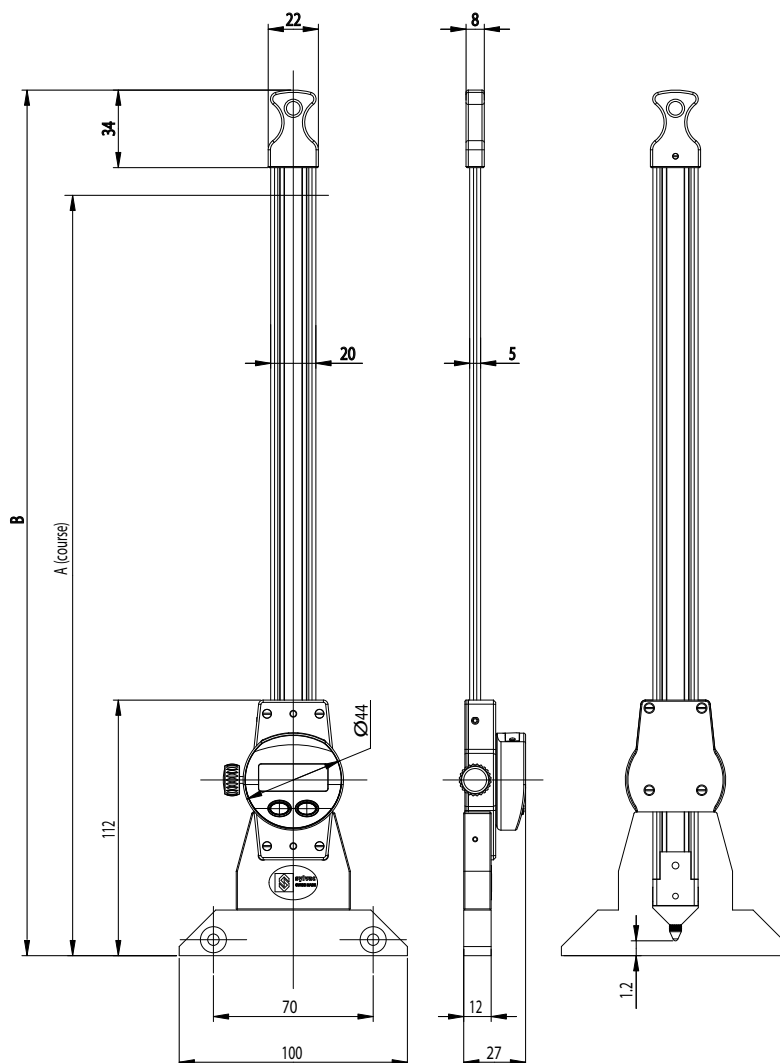
A



# Depth gauge

## S\_Depth PRO

### DIMENSIONAL DRAWING



### TECHNICAL SPECIFICATIONS

		805.6005	805.6006
Measuring range	mm	300	600
Max. Error	µm	30	40
Repeatability <sup>1)</sup>	µm	10	10
A	mm	422	625
B	mm	483	773
S_Connect : Power		USB / RS232 / Wireless <sup>2)</sup>	
2 References		●	
PRESET function		●	

<sup>1)</sup> ± 1 digit

<sup>2)</sup> see cables chapter

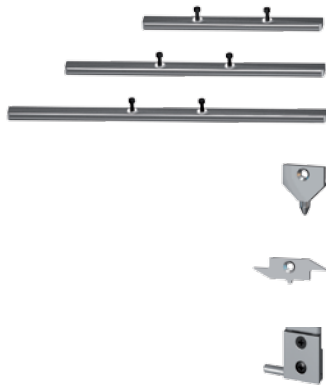
# Depth gauge

# S\_Depth PRO

## BASIC INSTRUMENT

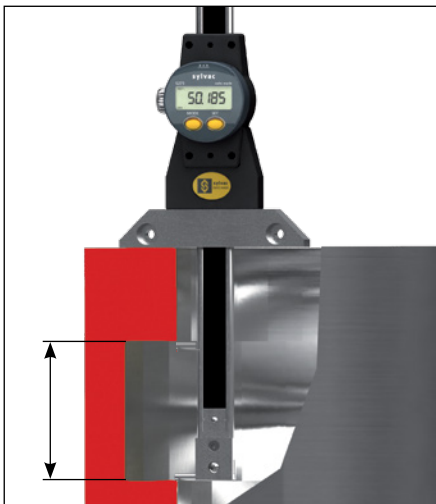
- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual

## COMPATIBLE ACCESSORIES



		Length	Thickness
<b>805.2180</b>	Additionnal base	180 mm	8 mm
<b>805.2260</b>	Additionnal base	260 mm	8 mm
<b>805.2320</b>	Additionnal base	320 mm	8 mm
<b>805.6101</b>	Ball probe M2.5 (standard)		
<b>805.6102</b>	Anvils UP&DOWN		
<b>805.6103</b>	Anvil with pin Ø4 mm		

## APPLICATIONS



Measure of an internal groove (height) thanks to the constant.



Depth measurement



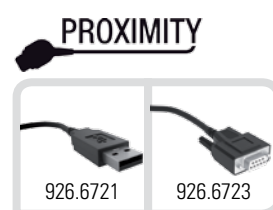
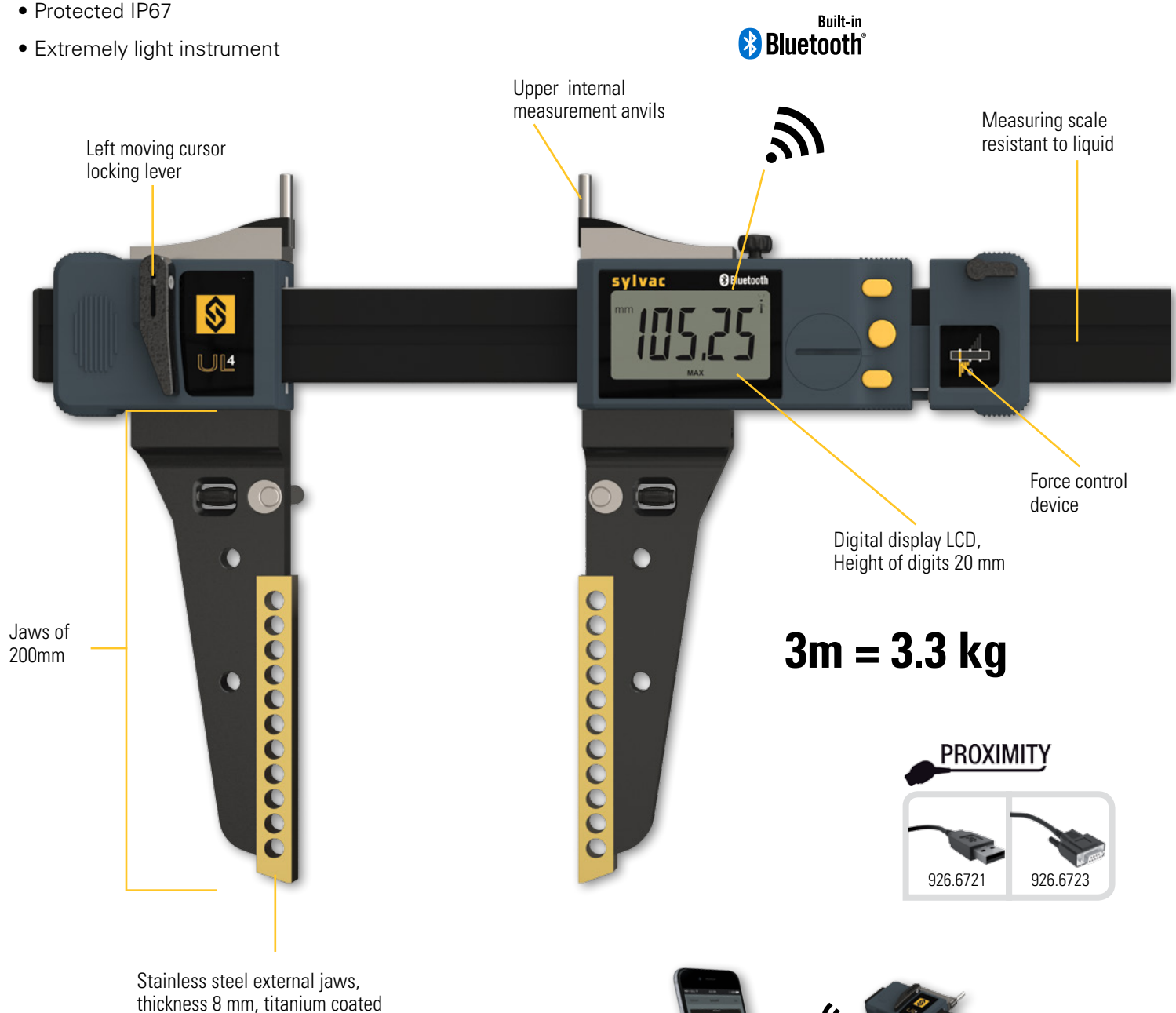
Depth measurement in a drilling with an additional base

# Ultra light caliper

## UL4

### DESCRIPTION

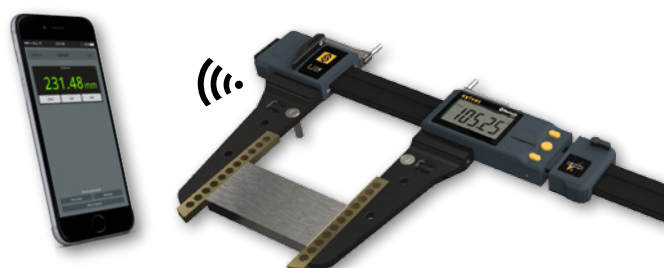
- Ultra light caliper for external and internal measurements
- **Integrated Bluetooth® technology**
- New Series with extra large display
- Aluminium beam reinforced by four stainless steel rods
- Long jaws 200 mm coated with titanium
- New carbide upper internal tips
- Measuring force applied control
- Protected IP67
- Extremely light instrument



IP67

WATER RESISTANT

SWISS MADE



# UL4

## A



## A

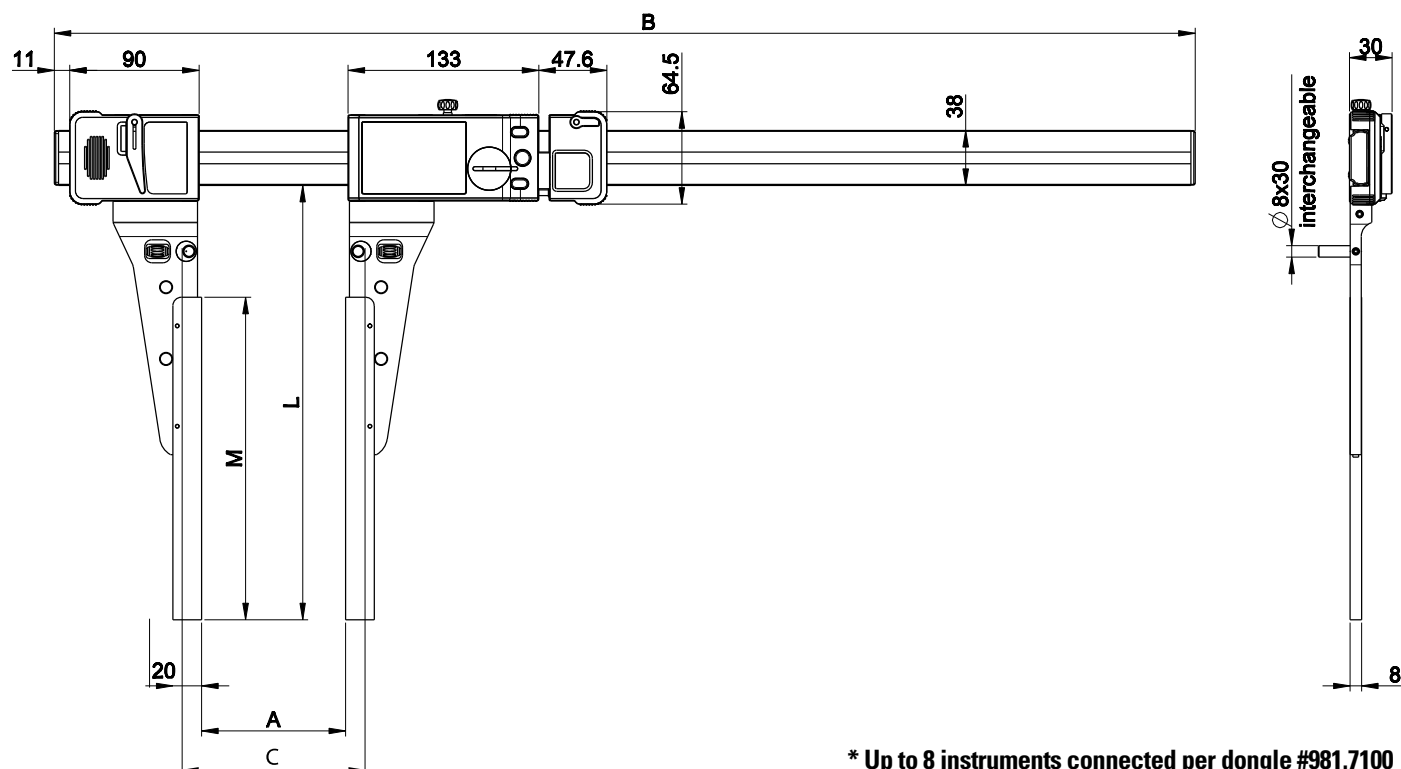
A

A

# Ultra light caliper

# UL4

SPECIAL EXECUTIONS | SPECIAL JAWS TYPE A



\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

## TECHNICAL SPECIFICATIONS

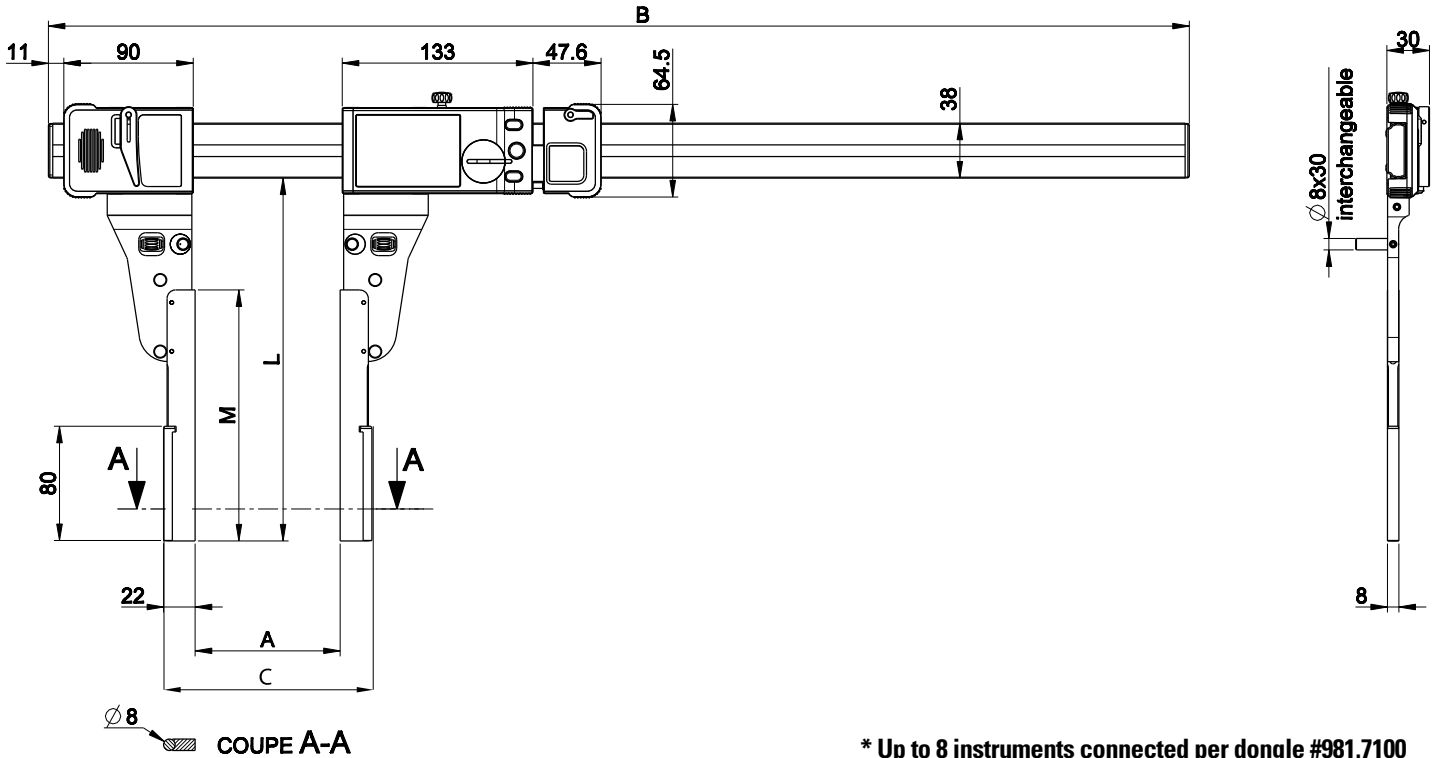
		811.2316.99	811.2317.99
<b>Special jaws (pair)</b>		Lenght L to specify with order (max 400 mm)	
L	mm	≤ 300	≤ 400
M	mm	L - 75	

		UL 400	UL 600	UL 1000	UL 1500	UL 2000	UL 2500	UL 3000
<b>UL specification</b>		<b>Max. error. [µm] / Repeatability [µm]</b>						
With Jaws 811.2316.99		40/20	50/20	70/20	130/30	180/40	220/40	320/40
With Jaws 811.2317.99		70/40	80/40	120/40	200/50	300/60	400/70	500/80
Measuring range	mm	400	600	1000	1500	2000	2500	3000
A	mm	0-478	0-683	0-1093	0-1608	0-2123	0-2638	0-3153
C	mm	27-505	27-710	27-1110	27-1635	27-2150	27-2665	27-3180
B	mm	796	1001	1411	1926	2441	2956	3471
Resolution	mm	0.01						

# Ultra light caliper

# UL4

SPECIAL EXECUTIONS | SPECIAL JAWS TYPE C



\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

## TECHNICAL SPECIFICATIONS

811.2319.99		
<b>Special jaws (pair)</b>		Lenght L to specify with order (max 300 mm)
L max	mm	300
M	mm	L - 75

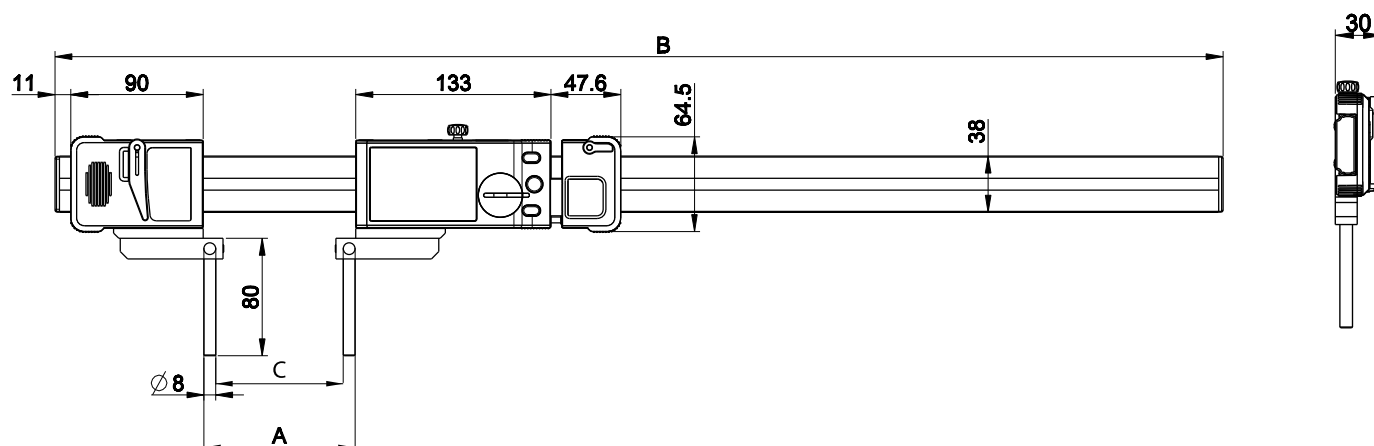
		UL 400	UL 600	UL 1000	UL 1500	UL 2000	UL 2500	UL 3000
UL specification		Max. error. [µm] / Repeatability [µm]						
With Jaws ≤ 200	mm	40/20	50/20	70/30	120/30	170/30	210/30	300/40
With Jaws ≤ 300	mm	50/30	60/30	90/30	150/30	200/40	300/40	400/50
Measuring range	mm	400	600	1000	1500	2000	2500	3000
A	mm	0-478	0-683	0-1093	0-1608	0-2123	0-2638	0-3153
C	mm	44-522	44-727	44-1137	44-1652	44-2167	44-2682	44-3197
B	mm	796	1001	1411	1926	2441	2956	3471
Resolution	mm	0.01						



# Ultra light caliper

## UL H4

### DIMENSIONAL DRAWING



### TECHNICAL SPECIFICATIONS

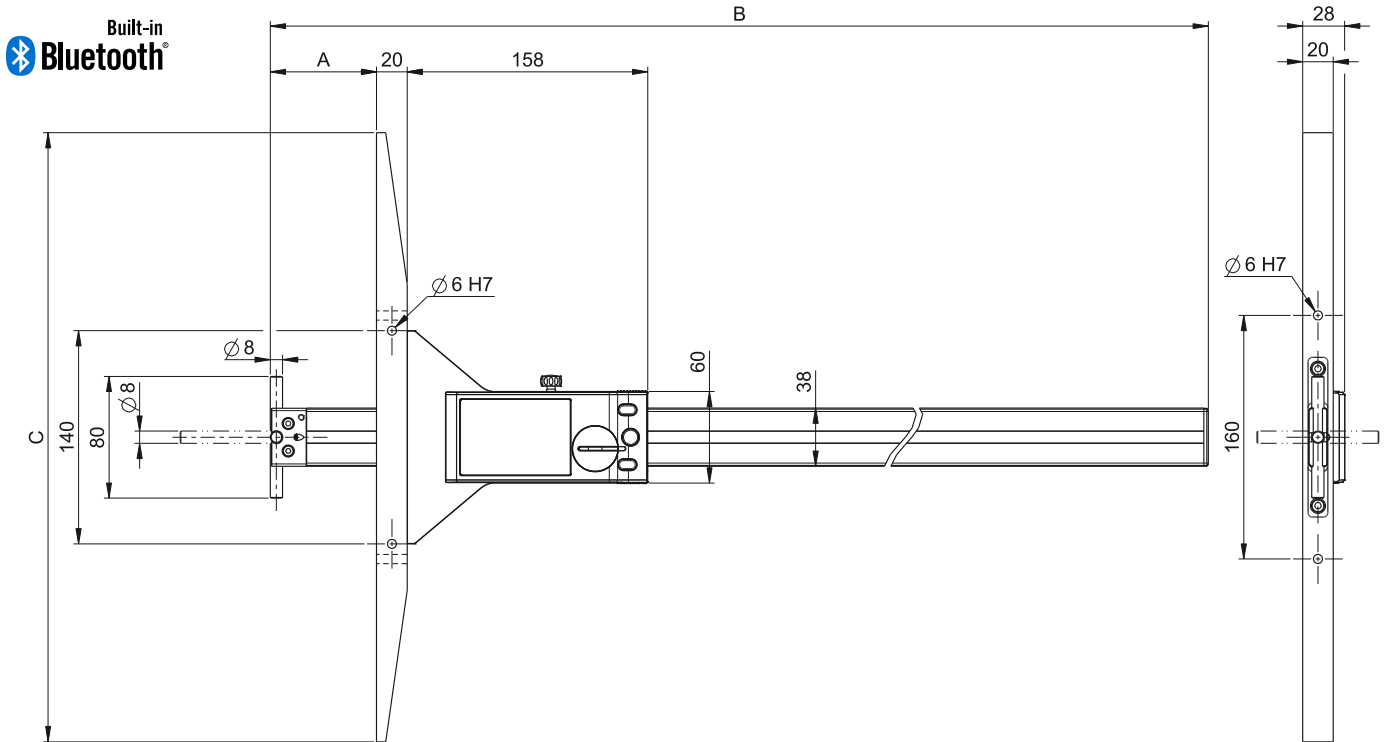
		811.8040	811.8060	811.8100	811.8150	811.8200	811.8250	811.8300
Measuring range	mm	400	600	1000	1500	2000	2500	3000
Max.Error	µm	30	40	50	90	120	150	200
Repeatability	µm	20				30		
Resolution	mm	0.01						
A	mm	26-480	26-685	26-1095	26-1610	26-2125	26-2640	26-3155
C	mm	10-464	10-669	10-1079	10-1594	10-2109	10-2624	10-3139
B	mm	796	1001	1411	1926	2441	2956	3471
Measuring Force	N	7.5 - 11.5 (±20%)						
Connections		Bluetooth® wireless technology* / Proxi.-RS232 , -USB						
IP67 Protection		●						
Preset max.		±9999.99 mm / ±399.9995 IN						
Weight	kg	1.1	1.2	1.5	1.9	2.2	2.5	2.9
Setting by PC		●						
2 references		●						
Min/Max function		●						
Tolerance limit indicators		●						

\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

# Ultra light depth gauge

## UL V4

### DIMENSIONAL DRAWING



### TECHNICAL SPECIFICATIONS

		811.6100	811.6150
Measuring range	mm	1000	1500
Max.Error	µm	100	130
Repeatability	µm	20	
Resolution	mm	0.01	
A	mm	0 - 1030	0 - 1545
C	mm	400	600
B	mm	1242	1757
Connections		Bluetooth® wireless technology* / Proxi.-RS232 , -USB	
IP67 Protection		●	
Preset max.		±9999.99 mm / ±399.9995 IN	
Weight	kg	2.2	3.16
Setting by PC		●	
2 references		●	
Min/Max function		●	
Tolerance limit indicators		●	

\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

# UL D4

A



## TECHNICAL SPECIFICATIONS

Bluetooth® wireless technology\* / Proxi.-RS232 , -USB

**More informations on How to use Bluetooth® leaflet SYL 1401 EN BT**

# Ultra light caliper

# UL4

## BASIC INSTRUMENT

A



### UL4 Standard

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Calibration certificate for UL up to 3000mm
- Upper internal measurement anvil (811.2323 - 2pcs)
- Universal base 811.2301
- Instruction manual



### UL4 Special Jaws Type A

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Special long jaws Type A (811.2316.99 or 811.2317.99)
- Length of jaws to specify when order (max. 400mm)
- Instruction manual



### UL4 Special Jaws Type C

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Special long jaws Type C (811.2319.99)
- Length of jaws to specify when order (max. 300mm)
- Instruction manual

# Ultra light caliper

## BASIC INSTRUMENT

### ULH4

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Calibration certificate for UL up to 3000mm
- Universal base 811.2301
- Anvil holder 811.2302
- Long cylindrical anvil Ø8x80mm (811.2324)
- Instruction manual

### ULV4

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Long cylindrical anvil Ø8x80mm (811.2324)
- Bridge 400mm or 600mm
- Instruction manual

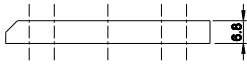
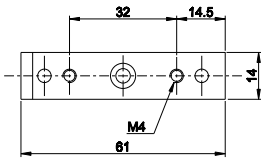
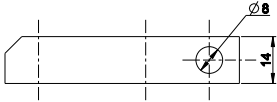
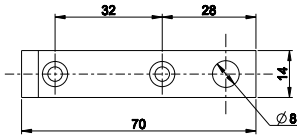
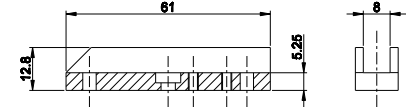
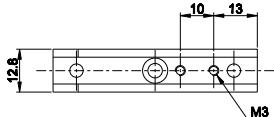
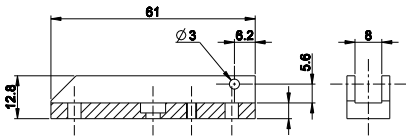
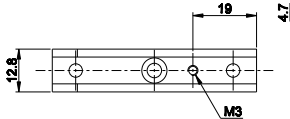
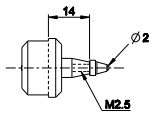
### ULD4

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Driving shaft
- Instruction manual

# Ultra light caliper

## ACCESSORIES

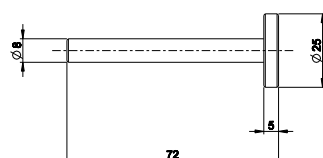
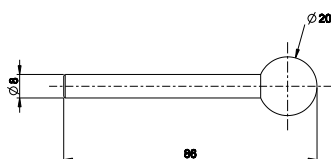
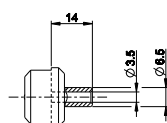
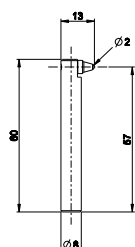
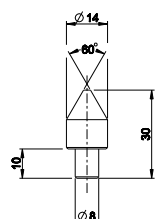
A

		UL4	UL H4	ULV4	UL D4
 	<b>811.2301</b> Universal base (2 pieces)	●	●		
 	<b>811.2302</b> Ø8 Anvil holder (2 pieces, to combine with 811.2301)	●	●		
    	<b>811.2303</b> Accessories holder (2 different pieces)	●	●		
<b>811.2305</b> Support with int. thread M 2.5 (2 pieces)	●				

See also cables chapter

# Ultra light caliper

## ACCESSORIES



		UL4	UL H4	ULV4	UL D4
811.2307	Inserts in hardened steel, cone 60° for bore clearance measurement > 10 mm, (2 pieces)	●	●		
811.2309	Holder for dial gauge contact points for internal groove measurement, (2 pieces)	●	●		
811.2304	Thread anvils holders (2 pieces)	●			
811.2310	Anvil Ø10mm (2 pieces)	●	●		
811.2311	Anvil Ø20mm (2 pieces)	●	●		
811.2312	Anvil Ø25x5mm (2 pieces)	●	●		
811.6306	Wooden box for UL4 400 and 600mm	●	●		
811.6310	Wooden box for UL4 1000mm	●	●		
811.6315	Wooden box for UL4 1500mm	●	●		

See also cables chapter

# Ultra light caliper

## ACCESSORIES

A

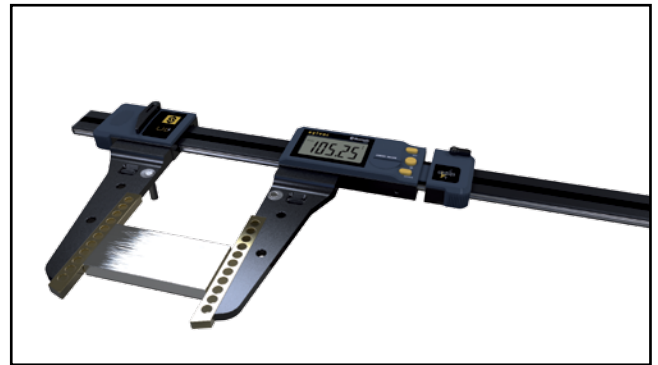


		UL4	UL H4	ULV4	UL D4
<b>811.2321</b>	Lower plate for internal anvil (2 pieces) (for Bowers Unical's «L anvils»)	●	●		
<b>811.2322</b>	Lower internal anvil (2 pieces)	●	●		
<b>811.2323</b>	Upper internal measurement anvil (2 pieces)* (to combine with 811.2303)	●	●		
<b>811.2324</b>	Long cylindrical anvil Ø8x80mm (2 pieces) (to combine with 811.2303)	●	●		
<b>811.2325</b>	Cylindrical anvil Ø8x30mm (2 pieces)	●	●		

## APPLICATIONS



Internal measure with UL4



External measure with UL4



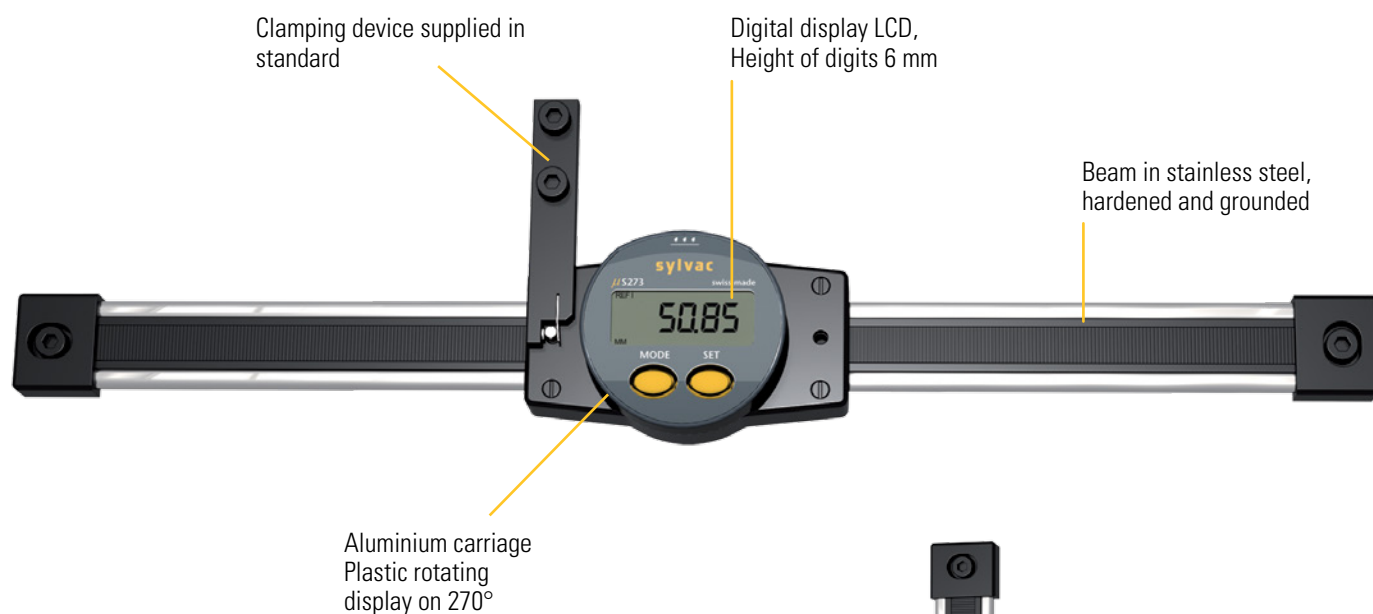


# Digital scales

# S\_Scale WORK

## DESCRIPTION

- Max displacement speed: 2 m/sec
- RS232 or USB Data output
- External power supply by Power cable
- Easy to integrate in your projects



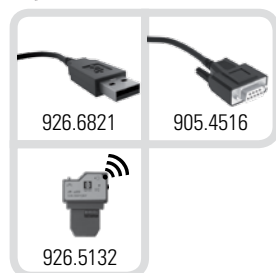
**SWISS**  
MADE

**SIS** Smart Inductive System

WATER RESISTANT

**IP65**

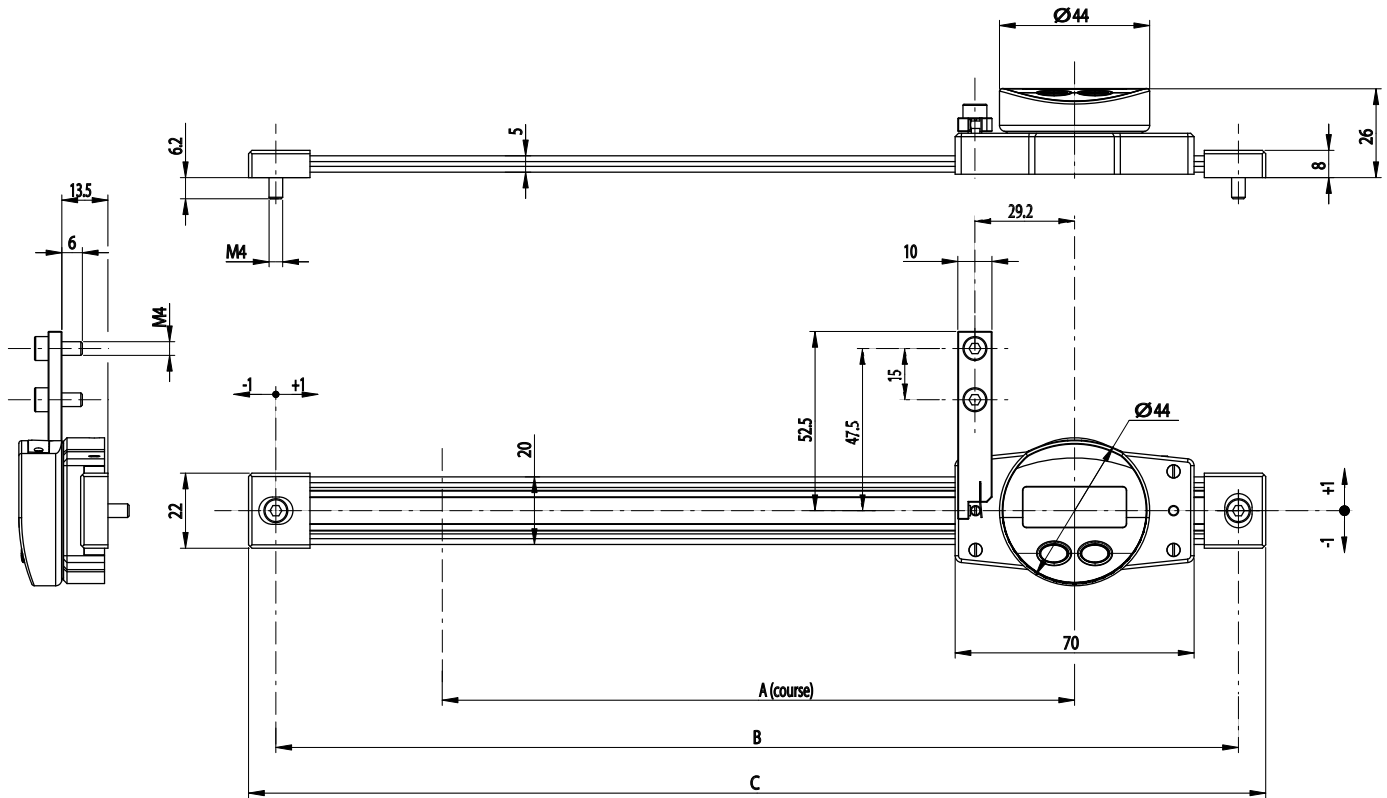
**POWER**



# Digital scales

# S\_Scale WORK

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

		816.1015	816.1020	816.1030	816.1060
Measuring range	mm	150	200	300	600
Type		H / V	H / V	H / V	H / V
Max. Error	µm	20	20	30	30
Repeatability <sup>1)</sup>	µm	10	10	10	10
Resolution mm		0.01	0.01	0.01	0.01
A	mm	185	235	335	665
B	mm	282	332	432	762
C	mm	298	348	448	778
S_Connect : Power		USB / RS232 / Wireless <sup>2)</sup>			
Selection of measuring direction		●			
PRESET function		●			
2 references		●			

<sup>1)</sup> ± 1 digit

<sup>2)</sup> see cables chapter

# Professional micrometer

# S\_Mike PRO

## DESCRIPTION

CYLINDRICAL Ø6.5

- Automatic wake-up by moving the measuring spindle (Absolute System S.I.S)
- Sleeping mode after 20 min. of no use (Absolute System S.I.S)
- Position memorized in sleeping mode, **Absolute System S.I.S\***
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529, **even connected**
- Measuring range 0-161 mm **covered with 5 instruments only**
- Set of 3 micrometers 0-102 mm available
- Quick displacement of the measuring spindle 10 mm / rotation
- Adjustable measuring force 5N / 10N (versions 903.030X)
- Repeatability and reproducibility never reached before
- Thimble in polyacetal-copolymer

Measuring surface  
in hard metal

Non-rotating spindle Ø 6.5 mm

Fast handle movement  
with ratchet



S\_connect proximity or Bluetooth®

Simple and friendly  
functions



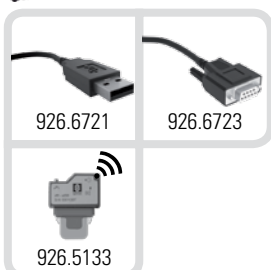
**SWISS  
MADE**

**SIS** Smart  
Inductive  
System

**WATER RESISTANT**

**IP67**

**PROXIMITY** Built-in  
**Bluetooth®**

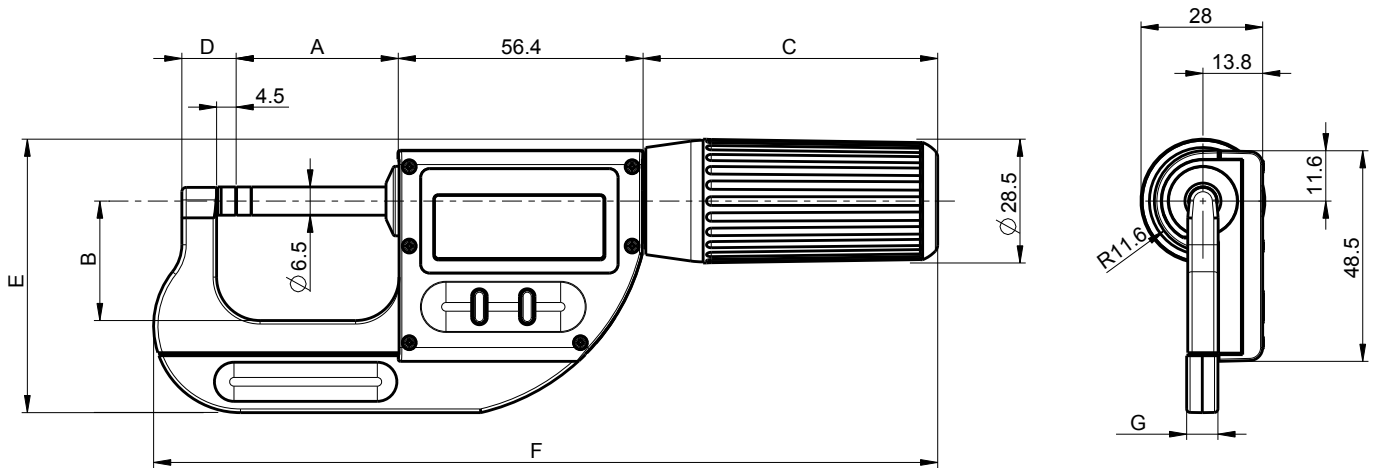


# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## CYLINDRICAL Ø6.5



## TECHNICAL SPECIFICATIONS

		803.0300	903.0600	903.1000	903.1360	903.1600
Measuring range	mm	0-30	30-66	66-102	100-136	125-161
Max. Error G <sup>1)</sup>	µm	3	4	5	7	8
Repeatability <sup>2)</sup>	µm	1	1	1	2	2
Anvils types		Ø6.5				
A	mm	37.3	73.3	109.3	143.3	168.3
B	mm	27.5	43	60	95	110
C	mm	68	74	74	74	74
D	mm	12.5	13.5	14.5	19.5	19.5
E	mm	63	86	106	151	169
F	mm	181	230	269	306	339
G	mm	7.2	9	9	9	9
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>				
Prot. rating accor. to IEC 60529		IP67 even connected				
Setting by PC		●				
Adjustable measuring force		5N / 10N	10N			
Non-rotating spindle		●				
Fast movement		●				
Preset function		●				
Smart Inductive Sensor		●				

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

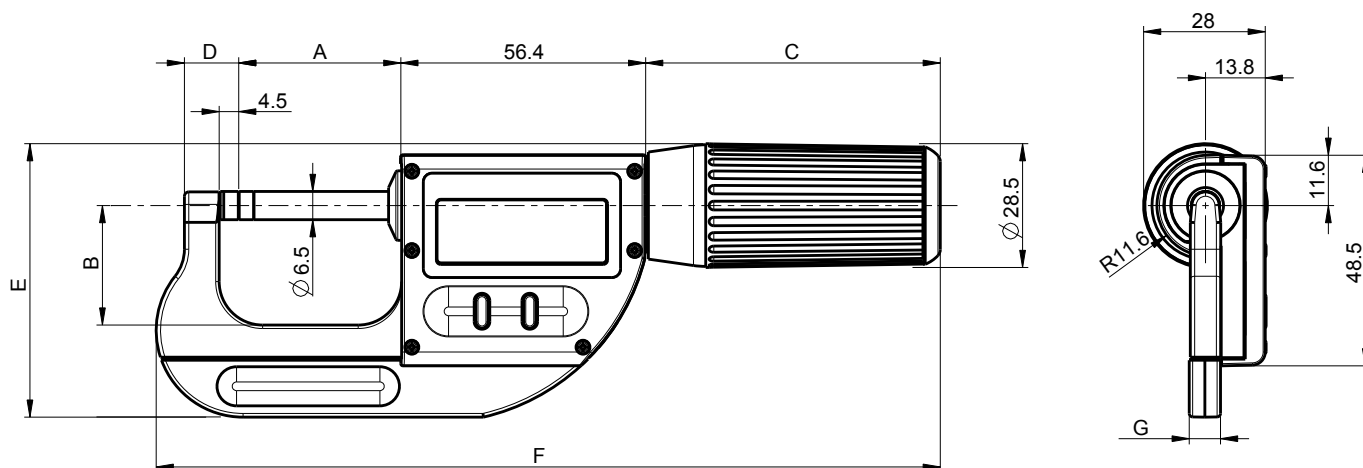
<sup>3)</sup> see cables chapter

# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## CYLINDRICAL Ø6.5 BLUETOOTH®



## TECHNICAL SPECIFICATIONS

		803.0306	903.0606	903.1006
Measuring range	mm	0-30	30-66	66-102
Max. Error G <sup>1)</sup>	µm	3	4	5
Repeatability <sup>2)</sup>	µm	1	1	1
Anvils types		Ø6.5 <sup>3)</sup>		
A	mm	37.3	73.3	109.3
B	mm	27.5	43	60
C	mm	68	74	74
D	mm	12.5	13.5	14.5
E	mm	63	86	106
F	mm	181	230	269
G	mm	7.2	9	9
S_Connect		Bluetooth® wireless technology*		
Prot. rating accor. to IEC 60529		IP67 even connected		
Setting by PC		●		
Adjustable measuring force		5N / 10N	10N	
Non-rotating spindle		●		
Fast movement		●		
Preset function		●		
Smart Inductive Sensor		●		

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> Other anvils type on demand.

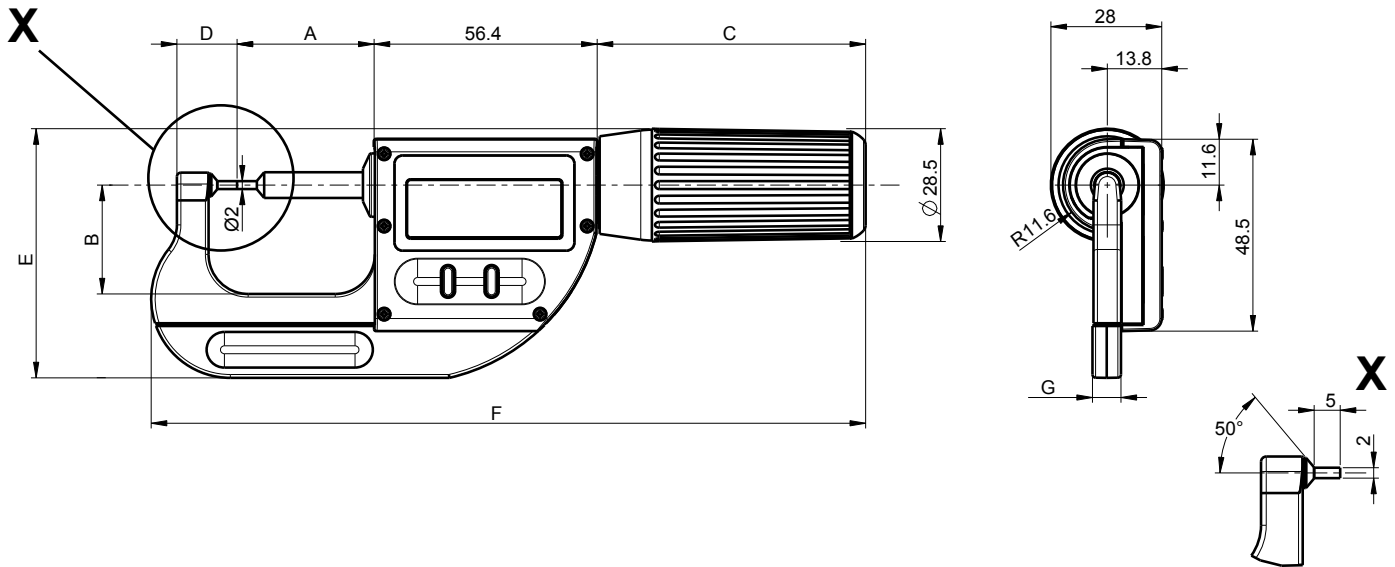
\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## CYLINDRICAL Ø2



## TECHNICAL SPECIFICATIONS

		803.0301	903.0601	903.1001	803.0307
Measuring range	mm	0-25	25-60	60-95	0-25
Max. Error G <sup>1)</sup>	µm	3	4	5	3
Repeatability <sup>2)</sup>	µm	1	1	1	1
Anvils types		Ø2			Ø2
A	mm	34.6	70.6	106.6	34.6
B	mm	27.5	43	60	27.5
C	mm	68	74	74	68
D	mm	15.2	16.2	17.2	15.2
E	mm	63	86	106	63
F	mm	181	230	269	181
G	mm	7.2	9	9	7.2
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>			Bluetooth® wireless technology*
Prot. rating accor. to IEC 60529		IP67 even connected			
Setting by PC		●			
Adjustable measuring force		5N / 10N	10N		5N / 10N
Non-rotating spindle		●			
Fast movement		●			
Preset function		●			
Smart Inductive Sensor		●			

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

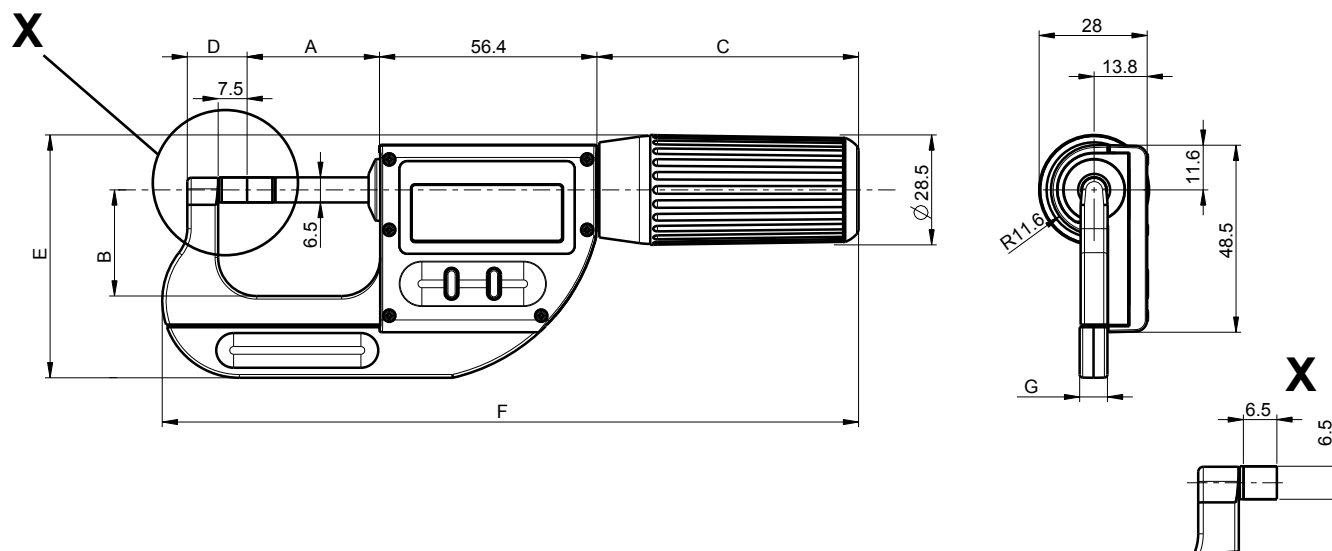
<sup>3)</sup> see cables chapter

# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## KNIFE-SHAPED



## TECHNICAL SPECIFICATIONS

		803.0302	903.0602	903.1002	903.1302	903.1602	803.0308
Measuring range	mm	0-25	25-60	60-95	95-130	120-155	0-25
Max. Error G <sup>1)</sup>	µm	3	4	5	6	7	3
Repeatability <sup>2)</sup>	µm	1	1	1	2	2	1
Anvils types		0.75x6.5					0.75x6.5
A	mm	34.3	70.3	106.3	140.3	165.3	34.3
B	mm	27.5	43	60	95	110	27.5
C	mm	68	74	74	74	74	68
D	mm	15.5	16.5	17.5	22.5	22.5	15.5
E	mm	63	86	106	151	169	63
F	mm	181	230	269	306	339	181
G	mm	7.2	9	9	9	9	7.2
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>					Bluetooth® wireless technology*
Prot. rating accor. to IEC 60529		IP67 even connected					
Setting by PC		●					
Adjustable measuring force		5N / 10N	10N				5N / 10N
Non-rotating spindle		●					
Fast movement		●					
Preset function		●					
Smart Inductive Sensor		●					

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

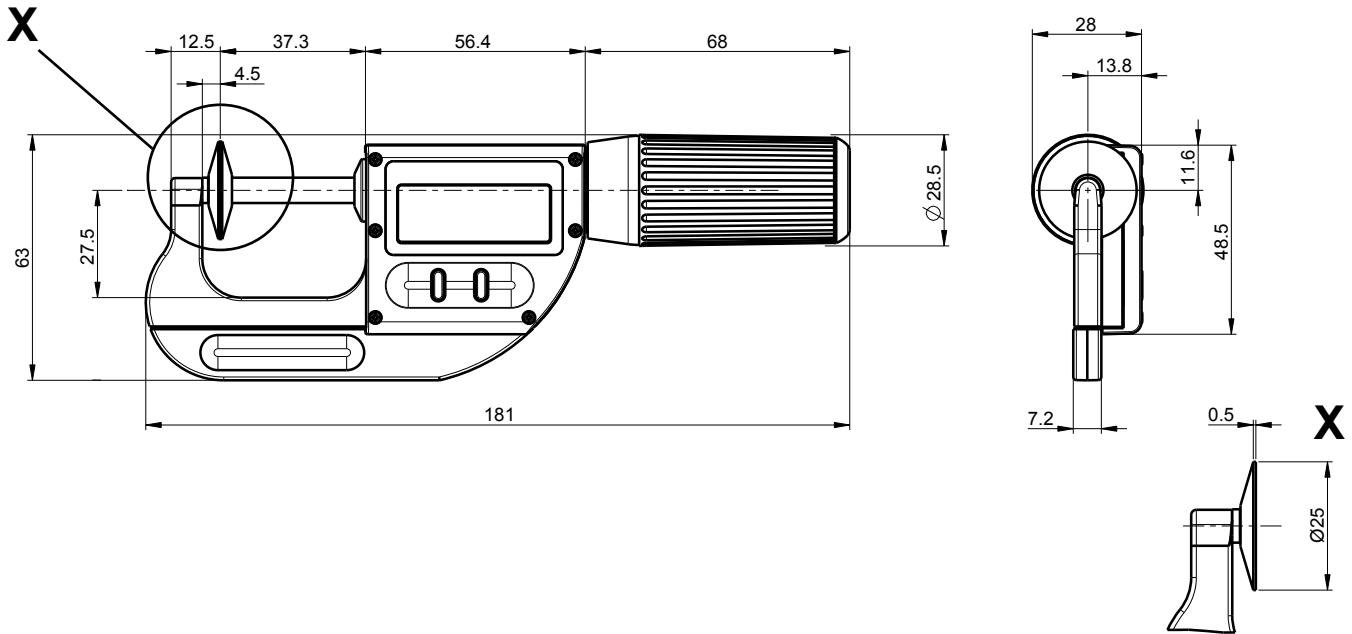
# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## DISC-SHAPED

A



## TECHNICAL SPECIFICATIONS

		803.0303
Measuring range	mm	0-30
Max. Error G <sup>1)</sup>	µm	4 (full-touch-contact) / 10 (partial contact)
Repeatability <sup>2)</sup>	µm	1
Flatness	µm	2
Parallelism	µm	5 (full-touch-contact) / 10 (partial contact)
Gear unit		Measurable module ≥ 0.5
Anvils types		Ø25
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>
Prot. rating accor. to IEC 60529		IP67 even connected
Setting by PC		●
Adjustable measuring force		5N
Non-rotating spindle		●
Fast movement		●
Preset function		●
Smart Inductive Sensor		●

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

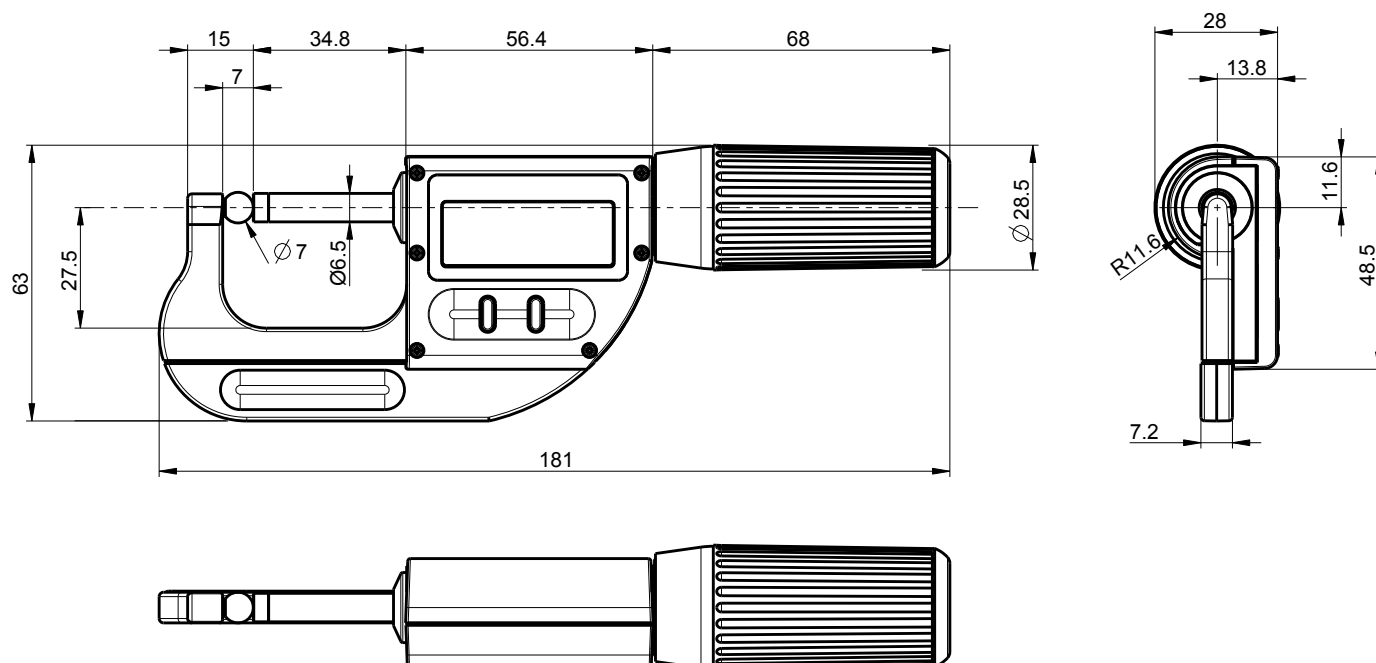


# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

FLAT Ø6.5 / SPHERICAL Ø7



## TECHNICAL SPECIFICATIONS

		903.0304
Measuring range	mm	0-30
Max. Error G <sup>1)</sup>	µm	3
Repeatability <sup>2)</sup>	µm	1
Parallelism	µm	1
Anvils types		Ø7 flat and Ø7 spherical
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>
Prot. rating accor. to IEC 60529		IP67 even connected
Setting by PC		●
Adjustable measuring force		5N / 10N
Non-rotating spindle		●
Fast movement		●
Preset function		●
Smart Inductive Sensor		●

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

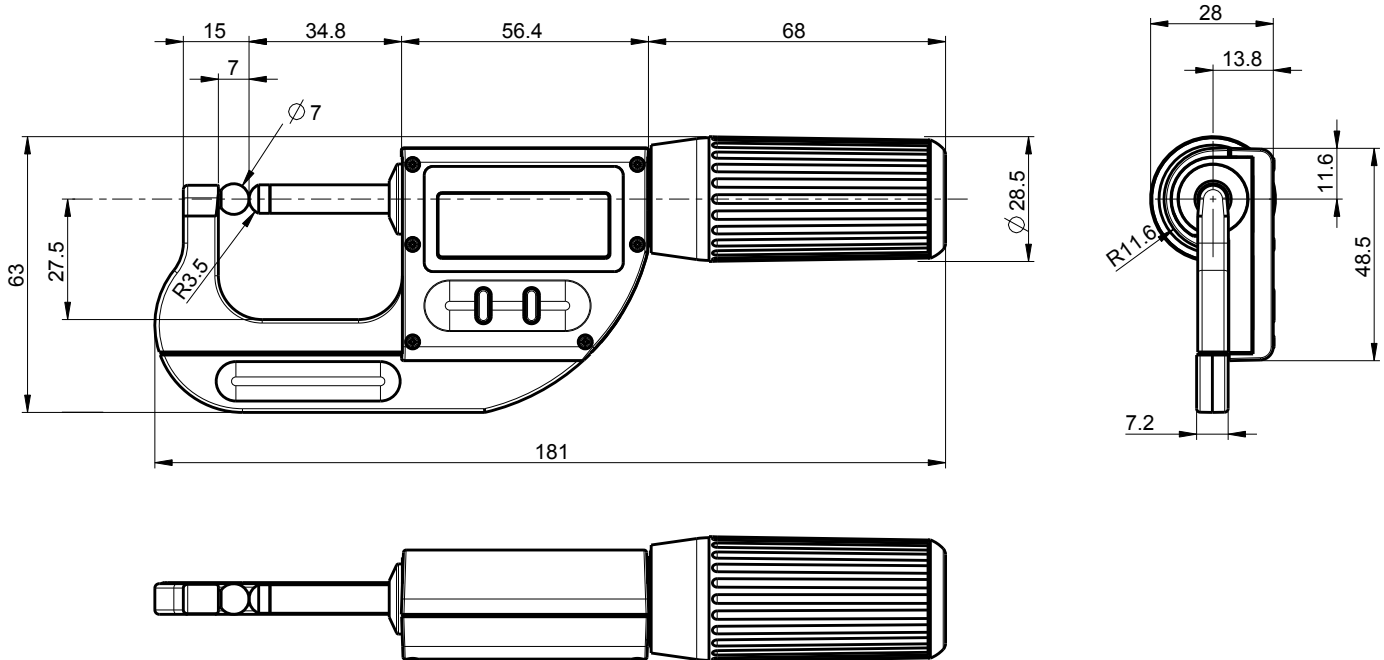
# Professional micrometer

# S\_Mike PRO

## DIMENSIONAL DRAWING

## SPHERICAL Ø7

A



## TECHNICAL SPECIFICATIONS

		903.0305
Measuring range	mm	0-30
Max. Error G <sup>1)</sup>	µm	4
Repeatability <sup>2)</sup>	µm	1
Anvils types		Ø7 2 spherical
S_Connect : Proximity		USB / RS 232 / Wireless <sup>3)</sup>
Prot. rating accor. to IEC 60529		IP67 even connected
Setting by PC		●
Adjustable measuring force		5N / 10N
Non-rotating spindle		●
Fast movement		●
Preset function		●
Smart Inductive Sensor		●

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

# Professional micrometer

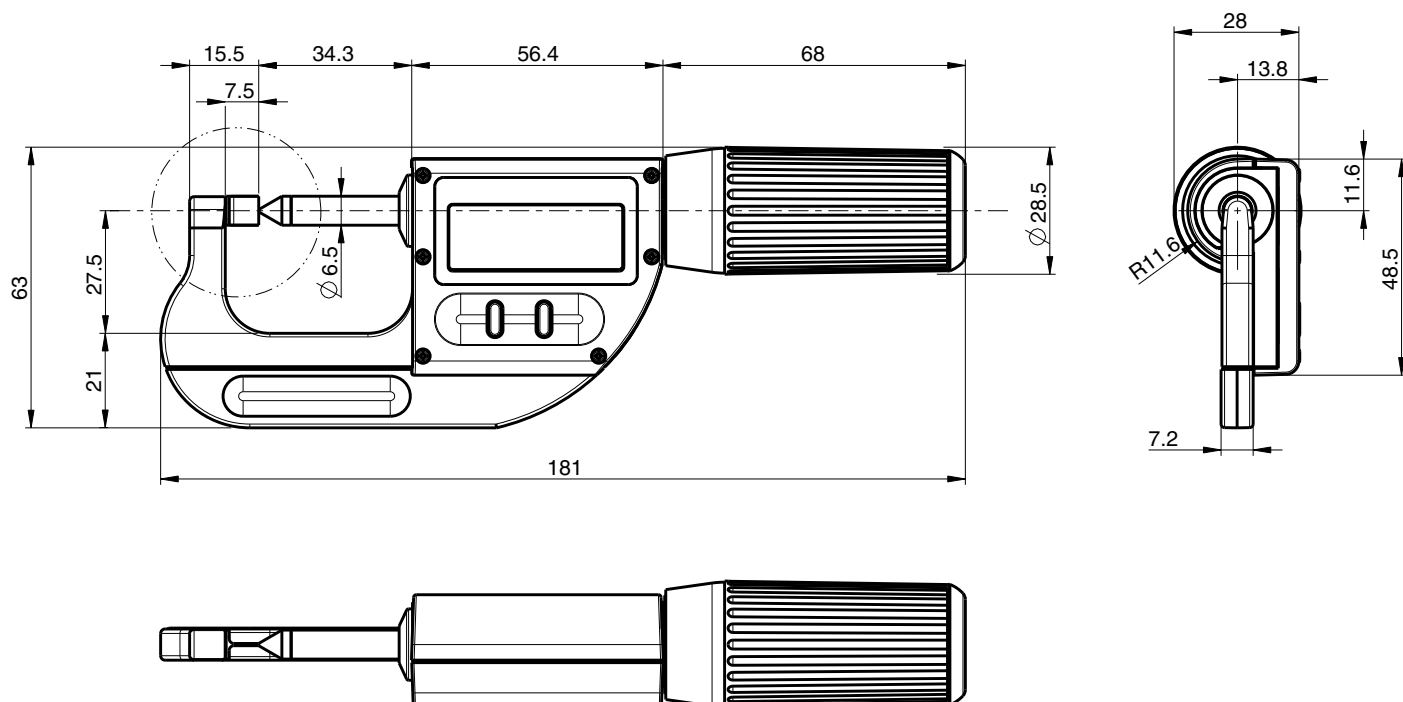
# S\_Mike PRO

## DIMENSIONAL DRAWING

## KNIFE-SHAPED / CONE



## Cable crimping



## TECHNICAL SPECIFICATIONS

		803.0309
Measuring range	mm	0-25
Max. Error G <sup>1)</sup>	µm	3
Repeatability <sup>2)</sup>	µm	1
Anvils types		Knife 0.5mm - cone 30°/Ø0.5mm
S_Connect : Proximity		Bluetooth® wireless technology*
Prot. rating accor. to IEC 60529		IP67 even connected
Setting by PC		●
Adjustable measuring force		5N / 10N
Non-rotating spindle		●
Fast movement		●
Preset function		●
Smart Inductive Sensor		●

