Developed in 🇨🇭

Manufactured in 🇨🇭

Assembled in 🇨🇭

Catalogue **Edition 10**

Catalogue **Edition 10**

Swiss manufacturer of precision measuring instruments since 1969

sylvac

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sylvac

Changes without prior notice
Images may differ from reality

EN

Bluetooth®

SWISS MADE

Introduction

SYLVAC CATALOGUE

Dear Customer, Dear Reader,

Welcome to the new edition 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 innovation is undoubtedly our new modern D62S display unit and its dedicated P12D probes with a range of 12.7 mm and equipped with an impressive repeatability. These digital absolute probes are equipped either with M8 connectors (for D62S) or with USB connectors for direct output on D300S V2 or PC and use our new data acquisition software, Sylcom.

But also our new SCAN F60 optical measuring machine for cylindrical components has arrived at an opportune time to meet the increasing needs of the manufacturing industries. Faster, more precise and equipped with Version 2 of the Reflex-SCAN+ software, its design will certainly captivate you.

The new catalogue also features other instruments, such as:

- The new S_Cal EVO Proximity calipers.
- A new version of the protractor, now available with wireless Bluetooth® technology.
- Sylcom, our new data acquisition and export software with a range of modules.
- A digital thickness gauge with wireless Bluetooth® technology and HID profile.
- Two new micrometers for cable crimping and spline measurement.
- Plus many other surprises…

This catalogue showcases all of Sylvac's know-how, as illustrated by the incredible number of new innovative products which are a perfect illustration of Sylvac's dynamism. 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

Managing Director
E. Schnyder

Sylvac SA

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Content

Certificates

SYLVAC PRODUCTS
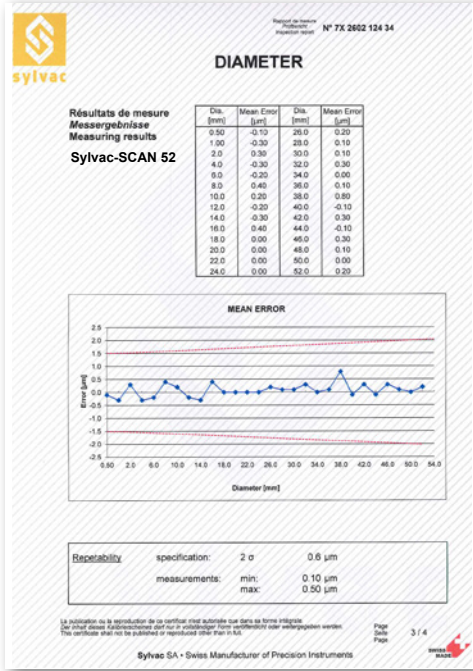

PRIX SVC+

GAGNANT 2016

SUISSE ROMANDE

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 1µm 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.

Max. error fe

Web site :
Up to date information as well as updated files and software can be downloaded on www.sylvac.ch

www.sylvac.ch

http://www.filierepolymecanicien.ch
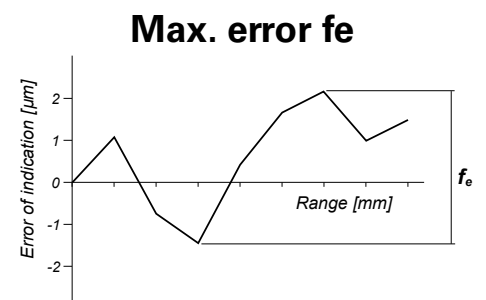
General information

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).

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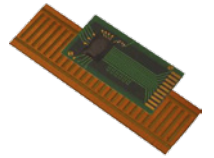
Characterizes the instruments whose the electronic module and the measuring system are protected against liquids. The IPXX degree defines the protection rating of the instruments.

SIS | Smart Inductive System

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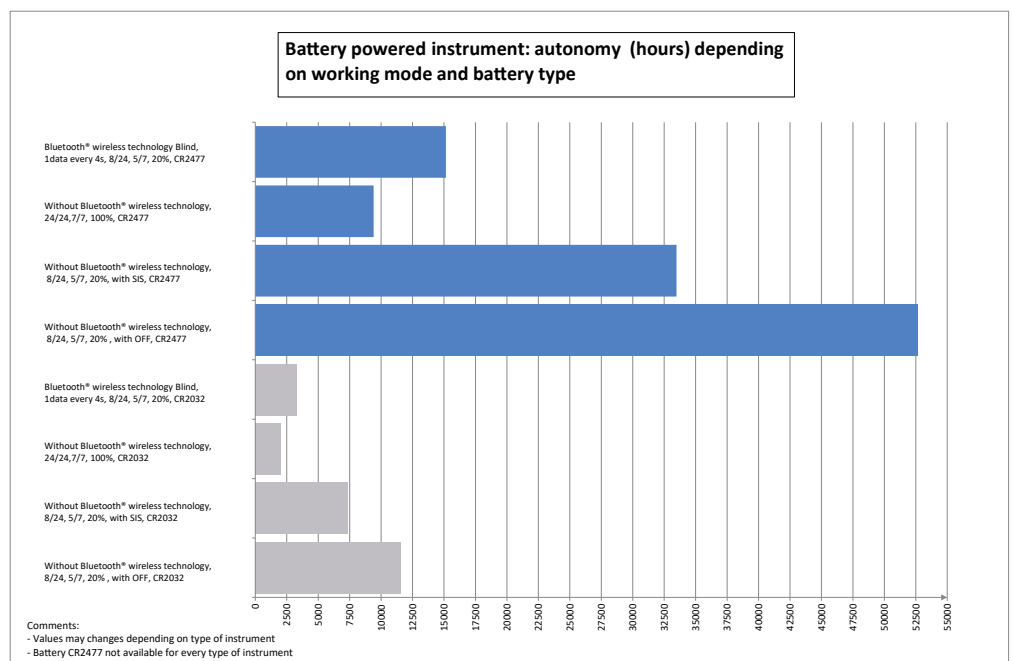**IP67** : completely sealed against dust, protected against temporary total immersion

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 instruments with Bluetooth® wireless technology have a 15m scope. In terms of wave emissions, the Bluetooth® low energy has 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 thousand times smaller than a mobile phone worn on the ear.

Battery powered instrument: autonomy (hours) depending on working mode and battery type

Bluetooth® wireless technology Blind, 1data every 4s, 8/24, 5/7, 20%, CR2477

Without Bluetooth® wireless technology, 24/24,7/7, 100%, CR2477

Without Bluetooth® wireless technology, 8/24, 5/7, 20%, with SIS, CR2477

Without Bluetooth® wireless technology, 8/24, 5/7, 20% , with OFF, CR2477

Bluetooth® wireless technology Blind, 1data every 4s, 8/24, 5/7, 20%, CR2032

Without Bluetooth® wireless technology, 24/24,7/7, 100%, CR2032

Without Bluetooth® wireless technology, 8/24, 5/7, 20%, with SIS, CR2032

Without Bluetooth® wireless technology, 8/24, 5/7, 20% , with OFF, CR2032

0 2500 5000 7500 10000 12500 15000 17500 20000 22500 25000 27500 30000 32500 35000 37500 40000 42500 45000 47500 50000 52500 55000

Comments:
- Values may changes depending on type of instrument
- Battery CR2477 not available for every type of instrument

DATA TRANSMISSION
& SOFTWARE

In the modern technical world, the capability of measuring instruments is not limited to the display of measured values.

New tasks are now requested and required to meet the era of Industry 4.0 and the Internet of Things.

A wide choice of connection cables, pioneering wireless transmission technologies as well as new functionalities provide compatibility with most data management and data acquisition systems

RS232, USB or Bluetooth® wireless technology data output

Data transmission and softwares

CONNECTIONS

What is the future for metrology?
The arrival of a new era for industrial production with the widely discussed concepts of "Industry 4.0", «Internet Of Things" and "Smart Manufacturing" will require new tools capable of interconnectivity and interoperability. Very soon it will become compulsory for many companies to collect data produced by the different elements in the manufacturing chain.

Traditional metrology will evolve towards more automation and digital (paperless) solutions which will enable increased traceability and remote monitoring of a whole set of information centralised on one server.

Sylvac is ready for the challenge!
Sylvac had already committed to digital and to data transfer without waiting for the current excitement! In fact, several decades ago we proposed a full range of instruments to our clients for simple and reliable interconnectivity. After the cable connections (RS232 then USB) we are proud that we focused our efforts on the technological progress of the wireless transmission of values. By equipping most of our hand-held instruments with a wireless Bluetooth® transmitter integrated into the electronics, Sylvac has been a genuine pioneer in this area, demonstrated by the fact that we are currently the only company able to offer a solution with Bluetooth® Wireless technology that meets the challenges of the future – and for the price of a cable connection!

The advantage of our instruments with Bluetooth® Wireless technology
Wireless connectivity provides greater freedom of action and more flexibility for the operator requested to execute measurements. New solutions can also be implemented for control-ling components using specific instruments or positions. Here are some of the highlights:
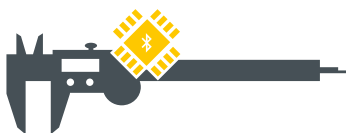
- <u>The solution is totally integrated into the instrument</u>
  The wireless Bluetooth® transmitter is fixed on the electronic chart of the instrument and no further accessory is required. The Sylvac instrument with Bluetooth® Wireless technology that you receive is ready to be connected. Most of our competitors claim to offer wireless solutions, which are not really wireless solutions, or which require an external element to be acquired which is often fragile and costly! Our integrated system also has the advantage of not being sensitive to liquids or dirt.

- <u>Transmission distance</u>
  The maximum distance between the instrument and the peripheral device receiving the values is generally between 5 and 15 meters, depending on the configuration of the premises and any potential disruptive influences. Given that a wired USB connection is limited to 7 meters, the transmission range of our instruments with Bluetooth® Wireless technology is therefore greater than wired connections most of the time!

- <u>Autonomy</u>
  Sylvac's technological achievement was to offer a solution with energy-efficient Bluetooth® Wireless technology so that our instruments powered by a standard lithium battery could remain connected and used for several weeks, even several months. This was achieved thanks to our patented measurement system (Sylvac System) which only needs minimum energy. On request our agent can give you an estimate of the battery service life of your instrument taking your specific usage conditions into account.

Data transmission and softwares
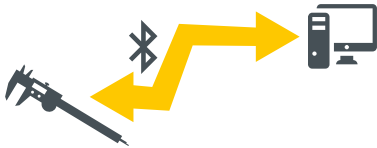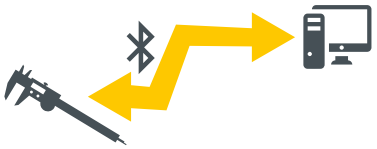
CONNECTIONS

- <u>Duplex Transmission</u>
Sylvac instruments are currently the only instruments able to communicate bidirectionally by Bluetooth® Wireless technology with the peripheral to which they are connected. This means that they can both send values and information and receive and interpret them. The best example of this is the transmission from the computer of a zero reset command for the instrument. This ensures the synchronisation of the value displayed on the instrument and on the peripheral device in order to limit the risks of error.

- <u>Freedom of action at the price of a wired connection</u>
One important factor to consider when selecting an instrument is of course its price! Our Sylvac instruments with Bluetooth® Wireless technology also offer, as well as the features listed above, the benefit of not costing more than a traditional wired digital instrument. Therefore they can be used everywhere as replacements for wired instruments.

How to connect our instruments with Bluetooth® Wireless technology
Flexibility is one of the watchwords that characterise our Sylvac instruments with Bluetooth® Wireless technology. They can be connected to a computer running Windows, to our D300S and D400S display units and to a Smartphone or Apple or Android tablet. This is how to connect them:

- <u>Connection to a computer</u>
There are different requirements depending on the instrument and the Windows operating system running on your computer. The most reliable solution is to attach a Sylvac Bluetooth® dongle to your computer which can connect up to 8 instruments. The most recent instruments also have a Human Interface Device (HID) direct communication mode enabling them to connect to a computer as a peripheral keyboard and transmit the values in any software application. (Use without dongle with Windows 10 possible with Sylcom)
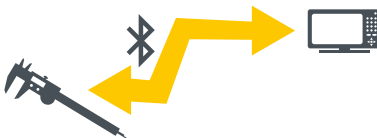
- <u>Connection to our multi-functional display units</u>
Our D300S display unit can be fitted with a Sylvac Bluetooth® dongle in order to connect up to 8 Sylvac Bluetooth® instruments. The same applies to the D400S unit to which one or several (up to 12) M-Bus BT modules can be connected enabling a multitude of Sylvac Bluetooth® instruments to be connected to it.

- <u>Connection to a smartphone or tablet</u>
Our instruments can be connected directly to a smartphone and to tablets running Android or iOS. Sylvac demonstration apps are available from the Google Store and the Apple Store. These apps demonstrate the connection of one of our instruments with Bluetooth® technology to one of these peripheral devices. As this area is evolving very rapidly, please refer to our website for the latest information.

Data transmission and softwares
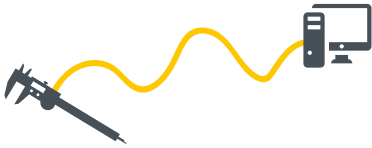
CONNECTIONS

- **Wired Connections**
  Despite all the benefits described above, it could be that Bluetooth® Wireless technology is not the most appropriate solution for a specific application. We are of course able to provide a connection cable fitted either with an RS232 or USB connector for every Sylvac instrument with a data output. Our standard cables are 2 or 3 meters in length depending on the models. On request they can be delivered in special lengths of up to 15 metres for RS232 cables and up to 5 metres for USB cables.

Use of a digital test indicator without its battery

In some cases, as for example when a digital test indicator is installed in a location that is difficult to access, or if it is fitted on a non-stop operating machine, it may be advisable to replace the battery of the instrument with a special cable (Power) which will ensure both its power supply and the data transfer. Most of our digital test indicators offer this option and they are identified by the Power logo.

Please refer to the chapter on cables for details on the different cables available.

Other digital test indicators, intended for connection to programmable logic controllers (PLC) also operate without a battery and their power supply is provided by the controller
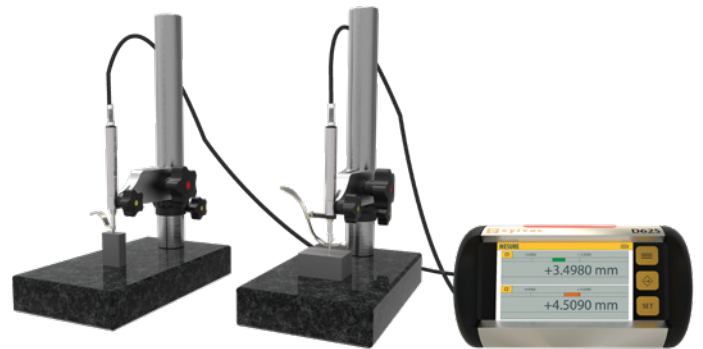
Data transmission and softwares

CONNECTIONS

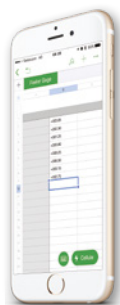**Connection RS-485**

Connection Proximity

Connection M8
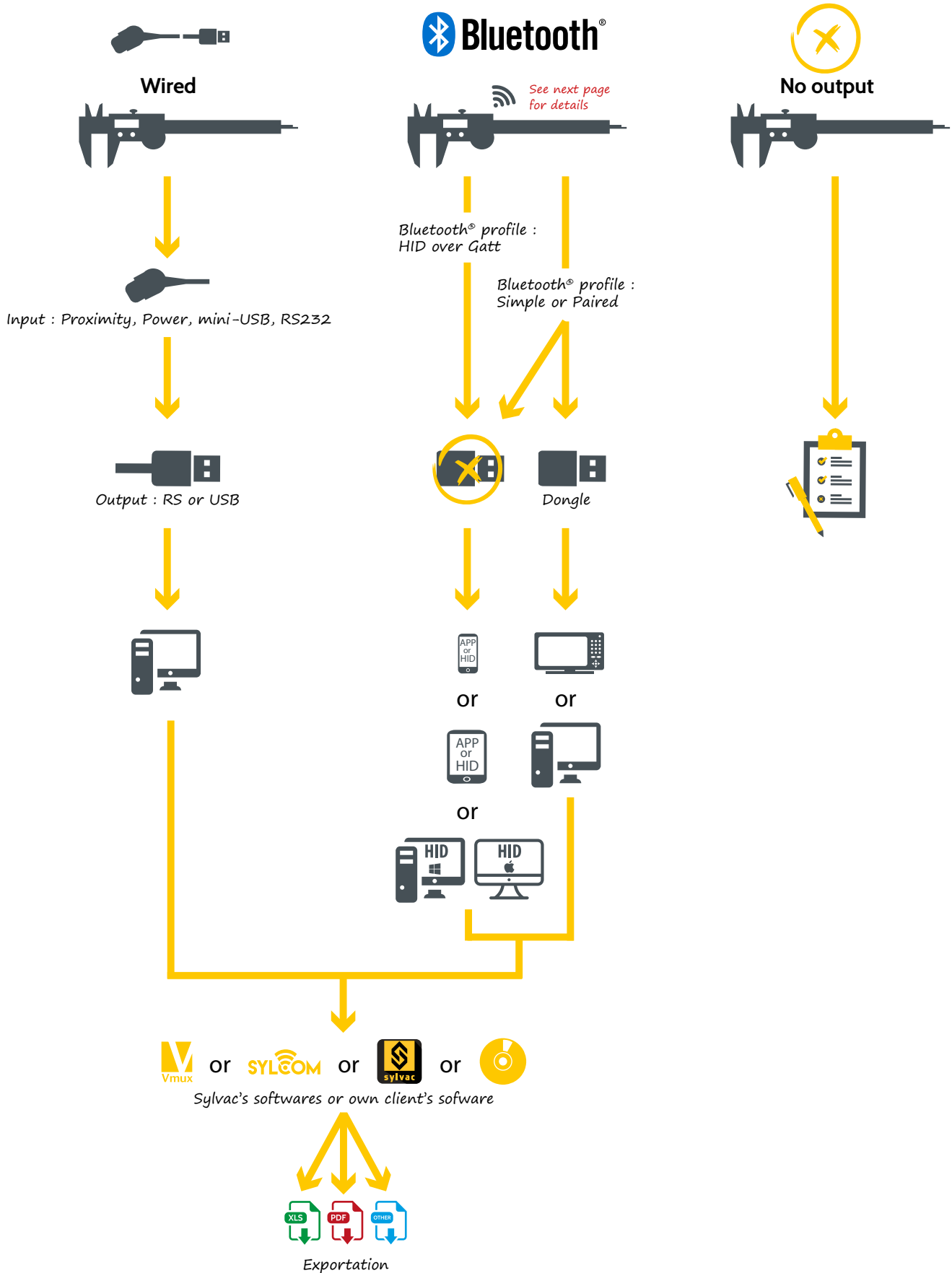
Bluetooth® Wireless technology with dongle