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

# Professional micrometer

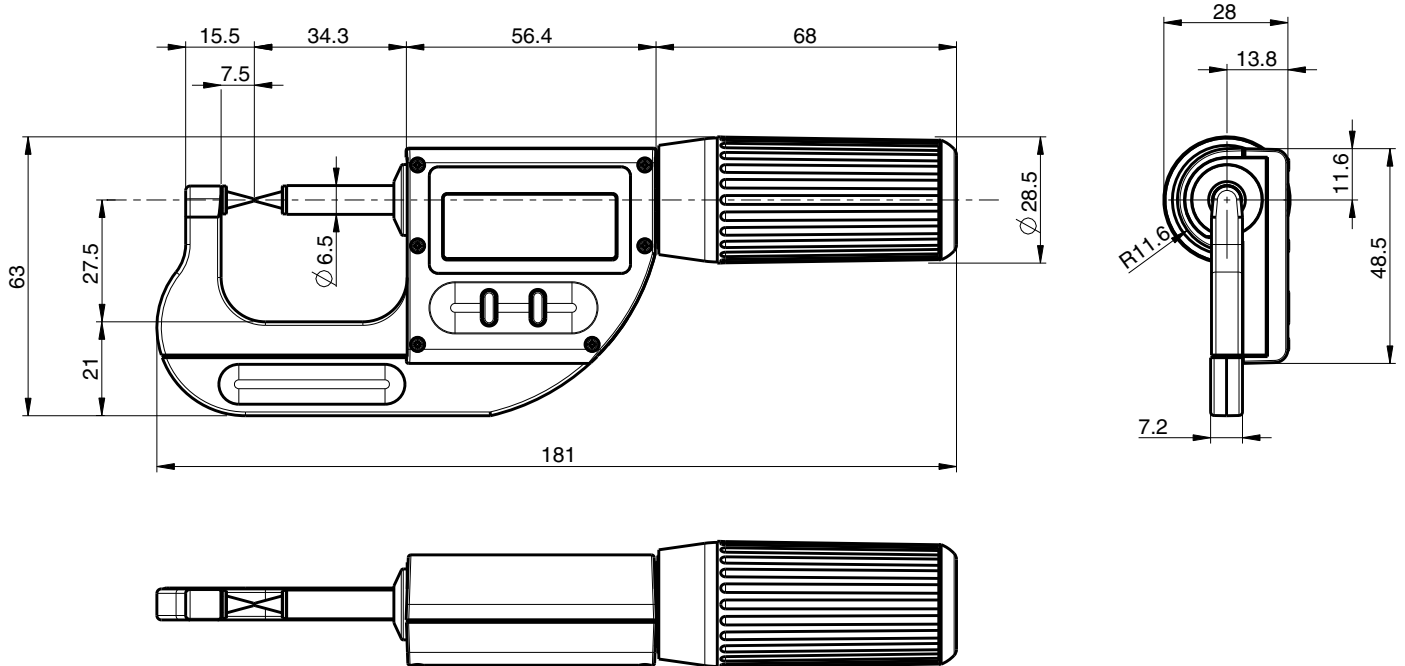
# S\_Mike PRO

DIMENSIONAL DRAWING

POINT / SPHERICAL

A

 Built-in Bluetooth® **Point**



## TECHNICAL SPECIFICATIONS

		803.0310
Measuring range	mm	0-25
Max. Error G <sup>1)</sup>	µm	3
Repeatability <sup>2)</sup>	µm	1
Anvils types		Point 30° - spherical Ø3mm
S_Connect : Proximity		Bluetooth® wireless technology*
Prot. rating accor. to IEC 60529		IP67 even connected
Setting by PC		●
Adjustable measuring force		5N / 10N
Non-rotating spindle		●
Fast movement		●
Preset function		●
Smart Inductive Sensor		●

<sup>1)</sup> according to DIN 863

<sup>2)</sup> ± 1 digit

<sup>3)</sup> see cables chapter

# Professional micrometer

# S\_Mike PRO

## BASIC INSTRUMENT



903.1301



910.1301 including:  
910.1502, 903.0300 and 903.0330



910.1304 including:  
810.1506, 803.0306 and 805.6301

		903.1300	903.1301	910.1301	910.1304
Measuring range	mm	0-102	0-102	150 / 0-30	150 / 0-30 / 12.5
Plastic case		●	-	-	●
Aluminium case		-	●	●	-
Connexion		USB / RS 232 / Wireless			Bluetooth® wireless technology*

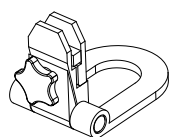
## BASIC INSTRUMENT

## MICROMETERS SETS

- Instrument according to technical specifications
- Standard bar 50 mm (for 903.060X)
- Standard bar 75 mm (for 903.100X)
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate

- 903.0300 / 0600 / 1000
- Standard bar 50 mm
- Standard bar 75 mm
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate

## ACCESSORIES



903.0330	Stand
903.0620	Standard bar 50 mm
903.1020	Standard bar 75 mm
903.1620	Standard bar 125 mm

# Professional micrometer

# S\_Mike PRO

## MODELS



Cylindrical Ø6.5mm Proximity /  
Cylindrical Ø6.5mm Bluetooth®



Disk Ø25mm



Ball-Ball Ø7mm



Flat Ø6.5mm-Ball Ø7mm



Knife 0.75x6.5mm



Cylindrical Ø2mm



Cable crimping Knife 0.5mm -  
cone 30° / Ø0.5mm Bluetooth®



Point 30° - ball Ø3mm Bluetooth®

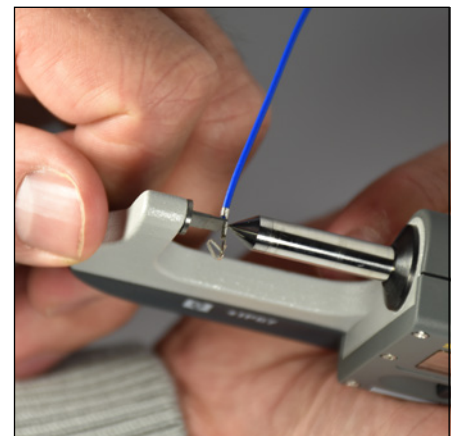
## APPLICATIONS



Part measurement with a S\_Mike PRO Disk



Length measurement of a lathed part

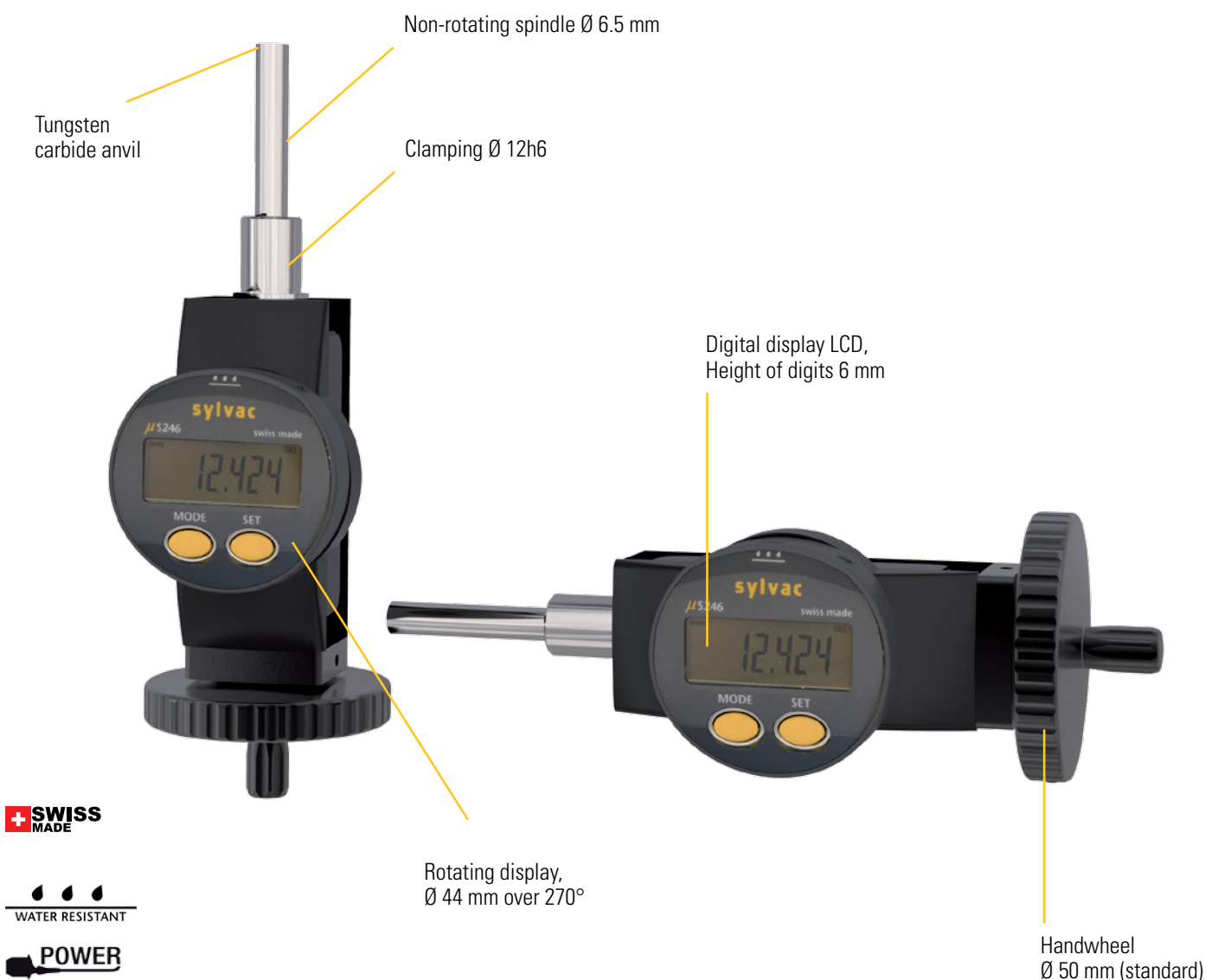


Cable crimping measurement

# Digital micrometer screws

## DESCRIPTION

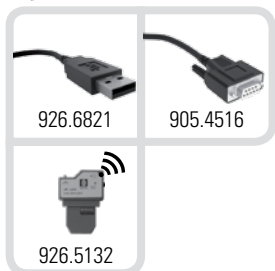
- Data output RS232, combined with external power supply
- Fine adjustment available (accessories)
- Horizontal and Vertical use (same type)
- Reduced dimensions (compact)
- Other handwheels on request



**SWISS  
MADE**

**WATER RESISTANT**

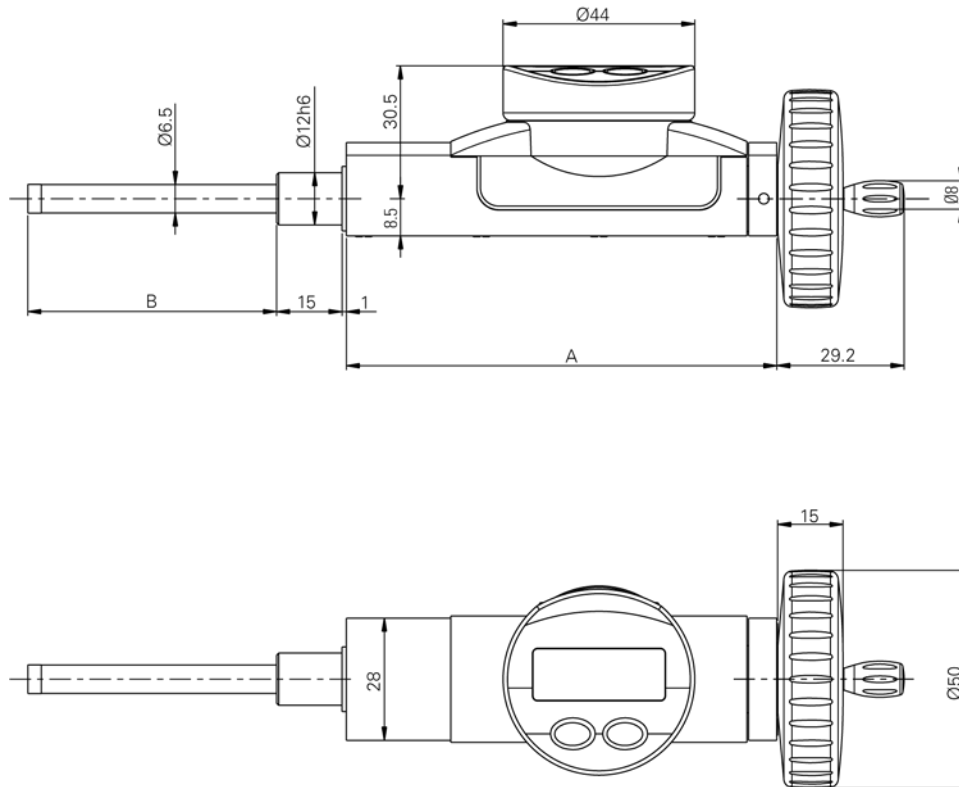
**POWER**



# Digital micrometer screws

## DIMENSIONAL DRAWING

A



## TECHNICAL SPECIFICATIONS

		852.2001	852.2011
Measuring range	mm	0-25	0-50
Max. Error	µm	5	8
Repeatability	µm	2	2
Resolution	mm	0.001	0.001
A	mm	74.5	98.5
B	mm	33.1	57.1
S_Connect : Power		USB / RS232 / Wireless <sup>1)</sup>	
Selection of measuring direction		●	
PRESET function		●	
Absolute or relative measurement		●	

<sup>1)</sup> see cables chapter

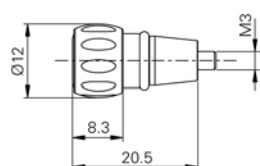


# Digital micrometer screws

## BASIC INSTRUMENT

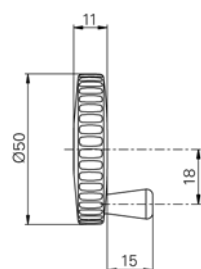
- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Handwheel Ø 50 mm (852.2311)
- Calibration certificate

## ACCESSORIES



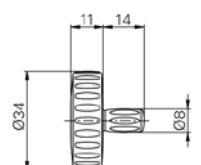
**852.2310**

Fine adjustment device



**852.2311**

Handwheel Ø 50 mm with crank handle for fast motion



**852.2312**

Handwheel Ø 34 mm

## APPLICATIONS



Fine adjustment device type 852.2310



Use on measuring microscope



Handwheel use

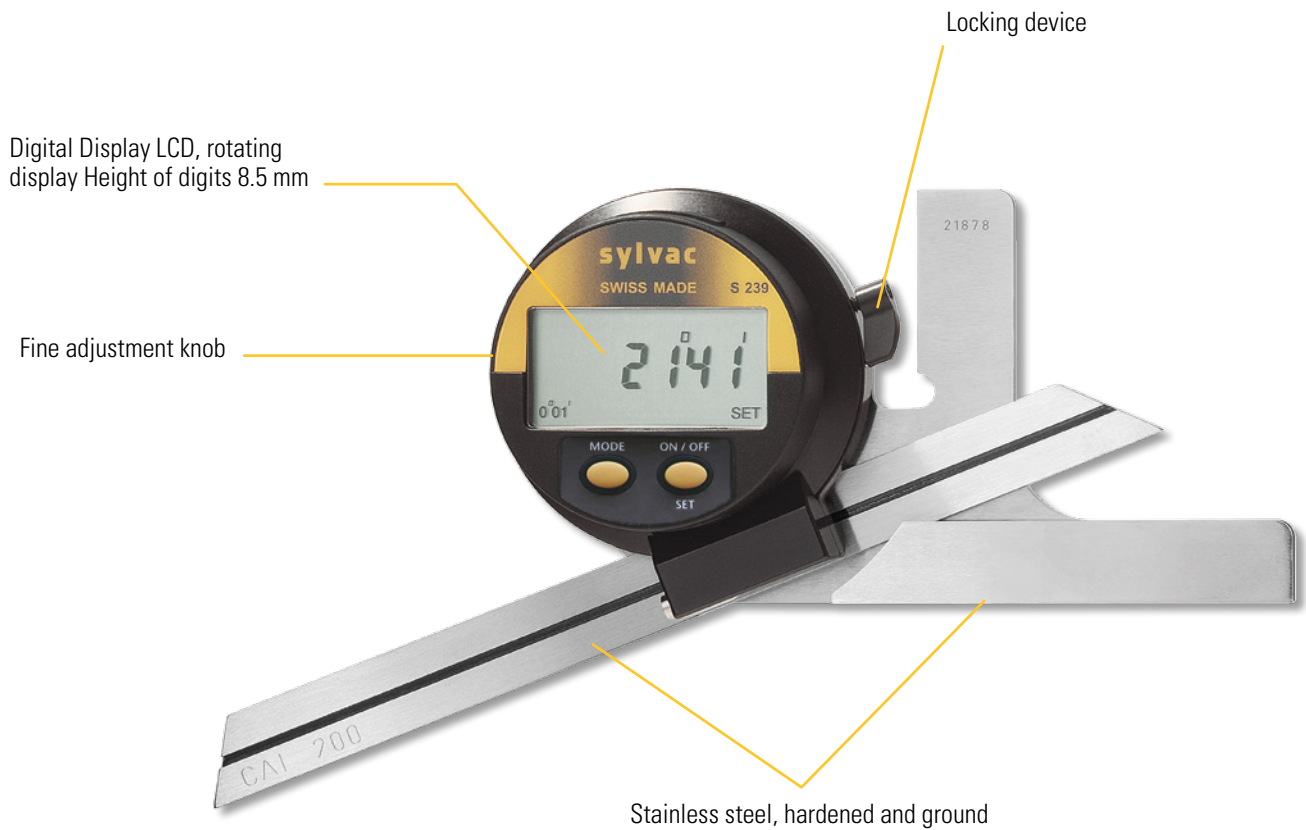
# Protractor

## S239

### DESCRIPTION

- Measuring range 1x360°, 2x180°, 4x90°
- Mechanical parts in stainless steel

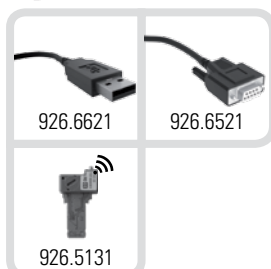
A



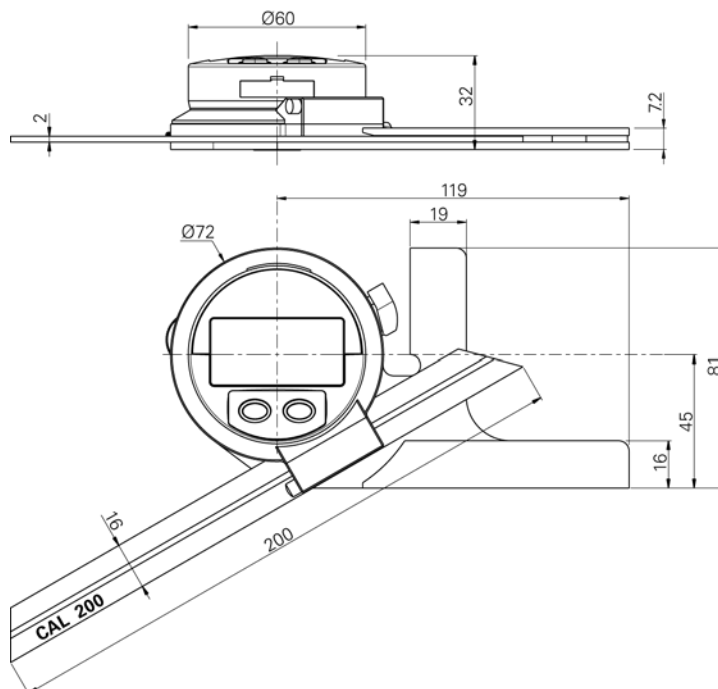
**SWISS  
MADE**

**WATER RESISTANT**

**OPTO**



## DIMENSIONAL DRAWING



## TECHNICAL SPECIFICATIONS

	820.1700
Measuring range	0-360°
Max. Error	4 minutes of arc
Resolution	1 minute of arc / 0.01°
Max. rotation speed	1080° / sec
Protection rating according to IEC 529	IP51
S_Connect : Opto	USB / RS232 / Wireless <sup>1)</sup>
Selection of measuring direction	●

<sup>1)</sup> see cables chapter

## BASIC INSTRUMENT

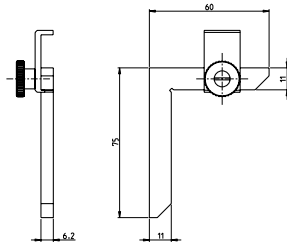
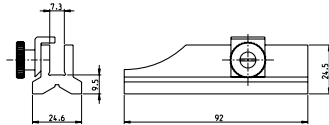
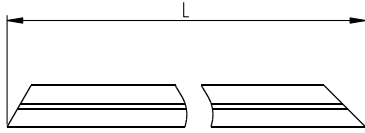
- Instrument according to technical specifications
- Wooden box <sup>2)</sup>
- Scale 200 mm (820.2420)
- Lithium battery CR2032 included
- Instruction manual

<sup>2)</sup> Fumigated, compatible ISPM 15 and NIMP 15

# Protractor

## S239

### ACCESSORIES



**820.2420**

Scale L 200 mm

**820.2430**

Scale L 300 mm

**820.2450**

Scale L 500 mm

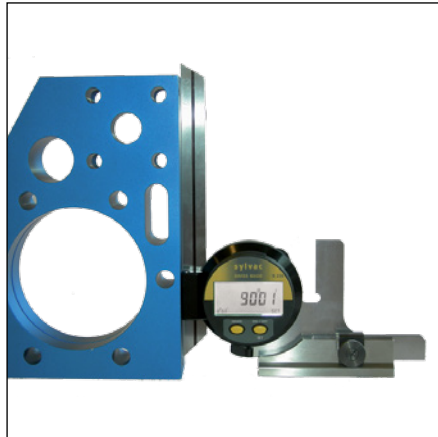
**820.2460**

Stand for vertical application and small angular measurements

**820.2461**

Square for small angular measurements

### APPLICATIONS



Measurement with accessory type 820.2460



Standard measurement



Measurement with accessory type 820.2461



# DIGITAL INDICATORS S\_DIAL

The electronic indicators are equipped with a linear sensor and an engraved scale glued on the measuring spindle. A sensor replaces the gears. The analogic display is transformed into a digital display.

The SYLVAC electronic indicator program covers the entire range of mechanical indicators with resolutions 0.1 to 0.0001mm and measuring range up to 150mm, and with much better accuracy.

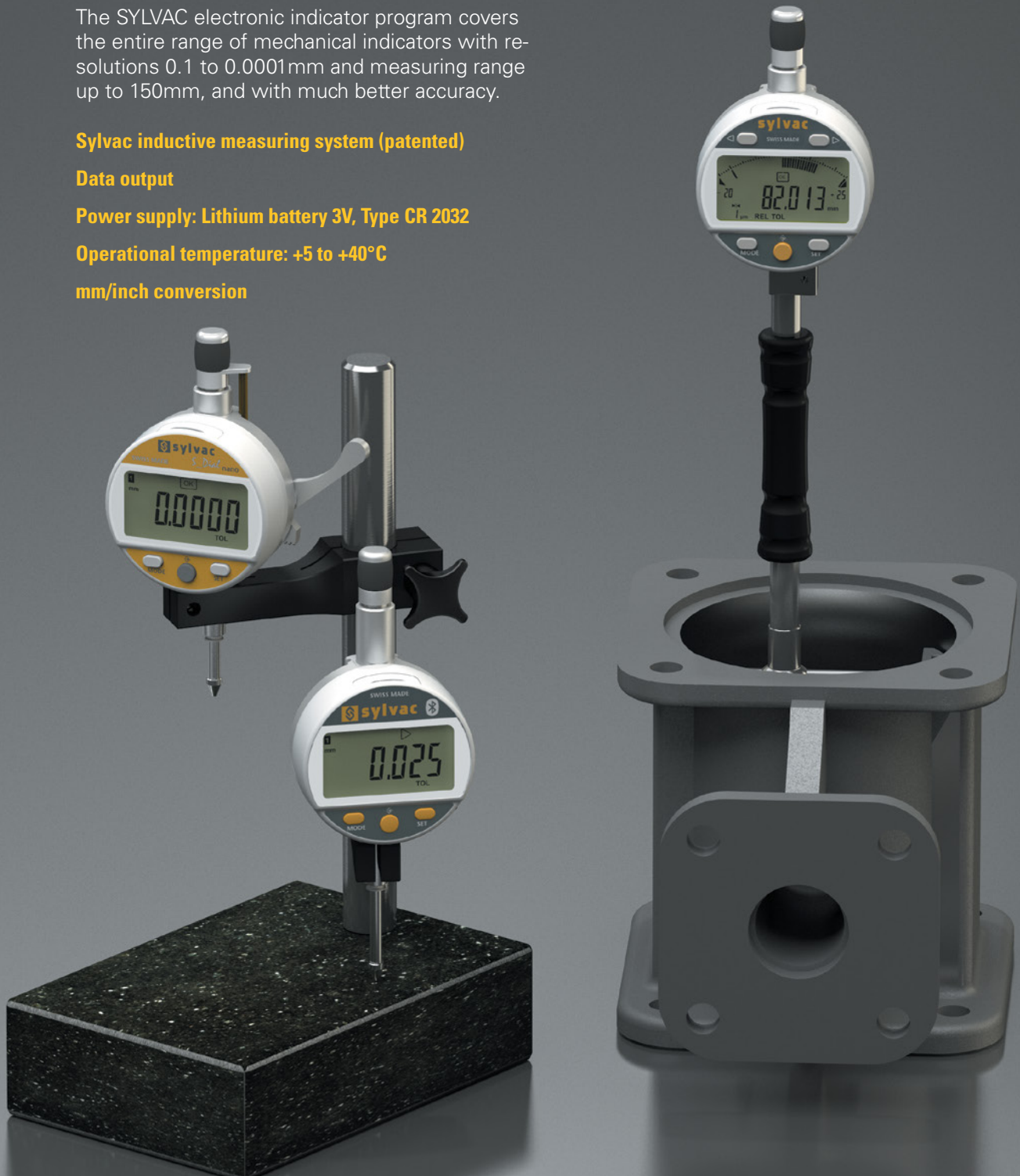
**Sylvac inductive measuring system (patented)**

**Data output**

**Power supply: Lithium battery 3V, Type CR 2032**

**Operational temperature: +5 to +40°C**

**mm/inch conversion**



# Digital indicators

# S\_Dial

## SUMMARY OF ALL TYPES

		S233								S234		BASIC						S_Dial WORK						PLC			
		905.4121	905.4125	905.4140	905.4521	905.4525	905.4540	905.4511	905.4515	905.4527	905.4321	905.4322	805.1201	805.1301	805.1401	805.1501	805.1601	805.1621	805.5307	805.5507	805.5305	805.5505	805.5625	805.7301	805.7201	805.7501	805.7401
RANGE																											
0.5 mm																											
0.8 mm																											
5 mm																											
12.5 mm																											
25 mm																											
50 mm																											
100 mm																											
150 mm																											
RESOLUTION																											
0.01 mm																											
0.001 mm																											
MECHANIC																											
Diameter 8 mm h6																											
Diameter 25mm g7																											
Dove tail																											
M1.4 contact point																											
M2.5 contact point																											
Rubber boot																											
IP51 (IEC 60529)																											
IP54 (IEC 60529)																											
IP65 (IEC 60529)																											
IP67 (IEC 60529)																											
DIAL																											
Diameter 44 mm																											
Diameter 60 mm																											
Rotating																											
Vertical display																											
FUNCTIONS																											
mm/inch																											
Preset																											
Preset onMin/Max																											
Measuring direction																											
Hold																											
Min / Max / Delta																											
Tolerances																											
Absolute function (ABS)																											
Absolute system S.I.S*																											
Auto off																											
Analog display																											
Setting by PC																											
Programmable menus																											
Powered by connector																											
Multiplication factor																											
Ref I / II																											



# Digital indicators

# S\_Dial

## SUMMARY OF ALL TYPES

		S_Dial WORK																ANALOG NANO BT		S_Dial PRO								
		ADVANCED								BLUETOOTH® Smart				NANO & NANO BT				BASIC										
		805.5201	805.5301	805.5401	805.5501	805.5601	805.5621	805.5641	805.5661	805.5671	805.5681	805.6301	805.6501	805.6621	805.6661	805.5306	805.5506	805.6306	805.6506	805.6307	805.6507	805.8601	805.8701	805.8602	805.8702	805.8501	805.8502	805.8661
RANGE																												
	0.5 mm																											
	0.8 mm																											
	5 mm																											
	12.5 mm	•	•									•				•		•		•								
	25 mm			•	•								•				•		•		•					•	•	
	50 mm					•	•							•								•	•	•	•			
	100 mm							•	•						•												•	
	150 mm									•	•																•	
RESOLUTION																												
	0.01 mm	•		•		•		•		•																		
	0.001 mm		•		•		•		•		•	•	•	•														
	0.0001 mm															•	•	•	•	•	•	•	•	•	•	•	•	
MECHANIC																												
	Diameter 8 mm h6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	
	Diameter 25 mm g7																						•		•			
	Spring	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	
	M1.4 contact point																											
	M2.5 contact point	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Rubber boot																											
	IP51 (IEC 60529)																						•	•	•	•	•	
	IP54 (IEC 60529)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DIAL																												
	Diameter 44 mm																											
	Diameter 60 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Rotating	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
FUNCTIONS																												
	mm/inch	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Preset	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Preset on Min/Max																			•	•							
	Measuring direction	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Min / Max / Delta	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Tolerances	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Absolute system S.I.S*	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Auto off	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Analog display																			•	•							
	BLUETOOTH® Smart											•	•	•	•			•	•	•	•							
	Setting by PC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Programmable menus	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Powered by connector	•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	
	Multiplication factor	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	
	Ref I / II	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•	

B

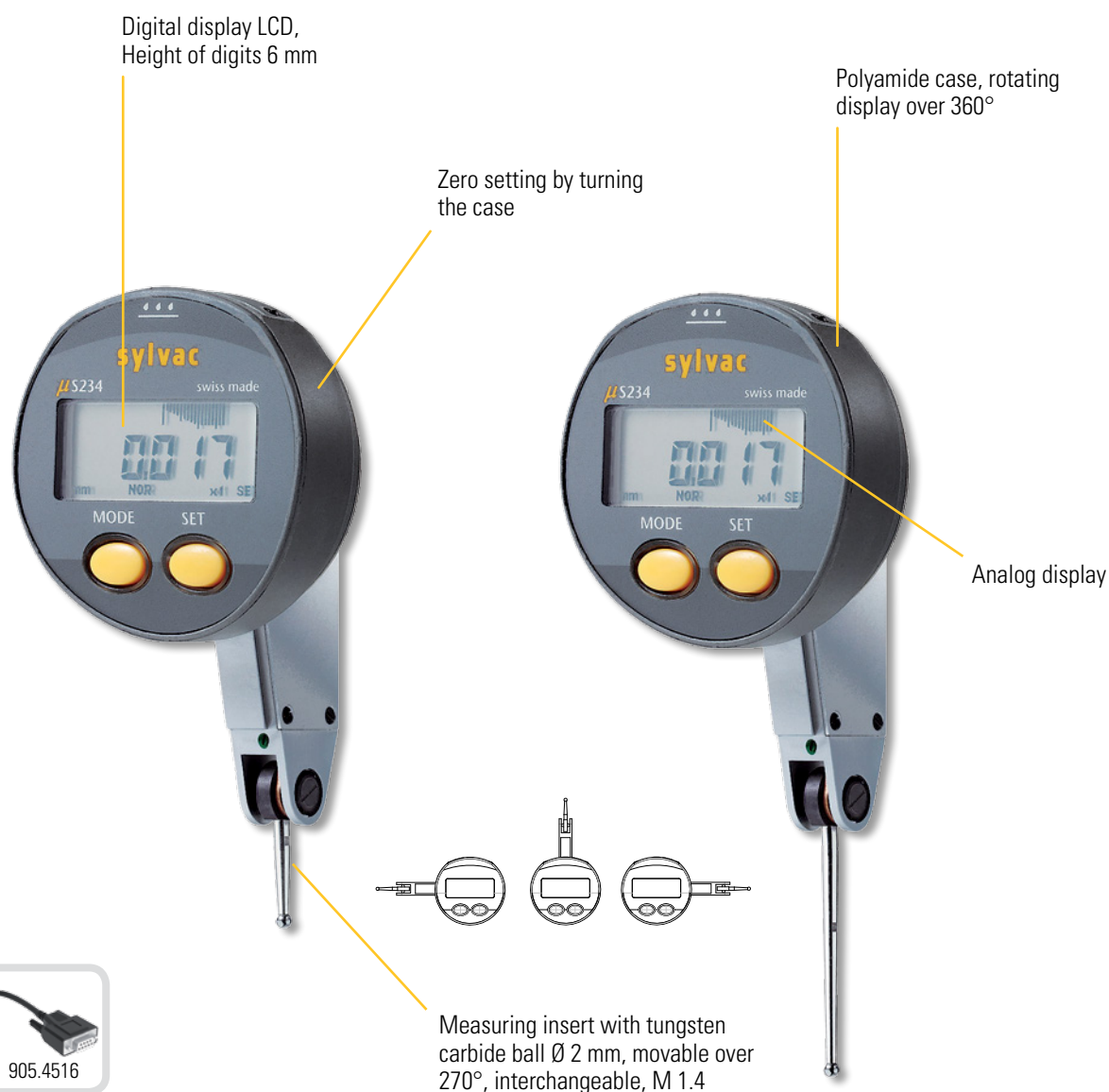


# Digital test indicators

## S\_Dial S234

### DESCRIPTION

- Digital and analog display
- Water and coolant resistant IP65
- Data output RS 232 combined with external power
- Automatic switch OFF
- Stem Ø 8 mm and dovetail back
- Rotating display over 360°

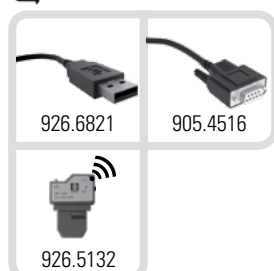


**SWISS**  
MADE

WATER RESISTANT

**IP65**

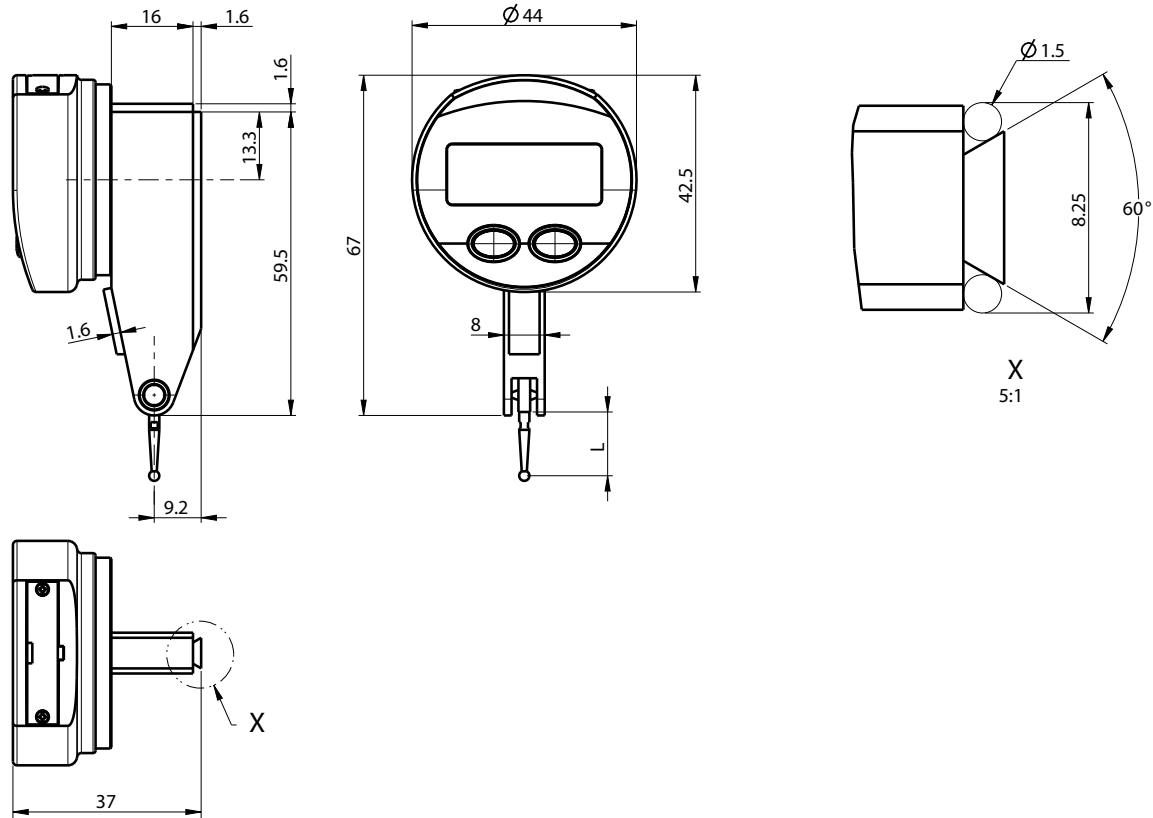
**POWER**



# Digital test indicators

## S\_Dial S234

### DIMENSIONAL DRAWING



### TECHNICAL SPECIFICATIONS

		905.4321	905.4322
Measuring range	mm	0.8	0.5
Probe length	mm	12.5	36.5
Max Error fe	μm	10	10
Hysteresis fu	μm	3 <sup>1)</sup>	4 <sup>1)</sup>
Resolution	mm	0.001	0.001
Repeatability	μm	3	3
Measuring force	N	0.13 ± 15%	0.07 ± 15%
Weight		75	75
Protection rating according to IEC 60529		IP65	
S_Connect : Power		USB / RS232 / Wireless <sup>2)</sup>	
Zero setting		●	
min / max / delta display		●	
Analog scale range ratio		●	
Selection of resolution		●	
Preset		max 99.999	

<sup>1)</sup> ± 1 digit

<sup>2)</sup> see cables chapter

# Digital test indicators

## S\_Dial S234

### DISPLAY

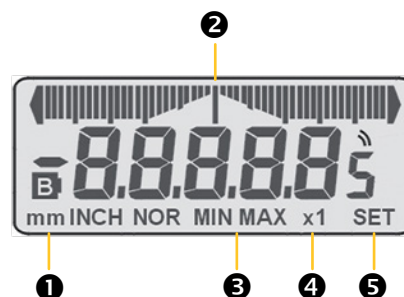
➊ Direct mm/inch conversion

➋ Analog display

➌ Min/max/delta mode

➍ Analogic resolution display

➎ Zero setting



### BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Stem Ø 8 mm

### APPLICATIONS



Run-out measurement



Checking the alignment on milling machine.



Perpendicularity measurement with a S234 mounted on a Hi\_Gage ONE



# Mini digital indicators

## S\_Dial S233

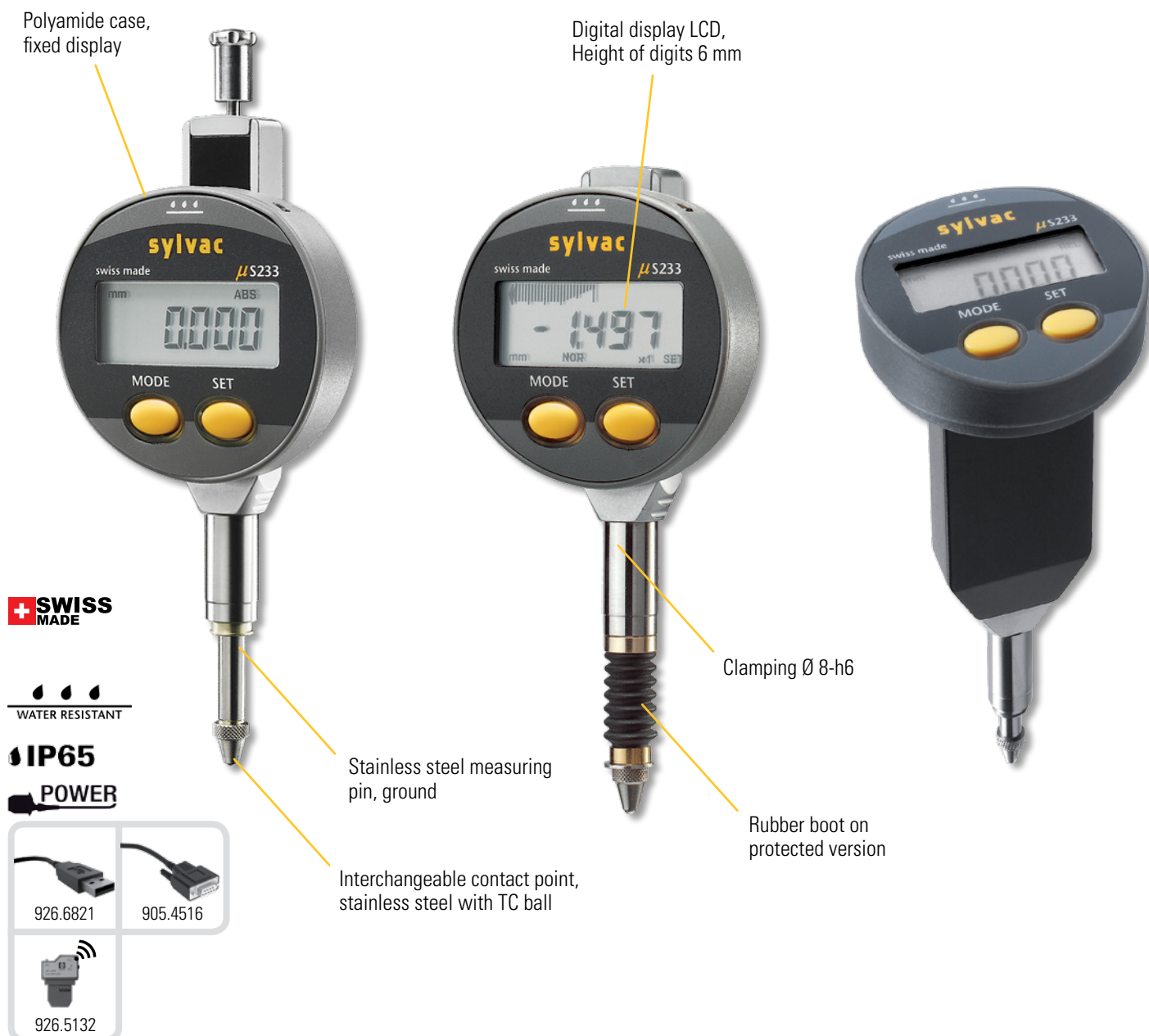
### DESCRIPTION

- Compact, small diameter (Ø44 mm)
- Water and coolant resistant, protection rating IP65 according to IEC 60529
- Data output RS 232 combined with external power supply.
- Interchangeable contact point M2.5
- Clamping stem Ø 8-h6 of hardened and ground stainless steel. Dovetail back
- Automatic power shut down

**Standard**

**Analog**

**Vertical**

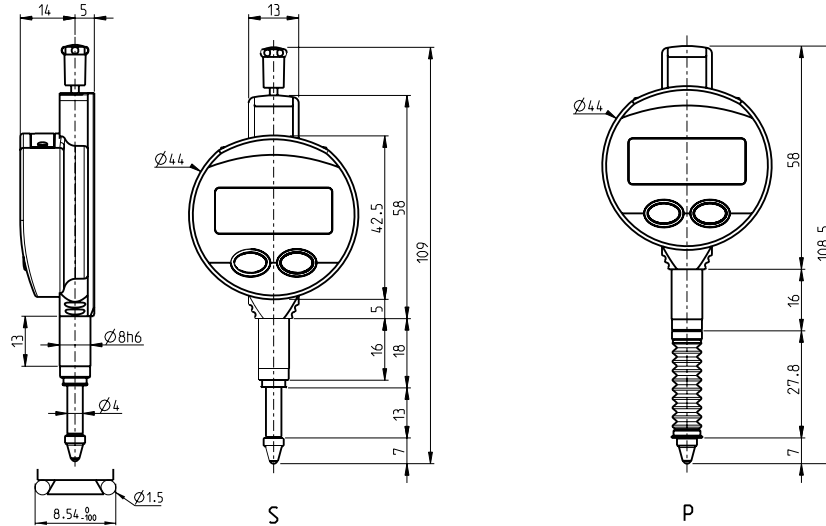


# Mini digital indicators

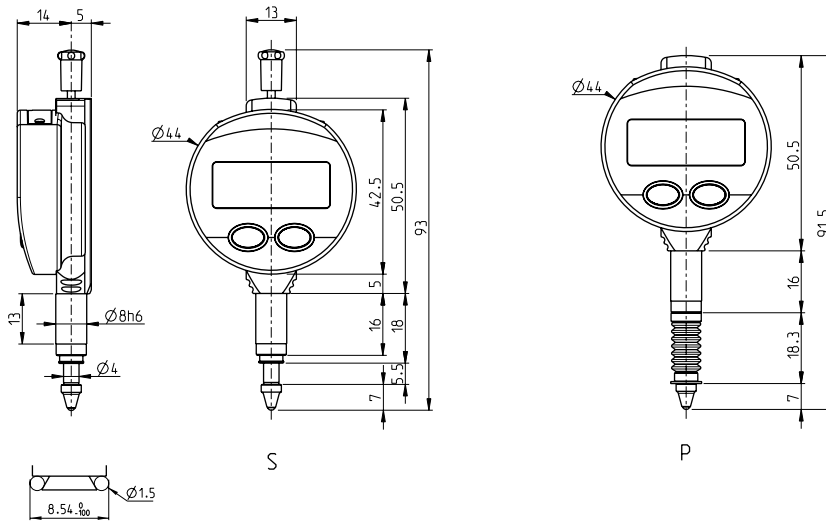
## S\_Dial S233

### DIMENSIONAL DRAWINGS

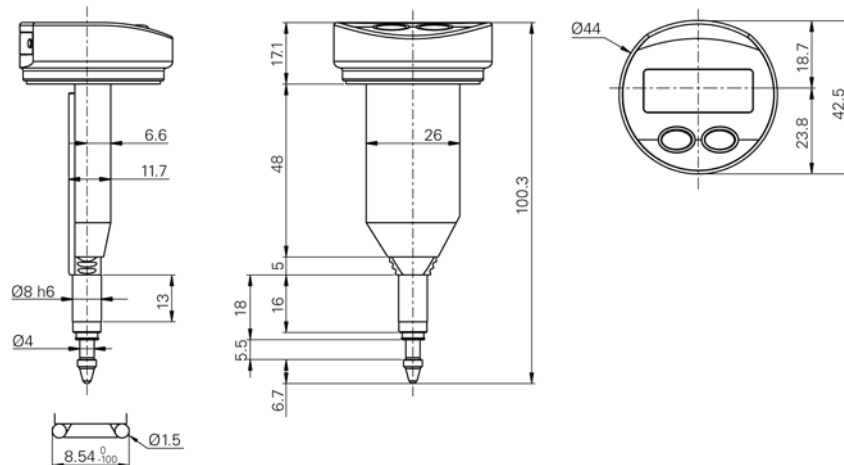
#### Standard



#### Analog



#### Vertical



S = standard

P = protected

# Mini digital indicators

# S\_Dial S233

## TECHNICAL SPECIFICATIONS

		905.4140	905.4540	905.4511	905.4515
Measuring range	mm	5	5	5	5
Display 90°		●	●	---	---
Analog scale		---	---	●	●
Resolution	mm	0.01	0.001	0.001	0.001
Execution <sup>3)</sup>		S	S	S	P
Max. Error fe	μm	10 <sup>1)</sup>	5	4	4
Repeatability	μm	2	2	2	2
Measuring force	N	0.50 - 0.65 <sup>2)</sup>	0.50 - 0.65 <sup>2)</sup>	0.50 - 0.65 <sup>2)</sup>	0.60 - 1.20 <sup>2)</sup>
Zero setting		●	●	●	●
REL and ABS measurement		●	●	---	---
Resolution selection		---	●	●	●
PRESET = (max. 130 mm)		●	●	●	●
Min / max / delta display		---	---	●	●
Selection of measuring direction		●	●	---	---
S_Connect : Power		USB / RS232 / Wireless <sup>4)</sup>			
IP rating		IP65			

		905.4121	905.4125	905.4521	905.4525	905.4527
Measuring range	mm	12.5	12.5	12.5	12.5	12.5
Analog scale		---	---	---	---	---
Resolution	mm	0.01	0.01	0.001	0.001	0.001
Execution <sup>3)</sup>		S	P	S	P	S
Max. Error fe	μm	10 <sup>1)</sup>	10 <sup>1)</sup>	5	5	5
Repeatability	μm	2	2	2	2	2
Measuring force	N	0.5 - 0.90 N	0.6 - 1.3 N	0.5 - 0.90 N	0.6 - 1.3 N	0.5 - 0.90 N
Zero setting		●				
REL and ABS measurement		●				
Resolution selection		---	---	●	●	●
PRESET = (max. 130 mm)		●				
Min / max / delta display		---				
Selection of measuring direction		●				
Multiplication factor		---				●
S_Connect : Power		USB / RS232 / Wireless <sup>4)</sup>				
IP rating		IP65				

<sup>1)</sup> ± 1 digit

<sup>2)</sup> Values ± 20%, indicator in vertical position, outgoing measuring spindle

<sup>3)</sup> S = Standard P = Protected

<sup>4)</sup> see cables chapter

# Mini digital indicators

## S\_Dial S233

### BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate for instruments with resolution 0.001 mm

B

### MEASURING FORCE FOR RANGE 12.5 mm

	S	P
Standard	0.5 - 0.90 N	0.6 - 1.3 N
Low <sup>1)</sup>	0.35 - 0.50 N	---
High <sup>1)</sup>	1.80 - 2.3 N	---

Tolerance  $\pm 20\%$ , indicator in vertical position, spindle in outgoing measurement.

<sup>1)</sup> on request

### APPLICATIONS



Checking of an internal  $\varnothing$  with a mechanical device



Measurent of the vertical displacement of an element



Measurement of internal chamfer



# Digital indicators

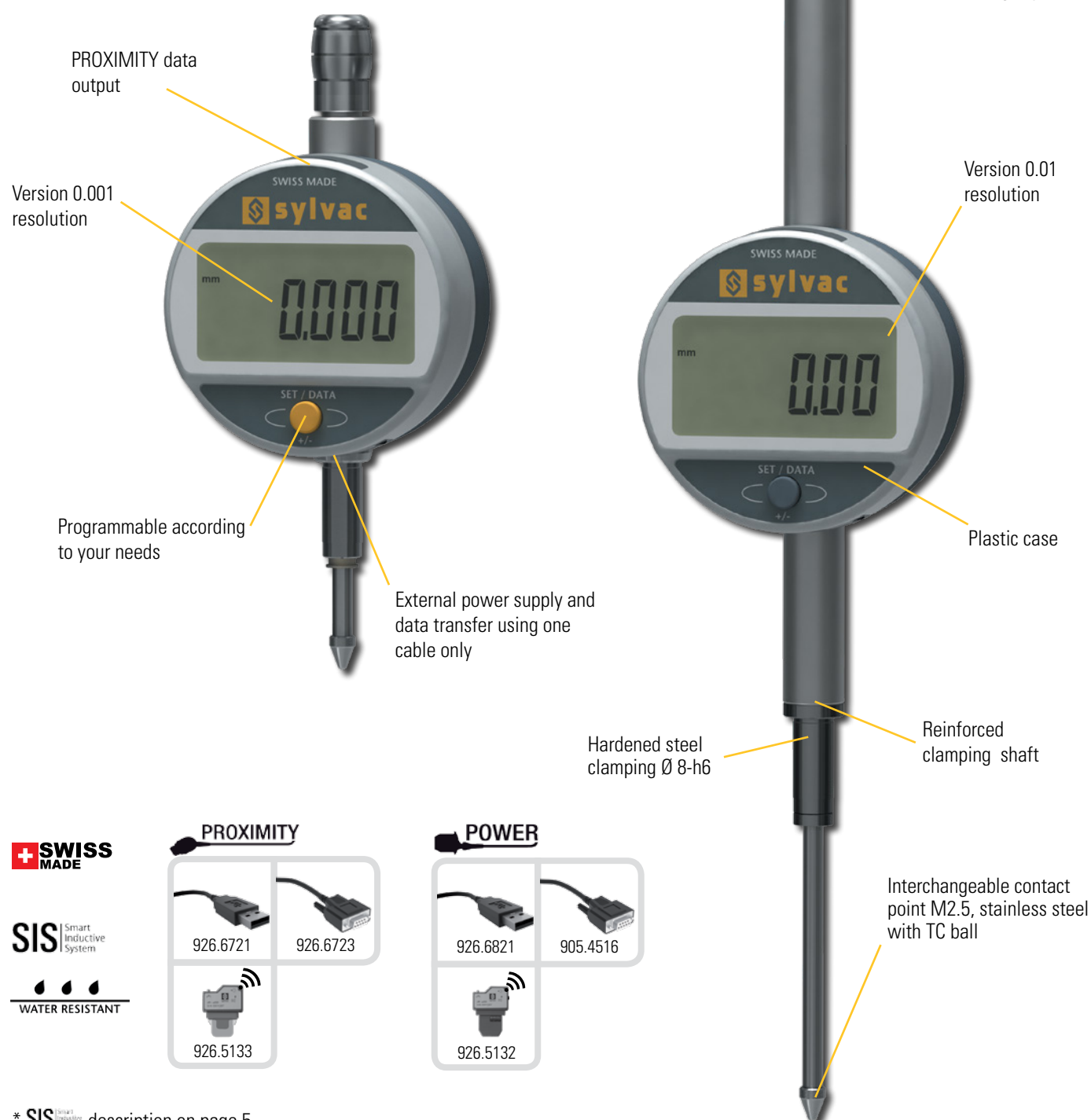
# S\_Dial WORK

## DESCRIPTION

## BASIC

- Robust construction
- Water and coolant resistant
- **Standard functions (mm/inch, preset, direction of measurement)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***

B



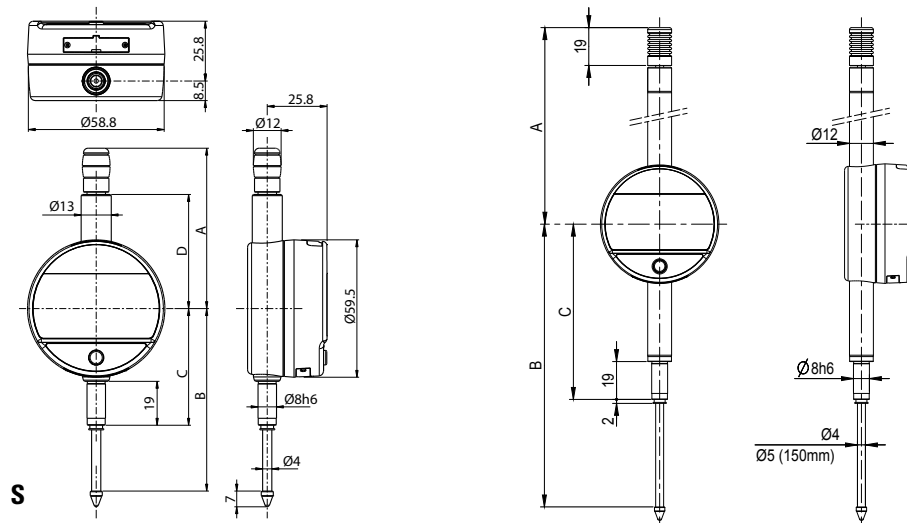
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## BASIC



## TECHNICAL SPECIFICATIONS

		805.1201	805.1301	805.1401	805.1501	805.1601	805.1621
Measuring range	mm	12.5	12.5	25	25	50	50
Resolution	mm	0.01	0.001	0.01	0.001	0.01	0.001
Max. Error fe	μm	10 <sup>1)</sup>	<b>4</b>	10 <sup>1)</sup>	<b>5</b>	20 <sup>1)</sup>	<b>7</b>
Repeatability	μm	2					
IP rating		IP51					
A	mm	56.7		69.9		121.3	
B	mm	66.1		78.5		142	
C	mm	50.5		50.5		88	
D	mm	36.6		49.4		-	
S_Connect : Proximity / Power		USB / RS232 / Wireless					
Programmable by PC		●					
Standard functions (customized by PC)		mm/inch, max 999.999), direction of measurement					

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

		S 12.5	S 25	S 50
• Instrument according to technical specifications				
• Lithium battery CR2032 included				
• Instruction manual				
• Calibration certificate for instruments 0.001 mm				
Standard	N	0.65 - 0.90	0.65 - 1.15	1.4 - 2.9
Low <sup>3)</sup>	N	0.4 - 0.55	0.45 - 0.9	---
High <sup>3)</sup>	N	1.0 - 1.6	0.9 - 1.8	---

Tolerance ± 20%, spindle in outgoing measurement position.