Bluetooth® Wireless technology and USB
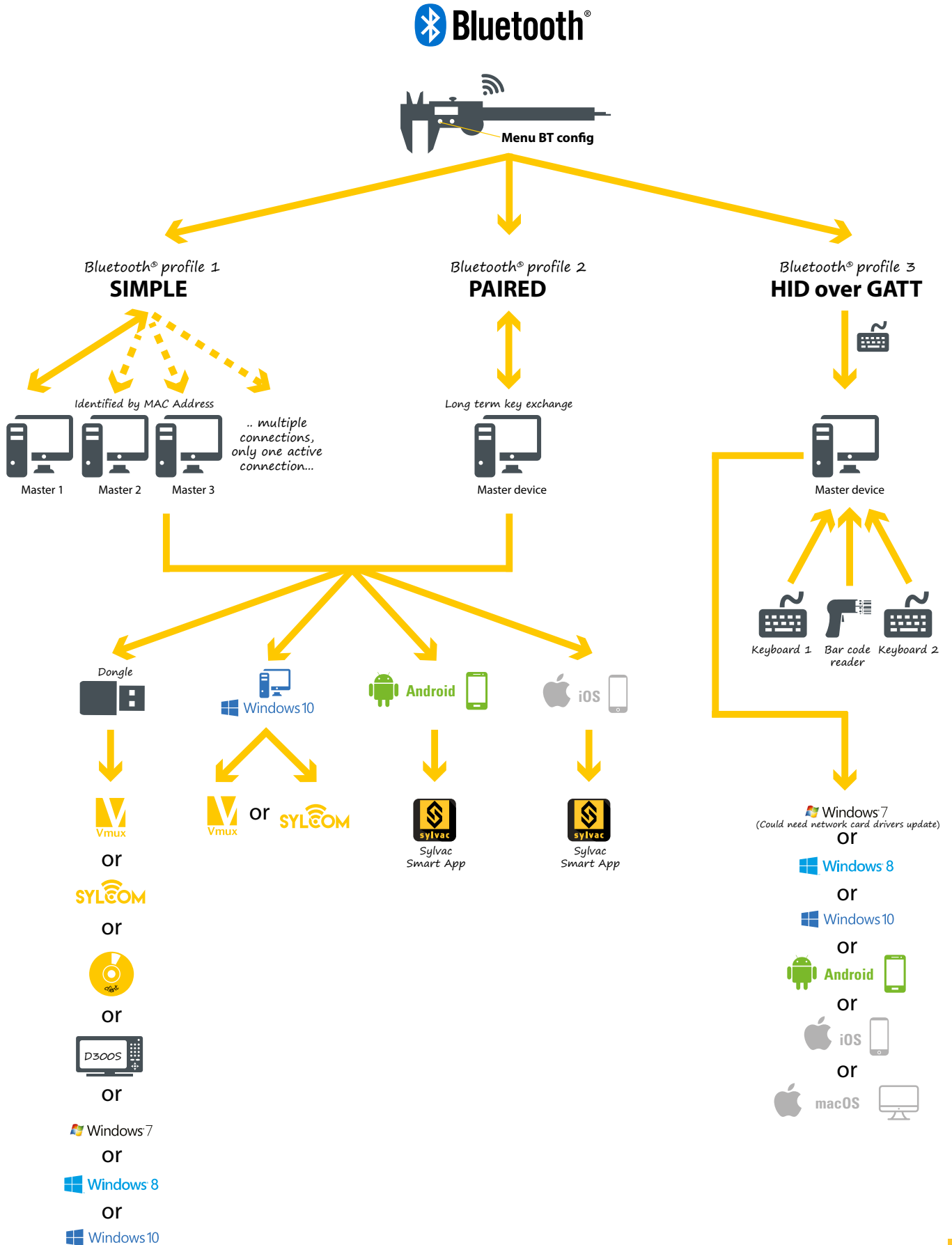
Bluetooth® Wireless technology via HID

Data transmission and softwares

CONNECTIONS POSSIBILITIES

Wired

Input : Proximity, Power, mini-USB, RS232

Output : RS or USB

Bluetooth®

See next page for details

Bluetooth® profile :
HID over Gatt

Bluetooth® profile :
Simple or Paired

Dongle

APP
or
HID

or

APP
or
HID

or

HID

HID

or

No output

Vmux   or   SYLCOM   or   sylvac   or

Sylvac's softwares or own client's sofware

XLS   PDF   OTHER

Exportation

Data transmission and softwares

WIRELESS CONNECTION PROFILES

Bluetooth®

Menu BT config

Bluetooth® profile 1	Bluetooth® profile 2	Bluetooth® profile 3
SIMPLE	**PAIRED**	**HID over GATT**

Identified by MAC Address

.. multiple connections, only one active connection...

Master 1   Master 2   Master 3

Long term key exchange

Master device

Master device

Keyboard 1   Bar code reader   Keyboard 2

Dongle

Vmux

or

SYLCOM

or

or

D300S

or

Windows 7

or

Windows 8

or

Windows 10

Windows 10

Vmux   or   SYLCOM

Android

Sylvac Smart App

iOS

Sylvac Smart App

Windows 7
(Could need network card drivers update)

or

Windows 8

or

Windows 10

or

Android

or

iOS

or

macOS

Sylvac softwares

DATA TRANSFER

SYLCOM

Sylcom is the latest software product to be launched by Sylvac and has been designed to process information from instruments connected via Bluetooth® Wireless technology or via a USB cable. It creates an almost limitless number of display channels spread over one or several pages. Several display modes are available so that the status of the variable measured (GO/NG) can be visualised instantaneously. Sylcom can also be used to measure components sequentially, to collect all values simultaneously and to define a time interval in order to save values automatically. The data can be saved in Sylcom and then exported to an Excel file.

The concept is to offer a modular software application based on the specific functionalities required.

Free Sylcom LITE version on www.sylvac.ch

A free version **Sylcom Lite**, limited to one connection can be downloaded free of charge from our website. The full version of **Sylcom Standard** with the capacity to connect up to 16 instruments and the **Sylcom Advanced** version with the capacity to connect up to 250 instruments (max. 40 instruments with Bluetooth® Wireless technology with advanced functions and connections to M-Bus modules) can be purchased online from our website or from the Sylvac distributor in your country. Further modules will be available in the future to expand the possible uses of Sylcom.

Your metrology partner for the new challenges ahead!

We hope that all the in-formation described above has convinced you that Sylvac is not only a manufacturer of innovative and high-quality measuring instruments but also the partner you need to help your quality control evolve towards the new industrial model that awaits us.

Data processing software
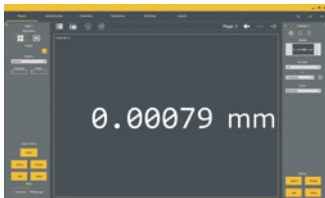
Channel display

Multi-channel display with colour-coded tolerances

Multi-channel analogue display
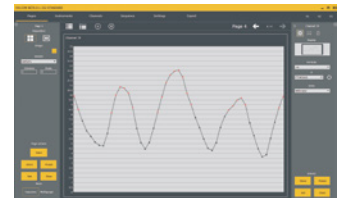
Chart display

Softwares SYLCOM	Order number
Sylcom LITE	**FREE**
Sylcom Standard (Dongle licence)	981.7132
Sylcom Standard (Digital licence)	981.7129
Sylcom Advanced (Dongle licence)	981.7133
Upgrade Sylconnect to Sylcom*	981.7139

Accessories	Order number
Dongle Smart	981.7100
USB pedal	926.7020
USB pedal robust	926.7021
Footpedal Smart	926.7022

* contact us to get the procedure for the update

Applications

DATA TRANSFER

Vmux

This software may be considered as a virtual interface which assigns a COM port to instruments connected by wireless Bluetooth® transmission or by USB cable and then redirects the values from these instruments to any Windows software (SPC or other).

For the simplest applications Vmux simply exports the values into a selectable Excel file. Extremely user-friendly, Vmux is an excellent replacement for the multiplexer boxes used in the past.
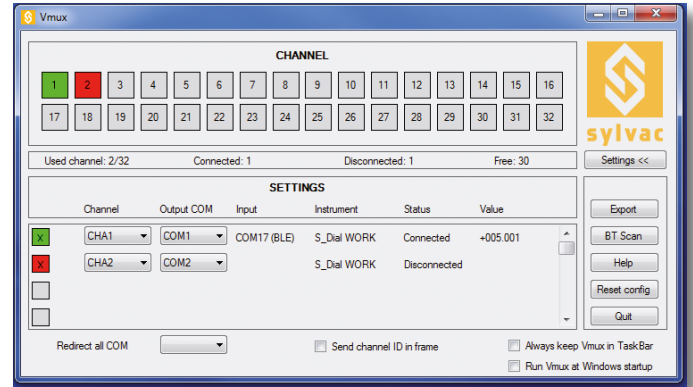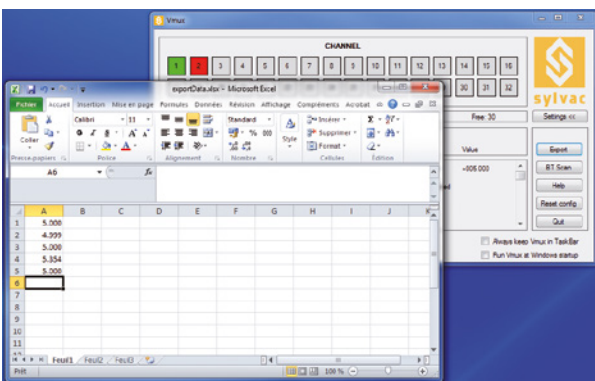

A free version Vmux Lite, limited to one connection can be downloaded free of charge from our website. The full version of Vmux with the capacity to connect up to 32 instruments (max. 16 instruments with wireless Bluetooth® transmission) can be ordered from the Sylvac distributor in your country.
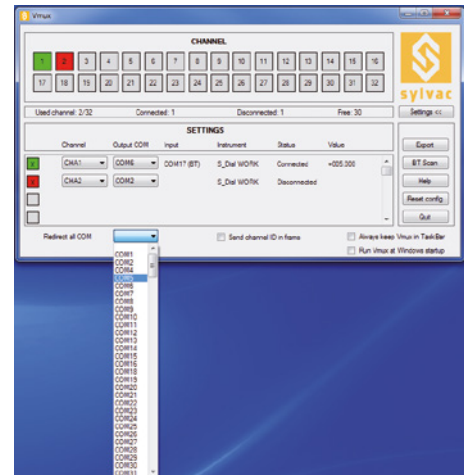

Basic display
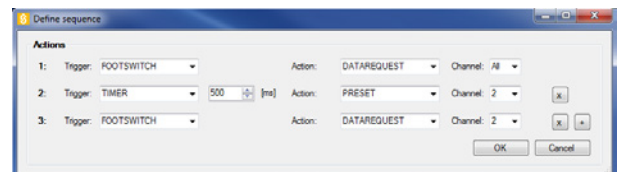
Defining a sequence

Exporting data in Excel®

Port COM changing

Softwares Vmux	Order number
Vmux LITE	**FREE**
Vmux	981.7161

Try the free version Vmux LITE available on our website www.sylvac.ch

Accessories	Order number
Dongle Smart	981.7100
USB pedal	926.7020
USB pedal robust	926.7021
Footpedal Smart	926.7022

Applications

DATA TRANSFER

Sylvac Smart App Android & Apple

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

Usable only with Sylvac instruments with Bluetooth® technology in "simple" profile.

| Instrument connected | Name changing | Info | Save Data |
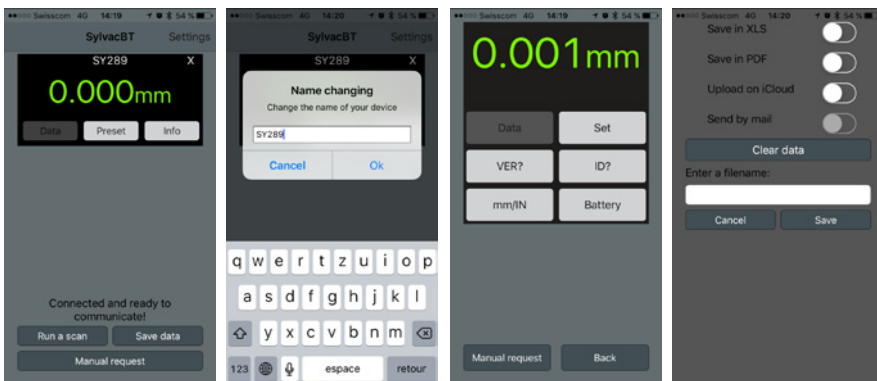
No dongle required !

Various softwares

OVERVIEW OF SOFTWARE AND FUNCTIONS

	SYLCOM					VMUX	
	LITE	Standard	Advanced Package	PRO Package	Upgrade from Sylconnect	LITE	Standard
		981.7132/29	981.7133	981.7134	981.7139		981.7161
NUMBER OF INSTRUMENTS							
Max. 1	●					●	
Max. 16		●		●	●		
Max. 32							● 1)
Up to 128			● 2)				
PLATFORMS							
Windows 7	●	●	●	●	●	●	●
Windows 8.1	●	●	●	●	●	●	●
Windows 10	●	●	●	●	●	●	●
Dongle required for instruments Smart	(●)	(●)	(●)	(●)	(●)	●	●
FUNCTIONS							
Export to ASCII	●	●	●	●	●		
Export to Microsoft Excel®		●	●	●	●		
Immediate export to external program	●	●	●	●	●	●	●
Communication gateway (virtual COM port)						●	●
Display value	●	●	●	●	●	●	●
Display tolerances	●	●	●	●	●		
Analogue display	●	●	●	●	●		
Chart display	●	●	●	●	●		
Multi-channel		●	●	●	●		●
Flatness and advanced formulas			●				
Inspection plan				●			
Statistics				●			
Action sequences		●	●	●	●		
User management	●	●	●	●	●		
Work menu (controlling instrument menus)	●	●	●	●	●		

1) Max. 32 USB or 16 USB and 16 instruments with Bluetooth® Wireless technology
2) via Mbus (depends on hardware), max. 40 instruments with Bluetooth® Wireless technology (5 dongles)

Wireless transmission   Dongle Smart

DESCRIPTION

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

❀ Bluetooth®

TECHNICAL SPECIFICATIONS

	981.7100
USB	●
Coupled instruments per module	8
Automatic detection of instrument	●
Instruments and software compatibility	D300S & SylConnect & Vmux
Transmission distance [1] m	15

[1] 1 module per instrument is required when used with SylConnect (up to 8 modules)

Wireless transmission   S_Footswitch Smart

DESCRIPTION

FOOTPEDAL SMART

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

Built-in
Bluetooth®

Non-slip foot

Status LED (low battery, Bluetooth® transmission)

SWISS MADE

Attachment plate (option)

Battery cover

Bluetooth® transmission reset button
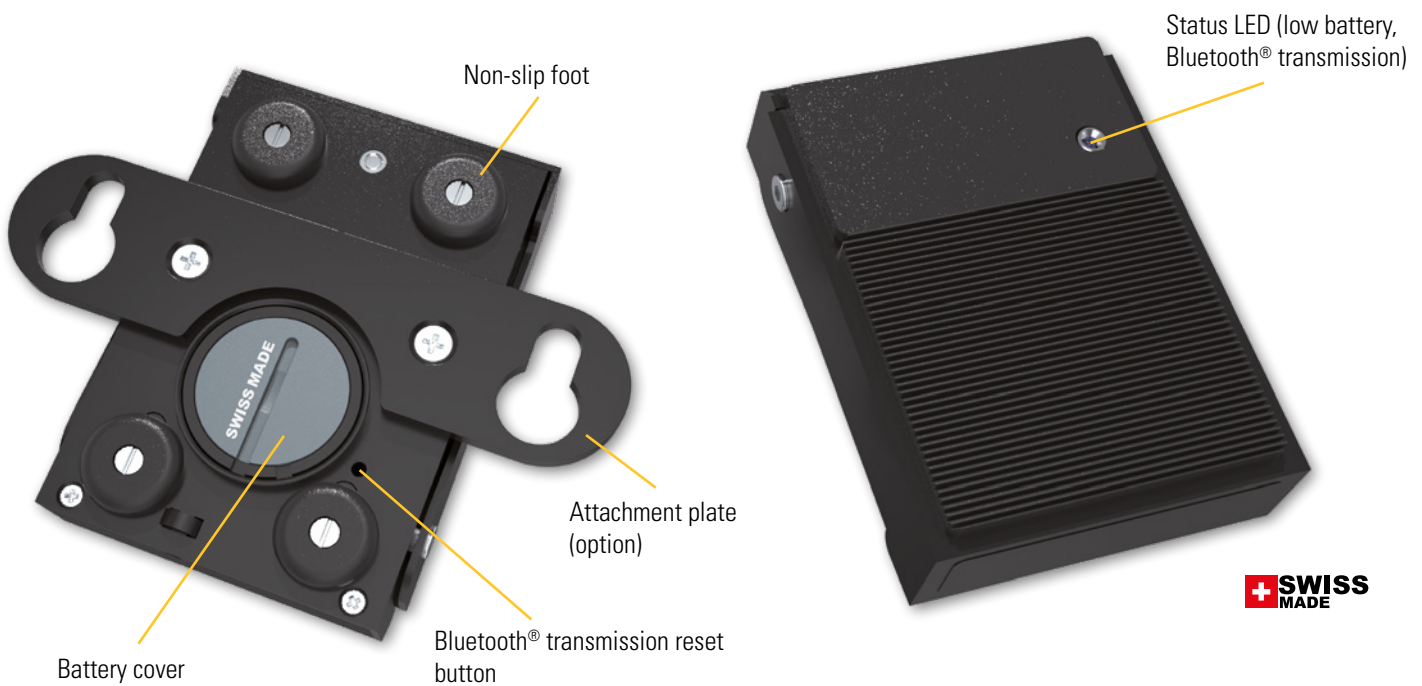
Dongle with Bluetooth® Wireless technology 981.7100

TECHNICAL SPECIFICATIONS

S_Footswitch Smart		926.7022
Connection		Bluetooth® wireless technology*
Weight	g	260
Software compatibility		Vmux (1.37 and later)
Transmission distance 1)	m	up to 15m

1) 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 nstruments with Bluetooth® wireless technology
- Compatible with all instruments with Power-RS and Power-USB connections
- Battery type CR2477, 3V
- Cable length : about 150mm

Built-in
Bluetooth®

Battery cover

Atachment plate
for dial gauges

Angled cable

Battery-RS connection
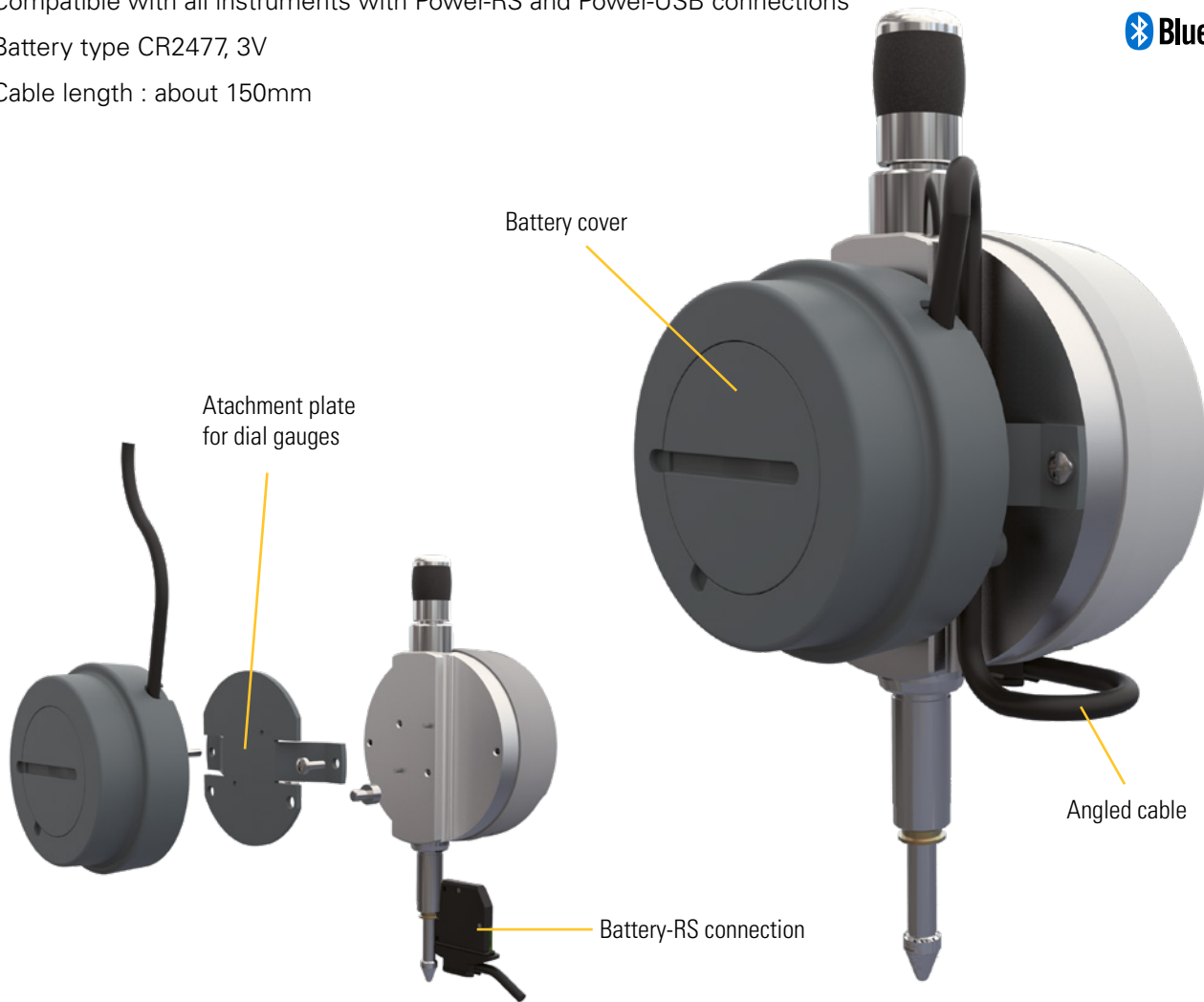
TECHNICAL SPECIFICATIONS