<sup>3)</sup> on request

B

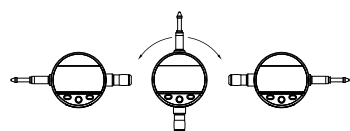
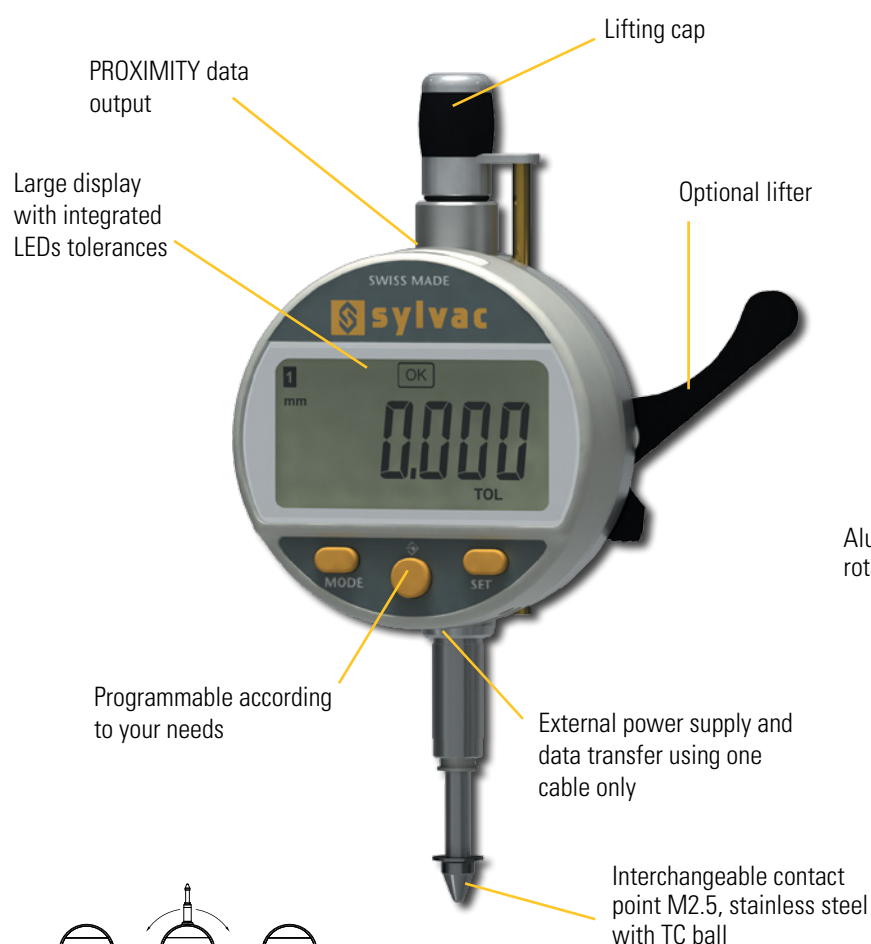
# Digital indicators

## S\_Dial WORK

### DESCRIPTION

### ADVANCED

- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***
- **Maximum error of 3 µm**

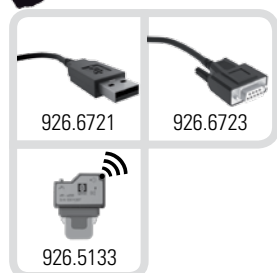


**SWISS MADE**

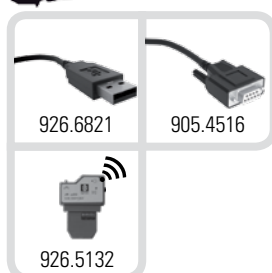
**SIS** Smart Inductive System

**WATER RESISTANT**

#### PROXIMITY



#### POWER



Aluminium case rotating display over 270°

Reinforced clamping shaft

Hardened steel clamping Ø 8-h6

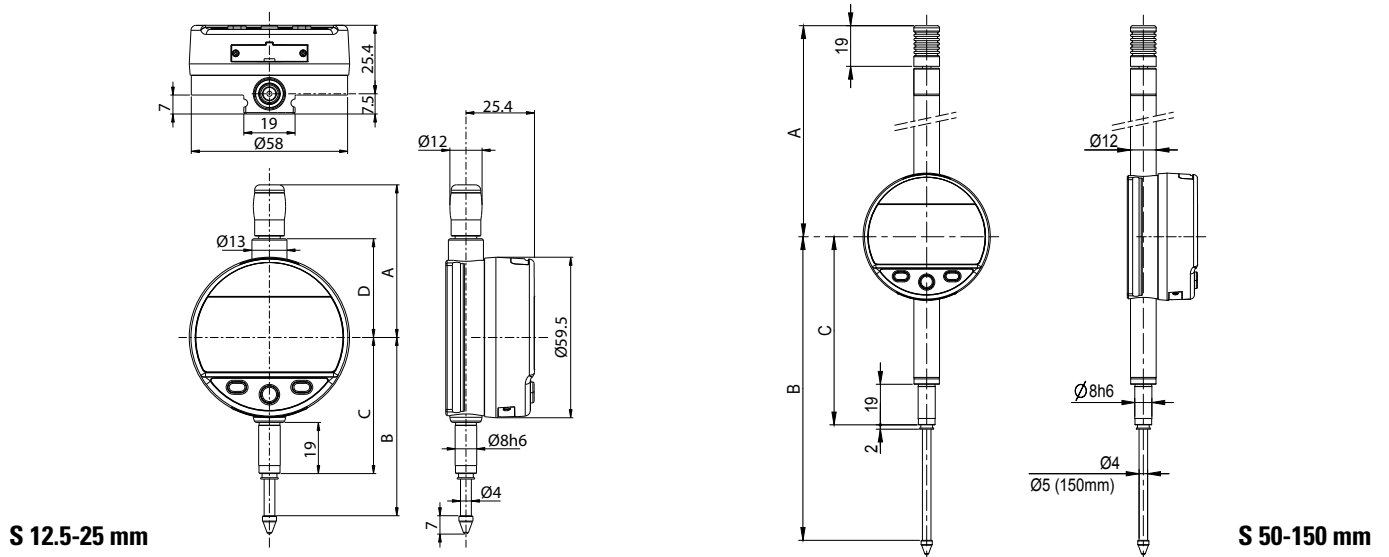
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ADVANCED



## TECHNICAL SPECIFICATIONS

		805.5201	805.5301	805.5401	805.5501	805.5601	805.5621	805.5641	805.5661	805.5671	805.5681
Measuring range	mm	12.5	12.5	25	25	50	50	100	100	150	150
Resolution	mm	0.01	0.001	0.01	0.001	0.01	0.001	0.01	0.001	0.01	0.001
Max. Error fe	µm	10 <sup>1)</sup>	<b>3</b>	10 <sup>1)</sup>	<b>4</b>	20 <sup>1)</sup>	<b>5</b>	20 <sup>1)</sup>	<b>6</b>	20 <sup>1)</sup>	<b>10</b>
Repeatability	µm	2									
IP rating		IP54									
A	mm	56.7		69.4		121		172		224	
B	mm	66.1		78.5		142		244		349	
C	mm	50.5		50.5		88		139		193	
D	mm	36.6		49.4		-		-		-	
S_Connect : Proximity / Power		USB / RS232 / Wireless									
Programmable by PC		●									
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock									

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

			12.5	25	50	100	150
● Instrument according to technical specifications							
● Lithium battery CR2032 included							
● Instruction manual							
● Calibration certificate for instruments 0.001 mm							
Standard	N		0.65 - 0.9	0.65 - 1.15	1.4 - 2.9	1.8 - 3.8	2.6 - 5.7
Low <sup>2)</sup>	N		0.4 - 0.55	0.45 - 0.9	---	---	---
High <sup>2)</sup>	N		1.0 - 1.6	0.9 - 1.8	---	---	---

Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>2)</sup> on request

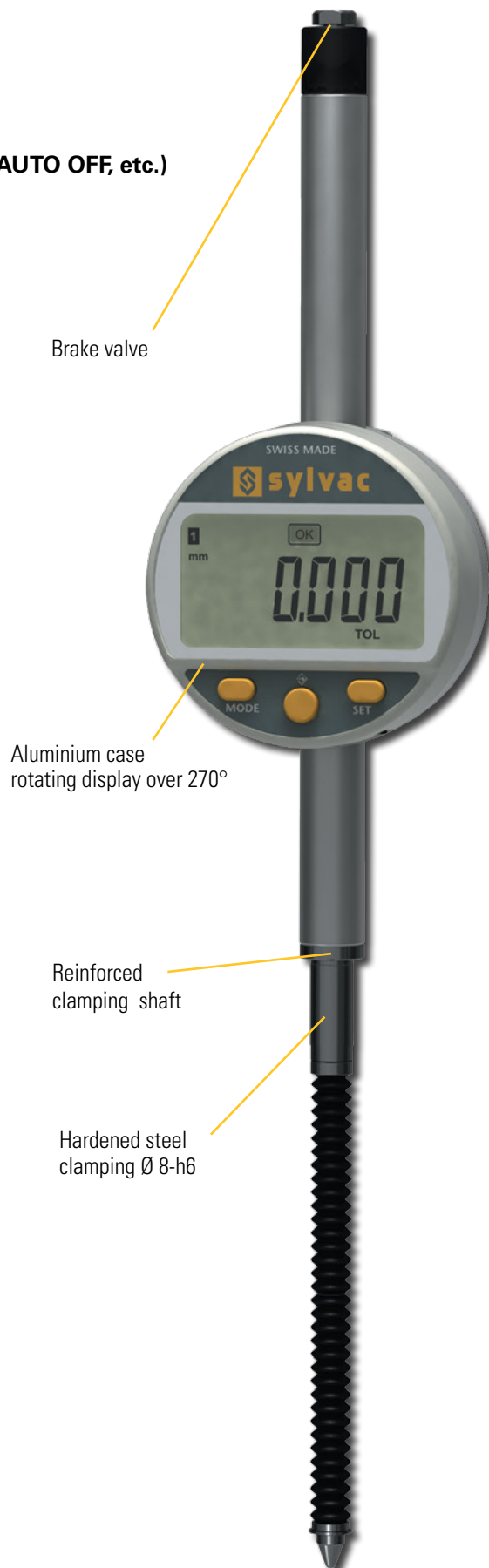
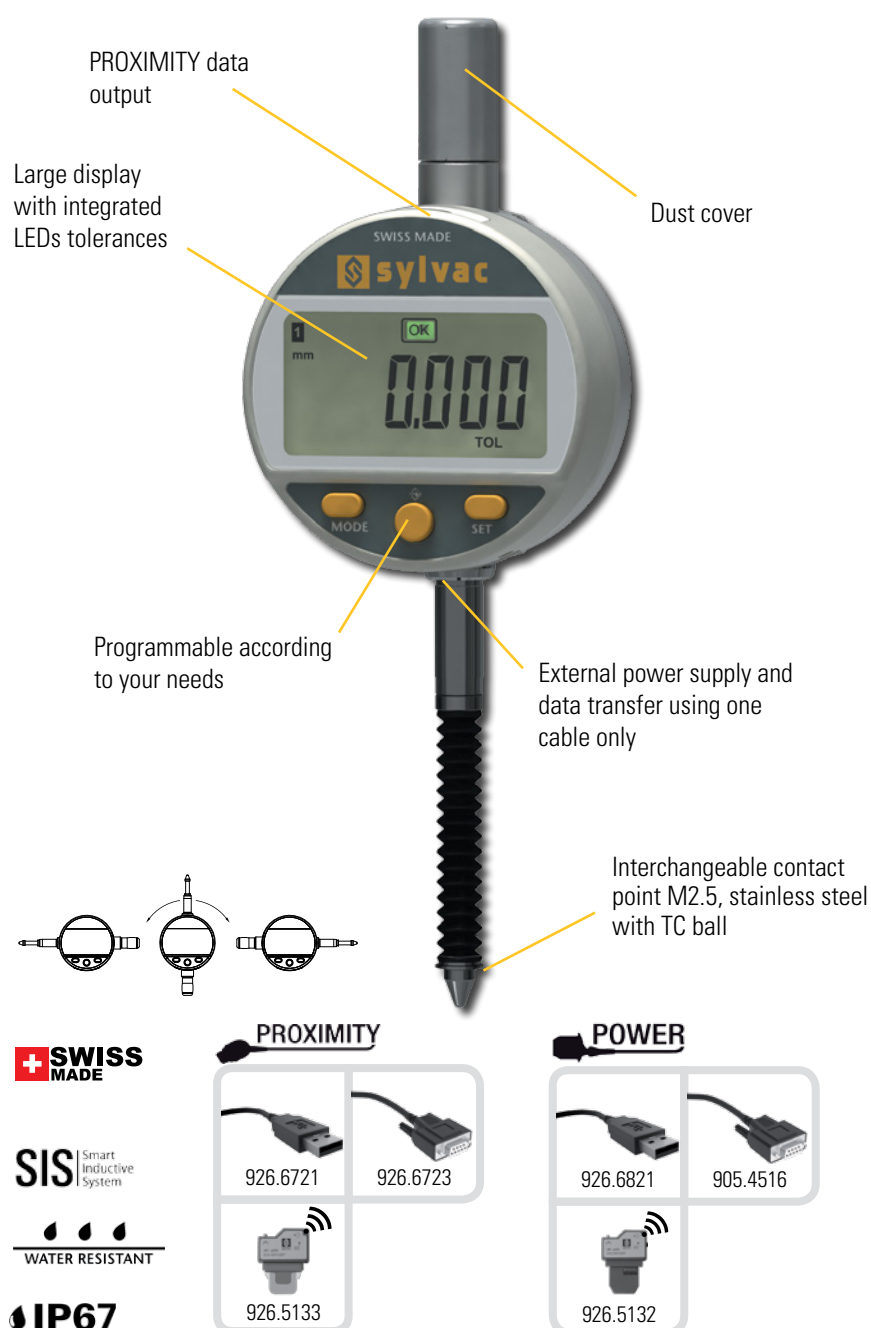
# Digital indicators

## S\_Dial WORK

### DESCRIPTION

ADVANCED IP67

- Robust construction
- Water and coolant resistant
- Protection rating IP67 according to IEC 60529, **even connected**
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S**
- **Maximum error of 3 µm**



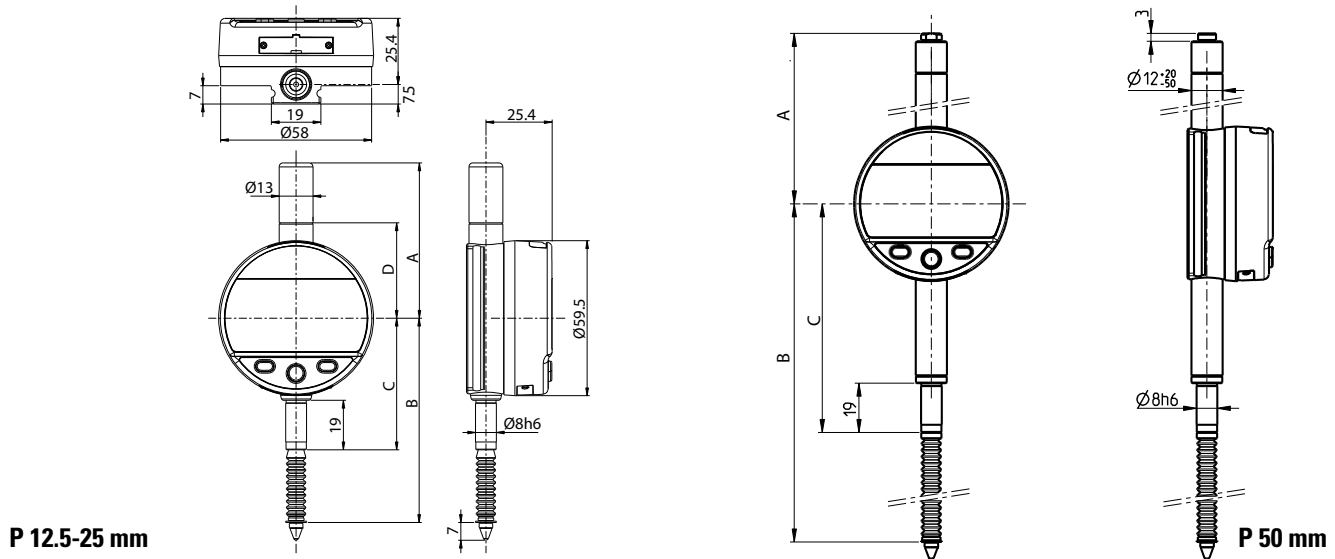
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ADVANCED IP67



## TECHNICAL SPECIFICATIONS

		805.5305	805.5505	805.5625
Measuring range	mm	12.5	25	50
Resolution	mm	0.001	0.001	0.001
Max. Error fe	µm	3	4	5
Repeatability	µm	2		
IP rating		IP67		
A	mm	59.6	85.4	104.4
B	mm	78.4	99.7	175.3
C	mm	50.5	50.5	88
D	mm	36.6	49.4	-
S_Connect : Proximity / Power		USB / RS232 / Wireless		
Programmable by PC		●		
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock		

## BASIC INSTRUMENT

## MEASURING FORCE

		P 12.5	P 25	P 50
● Instrument according to technical specifications	Standard	N	0.7 – 1.4	0.65 – 1.8
● Lithium battery CR2032 included	Low <sup>2)</sup>	N	---	---
● Instruction manual	High <sup>2)</sup>	N	---	---
● Calibration certificate for instruments 0.001 mm				

Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>2)</sup> on request

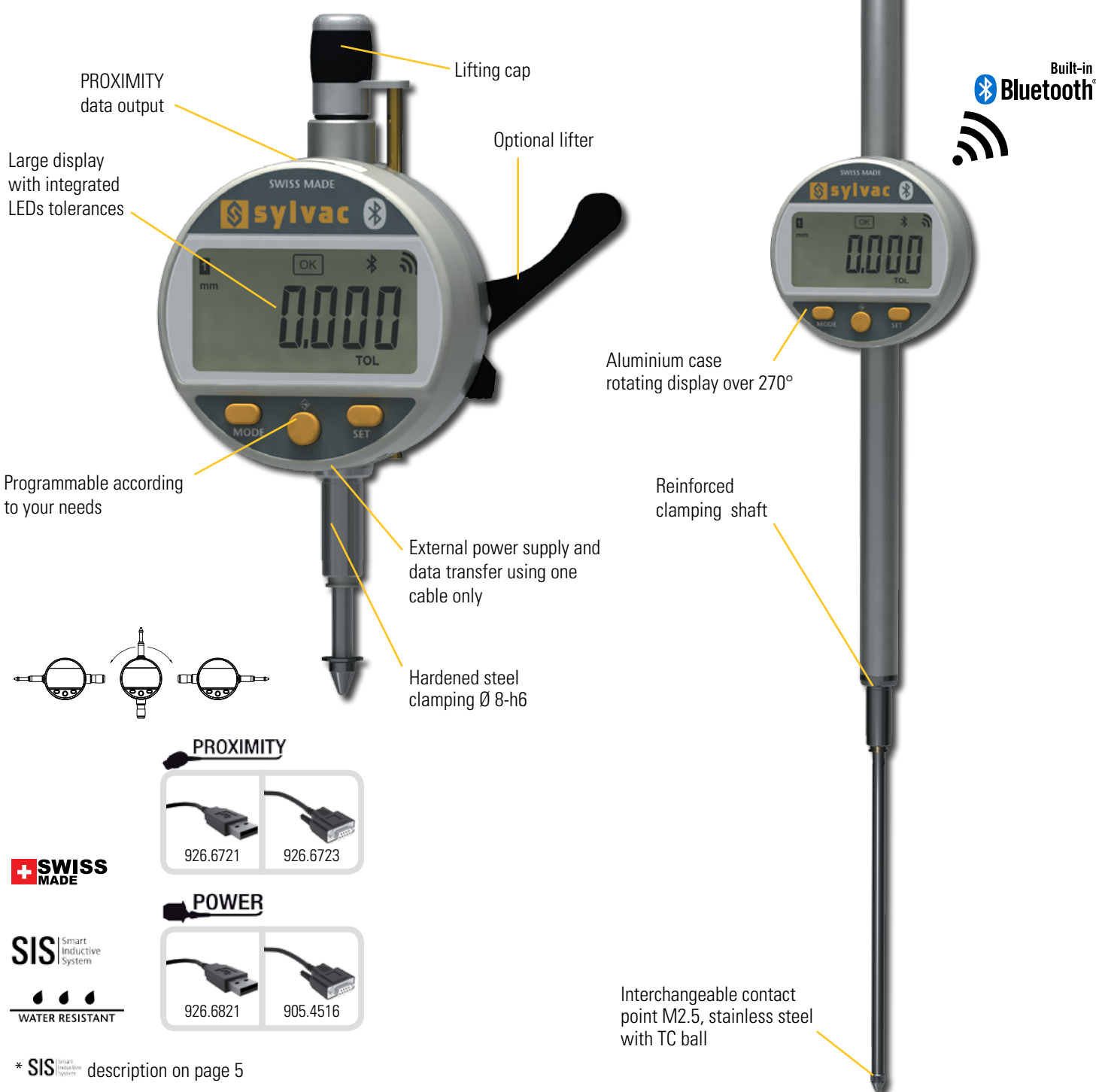
# Digital indicators

## S\_Dial WORK

### DESCRIPTION

### BLUETOOTH® SMART

- Integrated **Bluetooth®** technology
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***
- **Maximum error of 3 µm**

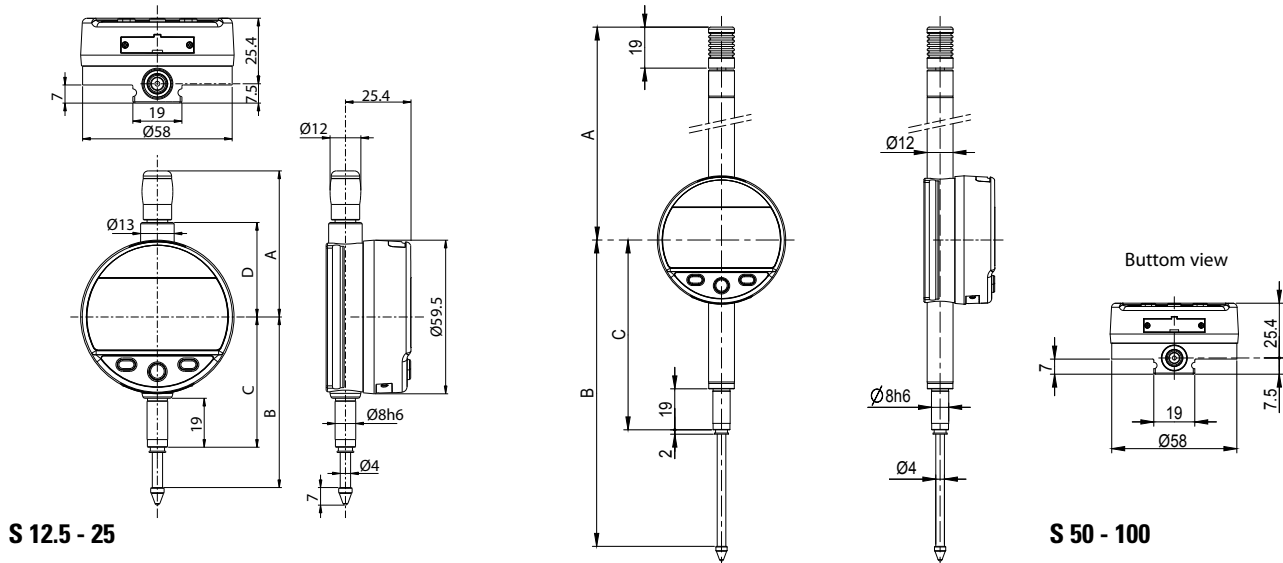


# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## BLUETOOTH® SMART



## TECHNICAL SPECIFICATIONS

		805.6301	805.6501	805.6621	805.6661
Measuring range	mm	12.5	25	50	100
Resolution	mm	0.001	0.001	0.001	0.001
Max. Error fe	µm	3	4	5	6
Repeatability	µm	2			
IP rating		IP54			
A	mm	56.7	69.4	121	172
B	mm	66.1	78.5	142	244
C	mm	50.5	50.5	88	139
D	mm	36.6	49.4	-	-
S_Connect : Proximity / Power		USB / RS232 / Bluetooth® wireless technology*			
Programmable by PC		●			
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

<sup>1)</sup> ± 1 digit

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

## BASIC INSTRUMENT

## MEASURING FORCE

		12.5	25	50	100
● Instrument according to technical specifications					
● Lithium battery CR2032 included					
● Instruction manual					
● Calibration certificate for instruments 0.001 mm					
Standard	N	0.65 - 0.90	0.65 - 1.15	1.4 - 2.9	1.8 - 3.8
Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9	---	---
High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8	---	---

Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>2)</sup> on request

B



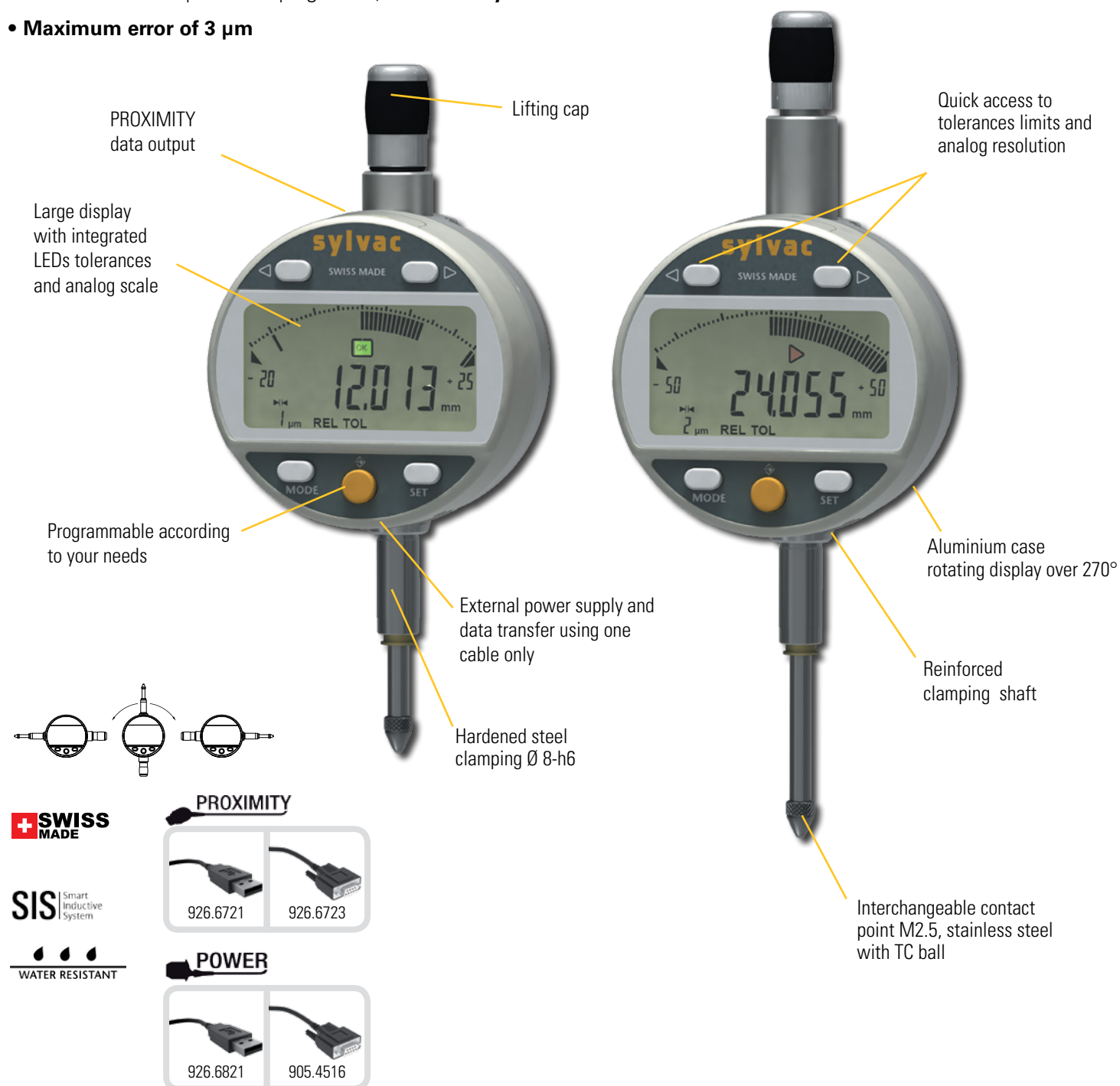
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## ANALOG

- **Adaptive analog display (up to 0.2  $\mu\text{m}$  per segment)**
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***
- **Maximum error of 3  $\mu\text{m}$**



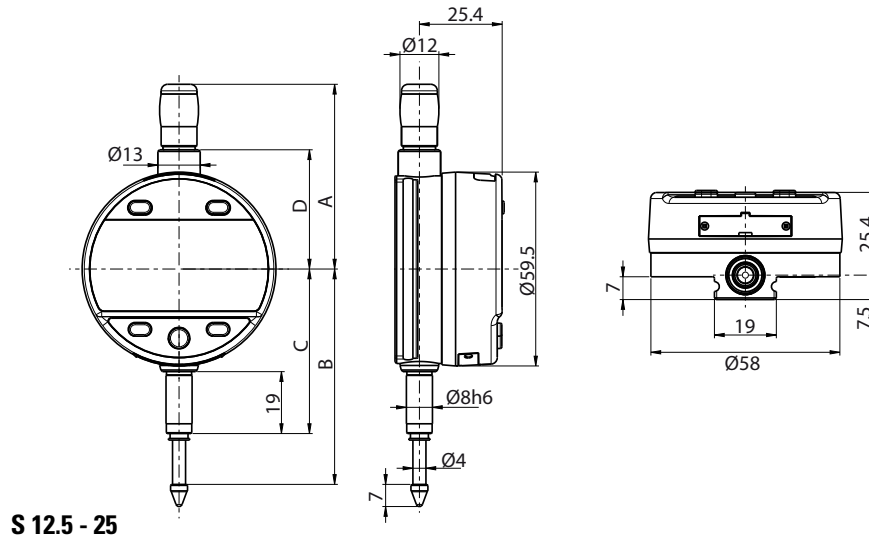
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ANALOG



## TECHNICAL SPECIFICATIONS

		805.5307	805.5507
Measuring range	mm	12.5	25
Resolution	mm	0.001	
Max. Error fe	µm	3	4
Repeatability	µm	2	
IP rating		IP54	
A	mm	56.7	69.4
B	mm	66.1	78.5
C	mm	50.5	50.5
D	mm	36.6	49.4
S_Connect : Proximity / Power		USB / RS232	
Programmable by PC		●	
Standard functions (customized by PC)		mm/inch, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock	

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

• Instrument according to technical specifications
• Lithium battery CR2032 included
• Instruction manual
• Calibration certificate

		S 12.5	S 25
Standard	N	0.65 - 0.90	0.65 - 1.15
Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9
High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.

<sup>2)</sup> on request

B

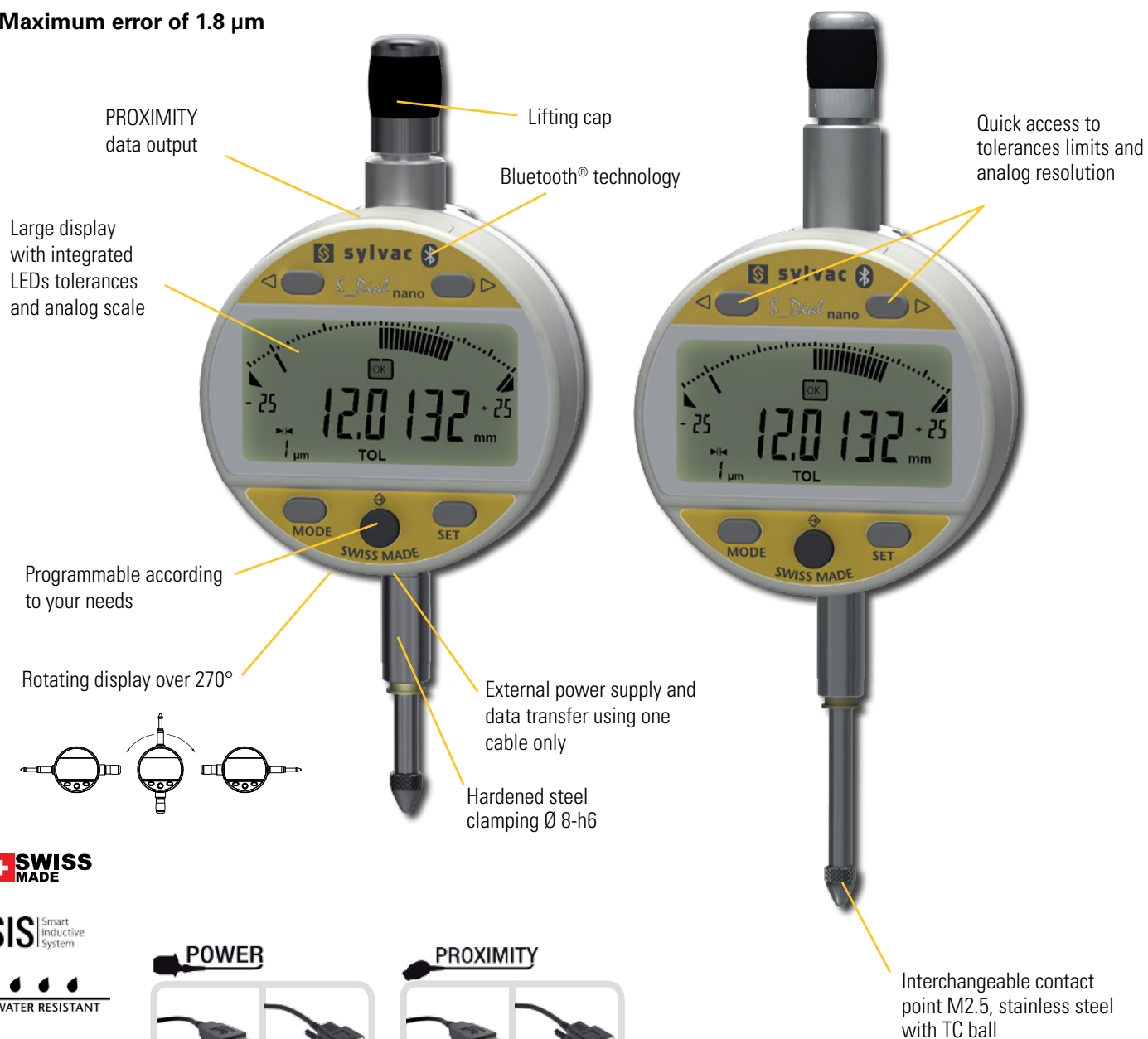
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## ANALOG NANO BLUETOOTH®

- **Integrated Bluetooth® technology**
- Adaptive analog display (up to 0.1  $\mu\text{m}$  per segment)
- **0,1  $\mu\text{m}$  resolution**
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***
- **Maximum error of 1.8  $\mu\text{m}$**

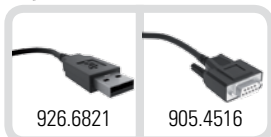


**SWISS MADE**

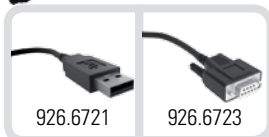
**SIS** Smart Inductive System

WATER RESISTANT

**POWER**



**PROXIMITY**



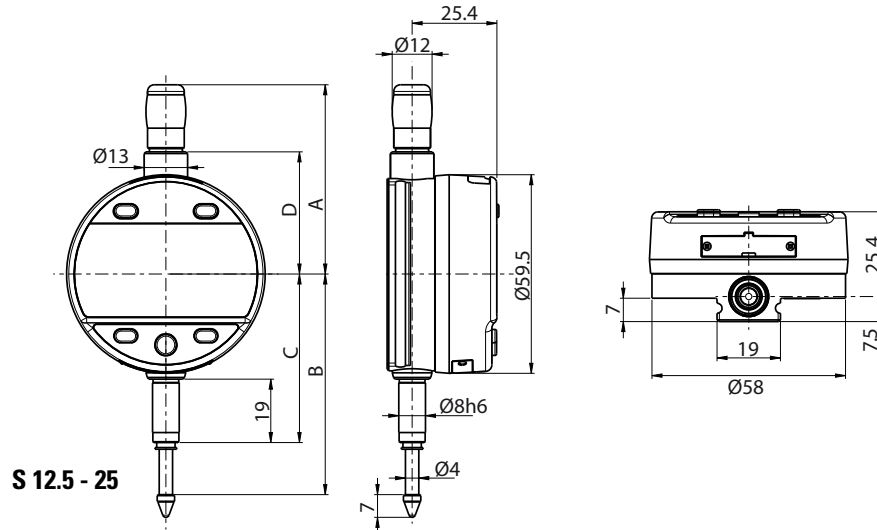
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ANALOG NANO BLUETOOTH®



## TECHNICAL SPECIFICATIONS

		805.6307	805.6507
Measuring range	mm	12.5	25
Resolution	mm	0.0001	
Max. Error fe	µm	<b>1.8</b>	<b>2.2</b>
Repeatability	µm	0.5	
IP rating		IP54	
A	mm	56.7	69.4
B	mm	66.1	78.5
C	mm	50.5	50.5
D	mm	36.6	49.4
S_Connect : Proximity / Power		USB / RS232 / Bluetooth® wireless technology*	
Programmable by PC		●	
Standard functions (customized by PC)		mm/inch, preset (max 99.9999 or 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock	

**\* Up to 8 instruments connected per dongle #981.7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

## BASIC INSTRUMENT

## MEASURING FORCE

● Instrument according to technical specifications
● Lithium battery CR2032 included
● Instruction manual
● Calibration certificate

		S 12.5	S 25
Standard	N	0.65 - 0.90	0.65 - 1.15
Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9
High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.

<sup>2)</sup> on request

B

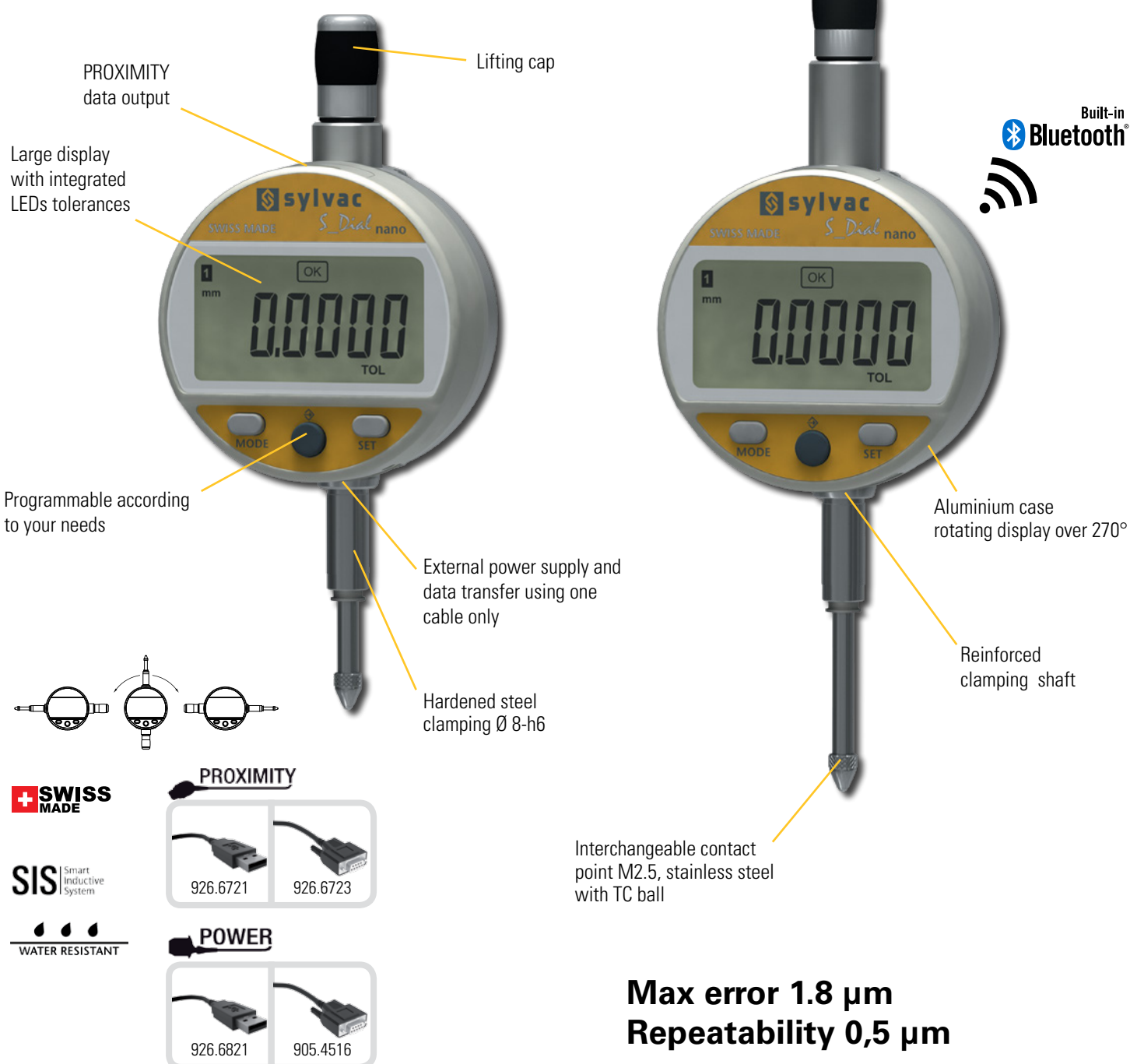
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## NANO & NANO BLUETOOTH®

- **0,1 µm resolution**
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)**
- Automatic wake-up and sleeping mode, **Absolute System S.I.S\***
- **Maximum error of 1.8 µm**



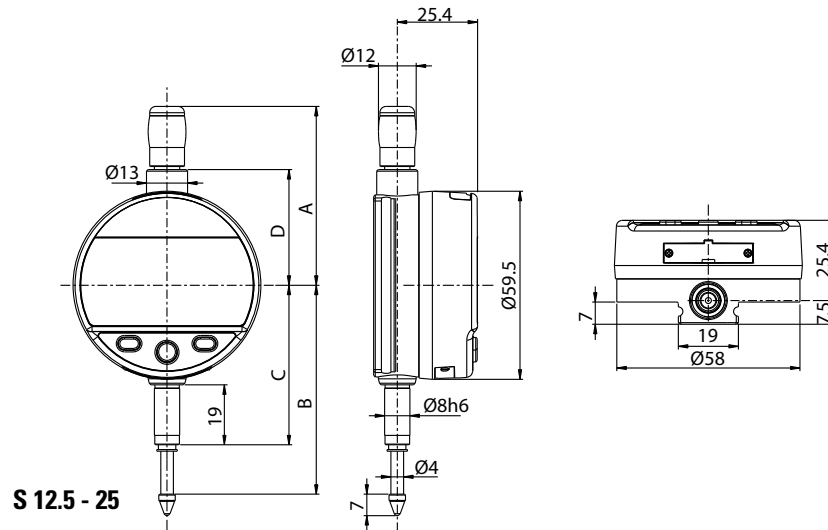
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## NANO & NANO BLUETOOTH®



## TECHNICAL SPECIFICATIONS

		805.5306	805.5506	805.6306	805.6506
Measuring range	mm	12.5	25	12.5	25
Resolution	mm	0.0001	0.0001	0.0001	0.0001
Max. Error fe	µm	1.8	2.2	1.8	2.2
Repeatability	µm	0.5			
IP rating		IP54			
A	mm	56.7	69.4	56.7	69.4
B	mm	66.1	78.5	66.1	78.5
C	mm	50.5	50.5	50.5	50.5
D	mm	36.6	49.4	36.6	49.4
S_Connect : Proximity / Power		USB / RS232		USB / RS232 / Bluetooth® wireless technology*	
Programmable by PC		●			
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, toleances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

**\* Up to 8 instruments connected per dongle #981.7100**  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

## BASIC INSTRUMENT

## MEASURING FORCE

• Instrument according to technical specifications			S 12.5	S 25
• Lithium battery CR2032 included	Standard	N	0.65 - 0.90	0.65 - 1.15
• Instruction manual	Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9
• Calibration certificate	High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>2)</sup> on request

B

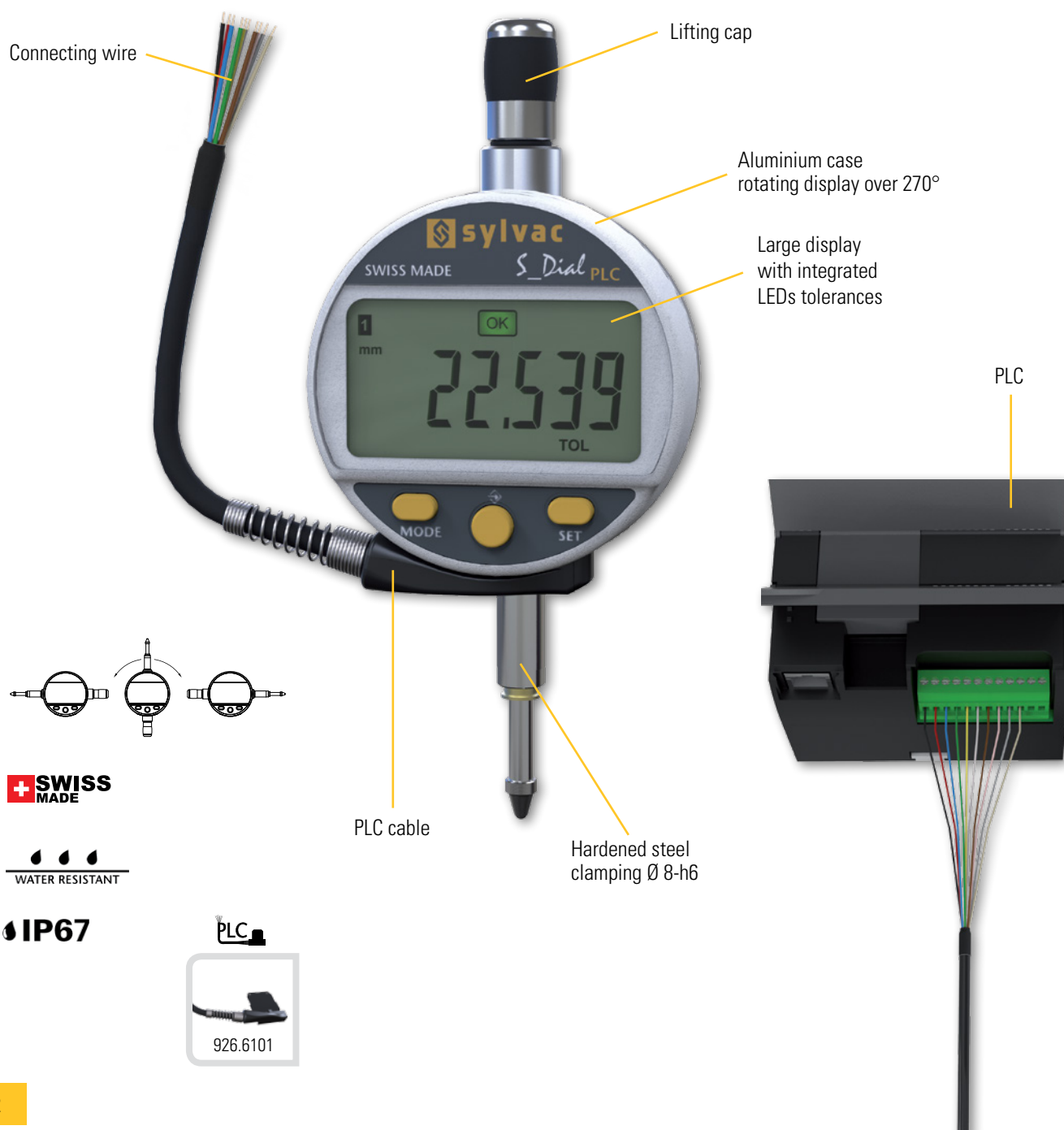
# Digital indicators

## S\_Dial WORK

### DESCRIPTION

PLC

- **Indicator with PLC connector**
- Resolution up to 0.001mm
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- **Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, etc.)**
- Maximum error up to 4 µm
- Compatible with the following protocols : MODBUS / ASCII / ORBIT

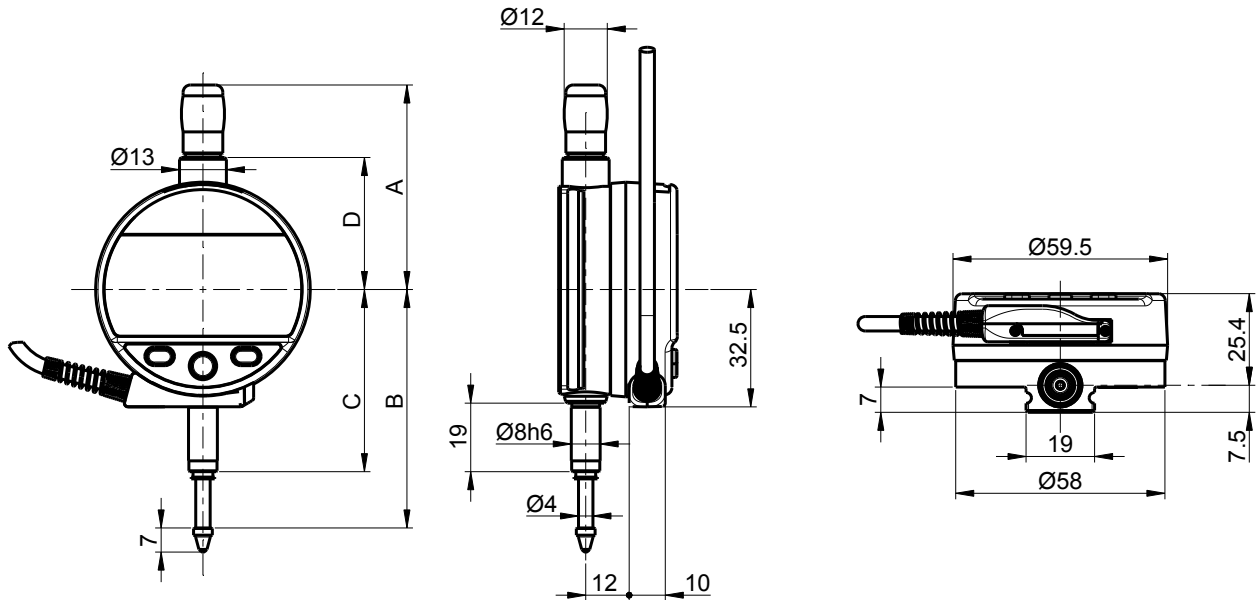


# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

PLC



## TECHNICALS SPECIFICATIONS

		805.7301	805.7201	805.7501	805.7401
Measuring range	mm	12.5	12.5	25	25
A	mm	56.7		69.4	
B	mm	66.1		78.5	
C	mm	50.5		50.5	
D	mm	36.6		49.4	
Resolution	mm	0.001	0.01	0.001	0.01
Max. Error fe	µm	4	10	5	10
Repeatability	µm	2			
S_Connect		PLC cable / RS232 (Proximity) and RS485 (cable) compatible			
Data bus		RS485 compatible / Charge 1/256 (Protocole MODBUS, ASCII or ORBIT)			
Measuring force	N	0.65 - 0.9		0.65 - 1.15	
IP rating		IP67	IP54	IP67	IP54
Clamping		Ø8h6, interchangeable anvil probe M2.5			
Standard functions (customizable by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, tolerances, resolution, measuring direction, multiplier, keylock			

## INSTRUMENT DE BASE

- Instrument according to technical specifications
- PLC cable included
- Manual
- Calibration certificate

B



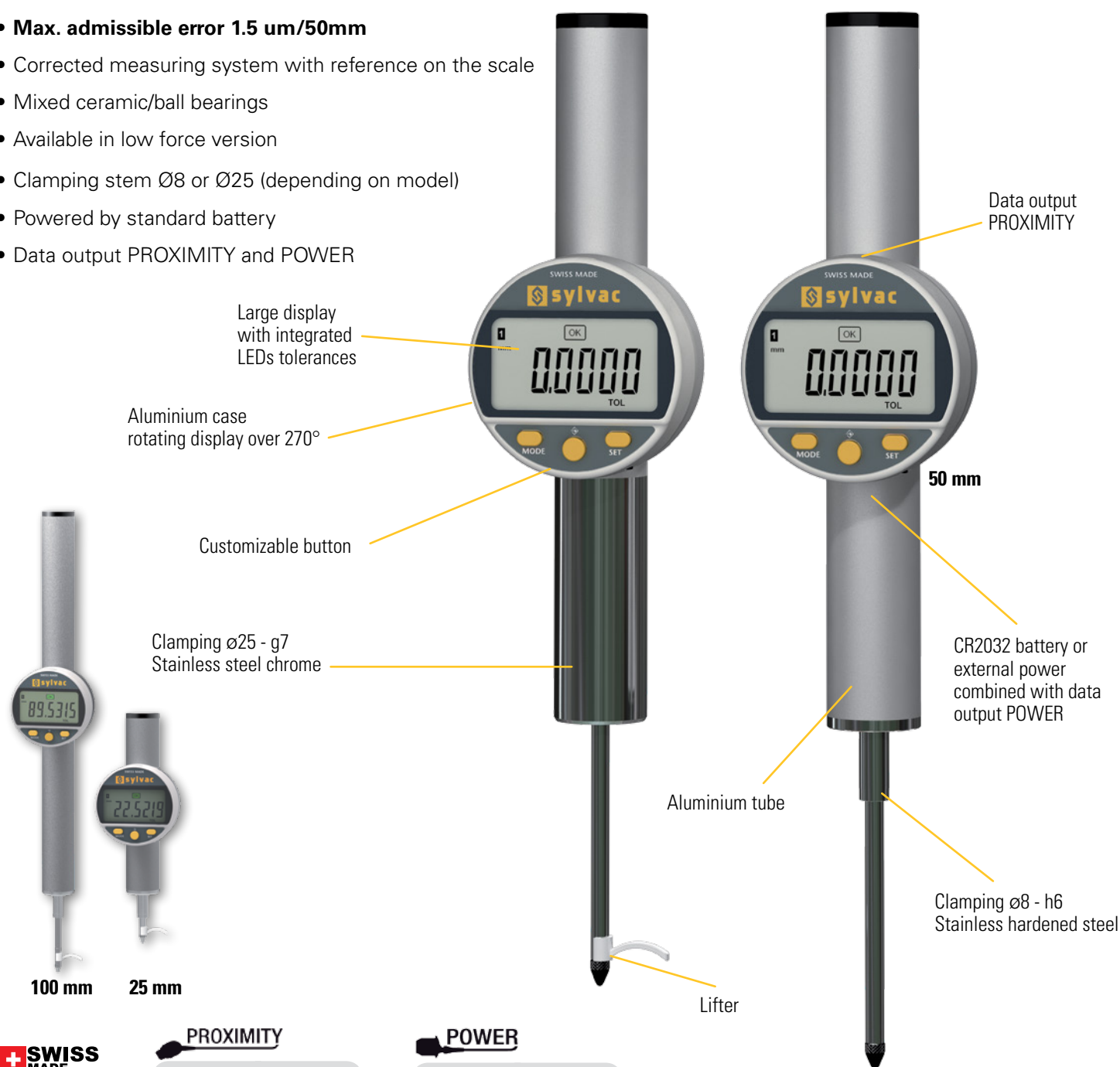
# Digital indicators

## S\_Dial PRO

### DESCRIPTION

### BASIC

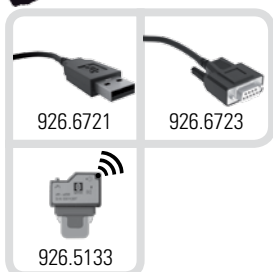
- High accuracy indicators allowing to measure on long range without calibration
- Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc)
- Resolution 0.1  $\mu$ m
- **Max. admissible error 1.5  $\mu$ m/50mm**
- Corrected measuring system with reference on the scale
- Mixed ceramic/ball bearings
- Available in low force version
- Clamping stem  $\varnothing 8$  or  $\varnothing 25$  (depending on model)
- Powered by standard battery
- Data output PROXIMITY and POWER



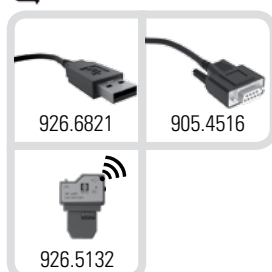
**SWISS MADE**

WATER RESISTANT

PROXIMITY



POWER

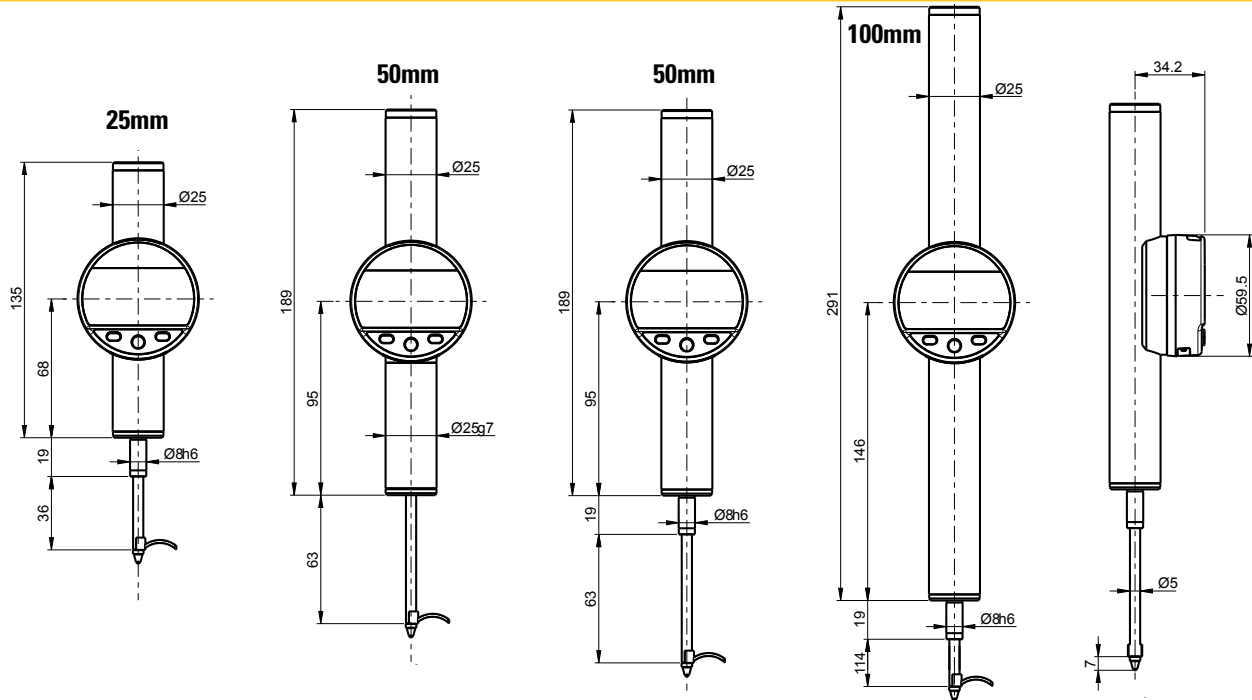


# Digital indicators

# S\_Dial PRO

## DIMENSIONAL DRAWINGS

## BASIC



## TECHNICALS SPECIFICATIONS

		805.8501	805.8502	805.8601	805.8701	805.8602	805.8702	805.8661
Measuring range	mm	25		50				100
Resolution	mm	0.0001						
Max. Error fe	µm	1.3		1.5				2.2
Repeatability	µm	0.2						
S_Connect : Proximity /Power		USB / RS232						
Programmable by PC		●						
Clamping		ø8 h6				ø25 g7		ø8 h6
Spring		●	1)	●	1)	●	1)	●
Measuring force	N	0.75 - 1.00 <sup>2)</sup>	0.30 <sup>2)</sup>	0.85 - 1.2 <sup>2)</sup>	0.40 <sup>2)</sup>	0.85 - 1.2 <sup>2)</sup>	0.40 <sup>2)</sup>	0.90 - 1.30 <sup>2)</sup>
IP rating		IP51						
Standard functions (customizable by PC)		mm/inch, ref I/II, preset (max 99.9999) min/max/delta, tolerances, resolution, measuring direction, multiplier, automatic extinction/manual, keylock						

<sup>1)</sup> Model without spring : Constant measuring force, use only in a vertical position

<sup>2)</sup> The values agree within ± 20% (vertical down, measuring rod outgoing)

## INSTRUMENT DE BASE

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Lifter included
- Manual
- Calibration certificate

# Digital indicators

# S\_Dial

## APPLICATIONS

B



Measurement of a span with S\_Dial WORK equipped with measuring ball probe 905.2207



S\_Dial WORK Analog measuring with bore gauge system



S\_Dial WORK mounted on a Sylvac PS15 bench



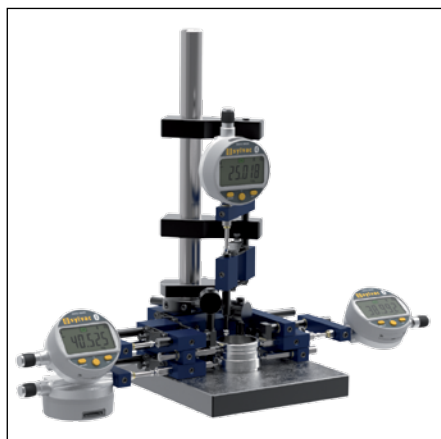
S\_Dial WORK BLUETOOTH SMART working in duplex mode and connected to D300S to measure concentricity, roundness, etc.



S\_Dial WORK PLC connected to a PLC



S\_Dial WORK Analog used on bore gauge system



Bluetooth® indicators on a 4 points jig



Bluetooth® indicators on an iPad through the Sylvac BT Smart App



S\_Dial PRO on ceramic stand

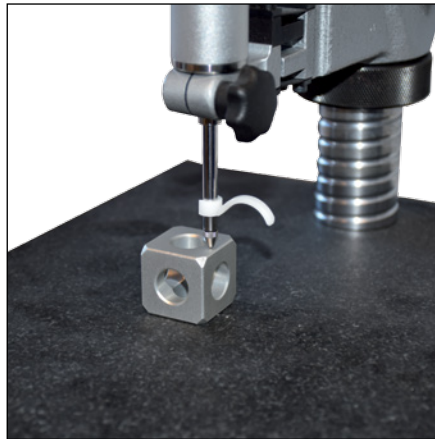
# Digital indicators

## S\_Dial

### LIFTING DEVICES



Lower lifting lever, type 905.4214



Lifting device on S\_Dial PRO Basic



Upper lifting device type 905.4215



Pneumatic lifting device type 905.2218



Vacuum lifting device type 905.2220



Lifting device with photo-cable type 905.2216



Lifting device type 905.2214



Lifting device on S\_Dial WORK BT



Upper lifting lever type, 905.2215

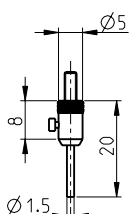
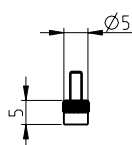
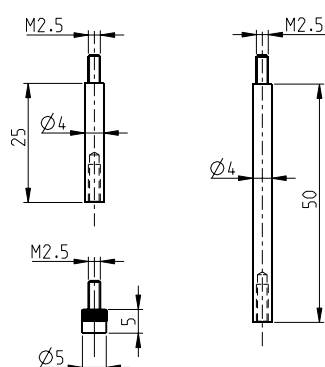
# Digital indicators

## S\_Dial

### ACCESSORIES

Contact points M2.5

B



905.2201

905.2202

905.2203

S233

S234 (905.4321)

S234 (905.4322)

S\_Dial WORK  
12,5 - 25 mm

S\_Dial WORK  
50 - 150 mm

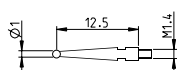
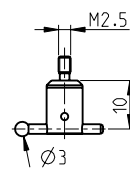
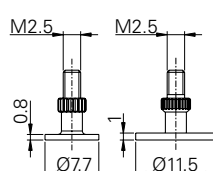
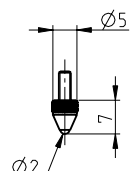
S\_Dial PRO Basic

905.2206

905.2204

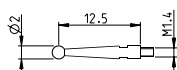
905.2205

905.2207



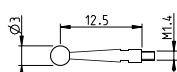
905.2240

Short probe, TC ball



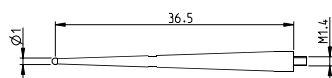
905.2241

Short standard probe, TC ball



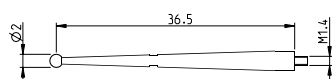
905.2242

Short probe, TC ball



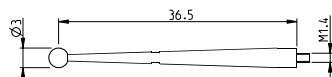
905.2243

Long probe, TC ball



905.2244

Long standard probe, TC ball



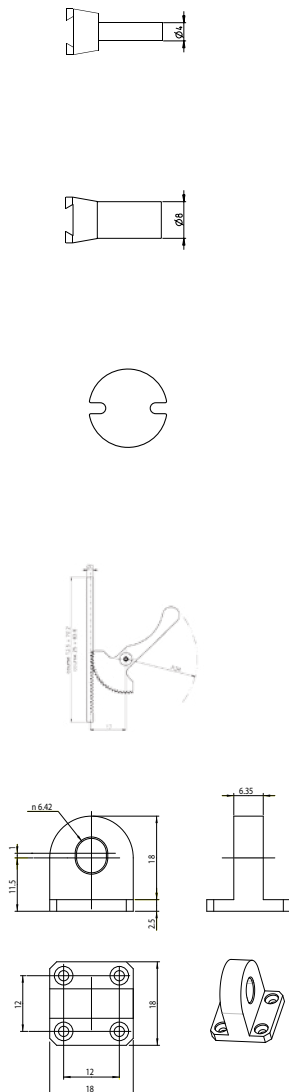
905.2245

Long probe, TC ball

# Digital indicators

## S\_Dial

### ACCESSORIES



		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm
905.2246	Clamping stem	•	•		
905.2247	Clamping stem	•	•		
905.2248	Spanner for probe		•		
805.0214	Lifting device, range 12.5mm			• <sup>1)</sup>	
805.0215	Lifting device, range 25mm			• <sup>1)</sup>	
805.0213	Lug back			• <sup>1)</sup>	• <sup>1)</sup>
905.2231	Sleeve Ø8 --> 10mm with locking screw	•	•	•	•
905.4212	Screwdriver for S233 & S234	•	•		

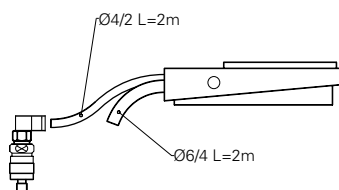
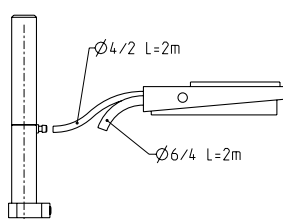
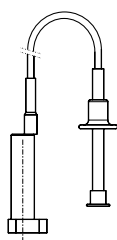
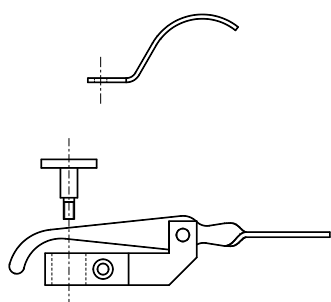
<sup>1)</sup> Except S\_Dial WORK Basic

# Digital indicators

## S\_Dial

### ACCESSORIES

B

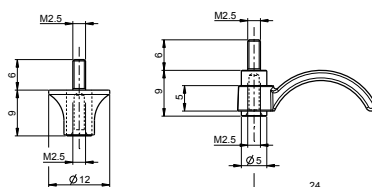
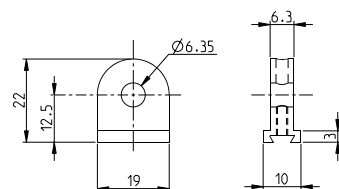
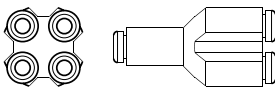
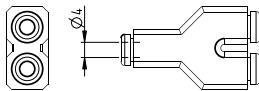
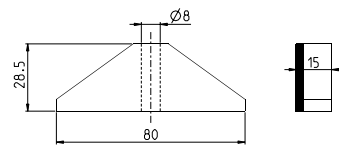
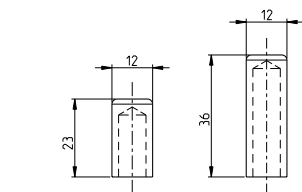


		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
905.2214	Lifting device	•		•	•	•
905.2215	Upper lifting device			•		
905.2216	Lifting device with photo-cable			•		
905.2218	Pneumatic lifting device with foot pedal			•		
905.2217	Lifter only for 905.2218			•		
905.2219	Pneumatic foot pedal for 905.2218	•		•		
905.2220	Vacuum lifting device with foot pedal				•	
905.2227	Pressure controller				•	
905.2228	Vacuum foot pedal for 905.2220				•	

# Digital indicators

## S\_Dial

### ACCESSORIES



		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
905.2221	Dust protection for indicator, range 12.5 mm			•		
905.2222	Dust protection for indicator, range 25 mm			•		
905.2223	Depth measuring base			•	•	
905.2261	Snap connector for pneumatic lifter x2	•		•	•	
905.2262	Snap connector for pneumatic lifter x4	•		•	•	
905.4211	Center lug back	•	•			
905.2224	Plastic lifting lever (bottom)	•		•	•	•
905.2225	Plastic lifting ring (bottom)	•		•	•	•

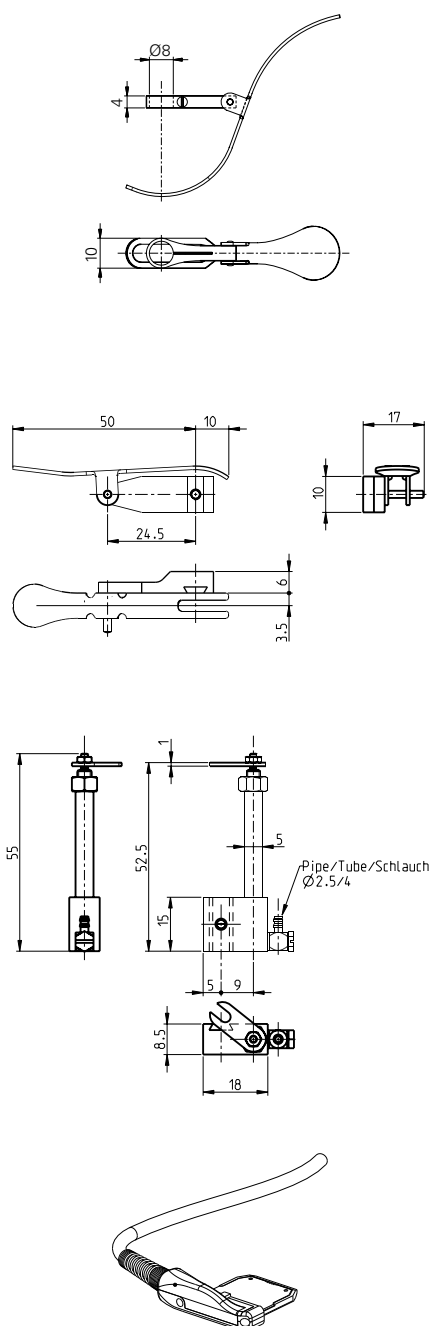


# Digital indicators

## S\_Dial

### ACCESSORIES

B



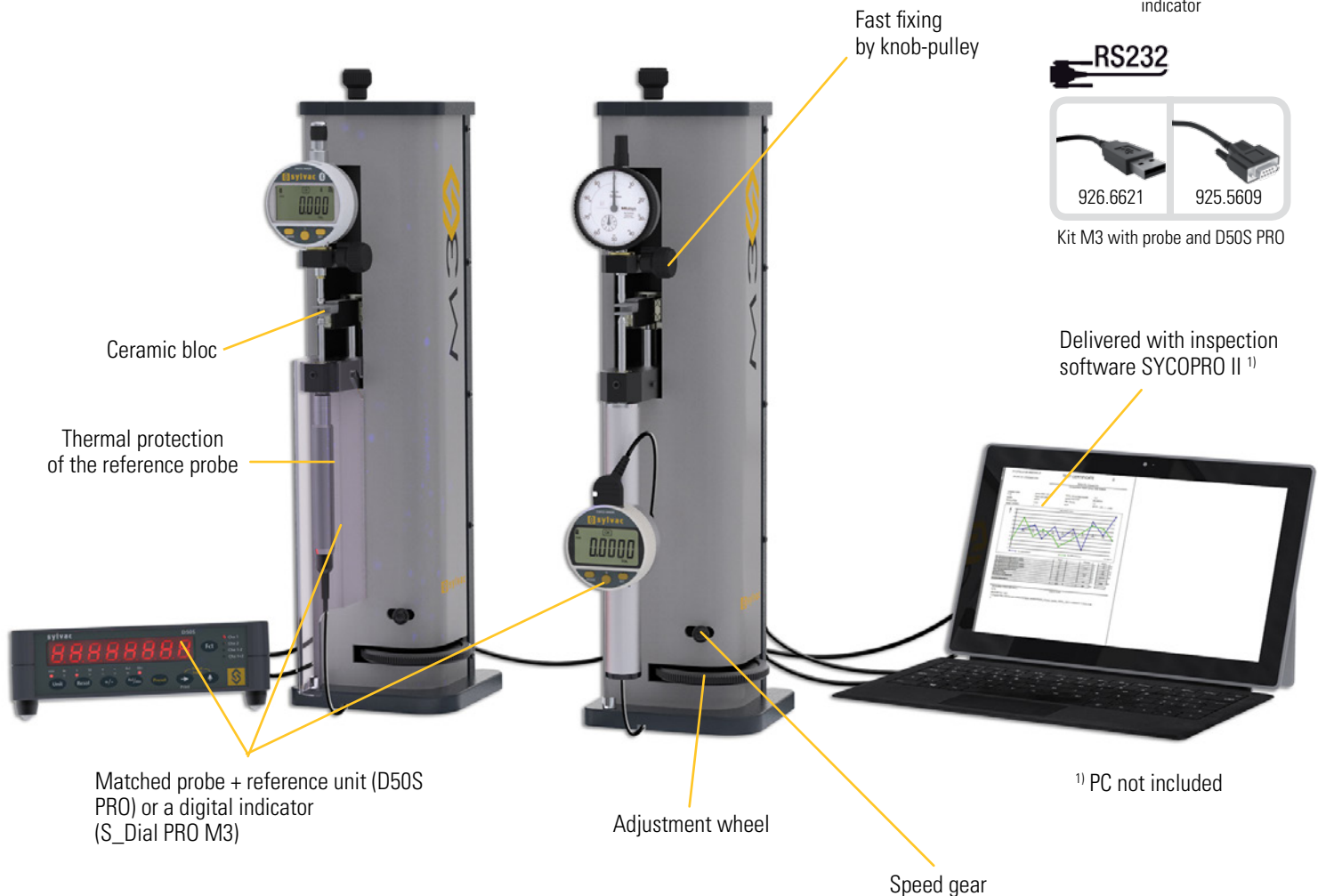
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial WORK PLC
905.4214	Lower lifting device, range 12.5 mm	●	1)	1)	1)	1)
905.4215	Upper lifting device for S (Standard) execution, except vertical type	●				
905.4217	Pneumatic lifting device for standard type	●				
926.6101	Replacement cable for digital indicator PLC					●