Battery Pack		926.7024
Connections		Power-RS / Battery-RS
Weight	g	71.6 (91.4g with atachment 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

Other

OTHER ACCESSORIES

Order number and compatibilities

Battery CR2032	**985.2215** Calipers S_Cal, ultra-light calipers ULX4 [1], dial gauges S_Dial (except PLC), micrometers, bore gauges, digital scale S_Scale digital micrometer screws, Feeler Gage, depth gauges S_Depth, Protractor, Hi_Gage, footpedal Smart[1] and benches table PS16 V2[1]
Battery CR2477	**985.2216** Ultra-light calipers ULX4. benches table PS16 V2, footpedal Smart, Battery Pack

[1] With adapter

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	--	--	[1]	●	
	Power RS	--	905.4516	--	905.4519	●	
	Power RS (bent)	--	905.4538	--	[1]	●	
	Power USB	--	926.6821	--	[1]	●	
	Power USB (bent)	--	926.6838	--	[1]	●	
	PLC digital indicator	--	--	926.6101	--	--	--

[1] Maximum 7m (Standard 5m)

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
		•								•			•					
		•								•			•					
		•								•			•					
		•								•			•					
		•								•			•					
			•	•	•	•	•	•					•					
			•	•	•	•	•	•					•					
			•	•	•	•	•	•					•					
			•	•	•	•	•	•					•					
																		•

23

Cables

CONNECTION

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

1) Maximum 7m (Standard 5m)
2) must be connected with bi-directional cables only
* The D70 and D400S do not work on Vmux with this adapter

Cables

S_Connect

CONNECTION

S_Cal Pro / S_Mike Pro	UL	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 microscrew	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)		●	● 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)				

3) must be connected with RS232 cables
4) For MB-XX module and RS232 PC connections
5) RS232 connection to PC (D70S version and D400S only) bidirectional. Versions D70I/H require a crossover RS232 cable.
6) Not working on PC
7) Update of the units
8) Crossover cable for PC connection
9) Connection cable for MB-I/O

DIGITAL INDICATORS
S_DIAL

A pioneer of the 100% digital indicator, Sylvac probably offers the widest range of digital indicators in the market with unrivalled precision measurement.

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)

Wireless Bluetooth® transmission available

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 ANALOG		ADVANCED IP67			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	•	•	•	•	•	•	•	•	•			• 1)	• 1)	• 1)	• 1)	• 1)	• 1)	•	•	•	•	•	•	•	•	•
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																		•	•	•	•	•	•	•	•	•

* SIS Smart Inductive System description on page 5

1) Preset configuration only by PC

Digital indicators — S_Dial

SUMMARY OF ALL TYPES

	ADVANCED										Smart				NANO & NANO SMART				ANALOG NANO SMART		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® technology											●	●	●	●			●	●	●								
Setting by PC	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programmable menus	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Powered by connector	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Multiplication factor	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ref I / II	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Column groups: **S_Dial WORK** (ADVANCED: 805.5201–805.5681; Smart: 805.6301–805.6661) · **NANO & NANO SMART** (805.5306–805.6506) · **ANALOG NANO SMART** (805.6307, 805.6507) · **S_Dial PRO** (BASIC: 805.8601–805.8661)
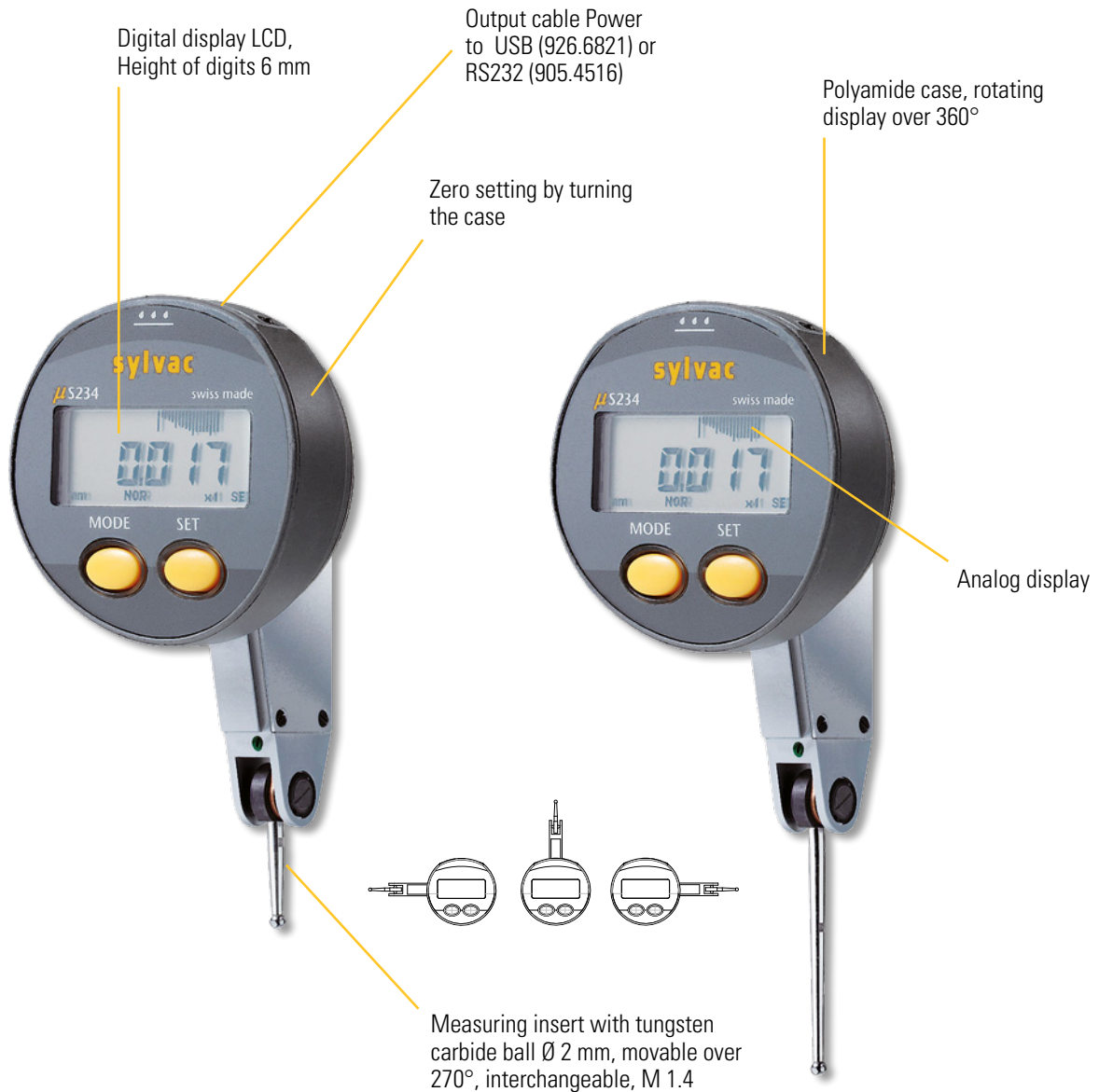
* SIS Smart Inductive System — description on page 5

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
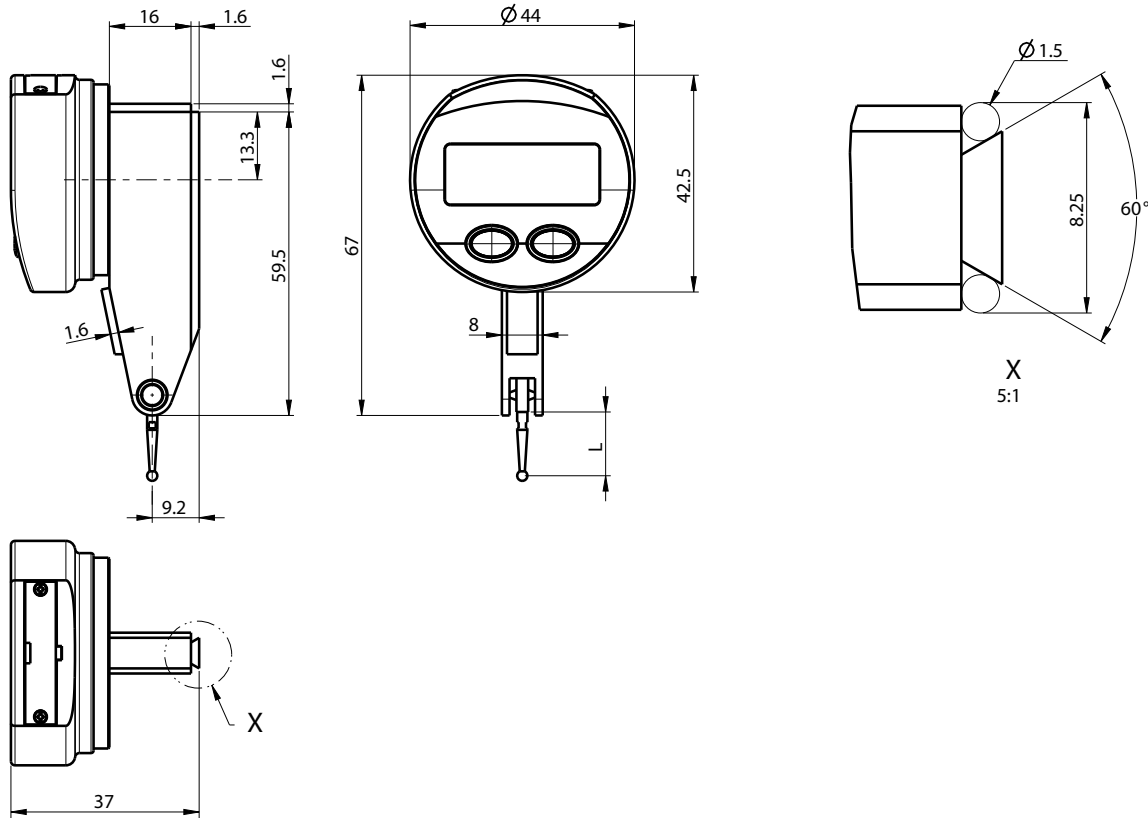- Stem Ø 8 mm and dovetail back
- Rotating display over 360°

Digital display LCD,
Height of digits 6 mm

Output cable Power
to USB (926.6821) or
RS232 (905.4516)

Polyamide case, rotating
display over 360°

Zero setting by turning
the case

Analog display

POWER

SWISS
MADE

WATER RESISTANT

IP65

Measuring insert with tungsten
carbide ball Ø 2 mm, movable over
270°, interchangeable, M 1.4

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[1]	4[1]
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	
Output data		USB / RS232 [2]	
Zero setting		●	
min / max / delta display		●	
Analog scale range ratio		●	
Selection of resolution		●	
Preset		max 99.999	

[1] ± 1 digit
[2] see cables chapter

Digital test indicators

S_Dial S234

DISPLAY

❶ **Direct mm/inch conversion**

❷ **Analog display**

❸ **Min/max/delta mode**

❹ **Analogic resolution display**
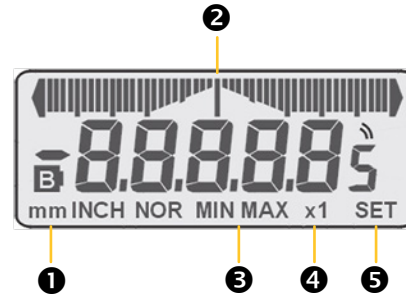
❺ **Zero setting**

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

Polyamide case,
fixed display

Output cable Power
to USB (926.6821) or
RS232 (905.4516)

Digital display LCD,
Height of digits 6 mm

Clamping Ø 8-h6

Stainless steel measuring
pin, ground

Rubber boot on
protected version

Interchangeable contact point,
stainless steel with TC ball
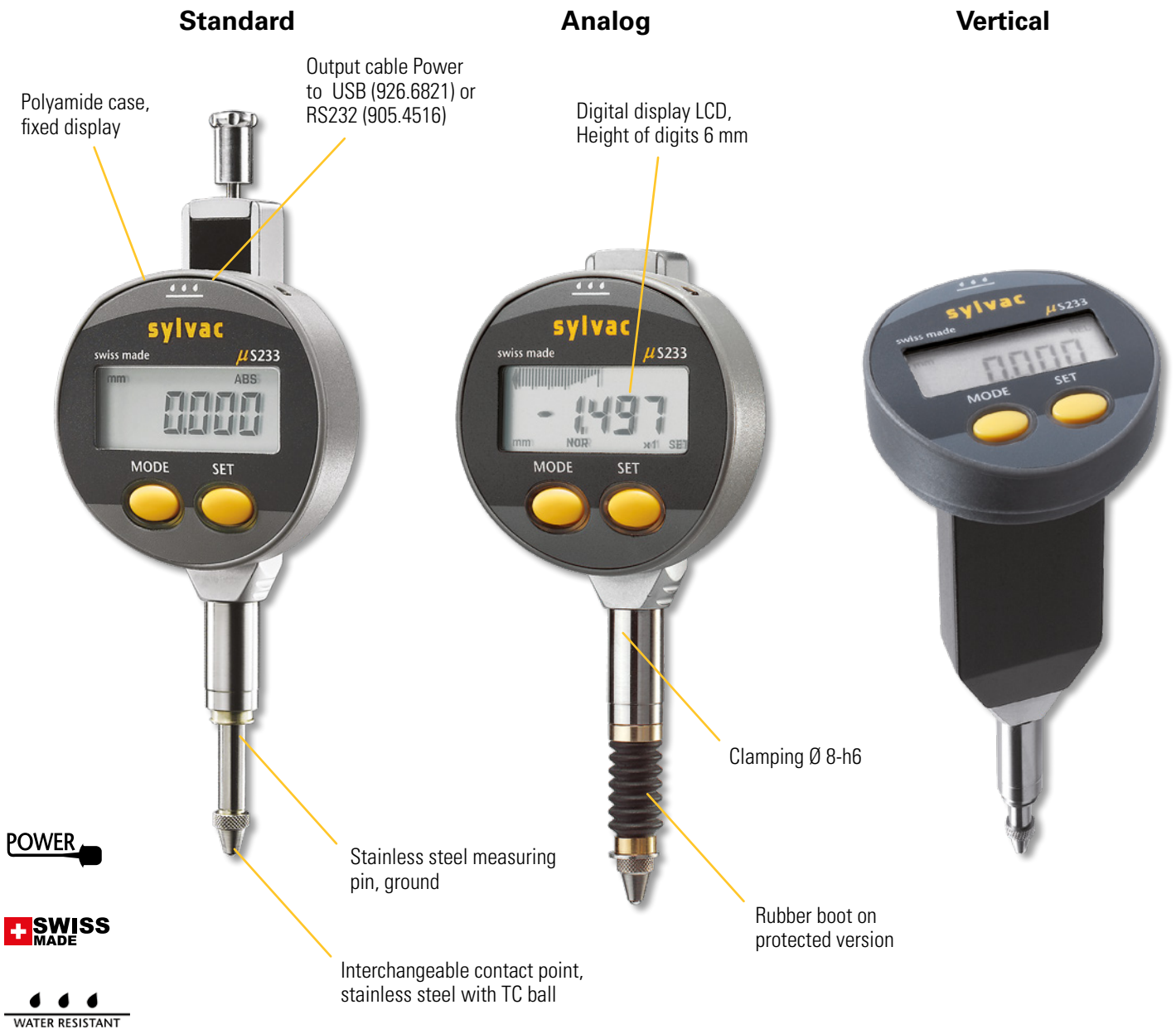
POWER

SWISS MADE

WATER RESISTANT

IP65

Mini digital indicators

S_Dial S233

DIMENSIONAL DRAWINGS

Standard

S

P

Analog

S

P
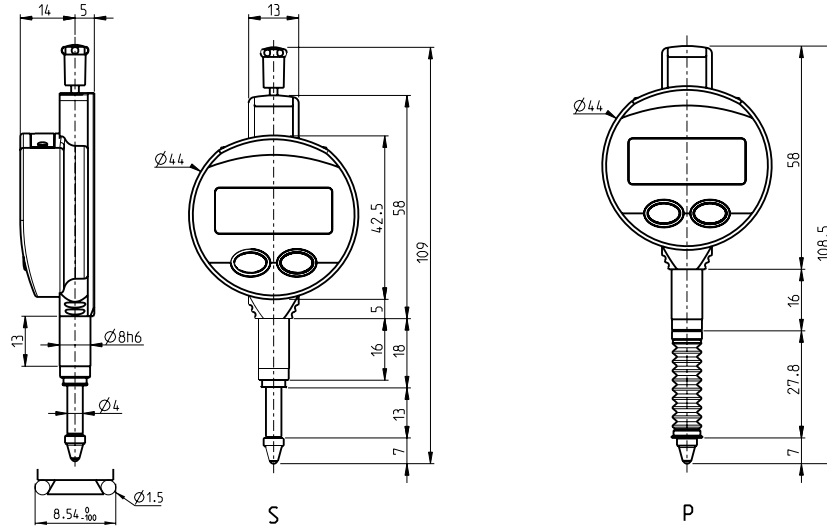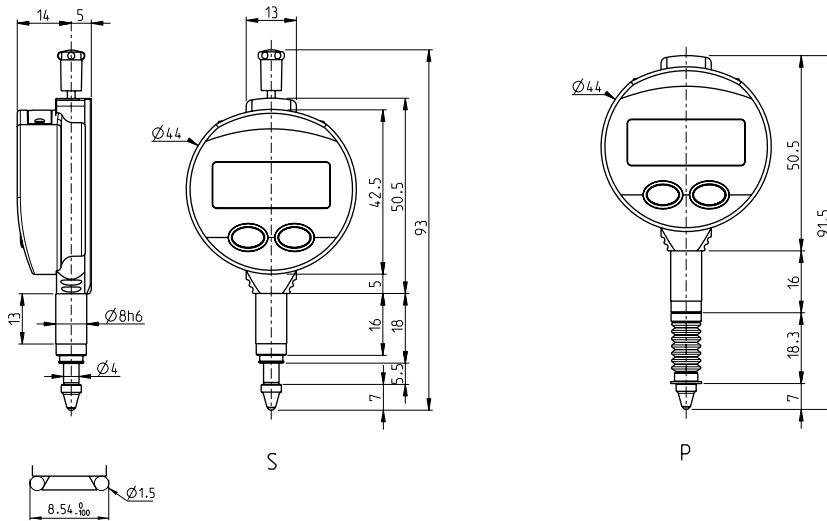
Vertical

S = standard   P = protected

Mini digital indicators

S_Dial S233

TECHNICAL SPECIFICATIONS

B

		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 [3]		S	S	S	P
Max. Error fe	µm	10[1]	5	4	4
Repeatability	µm	2	2	2	2
Measuring force	N	0.50 - 0.65[2]	0.50 - 0.65[2]	0.50 - 0.65[2]	0.60 - 1.20[2]
Zero setting		●	●	●	●
REL and ABS measurement		●	●	---	---
Resolution selection		---	●	●	●
PRESET = (max. 130 mm)		●	●	●	●
Min / max / delta display		---	---	●	●
Selection of measuring direction		●	●	---	---
Output data		USB / RS232 [4]			
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 [3]		S	P	S	P	S
Max. Error fe	µm	10[1]	10[1]	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				---		●
Output data		USB / RS232 [4]				
IP rating		IP65				

[1] ± 1 digit
[2] Values ± 20%, indicator in vertical position, outgoing measuring spindle
[3] S = Standard   P = Protected
[4] 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

MEASURING FORCE FOR RANGE 12.5 mm

	S	P
Standard	0.5 - 0.90 N	0.6 - 1.3 N
Low [1]	0.35 - 0.50 N	---
High [1]	1.80 - 2.3 N	---

Tolerance ±20%, indicator in vertical position, spindle in outgoing measurement.
[1] on request

APPLICATIONS

Checking of an internal Ø with a mechanical device

Measurent of the vertical displacement of an element

Measurement of internal chamfer

Digital indicators

S_Dial WORK

DESCRIPTION

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

Lifting cap

Output cable Proximity
to USB (926.6721) or
RS232 (926.6723)

Version 0.001
resolution

SWISS MADE

sylvac

mm

0.000

SET / DATA
+/-

Programmable according
to your needs

External power supply and
output cable Power to USB
(926.6821/926.6838) or RS232
(905.4516/905.4538)

Version 0.01
resolution

SWISS MADE

sylvac

mm

0.00

SET / DATA
+/-

Plastic case

Hardened steel
clamping Ø 8-h6

Reinforced
clamping shaft

Interchangeable contact
point M2.5, stainless steel
with TC ball

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

* SIS description on page 5

Digital indicators

S_Dial WORK

S
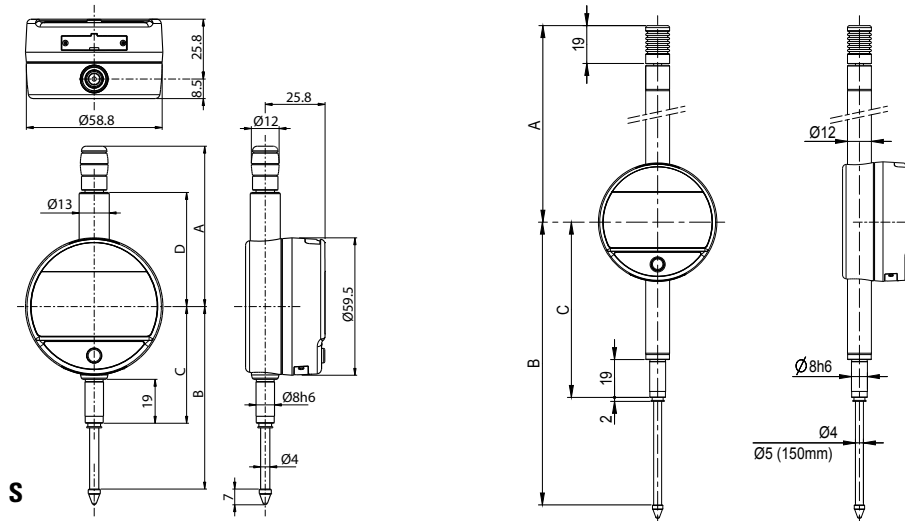
TECHNICAL SPECIFICATIONS

		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 [1]	**4**	10 [1]	**5**	20 [1]	**7**
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		-
Output data					USB / RS232		
Programmable by PC					●		
Standard functions (customized by PC)				Preset (only programmable by PC with cable) mm/inch, max 999.999), direction of measurement			

[1] ± 1 digit

BASIC INSTRUMENT

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

MEASURING FORCE

		S 12.5	S 25	S 50
Standard	N	0.65 - 0.90	0.65 - 1.15	1.1 - 2.6
Low [3]	N	0.4 - 0.55	0.45 - 0.9	---
High [3]	N	1.0 - 1.6	0.9 - 1.8	---

Tolerance ± 20%, spindle in outgoing measurement position.
[3] on request

Digital indicators

S_Dial WORK

DESCRIPTION

- Robust construction

B

- 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***
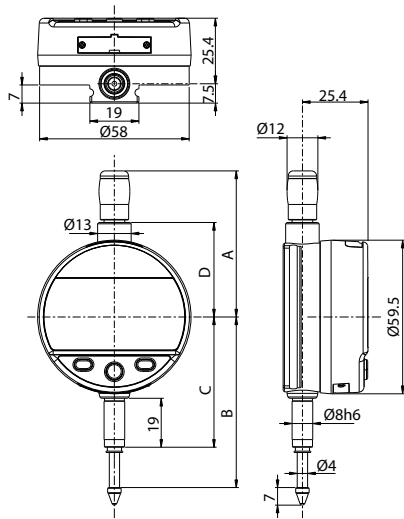
- **Maximum error of 3 μm**

Output cable Proximity
to USB (926.6721) or
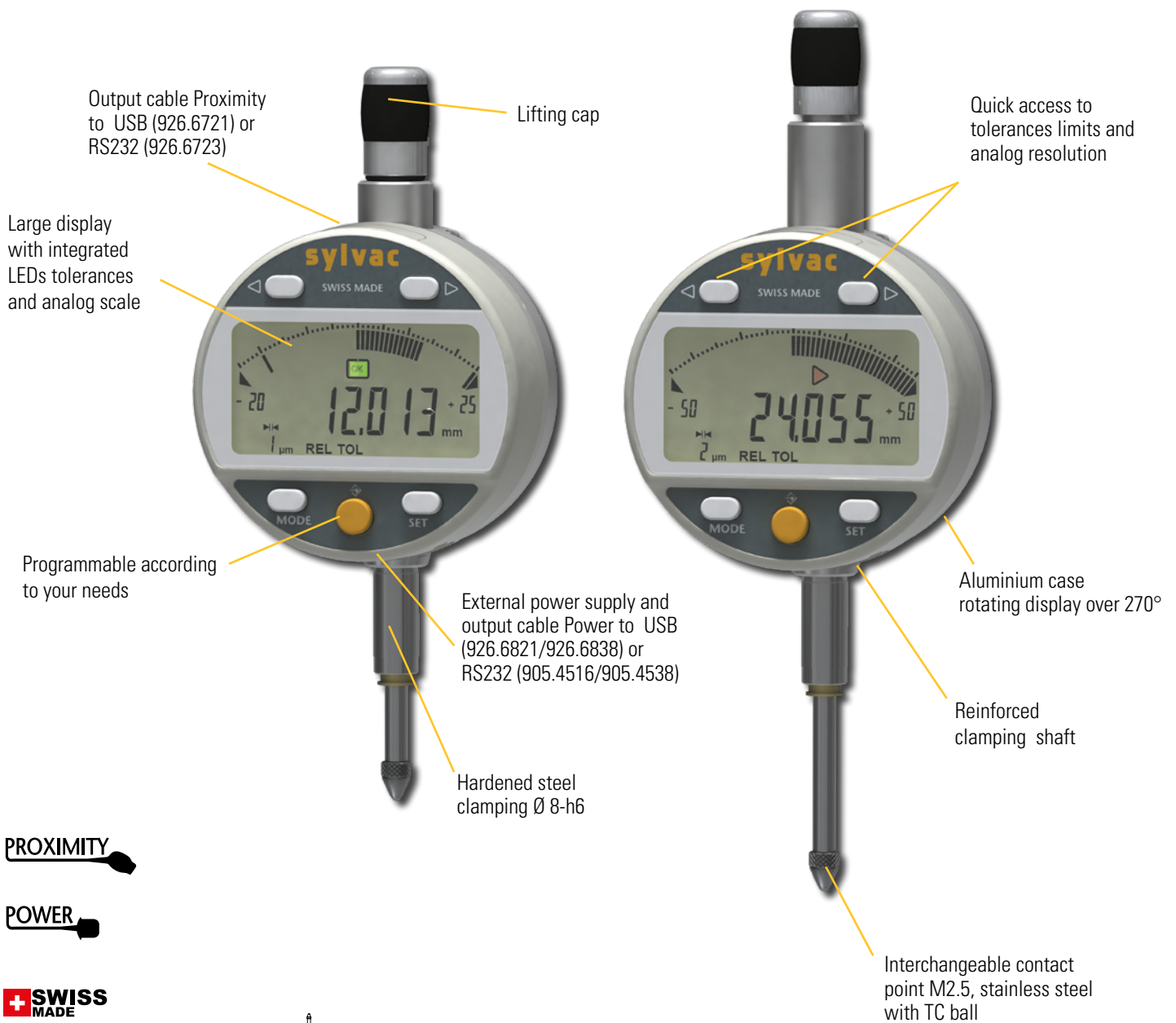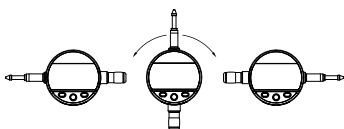RS232 (926.6723)

Lifting cap

Large display
with integrated
LEDs tolerances

Optional lifter

SWISS MADE

sylvac

Aluminium case
rotating display over 270°

Programmable according
to your needs

External power supply and
output cable Power to USB
(926.6821/926.6838) or RS232
(905.4516/905.4538)

Interchangeable contact
point M2.5, stainless steel
with TC ball

Reinforced
clamping shaft

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

Hardened steel
clamping Ø 8-h6

* SIS Smart Inductive System description on page 5
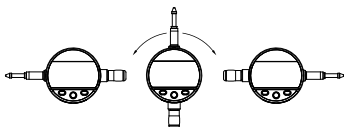
Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

ADVANCED

S 12.5-25 mm
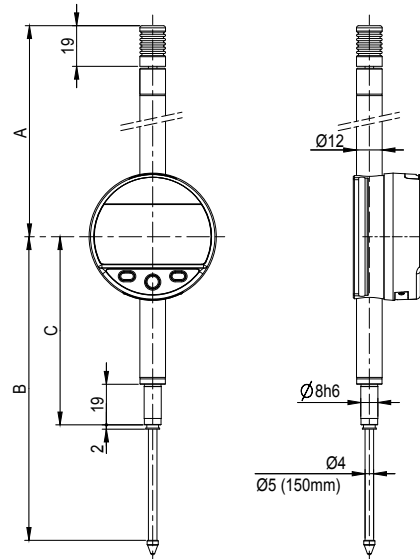
S 50-150 mm

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 [1]	**3**	10 [1]	**4**	20 [1]	**5**	20 [1]	**6**	20 [1]	**10**
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		-		-		-	
Output data		USB / RS232									
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									

[1] ± 1 digit

BASIC INSTRUMENT

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

MEASURING FORCE

		12.5	25	50	100	150
Standard	N	0.65 - 0.9	0.65 - 1.15	1.1 - 2.6	1.8 - 3.8	2.6 - 5.7
Low [2]	N	0.4 - 0.55	0.45 - 0.9	---	---	---
High [2]	N	1.0 - 1.6	0.9 - 1.8	---	---	---

Tolerance ± 20%, spindle in outgoing measurement position.
[2] on request

Digital indicators

DESCRIPTION

- 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**

Brake valve

Output cable Proximity to USB (926.6721) or RS232 (926.6723)

Dust cover

Large display with integrated LEDs tolerances

Aluminium case rotating display over 270°

Programmable according to your needs

External power supply and output cable Power to USB (926.6821/926.6838) or RS232 (905.4516/905.4538)

Reinforced clamping shaft

Interchangeable contact point M2.5, stainless steel with TC ball

Hardened steel clamping Ø 8-h6

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

IP67

* SIS Smart Inductive System description on page 5

B

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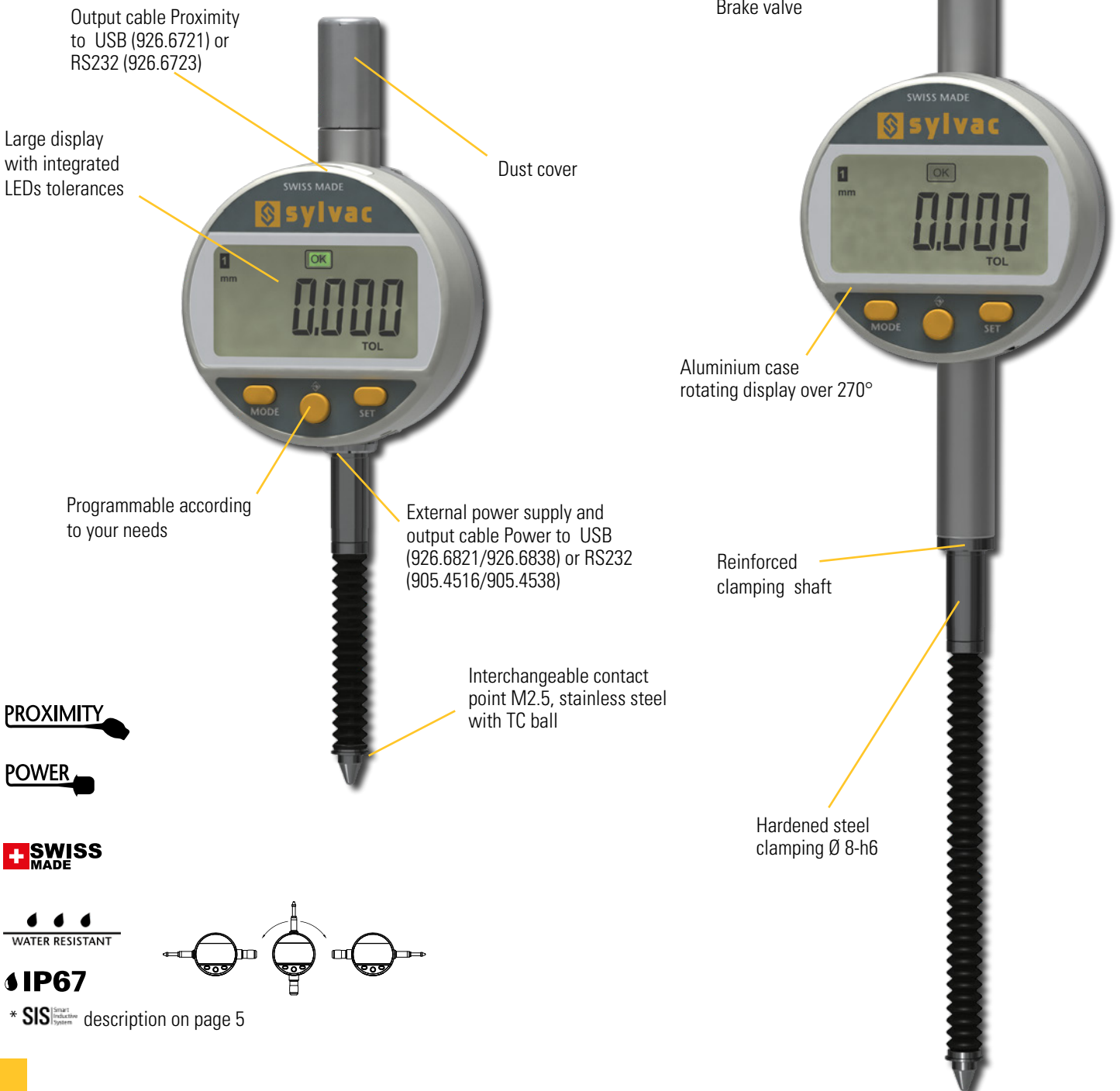
Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

ADVANCED IP67
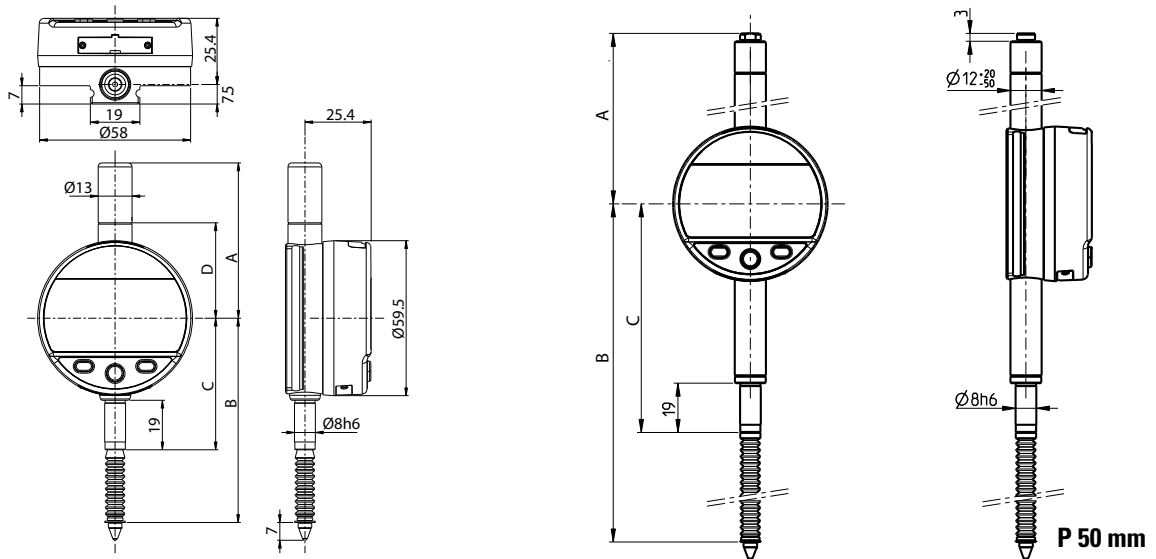
P 12.5-25 mm

P 50 mm

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	-
Output data			USB / RS232	
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		

BASIC INSTRUMENT

MEASURING FORCE

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

		P 12.5	P 25	P 50
Standard	N	0.7 – 1.4	0.65 – 1.8	0.9 – 2.8
Low [2]	N	---	---	---
High [2]	N	---	---	---

Tolerance ± 20%, spindle in outgoing measurement position.
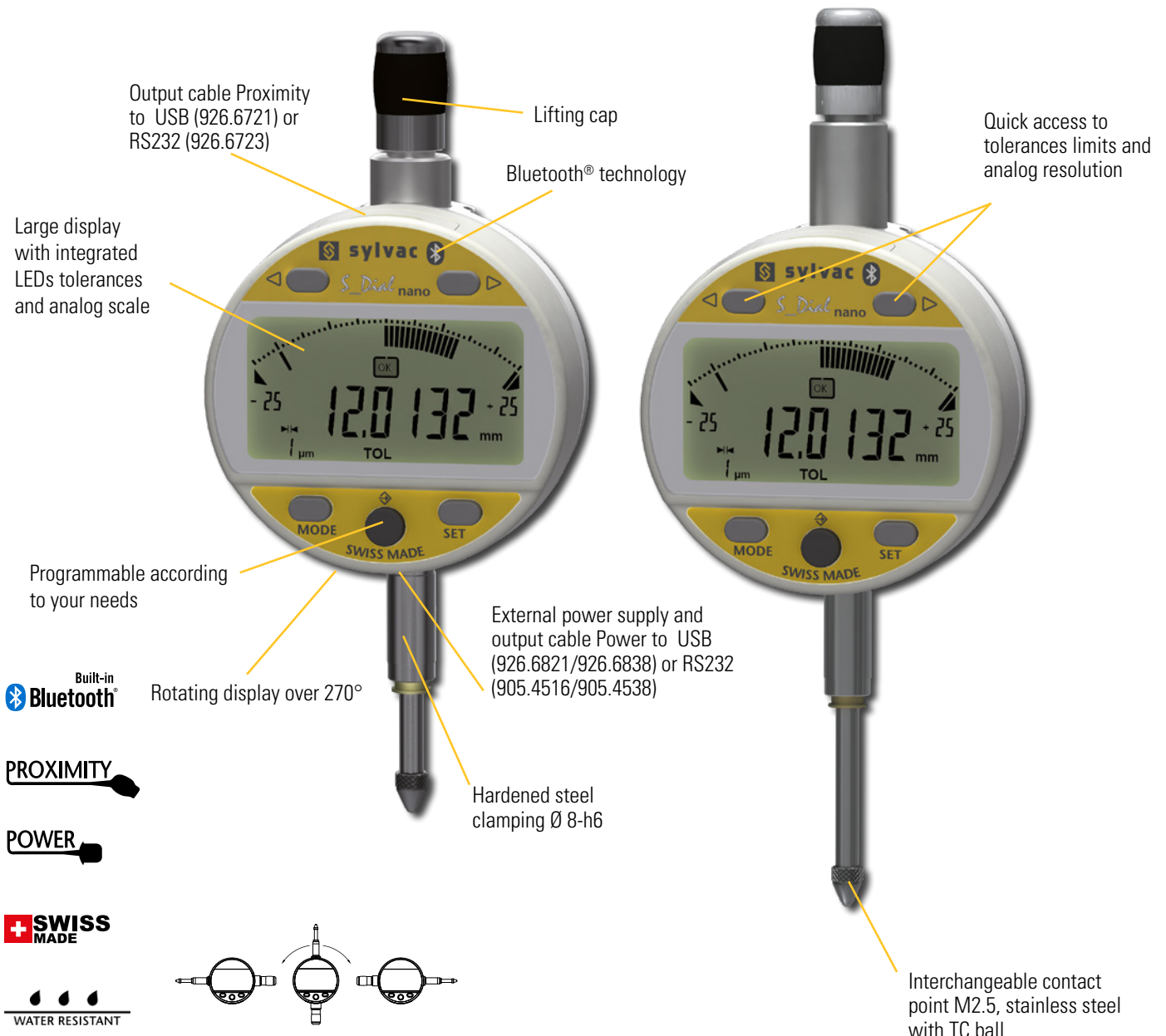[2] on request