<sup>1)</sup> used on range 20 mm max

# Digital indicator testing stand M3

## DESCRIPTION

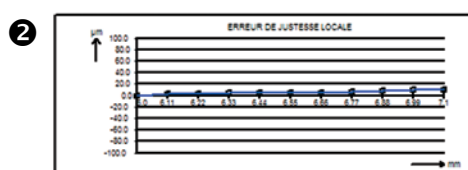
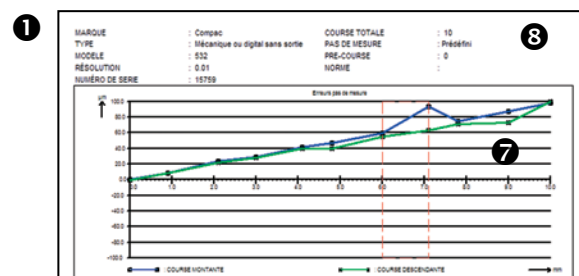
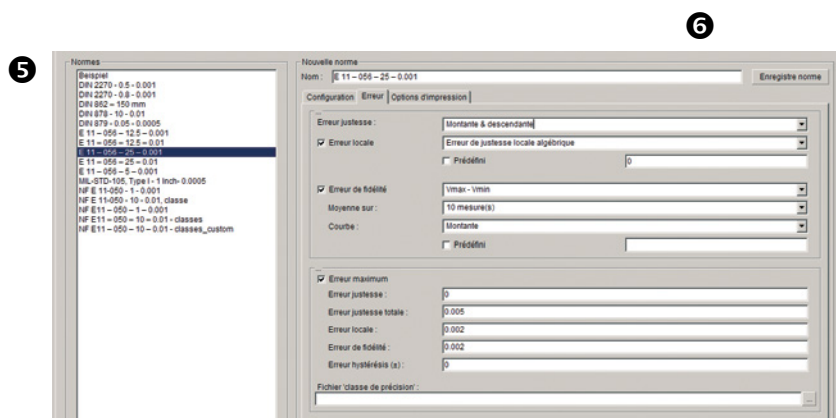
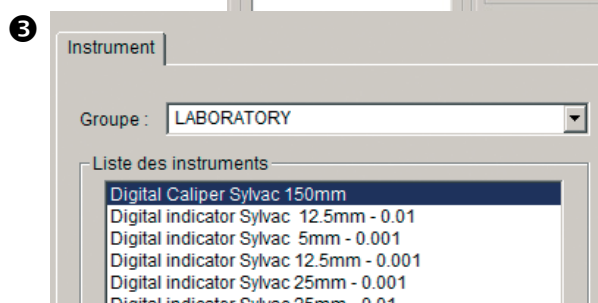
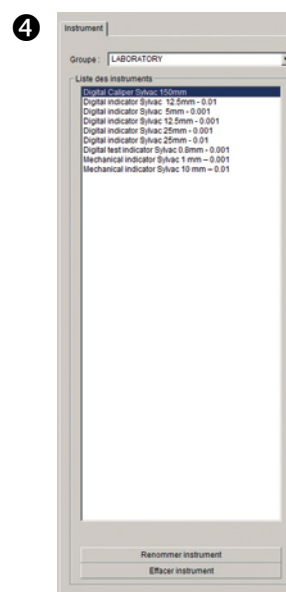
- Control thanks to a probe 10mm, 25mm or a digital indicator 25mm, 50mm
- Suitable for testing dial gauges plunger type and test indicators
- Allows the use of 2 calibrated measuring probes (like P25 and P25)  
(P10 calibrated on channel 1 and P50 calibrated on channel 2) (version D50S PRO)
- Testing system according to ABBE principle
- Can be used in vertical and horizontal position
- Ceramic gauges blocs
- Direct status from the instrument during checking
- Integrated standards
- Creation of personalized certificates of inspection
- Fast and slow approach speeds
- Visualization at any time of the control status
- Control of digital instruments with direct connection



# Digital indicator testing stand M3

## DISPLAY/SOFTWARE

- 1 Display the curves of measurement
- 2 Check the error and repeatability
- 3 Creation and management of instrument groups
- 4 Fast access to all of stored instruments
- 5 Integrated standards
- 6 Personalisation of the standards
- 7 Display the measured values
- 8 Possibility to customize the certificate

## TECHNICAL SPECIFICATIONS

		Kit with probe and D50S PRO		Kit with digital indicator	
		809.1303	809.1301	809.1305	809.1304
Measuring range	mm	M3 Kit probe 10 mm	M3 Kit probe 25 mm	M3 Kit S_Dial PRO M3 25 mm	M3 Kit S_Dial PRO M3 50 mm
Max. Error	µm	0.6	0.8	1.0	1.2

# Digital indicator testing stand M3

## BASIC INSTRUMENT

### Kit with probe and D50S PRO

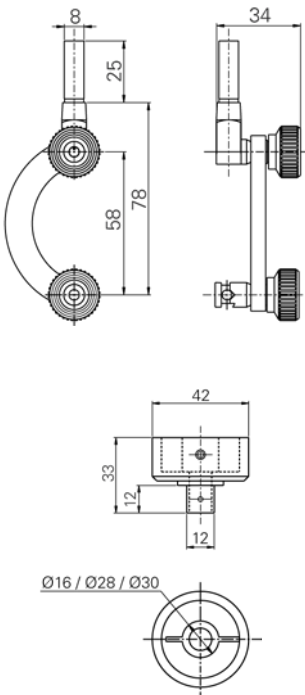
- Stand M3 (909.1300)
- Ceramic bloc gauges
- Thermal protection of the probe reference
- D50S PRO + probe calibrated
- Cable RS232C (925.5609)
- Charging unit according to country (904.4200/01/03/04/05)
- External contact (foot-pedal 904.4101)
- CD- with inspection software SYCOPRO II (981.7124)
- Accessory for lever indicators (909.2010)
- Instruction manual

### Kit with digital indicator

- Stand M3 (909.1300)
- Ceramic bloc gauges
- S\_Dial PRO M3 with special measuring force
- Cable Proximity USB (926.6721)
- External contact (foot-pedal 926.7020)
- CD- with inspection software SYCOPRO II (981.7124)
- Accessory for lever indicators (909.2010)
- Instruction manual

B

## ACCESSORIES



**909.2010**

Clamping device for test indicator

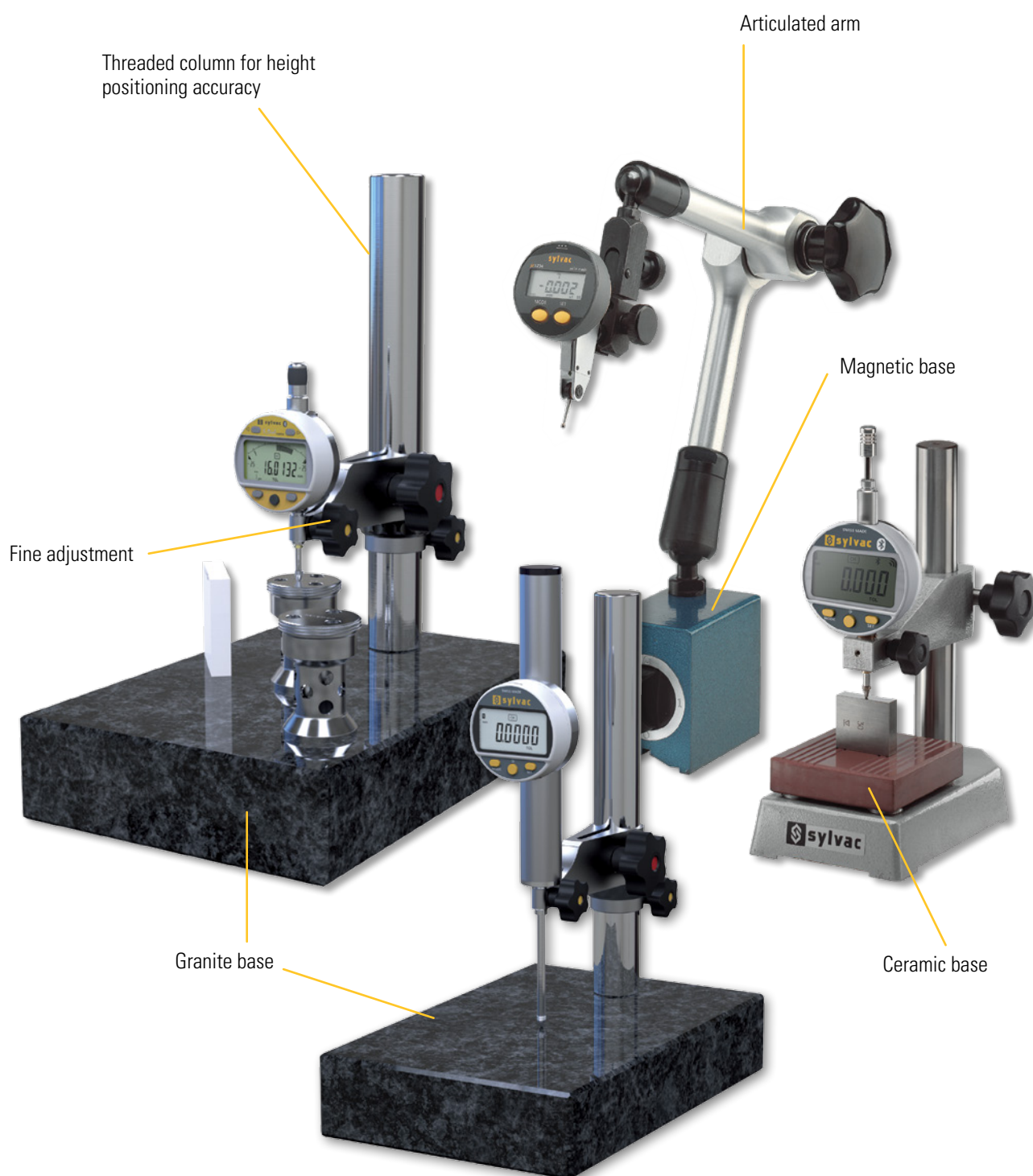
**909.2011**

Clamping device for dial gauges Ø 16 / 28 / 30 mm

# Measuring stands

## DESCRIPTION

- A selection of universal measuring stands for fixing all probes, test indicators and dial gauges
- Clamping on Ø 8 mm, Ø 25mm or dovetail on magnetic stand



# Measuring stands

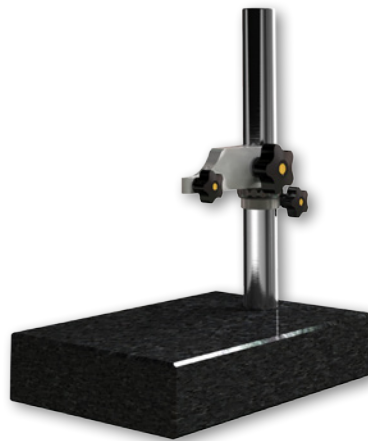
## TECHNICAL SPECIFICATIONS



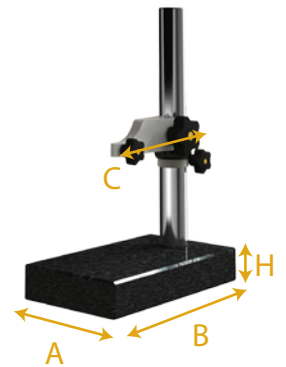
908.1201



908.1209



808.1204



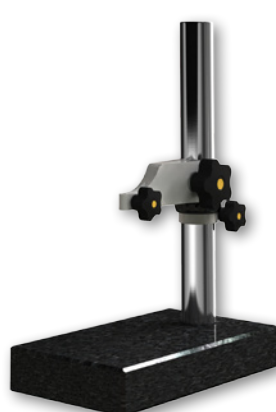
		908.1201	908.1209	908.1207	808.1204	808.1205
Base		magnetic <sup>1)</sup>	Cast iron ceramic table	granit grade 00	granit grade 00	granit grade 00
Base dimensions AxBxH	mm	70x46x65	85x85x25	200x130x40	300x210x60	300x210x60
Central locking		•	---		---	---
Column	mm	---	Steel Ø 25	Steel Ø 25	Steel Ø 35	Steel Ø 35
Clamping dimension	mm	Ø 8	Ø 8	Ø 8	Ø 8	Ø 25
Dist. Column.-meas. point. C	mm	---	78	60	115	115
Measuring range	mm	---	0 - 115	---	0 - 260	0 - 260
Total height	mm	430	215	450	360	360
Weight	kg	2.2	4.3	4.3	13.4	13.5
Fine adjustment		---	---	---	•	•

<sup>1)</sup> Gripping coefficient : 600N

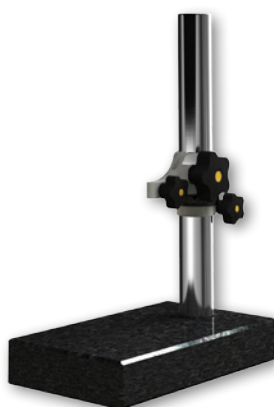
# Measuring stands

## TECHNICAL SPECIFICATIONS

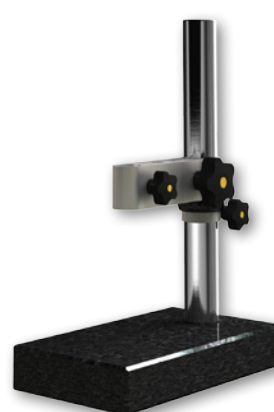
- Superior Swiss Made supports with reinforced column and precision measuring arm ensuring optimal parallelism and rigidity reducing the measurement error due to the carrier. These measuring stands are equipped with a ring allowing fine height adjustment and a 00 grade granite base.



808.1206

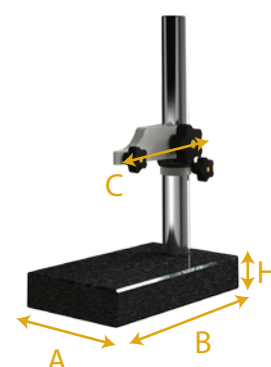


808.1203



808.1202

		808.1206	808.1207	808.1202	808.1203	808.1201
Base		granit grade 00	granit grade 00	granit grade 00	granit grade 00	granit grade 00
Base dimensions AxBxH	mm	150X100X40	150X100X40	240x140x50	240x140x50	240x140x50
Central locking		---	---	---	---	---
Column	mm	Steel Ø 25	Steel Ø 35	Steel Ø 35	Steel Ø 35	Steel Ø 35
Clamping dimension	mm	Ø 8	Ø 8	Ø 25	Ø 8	Ø 8
Dist. Column.-meas. point. C	mm	70	70	115	70	115
Measuring range	mm	0 - 190	0 - 260	0 - 260	0 - 260	0 - 260
Total height	mm	270	340	340	340	340
Weight	kg	2.9	4.3	6.6	6.5	6.6
Fine adjustment		•	•	•	•	•



# INTERNAL MEASURING INSTRUMENTS

---

SYLVAC offers a large range of internal measuring instruments made of interchangeable 2 or 3 points mechanical heads and electronic units with digital display, integrated in the micrometer bodies or in pistol grips guaranteeing a sure and fast measurement.

The measuring range goes from 2 to 500mm in the Xtreme type and from 2 to 310mm in the Ultima type. Special executions are manufactured on request.

**Sylvac inductive measuring system (patented)**

**Data output**

**Power supply: Lithium battery 3V, Type CR 2032**

**Operational temperature: +5 to +40°C**

**mm/inch conversion**

**Repeatability:  $\leq 2 \mu\text{m}$**





# Bore gauges

## Xtreme 3 BT

### DESCRIPTION

- Instruments covering a large measuring range (2 - 300 mm)
- **Integrated *Bluetooth®* technology and Proximity**
- Blind bore measurement from 2 to 6 mm and from 12.5 mm
- Interchangeable measuring heads
- UKAS certificate included with all rings
- UKAS certificate included with each instrument
- Manufactured according to DIN863
- Memorization of 4 ring gauges values
- Water and coolant resistant, protection rating IP67 according to IEC 60529
- Programmable by PC



\* Up to 8 instruments connected per dongle #981.7100  
More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

# Bore gauges

## Xtreme 3 BT

### TECHNICAL SPECIFICATIONS INSTRUMENTS SETS BLUETOOTH®

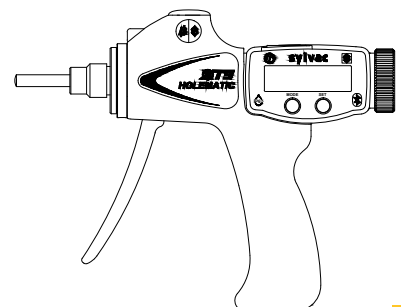
<b>XT3D</b>	<b>951.6102</b>	<b>951.6103</b>	<b>951.6104</b>	<b>951.6105</b>
Meas. range mm	2-6	6-10	10-20	20-50
Type	SXT3D 1M BT	SXT3D 3M BT	SXT3D 4M BT	SXT3D 5M BT
Number of heads	5	2	3	3
Numb. of rings	3	1	2	2
Meas. Force	8N	7N	15N	21N

<b>XT3D</b>	<b>951.6106</b>	<b>951.6107</b>	<b>951.6108</b>	<b>951.6109</b>
Meas. range mm	50-100	100-150	150-200	100-200
Type	SXT3D 6M BT	SXT3D 7M BT	SXT3D 8M BT	SXT3D 9M BT
Number of heads	3	2	2	4
Numb. of rings	2	1	1	2
Meas. Force	28N	32N	32N	32N

<b>XT3H</b>	<b>955.6102</b>	<b>955.6103</b>	<b>955.6104</b>	<b>955.6105</b>	<b>955.6106</b>
Meas. range mm	2-6	6-10	10-20	20-50	50-100
Type	SXT3H 1M BT	SXT3H 3M BT	SXT3H 4M BT	SXT3H 5M BT	SXT3H 6M BT
Number of heads	5	2	3	3	3
Numb. of rings	3	1	2	2	2
Meas. Force	4N	9N	9N	19N	19N

<b>XT3H</b>	<b>955.6107</b>	<b>955.6108</b>	<b>955.6114</b>	<b>955.6115</b>	<b>955.6116</b>
Meas. range mm	100-150	150-200	6-20	20-100	100-200
Type	SXT3H 7M BT	SXT3H 8M BT	SXTH10 BM BT	SXTH11 BM BT	SXT3H 9M BT
Number of heads	2	2	5	6	4
Numb. of rings	1	1	3	4	2
Meas. Force	22N	22N	9N	19N	22N

\*Individual Bluetooth® instruments : on request



# Bore gauges

## Xtreme 3

### DESCRIPTION

- Instruments covering a large measuring range (2 - 300 mm)
- Blind bore measurement from 2 to 6 mm and from 12.5 mm
- Interchangeable measuring heads
- UKAS certificate included with all rings
- UKAS certificate included with each instrument
- Manufactured according to DIN863
- Memorization of 4 ring gauges values
- Water and coolant resistant, protection rating IP67 according to IEC 60529
- Programmable by PC
- S\_Connect Proximity

#### X\_Treme XTD

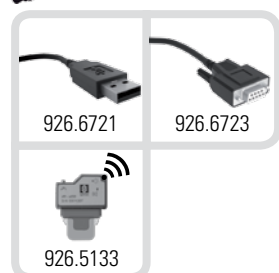


#### X\_Treme XTH



#### IP67

#### PROXIMITY



# Bore gauges

# Xtreme 3

## TECHNICAL SPECIFICATIONS INDIVIDUAL INSTRUMENTS XT3D

		950.5006	950.5007	950.5008	950.5009	950.5010	950.5011	950.5012	950.5013
Meas. range	mm	2-2.5	2.5-3	3-4	4-5	5-6	6-8	8-10	10-12.5
Type		XT3D 1M	XT3D 2M	XT3D 3M	XT3D 4M	XT3D 5M	XT3D 6M	XT3D 8M	XT3D 10M
Depth	mm	9	9	12	18	18	58	58	58
Max. Error	µm	4	4	4	4	4	4	4	4
Ø Incl. ring	mm	2.5	2.5	4.0	4.0	5.0	8.0	8.0	12.5

		950.5014	950.5015	950.5016	950.5017	950.5018	950.5019	950.5020	950.5021
Meas. range	mm	12.5-16	16-20	20-25	25-35	35-50	50-65	65-80	80-100
Type		XT3D 12M	XT3D 16M	XT3D 20M	XT3D 25M	XT3D 35M	XT3D 50M	XT3D 65M	XT3D 80M
Depth	mm	62	62	66	66	80	80	80	100
Max. Error	µm	4	4	4	4	4	5	5	5
Ø Incl. ring	mm	12.5	20.0	20.0	35.0	35.0	65.0	65.0	80.0

		950.5022	950.5023	950.5024	950.5025	950.5026	950.5027	950.5028	950.5029
Meas. range	mm	100-125	125-150	150-175	175-200	200-225	225-250	250-275	275-300
Type		XT3D 100M	XT3D 125M	XT3D 150M	XT3D 175M	XT3D 200M	XT3D 225M	XT3D 250M	XT3D 275M
Depth	mm	115	115	115	115	118	118	118	118
Max. Error	µm	6	6	7	7	8	8	9	9
Ø Incl. ring	mm	125.0	125.0	175.0	175.0	225.0	225.0	275.0	275.0

## TECHNICAL SPECIFICATIONS INSTRUMENTS SETS SXT3D

		951.5102	951.5103	951.5104	951.5105	951.5106	951.5107	951.5108	951.5109
Meas. range	mm	2-6	6-10	10-20	20-50	50-100	100-150	150-200	100-200
Type		SXT3D 1M	SXT3D 3M	SXT3D 4M	SXT3D 5M	SXT3D 6M	SXT3D 7M	SXT3D 8M	SXT3D 9M
Number of heads		5	2	3	3	3	2	2	4
Numb. of rings		3	1	2	2	2	1	1	2
Meas. Force		8N	7N	15N	21N	28N	32N	32N	32N

C

# Bore gauges

# Xtreme 3

## TECHNICAL SPECIFICATIONS INDIVIDUAL INSTRUMENTS XT3H

	954.5006	954.5007	954.5008	954.5009	954.5010	954.5011	954.5012	954.5013
Meas. range mm	2-2.5	2.5-3	3-4	4-5	5-6	6-8	8-10	10-12.5
Type	XT3H 1M	XT3H 2M	XT3H 3M	XT3H 4M	XT3H 5M	XT3H 6M	XT3H 8M	XT3H 10M
Depth	9	9	12	18	18	58	58	58
Max. Error $\mu\text{m}$	4	4	4	4	4	4	4	4
$\varnothing$ Incl. ring mm	2.5	2.5	4.0	4.0	5.0	8.0	8.0	12.5

	954.5014	954.5015	954.5016	954.5017	954.5018	954.5019	954.5020	954.5021
Meas. range mm	12.5-16	16-20	20-25	25-35	35-50	50-65	65-80	80-100
Type	XT3H 12M	XT3H 16M	XT3H 20M	XT3H 25M	XT3H 35M	XT3H 50M	XT3H 65M	XT3H 80M
Depth	62	62	66	66	80	80	80	85
Max. Error $\mu\text{m}$	4	4	4	4	4	5	5	5
$\varnothing$ Incl. ring mm	12.5	20.0	20.0	35.0	35.0	65.0	65.0	80.0

	954.5022	954.5023	954.5024	954.5025	954.5026	954.5027	954.5028	954.5029
Meas. range mm	100-125	125-150	150-175	175-200	200-225	225-250	250-275	275-300
Type	XT3H 100M	XT3H 125M	XT3H 150M	XT3H 175M	XT3H 200M	XT3H 225M	XT3H 250M	XT3H 275M
Depth	100	100	100	100	100	103	103	103
Max. Error $\mu\text{m}$	6	6	7	7	8	8	9	9
$\varnothing$ Incl. ring mm	125.0	125.0	175.0	175.0	225.0	225.0	275.0	275.0

## TECHNICAL SPECIFICATIONS INSTRUMENTS SETS SXT3H

	955.5102	955.5103	955.5104	955.5105	955.5106
Meas. range mm	2-6	6-10	10-20	20-50	50-100
Type	SXT3H 1M	SXT3H 3M	SXT3H 4M	SXT3H 5M	SXT3H 6M
Number of heads	5	2	3	3	3
Number of rings	3	1	2	2	2
Measuring Force	4N	9N	9N	19N	19N

	955.5107	955.5108	955.5114	955.5115	955.5116
Meas. range mm	100-150	150-200	6-20	20-100	100-200
Type	SXT3H 7M	SXT3H 8M	SXT3H 10M	SXT3H 11M	SXT3H 12M
Number of heads	2	2	5	6	4
Number of rings	1	1	3	4	2
Measuring Force	22N	22N	9N	19N	22N



# Bore gauges

## Xtreme 3

### BASIC INSTRUMENT XT3D AND XT3H INDIVIDUAL

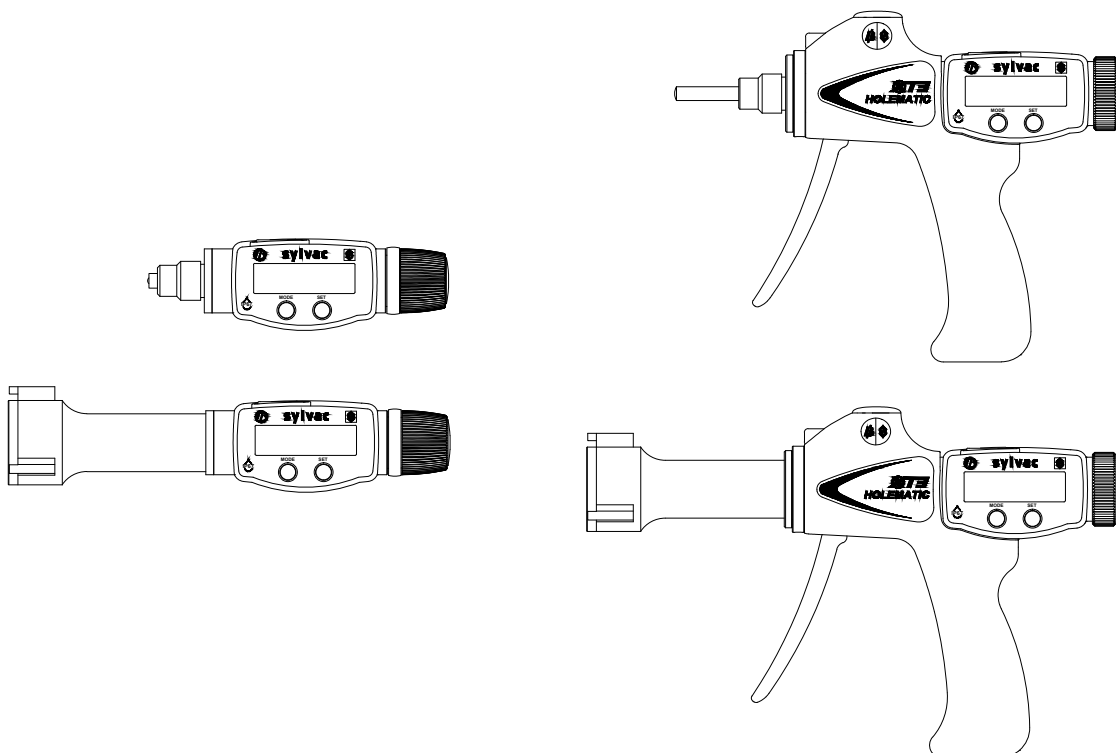
- Instrument according to technical specifications
- Wooden box (XT3D : from 150 mm = 2 box; XT3H : from 200 mm = 2 box) <sup>1)</sup>
- Rings according to technical specifications + UKAS certificate
- 1 x digital display XT3DU or XT3PG
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate

<sup>1)</sup> Fumigated compatible ISPM 15 and NIMP 15

### TECHNICAL SPECIFICATIONS ELECTRONIC UNITS XT3DU AND XT3PG

XT3DU	951.5001	951.5002	951.5003	951.5004	951.5005	951.5006	951.5007
Meas. range mm	2-6	6-10	10-20	20-50	50-100	100-300	200-300
Type	XT3DU 2M	XT3DU 6M	XT3DU 10M	XT3DU 20M	XT3DU 50M	XT3DU 100M	XT3DU 200M
Thread	1/4"x 40 TPI	M5 x 0.5	5/16"x 40 TPI	5/8"x 24 TPI	5/8"x 24 TPI	5/8"x 24 TPI	5/8"x 24 TPI

XT3PG	955.5001	955.5002	955.5003	955.5004
Meas. range mm	2-6	6-20	20-100	100-300
Type	XT3PG 01M	XT3PG 02M	XT3PG 03M	XT3PG 04M
Thread	1/4"x 40 TPI	5/16"x 40 TPI	5/8"x 24 TPI	5/8"x 24 TPI

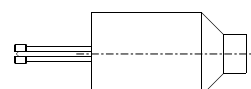


# Bore gauges

## Xtreme 3

### TECHNICAL SPECIFICATIONS MEASURING HEADS XTHD

	953.2496	953.2497	953.2498	953.2499	953.2500
Meas. range mm	2-2.5	2.5-3	3-4	4-5	5-6
Type	XTHD1	XTHD2	XTHD3	XTHD4	XTHD5
Execution	2 points / ST	2 points / ST	2 points / ST	2 points / ST	2 points / ST



2 points head

	953.2501	953.2502	953.2503	953.2504	953.2505
Meas. range mm	6-8	8-10	10-12.5	12.5-16	16-20
Type	XTHD6	XTHD8	XTHD10	XTHD12.5	XTHD16
Execution	3 points / ST	3 points / ST	3 points / ST	3 points / TC	3 points / TC

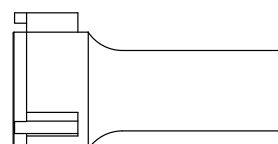
	953.2506	953.2507	953.2508	953.2509	953.2510
Meas. range mm	20-25	25-35	35-50	50-65	65-80
Type	XTHD20	XTHD25	XTHD35	XTHD50	XTHD65
Execution	3 points / TC	3 points / TC	3 points / TC	3 points / TC	3 points / TC

	953.2511	953.2512	953.2513	953.2514	953.2515
Meas. range mm	80-100	100-125	125-150	150-175	175-200
Type	XTHD80	XTHD100	XTHD125	XTHD150	XTHD175
Execution	3 points / TC	3 points / TC	3 points / TC	3 points / TC	3 points / TC

	953.2516	953.2517	953.2518	953.2519
Meas. range mm	200-225	225-250	250-275	275-300
Type	XTHD200	XTHD225	XTHD250	XTHD275
Execution	3 points / TC	3 points / TC	3 points / TC	3 points / TC

ST = steel  
TC = tungsten carbide

All heads are compatible with the XT3D and XT3H systems.



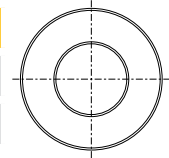
3 points head

# Bore gauges

## Xtreme 3

### TECHNICAL SPECIFICATIONS SETTING RINGS XTR

		953.2598	953.2599	953.2600	953.2601	953.2602	953.2603
Size	mm	2.5	4	5	8	12.5	20
Type		XTR2.5	XTR4	XTR5	XTR8	XTR12.5	XTR20



		953.2604	953.2605	953.2606	953.2607	953.2608	953.2609	953.2610
Size	mm	35	65	80	125	175	225	275
Type		XTR35	XTR65	XTR80	XTR125	XTR175	XTR225	XTR275

### TECHNICAL SPECIFICATIONS EXTENSIONS SX

		953.2001	953.2002	953.2003	953.2004	953.2005
Meas. range	mm	6-10	10-12.5	12.5-20	20-50	50-300
Type		SX200	SX400	SX500	SX1	SX4
Length	mm	63	76	100	150	150



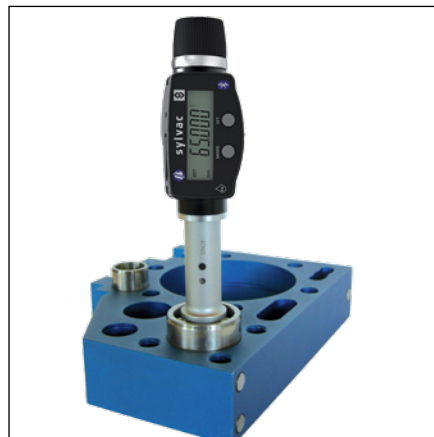
#### Other accessories

		953.2010	953.2011
Description		Stand	Depth stop
Meas. range	mm	2-50	2-6

### APPLICATIONS



Pistol measuring system



Measuring with ratchet XTD system



Measuring with pistol XTH system



# High accuracy internal measurement

# Ultima

## DESCRIPTION

- Measuring range from 2 to 310 mm
- Resolution up to 0.0001 mm
- Mechanical repeatability : 1µm from 2 to 60 mm, 1.5µm from 60 to 210 mm and 2µm from 210 to 310 mm
- Robust construction designed for use by inspection and machine shop
- UKAS certificate supplied with each head
- UKAS certificate supplied with each setting ring.
- Rings manufactured according to DIN 2250 part 2 (standard)
- Blind bore measuring from 12 to 310 mm
- Compatible with all Sylvac digital display
- Special heads on request ( threads, grooves, splines, slot width, etc...)



# High accuracy internal measurement

# Ultima

## TECHNICAL SPECIFICATIONS OF MEASURING HEADS

		960.1006	960.1007	960.1008	960.1009	960.1010	960.1011	960.1012	960.1013
Meas. range	mm	2.0-2.5	2.5-3	3-4	4-5	5-6	6-8	8-10	10-12
Ring Ø	mm	2.5	2.5	4	5	5	8	8	12
Depth	mm	9	9	12	18	18	60	60	61
Max. Error	µm	1	1	1	1	1	1	1	1

		960.1014	960.1015	960.1016	960.1017	960.1018	960.1019	960.1020	960.1021
Meas. range	mm	12-14	14-17	17-20	20-24	24-28	28-32	32-38	38-44
Ring Ø	mm	12	17	17	24	24	32	32	44
Depth	mm	61	61	61	69	69	69	72	72
Max. Error	µm	1	1	1	1	1	1	1	1

		960.1022	960.1023	960.1024	960.1025	960.1026	960.1027	960.1028	960.1029
Meas. range	mm	44-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120
Ring Ø	mm	44	60	60	80	80	100	100	120
Depth	mm	72	80	80	80	80	80	80	80
Max. Error	µm	1	1	1.5	1.5	1.5	1.5	1.5	1.5

		960.1030	960.1031	960.1032	960.1033	960.1034	960.1035	960.1036	960.1037
Meas. range	mm	120-130	130-140	140-150	150-160	160-170	170-180	180-190	190-200
Ring Ø	mm	120	140	140	160	160	180	180	200
Depth	mm	80	80	80	80	80	80	80	80
Max. Error	µm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

		960.1038	960.1039	960.1040	960.1041	960.1042	960.1043	960.1044	960.1045
Meas. range	mm	200-210	210-220	220-230	230-240	240-250	250-260	260-270	270-280
Ring Ø	mm	200	220	220	240	240	260	260	280
Depth	mm	80	80	2.5	80	80	80	80	80
Max. Error	µm	1.5	2	2	2	2	2	2	2

		960.1046	960.1047	960.1048
Meas. range	mm	280-290	290-300	300-310
Ring Ø	mm	280	300	300
Depth	mm	80	80	80
Max. Error	µm	2	2	2

C

# High accuracy internal measurement

# Ultima

## TECHNICAL SPECIFICATIONS SETS

	961.1102	961.1103	961.1104
Meas. range mm	2-6	6-10	10-20
Number of rings	3	1	2

	961.1107	961.1108	961.1109	961.1110
Meas. range mm	6-20	20-50	50-100	20-100
Number of rings	3	3	3	6

## BASIC INSTRUMENT

### Individual

- Instrument according to technical specifications (handle with integrated probe + head)
- Setting rings according to technical specifications
- Wooden box <sup>1)</sup>
- Certificate

### Sets

- Instrument according to technical specifications (handle with integrated probe + head)
- Setting rings according to technical specifications
- Digital display D50S (804.1050)
- Wooden box <sup>1)</sup>
- Instruction manual + certificate

<sup>1)</sup> Fumigated compatible ISPM 15 and NIMP 15

## TECHNICAL SPECIFICATIONS HANDLES

	961.3001	961.3002	961.3003	961.3004
Meas. range mm	2-6	6-20	20-100	100-310

Capacitive probe included

## TECHNICAL SPECIFICATIONS EXTENSIONS

	961.2001	961.2002	961.2003	961.2004	961.2005	961.2006	961.2007
Meas. range mm	6-10	10-12	12-20	20-50	50-310	20-50	50-310
Length mm	63	75	100	50	50	150	150

# High accuracy internal measurement

# Ultima

## APPLICATIONS



Data output through RS232



Two Ultima gauges connected with one unit  
Sylvac D50S only



Adjustable depth stop (on request)



Set including 6 measuring heads, 3 master rings, 1 D50S, the handle and his probe, charging unit

# Bore gauges

# other applications

## DESCRIPTION

In spite of the fact that our range of interior measuring instruments is more complete, all the applications cannot be covered by the standard series. The illustrations below express the possibilities of special applications which we can carry out.

For instance, below some pictures of special applications :

### Grooves and slots head



### Spherical anvils head



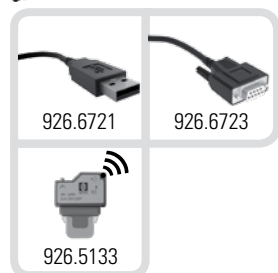
### Threads measuring head



### Ball screw head



### PROXIMITY



Built-in  
Bluetooth

# HEIGHT GAUGE Hi\_Cal & Hi\_Gage ONE

Specially developed and optimized for use in production lines, HI\_CAL offers a great efficiency thanks to its large screen which can simultaneously display diameters and centerlines.

Its principal advantages consist in its ease of use, reduced dimensions of its base, its great lightness, the compatibility of the accessories with the instruments of the previous generation and the two travel speeds which offer a great comfort during the measurement of small diameters.

**Inductive Sylvac system (patented)**

**Automatic motorized probe (patented)**

**Data output RS232 – USB**

**mm/inch conversion**



# Height gauge

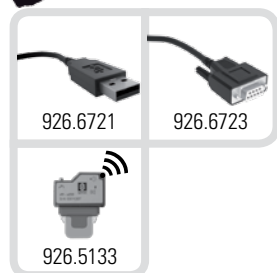
# Hi\_Gage ONE

## DESCRIPTION

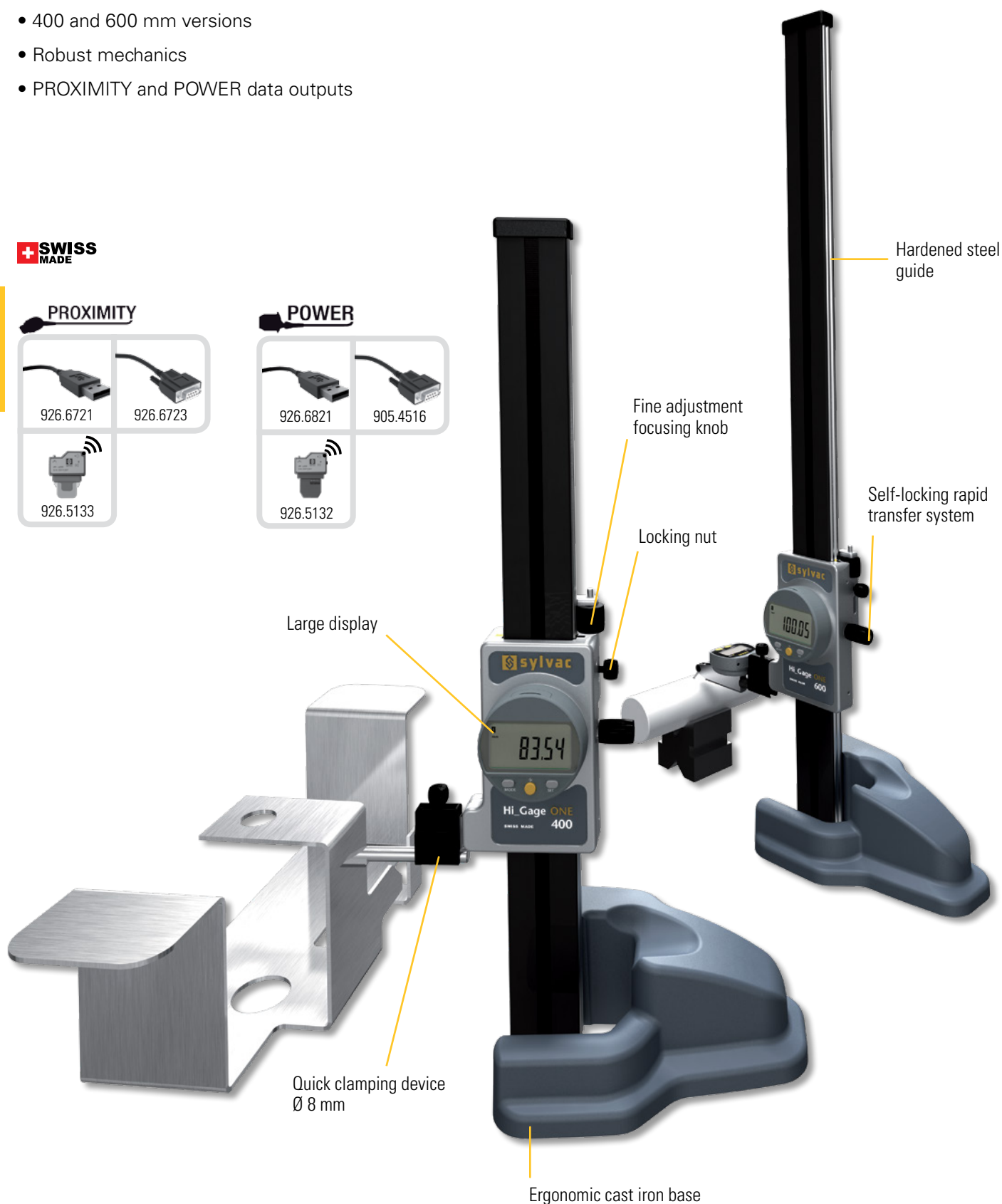
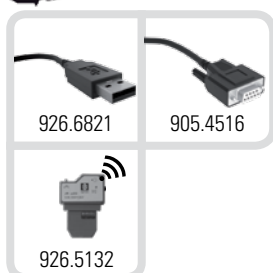
- Intuitive functions
- 400 and 600 mm versions
- Robust mechanics
- PROXIMITY and POWER data outputs

**SWISS  
MADE**

### PROXIMITY



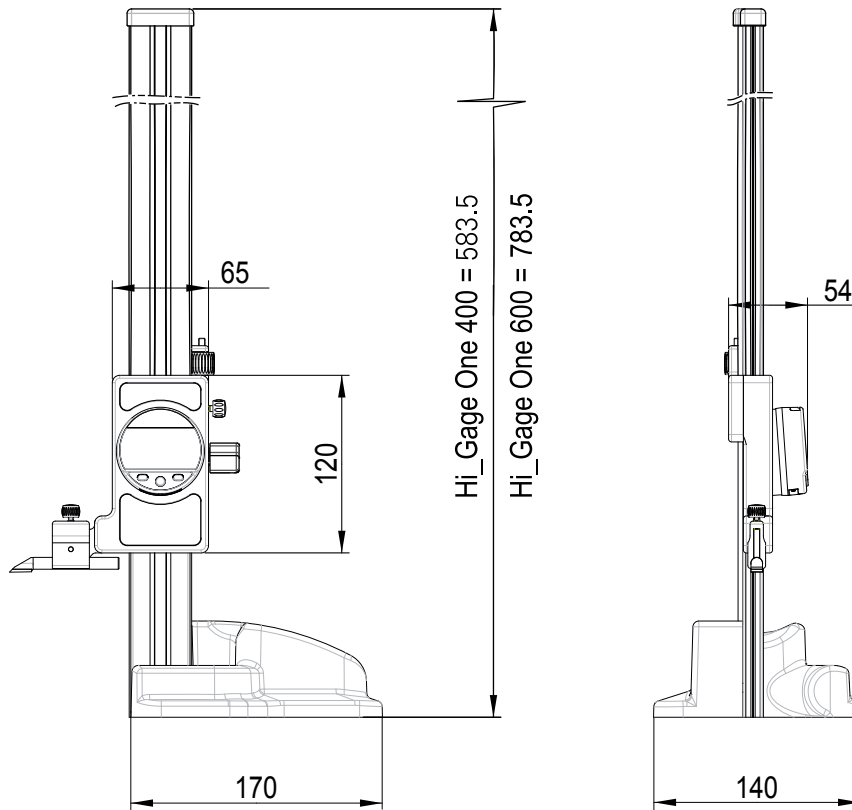
### POWER



# Height gauge

# Hi\_Gage ONE

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

	840.0400	840.0600
Measurement range mm	400	600
Resolution mm	0.01	0.01
Max. error $\mu\text{m}$	40	50
Repeatability $\mu\text{m}$	10 <sup>1)</sup>	10 <sup>1)</sup>
2 references	•	•
PRESET	9999.99	
Selection of measuring direction	•	•
Smart Inductive Sensor (S.I.S)	•	•
S_Connect : Proximity & Power	USB / RS232 / Wireless	

<sup>1)</sup>  $\pm 1$  digit

## ACCESSORIES

	Description
840.9001	Ball probe $\varnothing 8$ mm
840.9002 <sup>1)</sup>	Tracing probe
905.2247	Clamping stem

<sup>1)</sup> supplied in standard



840.9001



840.9002



905.2247

D

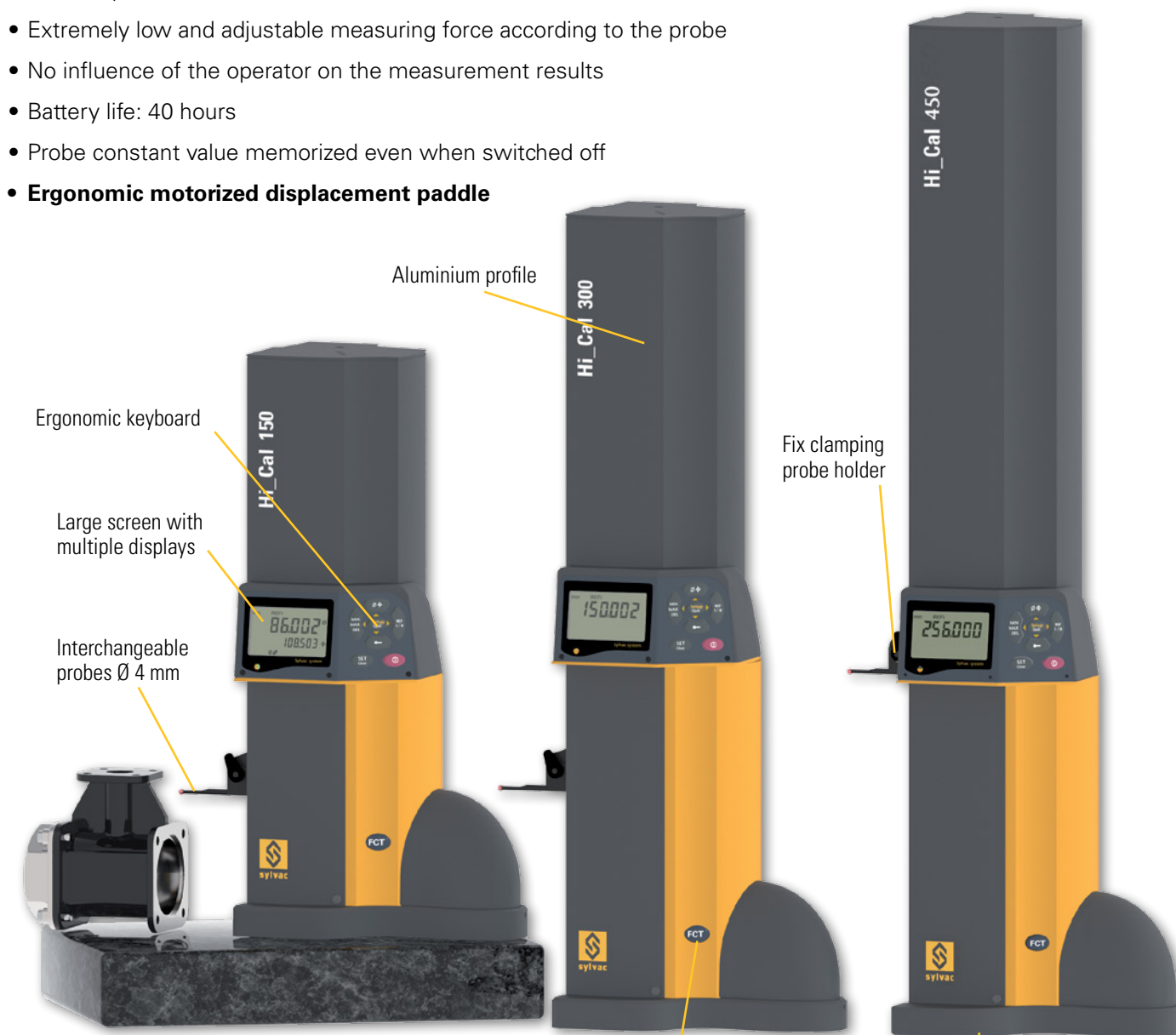


# Height gauge

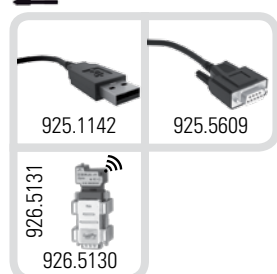
# Hi\_Cal

## DESCRIPTION

- Intuitive functions
- Great mobility
- Measurement of internal and external diameters, centerlines, heights, thicknesses, depths, surfaces
- 150, 300 and 450 mm range
- Data output USB and RS232
- Extremely low and adjustable measuring force according to the probe
- No influence of the operator on the measurement results
- Battery life: 40 hours
- Probe constant value memorized even when switched off
- **Ergonomic motorized displacement paddle**



RS232



USB mini

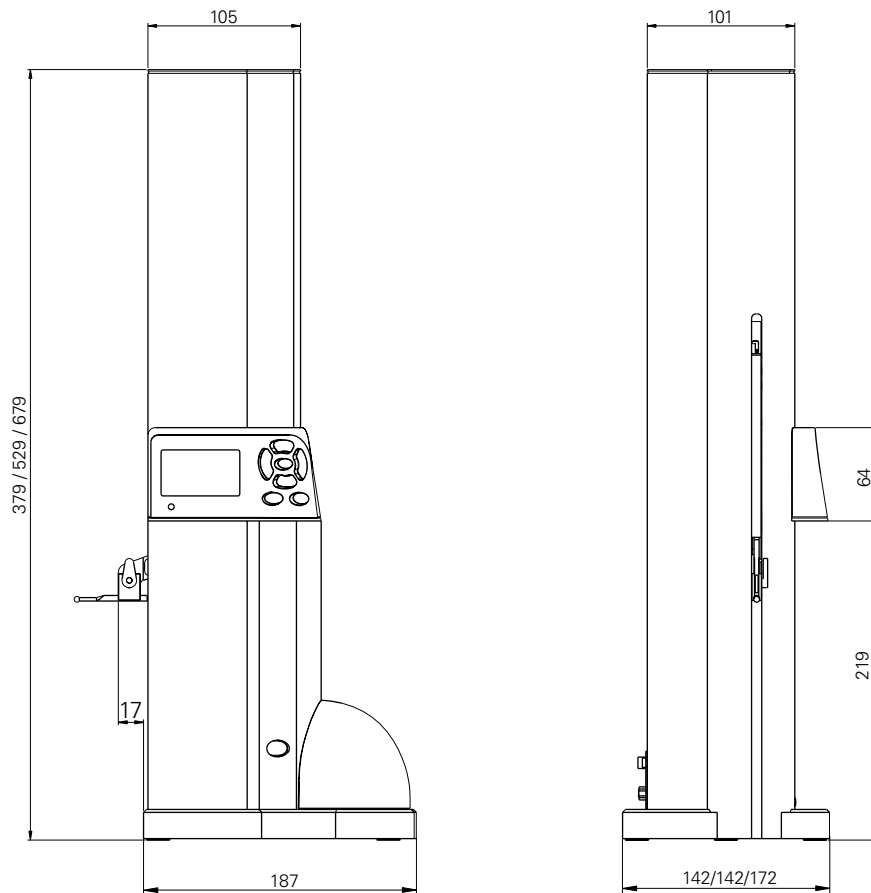


## Switch on and measure!

# Height gauge

# Hi\_Cal

## DIMENSIONAL DRAWINGS



## DISPLAYS

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



D

# Height gauge

# Hi\_Cal

## TECHNICAL SPECIFICATIONS

		830.0150	830.0300	830.0450
Measuring range	mm	150	300	450
Application range	mm	0 - 155	0 - 320	0 - 470
Max. Error	µm	2.5 + L / 175 <sup>1)</sup>		
Repeatability	µm	2		
Resolution	mm	0.01 / 0.001		
Velocity	mm/s	50 / 100		
Measuring force	N	0.2 - 0.3		
Self-contained use	h	>40		
Height	mm	379	529	679
Weight	kg	3.9	4.6	6.8
Weight of the standard probe		7.5g, possibility of using 0-15g or 10-25g <sup>2)</sup> probes		
S_Connect		USB / mini USB / RS232 <sup>3)</sup>		
Programmable by PC		●		
Zero setting		●		
Min / max / delta		●		
PRESET function		●		
2 references		●		
Height measurement, Ø and centerlines		●		
2 types of progressive speed		●		

<sup>1)</sup> With standard probe, in laboratory conditions

<sup>2)</sup> With adjustment of the measuring force

<sup>3)</sup> See cables chapter

## BASIC INSTRUMENT

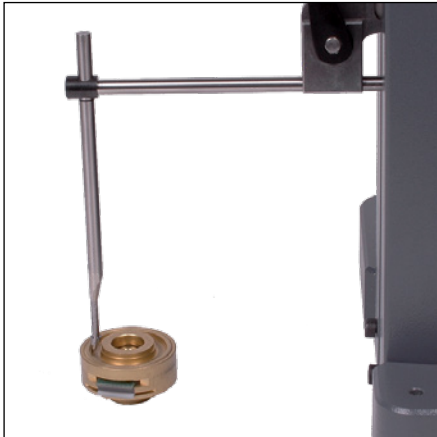
- Loose cover HI\_CAL 150 (930.6001)
- Loose cover HI\_CAL 300 (930.6002)
- Loose cover HI\_CAL 450 (930.6005)
- Charging set (904.4200<sup>1)</sup>/01/03/04/05)
- Ruby ball probe Ø 3 mm
- Setting gauge
- Calibration certificate
- Instruction manual

<sup>1)</sup> according to country

# Height gauge

# Hi\_Cal

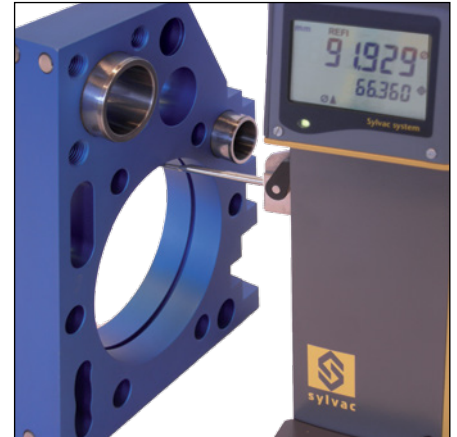
## APPLICATIONS



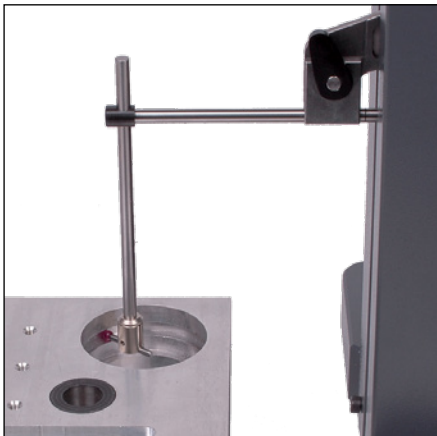
Depth measurement with accessories 930.2108 and 930.2105



Depth measurement with accessories 930.2108 and 905.2204



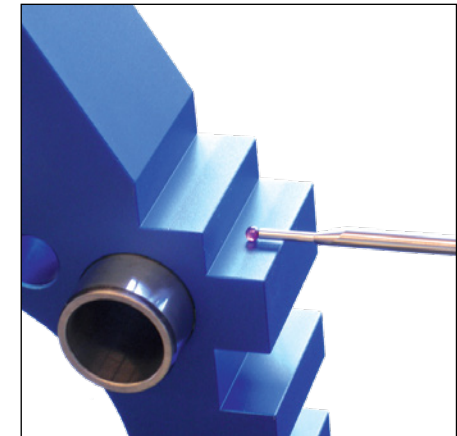
Internal measurement with ruby ball probe Ø 3 mm, 930.2101 (standard)



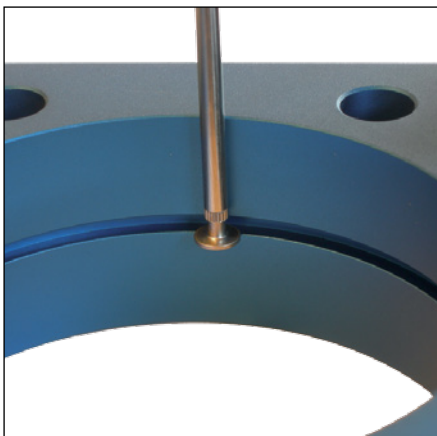
Internal groove measurement with accessories 930.2108, 930.2110 and 905.2207



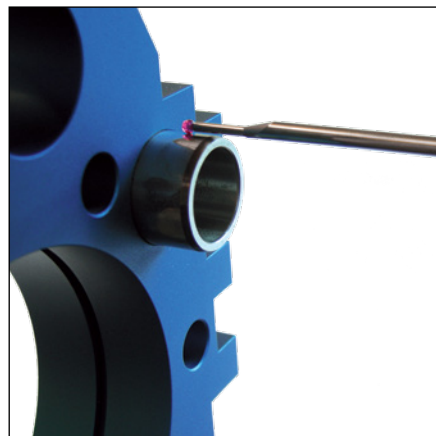
Taking the probe constant value with the setting bloc 930.2002 (standard)



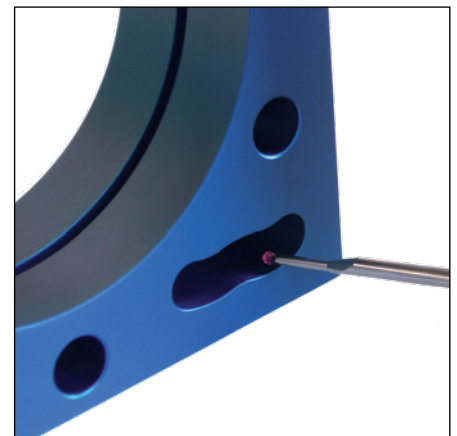
Heights and thicknesses measurements with the standard probe 930.2101



Internal groove measurement with accessories 930.2108, 930.2110 and 905.2205



External diameter measurement with the standard probe 930.2101

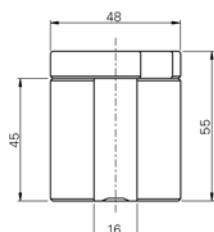
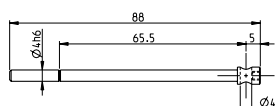
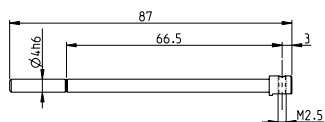
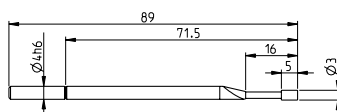
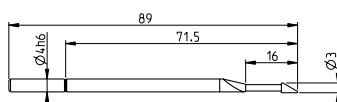
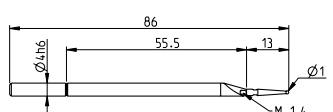
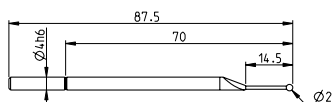
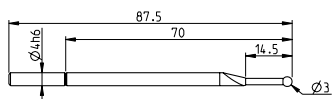


Min/Max/Delta measurements

# Height gauge

# Hi\_Cal

## ACCESSORIES

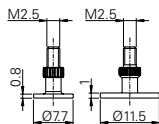
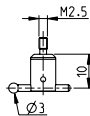
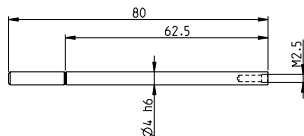
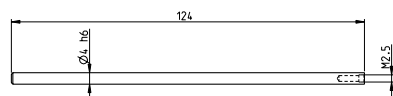
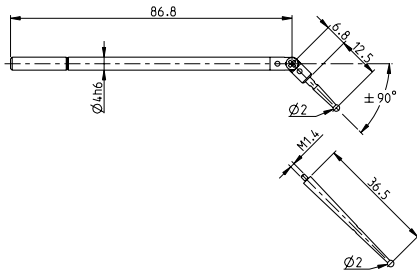


<b>930.2101</b>	Ruby ball probe Ø 3 mm
<b>930.2103</b>	Ruby ball probe Ø 2 mm
<b>930.2104</b>	Tungsten carbide ball probe Ø 1 mm
<b>930.2105</b>	Knife-edged measuring probe TC Ø 3 mm
<b>930.2106</b>	Cylindrical measuring probe TC Ø 3 mm
<b>930.2107</b>	Probe holder 90° M2.5
<b>930.2108</b>	Probe holder 90° Ø 4 mm
<b>930.2002</b>	Setting gauge
<b>904.4200</b>	Charging set 100-240V / 9V
<b>904.4205</b>	EUR cable, included in 904.4000 (CH - 904.4201)
<b>904.4204</b>	UK cable, included in 904.4000
<b>904.4203</b>	USA/JPN cable, included in 904.4000

# Height gauge

# Hi\_Cal

## ACCESSORIES



<b>930.2102</b>	Swivelling tungsten carbide ball probe (M1.4)
<b>930.2109</b>	Extension 124 mm M2.5
<b>930.2110</b>	Extension 80 mm M2.5
<b>905.2207</b>	Probe holder and ruby ball probe Ø 3 mm, M2.5
<b>905.2205</b>	Disk shaped anvils Ø 7.7 mm and Ø 11.5 mm, M2.5
<b>930.2150</b>	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
<b>930.2151</b>	Basic accessory set in wooden box Content : 930.2103, 930.2104, 930.2105, 930.2106
<b>904.4101</b>	External contact (foot-pedal)

# Height gauge

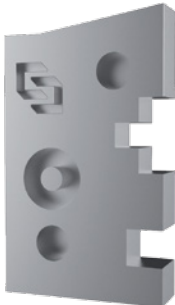
# Hi\_Cal

## ACCESSORIES



**930.2111**

Carbon probe-holder 200mm, Ø4mm



**930.2112**

Demonstration piece

D



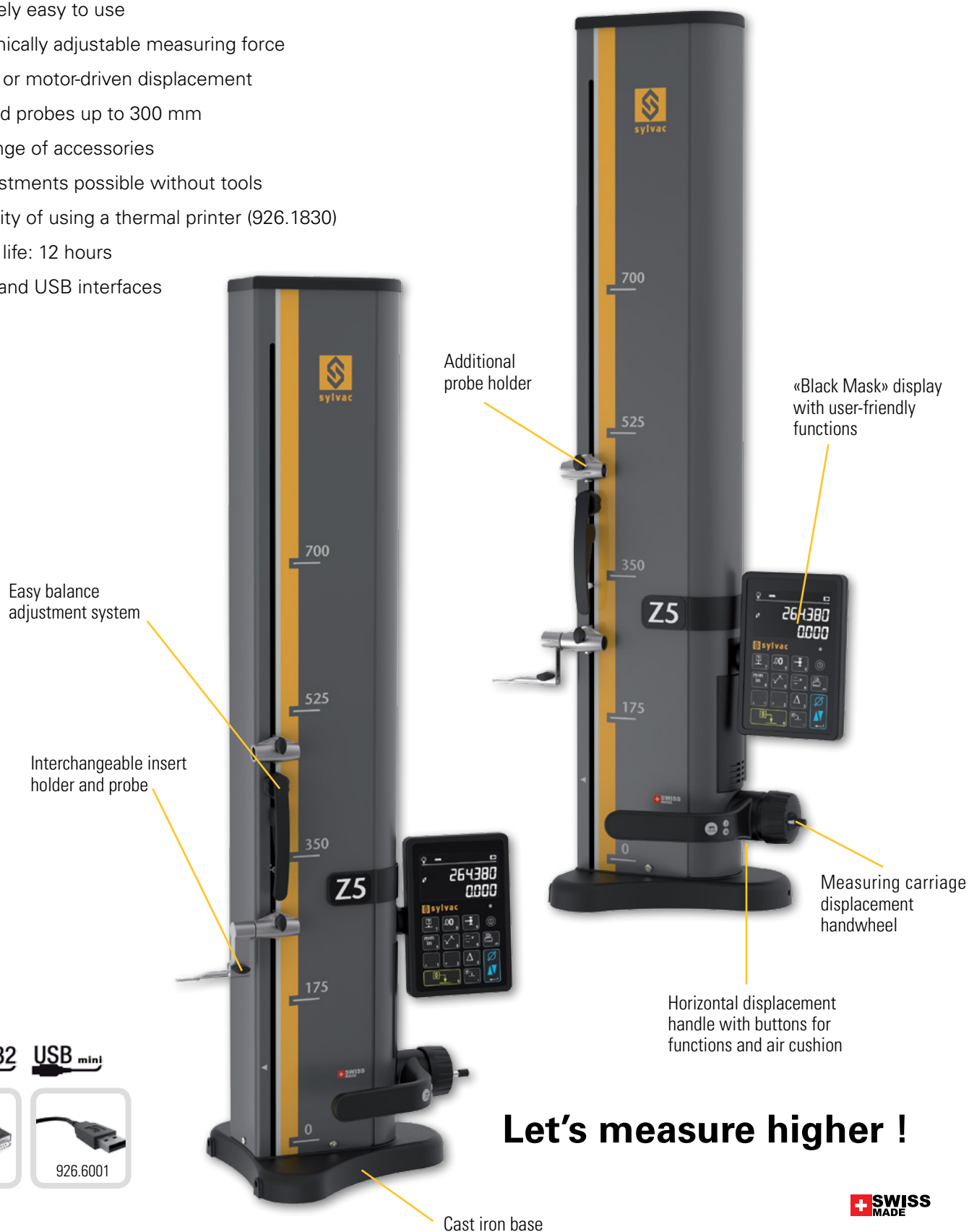


# Height gauge

# Z5

## DESCRIPTION

- Height gauge with measuring range 700mm
- Extremely easy to use
- Electronically adjustable measuring force
- Manual or motor-driven displacement
- Standard probes up to 300 mm
- Vast range of accessories
- All adjustments possible without tools
- Possibility of using a thermal printer (926.1830)
- Battery life: 12 hours
- RS232 and USB interfaces

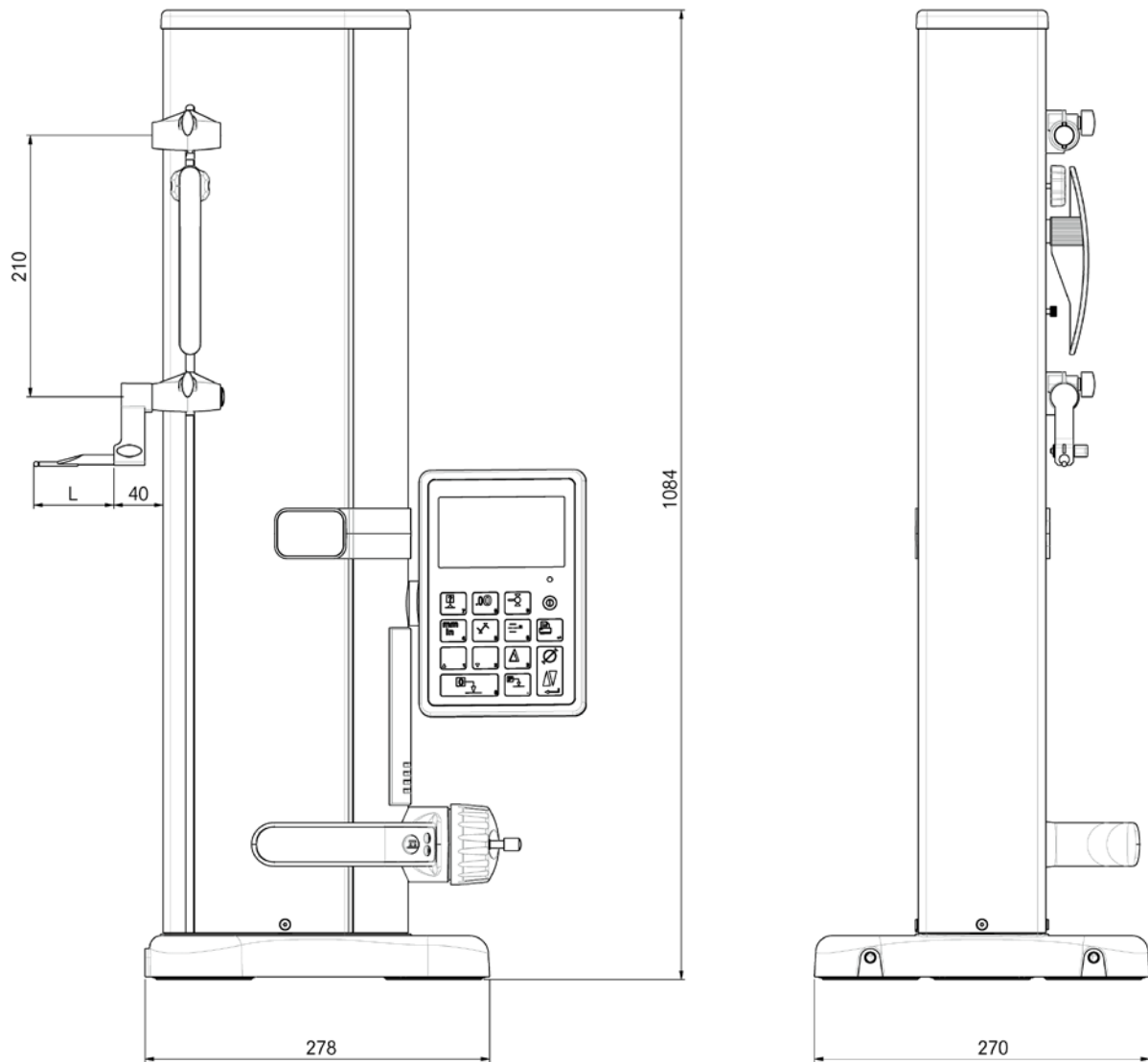


**Let's measure higher !**

# Height gauge

# Z5

## DIMENSIONAL DRAWINGS



## BASIC INSTRUMENT

- Instrument according to technical specifications
- Protection cover
- Charging set (904.4200<sup>1)</sup>/01/03/04/05)
- Ruby ball probe Ø 4 mm
- Setting gauge
- Calibration certificate
- Instruction manual

<sup>1)</sup> according to country

# Height gauge

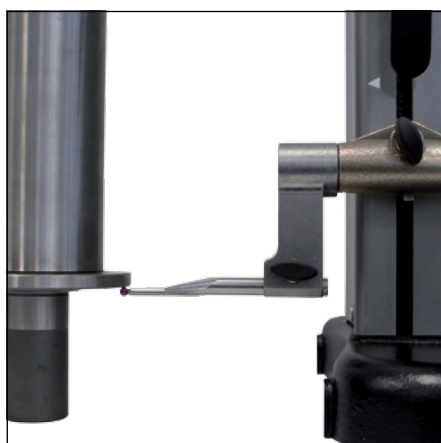
**Z5**

## TECHNICAL SPECIFICATIONS

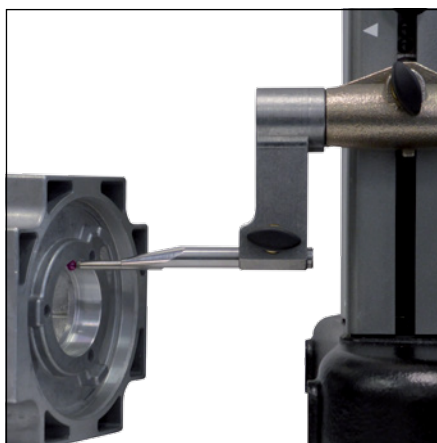
		936.0700
Measuring range	mm	711
Measuring range with extension	mm	1023
Max. Error	μm	2.5 + L / 300
Repeatability R <sub>MPE</sub>	μm	2
Frontal squareness deviation S <sub>MPE</sub>	μm	8
Maximum resolution	mm	0.001
Measuring force	N	0.75 ÷ 1.5
Autonomy	h	12
Connections	mm	USB / RS232
Air cushion		•
Weight	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.

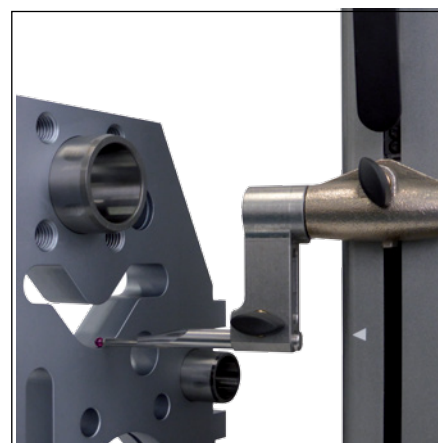
## APPLICATIONS



Height measurement



Diameter measurement



MIN/MAX/DELTA measurement

For the accessories, refer to Trimos website : [www.trimos.com](http://www.trimos.com)

# MEASURING PROBES AND DIGITAL DISPLAYS

Depending on the domain of application, Sylvac proposes two types of probes. The capacitive type offers a high accuracy on all the probe's range and a high repeatability. Coupled to the Sylvac display units, a linearisation can be performed to decrease the sampling error up to  $0.4\text{ }\mu\text{m}$ . They perfectly fit for applications on granite stands and Sylvac measuring benches. The inductive type proposes some probes with minimal dimensions and a very high repeatability. Insensitive to the dust, their IP65 rating allows them to be used in heavy-duty work. They are the solution for multigauging applications from 2 to 255 probes.

The Sylvac display units allow to connect a large range of products like linear probes, linear scales, handtools and dial gauges.

**Absolute capacitive measuring system**

**Digital display units RS232 and USB**

**Operational temperature 0 to  $+50^{\circ}\text{C}$**



# Measuring probes

## LISTING OF ALL MODELS

	TYPE	INDUCTIVE				CAPACITIVE						
		P2i	P2iP	P5i	P5iP	P5	P5BL	P5V	P5B	P5BVL	P5L	P5VL
ORDER NUMBER		900.1101	900.1102	900.1111	900.1112	900.1001	900.1002	900.1003	900.1004	900.1007	900.1006	900.1008
<b>RANGE</b>												
	±2 mm	•	•									
	5 mm					•	•	•	•		•	•
	± 5 mm			•	•							
	10 mm											
	12.7 mm											
	25 mm											
<b>EXECUTION</b>												
	Plain bearing					•		•			•	•
	B- Ball bearing	•	•	•	•		•		•	•		
	Pneumatic push		•		•							
	V- Vacuum lifter							•		•		•
	L- 90 degrees cable	*		*			•			•	•	•
	S- with rubber boot	•	•	•	•	•	•	•	•	•	•	•
<b>MECHANIC</b>												
	Diameter 8 mm h6	•	•	•	•	•	•	•	•	•	•	•
	Diameter 12 mm											
	Measuring anvil M2.5	•	•	•	•	•	•	•	•	•	•	•
<b>LIFTING</b>												
	Integrated		•		•			•		•		•
	Separate accessories					•	•		•		•	
<b>PROTECTION IP</b>												
	Protection rating IP (IEC 60529)	65	65	65	65	64	64	64	64	64	64	64

\* by accessories, see next pages

149

# Absolute digital measuring probes

## P12D

### DESCRIPTION

- New very high accuracy P12D probes Series
- Measuring range 12.7mm (½in)
- Resolution up to 0.01 µm
- Repeatability up to 0.08 µm
- Absolute system with integrated correction, no more pairing needed
- Patented dual inductive and capacitive system
- Available in very low force version
- USB connector or M8 industrial connector



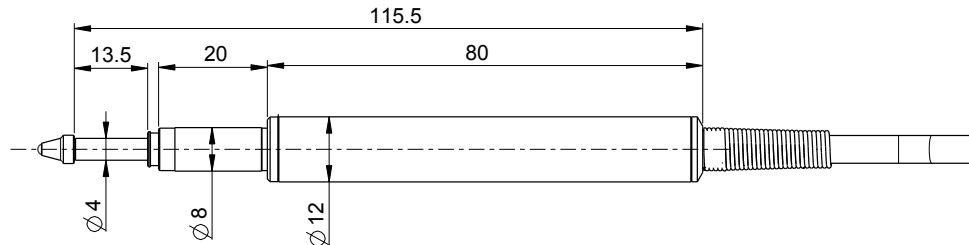
**SWISS  
MADE**

**IP54**

# Absolute digital measuring probes

## P12D

### DIMENSIONAL DRAWINGS



### TECHNICAL SPECIFICATIONS

High resolution		801.1012	801.1018	801.1212	801.1218
Resolution type		High resolution			
Type		P12D HR USB	P12D HR USB CF <sup>2)</sup>	P12D HR M8	P12D HR M8 CF <sup>2)</sup>
Force <sup>1)</sup>	N	0.2 - 0.3	0.06	0.2 - 0.3	0.06
Measuring range	mm	12.7			
Resolution	µm	0.01			
Max. Error	µm	0.6			
Repeatability	µm	0.08			
Nb measures/s		up to 300/s, according to configuration <sup>4)</sup>		up to 100/s, according to configuration <sup>5)</sup>	
Output type		USB		M8	
Cable output		Straight			

Standard resolution		801.2012	801.2017	801.2212*
Resolution type		Standard		
Type		P12D USB	P12D USB LF <sup>3)</sup>	P12D M8
Force <sup>1)</sup>	N	0.4 - 0.8	0.2 - 0.3	0.4 - 0.8
Measuring range	mm	12.7		
Resolution	µm	0.1		
Max. Error	µm	1		
Repeatability	µm	0.2		
Nb measures/s		up to 300/s, according to configuration <sup>4)</sup>		up to 100/s, according to configuration <sup>5)</sup>
Output type		USB		M8
Cable output		Straight		

<sup>1)</sup> ± 20%, vertical position

<sup>2)</sup> CF = constant force

<sup>3)</sup> LF = low force

<sup>4)</sup> depends on resolution and software

<sup>5)</sup> depends on resolution and number of probes

\* Availability : August 2017



# Absolute digital measuring probes

## P12D

### BASIC INSTRUMENT

- Probe according to technical specifications
- Cable 1.8 m
- Stainless steel contact point with tungsten carbide ball Ø 2 mm
- Quickstart
- Calibration certificate

### APPLICATIONS



Absolute digital probes connected to a PC, measures displayed by Sylcom.



Absolute digital probes connected to a D300S (maximum resolution 0.1 µm)



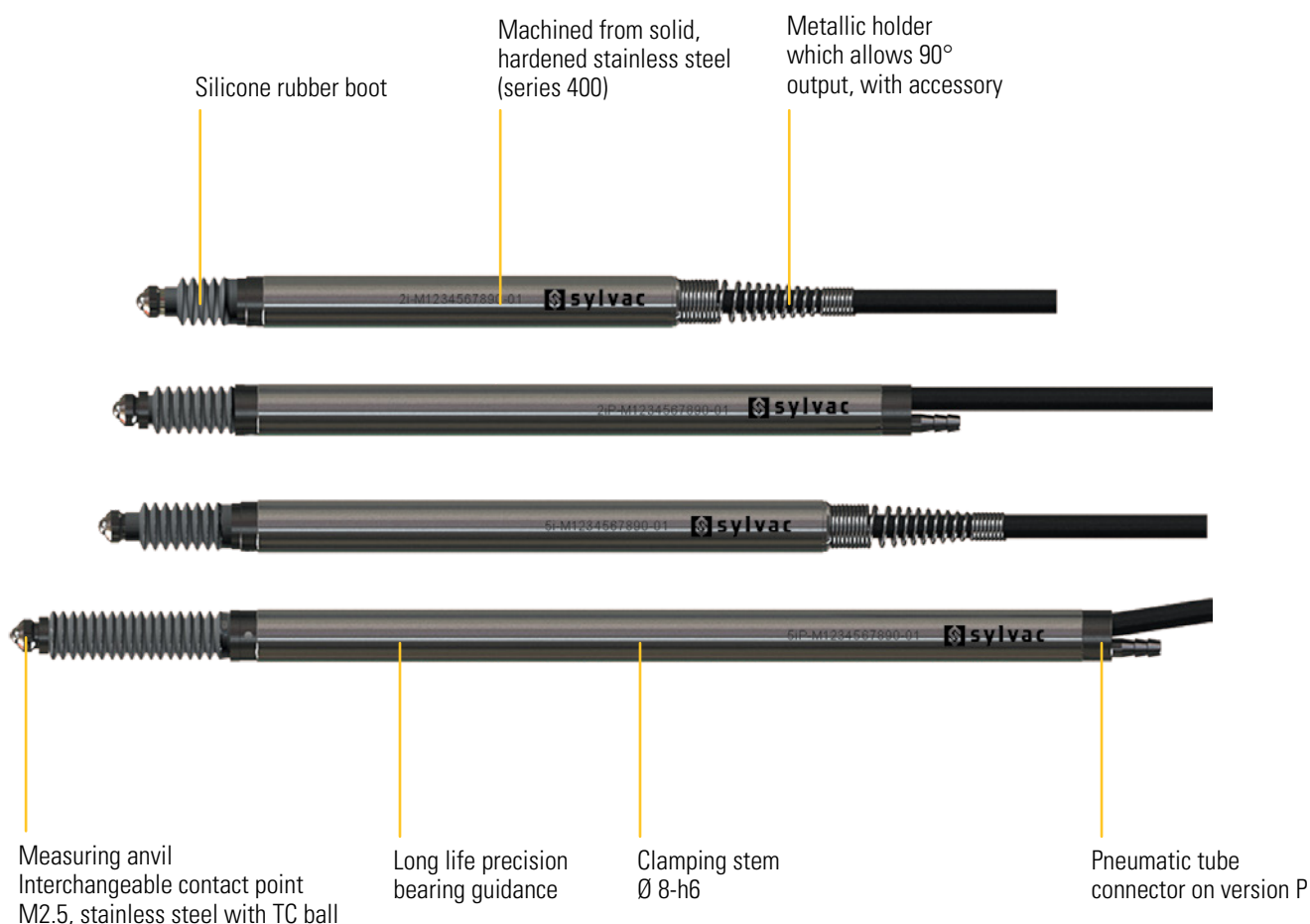
Probes P12D connected to a D62S.



# Inductive measuring probes

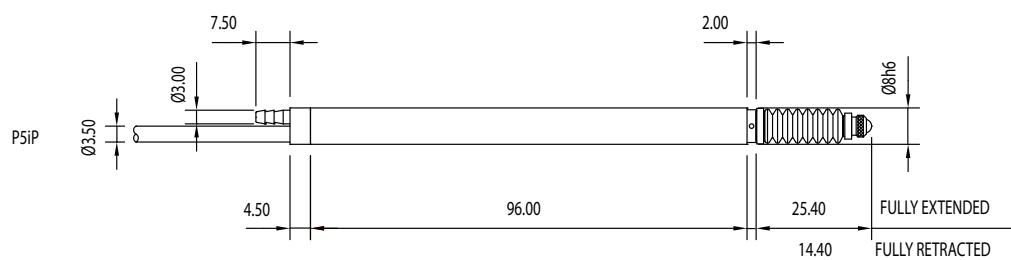
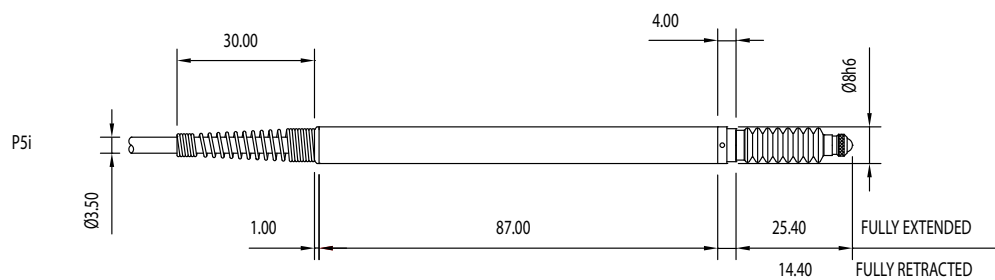
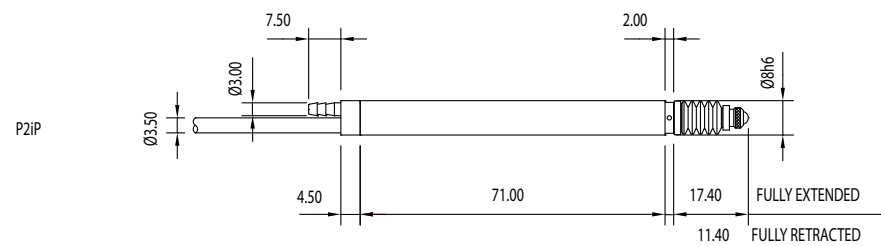
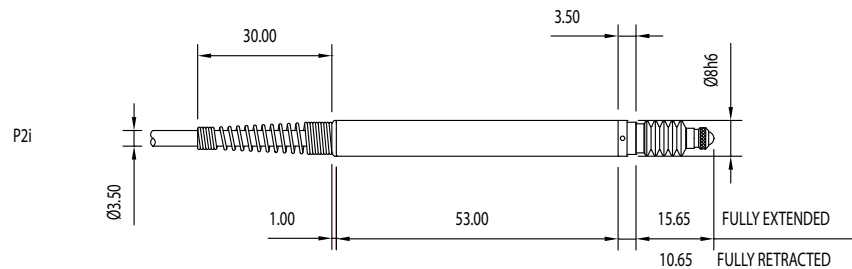
## DESCRIPTION

- Inductive measuring probes specially designed for measurement by comparison
- Available in 2 versions: spring push and pneumatic push
- Long life precision bearing guidance (tested up to 13 million cycles)
- Resolution  $<0.0001$  mm
- Repeatability  $0.15 \mu\text{m}$
- Measuring range  $\pm 2\text{mm}$  and  $\pm 5\text{mm}$
- Compatible with D300SV2, D70i and D400S units through M-Bus multiplexer units
- High data speed
- Operating temperature  $+5$  to  $+80^{\circ}\text{C}$
- IP65 protected



# Inductive measuring probes

## DIMENSIONAL DRAWINGS



# Inductive measuring probes

## TECHNICAL SPECIFICATIONS

		P2i	P2iP	P5i	P5iP
Travel	mm	±2	±2	±5	±5
Pre-travel	mm	0.15	0.8	0.15	0.3
Post-travel	mm	1.35	1.2	0.85	0.7
Resolution		Digital : user selectable to <0.1µm			
Repeatability	µm	0.15	0.15	0.15	0.15
Moving mass	g	3.4	3.4	3.7	3.7
Accuracy of reading %		0.5	0.5	0.5	0.5
Body diameter	mm	8h6			
IP rating		IP65			
Temperature	%FS/°C	0.01			

## MEASURING FORCE

		P2i	P2iP	P5i	P5iP
Standard	N	0.7	0.7 / 0.4 bar - 2.6 / 1 bar	0.7	0.7 / 0.4 bar - 2.6 / 1 bar

Tolerance ± 20%, measuring probe in middle course, outgoing spindle.

## PNEUMATIC PROBES

Pneumatic probes are fully retracted when they are not supplied with air. For continual reliable operation and to maximise working life, the air supply should be clean and dry. 60% maximum relative humidity, filtered to better than 2µm particle size. Air pressure : 0.4-0.8 bar, don't go over 0.8 Bar because the rubber boot can be damaged.

## LIST OF REFERENCES

P2i				P5i			
P2i	900.1101	P2iP	900.1102	P5i	900.1111	P5iP	900.1112

P = pneumatic push

# Inductive measuring probes

## BASIC INSTRUMENT

- Probe according to technical specifications
- Cable 2 m
- Stainless steel contact point with tungsten carbide ball Ø 3 mm (905.2204)
- Calibration certificate

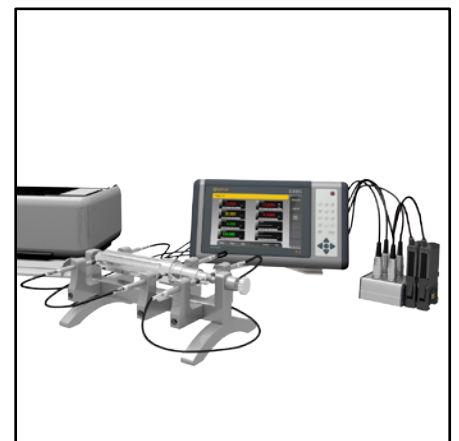
## APPLICATIONS



Inductives probes connected to a D70I.



Inductives and Solartron probes connected to a M-Bus modul coupled with D400S.

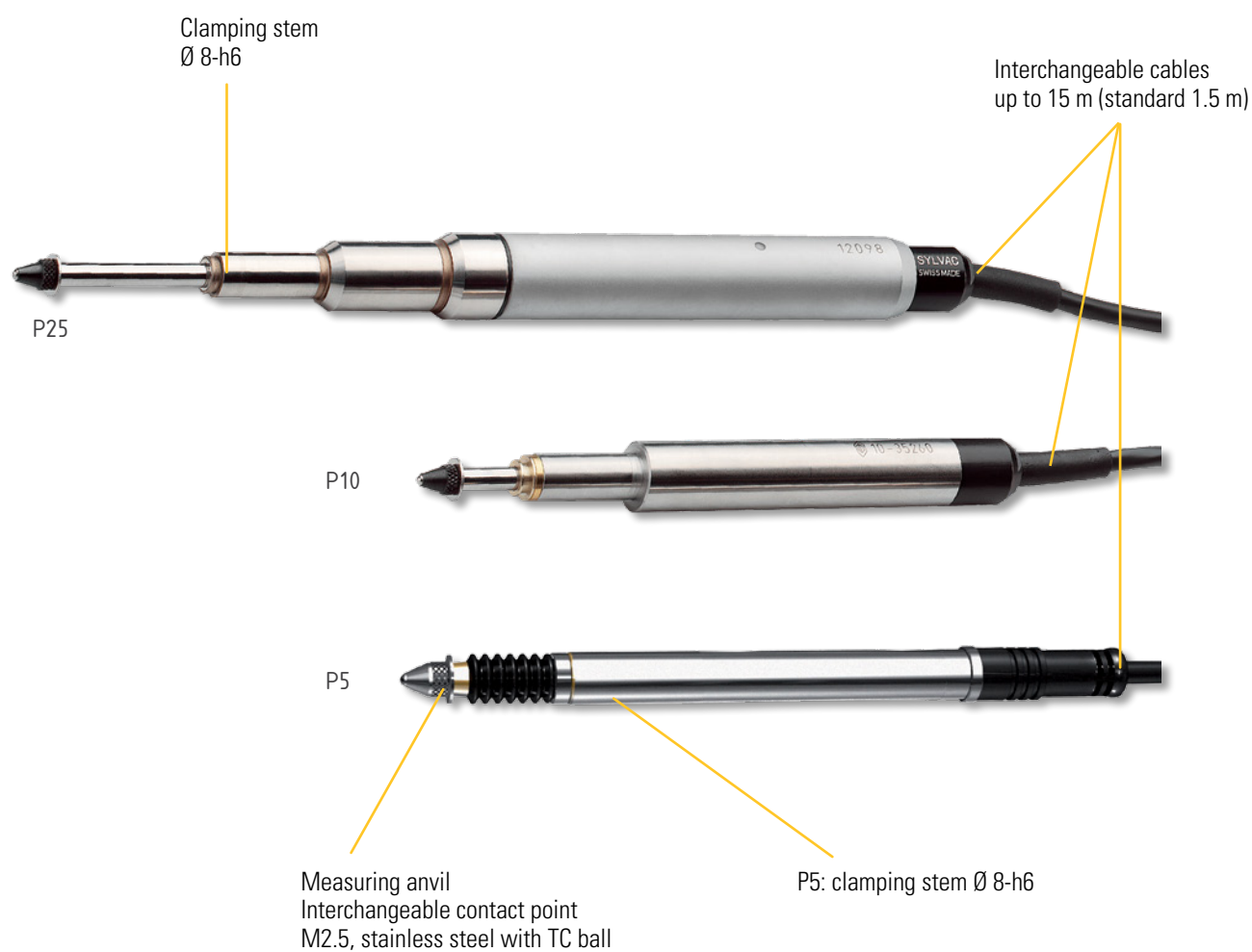


Inductives probes connected to a M-Bus modul coupled with D300S.

# Capacitive measuring probes

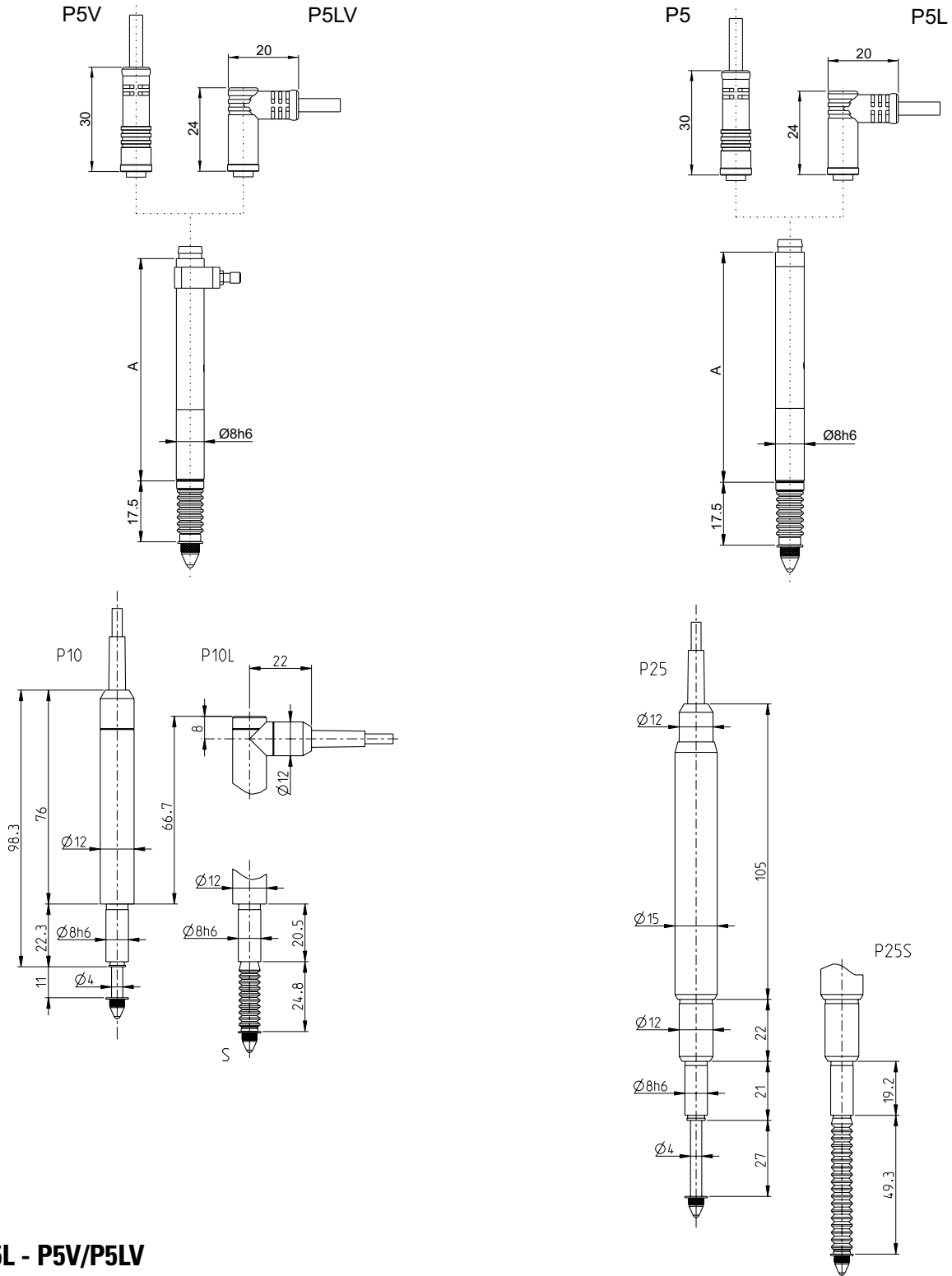
## DESCRIPTION

- Capacitive absolute measuring probes, plunger type
- Resolution 0.0001 mm
- Measuring range from 5 to 25 mm
- Plain bearing or ball bearing, integrated vacuum lifter on P5
- Compatible with all Sylvac digital units
- Excellent linearity
- Interchangeable cables on most types



# Capacitive measuring probes

## DIMENSIONAL DRAWINGS



### P5/P5L - P5V/P5LV

Guiding axis	Measure A
Plain bearing	72
Ball bearing	64



# Capacitive measuring probes

## TECHNICAL SPECIFICATIONS

		P5	P10	P25
Travel	mm	5	10	25
Pre-travel	mm	0.7	0.5	0.8
Max. Error <sup>1)</sup>	µm	1	1	1.2
Repeatability	µm	0.2	0.2	0.2
Moving mass	g	3.7	4.1	9.6

<sup>1)</sup> With Master unit. See as well the specifications of the pair Measuring probe/display unit.

## MEASURING FORCE

		P5	P10	P10S	P25	P25S
Standard	N	0.60-1.20	0.60-0.80	0.70-1.25	0.60-1.00	0.65-1.4
Minimum	N	---	< 0.10	---	< 0.15	---
Low	N	0.20-0.25	0.20-0.25	---	0.20-0.30	---
High	N	1.00-1.80	0.70-1.50	---	0.70-1.60	---
Lateral max	N	0.70	0.60	---	0.30	---

Tolerance ± 20%, measuring probe in vertical position, outgoing spindle.

## LIST OF REFERENCES

P5				P10				P25			
P5	900.1001	P5BV	900.1005	P10	900.1010	P10L LF	900.1014.91	P25	900.1025	P25S	900.1027
P5BL	900.1002	P5L	900.1006	P10 LF	900.1010.91						
P5V	900.1003	P5BVL	900.1007	P10S	900.1012	P10LS	900.1016				
P5B	900.1004	P5LV	900.1008	P10L	900.1014						

B = ball bearing / V = Vacuum lifter / L = 90° cable / LF = low force / S = with rubber boot

## BASIC INSTRUMENT

- Probe according to technical specifications
- Calibration certificate
- Cable 1.5 m
- Stainless steel contact point with tungsten carbide ball Ø 2 mm (905.2204)

# Capacitive measuring probes

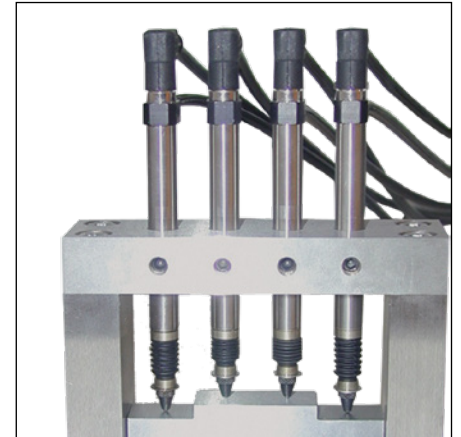
## APPLICATIONS



P5 probes connected to a D302 coupled with D300S for OD, concentricity and cylindricity measurements



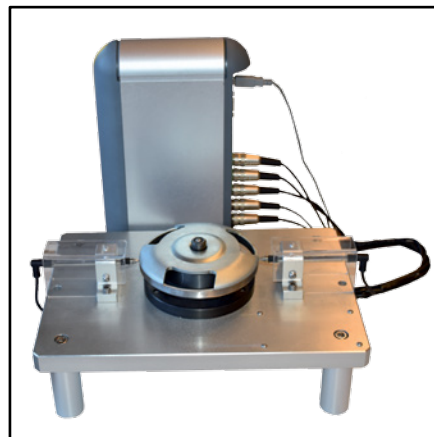
P5 probes connected to a D50S unit measuring the external diameter of a shaft



Combined probes for the measurement of several heights



Capacitive probes connected to a D70S.



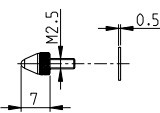
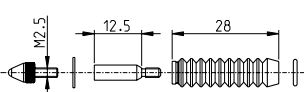
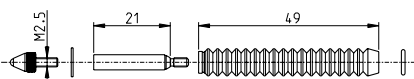
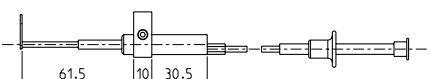
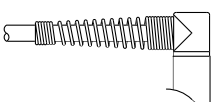
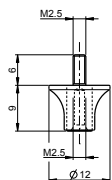
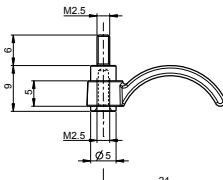
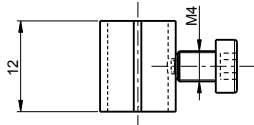
Capacitive probes connected to a D200S



Capacitive probes on a jig

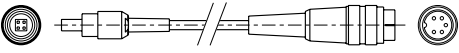
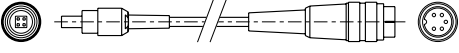
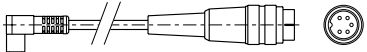
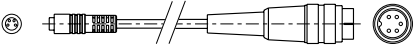
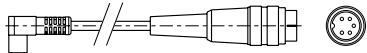
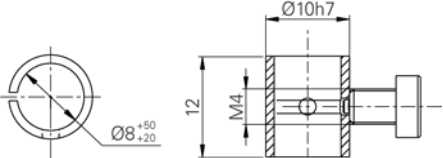
# Measuring probes

## ACCESSORIES

		P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
	<b>905.2204</b>					•	•	•	•	•
	<b>901.2003</b>							•		
	<b>901.2004</b>								•	
	<b>901.2005</b>							•	•	•
	<b>901.2012</b>						•	•	•	
	<b>901.2013</b>						•	•	•	
	<b>901.2014</b>						•	•	•	
	<b>901.5110</b>	•		•						
	<b>902.2225</b>	•	•	•	•	•	•	•	•	•
	<b>902.2224</b>	•	•	•	•	•	•	•	•	•
	<b>905.2231</b>	•	•	•	•	•	•	•	•	•

# Measuring probes










## ACCESSORIES

			P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
	<b>901.5002</b>	Cable 1.5 m							•		
	<b>901.5012</b>	Cable 1.5 m								•	
	<b>901.5032</b>	Cable 1.5 m bent							•		
	<b>901.5042</b>	Cable 1.5 m						•			
	<b>901.5052</b>	Cable 1.5 m bent						•			
	<b>905.2231</b>	Adapting socket + screw	•	•	•	•	•	•	•	•	•



# Digital display

## TABLE OF CORRESPONDENCES

																	
Direct input	Probes	2 <sup>c)</sup>	2 <sup>c)</sup>	2 <sup>a)</sup>		2 <sup>c)</sup>	2 <sup>H)</sup>	2 <sup>i)</sup>		1 <sup>c)</sup>	8 <sup>c)</sup>	2 (4) <sup>c)</sup>	2 <sup>c)</sup>	2 <sup>c)</sup>	4 <sup>c)</sup>	4 <sup>c)</sup>	
	RS/USB instruments									1 / -	0	1 / 6					
	External contact	1	1	1		1 <sup>p)</sup>	1 <sup>p)</sup>	1 <sup>p)</sup>	1 <sup>p)</sup>	1	1	2	1	1	1	1	1
	Mbus											• <sup>5)</sup>					•
	Air gages								2								
Additional input	Probes									8 <sup>1)</sup>	24 <sup>2)</sup>	32 <sup>3)</sup>					99 <sup>9)</sup>
	USB instruments				1							30 <sup>4)</sup>					99 <sup>9)</sup>
	Analog display			•	•	•	•	•	•								•
Output	RS 232	•	•	•	•	•	•	•	•	•	•	•					•
	RS 485											•	•	•	•	•	
	USB			• <sup>10)</sup>	• <sup>10)</sup>	• <sup>10)</sup>	• <sup>10)</sup>	• <sup>10)</sup>	• <sup>10)</sup>		•	•	•	•	•	•	•
	Opto-coupled output										•	•	•	•	•	•	• <sup>6)</sup>
	Analogic													•		•	
	Bluetooth® wireless technology				•												
Functions	Direct zero setting	•	•	•	•	•	•	•	•	•	•	•					•
	Direct zero setting per channel	•	•	•	•	•	•	•	•	•	•	•					•
	Selection of resolution	•	•	•	•	•	•	•	•	•	•	•					•
	Selection of measuring direction	•	•	•	•	•	•	•	•	•	•	•					•
	PRESET	•	•	•	•	•	•	•	•	•	•	•					•
	Tolerance indicators			•	•	•	•	•	•	•	•	•					•
	Classification (max 8 classes)											•					• <sup>11)</sup>
	Min, Max, Delta				•	•	•	•	•	•	•	•					•
	A ± B	•	•		•	•	•	•	•		•	•	•	•			•
	Mathematics functions				•						•	•			• <sup>8)</sup>	• <sup>8)</sup>	•
	Scanning of the channels				•	•	•	•	•		•	•					•
	Histogram											•					•
	Statistics											•					•
	Memorization										•	•					•
	Simultaneous display of the channels			•	•	•	•	•	•		•	•					•
	Dynamic measurement				•	•	•	•	•		•						•
	Calibration (max. 25 points)		•			•		•	•			•	•	•	•	•	•
	Time and date display				•												

<sup>1)</sup> with unit (s) additional (s) D108

<sup>2)</sup> with 3 D200S units

<sup>3)</sup> 32 probes with units D200S or maximum 32 with D302 / D304 or M-Bus

<sup>4)</sup> with USB-Hub powered

<sup>5)</sup> depending on model, see details on pages D300S

<sup>6)</sup> with modul MB-IO

<sup>8)</sup> A ± B ± C ± D ±, depending on model

<sup>9)</sup> Maximum 99 instruments on D400S through M-BUS (MB-4D & MB-8D digimatic)

<sup>10)</sup> Mini-USB

<sup>11)</sup> Up to 16 classes for 1 channel only

<sup>p)</sup> Binder 3 poles for D70S or Jack for D70H, D70A and D70I

<sup>c)</sup> capacitive, <sup>H)</sup> Heidenhain, <sup>i)</sup> inductive, <sup>a)</sup> absolute digital

\* Maximum 62 mixed on the D300S instruments

# Digital display

## D50S

### DESCRIPTION

- Digital display with 2 probe inputs
- Data output RS232C
- Power supply by external unit
- Light and compact
- Ease of use
- Correction of linearity on both channels (D50S PRO)

Resolution up to 0.0001 mm

Great clear and luminous display

Combination of channels A+B; A-B

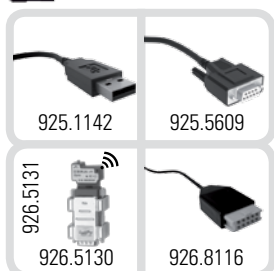


Direct functions

Feet

**SWISS  
MADE**

**RS232**



**D50S PRO**

Correction of linearity.  
Higher precision

# Digital display

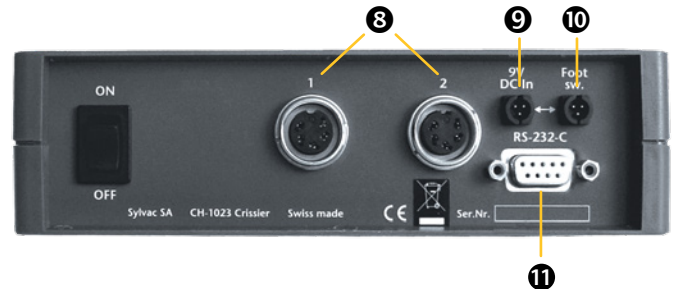
## D50S

### DISPLAY

- ❶ Conversion mm/inch
- ❷ Selection of resolution
- ❸ Selection of measuring direction
- ❹ REL and ABS measurement
- ❺ PRESET function
- ❻ Data sending
- ❼ Selection of measuring mode: channel 1 ; channel 2 ; channel 1-2 ; channel 1+2



- ❽ Probe inputs
- ❾ Power supply connection
- ❿ External contact connection
- ⓫ RS232 input/output



### TECHNICAL SPECIFICATIONS

		804.1050	804.1060
Type		D50S	D50S PRO
Max. Error	μm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9	P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8
Repeatability	μm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2
Sizes	mm	180 x 75 x 50	180 x 75 x 50
Weight	kg	0.3	0.3
Case		Terblend Plastic	Terblend Plastic
Protection according to IEC 60529		IP40	IP40
S_Connect		RS232 <sup>1)</sup>	RS232 <sup>1)</sup>
Programmable by PC		•	•

<sup>1)</sup> see cables chapter

### BASIC INSTRUMENT

- Unit according to technical specifications
- Feet (pair)
- Charging unit according to country (904.4200)
- Instruction manual



## APPLICATIONS



Measuring a shaft with 2 probes (A+B)



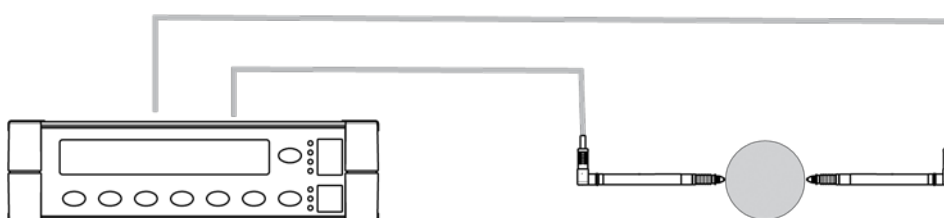
PS15 with connected to a D50S



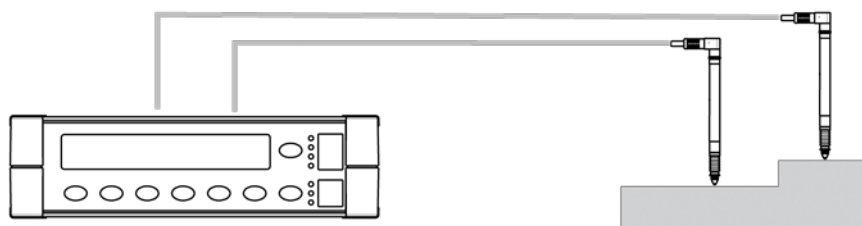
Simple measurement with one probe

## COMBINATIONS OF PROBES

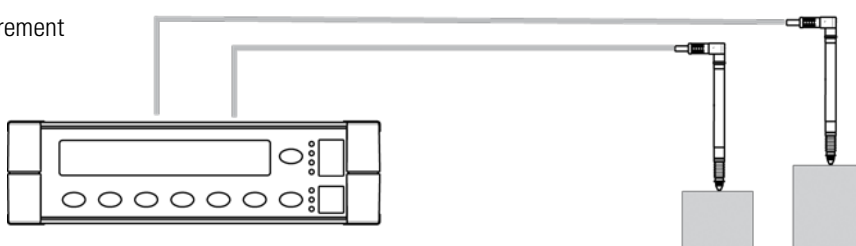
Diameter = 1+2



Difference = 1-2



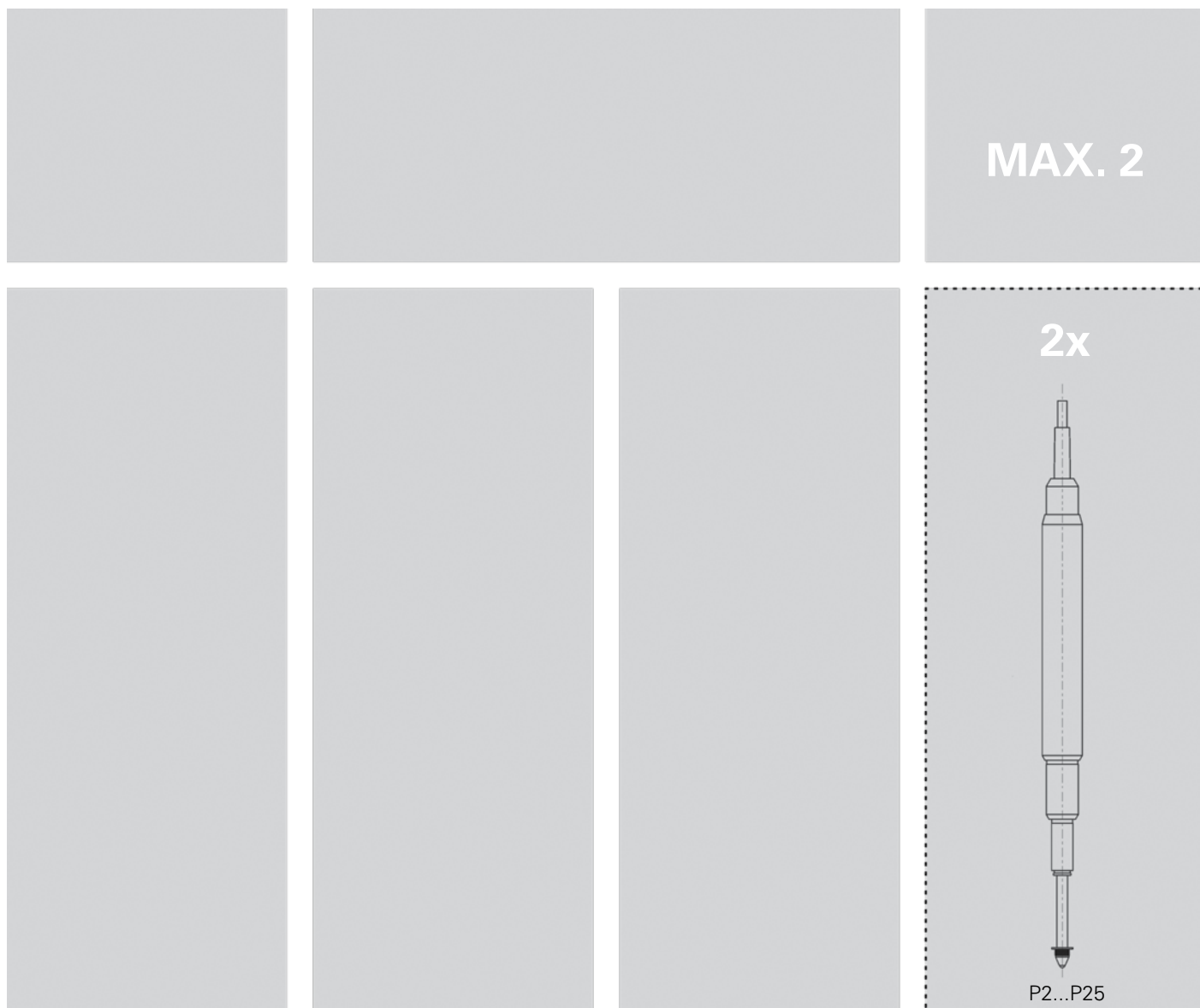
Individual measurement



# Digital display

# D50S

## POSSIBILITIES OF CONNECTION



# Digital display

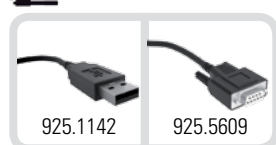
## D62S

### DESCRIPTION

- New compact display unit exclusively for P12D probes with industrial connector M8
- 2x P12D probe inputs (M8)
- Innovative modern design
- Large touch screen display 4.3" with intuitive functions
- Shockproof construction
- Built-in battery autonomy 8 hours (depends on model)
- Indication of the global tolerance (depends on model)
- Data output RS232, USB or Bluetooth® technology\* (depends on model)
- Programmable by PC



RS232



925.1142

925.5609

mini-USB



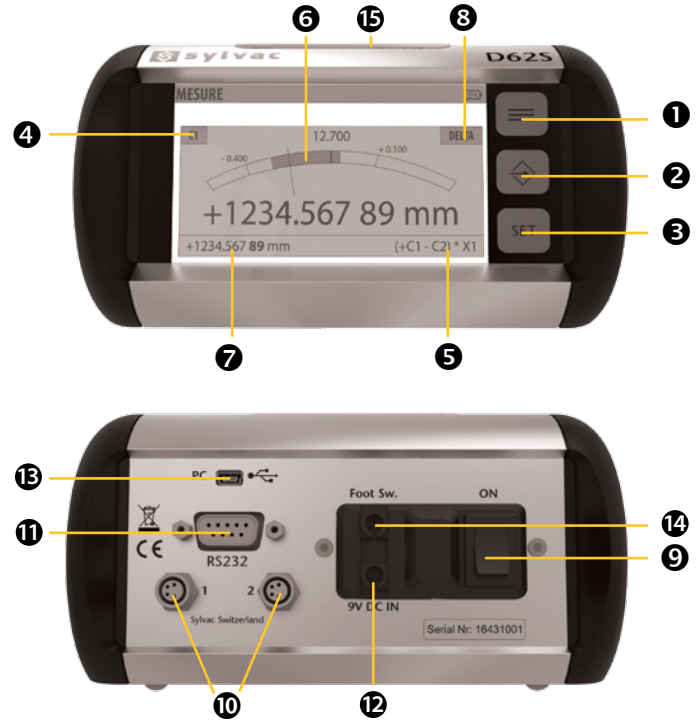
926.6001

# Digital display

## D62S

### DISPLAY

- ① Menu display
- ② Favourite key
- ③ SET
- ④ Selection of channels
- ⑤ Formula <sup>1)</sup>
- ⑥ Analog display
- ⑦ Current value, mode MIN/MAX/DELTA <sup>1)</sup>
- ⑧ Measuring mode MIN/MAX/DELTA <sup>1)</sup>
- ⑨ Button ON/OFF
- ⑩ Probes inputs (M8 - P12D)
- ⑪ RS232 inputs/outputs
- ⑫ Power-supply
- ⑬ mini/USB Device (PC connection)
- ⑭ Footswitch input
- ⑮ Light indicator of the global tolerances <sup>1)</sup>



### TECHNICAL SPECIFICATIONS

	804.1062	804.1063
Model	D62S	D62S Advanced
Inputs	2x M8 for Sylvac absolute digital probes	
Resolution	μm	0.01
Max. error	μm	P12D HR : 0.6
Repeatability	μm	P12D HR : 0.08
Sizes	mm	170 x 90 x90
Weight	kg	0.75
Case	Aluminium and thermoplastic elastomer	
Protection according to IEC 60529	IP40 (Front face : IP54)	
Connections	USB (Device) <sup>1)</sup> , RS232	Bluetooth® wireless technology*, RS232, USB (Device) <sup>2)</sup>
Indicator of the global tolerance		•
Battery		•
Time and date display (RTC)		•

<sup>2)</sup> see cables chapter

# Digital display

## D62S

### BASIC INSTRUMENT

- Unit according to technical specifications
- Charging unit according to country (904.4200)
- Instruction manual

### APPLICATIONS



Probes P12D connected to a D62S.

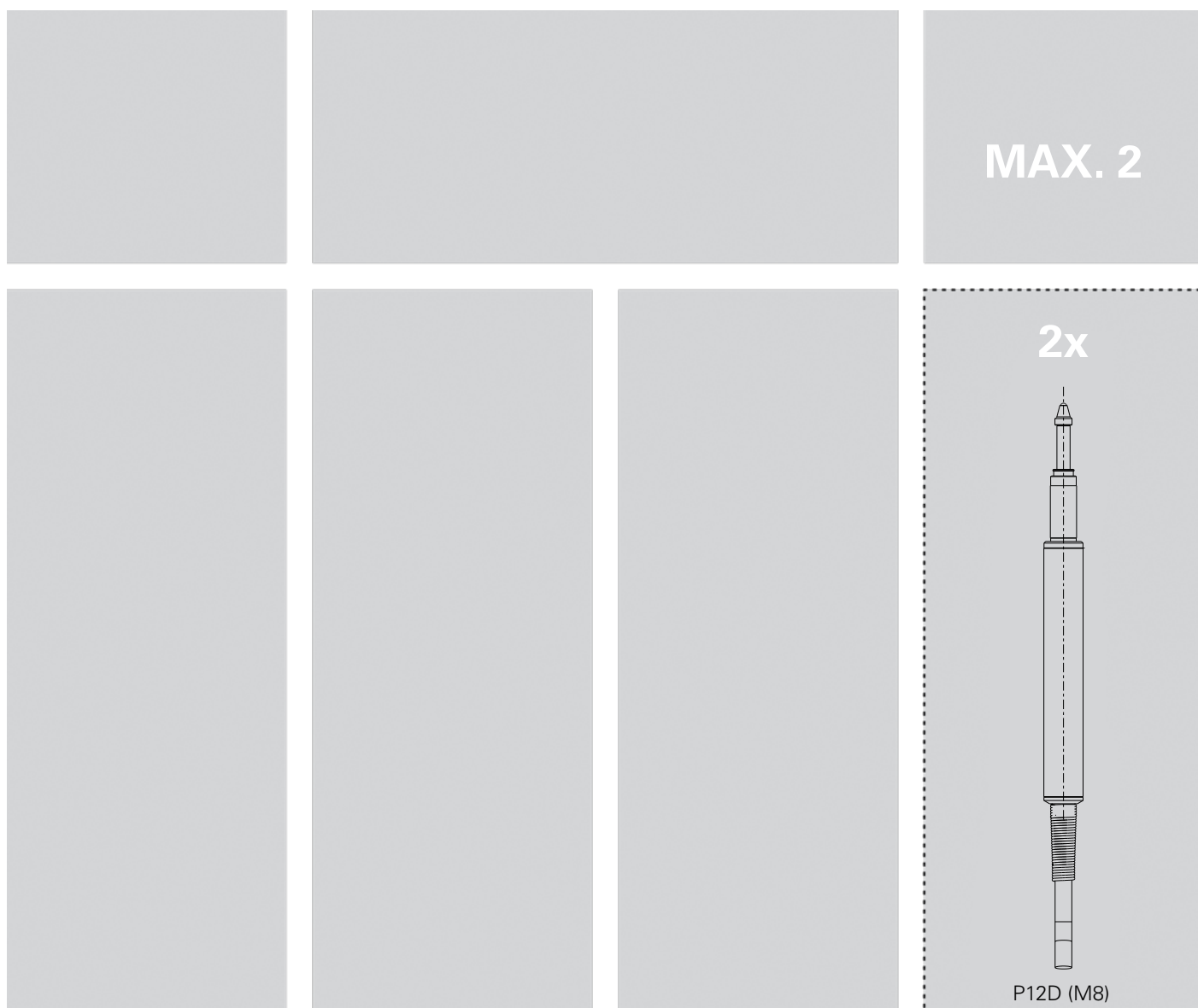


D62S sending data on the Sylvac BT Smart App for smartphones.

# Digital display

# D62S

## POSSIBILITIES OF CONNECTION

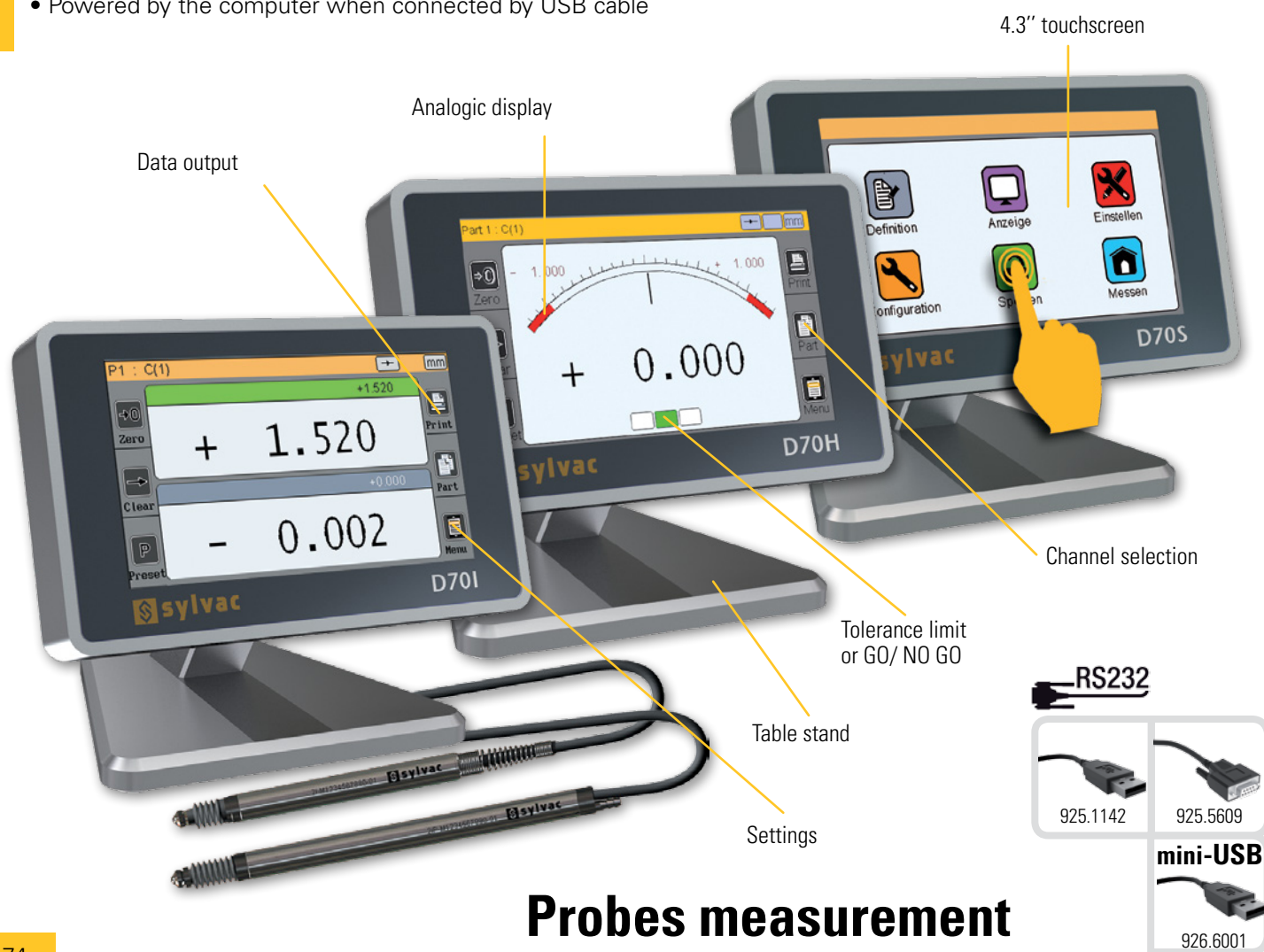


# Digital display

## D70S/H/I

### DESCRIPTION

- 4.3" touch screen display
- Available in 3 versions:
  - D70S for Sylvac capacitive probes
  - D70I for Sylvac inductive probes (also compatible with Tesa and Mahr probes)
  - D70H for Heidenhain ST/MT probes (Mitutoyo and Magescale probes with adapter)
- All versions with 2 probes/instruments inputs
- Display resolution selectable up to 0.00001 mm (on D70H)
- Simple or double display with bargraph, needle or no-tolerances
- Probe's combination : (C1, C2, C1-C2 ...)
- Direct measurement or Min, Max, Average, Max-Min...
- User friendly interface
- Very robust construction (Aluminium)
- USB connection «Keyboard» unidirectional and RS232 bidirectional
- No driver, no software to be installed
- Compatibility Excel and SPC
- Powered by the computer when connected by USB cable



## Probes measurement

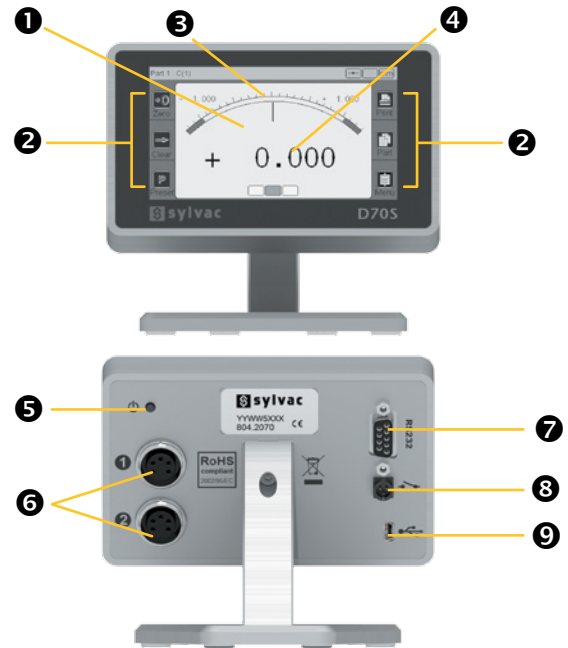


# Digital display

## D70S/H/I

### DISPLAY

- ❶ 4.3" Touchscreen display
- ❷ User friendly interface
- ❸ Analogic display
- ❹ Digital display
- ❺ ON/OFF
- ❻ 2 Capacitive / Inductive / 1VPP probes input (depending model)
- ❼ RS232 output
- ❽ 1 external contact
- ❾ Mini-usb and and supply/data



### TECHNICAL SPECIFICATIONS

804.2070		
Type		D70S
Sizes	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
S_Connect		mini-USB / RS232
Probes		Sylvac Capacitive probes
Programmable by PC		●

804.2072		
Type*		D70H
Sizes	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
S_Connect		mini-USB / RS232 (1x1)
Probes		Heidenhain ST/MT probes (Mitutoyo & Magescale with adapter)
Programmable by PC		●

\* Not available in Switzerland



# Digital display

# D70S/H/I

## TECHNICAL SPECIFICATIONS

		804.2071
Type		D70I
Sizes	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
S_Connect		mini-USB / RS232 (1x1)
Probes		Sylvac Inductive probes (Tesa & Mahr compatible)
Programmable by PC		●



D70S : Capacitive probes



D70I : Inductive probes



D70H : Heidenhain probes

## APPLICATIONS



D70S with capacitive Sylvac probes



D70H with Heidenhain probes



D70I with inductive probes

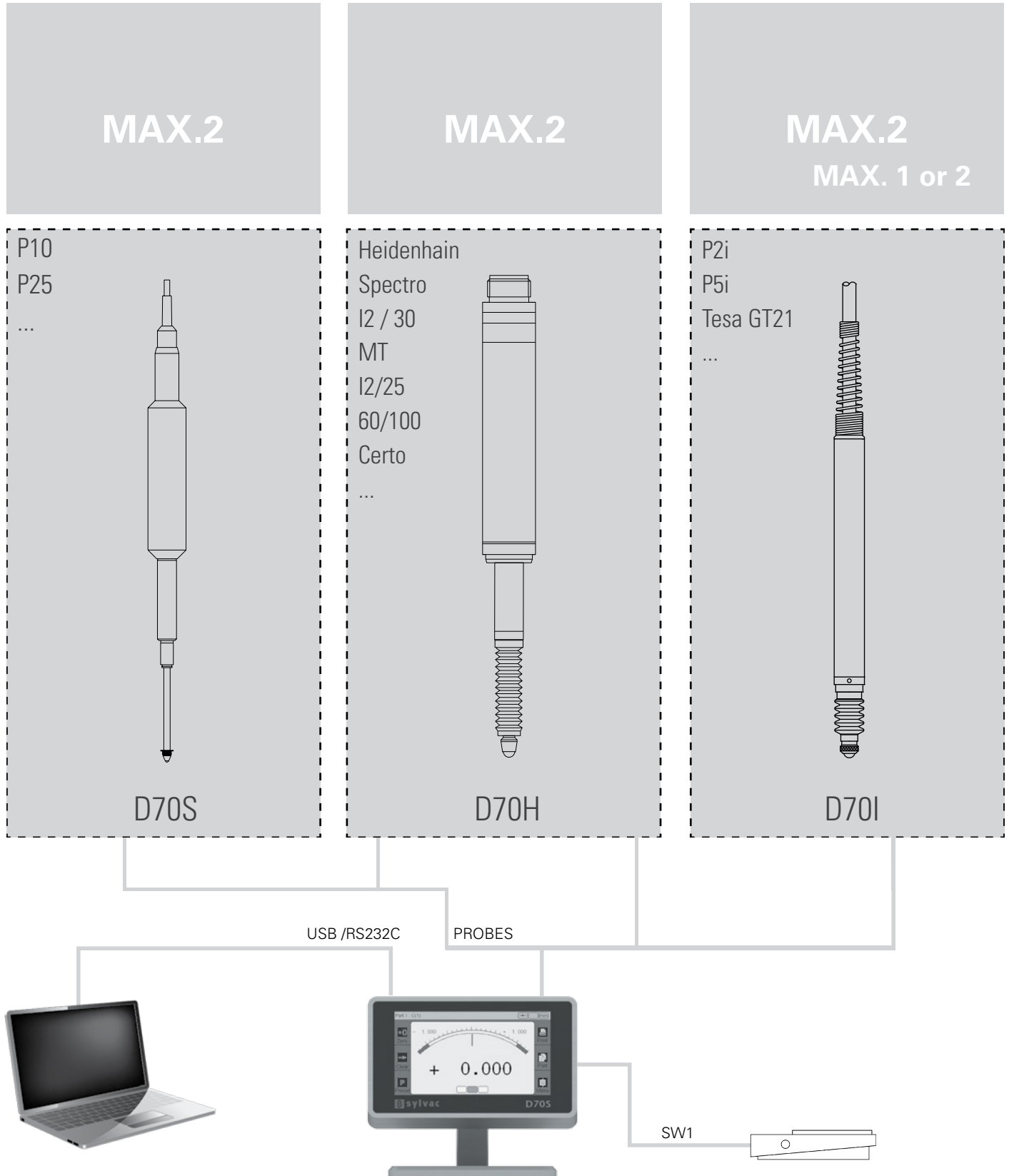
## BASIC INSTRUMENT

- Unit according to technical specifications
- Table base
- Charging unit
- Instruction manual (CD-ROM)