Digital indicators

S_Dial WORK

- **Integrated Bluetooth® Wireless 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***
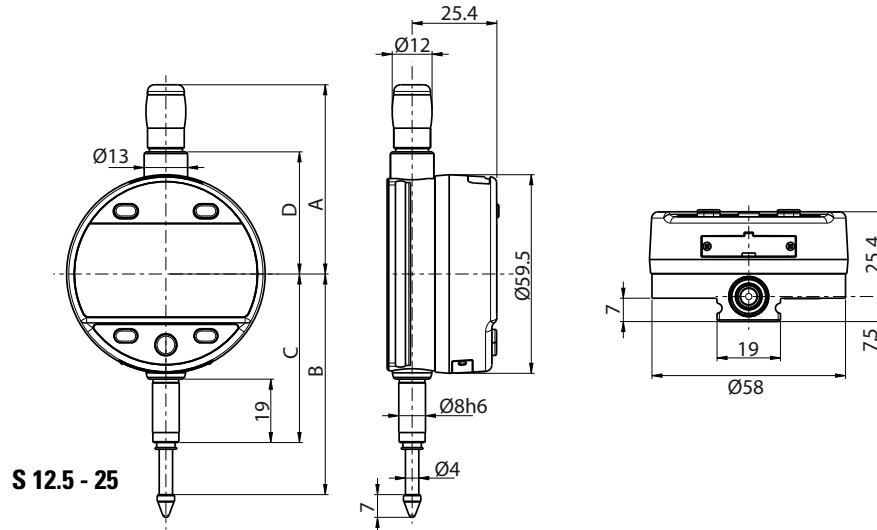- **Maximum error of 3 µm**

Output cable Proximity to USB (926.6721) or RS232 (926.6723)

Lifting cap

Optional lifter

Large display with integrated LEDs tolerances

Built-in Bluetooth®

Aluminium case rotating display over 270°

Programmable according to your needs

External power supply and output cable Power to USB (926.6821/926.6838) or RS232 (905.4516/905.4538)

Reinforced clamping shaft

Built-in Bluetooth®

PROXIMITY

POWER

Hardened steel clamping Ø 8-h6

SWISS MADE

WATER RESISTANT

Interchangeable contact point M2.5, stainless steel with TC ball

* **SIS** Smart Inductive System description on page 5

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Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

S 12.5 - 25

Buttom view
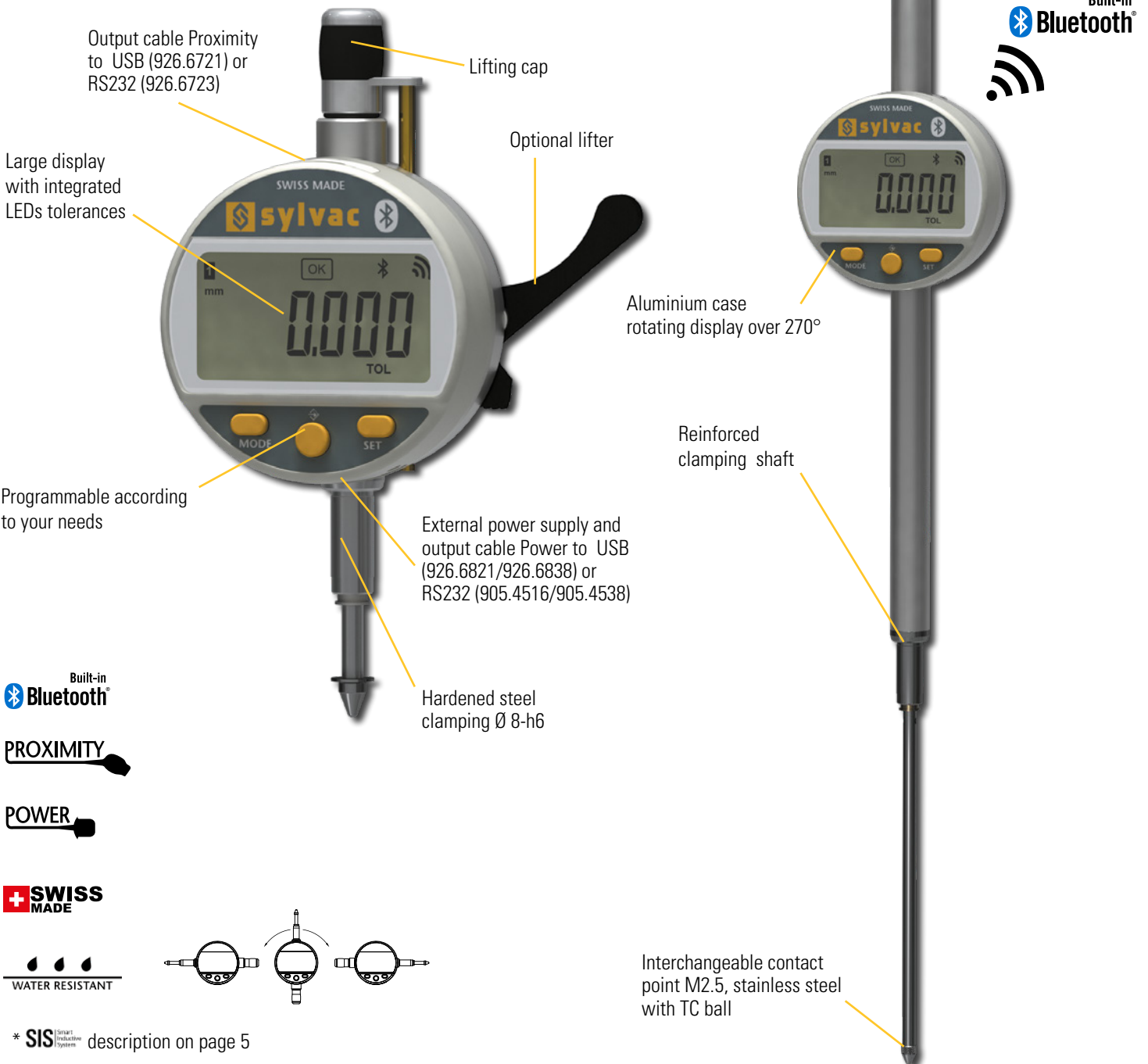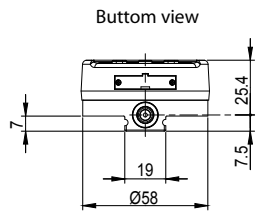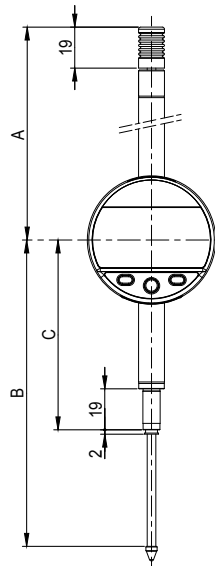
S 50 - 100

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	-	-
Output data		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			

[1] ± 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

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

MEASURING FORCE

		12.5	25	50	100
Standard	N	0.65 - 0.90	0.65 - 1.15	1.1 - 2.6	1.8 – 3.8
Low [2]	N	0.4 - 0.55	0.45 - 0.9	---	---
High [2]	N	1.0 - 1.6	0.9 - 1.8	---	---

Tolerance ± 20%, spindle in outgoing measurement position.
[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

ANALOG

- **Adaptive analog display (up to 0.2 µm 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 µm**

Output cable Proximity
to USB (926.6721) or
RS232 (926.6723)

Lifting cap

Quick access to
tolerances limits and
analog resolution

Large display
with integrated
LEDs tolerances
and analog scale

Programmable according
to your needs

External power supply and
output cable Power to USB
(926.6821/926.6838) or
RS232 (905.4516/905.4538)

Aluminium case
rotating display over 270°

Hardened steel
clamping Ø 8-h6

Reinforced
clamping shaft

Interchangeable contact
point M2.5, stainless steel
with TC ball

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

* SIS Smart Inductive System description on page 5

Digital indicators

S_Dial WORK

S 12.5 - 25
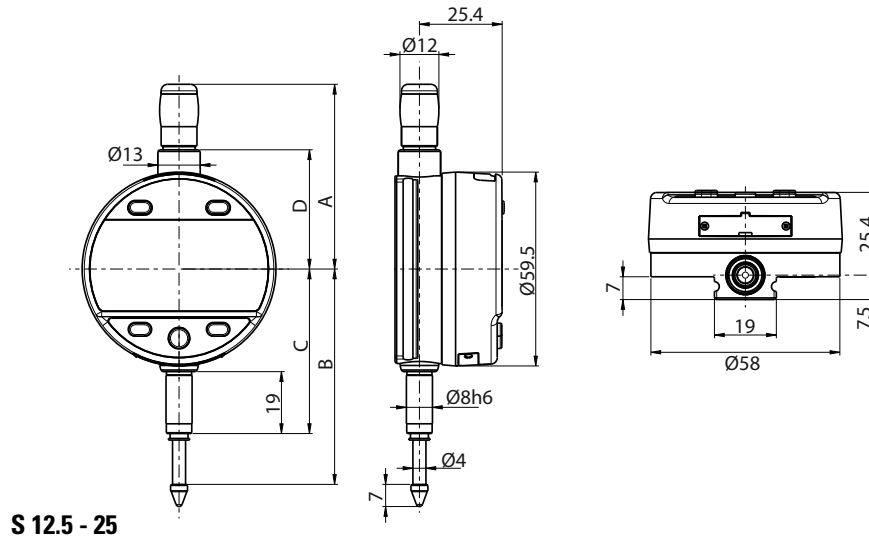
TECHNICAL SPECIFICATIONS

		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
Output data		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	

[1] ± 1 digit

BASIC INSTRUMENT

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

MEASURING FORCE

		S 12.5	S 25
Standard	N	0.65 - 0.90	0.65 - 1.15
Low [2]	N	0.4 - 0.55	0.45 - 0.9
High [2]	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.
[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

NANO & NANO SMART

- **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**

Output cable Proximity to USB (926.6721) or RS232 (926.6723)

Lifting cap

Large display with integrated LEDs tolerances

Built-in **Bluetooth®**

Programmable according to your needs

External power supply and output cable Power to USB (926.6821/926.6838) or RS232 (905.4516/905.4538)

Aluminium case rotating display over 270°

Hardened steel clamping Ø 8-h6

Reinforced clamping shaft

Built-in **Bluetooth®**

PROXIMITY

POWER

Interchangeable contact point M2.5, stainless steel with TC ball

SWISS MADE

WATER RESISTANT
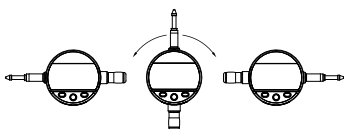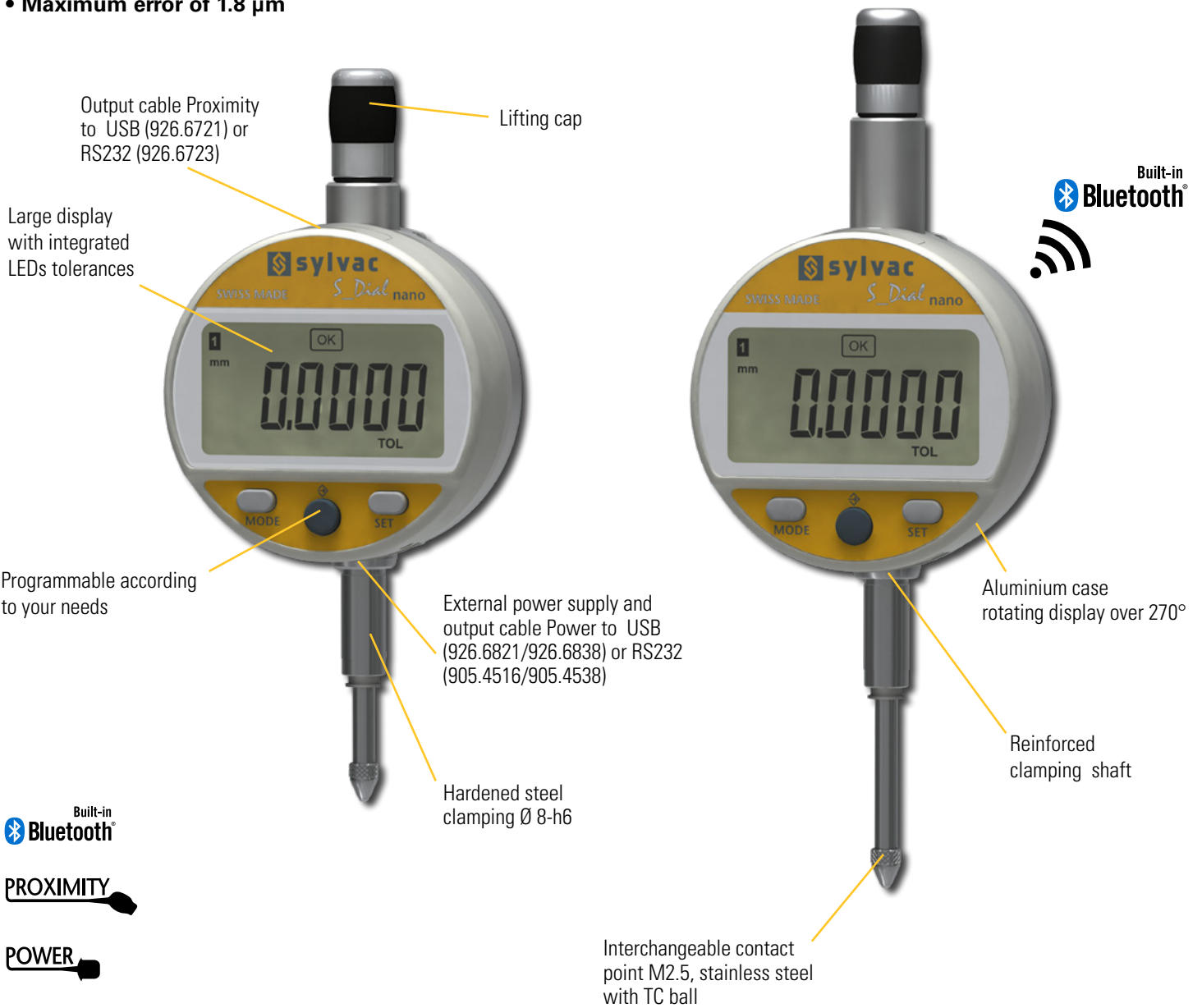
* **SIS** Smart Inductive System description on page 5

Max error 1.8 µm
Repeatability 0,5 µm

Digital indicators

S_Dial WORK

S 12.5 - 25
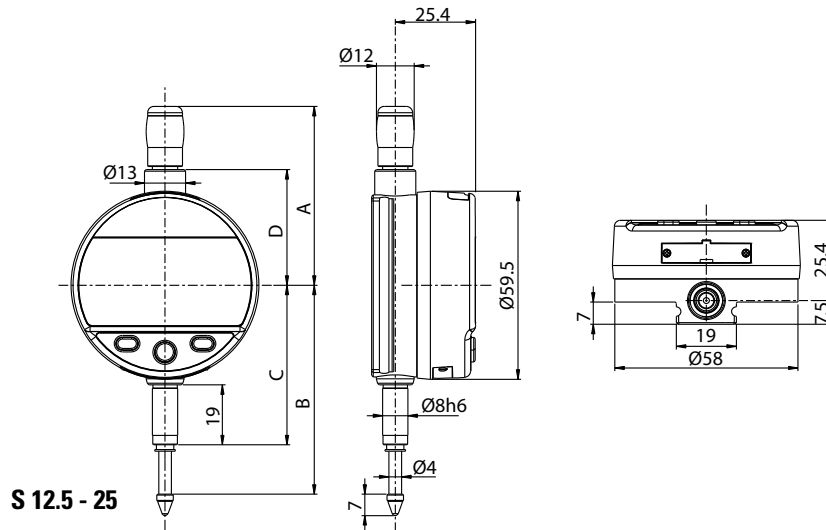
TECHNICAL SPECIFICATIONS

		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
Output data		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

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

MEASURING FORCE

		S 12.5	S 25
Standard	N	0.65 - 0.90	0.65 - 1.15
Low [2]	N	0.4 - 0.55	0.45 - 0.9
High [2]	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.
[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

ANALOG NANO SMART

- **Integrated Bluetooth® Wireless technology**

- Adaptive analog display (up to 0.1 µm per segment)

- **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**

Built-in
Bluetooth®

Output cable Proximity to USB (926.6721) or RS232 (926.6723)

Lifting cap

Bluetooth® technology

Quick access to tolerances limits and analog resolution

Large display with integrated LEDs tolerances and analog scale

Programmable according to your needs

Built-in
Bluetooth®

Rotating display over 270°

External power supply and output cable Power to USB (926.6821/926.6838) or RS232 (905.4516/905.4538)

PROXIMITY

POWER

Hardened steel clamping Ø 8-h6

Interchangeable contact point M2.5, stainless steel with TC ball

SWISS MADE

WATER RESISTANT

* SIS Smart Inductive System description on page 5

Digital indicators

DIMENSIONAL DRAWINGS

S_Dial WORK

ANALOG NANO SMART

S 12.5 - 25

TECHNICAL SPECIFICATIONS

		805.6307	805.6507
Measuring range	mm	12.5	25
Resolution	mm	0.0001	
Max. Error fe	µm	**1.8**	**2.2**
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
Output data		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

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

MEASURING FORCE

		S 12.5	S 25
Standard	N	0.65 - 0.90	0.65 - 1.15
Low [2]	N	0.4 - 0.55	0.45 - 0.9
High [2]	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.
[2] on request

Digital indicators

S_Dial WORK

- **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

PLC

SWISS MADE

WATER RESISTANT

IP67

Connecting wire

Lifting cap

Aluminium case
rotating display over 270°

Large display
with integrated
LEDs tolerances

PLC

Binder

PLC cable
(926.6101)