# Digital display

## D70S/H/I

### POSSIBILITIES OF CONNECTION



# Digital display

## D70A

### DESCRIPTION

- 4"3 touch screen display
- Compatible with all brands of plug and air gages
- Available in 2 versions : 1 or 2 inputs
- Input for MB-IO
- Simple or double display with bargraph, needle or no-tolerances
- Direct measurement or Min, Max, Average, Max-Min...
- User friendly interface
- Very robust construction (Aluminium)
- USB connection «Keyboard» unidirectional and RS232 bidirectional
- No driver, no software to be installed
- Compatibility Excel and SPC
- Powered by the computer when connected by USB cable

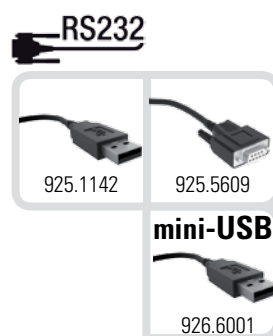
## Air measurement



4.3" touchscreen

Table stand

\* plug and air gages available on request

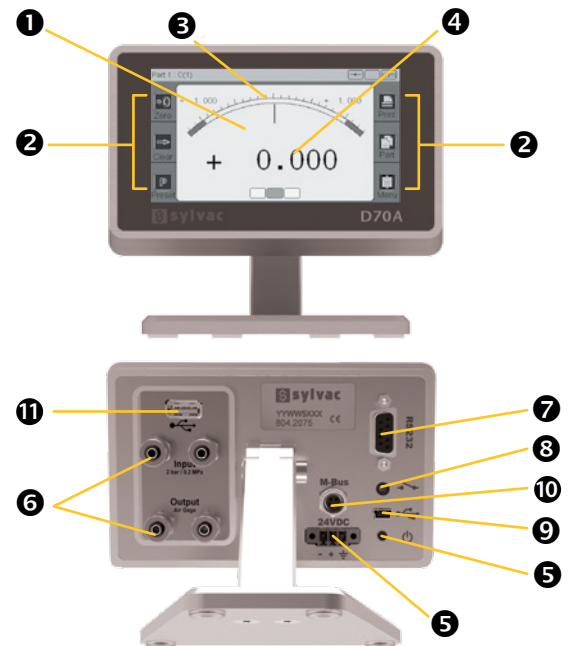


# Digital display

## D70A

### DISPLAY

- ❶ 4.3" Touchscreen display
- ❷ User friendly interface
- ❸ Analogic display
- ❹ Digital display
- ❺ ON/OFF
- ❻ 1 or 2 air gages inputs (depending model)
- ❼ RS232 output
- ❽ 1 external contact
- ❾ Mini-usb and and supply/data
- ❿ USB key input
- ⓫ Power-supply 24VDC



### TECHNICAL SPECIFICATIONS

804.2074		
Type		D70A - 1 input
Sizes	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
S_Connect		mini-USB / RS232
Instruments		Plug gages and air gages
Programmable by PC		●

804.2075		
Type*		D70A - 2 inputs
Sizes	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
S_Connect		mini-USB / RS232 (1x1)
Instruments		Plug gages and air gages
Programmable by PC		●

# Digital display

# D70A

## TECHNICAL SPECIFICATIONS



D70A - 1 input



D70A - 2 inputs

## APPLICATIONS AND ACCESSORIES



D70A with air and plug gauges



Air kit for D70A (804.2203)



D70A with accessory 804.2202 (panel mounting)

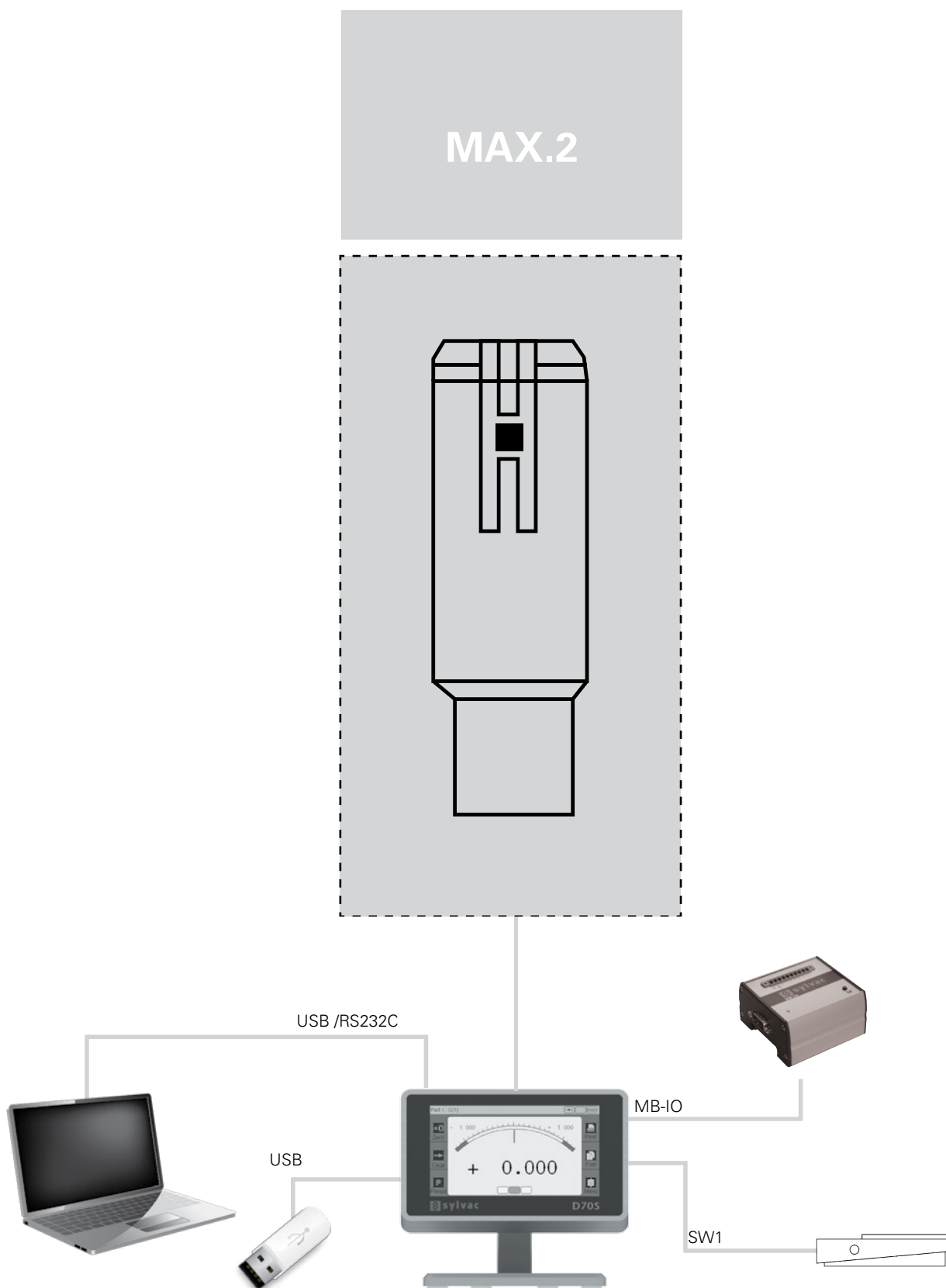
## BASIC INSTRUMENT

- Unit according to technical specifications
- Table base
- Charging unit
- Instruction manual (CD-ROM)
- 2 additional sets of restrictors

# Digital display

# D70A

## POSSIBILITIES OF CONNECTION



# Digital display

# D80S

## DESCRIPTION

- Digital unit with 1 probe input (8 channels)
- Resolution up to 0.0001 mm
- Data output RS232C
- Opto-coupled output (command signals)
- Command for pneumatic lifting unit
- Selection of measuring direction
- Possibility of increasing the precision by calibrating the unit with the probe
- Powered by charging unit

CCFL graphic display  
with backlight

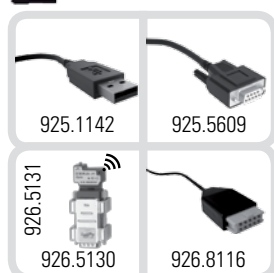


Ergonomic keyboard

Adjustable base

**SWISS  
MADE**

**RS232**

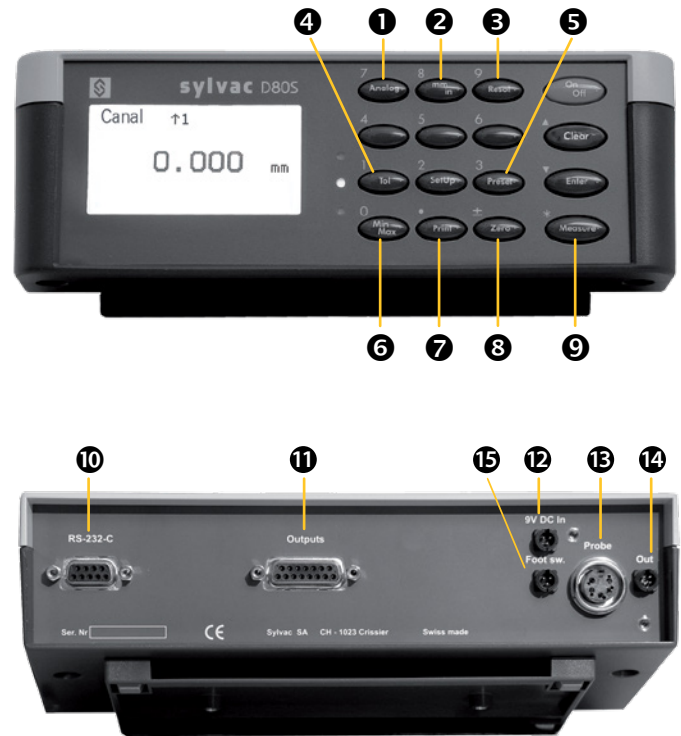


# Digital display

# D80S

## DISPLAY/SOFTWARE

- 1 Activation of analog display
- 2 Selection of unit mm/inch
- 3 Selection of resolution
- 4 Tolerance indicators with LED
- 5 PRESET function
- 6 Display Min/Max/Delta
- 7 Data sending
- 8 Zero setting
- 9 Configuration channel
- 10 RS232 input/output
- 11 Analog and digital Opto-coupled output
- 12 External power supply connection
- 13 Capacitive probe input
- 14 Connection D102/D108 unit
- 15 External contact connection



## TECHNICAL SPECIFICATIONS

804.1080		
Type		D80S
Max. Error	μm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9
Max. Error <sup>1)</sup>	μm	P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8
Repeatability	μm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2
Sizes	mm	227 x 77 x 132
Weight	kg	0.8
Case		Terlend Plastic
Protection rating according to IEC 60529		IP50
S_Connect		RS232 <sup>2)</sup>
Programmable by PC		•

<sup>1)</sup> Probe and unit calibrated

<sup>2)</sup> see cables chapter

E



# Digital display

## D80S

### BASIC INSTRUMENT

- Unit according to technical specifications
- Base
- External contact (foot-pedal)
- Charging unit according to country (904.4200)
- Instruction manual

### APPLICATIONS



Measurement of 4 dimensions on 4 channels with one single probe



Using 3 measuring channels with 3 separated probes

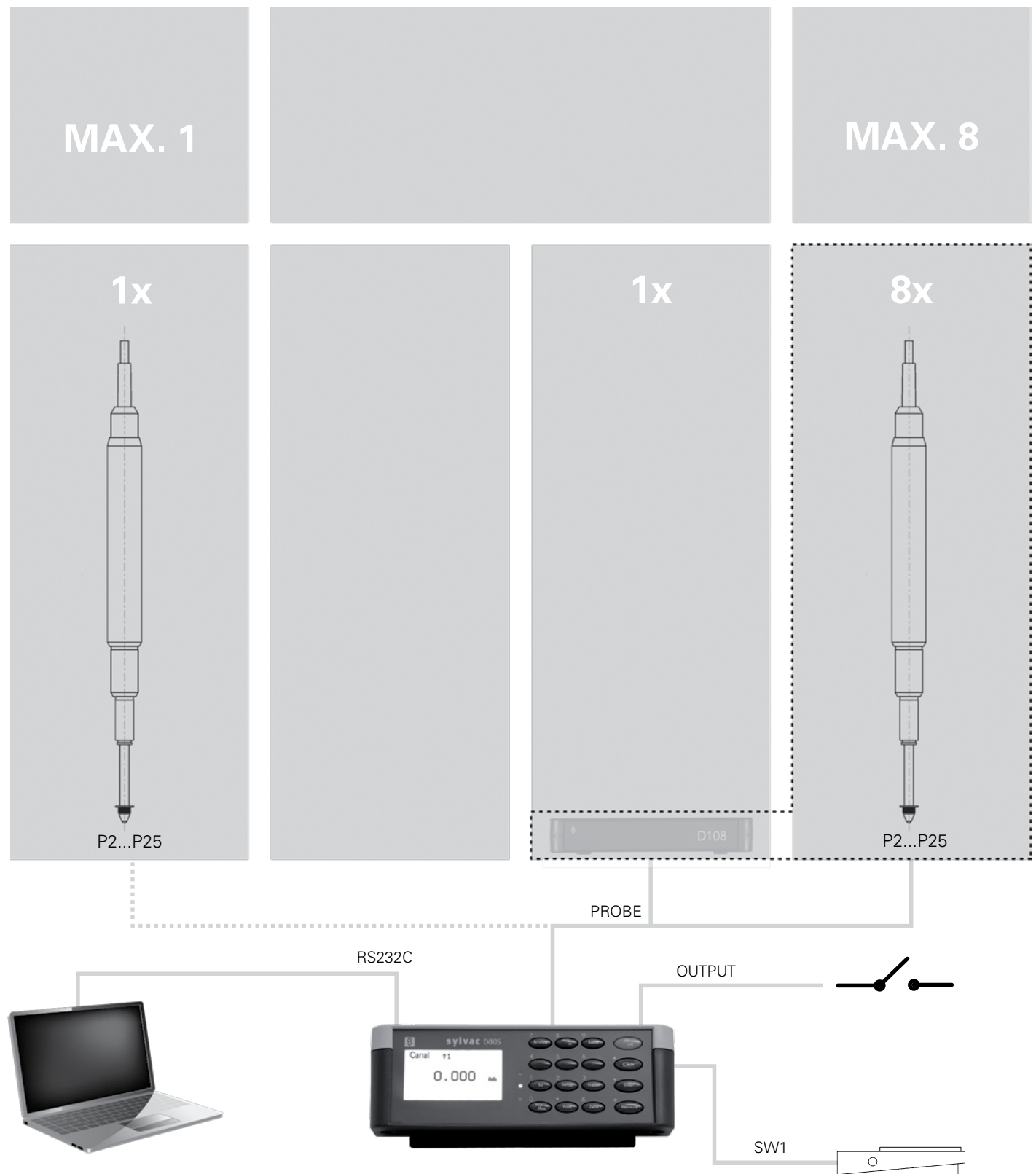


Affichage de la mesure d'un banc PS17 sur une D80S

# Digital display

# D80S

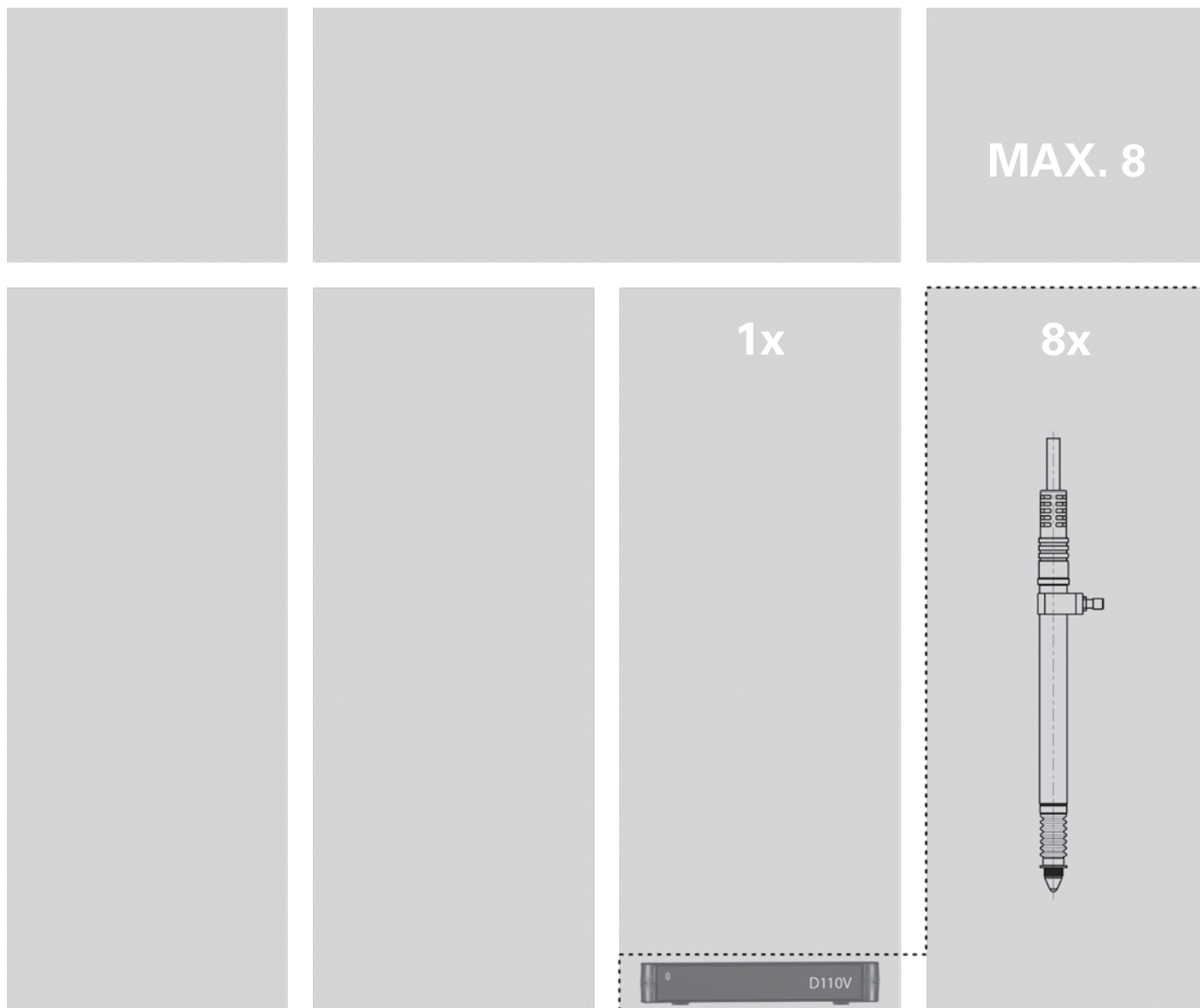
## CONNECTION DIAGRAM



# Digital display

# D80S

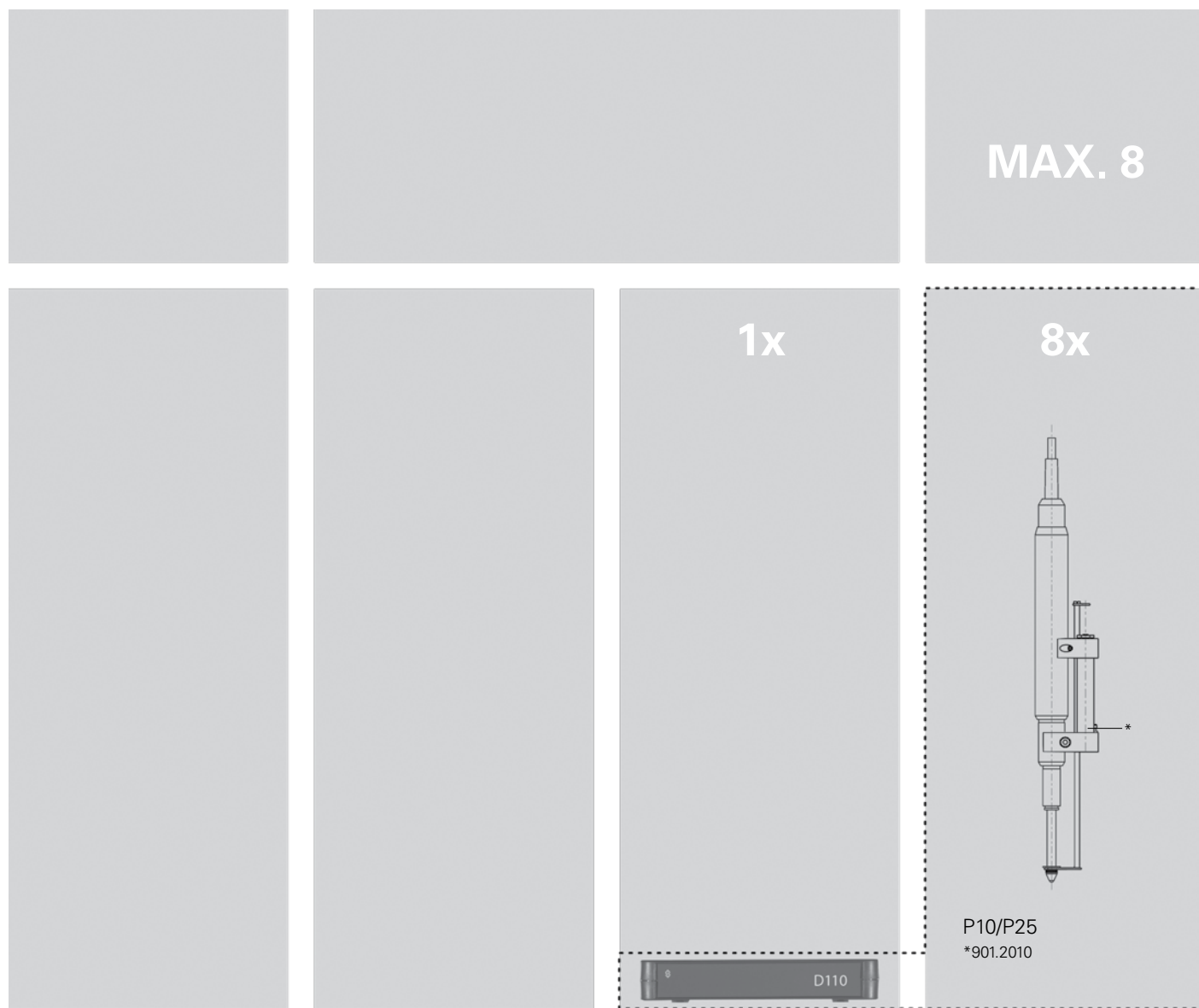
## POSSIBILITIES OF D110V LIFTER



# Digital display

# D80S

## POSSIBILITIES OF D110 LIFTER

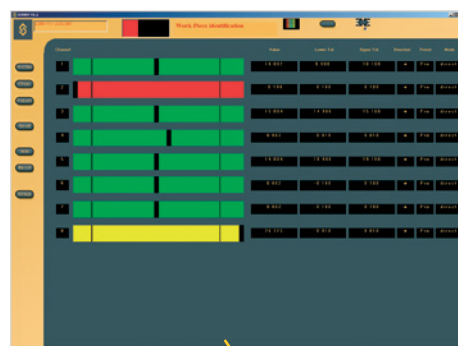


# Multiplexer unit

## D200S

### DESCRIPTION

- Multiplexer with 8 inputs (for Sylvac probes P2 to P25)
- Dynamic measurement (200 mes/s)
- Ideal for the layout conception of multi-gauging
- Command for pneumatic lifting unit
- Software allowing the treatment of up to 24 channels simultaneously (bargraph)
- Sending of the measured values into Excel, notepad or in specific files
- Creation of sequences for sending data
- Mathematic combinations between channels
- Standalone use possible



8 inputs for Sylvac probes

Software allowing the treatment of up to 24 channels simultaneously (bargraph)

Tolerance indicators

Connection by  
USB (2x)  
or RS232 (1x)

Opto-coupled digital  
output rack

Connection by  
USB (2x)  
or RS232 (1x)

**SWISS  
MADE**

USB

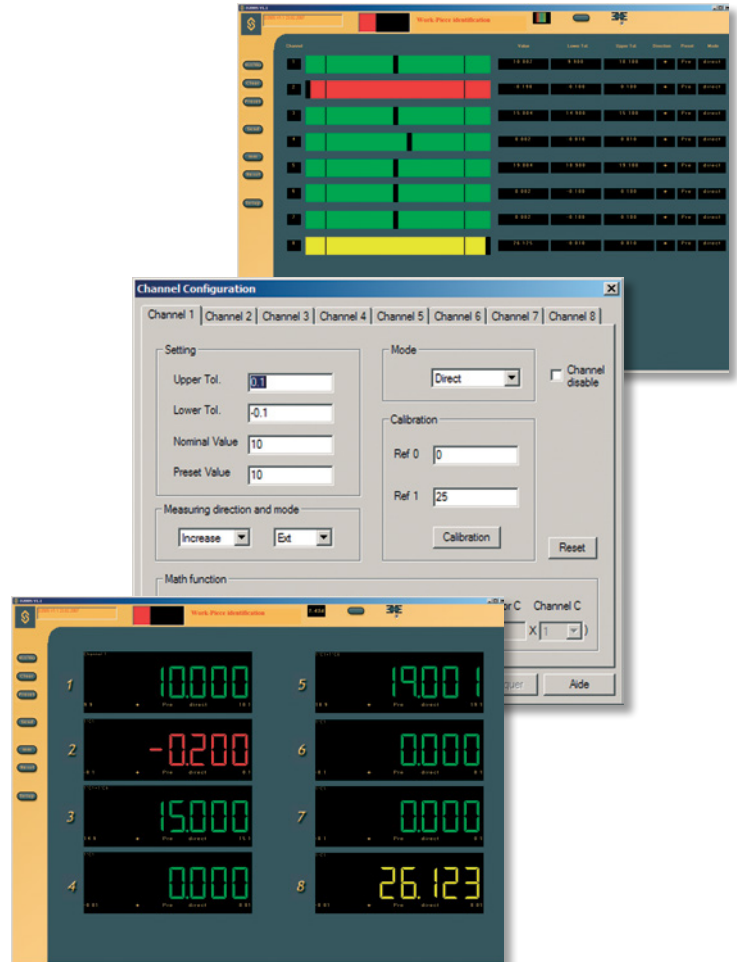
804.1210

# Multiplexer unit

# D200S

## DISPLAY/SOFTWARE

- Selection of unit mm/inch
- Selection of resolution
- PRESET function
- Sending Data
- Tolerance indicators with LED
- Min/Max/Delta display
- Individual selection of measuring direction
- Switchable digital/bargraph display
- Global tolerance status of the measured part
- Programming channels screen
- Sending Sequences of Data
- External contact configuration
- Electrical external contact configuration
- Open / Save configurations
- Transfer configuration to D200S unit



## TECHNICAL SPECIFICATIONS

804.1200		
Type		D200S
Max. Error	μm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9
Repeatability	μm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2
Frequency of measurement		200 values /second
Sizes	mm	304 x 171 x 61
Weight	kg	1.2
Case		Aluminium profile, Terlend plastic, ABS and aluminium vanished
Protection rating according to IEC 60529		IP50
S_Connect		USB / RS232 <sup>1)</sup>
Programmable by PC		•

<sup>1)</sup> see cables chapter

# Multiplexer unit

# D200S

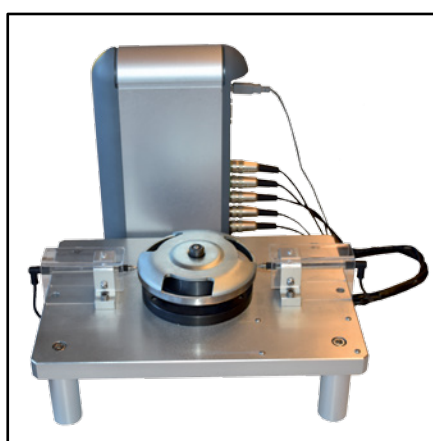
## BASIC INSTRUMENT

- Instrument according to technical specifications
- Feet for use in vertical position
- Charging unit according to country (904.4200)
- PC Connection cable type USB (804.1210)
- CD with D200S software
- Instruction manual

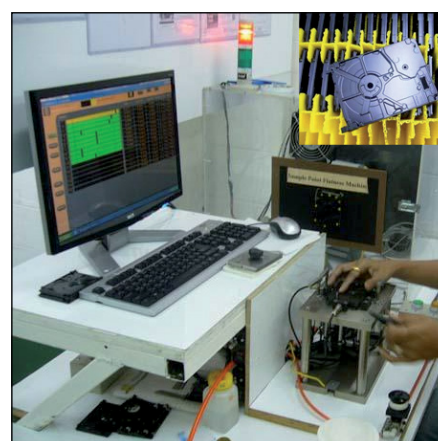
## APPLICATIONS



Dynamic measurement of several diameters, (OD and ID) of a shaft



Capacitive probes connected to a D200S.



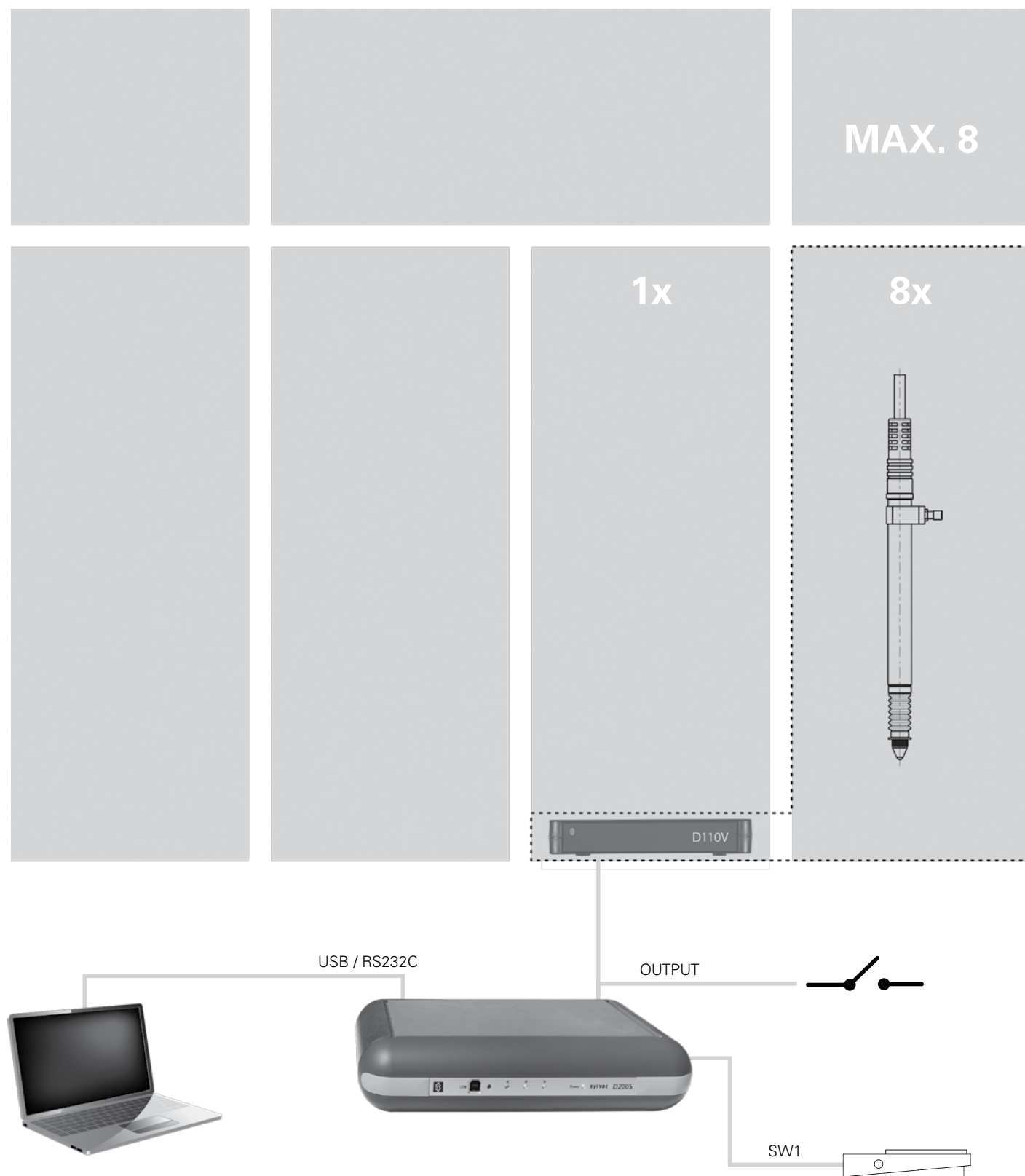
Multi-gauging application



# Multiplexer unit

# D200S

## POSSIBILITIES OF D110V PNEUMATIC LIFTER



E



# Multiplexer unit

## D200S

### POSSIBILITIES OF CONNECTION

MAX. 8

MAX. 8

MAX. 8

8x

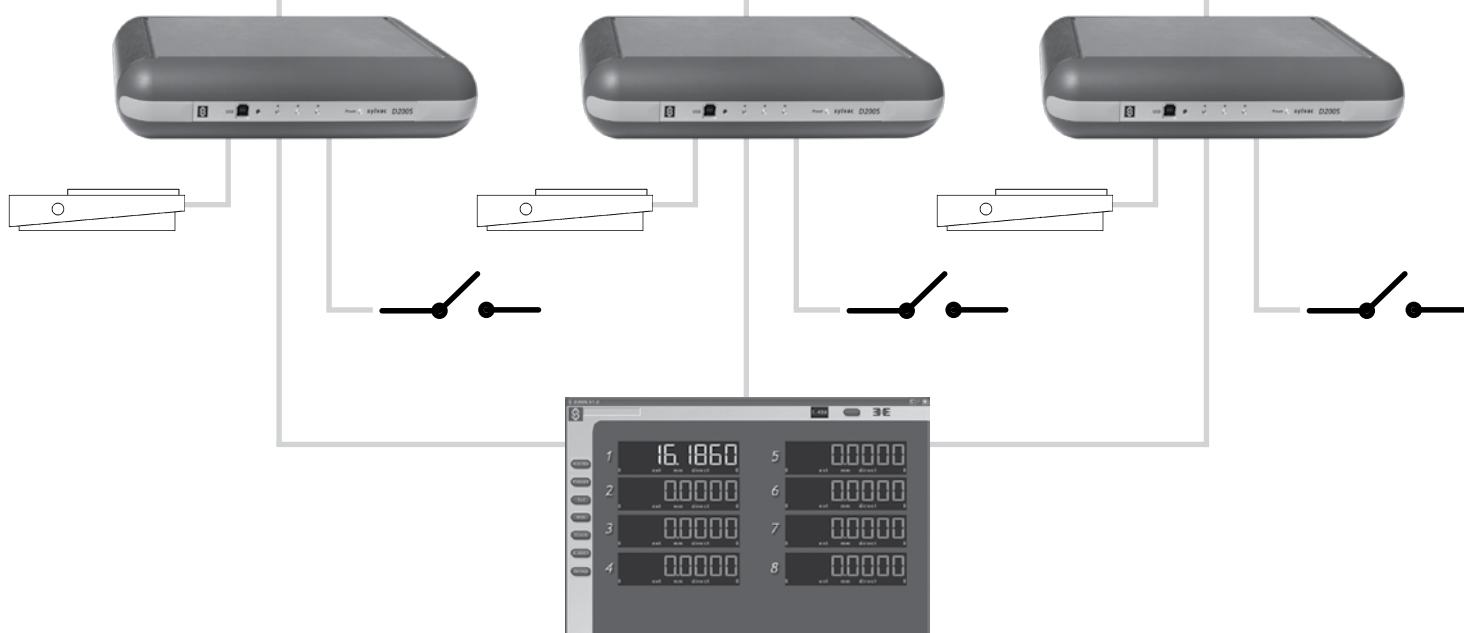
8x

8x

P2...P25

P2...P25

P2...P25






# Digital display

# D300S V2

## DESCRIPTION

- Digital display with 8.5" touchscreen
- Available in 3 versions :
  - 6 USB and M-Bus
  - 6 USB and 2 Sylvac capacitive probe input
  - 6 USB and 4 Sylvac capacitive probe input
- Automatic detection of connected instruments
- New CPU unit (5 times faster than previous version)
- OS based on Windows CE 7 embedded
- Display and page setting fully configurable (up to 8 channels per page, up to 64 pages)
- Memorizing of setups and values
- RJ-45 Ethernet connector
- General or individual Preset
- Math functions for each channel
- Numeric, analog and statistic display
- Compatible with  **Bluetooth®** instruments (USB dongle is required)

Large touchscreen 8.5" protected against liquids IP65



 **SWISS  
MADE**



Fully configurable user interface allowing to define the number of displayed channels per screen

Ergonomic keyboard

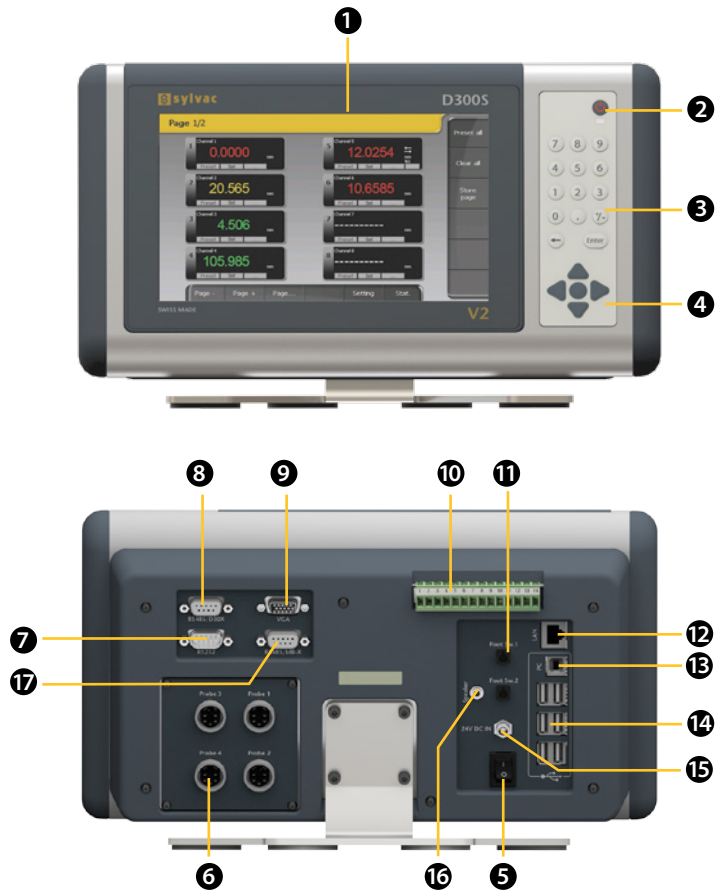
\* Dongle Bluetooth® required

# Digital display

# D300S V2

## INTERFACE | HARDWARE

- 1 Touchscreen 8.5 "
- 2 ON/OFF button for LCD
- 3 Numeric keyboard
- 4 Navigation keyboard
- 5 ON/OFF switch
- 6 Capacitive probes inputs
- 7 RS-232 instrument input
- 8 RS-485 input
- 9 VGA output
- 10 Opto-coupled digital output
- 11 2 inputs for external contacts
- 12 RJ-45 Ethernet
- 13 USB Device connector
- 14 6 USB Host inputs
- 15 24VDC connector
- 16 Audio jack connector
- 17 RS485 connector for connecting MB-X modules



## TECHNICAL SPECIFICATIONS

		804.1300	804.1320	804.1310
Model		D300S-2	D300S-4	D300S
Inputs *		2 probes / 6 USB**	4 probes / 6 USB**	M-BUS / 6 USB
Max error	µm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9		P2i / P5i / P10i
Max. Error <sup>1)</sup>	µm	P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8		---
Repeatability	µm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2		---
Overall dimensions	mm	330 x 175 x 77		
Weight	kg	3.3		
Case		Steel / Plastic		
Protection rating according to IEC 60529		IP40		
S_Connect		RS232 / USB		
Programmable by PC		•		

<sup>1)</sup> Probe and unit calibrated

\* Extendable to 32 probes and 30 USB instruments

\*\* On request, all the units can be provided with M-Bus modules connectors

# Digital display

# D300S V2

## BASIC INSTRUMENT

- Unit according to technical specifications
- Table base
- External contact (foot-pedal)
- Charging unit according to country (804.4000)
- Instruction manual

## APPLICATIONS



Many instruments connected to the D300S with live displayed colored values to indicate the tolerances



Multi-gauging measurement using D200S interface and D300S display



Measurement using PS17 bench  
Automatic detection of measuring channel and automatic switch to the right window



Multiple instruments connection through Bluetooth®



Multiple instruments connection through M-BUS inputs



Bluetooth® Dial gauges connected to D300S



# Digital display

## D300S V2

### POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 32

MAX. 32

2x

15x

7x

4x



P2...P25



D302



D304



P2...P25

RS485

RS485

USB

OUTPUT

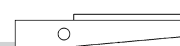
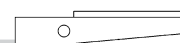


USB



SW1

SW2



# Digital display

# D300S V2

## POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 32

Compatible with all  
M-BUS modules, except  
MB-RS, MB-AG and MB-BT

MAX. 32

2 - 8x\*



P2i / P2iP / P5i / P5iP

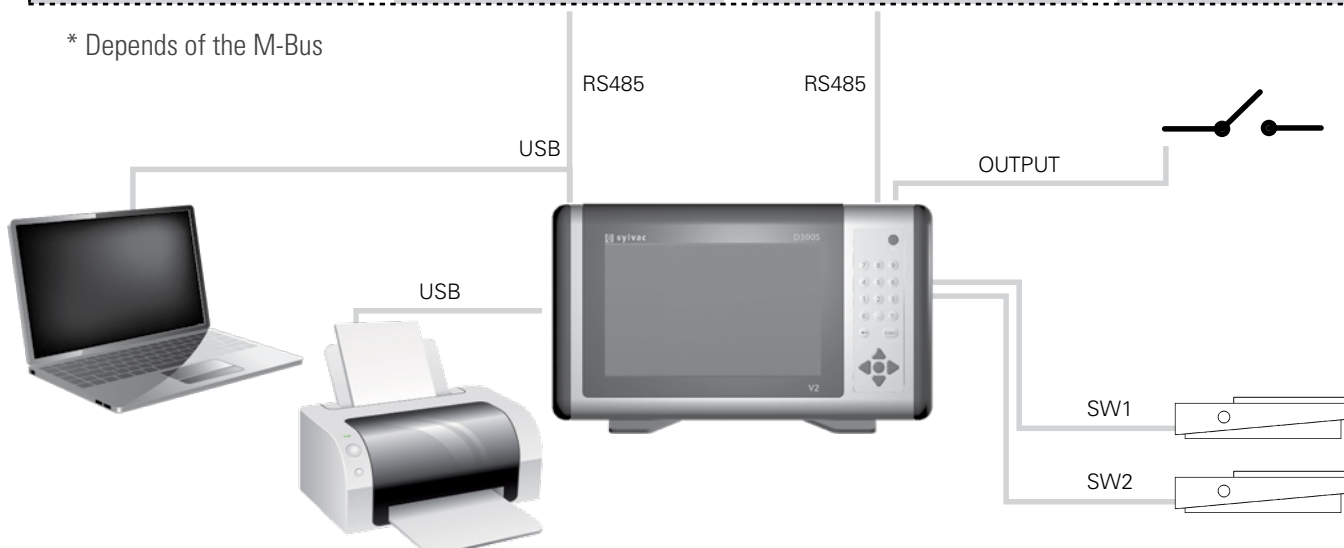


2 - 8x\*



P2i / P2iP / P5i / P5iP

\* Depends of the M-Bus





# Digital display

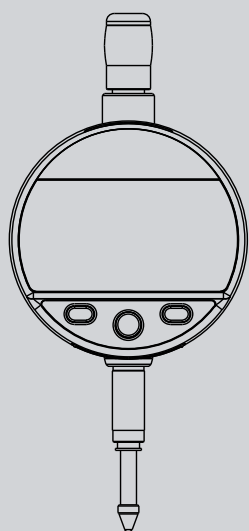
# D300S V2

## POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 8

Instruments

Bluetooth®



1x

981.7100



USB

USB

USB

OUTPUT

SW1

SW2





## DESCRIPTION

- Digital multifunctional unit with 7" touch screen display
- Multi-brands compatible through M-BUS multiplexers (possibility to mix the brands)
- Designed for multigauging applications
- Up to 99 instruments connectable through M-BUS modules
- Automatic detection of connected instruments
- Storage of up to 128 different parts configurations
- Up to 30'000 measurements can be saved by configuration
- Display of up to 32 channels simultaneously (on the same screen) or distributed up to 32 pages
- Single or multi-gauging display mode
- SPC functions (run chart, pareto, histogram with Gauss curve, etc.)
- PLC functions and PLC communication protocols
- Formula editor, free combination between all instruments connected to the M-BUS
- Configurable by PC
- Ethernet connection with Modbus TCP
- Multifunction footpedal input
- User friendly interface
- Very robust construction (Aluminium)
- Table or panel mounting

Large touchscreen 7" protected against liquids IP65

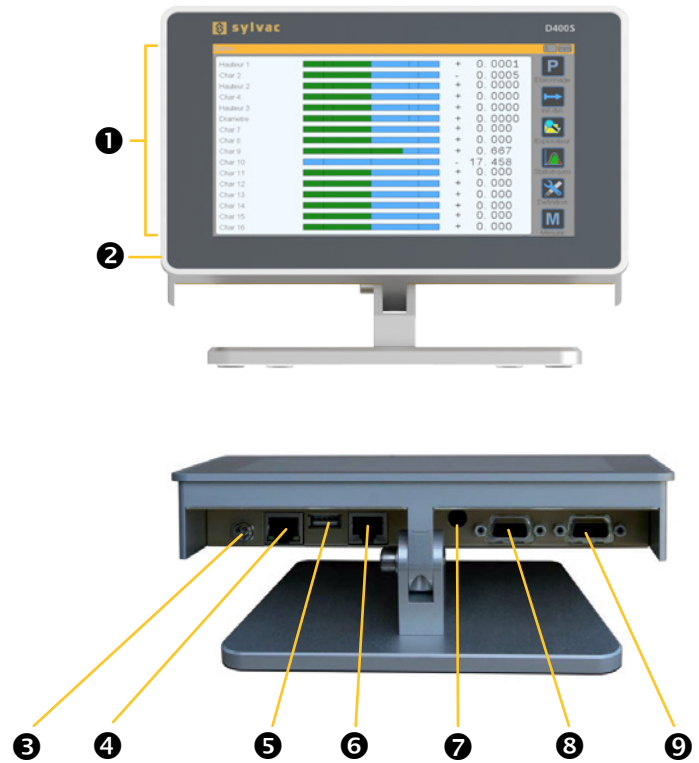


# Digital display

# D400S

## INTERFACE | HARDWARE

- ❶ Customizable display interface
- ❷ Aluminium body
- ❸ 12VDC/30VDC Power supply
- ❹ RJ-45 Ethernet TCP4
- ❺ USB host (for usb key)
- ❻ USB device (virtual keyboard)
- ❼ Footswitch
- ❽ M-bus
- ❾ RS232



## TECHNICAL SPECIFICATIONS

		804.2400
Model		D400S
Overall dimensions	mm	200x143x151.6
Weight	kg	1.3
Case		Aluminium
Protection rating according to IEC 60529		IP65 (front face)
S_Connect		mini-usb / RS232
Programmable by PC		•

E

# Digital display

# D400S

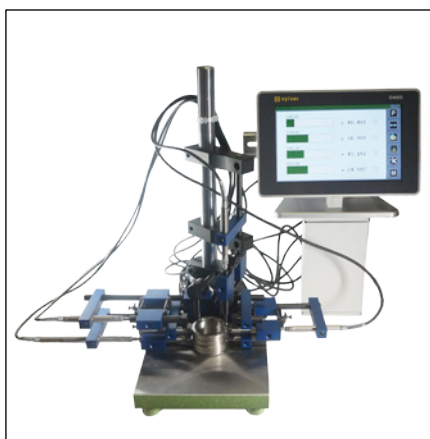
## BASIC INSTRUMENT

- Unit according to technical specifications
- Charging unit
- Instruction manual

## APPLICATIONS



Probes connection through M-BUS inputs



Inductive probes connection on a jig



Probes and indicators connection through M-BUS inputs

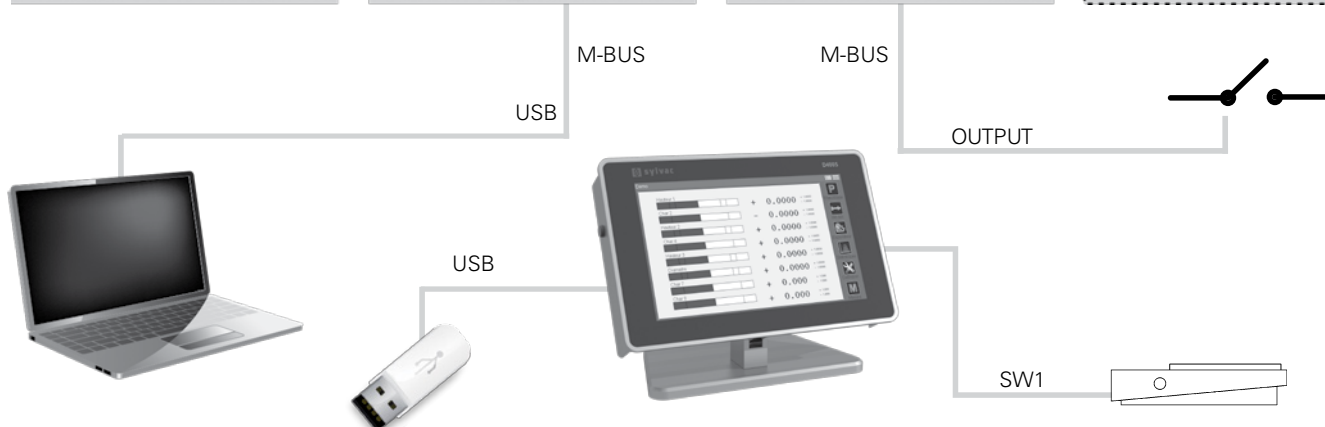
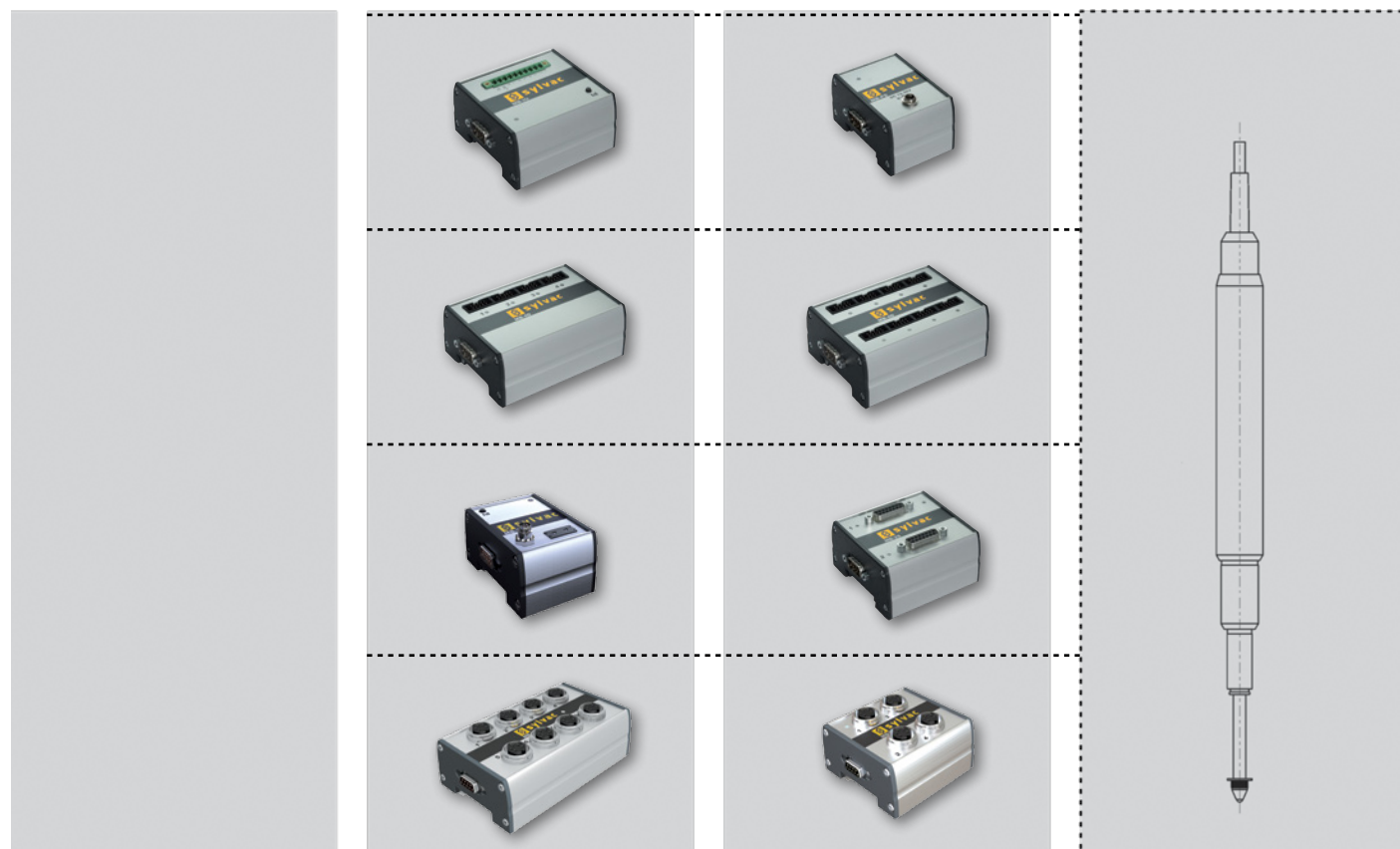
# Digital display

# D400S

## POSSIBILITIES OF CONNECTION WITH ACCESSORIES

Compatible with all  
M-BUS modules, except  
MB-RS

MAX.99



# Multiplexer unit

## D302 / D304

### DESCRIPTION

- Multiplexing unit with 2 or 4 inputs for Sylvac probes P2 à P25
- Dynamic measurement (10 à 20 meas./Sec. according to resolution)
- Perfect solution for multi-gauging system
- Analog output for PLC connection
- Standalone use possible



RS-485



USB mini

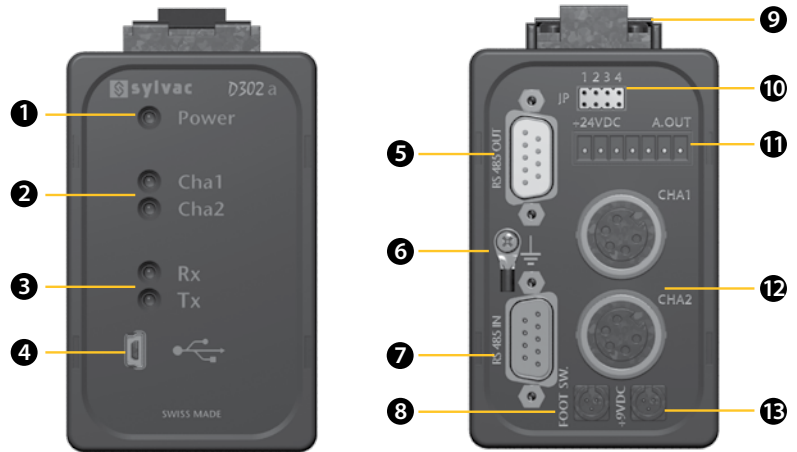


# Multiplexer unit

## D302 / D304

### HARDWARE DESCRIPTION

- ① LED Power
- ② LED channel
- ③ LED RS 485 activity
- ④ USB port for PC connection
- ⑤ RS 485 output
- ⑥ Ground connector
- ⑦ RS 485 input
- ⑧ External connector
- ⑨ Standard clamping (DIN 35mm)
- ⑩ Jumpers
- ⑪ Analog output / 24 VDC (only version a)
- ⑫ Probes input
- ⑬ 9V power supply input



### TECHNICAL SPECIFICATIONS

		804.1302	804.1303	804.1304	804.1305
Modele		D302	D302a	D304	D304a
Max error	µm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9			
Max. Error <sup>1)</sup>	µm	P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8			
Repeatability	µm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2			
Overall dimensions	mm	95 x 88 x 55		95 x 88 x 77	
Weight	kg	0.3			
Case		Aluminium profil / plastic TA 6			
Protection rating according to IEC 60529		IP40			
S_Connect		USB / RS 485			
Programmable by PC		●			
Analog output signal			-10V ... +10V		-10V ... +10V

### BASIC INSTRUMENT

- Unit according to technical specifications
- Feet (pair)
- RS232/RS485 cable
- Charging unit according to country (904.4200)
- Instruction manual



# Multiplexer unit

## M-Bus

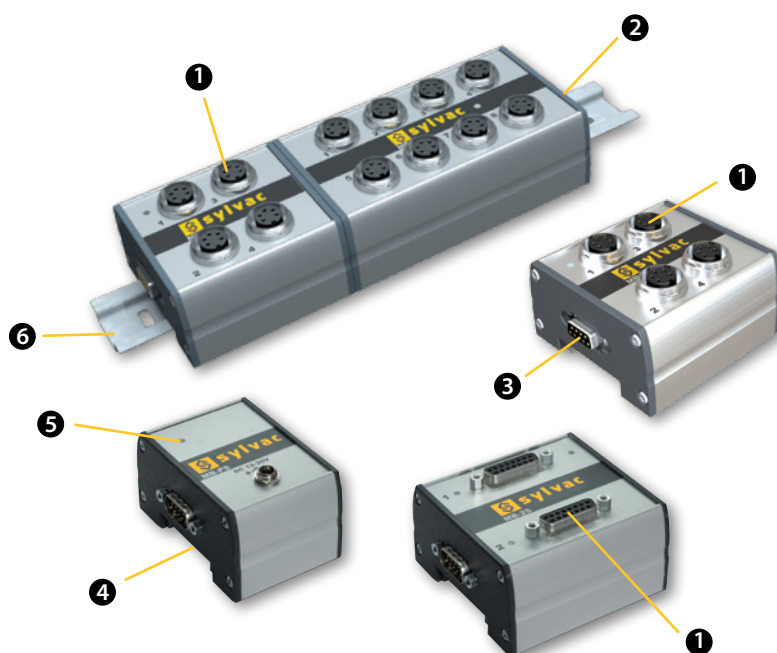
### DESCRIPTION

- Multiplexer units allowing to connect different kind and brands of instruments to our D300S V2 and D400S display units
- Possibility to connect and mix different brands together
- RS485 based protocol
- The different units can be mounted on a DIN rail
- Robust construction



### HARDWARE DESCRIPTION

- 1 Probes input
- 2 M-Bus input
- 3 M-Bus output
- 4 DIN mounting groove
- 5 LED / Power module
- 6 DIN rail



# Multiplexer unit

# M-Bus

## TECHNICAL SPECIFICATIONS

	804.2104	804.2108	804.2122	804.2114	804.2118
Modele	MB-4C	MB-8i	MB-2S	MB-4D	MB-8D
Instrument type	Sylvac capacitive probes	Inductive <sup>1)</sup>	Heidenhain probes (11µmA/1VPP)	Digimatic	
Compatibility	D300S & D400S				
Dimensions (L x h x w) mm	107x42x74	131x44x74	82x43x74	107x39x74	107x39x74
Weight kg	0.2	0.3	0.2	0.2	0.2
Inputs	4	8	2	4	8
Case	Anodized aluminium profile				
S_Connect	RS 485				

<sup>1)</sup> Half-bridge: see [www.sylvac.ch](http://www.sylvac.ch) for information on compatibility

	804.2130	804.2140	804.2160	804.2170	804.2180	804.2190
Modele	MB-IO	MB-PS	MB-RS	MB-TP	MB-BT	MB-AG
Instrument type	PLC I/O	Power-Supply	Computer	Temperature sensor input PT100 and Thermocouple	Bluetooth® Instruments	Plug gauges and Air gauges
Compatibility	D300S & D400S			D400S		
Dimensions (L x h x w) mm	82x39x74	52x42x74	82x39x74	52x51x74	52x39x74	52x64x74
Weight kg	0.2	0.2	0.2	0.1	0.1	0.15
Inputs	8	12-30 VDC	254	1 / 1	8	1
Case	Anodized aluminium profile					
S_Connect			RS 485			



MB-4C



MB-8i



MB-2S



MB-4D



MB-8D



MB-IO



MB-PS



MB-RS



MB-TP



MB-BT



MB-AG

## BASIC INSTRUMENT

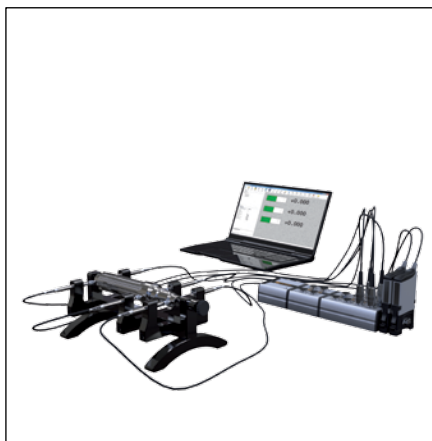
- M-Bus module according to technical specifications
- Instruction manual

# Multiplexer unit

## APPLICATIONS



Probes connection through M-BUS inputs



Probes connection on PC through MB-RS



Probes and indicators connection through M-BUS inputs



Probes connection on a D300S through D302 multiplexer units



Digimatic instruments connected to a MB-4D



Probes connected to a MB-8i

# Display units

## ACCESSORIES



		D50S	D62S	D70S	D70H	D70I	D70A	D80S	D200S	D300S	D302	D304	D400S
<b>904.1108</b>	D108-additional 8 input unit for probes							•					
<b>904.1112</b>	D110V-control unit with 16 vacuum outputs							•	•	•			
<b>904.4200</b>	Charging set 100-240V / 9V	•	•					•	•		•		
<b>904.4205</b>	EUR cable, included in 904.4200	•	•					•	•		•		
<b>904.4204</b>	UK cable, included in 904.4200	•	•					•	•		•		
<b>904.4203</b>	USA/JPN cable, included in 904.4200	•	•					•	•		•		
<b>904.4201</b>	CH cable, included in 904.4200	•	•					•	•		•		
<b>804.4000</b>	Charging set 100-240V / 24V									•			
<b>904.4001</b>	EUR cable included in 804.4000									•			
<b>904.4003</b>	UK cable included in 804.4000									•			
<b>904.4002</b>	USA/JPN cable included in 804.4000									•			
<b>804.4010</b>	Charging set 100-240V / 24V												•
<b>804.4011</b>	EUR cable included in 804.4010												
<b>804.4013</b>	UK cable included in 804.4010												
<b>804.4012</b>	USA/JPN cable included in 804.4010												
<b>904.4101</b>	External contact (footpedal)	•	•	•				•	•	•	•	•	•
<b>904.4102</b>	Footpedal (jack)				•	•	•						
<b>926.7022</b>	Footpedal Bluetooth®									• <sup>1)</sup>			
<b>904.6001</b>	Dust cover							•		•			
<b>804.1211</b>	Connection cable D200S - D110/V								•				
<b>804.2104</b>	MB-4C									•			•
<b>804.2108</b>	MB-8i									•			•
<b>804.2122</b>	MB-2S									•			•
<b>804.2114/18</b>	MB-4D & MB-8D									•			•
<b>804.2130</b>	MB-IO									•			•
<b>804.2140</b>	MB-PS									•			•
<b>804.2160</b>	MB-RS												
<b>804.2170</b>	MB-TP									•			•
<b>804.2180</b>	MB-BT												•
<b>804.2190</b>	MB-AG												•

<sup>1)</sup> Bluetooth® dongle required

# Display units

## ACCESSORIES



		D50S	D70S	D70H	D70I	D70A	D80S	D200S	D300S	D302	D304	D400S	MB-AG
<b>804.2203</b>	Air kit					•							
<b>804.2202</b>	Bracket for panel mounting					•							
<b>804.4101</b>	Restrictor Ø 0.3mm					•							•
<b>804.4102</b>	Restrictor Ø 0.4mm					•							•
<b>804.4103</b>	Restrictor Ø 0.5mm					•							•
<b>804.4104</b>	Restrictor Ø 0.7mm					•							•

# MEASURING BENCH PS15/16/17

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Welcome to our small world!

Miniaturization of manufactured goods generates challenges for the control of smaller and smaller components with high requirements on accuracy. Conventional measuring instruments and even latest optical and non-contact equipment sometimes do not allow achieving the expected results. Sylvac has a long experience of all these particular applications, acquired in contact of our very demanding Swiss watchmaker's customers.

Our PS bench table series was designed to meet high expectations and to offer solutions even when it seems to be impossible! Whether internal or external measurement of small dimensions, Sylvac is ready for the challenge; If our wide selection of instruments, tables, anvils and accessories is not sufficient, we will design and manufacture the measuring solution according to your needs.

Hundreds of users around the world cannot work without our measuring bench tables PS. Let us be your partner for the measurement of small components.

**Integrated digital display or values displayed on an external display unit.**

**Large selection of anvils, tables and accessories available**

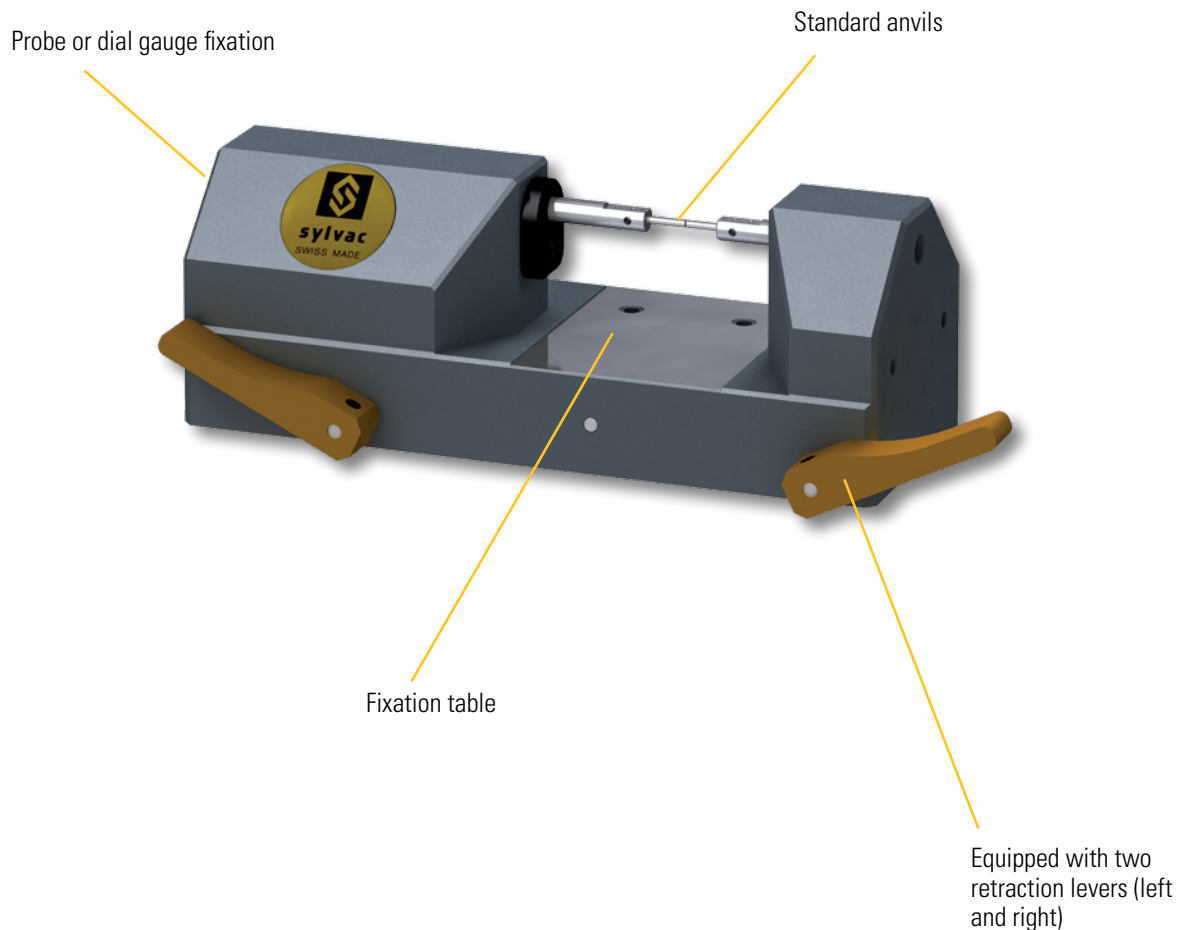
**Adjustable measuring force**





## DESCRIPTION

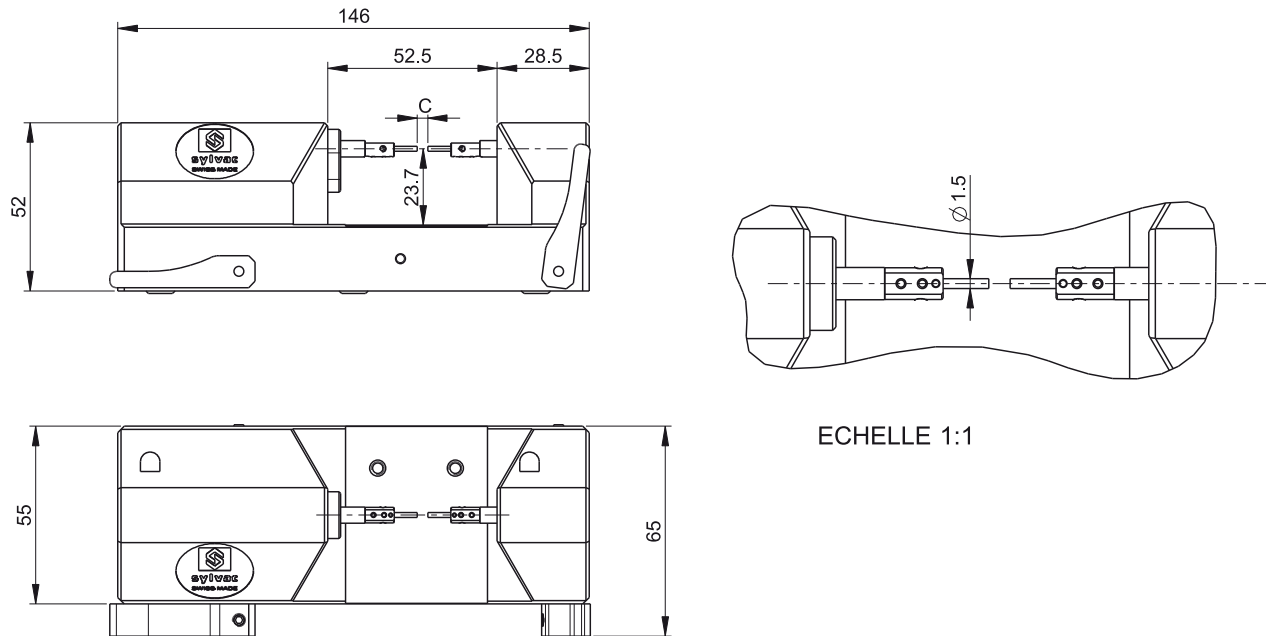
- Small horizontal bench table designed to easily and quickly check small parts up to 10 mm
- **Measuring spindle guided by linear ball bearing**
- The measured value will be displayed either by a Sylvac digital dial gauge range 12.5mm, up to 0.1  $\mu\text{m}$  resolution or by a Sylvac measuring probe P10 (P10L) linked to a digital display unit. Using a pair display unit / measuring probe an overall accuracy of 0.6  $\mu\text{m}$  and a repeatability of 0.2  $\mu\text{m}$  can be reached.
- This bench table can be equipped with different kind of tables as well as with several types of anvils of any shapes
- Standard spindle  $\varnothing$  1.5 mm (908.2175)
- Compatible with Sylvac  $\varnothing$  1.5 mm and Cary type spindle



# Bench table

# PS15

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

		808.1215
Type		PS15BH
Max. Capacity C	mm	20
Measuring range	mm	10
Adjustable measuring force	N	0.3 - 1.0
Max. error	µm	Probe P10 : 0.6µm / Dial gauge S_Dial : 1.6 - 3µm
Weight	kg	1.8
Measuring direction		Horizontal
Anvils fixation		Ø 1.5 mm
Cary Compatibility		•

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Instruction manual
- Measuring anvils Ø 1.5 mm (908.2175)
- Allen keys 2 and 2.5 mm
- Dust cover



## DESCRIPTION

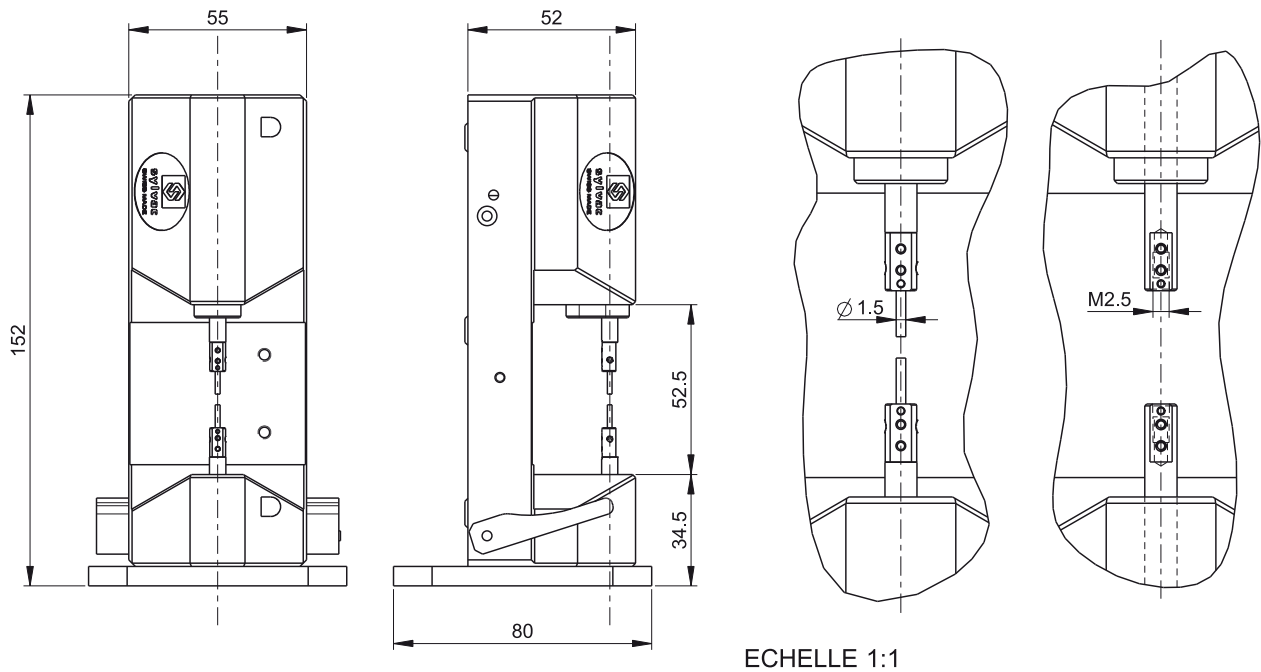
- Small vertical bench table designed to easily and quickly check small parts up to 20 mm
- **Measuring spindle guided by linear ball bearing**
- The measured value will be displayed either by a Sylvac digital dial gauge range 12.5mm, up to 0.0001mm resolution or by a Sylvac measuring probe P10 (P10L) linked to a digital display unit. Using a pair display unit / measuring probe an overall accuracy of 0.6  $\mu\text{m}$  and a repeatability of 0.2  $\mu\text{m}$  can be reached.
- This bench table can be equipped with different kind of tables XYZ as well as with several types of anvils of any shapes



# Bench table

# PS15

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

		808.1216	808.1218
Type		PS15BV	PS15BV +
Measuring scale	mm	10	10
Adjustable measuring force	N	0.3 - 1.0	0.3 - 1.0
Max. error	µm	Probe P10 : 0.6µm / Dial gauge S_Dial : 1.6 - 3µm	
Weight	kg	1.8	1.8
Measuring direction		Vertical	Vertical
Anvils fixation		M2.5	Ø 1.5 mm
Cary Compatibility		•	•

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Instruction manual
- Measuring anvils Ø 1.5 mm or Ø 5 mm (depending on model)
- Allen keys 2 and 2.5 mm
- Dust cover

# Bench table

PS15

## TABLES, PLATES AND LAPPING



N°	Designation	PS15BH	PS15BV / BV+
908.2170	Supporting table adjustable in XYZ	•	
908.2160	Supporting table with fine adjustment XYZ	•	
908.2161	Supporting table with fine adjustment Z	•	
908.2166	Floating table	•	
908.2172	Rotating table with 25 bores		•
908.2165	Plain table only		•
908.2162	Cylindrical plate with 25 bores from 0.2 to 5 mm		•

## ACCESSORIES



N°	Designation	PS15BH	PS15BV / BV+
908.2198	Replacement lapping stone for 908.2199	•	
908.2199	Lapping device (3 stones and lapping liquid included)	•	

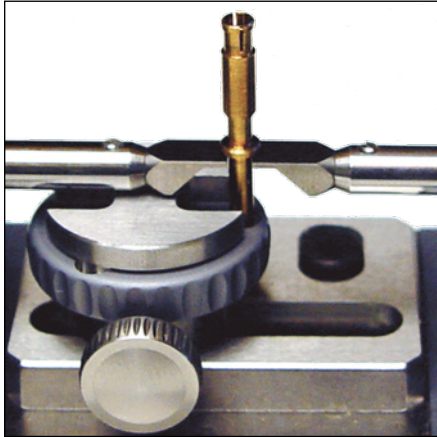
## ANVILS

Compatible anvils list at the end of this chapter.

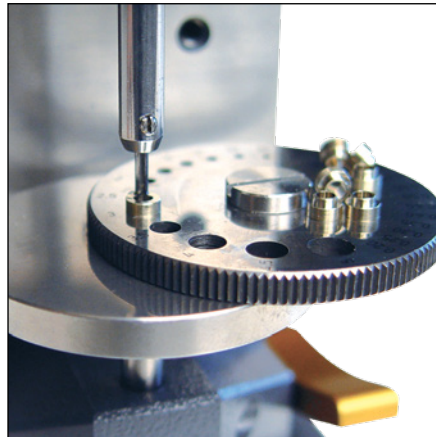
# Bench table

## PS15

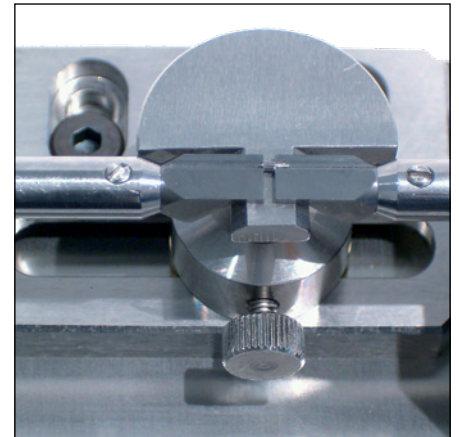
### APPLICATIONS



XYZ table with plate with fine adjustment.



Measurement of small parts with PS15V+ and rotation 25 holes support



Special anvils

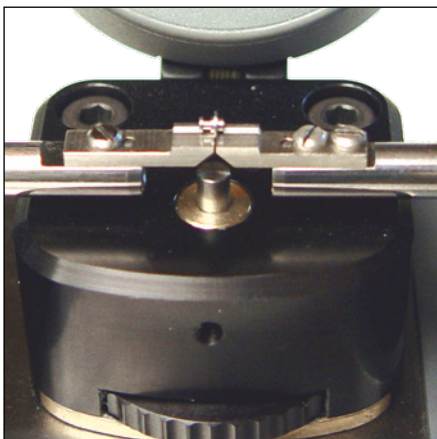
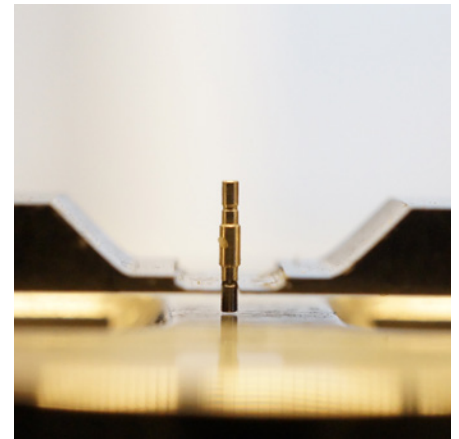


Table with plate Ø 3 mm and fine adjustment. Indication of the height integrated.



Multi-functional measuring station



Gear measuring anvils. On request

# Bench table

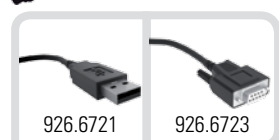
# PS16 V2

## DESCRIPTION

- **Integrated Bluetooth® technology**
- Brand new design with integrated display resolution 0.1µm
- The bench tables PS16 V2 are designed to check dimensions up to 50 mm
- These bench tables can be equipped with different kind of tables to fit your needs as well as with several types of anvils of any shapes
- A ball bearing, as well as many other features and accessories make these tables a must for your workshop or your inspection room
- Adjustable measuring force
- Led tolerances status
- Data output USB, Proximity or Bluetooth®
- Standard measuring anvils Ø 1.5 mm



### PROXIMITY



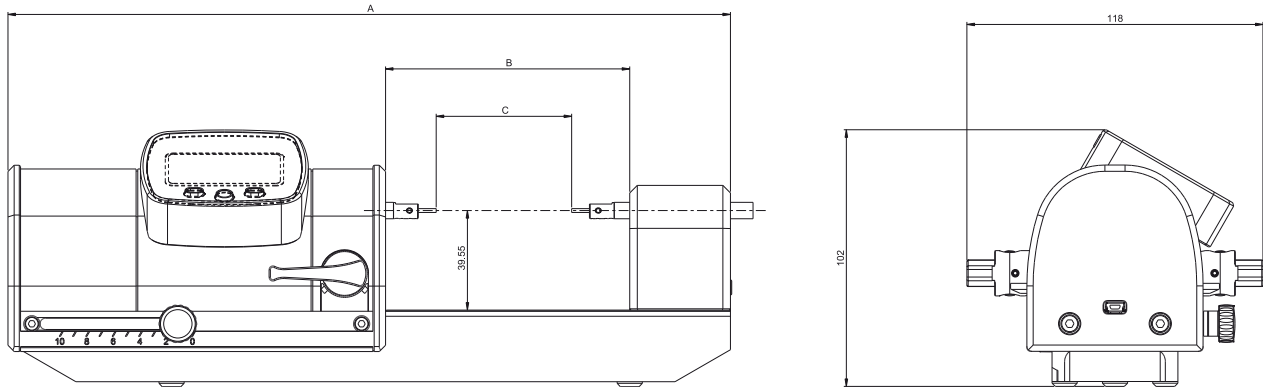
### mini-USB



# Bench table

# PS16 V2

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

External and internal measurement		808.1231	808.1232
Max. Capacity C	mm	25	50
Max. Error	µm	1.5	2.0
Repeatability	µm	0.2	0.2
Resolution	µm	0.1	0.1
Measuring force (Adjustable)	N	0.1 - 0.6 <sup>1)</sup>	
Weight	kg	3.6	4.2
Anvils clamping dimension	mm	Ø 1.5	
Cary compatibility		•	
A	mm	232	287
B	mm	66	97

<sup>1)</sup> ± 20%

## BASIC INSTRUMENT

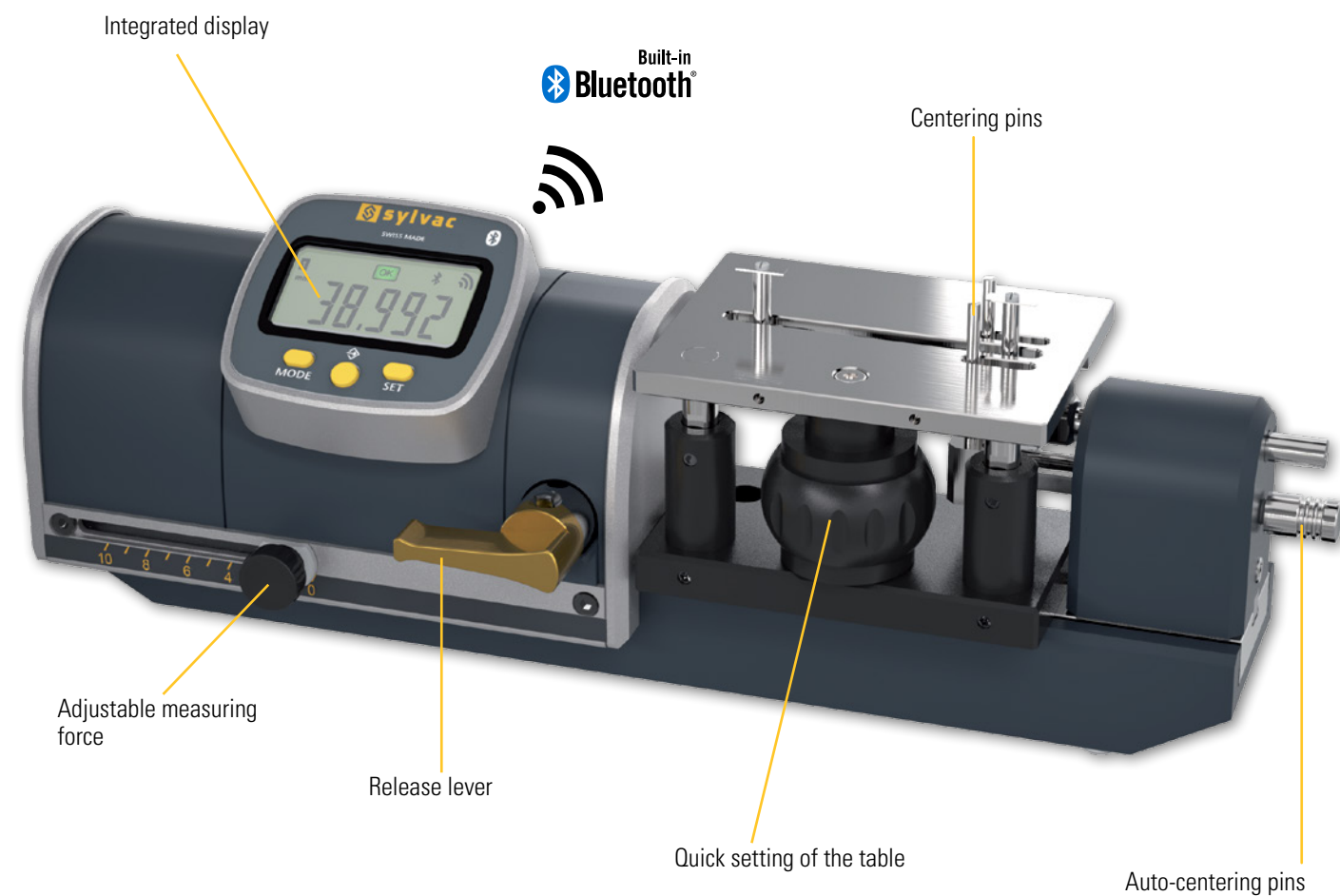
- Instrument according to technical specifications
- Instruction manual
- Lithium battery CR2477 included
- Adapter for Lithium battery CR2032
- Calibration certificate
- Table not included
- Anvils Ø 1.5mm (908.2175)
- Dust cover

# Bench table

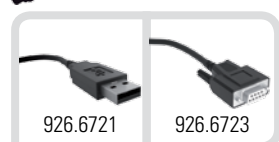
# PS16 V2 LV

## DESCRIPTION

- LV version are designed to check internal dimensions up to 70 mm (depends on model)
- **Integrated Bluetooth® technology**
- Brand new design with integrated display resolution 0.1µm
- 2 points measurement with centering pins
- Table height adjustable up to 20mm
- Adjustable measuring force
- Led tolerances status
- Data output USB, Proximity or Bluetooth®
- Standard measuring anvils 0.4 mm



### PROXIMITY



### mini-USB



WATER RESISTANT

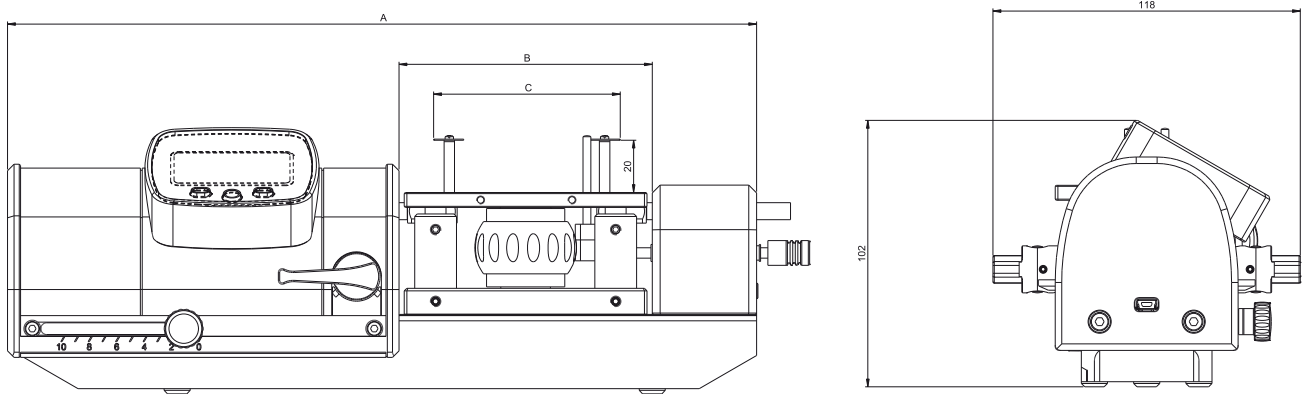
**IP67**

**SWISS MADE**

# Bench table

# PS16 V2 LV

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

Internal measurement		808.1233	808.1234
Max. Capacity C	mm	Ø 12 - 62	Ø 24 - 70
Max. Error	µm	6.0	6.0
Repeatability	µm	1.5	1.5
Resolution	µm	0.1	0.1
Measuring force (Adjustable)	N	0.1 - 0.6 <sup>1)</sup>	
Weight	kg	5.1	5.1
Anvils clamping dimension	mm	Ø 1.5	

<sup>1)</sup> ± 20%

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Adapter for Lithium battery CR2032
- Instruction manual
- Calibration certificate
- Anvils 0.4mm and LVS table included
- Dust cover

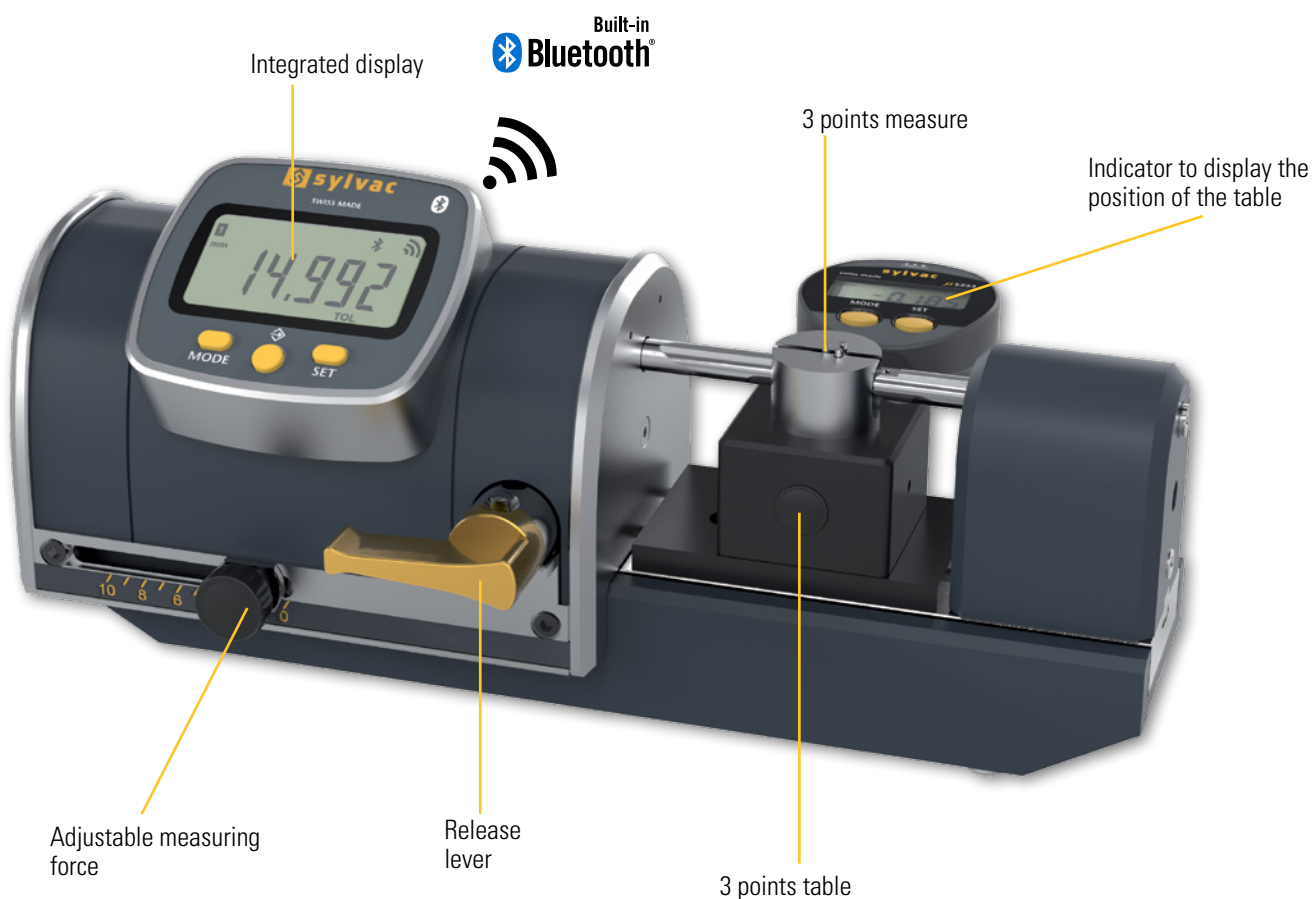


# Bench table

# PS16 V2 3-Points

## DESCRIPTION

- 3 points version are designed to check internal dimensions of 0.8mm up to 12.5mm
- **Integrated Bluetooth® technology**
- Customized version based on the components to measure available on request (provide drawing)
- 3-points measurement with exact calculation of the diameter by electric function
- Calibration with two setting rings corresponding to the diameters MIN and MAX of the measuring range
- Table with fine adjustment in Z axis (height), position adjustable on 0-3 mm wit indicator.
- Adjustable measuring force
- Led tolerances status
- Data output USB, Proximity or Bluetooth®
- Set including: bench table PS16VP25 with integrated probe, table, anvils and 2 setting rings



### PROXIMITY



926.6721



926.6723

### mini-USB



926.6001

WATER RESISTANT

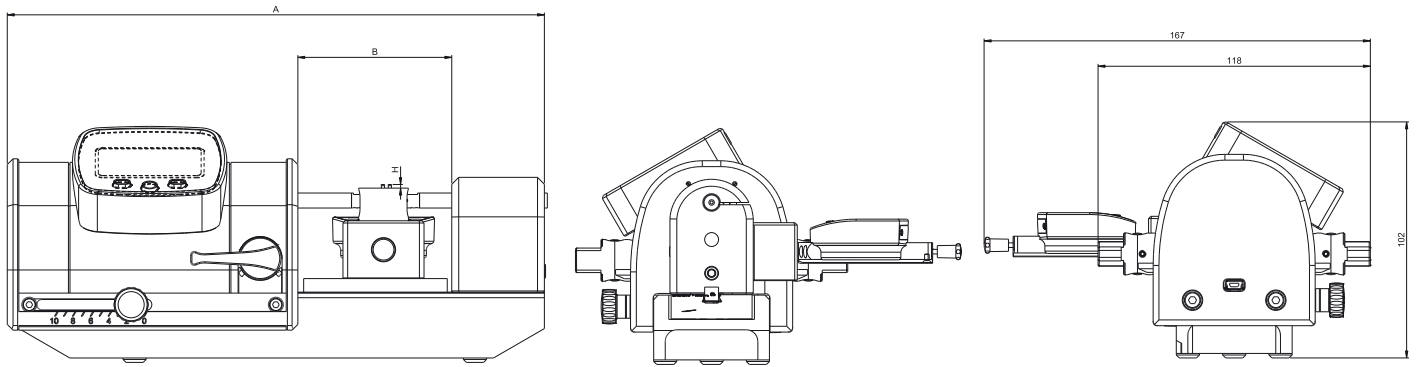
IP67

SWISS MADE

# Bench table

# PS16 V2 3-Points

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

External and internal measurement		808.1335	808.1336	808.1337	808.1338	808.1339
Max. Capacity C	mm	Ø0.8-1.3	Ø1.3-2.5	Ø2.5-4.0	Ø4.0-8.0	Ø8.0-12.5
Max. Error	µm	1.5				
Repeatability	µm	0.2				
Resolution	µm	0.1				
Measuring force (Adjustable)	N	0.1 - 0.6 <sup>1)</sup>				
Weight	kg	4.1				
Anvils clamping dimension	mm	Ø1.5				
A	mm	232				
B	mm	60				

<sup>1)</sup> ± 20%

## BASIC INSTRUMENT

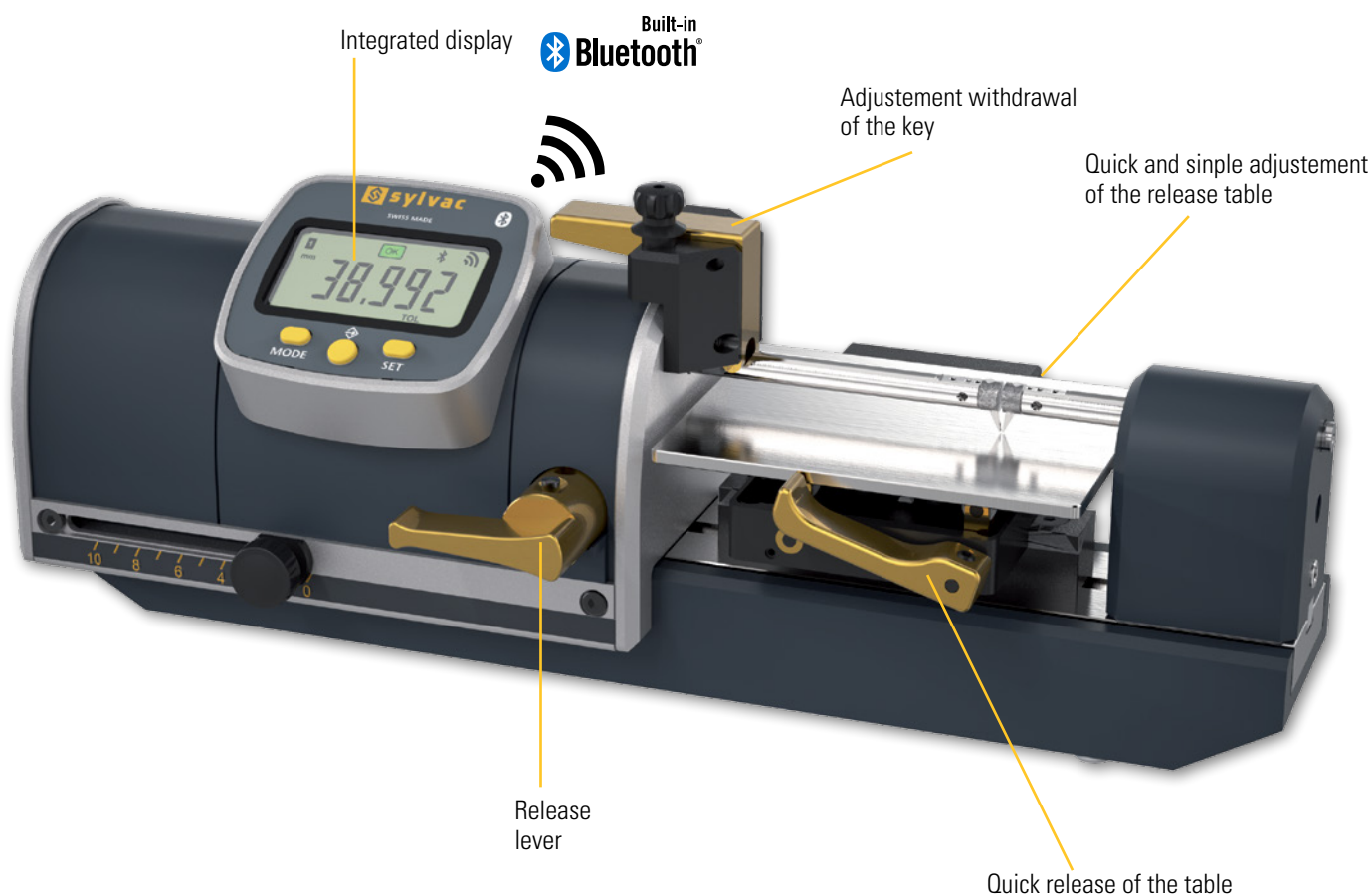
- Instrument according to technical specifications
- Lithium battery CR2477 included
- Adapter for Lithium battery CR2032
- Instruction manual
- Calibration certificate
- Table and anvils according to technical specification
- Mini indicator and 2 setting rings included
- Dust cover

# Bench table

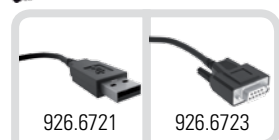
# PS16 V2 Goutte

## DESCRIPTION

- Goutte version designed to measure small pivot on watch plates (gouttes) or on parts requiring an important clearance to load the components on the table
- **Integrated Bluetooth® technology**
- Adjustable and retractable table with a lever allowing to place and bring the piece in measuring position
- Quick and simple adjustment of the release table and the withdrawal of the key
- Customized anvils manufactured based on the components to measure available on request (provide drawing)
- Adjustable measuring force
- Led tolerances status
- Data output USB, Proximity or Bluetooth®
- Set including: bench table, special table and anvils



### PROXIMITY



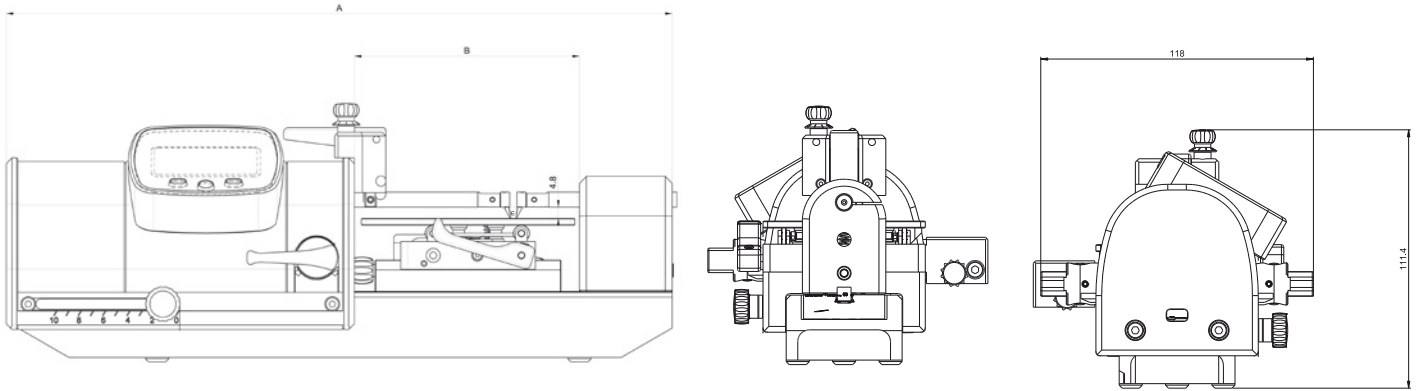
### mini-USB



# Bench table

# PS16 V2 Goutte

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

External measurement		808.5213	808.5413
Max. Capacity C	mm	25	50
Quick clearance	mm	7	7
Measuring range E	mm	3	3
Resolution	µm	0.1	0.1
Max. Error	µm	2.5	3.5
Repeatability	µm	0.5	0.5
Table dimensions (lxL)	mm	58x70	92x70
Measuring force (Adjustable)	N	0.1 - 0.6 <sup>1)</sup>	
Weight	kg	4.0	4.7
A	mm	232	287
B	mm	66	97

<sup>1)</sup> ± 20%

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2477 included
- Adapter for Lithium battery CR2032
- Instruction manual
- Calibration certificate
- Table and anvils according to specification
- Dust cover

F

# Bench table

# PS16 V2

## TABLES, PLATES AND LAPPING



N°	Designation	PS16 V2 25	PS16 V2 50	PS16 V2 LV	3 points	Goutte
808.2190	Supporting table XYZ	•	•			
808.2302	Supporting table adjustable XZ	•	•			

## ACCESSORIES

F



N°	Designation	PS16 V2 25	PS16 V2 50	PS16 V2 LV	3 points	Goutte
908.2194	Dial gauge holder (display height / depth)			•		
908.2198	Replacement lapping stone for 908.2199	•	•			•
908.2199	Lapping device (3 stones and lapping liquid included)	•	•			•

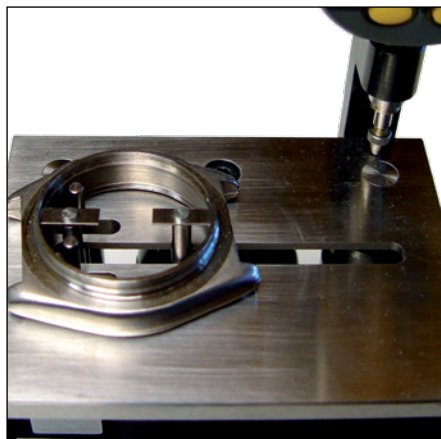
## ANVILS

Compatible anvils list at the end of this chapter.

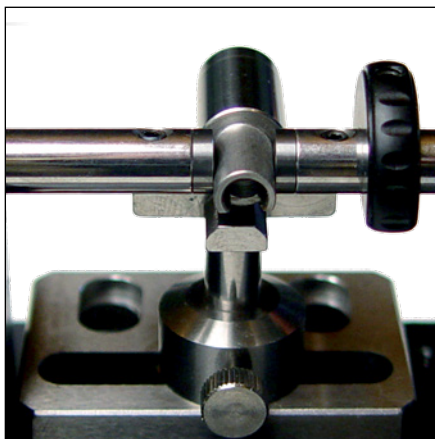
# Bench table

# PS16 V2

## APPLICATIONS



Internal measurement in 2 – points with auto-centering of the part on LVS 50



External measurement with anvils Ø 6.5 and XYZ table

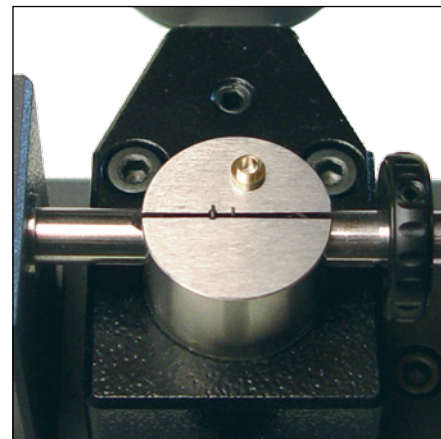


Table and anvils for internal measurement in 3 - points 1.3 - 2.5 mm

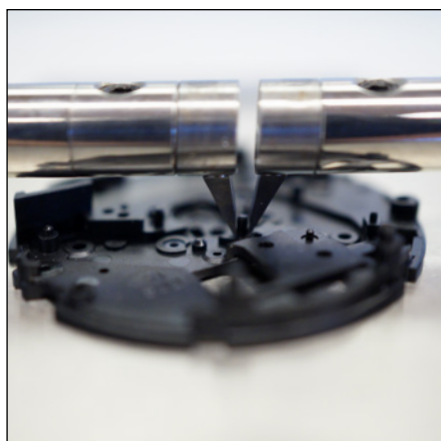
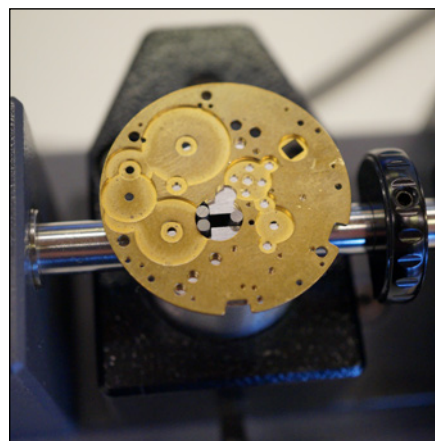


Table with adjustable plate (height). Different Ø plates available



3 – points internal measurement

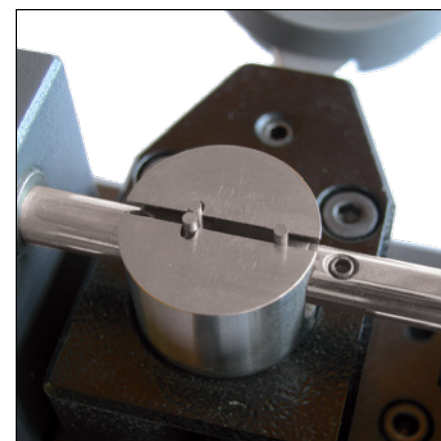


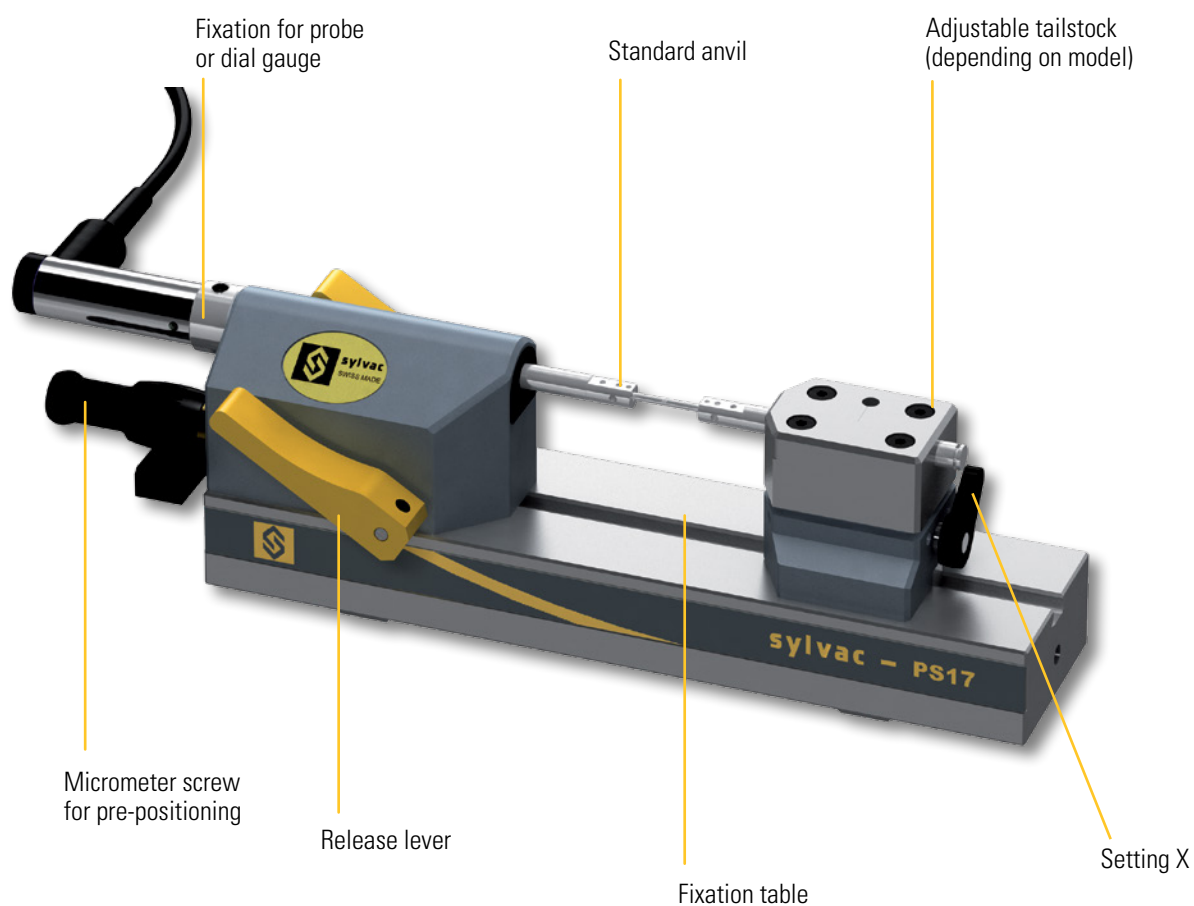
Table and anvils for internal measurement in 3 - points 2.5 - 4 mm

# Bench table

## PS17 VS/VP

### DESCRIPTION

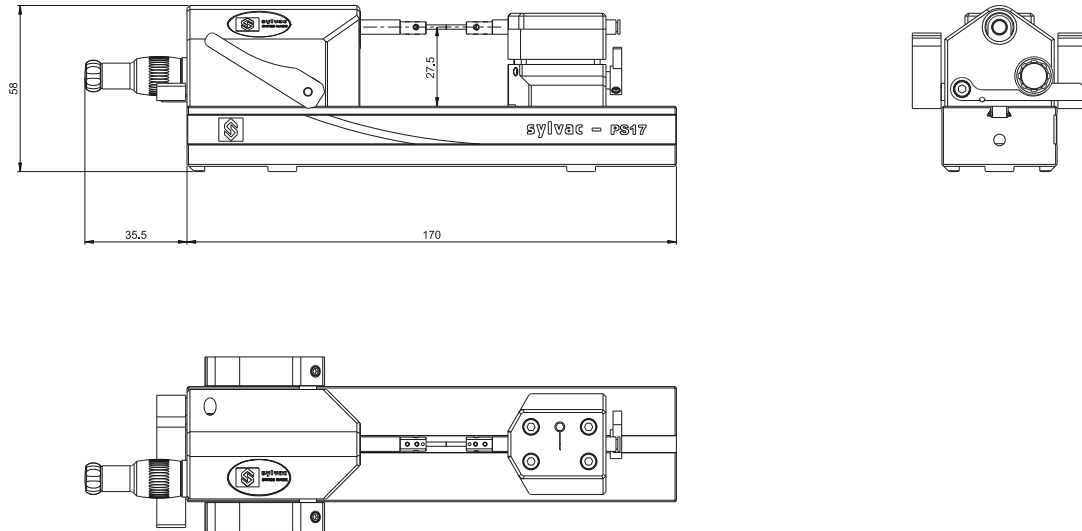
- Measuring bench with great flexibility of use for external dimensions
- Tailstock adjustable in X axis (and in Z, depends on model)
- Accurate micrometer screw for pre-positioning
- Compatibility with Sylvac anvils (Ø1.5mm) and Cary type anvils
- Several accessories available
- 2 models : Integrated P10 capacitive probe (VP) or free use with indicator (VS)



# Bench table

# PS17 VS/VP

## DIMENSIONAL DRAWING



## TECHNICAL SPECIFICATIONS

		908.1240	908.1241	908.1242	908.1243
Type		VS <sup>1)</sup>	VP <sup>1)</sup>	VS <sup>1)</sup>	VP <sup>1)</sup>
Measuring system		Dial gauge <sup>2)</sup>	Probe 10 mm	Dial gauge <sup>2)</sup>	Probe 10 mm
Tailstock adjustable in Z $\pm 1.75$ mm				•	•
Measurement capacity C	mm	37			
Measuring scale	mm	10			
Adjustable measuring force	N	0.2 - 1.0			
Weight	kg	1.4	1.5	1.4	1.5
Clamping anvils $\varnothing 1.5$ mm		•			
Compatibility with Cary		•			
Micrometer screw		•			

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Instruction manual
- Measuring anvils  $\varnothing 1.5$  mm (908.2175)
- Calibration certificate for VP
- Dust cover

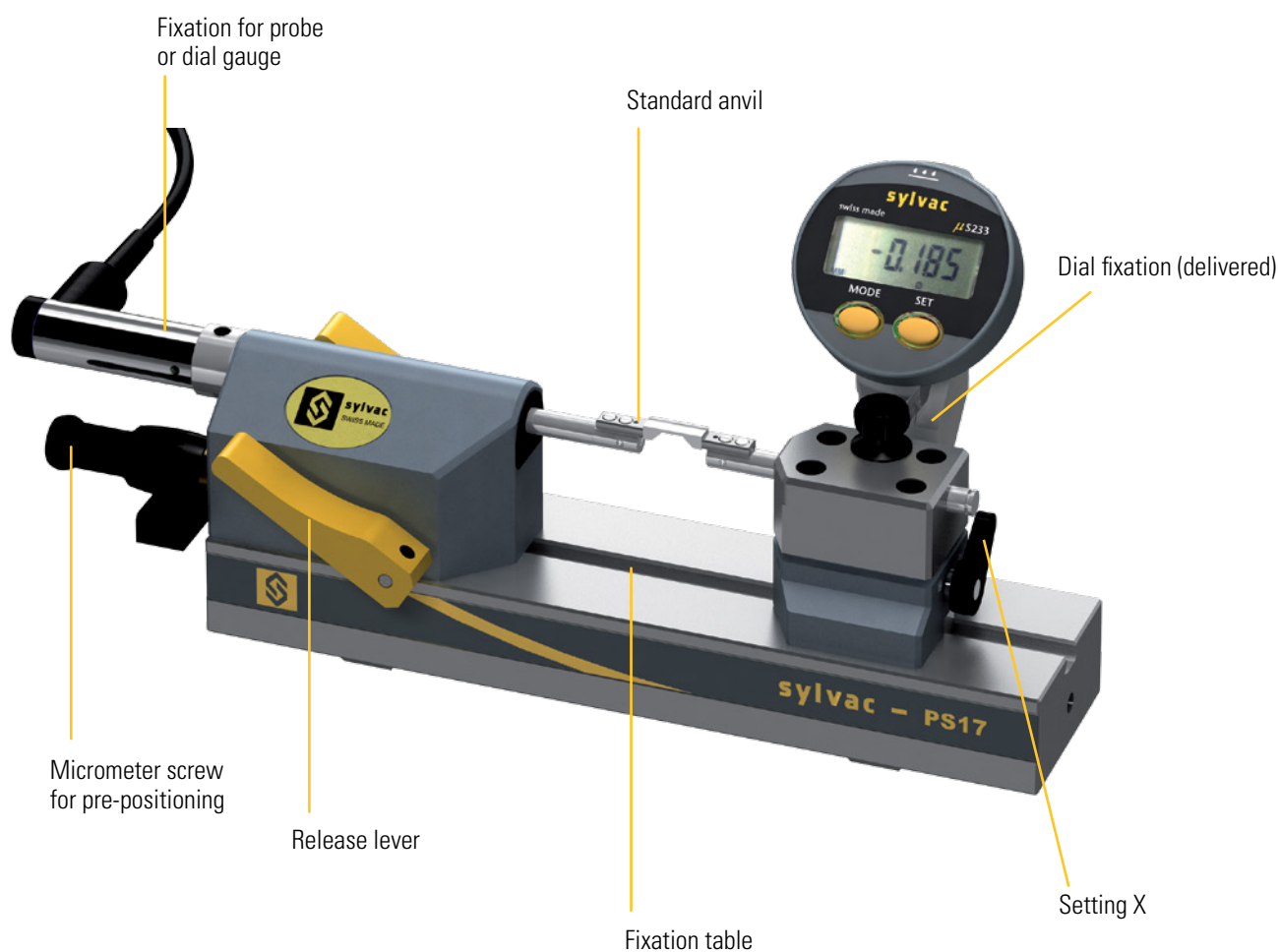


# Bench table

# PS17 Entre-portée

## DESCRIPTION

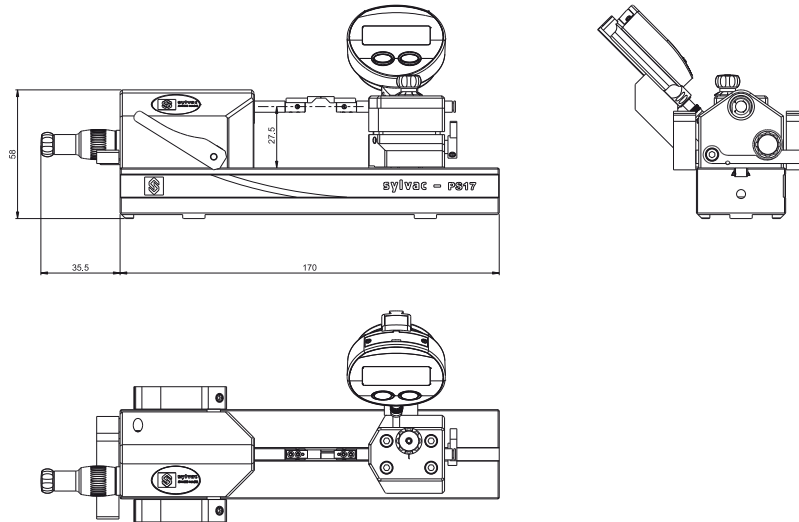
- Measuring bench with great flexibility of use for external dimensions
- Tailstock adjustable in X axis and in Z
- Mini indicator to display the position in Z axis (height) of the tailstock
- Delivered with carbide anvils 0.7mm with 90°V for the measure of distance width
- Accurate micrometer screw for pre-positioning
- Compatibility with Sylvac anvils (Ø1.5mm) and Cary type anvils
- Several accessories available
- 2 models : integrated P10 capacitive probe (VP) or Ø 8mm bore to locate any other measuring devices (VS)



# Bench table

# PS17 Entre-portée

## DIMENSIONAL DRAWINGS



## TECHNICAL SPECIFICATIONS

		908.1245	908.1244
Type		VP	VS
Measuring system		Probe 10 mm	Dial gauge <sup>1)</sup>
Tailstock adjustable in Z $\pm 1.75$ mm		•	
Measurement capacity C	mm	0 - 37	
Measurement scale	mm	0 - 10	
Measurement force	N	1	
Working temperature (storage)	°C	5 - 40 (-10 - 60)	
Weight	kg	1.4	
Cary Compatibility		•	
Micrometer screw		•	

<sup>1)</sup> No-included on delivery

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Instruction manual
- Measuring anvils Cary 0.7mm with Vé (908.2220)
- Calibration certificate for VP
- Mini digital indicator
- Dust cover

# Bench table

**PS17**

## TABLES, PLATES AND LAPPING



			PS17 VS / VP
	N°	Designation	
	908.2290	Supporting table adjustable XYZ	
	908.2301	Supporting table adjustable XZ	
	908.2296	Floating table	

## ACCESSORIES

F



			PS17 VS / VP
	N°	Designation	
	908.2310	Kit for low and strong measuring force	
	908.2198	Replacement lapping stone for 908.2199	
	908.2199	Lapping device (3 stones and lapping liquid included)	

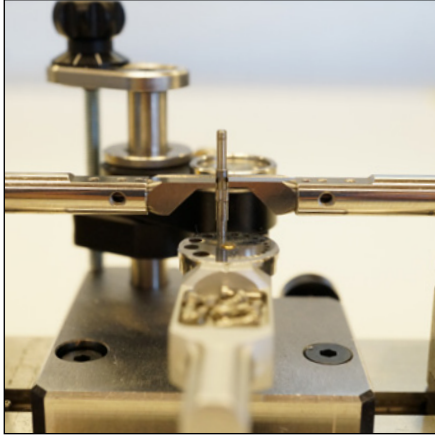
## ANVILS

Compatible anvils list at the end of this chapter.

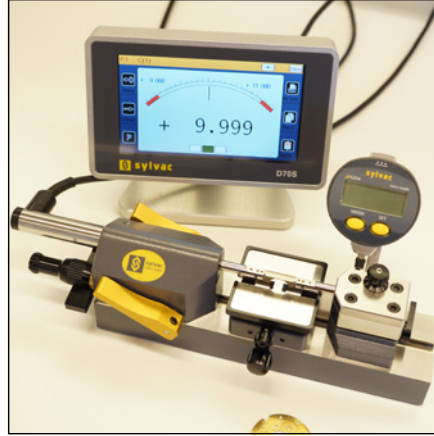
# Bench table

# PS17

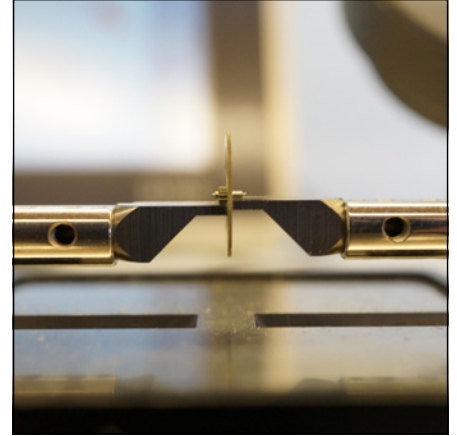
## APPLICATIONS STANDARD



Measure of a small part on a floating table



Multifunctional control station



Measure of a distance width with the Z axis adjustable tailstock.

# Bench table

# PS15/PS16/PS17

## ANVILS

### Anvils Ø1.5



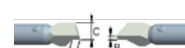
N°	Designation	B	F	C	PS15 BH	PS15 BV	PS15 BV+	PS16 V2	PS 17
908.2175	Cylindrical anvils TC Ø 1.5 mm	-	8	Ø 1.5	•		•	•	•
908.2176	Cylindrical anvils TC Ø 2 mm	-	8	Ø 2	•		•	•	•
908.2177	Cylindrical anvils TC Ø 6.5 mm	-	2	Ø 6.5				•	



908.2174	Knife-shaped anvils TC 0.7 mm	0.70	2.2	4	•		•	•	•
908.2178	Knife-shaped anvils TC 0.4 mm	0.40	2.2	4	•		•	•	•
908.2179	Knife-shaped anvils TC 0.3 mm	0.30	2.2	4	•		•	•	•
908.2180	Knife-shaped anvils standard TC 0.2 mm	0.20	2.2	4	•		•	•	•
908.2181	Knife-shaped anvils standard TC 0.14 mm	0.14	2.2	4	•		•		•
908.2182	Knife-shaped anvils standard TC 0.1 mm	0.10	2.2	4	•		•		•



908.2201	Knife-shaped anvils TC 0.7 mm/V	0.70	2.2	4	•		•	•	•
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908.2202	Knife-shaped anvils standard TC 1.5 mm	1.5	2.2	4	•		•	•	•
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### Anvils LV



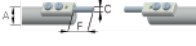



N°	Designation	B	E (Ø int)	PS15 BH	PS15 BV	PS15 BV+	PS16 V2	PS16 V2 LV	PS 17
908.2184	Knife-shaped anvils in steel 0.4 mm	0.4	24-70					•	
908.2185	Knife-shaped anvils in steel 1 mm	1	24-70					•	
908.2186	Knife-shaped anvils in steel 0.40 mm	0.4	-					•	
908.2187	Knife-shaped anvils in steel 1 mm	1	-					•	

# Bench table

# PS15/PS16/PS17

## ANVILS

Anvils Cary		B	F	C	PS15 BH	PS15 BV	PS15 BV+	PS16 V2	PS 17
N°	Designation								
	908.2214	Knife-shaped anvils TC 0.10 mm	0.10	2.2	4	●			●
	908.2221	Knife-shaped anvils TC 0.12 mm	0.12	2.2	4	●			●
	908.2215	Knife-shaped anvils TC 0.14 mm	0.14	2.2	4	●			●
	908.2213	Knife-shaped anvils TC 0.15 mm	0.15	2.2	4	●		●	●
	908.2216	Knife-shaped anvils TC 0.20 mm	0.20	2.2	4	●		●	●
	908.2217	Knife-shaped anvils TC 0.30 mm	0.30	2.2	4	●		●	●
	908.2218	Knife-shaped anvils TC 0.40 mm	0.40	2.2	4	●		●	●
	908.2219	Knife-shaped anvils TC 0.70 mm	0.70	2.2	4	●		●	●
	908.2220	Knife-shaped anvils TC 0.70 mm/vé	0.70	2.2	4	●		●	●
	908.2223	Knife-shaped anvils TC 1.5 mm	-	6	Ø1.5	●		●	●
	908.2224	Cylindrical anvils TC Ø 1.5 mm	-	6	Ø2	●		●	●
	908.2225	Cylindrical anvils TC Ø 2.0 mm	-	6	Ø3	●		●	●
	908.2222	Cylindrical anvils TC Ø 3.0 mm	1.50	2.2	4	●		●	●

F



# OPTICAL MEASURING MACHINES

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## SYLVAC SCAN

Dedicated to the fast and contactless measuring of cylindrical parts, our new SCAN machines are based on the principle of the scanner. This technique allows to reproduce a high resolution image of the component scanned and thanks to the software, to measure over 150 different type of static and dynamic features.

## SYLVAC VISIO

Our 2.5D video measuring systems equipped with manual XY stage and manual/motorized optical zoom allow to quickly measure most of the industrial components based on the live image of the workpiece displayed on the software.

Our SCAN and VISIO machines are designed for use in the workshop or laboratory. Discover them without further delay !