Hardened steel
clamping Ø 8-h6
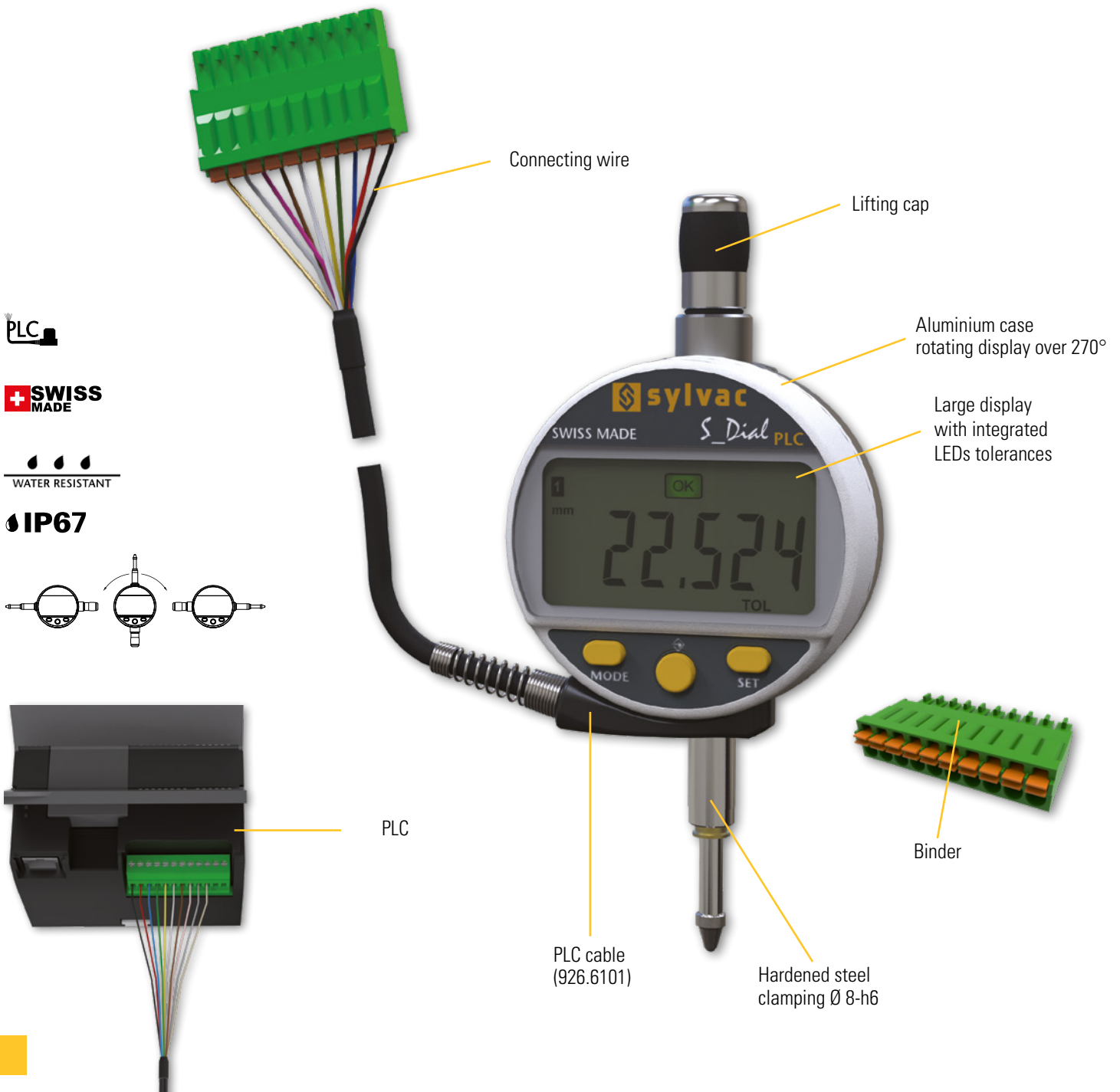
Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS
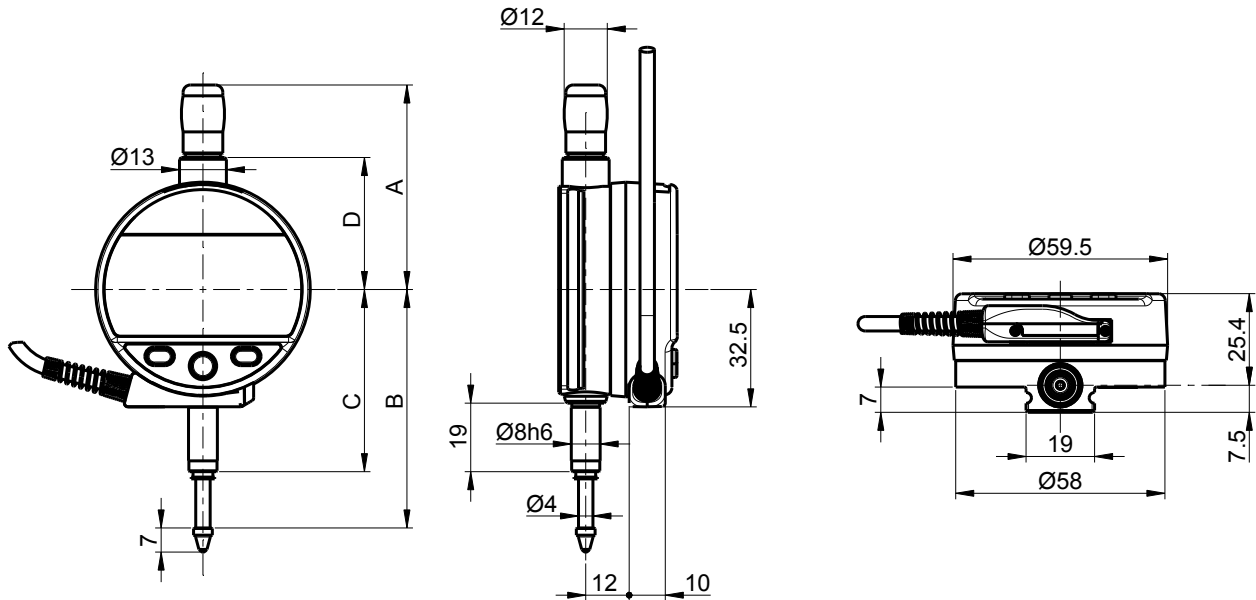
TECHNICALS SPECIFICATIONS

		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			
Output data		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 + binder included
- Manual
- Calibration certificate

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 um
- **Max. admissible error 1.5 um/50mm**
- Corrected measuring system with reference on the scale
- Mixed ceramic/ball bearings
- Available in low force version
- Clamping stem Ø8 or Ø25 (depending on model)
- Powered by standard battery
- Data output PROXIMITY and POWER

Output cable
Proximity to USB
(926.6721) or
RS232 (926.6723)

Large display
with integrated
LEDs tolerances

Aluminium case
rotating display over 270°

Customizable button

50 mm

Clamping ø25 - g7
Stainless steel chrome

External power supply and
output cable Power to USB
(926.6821/926.6838) or
RS232 (905.4516/905.4538)

Aluminium tube

Clamping ø8 - h6
Stainless hardened steel

Lifter

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

100 mm   **25 mm**

54

Digital indicators

S_Dial PRO

DIMENSIONAL DRAWINGS

BASIC

25mm — 135, 68, 19, 36, Ø25, Ø8h6

50mm — 189, 95, 63, Ø25, Ø25g7

50mm — 189, 95, 19, 63, Ø25, Ø8h6

100mm — 291, 146, 19, 114, Ø25, Ø8h6

34.2, Ø59.5, Ø5, 7
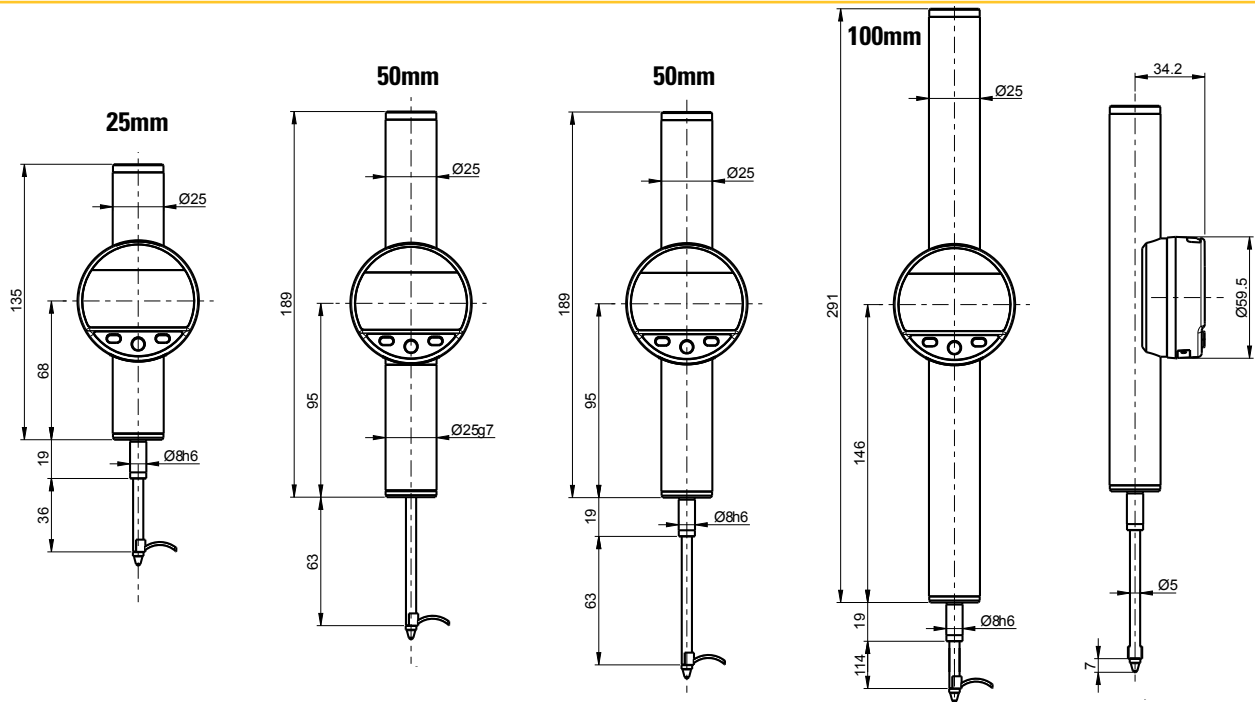
TECHNICALS SPECIFICATIONS

		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						
Output data		USB / RS232						
Programmable by PC		●						
Clamping		ø8 h6				ø25 g7		ø8 h6
Spring		●	1)	●	1)	●	1)	●
Measuring force	N	0.75 - 1.00 2)	0.30 2)	0.85 - 1.2 2)	0.40 2)	0.85 - 1.2 2)	0.40 2)	0.90 - 1.30 2)
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						

1) Model without spring : Constant measuring force, use only in a vertical position
2) 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

APPLICATIONS

S_Dial

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 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
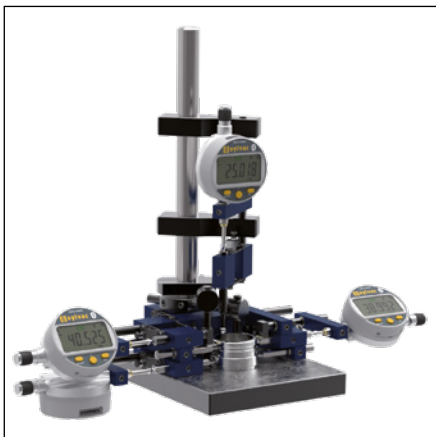
Indicators with Bluetooth® Wireless technology on a 4 points jig

Indicators with Bluetooth® Wireless technology 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
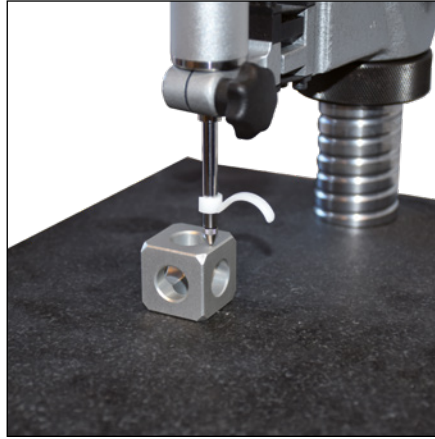
Lifting device on S_Dial PRO Basic

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 Smart

Upper lifting lever type, 905.2215

Digital indicators

S_Dial

ACCESSORIES

B

Contact points M2.5
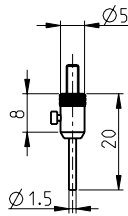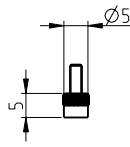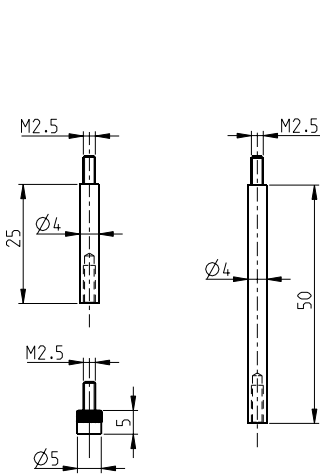
				S233	S234 (905.4321)	S234 (905.4322)	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
905.2201	**905.2202**	**905.2203**		●			●	●	●
905.2206	**905.2204**	**905.2205**	**905.2207**	●			●	●	●
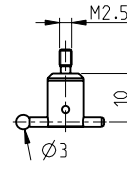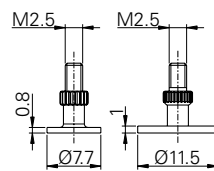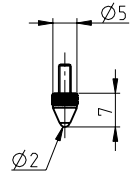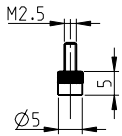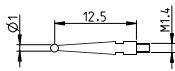
				S233	S234 (905.4321)	S234 (905.4322)	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
	905.2240	Short probe, TC ball			●				
	905.2241	Short standard probe, TC ball			●				
	905.2242	Short probe, TC ball			●				
	905.2243	Long probe, TC ball				●			
	905.2244	Long standard probe, TC ball				●			
	905.2245	Long probe, TC ball				●			
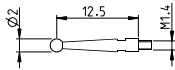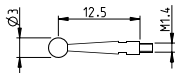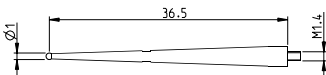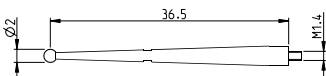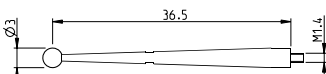
Digital indicators

S_Dial

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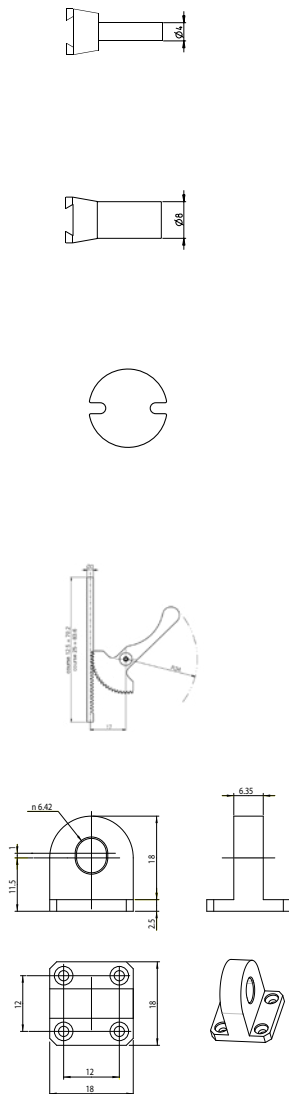
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm
905.2246	Clamping stem	●	●		
905.2247	Clamping stem	●	●		
905.2248	Spanner for probe		●		
805.0214	Lifting device, range 12.5mm			● [1]	
805.0215	Lifting device, range 25mm			● [1]	
805.0213	Lug back			● [1]	● [1]
905.2231	Sleeve Ø8 --> 10mm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

[1] Except S_Dial WORK Basic

Digital indicators

S_Dial

ACCESSORIES

B
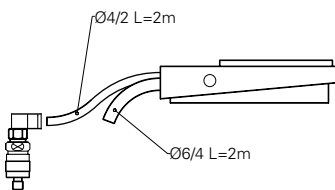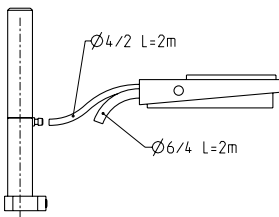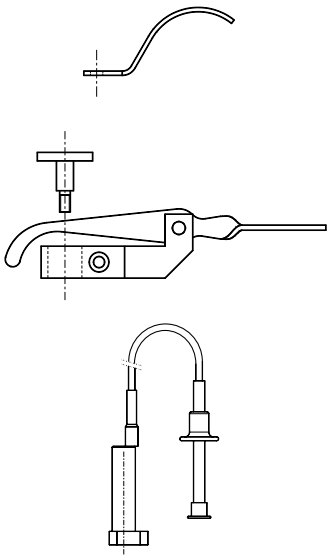
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
905.2214	Lifting device	●		●	●	●
905.2215	Upper lifting device			●		
905.2216	Lifting device with photo-cable			●		
905.2218	Pneumatic lifting device with foot pedal			●		
905.2217	Lifter only for 905.2218			●		
905.2219	Pneumatic 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				●	

Ø4/2 L=2m
Ø6/4 L=2m

Ø4/2 L=2m
Ø6/4 L=2m

Digital indicators

S_Dial

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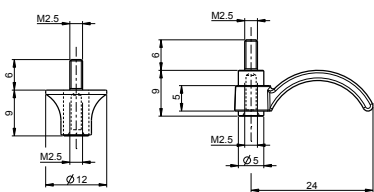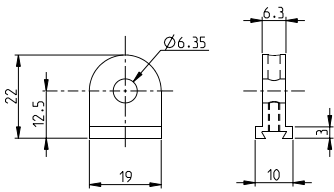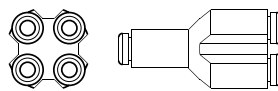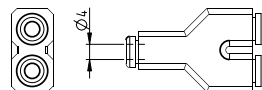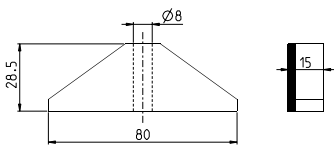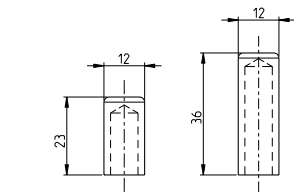
			S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
	905.2221	Dust protection for indicator, range 12.5 mm			●		
	905.2222	Dust protection for indicator, range 25 mm			●		
	905.2223	Depth measuring base			●	●	
	905.2261	Snap connector for pneumatic lifter x2	●		●	●	
	905.2262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

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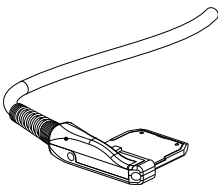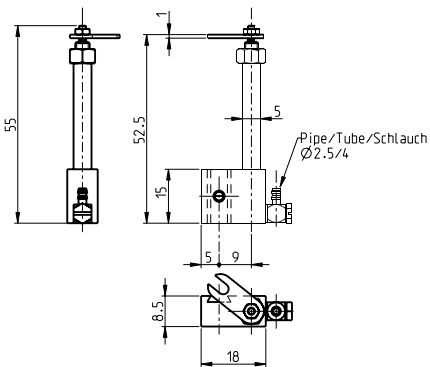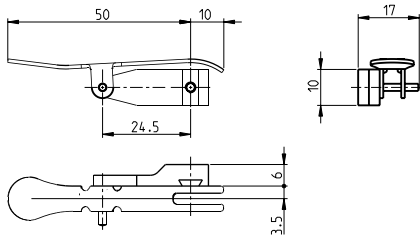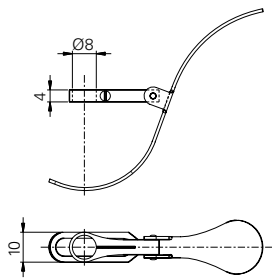
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial WORK PLC
905.4214	Lower lifting device, range 12.5 mm	●	1)	1)	1)	1)
905.4215	Upper lifting device for S (Standard) execution, except vertical type	●				
905.4217	Pneumatic lifting device for standard type	●				
926.6101	Replacement cable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

1) 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

PROXIMITY
Kit M3 with digital indicator : output cable Proximity to USB (926.6721)

RS232
Kit M3 with probe and D50S PRO : output cable RS232 to USB (926.6621) or to RS232 (925.5609)

SWISS MADE

Fast fixing by knob-pulley

Ceramic bloc

Thermal protection of the reference probe

Delivered with inspection software SYCOPRO II [1]

[1] PC not included

Matched probe + reference unit (D50S PRO) or a digital indicator (S_Dial PRO M3)

Adjustment wheel

Speed gear

Digital indicator testing stand M3

DISPLAY/SOFTWARE

❶ **Display the curves of measurement**

❷ **Check the error and repeatability**

❸ **Creation and management of instrument groups**

❹ **Fast access to all of stored instruments**

❺ **Integrated standards**

❻ **Personalisation of the standards**

❼ **Display the measured values**

❽ **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

ACCESSORIES
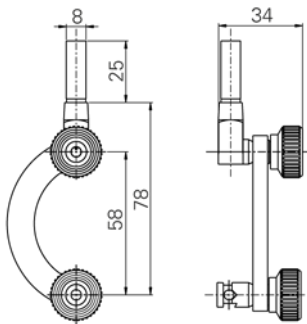
	909.2010	Clamping device for test indicator
	909.2011	Clamping device for dial gauges Ø 16 / 28 / 30 mm
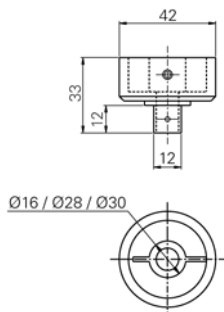
Measuring stands

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

Articulated arm

Threaded column for height positioning accuracy

Magnetic base

Fine adjustment

Granite base
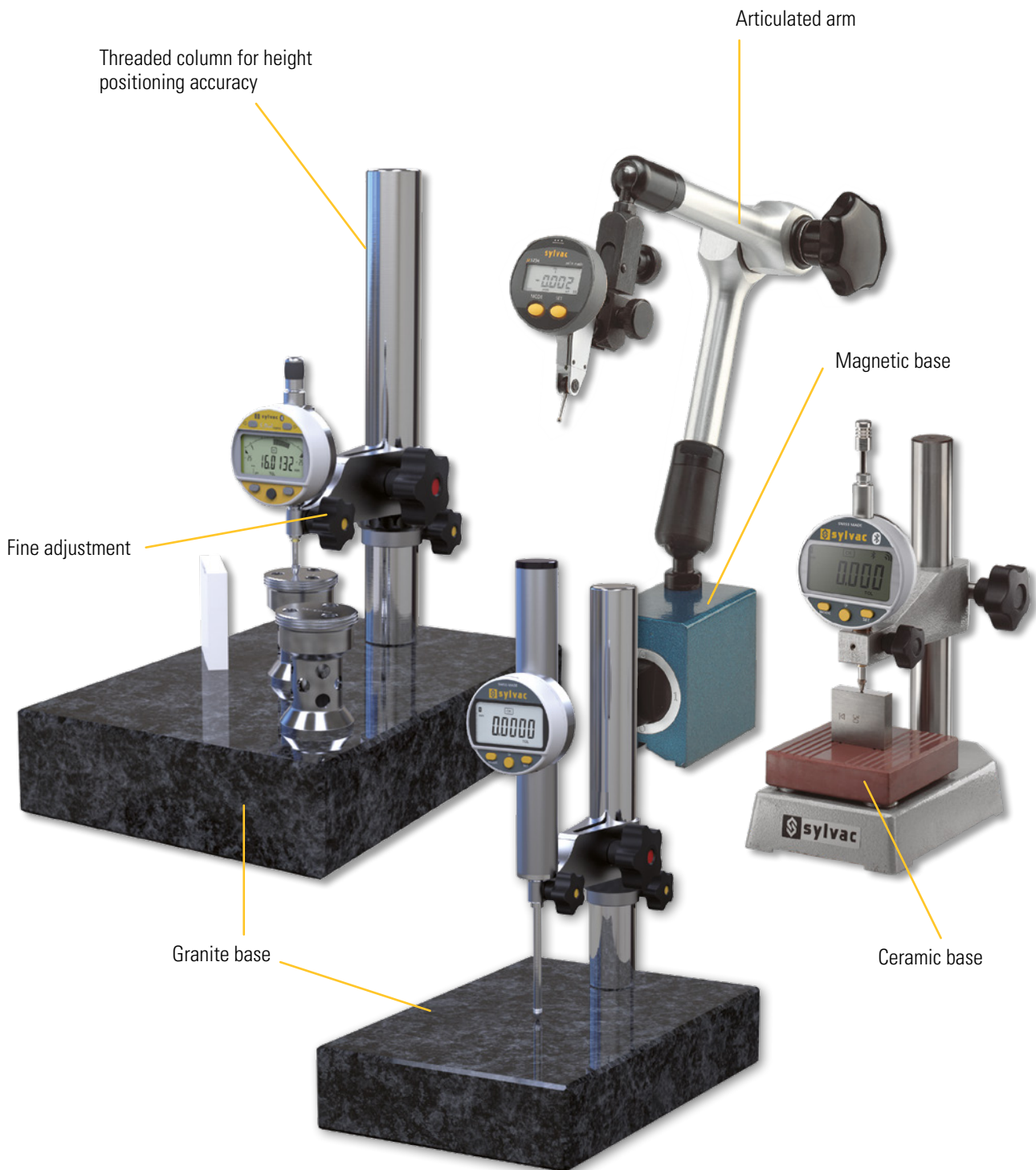
Ceramic base

Measuring stands

TECHNICAL SPECIFICATIONS

908.1201

908.1209
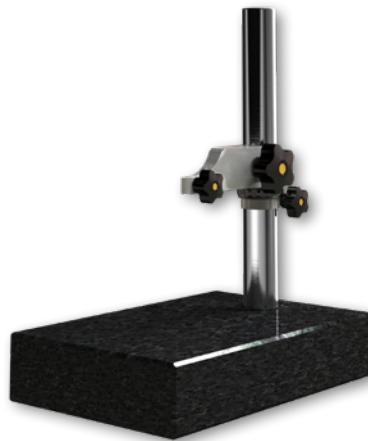
808.1204
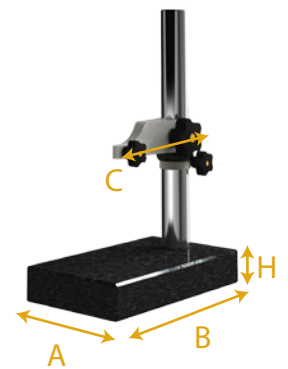
		908.1201	908.1209	908.1207	808.1204	808.1205
Base		magnetic [1]	Cast iron ceramic table	granit grade 00	granit grade 00	granit grade 00
Base dimensions AxBxH	mm	70x46x65	85x85x25	200x130x40	300x210x60	300x210x60
Central locking		●	---		---	---
Column	mm	---	Steel Ø 25	Steel Ø 25	Steel Ø 35	Steel Ø 35
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		---	---	---	●	●

[1] 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.
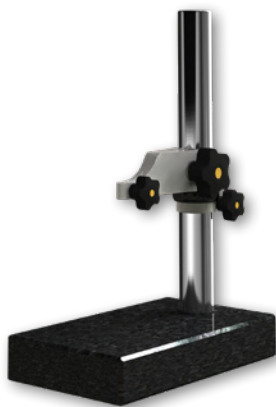
808.1206
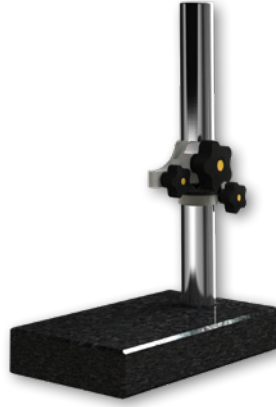
808.1203
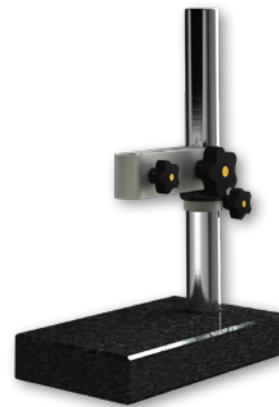
808.1202

		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		●	●	●	●	●
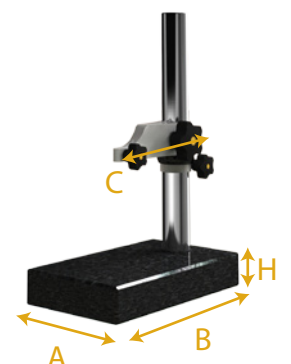
CALIPERS

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.

Sylvac inductive measuring system (patented)

Data output

Power supply: Lithium battery 3V, Type CR 2032

Operational temperature: +5 to +40°C

mm/inch selection

C

- **Standard professionnal caliper with protection IP67**

- New extra-large display

- Without output data

- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)

- Sleeping mode after 10 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
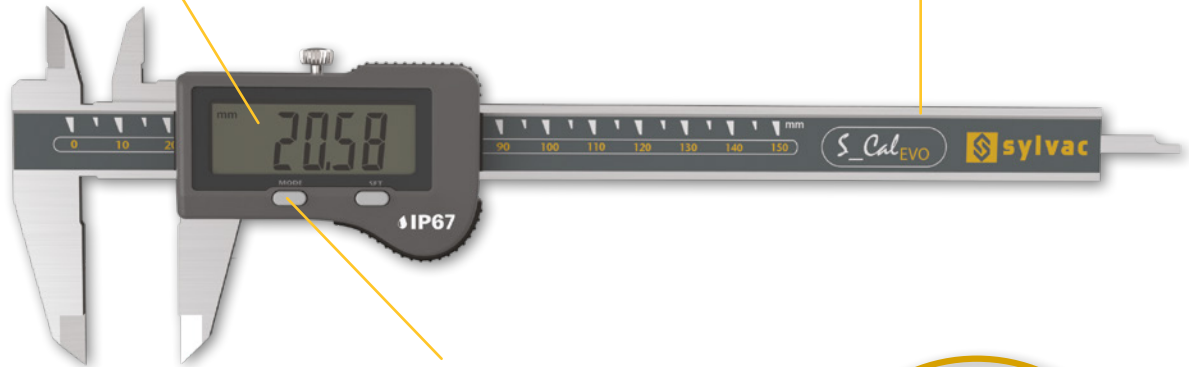
Simple and intuitive functions
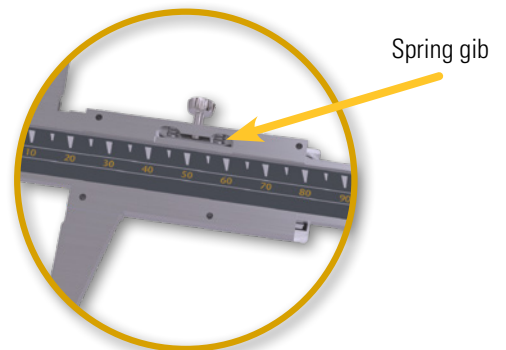
Spring gib

Sliding mechanism

SIS | Smart
Inductive
System

♦ ♦ ♦
WATER RESISTANT

♦**IP67**

Protection rating IP67 !

* SIS | Smart Inductive System description on page 5

Caliper

S_Cal EVO

DIMENSIONAL DRAWING

STANDARD
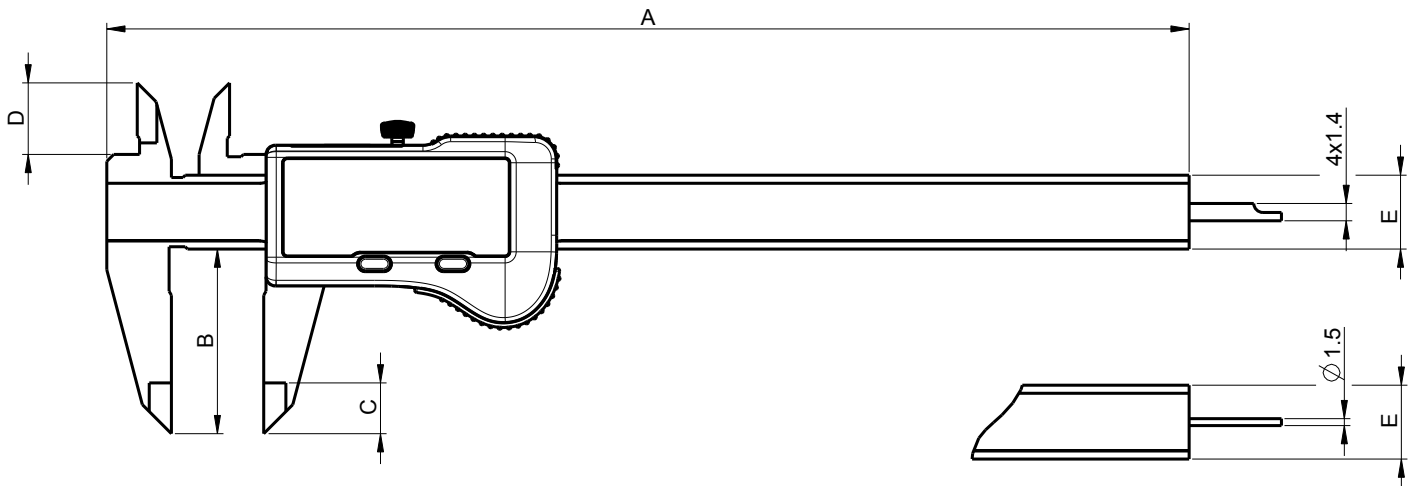
TECHNICAL SPECIFICATIONS

		810.1502	810.1507	810.1522	810.1532
Measuring range	mm	150	150	200	300
Max. Error G	µm	20[1]	20[1]	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			
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold			
Smart Inductive Sensor		●			

[1] > 100 mm : 30 µm / DIN 862

S_Cal EVO

- Standard professionnal caliper with protection IP67

- **Proximity data output**

- New extra-large display

- Programmable button with a function of choice

- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)

- Sleeping mode after 10 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)

C

Digital display LCD,
Height of digits 11.5 mm

Output cable Proximity to
USB (926.6721) or RS232
(926.6723)

Thickness of frame 3.5 mm

Programmable button
according to your needs

Simple and intuitive
functions

Proximity cable

PROXIMITY

SIS | Smart Inductive System

WATER RESISTANT

IP67

Proximity version

* **SIS** | Smart Inductive System description on page 5

Caliper

S_Cal EVO

DIMENSIONAL DRAWING

PROXIMITY
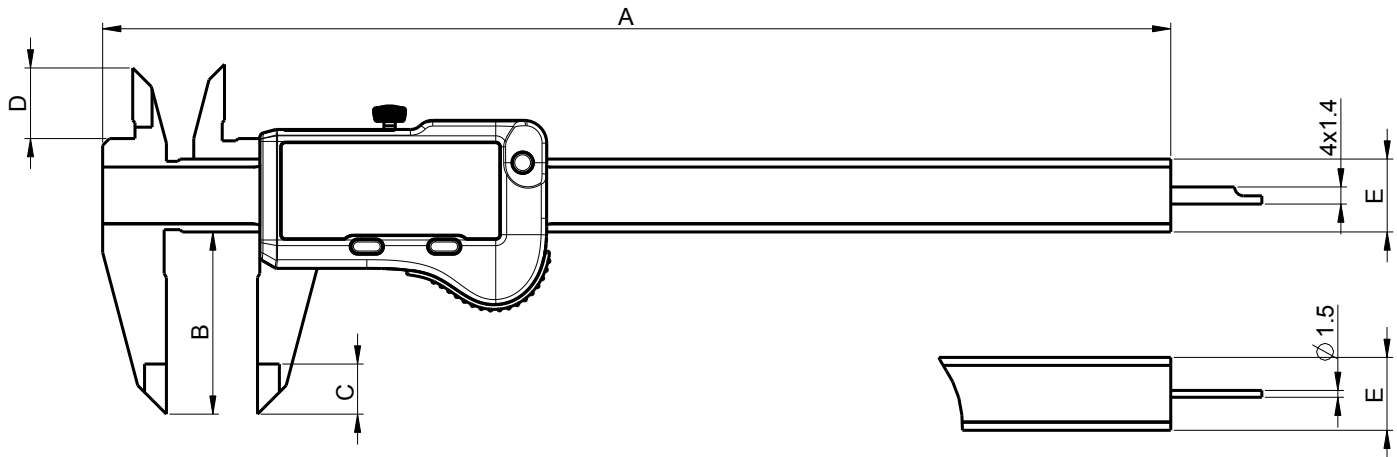
TECHNICAL SPECIFICATIONS

		810.1702	810.1707	810.1722	810.1732
Measuring range	mm	150	150	200	300
Max. Error G	µm	20[1]	20[1]	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			
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold			
Output data		USB / RS232 [2]			
Smart Inductive Sensor		●			

[1] > 100 mm : 30 µm / DIN 862
[2] see cables chapter

Caliper

S_Cal EVO µm

DESCRIPTION

PROXIMITY MICRON

- Standard professionnal caliper with protection IP67
- **Proximity data output**
- **New extra-large micron display**
- Programmable button with a function of choice
- Automatic wake-up by moving the electronic on his frame. (Absolute System S.I.S)
- Sleeping mode after 10 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

Output cable Proximity to
USB (926.6721) or RS232
(926.6723)

Thickness of frame 3.5 mm

Programmable button
according to your needs

Simple and intuitive
functions

PROXIMITY

SIS | Smart
Inductive
System

WATER RESISTANT

💧IP67

Proximity cable

Version Proximity micron
4µm repeatability

* SIS | Smart Inductive System description on page 5

Caliper

DIMENSIONAL DRAWING

S_Cal EVO µm

PROXIMITY MICRON

TECHNICAL SPECIFICATIONS

		810.9702	810.9707
Measuring range	mm	150	150
Max. Error G	µm	15[1]	15[1]
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
Functions		Zero setting, Preset (max 99.999), mm/inch, Hold	
Protection rating according to IEC 60529		IP67	
Output data		USB / RS232 [2]	
Smart Inductive Sensor		●	

[1] < 100 mm: 15 µm / > 100 mm : 30 µm / DIN 862
[2] see cables chapter

- **Integrated _Bluetooth®_ wireless 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 10 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)

Built-in Bluetooth®

Programmable button according to your needs

Digital display LCD, Height of digits 11.5 mm

Thickness of frame 3.5 mm

Bluetooth® technology

Simple and intuitive functions

Built-in Bluetooth®
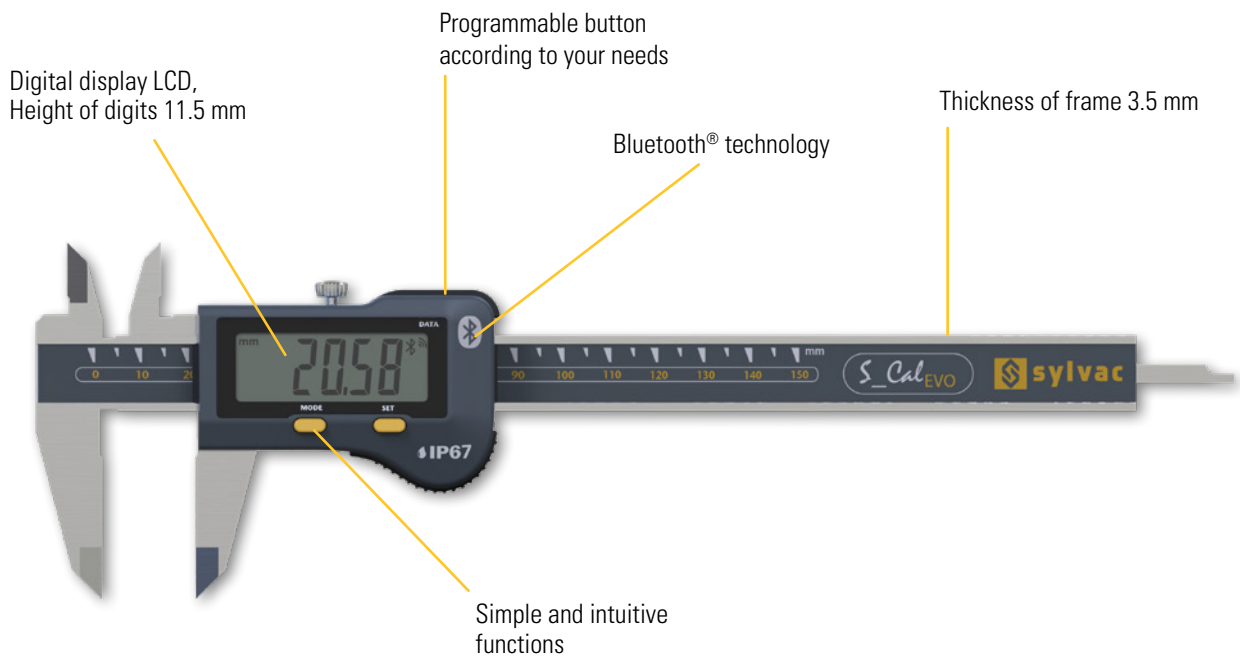
Bluetooth® wireless technology and IP67 protection rating!