# Optical measurement

## SYLVAC-SCAN

### DESCRIPTION

### 52 REFLEX-CLICK

- Horizontal SCAN machine allowing to measure in the same position as the parts have been produced
- Robust construction with granite table for use in workshop or control laboratory
- Concept Reflex SCAN patented for measuring cylindrical workpieces without preprogramming
- Measurements performed in seconds by a single click
- Load the part, click the button and you get all the main values directly!
- Automatic recognition of recorded parts already measured
- Easy daily calibration thanks to the integrated master
- Quick return of investment



Sylvac Reflex SCAN Software

One click measurement



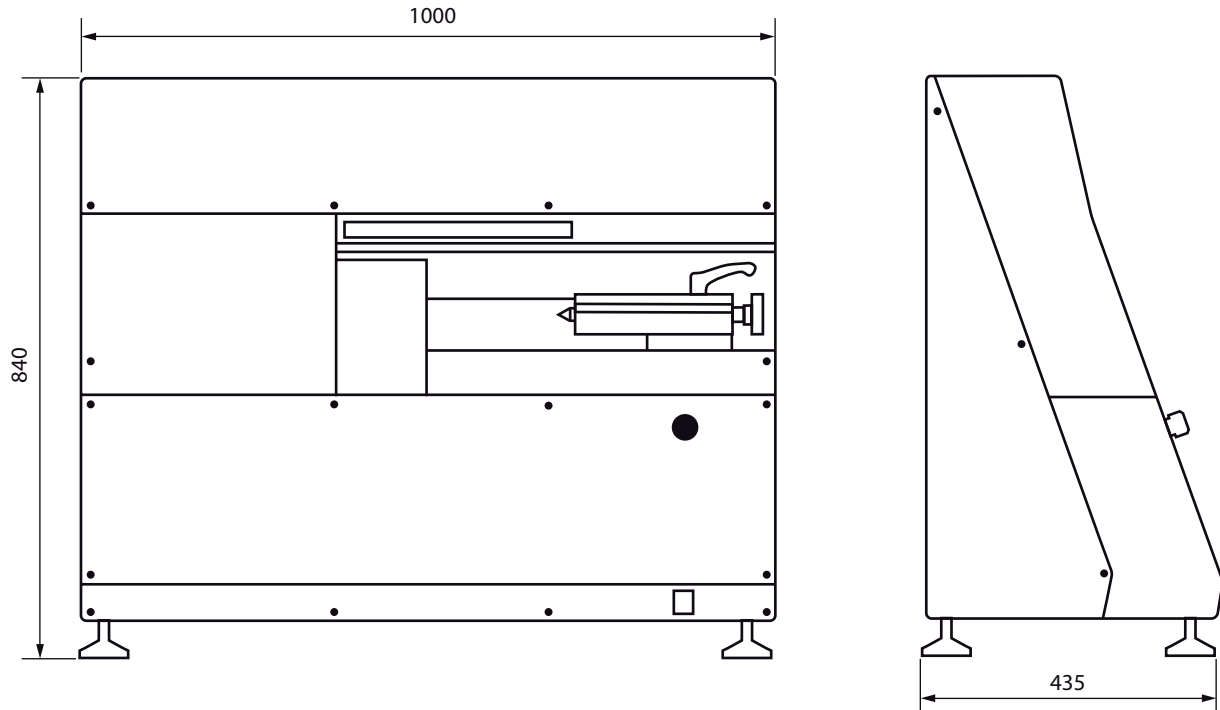
For turned parts

# Optical measurement

# SYLVAC-SCAN

## DIMENSIONAL DRAWINGS

## 52 REFLEX-CLICK



## TECHNICAL SPECIFICATIONS

		902.5520		902.5521	
		Diameter	Length	Diameter	Length
Measuring range	mm	0.5 ÷ 52	300	0.5 ÷ 52	300
Resolution up to	mm	0.0001	0.0005	0.0001	0.0005
Max. error	µm	1.5 + D/100	4 + L/100	1.5 + D/100	4 + L/100
Repeatability	µm	0.6	2.5	0.6	2.5
Headstock		Non-Rotating headstock for static measurements		Rotary headstock for static and dynamic measurements	
Max. weighth of part	kg	4			
Machine's weight	kg	103			

## BASIC INSTRUMENT

- Instrument according to technical specifications
- 2 male centers
- Computer with screen, keyboard and mouse
- Windows 7 multilingual operating system
- Sylvac Reflex SCAN Software
- Manual

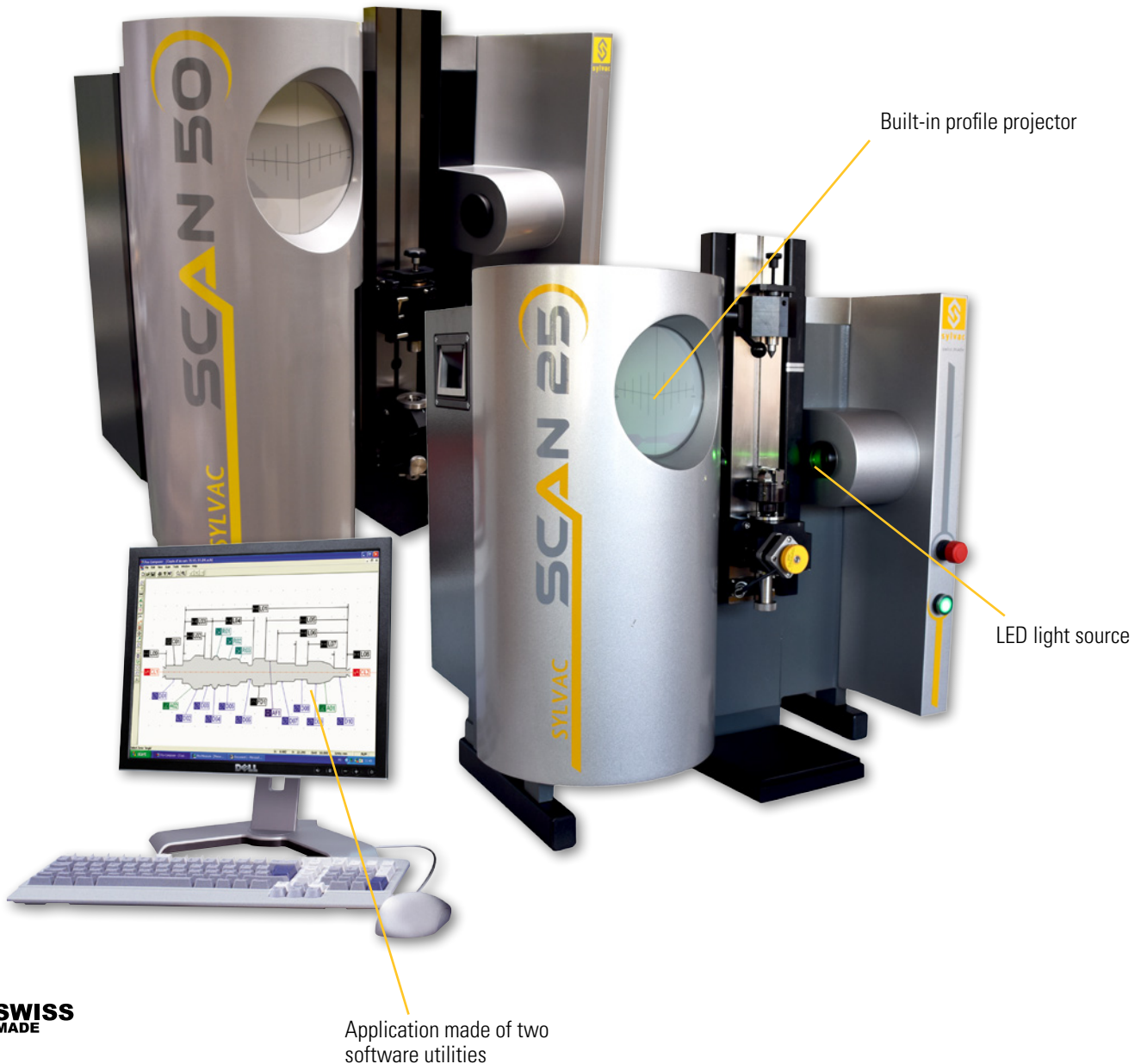
# Optical measurement

## SYLVAC-SCAN

### DESCRIPTION

25 & 50

- Vertical machines with motorized movement of the part through the light source
- Compact and robust construction
- Ideal for the control of small components
- Integrated profile projector for viewing the live measuring position
- Powerful application software with operator and programming modes. Optional off-line software available

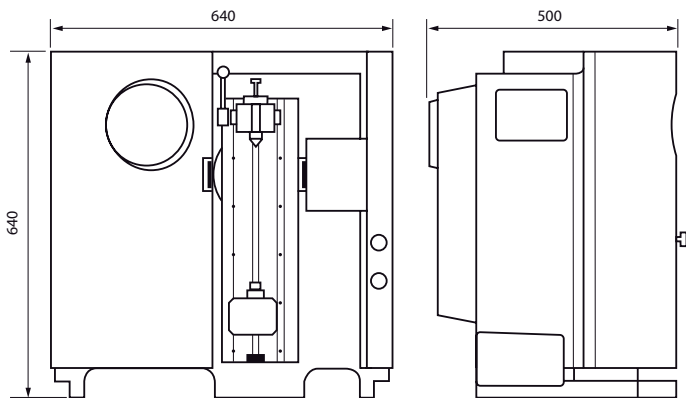


# Optical measurement

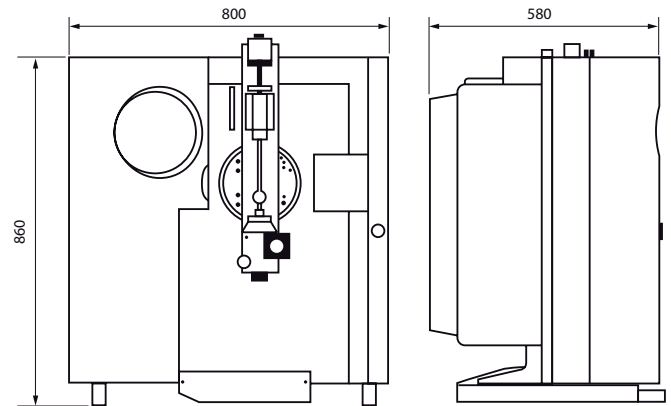
# SYLVAC-SCAN

## DIMENSIONAL DRAWINGS

25 & 50



**Sylvac SCAN 25**



**Sylvac SCAN 50**

## TECHNICAL SPECIFICATIONS

		902.5250		902.5500	
		Diameter	Length	Diameter	Length
Model		Sylvac Scan 25		Sylvac Scan 50	
Measuring range	mm	0.25 ÷ 25	200	0.50 ÷ 50	275
Resolution up to	mm	0.0001	0.0005	0.0001	0.0005
Max. error	µm	1 + D/100	4 + L/100	1 + D/100	4 + L/100
Repeatability	µm	0.5	2	0.5	2
Headstock		Rotary headstock for static and dynamic measurements		Rotary headstock for static and dynamic measurements	
Max. weight of part	kg	2		4	
Machine's weight	kg	67		103	

G

## BASIC INSTRUMENT

- Instrument according to technical specifications
- 2 male centers (SCAN25 : 902.6201/SCAN50 : 902.6202)
- Computer with screen, keyboard and mouse
- Windows 7 multilingual operating system
- Rotary headstock
- Part rotation
- Softwares Pro-Measure / Pro-Composer
- Manual

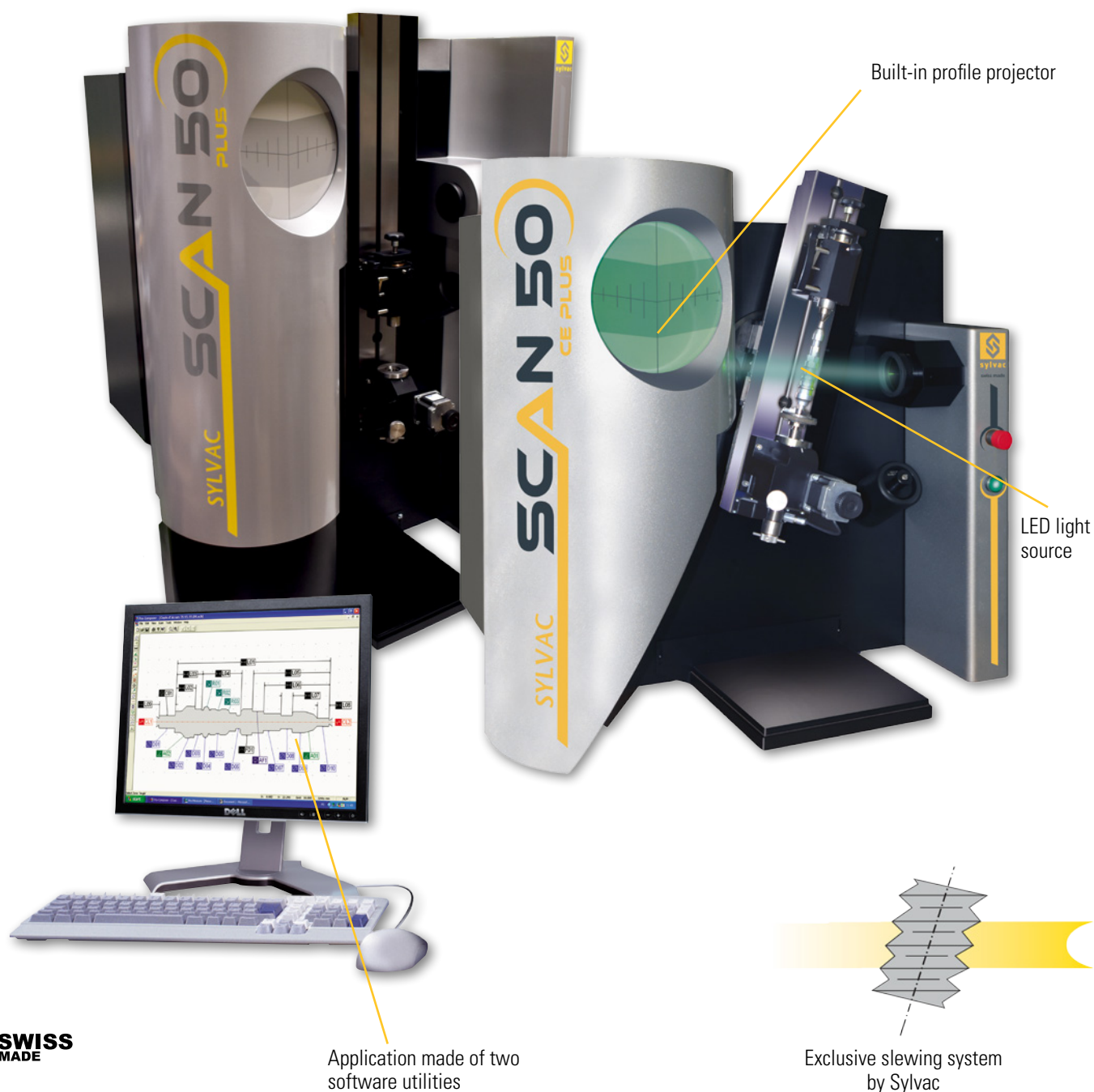
# Optical measurement

## SYLVAC-SCAN

### DESCRIPTION

50 CE PLUS & 50 PLUS

- Vertical machines with motorized movement of the part through the light source
- Compact and robust construction
- Exclusive slewing system, facilitating comprehensive thread measurements aligned to the thread helix
- Integrated profile projector for viewing the live measuring position
- Powerful application software with operator and programming modes. Optional off-line software available

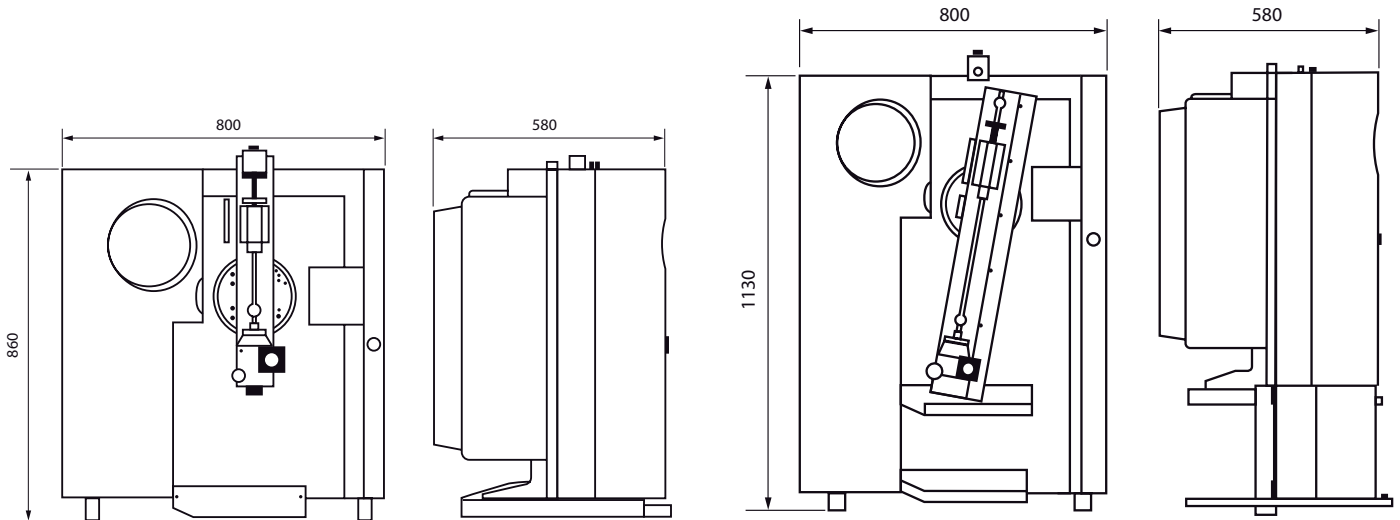


# Optical measurement

# SYLVAC-SCAN

## DIMENSIONAL DRAWINGS

## 50 CE PLUS & 50 PLUS



**Sylvac SCAN 50 CE PLUS**

**Sylvac SCAN 50 PLUS**

## TECHNICAL SPECIFICATIONS

		902.5501		902.5502	
		Diameter	Length	Diameter	Length
Model		Sylvac Scan 50 CE Plus		Sylvac Scan 50 Plus	
Measuring range	mm	0.50 ÷ 50	275	0.50 ÷ 50	500
Resolution up to	mm	0.0001	0.0005	0.0001	0.0005
Max. error	µm	1 + D/100	4 + L/100	1 + D/100	4 + L/100
Tilting for thread meas.	°	30		15	
Repeatability	µm	0.5	2	0.5	2
Headstock		Rotary headstock for static and dynamic measurements		Rotary headstock for static and dynamic measurements	
Slewing mechanism for thread measurement		●		●	
Max. weight of part	kg	4		6	
Machine's weight	kg	140		180	

## BASIC INSTRUMENT

- Instrument according to technical specifications
- 2 male centers
- Computer with screen, keyboard and mouse
- Windows 7 multilingual operating system
- 1 Rotary headstock
- Softwares Pro-Measure / Pro-Composer
- Manual
- Slewing mechanism for thread measurement

# Optical measurement

# SYLVAC-SCAN

## TECHNICAL SPECIFICATIONS

## SOFTWARES



	FUNCTIONS	
	SYLVAC REFLEX SCAN 52	SYLVAC SCAN 25/50/50CE+/50+
Automatic measurement of the main features (diameters, lengths, angles, radius)	•	
Automatic parts / program recognition	•	
Off-line programming		•
CAD import for programming		•
Reports editor	•	•
Data export	•	•
SPC basic calculations	•	•
SPC software	On request	On request
Access management - security level	1	4

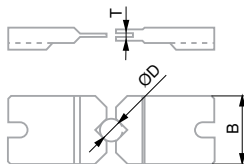
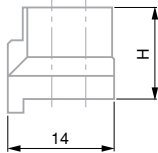
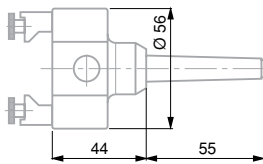


	GEOMETRICAL TOLERANCING - FEATURES SUMMARY	
	SYLVAC REFLEX SCAN 52	SYLVAC SCAN 25/50/50CE+/50+
Diameters	•	•
Lengths, heights, distances	•	•
Angles, chamfers	•	•
Radii	•	•
Threads (parallel)	•	•
Threads (root detail, taper, multi-starts, ball screws, worm screws, special threads)		•
Perpendicularity		•
Form deviation		•
2 and 3D alignment of the parts (axis correction)	•	•
Rotational diameters	Advanced	•
Run out	•	•
Concentricity	•	•
Roundness	•	•
Cylindricity	•	•
Across flats	•	•
Straightness	Advanced	•
Interrupted parts (splines, turbines)		•

# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES



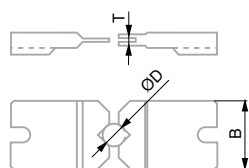
		Morse 1 SCAN 25	Morse 2 SCAN 50 / 52
<b>902.6220</b>	Two-jaw gripper External clamping for manual use	•	• Requires 902.6360
<b>902.6231</b> H=22	Raising blocks for external jaws, in pairs	• For 902.6220	
<b>902.6141</b> 0-6 mm T=1.5	External jaws, in pairs	• For 902.6220	• For 902.6220
<b>902.6142</b> 0-6 mm T=3			
<b>902.6143</b> 6-12 mm T=3			
<b>902.6144</b> 12-18 mm T=6			
<b>902.6145</b> 18-24 mm T=9			
<b>902.6152</b> 0-6 mm T=6			
<b>902.6153</b> 0-6 mm T=15			
<b>902.6140</b> 6-12 mm T=15			



# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES



### 902.6154

Set with:  
902.6141  
902.6142  
902.6143  
902.6144  
902.6145

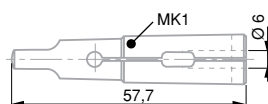
External jaws,  
in pairs

902.6141 : Jaws dia 0-6mm, T1=1.5mm  
902.6142 : Jaws dia 0-6mm, T1=1.3mm  
902.6143 : Jaws dia 6-12mm, T1=3mm  
902.6144 : Jaws dia 12-18mm, T1=6mm  
902.6145 : Jaws dia 18-24mm, T1=9mm

Morse 1  
SCAN 25

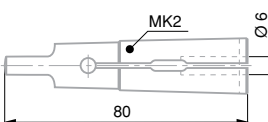
•  
For  
902.6220

Morse 2  
SCAN 50 / 52



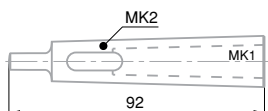
### 902.6250

Center  
adapter with  
a 6 mm dia.  
coupling bore



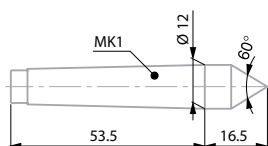
### 902.6251

Center adapter  
with a 6 mm dia.  
coupling bore



### 902.6360

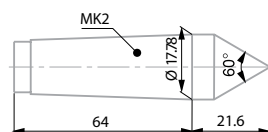
Reduction  
sleeve,  
Morse 2 to 1



### 902.6201

Extra male center, 10 mm  
(2 items provided with  
SYLVAC-SCAN 25)

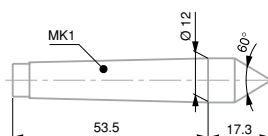
•  
Standard



### 902.6202

Extra male center, 17.78 mm  
(2 items provided with SYLVAC-SCAN 50 and  
SYLVAC-SCAN 52 Reflex-Click)

•  
Standard



### 902.6203

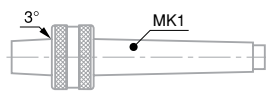
Drive centre  
(Diamond coated 10 mm)

•

# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES

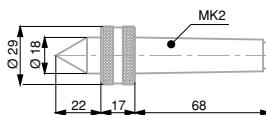


**902.6160**

Rotation center with a B12 male taper plus  
a Morse 1 taper shank  
(For added sleeves 902.6206/902.6207)

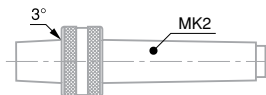
**Morse 1  
SCAN 25**

**Morse 2  
SCAN 50 / 52**



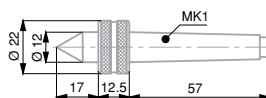
**902.6161**

Rotation center,  
Morse 2



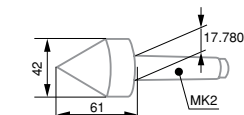
**902.6162**

Rotation center  
with a B18  
male taper plus  
a Morse 1 shank



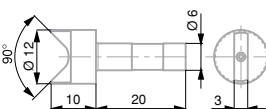
**902.6163**

Rotation center,  
Morse 1



**902.6380**

Rotation center,  
Morse 2



**902.6204**

Female center,  
10 mm dia.

Requires  
902.6250

Requires  
902.6251

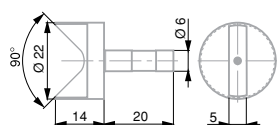
# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES

**Morse 1  
SCAN 25**

**Morse 2  
SCAN 50 / 52**

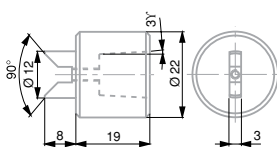


**902.6205**

Female center,  
20 mm dia.

•  
Requires  
902.6250

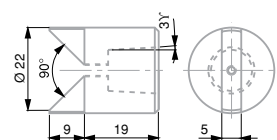
•  
Requires  
902.6251



**902.6206**

Female center,  
10 mm dia.  
Also with internal  
B12 taper

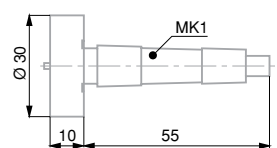
•  
Requires  
902.6160



**902.6207**

Female center,  
12 mm dia.  
Also with internal  
B12 taper

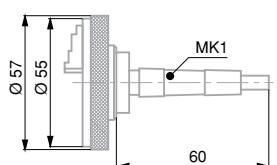
•  
Requires  
902.6160



**902.6208**

Platten,  
30 mm dia.

•

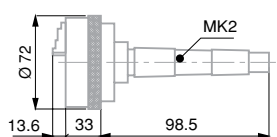


**902.6300**

3-jaw chuck, clamping range 1÷15 mm  
(Clamping capacity: outside 1÷15 mm  
inside 11÷26 mm)

•

•  
Requires  
902.6360



**902.6301**

3-jaw chuck with Morse 2  
taper shank, clamping range 2÷50 mm  
(Clamping capacity: outside 2÷50 mm  
inside 23÷50 mm)

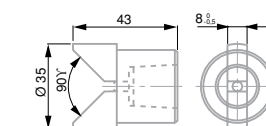
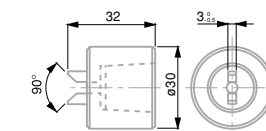
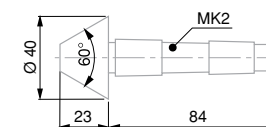
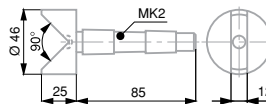
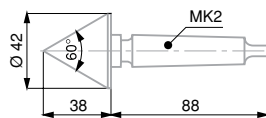
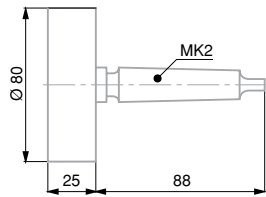
•

•

# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES



		Morse 1 SCAN 25	Morse 2 SCAN 50 / 52
902.6209	Platten, 80 mm dia. with a Morse 2 taper shank		•
902.6210	Drive centre, Ø 40 mm. Diamond coated with a Morse 2 taper shank		•
902.6340	Female centre, 40 mm dia. with a Morse 2 taper shank		•
902.6341	Male centre, 15÷40 mm dia. with a Morse 2 taper shank		•
902.6310	Female center, 10 mm dia., with a B18 internal taper		• Requires 902.6162
902.6311	Female center, 30 mm dia., with a B18 internal taper		• Requires 902.6162

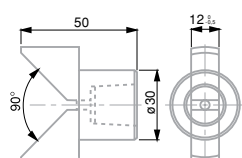
# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES

Morse 1  
SCAN 25

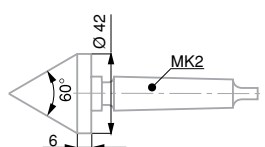
Morse 2  
SCAN 50 / 52



902.6312

Female center, 45 mm dia.,  
with a B18  
internal taper

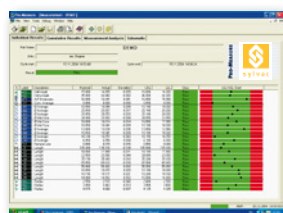
•  
Requires  
902.6162



902.6410

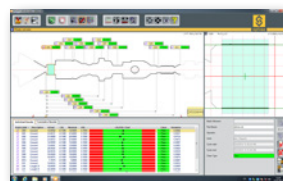
Drive centre - diamond coated,  
42 mm dia. max.

•



902.6006

Pro-Composer off-line programming (not for SCAN 52)



902.6350

Reflex SCAN Advanced Package

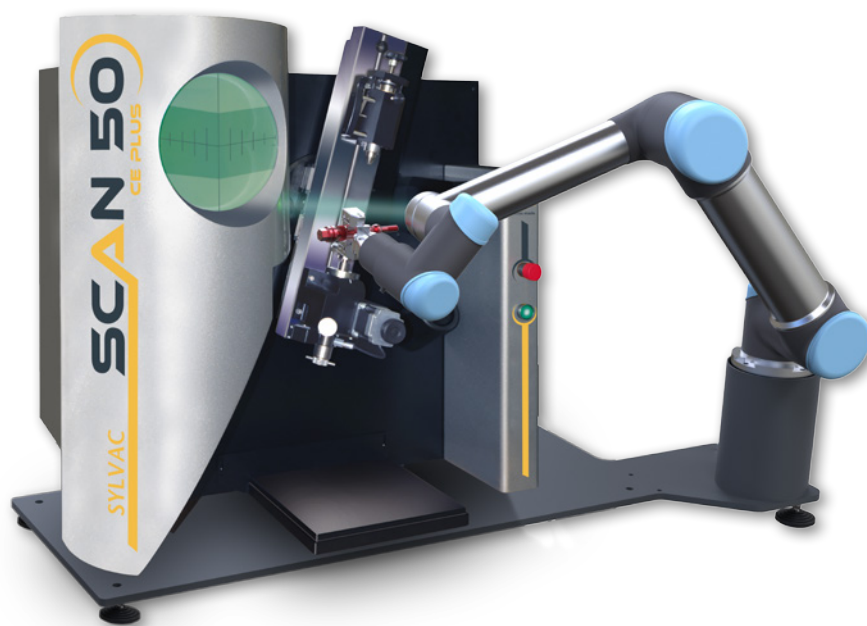
# Optical measurement

# SYLVAC-SCAN

## ACCESSORIES



Our Sylvac Scan range is now fully automated with an universal robot that can load all your workpieces for you directly on the machine for measurement.



# Optical measurement

## SYLVAC-VISIO

### DESCRIPTION

200 & 300 V3

- High quality 2.5D video measuring system with larger field of view up to 30x19mm (standard config 15x9.5mm)
- New software layout with auto toggle screens live/schematic and touch compatible
- Full HD Camera with improved image quality
- Robust construction with stage mounted on granite base and vertical column in granite
- Manual table stage releasable for quick XY movement, fitted with high precision encoders
- High quality bearing guidance for better accuracy
- Optics including CMOS camera and Navitar zoom (manual or motorised)
- Programmable triple lighting: coaxial, ring light programmable by sector and diascope light
- Multilingual Sylvac VISTA software easy to use

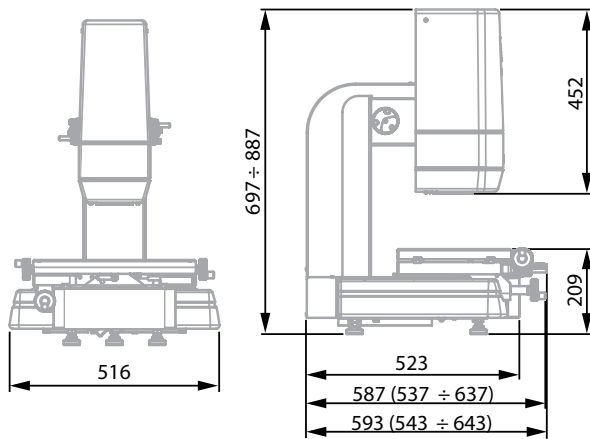


# Optical measurement

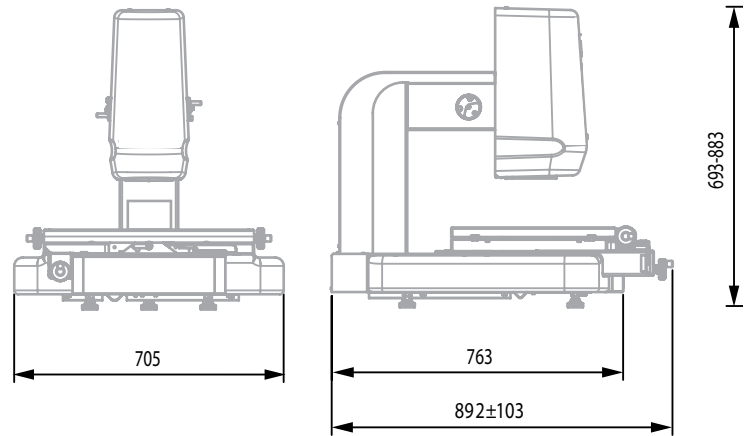
# SYLVAC-VISIO

## DIMENSIONAL DRAWINGS

200 & 300 V3



**Sylvac VISIO 200 V3**



**Sylvac VISIO 300 V3**

## TECHNICAL SPECIFICATIONS

		902.2210	902.2211	902.2310
Model		Sylvac Visio 200		Sylvac Visio 300
Measuring volume	mm	200x100x150		300x200x150
X, Y Accuracy ( $E_1$ , X, Y)	$\mu\text{m}$	$1.9 + 10L/1000$ (L = mm) <sup>1) / 3)</sup>		$1.9 + 4L/1000$ (L = mm) <sup>1) / 3)</sup>
XY Accuracy ( $E_2$ , XY)	$\mu\text{m}$	$2.4 + 10L/1000$ (L = mm) <sup>1) / 3)</sup>		$2.4 + 4L/1000$ (L = mm) <sup>1) / 3)</sup>
Z Accuracy ( $E_1$ , Z) <sup>2)</sup>	$\mu\text{m}$	$3.9 + 10L/1000$ (L = mm)		$3.9 + 5L/1000$ (L = mm)
Resolution	mm	0.001		0.001
Max. load capacity	kg	10		16
Magnification		12x - 288x (Standard configuration 24x - 144x)		
Zoom		Manuel 6.5x	Motorised 6.5x	Motorised 6.5x
Weight		98		170
International standards		EN61000-6-2, EN61000-6-4, EN61326-1, EN12100-1, EN12100-2		

<sup>1)</sup> m ≤ 5 kg

<sup>2)</sup> mechanical accuracy

<sup>3)</sup> at glass plate level

## BASIC INSTRUMENT

- Instrument according to technical specifications
- Software Sylvac Vista multilingual
- Computer with touchscreen 23", keyboard and mouse
- CAD compare software
- Windows 7 multilingual operating system
- Manual
- Calibration certificate

G



# Optical measurement

## SYLVAC-VISIO

### ACCESSORIES



902.7370

Diascopic illumination, parallel light

VISIO 200



VISIO 300



902.7100

Additional lens, 0,5x for zoom 6,5x



902.7101

Additional lens, 0,75x for zoom 6,5x



902.7102

Additional lens, 1.5x for zoom 6,5x



902.7103

Additional lens, 2x for zoom 6,5x



902.7380

Foot switch for value capture



902.7390

Sylvac - Reflex Vista COMPARE

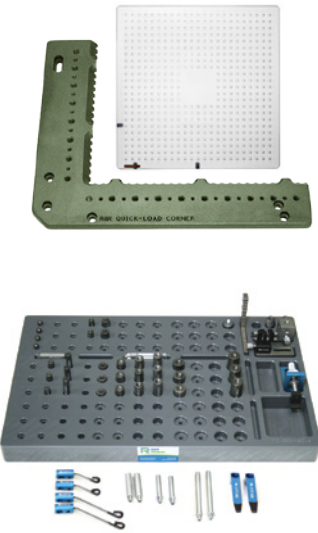

Standard  
delivery

Standard  
delivery

# Optical measurement

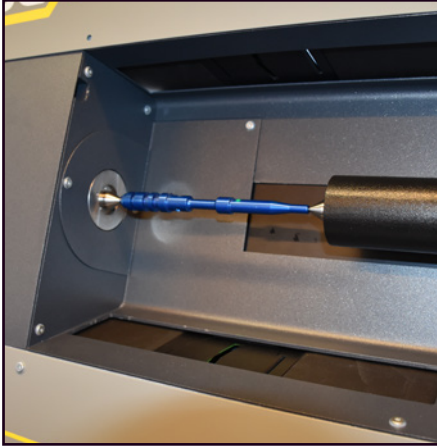
# SYLVAC-VISIO

## ACCESSORIES KITS

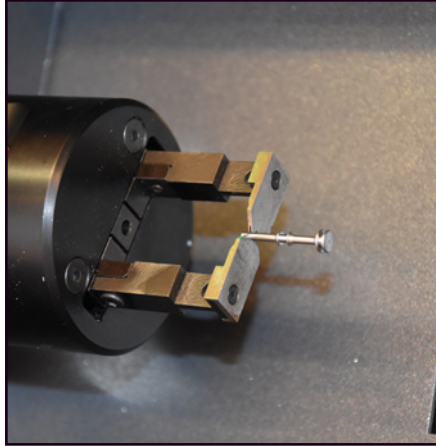
			VISIO 200	VISIO 300
	902.7300	<p>Basic fixtures Kit :</p> <ul style="list-style-type: none"> <li>• 1x Quick-Load Corner Fixture (QLC)</li> <li>• 1x 13mm x 150mm x 150mm R&amp;R Acrylic Multi-Hole Fixture Plate</li> <li>• 1x (3) Dowel Pins</li> <li>• 3x 6mm Dia. x 10 and x 25mm Standoff</li> <li>• 3x 9mm Dia. x 5, x 10, x 20 and x 25mm Standoff</li> <li>• 3x 12mm Dia. x 10 and x 25mm Standoff</li> <li>• 2x 6mm Dia. x 10mm Pin Standoff</li> <li>• 2x 9mm Dia. x 10mm Pin Standoff</li> <li>• 2x 40mm Tension Clamp with Rubber Coated Tip</li> <li>• 2x 25mm Wire Clamp with Rubber Coated Tip</li> <li>• 2x 50mm Wire Clamp with Rubber Coated Tip</li> <li>• 4x Aluminium Resting Pin with M4 Thread</li> <li>• 1x 50mm x 50mm Corner Viewer for M4</li> <li>• 1x 9mm Dia. Adjustable Jackstand with M4 Thread</li> <li>• 1x M4 Pusher Clamp</li> <li>• 1x 30mm and 1x 45mm Long Adjustable Slide with M4 Thread</li> <li>• 1x M4 Tower Block</li> <li>• 1x Micro-Clamp Vise with Base for M4 Components</li> <li>• 1x 12mm Dia. x10mm Spring Pusher Standoff Clamp</li> <li>• 1x 300mm x 190mm x 25mm Component Tray to Hold M4 Components</li> </ul>	•	•
	902.7301	<p>Advanced fixtures Kit :</p> <p>All Basic fixtures (acrylic plate 13x200x200mm) kit added with :</p> <ul style="list-style-type: none"> <li>• 3x 6mm Dia. x 5, x 10 and x 25mm Standoff</li> <li>• 3x 9mm Dia. x 10, x 20, x 25mm Standoff</li> <li>• 3x 12mm Dia. x 10, x25mm Standoff</li> <li>• 2x 6mm Dia. x 10mm Pin Standoff</li> <li>• 2x 9mm Dia. x 10mm Pin Standoff</li> <li>• 4x 12mm Dia. x 10mm Pin Standoff</li> <li>• 2x 40mm Tension Clamp with Rubber Coated Tip</li> <li>• 2x 25mm Wire Clamp with Rubber Coated Tip</li> <li>• 2x 50mm Wire Clamp with Rubber Coated Tip with 50mm Post</li> <li>• 1x 9mm Dia. Adjustable Jackstand with M4 Thread</li> <li>• 1x 30mm and 1x 45mm Long Adjustable Slide with M4 Thread</li> <li>• 1x Base 16mm Sq x 19mm (for M4 Tower Block)</li> </ul>	•	•
	902.7104	<p>Fresnel kit 0.5x</p> <p>Fresnel lens + lens 0.5x + fixation screws (for Ringlight)</p>	•	
	902.7105	<p>Fresnel kit 0.75x</p> <p>Fresnel lens + lens 0.75x + fixation screws (for Ringlight)</p>	•	
	902.7106	<p>Fresnel kit 1.5x</p> <p>Fresnel lens + lens 1.5x + fixation screws (for Ringlight)</p>	•	

# Optical measurement

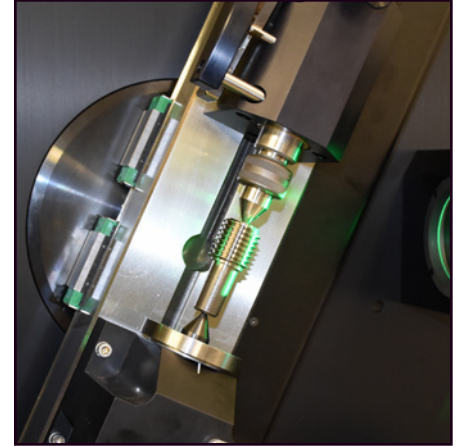
## APPLICATIONS



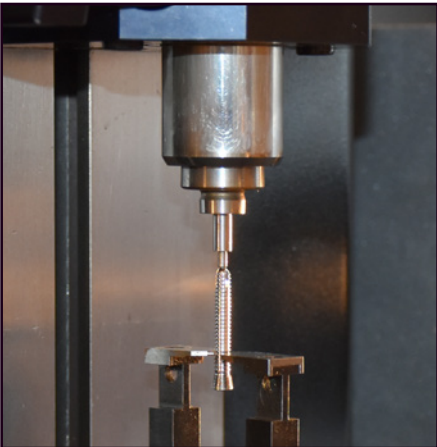
Measurement of a turned part with SCAN 52



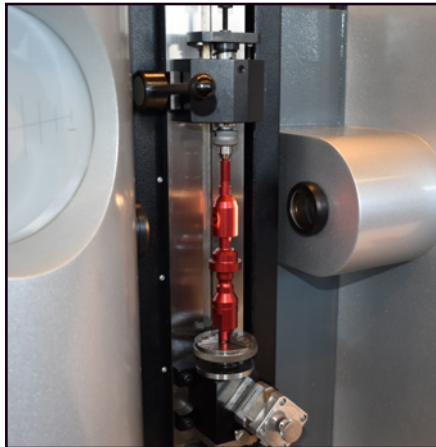
Small turning part held with 2-jaws gripper accessory on SCAN 52



Thread measurement with SCAN 50 CE+ accessory on SCAN 52



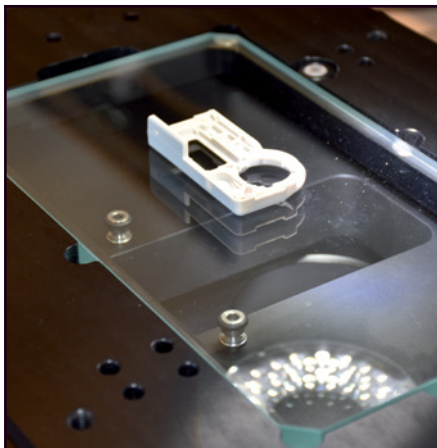
Part measurement with SCAN 50



Part measurement with SCAN 50



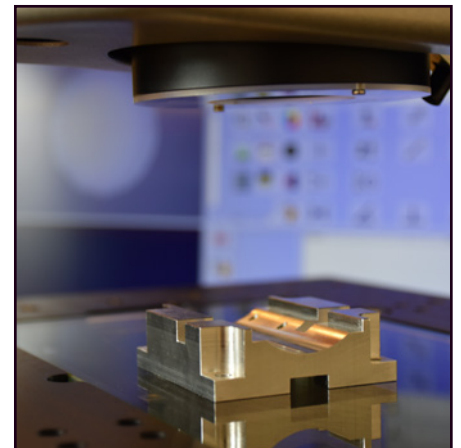
A Large selection of accessories for holding the parts are available for each machine.



Part lit by ring light on VISIO



Part lit by diascopic light on VISIO



Part lit by coaxial light on VISIO

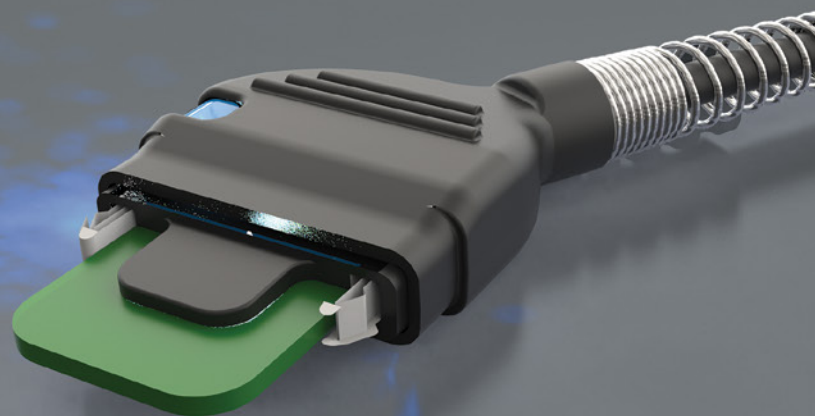
# CONNECTION & SOFTWARE

---

In the modern technical world, the capability of measuring instruments is not limited to the display of measured values. With connection and software abilities, our devices transform into even more precise, efficient, and productive machines.

Thanks to a great choice of connecting cables, the Sylvac instruments are compatible with the majority of data acquisition systems.

**RS232, USB or Wireless data output**





# Wireless transmission

# BLUETOOTH®

## DESCRIPTION

- Possibility to connect up to 8 instruments
- Duplex data transmission
- Easy programming
- Individual identification of each instrument *Bluetooth®* technology
- Confirmation of transmission



## TECHNICAL SPECIFICATIONS

		981.7100
USB		•
Coupled instruments per module		8
Automatic detection of instrument		•
Instruments and software compatibility		D300S & SylConnect & Vmux
Transmission distance <sup>1)</sup>	m	15

<sup>1)</sup> 1 module per instrument is required when used with SylConnect (up to 8 modules)

# Wireless transmission

## DESCRIPTION

- Possibility to connect up to 120 instruments on only one receiver
- Choice of modules according to the instruments
- Transmission on long distances
- Easy programming
- Individual identification of each instrument
- Confirmation of transmission
- Battery life : 2 years in standard use



926.5131



926.5132 / 926.5133



926.5110

## TECHNICAL SPECIFICATIONS

		926.5110
USB		•
Confirmation of transmission OK/KO		•
Attribution of the addresses of the modules by software		•
Software interfaces and configuration menu		•
Transmission distance <sup>1)</sup>	m	200

<sup>1)</sup> with large antenna

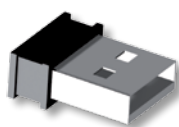
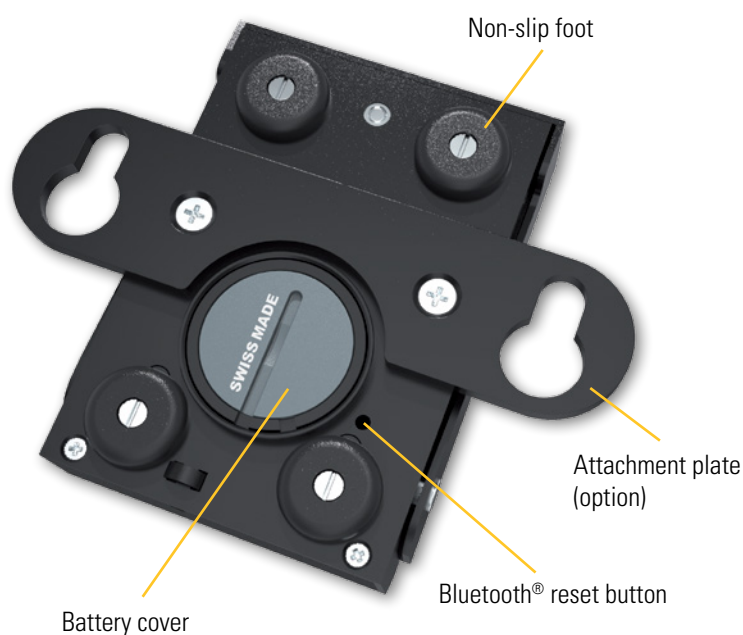
# Wireless transmission

# S\_Footswitch BT

## DESCRIPTION

## BLUETOOTH® FOOTPEDAL

- Robust Bluetooth® footpedal
- IP rating IP53
- Battery life : 3 years (Battery CR2477)
- Possibility of triggering sequences from the software Vmux



Bluetooth® dongle 981.7100

## TECHNICAL SPECIFICATIONS

Bluetooth® Footpedal		926.7022
Connection		Bluetooth® wireless technology*
Weight	g	260
Software compatibility		Vmux (1.37 and later)
Transmission distance <sup>1)</sup>	m	up to 15m

<sup>1)</sup> depends on the environnement

\* Connection with dongle #981.7100

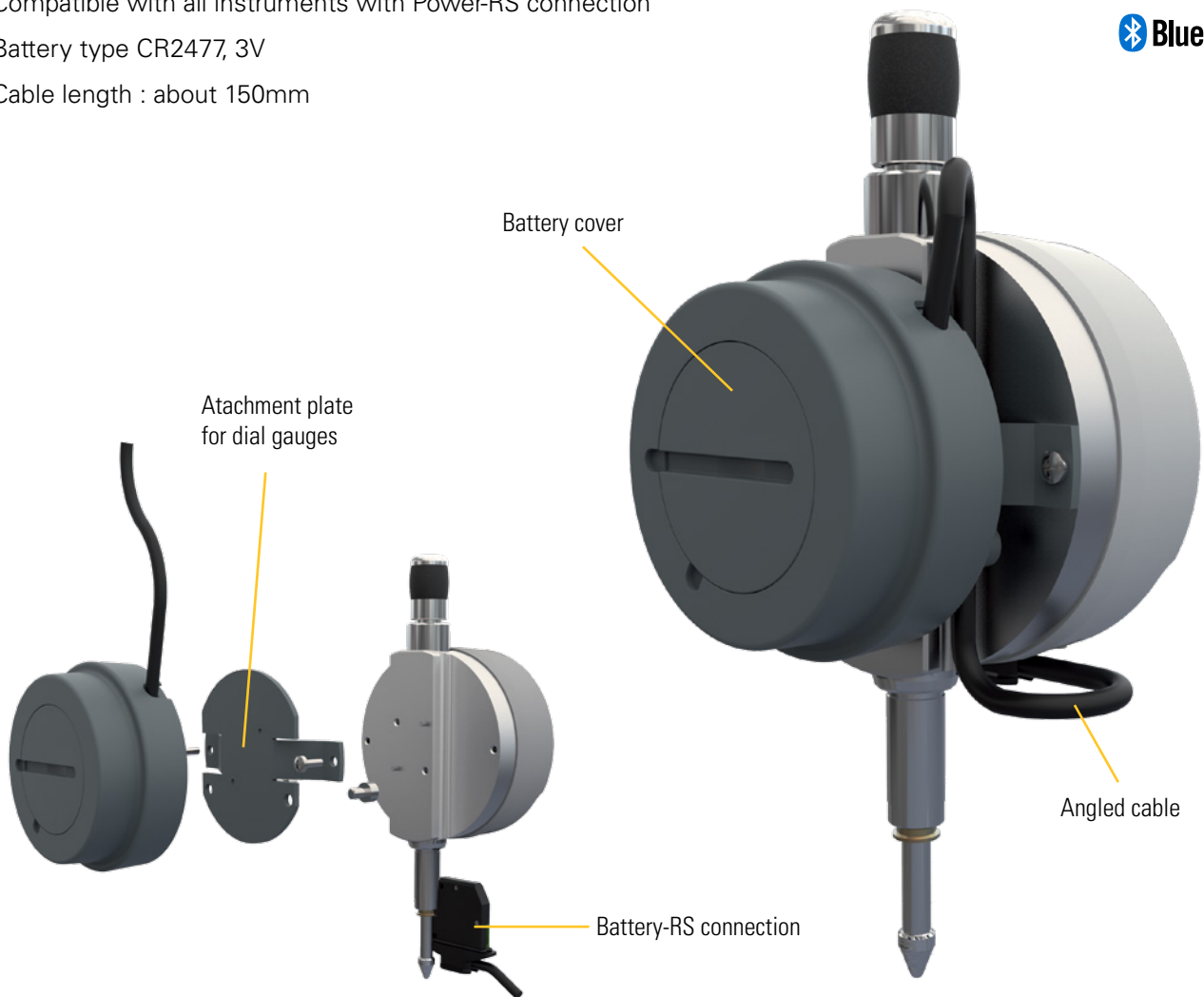
Accessories		926.7023	985.2217
Description		Fixing plate	Adapter for battery CR2032
Weight	g	85	5

# Wireless transmission

# Battery Pack

## DESCRIPTION

- External power-supply for Bluetooth® instruments
- Compatible with all instruments with Power-RS connection
- Battery type CR2477, 3V
- Cable length : about 150mm



## TECHNICAL SPECIFICATIONS

Battery Pack		926.7024
Connections		Power-RS / Battery-RS
Weight	g	71.6 (91.4g with attachment plate)
Capacity max.	mAh	1000
Clamping		compatible with dial gauges Ø60mm
Cable length	mm	150

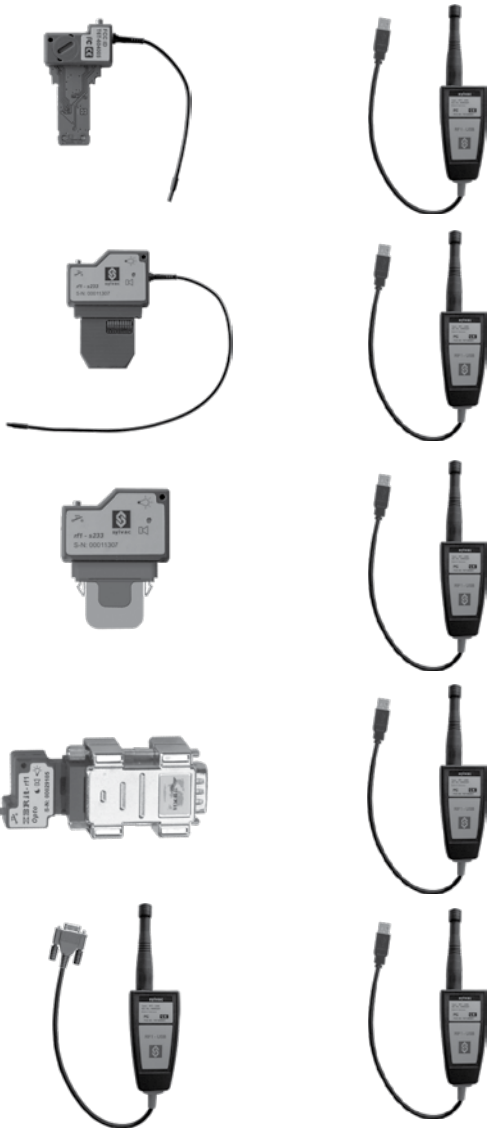
Accessories		985.2217
Description		Adapter for battery CR2032
Weight	g	5



# Wireless transmission

## CONNECTION

Bi-directional  
Programmable by PC



Opto module + USB receiver	926.5131 926.5110		
RS Power module + USB receiver	926.5132 926.5110		
Proximity module + USB receiver	926.5133 926.5110		
Adapter RS232/Opto + Opto module + USB receiver	926.5130 926.5131 926.5110		
RS232 module + USB receiver	926.5120 926.5110		

# Wireless transmission

## CONNECTION

S_Cal Pro / S_Mike Pro	S_Cal Work, Ultra UL	S_Depth PRO S_Scale WORK	Protractor	S_Dial S233 / S234	S_Dial ONE / S_Dial WORK S_Dial PRO / Hi_Gage ONE	Xtreme 2	Digital microscrew	Hi_Cal	PS16 V1 VS	S_View D50S / D80S PC output	S_View D200S	D300S instr. input	D300S output PC	D302 / D304	PC input
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# Cables

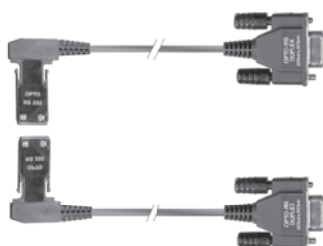
# S\_Connect

## CONNECTION

Our cables are available in various lengths indicated below.

On request, we can deliver our special length cables, within the following limits:

- RS232 cables: maximum length 15 meters
- USB cable: maximum length 7 meters.



	Standard 2 m	Standard 3 m	Standard 5 m	≤15 m	Bi-directional	Programmable by PC
Opto RS	926.5521	--	--	926.5535		
Opto RS	926.6521	--	--	926.6535	●	
Opto RS	926.6538	--	--	926.6542	●	
Opto RS	926.6539	--	--	926.6543	●	
Opto USB	926.6621	--	--	<sup>1)</sup>	●	
Power RS	--	905.4516	--	905.4519	●	
Power RS (bent)	--	905.4538	--	<sup>1)</sup>	●	
Power USB	--	926.6821	--	<sup>1)</sup>	●	
Power USB (bent)	--	926.6838	--	<sup>1)</sup>	●	
PLC digital indicator	--	--	926.6101	--	--	--












<sup>1)</sup> Maximum 7m (Standard 5m)

# Cables

# S\_Connect

## CONNECTION

S_Cal Pro / S_Mike Pro	S_Cal Work, Ultra UL 3	S_Depth PRO S_Scale WORK	Protractor	S_Dial S233 / S234	S_Dial ONE / S_Dial WORK S_Dial PRO / Hi_Gage ONE	Xtreme 2	Digital microscrew	Hi_Cal	PS16 V1 VS	S_View D50S / D80S PC output	S_View D200S	D300S instr. input	D300S output PC	D302 / D304	D400S	D70S/H/I	S_Dial WORK PLC
	•		•						•			•					
	•		•						•			•					
	•		•						•			•					
	•		•						•			•					
	•		•						•			•					
		•		•	•	•	•					•					
		•		•	•	•	•					•					
		•		•	•	•	•					•					
		•		•	•	•	•					•					
																	•

		Standard 2 m	Standard 3 m	≤15 m	Bi-directional	Programmable by PC
	Proximity RS232	--	926.6723	<sup>1)</sup>	●	
	Proximity USB	--	926.6721	<sup>1)</sup>	●	
	RS232 1:1	--	925.5609	<sup>1)</sup>	●	
	USB-USB	--	804.1210	--	●	
	Mini USB-USB	--	926.6001	--	●	
	Adaptator RS-USB	925.1142	--	--	●	
	Booster + footswitch	--	925.1143 <sup>2)</sup>	--	●	
	Special - RS232	--	926.5505	--	●	
	RS232 1X1 (3 pins wired)	--	804.2201	--		
	RS232 1X1	--	804.2204	--		
	M8-RS485	--	804.2205	--		

<sup>1)</sup> Maximum 7m (Standard 5m)

<sup>2)</sup> must be connected with bi-directional cables only

# Cables

# S\_Connect

## CONNECTION

S_Cal Pro / S_Mike Pro	S_Cal Work, Ultra UL 3	S_Depth PRO / S_Scale WORK	Mesureur d'angles	S_Dial S233 / S234	S_Dial ONE / S_Dial WORK Hi_Gage ONE	PS16 V2	Digital microcrew	Hi_Cal	PS16 V1 VS	S_View D50S / D80S PC output	S_View D200S	D300S instr. input	D300S output PC	D302 / D304	D400S	D70 H/I	D70 S	D70 A	D62S	Xtreme 3 / UL4	M-Bus (except RS)	Z5
•					•	•						•								•		
•					•	•						•								•		
								•		•	• 6)	• 6)		•	• 4)		•		•		•	
											•		•									
						•		•						•					•			•
3)	3)	3)	3)	3)	3)		3)	3)	3)	•	•				• 5)	• 5)	• 5)	• 5)	•	3)		
3)	3)	3)	3)	3)	3)		3)		3)											3)		
																						•
																• 7)		• 7)				
																• 8)		• 8)				
																		• 9)				

<sup>3)</sup> must be connected with RS232 cables

<sup>4)</sup> For MB-XX module and RS232 PC connections

<sup>5)</sup> RS232 connection to PC (D70S version and D400S only) bidirectional.  
Versions D70I/H require a crossover RS232 cable.

<sup>6)</sup> Not working on PC

<sup>7)</sup> Update of the units

<sup>8)</sup> Crossover cable for PC connection

<sup>9)</sup> Connection cable for MB-I/O

# Sylvac softwares

## DATA TRANSFER

### SYLCOM

Latest of our softwares, SYLCOM allows to connect all the Sylvac instruments either by USB cable or by Bluetooth®. This universal software can be used to display values in different modes, to upload part drawing in background, to show the tolerances status, to define measuring sequences and to export data to Excel or to third party software.

Currently two versions are available:

### SYLCOM LITE

Free software downloadable on [www.sylvac.ch](http://www.sylvac.ch). Full features as SYLCOM Standard, but limited to one instrument connected.

### SYLCOM Standard

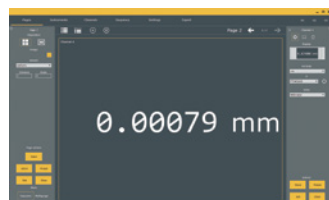
Software protected by payable license (dongle or web license). Allows to connect up to 16 instruments.

There is also an upgrade from Sylconnect to Sylcom Standard.

Additional versions (modules) will be available in the coming months. For features and functionality, refer to the table at the end of the chapter.



Free Sylcom LITE version on [www.sylvac.ch](http://www.sylvac.ch)



Channel display



Multi-channel display with colour-coded tolerances



Multi-channel analogue display

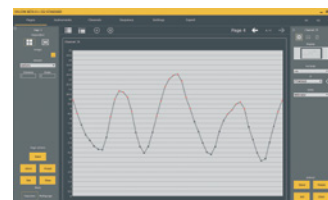


Chart display

### Softwares

### Order number

Sylcom LITE	<b>FREE</b>
Sylcom Standard (Dongle)	981.7132
Upgrade Sylconnect to Sylcom*	981.7133

\* contact us to get the procedure for the update

### Accessories

### Order number

Bluetooth® Dongle	981.7100
USB pedal	926.7020
USB pedal robust	926.7021
Bluetooth® footpedal	926.7022

# Applications

## DATA TRANSFER

### Vmux

Virtual multiplexer which allows you to connect and organise the whole range of SYLVAC Bluetooth® Smart and USB products, by redirecting them to the virtual COM ports.

The software supports up to 32 instruments. (max. 32 USB or max. 16 Bluetooth® and 16 USB). For Bluetooth® connection, a 981.7100 dongle is required which must be connected to the PC via a USB port.

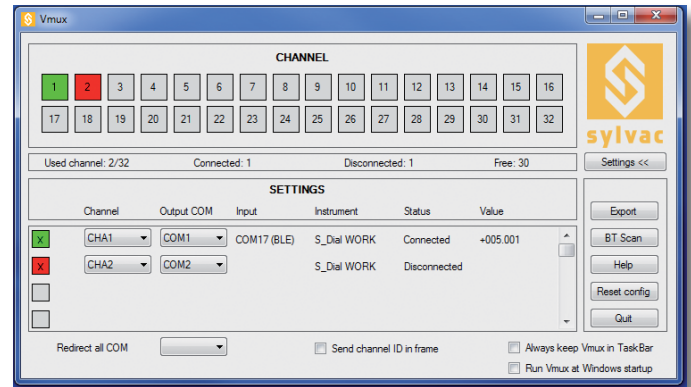
Up to 8 Bluetooth® instruments per dongle!

The protocol used ensures compatibility with all SPC software by sending and/or requested data via the COM ports.

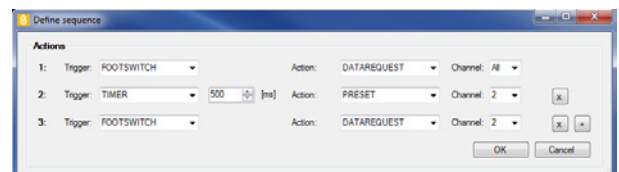
Used to send data to existing applications. Incorporates sending of data in Excel®

**Vmux LITE** : allows up to 1 instrument and 1 pedal to be connected.

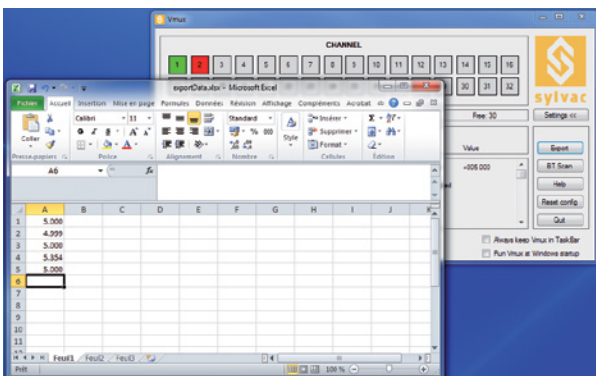
**Vmux Standard** : allows up to 32 instruments to be connected.



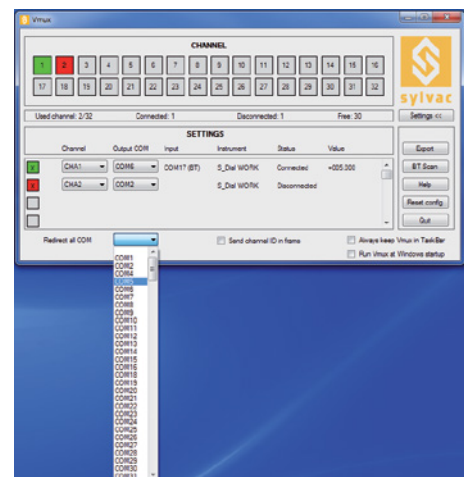
Basic display



Defining a sequence



Exporting data in Excel®



Port COM changing

Softwares	Order number
Vmux LITE	FREE
Vmux	981.7161

Try the free version Vmux LITE available on our website [www.sylvac.ch](http://www.sylvac.ch)

Accessories	Order number
Bluetooth® Dongle	981.7100
USB pedal	926.7020
USB pedal robust	926.7021
Bluetooth® footpedal	926.7022



# Applications

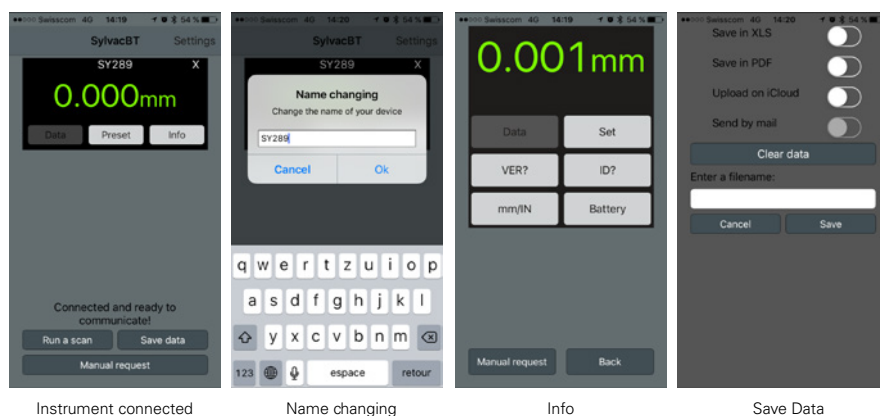
## DATA TRANSFER

### Sylvac BT Smart Android & Apple

Enables the display of data from *Bluetooth®* instruments on touchpads and smartphones Android 4.3 version and Apple IOS7, equipped with *Bluetooth®* wireless technology.

Ability to save data on the touchpad or smartphone into a PDF or Excel and export the data in Google Drive or iCloud.

Available for free on the Google Play Store and the App Store.



Instrument connected

Name changing

Info

Save Data

**No dongle required !**



# Various softwares

## OVERVIEW OF SOFTWARE AND FUNCTIONS

	SYLCOM						VMUX		SYLVAC BT SMART APP		
	LITE	Standard	Advanced Package	PRO Package	SCP Package	Upgrade from Sylconnect	LITE	Standard	ANDROID	IOS	WINDOWS
		981.7132	981.7133	981.7134	981.7135	981.7139		981.7161			
NUMBER OF INSTRUMENTS			Soon								Saan
Max. 1	●						●		●	●	●
Max. 16		●		●	●	●					
Max. 32								● 1)			
Max. 254			● 2)								
PLATFORMS											
Windows 7	●	●	●	●	●	●	●	●			
Windows 8.1	●	●	●	●	●	●	●	●			
Windows 10	●	●	●	●	●	●	●	●			
Windows Mobile											● 3)
Android									● 4)		
IOS										● 5)	
Dongle required for Bluetooth® instruments	●	●	●	●	●	●	●	●			
FUNCTIONS											
Export to ASCII	●	●	●	●	●	●					
Export to Microsoft Excel®		●	●	●	●	●			●	●	●
Export to PDF									●	●	●
Immediate export to external program	●	●	●	●	●	●	●	●			
Send by email									● 6)	●	●
Save data to Cloud									● 7)	● 7)	● 7)
Save data to device									●	● 8)	●
Communication gateway (virtual COM port)							●	●			
Display value	●	●	●	●	●	●	●	●	●	●	●
Display tolerances	●	●	●	●	●	●			●	●	●
Analogue display	●	●	●	●	●	●					
Chart display	●	●	●	●	●	●					
Multi-channel		●	●	●	●	●		●			
Flatness			●								
Inspection plan				●							
SPC light					●						
Action sequences		●	●	●	●	●					
User management	●	●	●	●	●	●					
Work menu (controlling instrument menus)	●	●	●	●	●	●					

1) Max. 32 USB or 16 USB and 16 Bluetooth®

2) via Mbus

3) Not currently available

4) Minimum Android 4.3 with Bluetooth® 4.0

5) minimum IOS 7 with Bluetooth® 4.0

6) Send by email only available if file is saved to device and an email created in an external application

7) Android: export to Google Drive/iOS: export to iCloud/Windows: export to OneDrive

8) Can be saved to iOS but file can only be retrieved using a computer

# Other

## OTHER ACCESSORIES



Battery CR2032	985.2215
Battery CR2477	985.2216

# Other

## COMPATIBILITY

Calipers S\_Cal, ultra-light calipers ULX4 <sup>1)</sup>, dial gauges S\_Dial (except PLC), micrometers, bore gauges, digital scale S\_Scale, digital micrometer screws, depth gauges S\_Depth, Protractor, Hi\_Gage, Bluetooth® footpedal<sup>1)</sup> and benches table PS16 V2<sup>1)</sup>

Ultra-light calipers ULX4, benches table PS16 V2, Bluetooth® footpedal, Battery Pack

<sup>1)</sup> With adapter



**sylvac**

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