SIS Smart Inductive System

WATER RESISTANT

IP67

* SIS Smart Inductive System description on page 5

Caliper

S_Cal EVO

DIMENSIONAL DRAWING

SMART
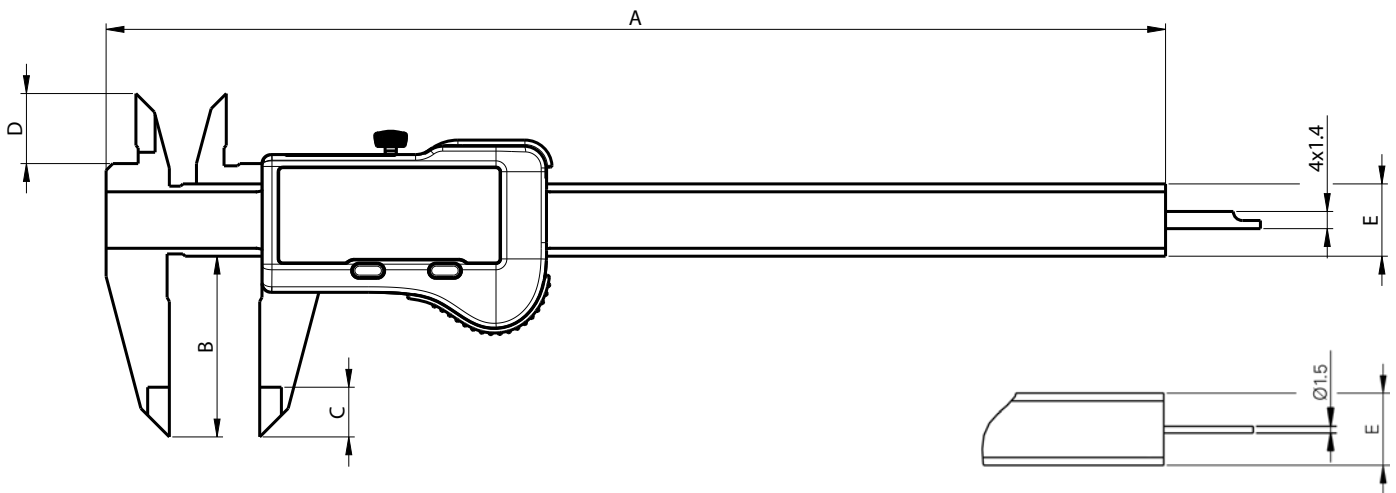
TECHNICAL SPECIFICATIONS

		810.1506	810.1516	810.1526	810.1536
Measuring range	mm	150	150	200	300
Max. Error G	µm	20[1]	20[1]	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			
Output data		Bluetooth® wireless technology*			
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data			
Smart Inductive Sensor		●			

[1] > 100 mm : 30 µm / DIN 862

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

Caliper

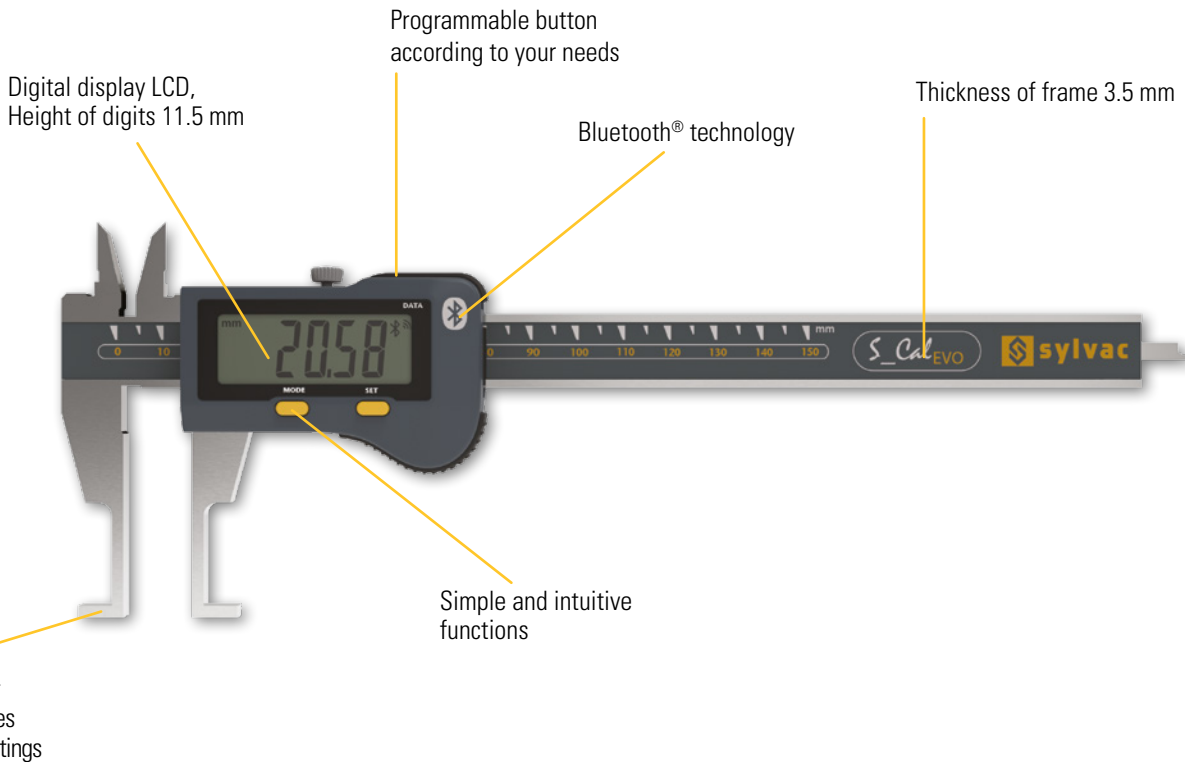# S_Cal EVO

DESCRIPTION

CARBIDE

- **Integrated *Bluetooth*® wireless 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 10 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)

Built-in
Bluetooth®

Programmable button
according to your needs

Digital display LCD,
Height of digits 11.5 mm

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Carbide
jaws

Built-in
Bluetooth®

SIS | Smart
Inductive
System

WATER RESISTANT
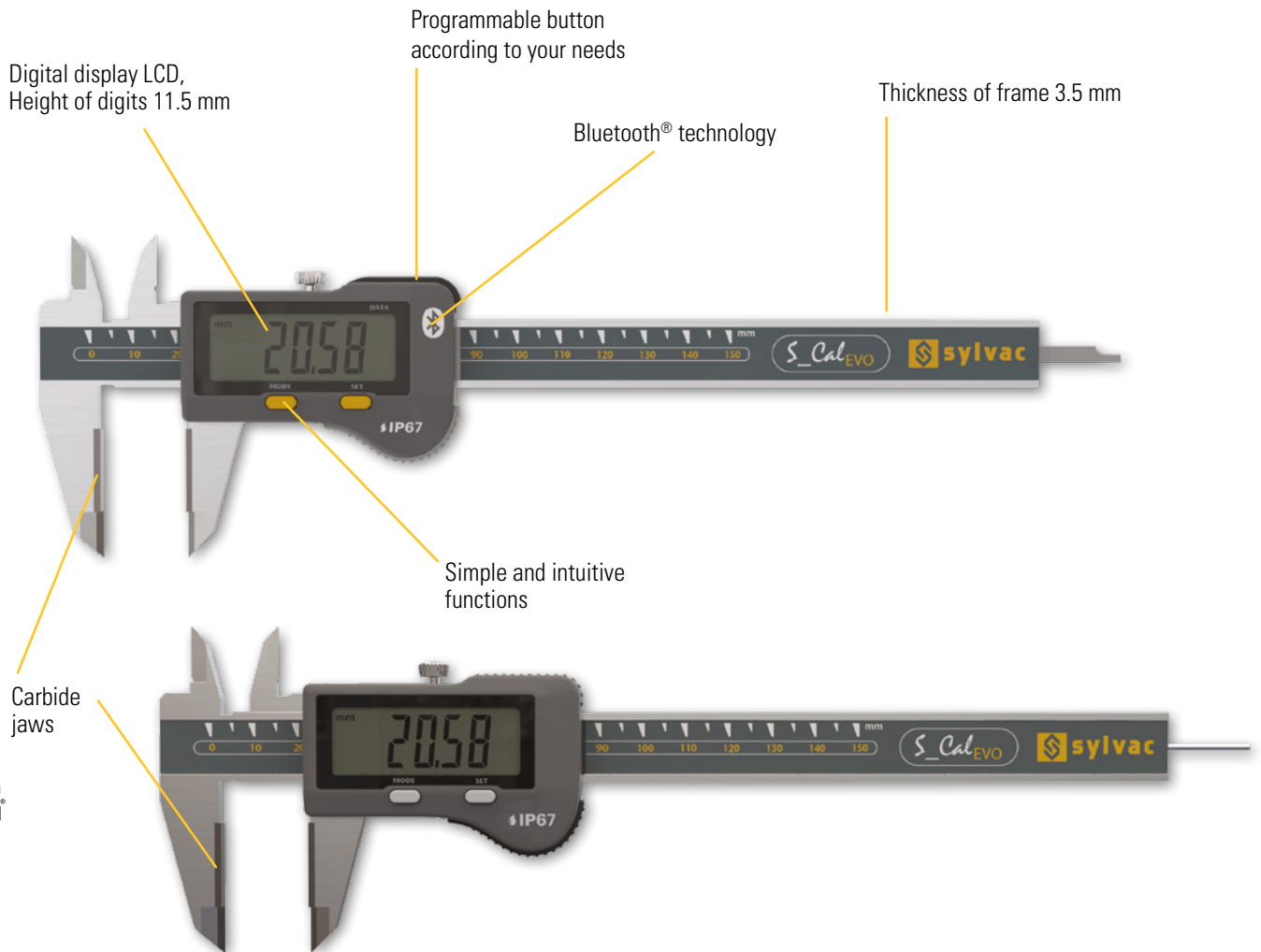
Carbide jaws

💧IP67

* SIS | Smart Inductive System description on page 5

Caliper

S_Cal EVO

DIMENSIONAL DRAWING

CARBIDE
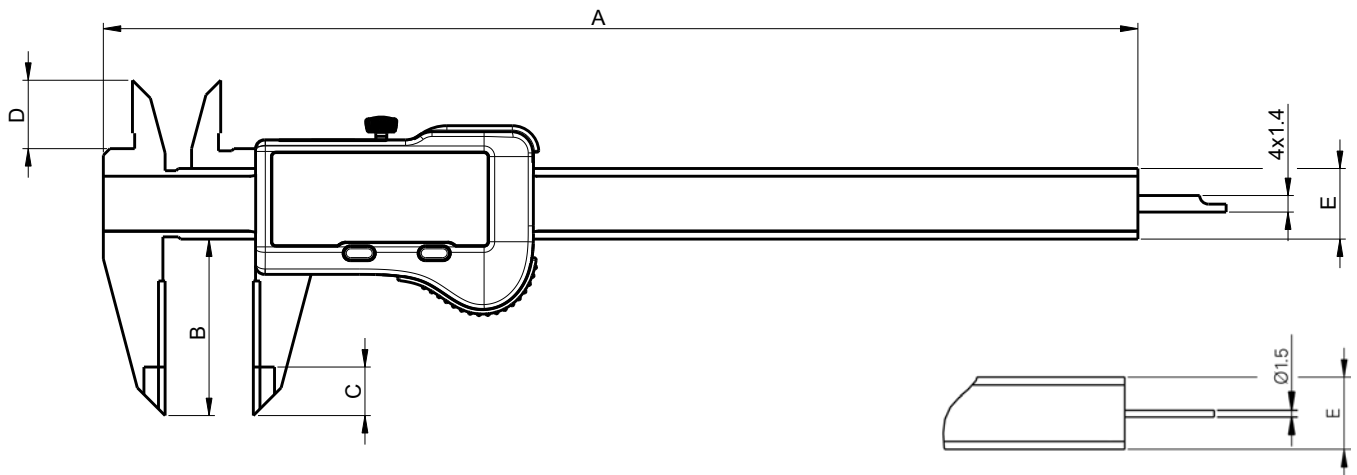
TECHNICAL SPECIFICATIONS

		810.1409	810.1509
Measuring range	mm	150	150
Max. Error G	μm	20[1]	20[1]
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		IP67	IP67
Output data		-	Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

[1] > 100 mm : 30 μm / DIN 862

* see cables chapter

* Up to 8 instruments connected per dongle #981.7100
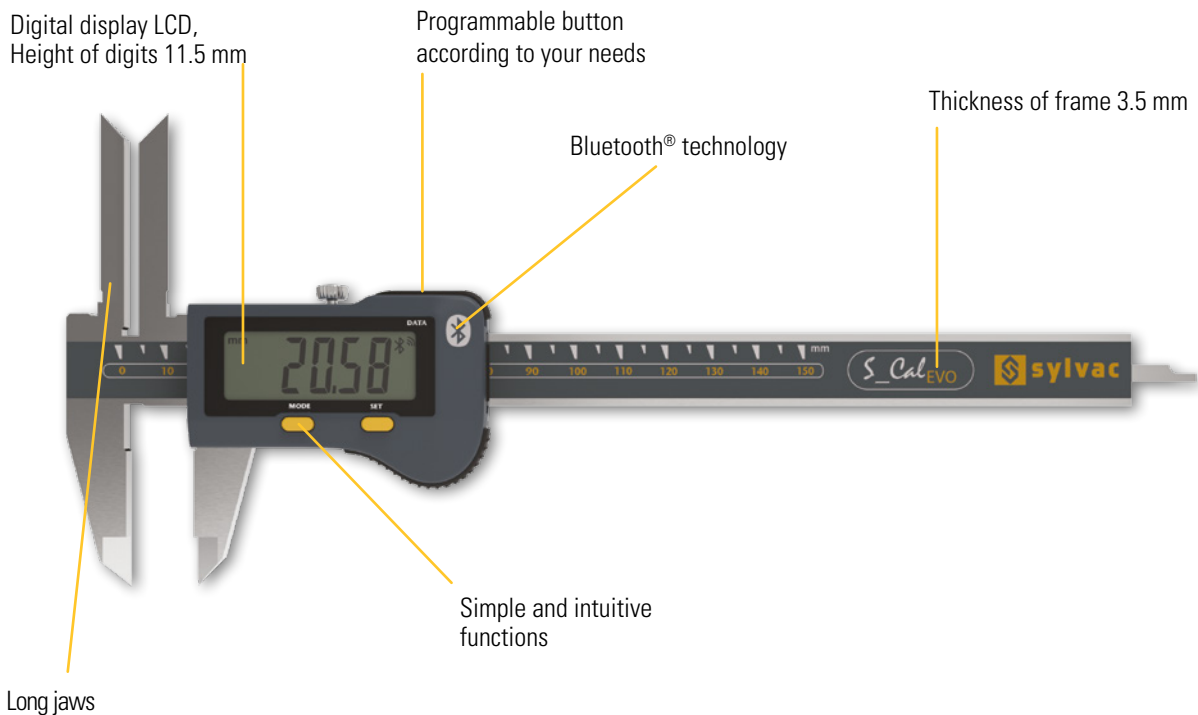**More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT**

Micron Caliper

DESCRIPTION

- **Integrated *Bluetooth*® wireless 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 10 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
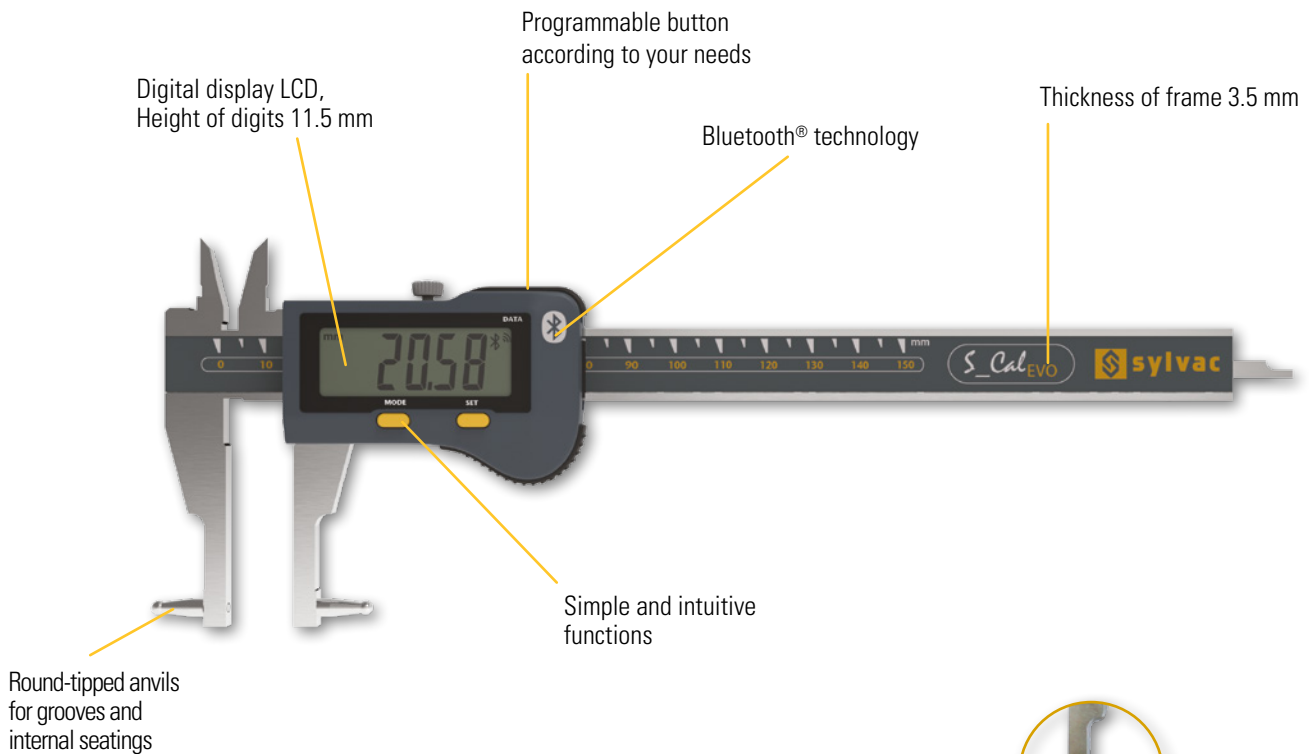
- Great comfort of use thanks to its ergonomic frame

- Thumb wheel on request (see accessories)

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm,
1 µm resolution

Programmable button
according to your needs

Thickness of frame 3.5 mm

Bluetooth® technology

Simple and intuitive
functions

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

4µm repeatability

* SIS Smart Inductive System description on page 5

Micron Caliper

S_Cal EVO

DIMENSIONAL DRAWING

SMART MICRON
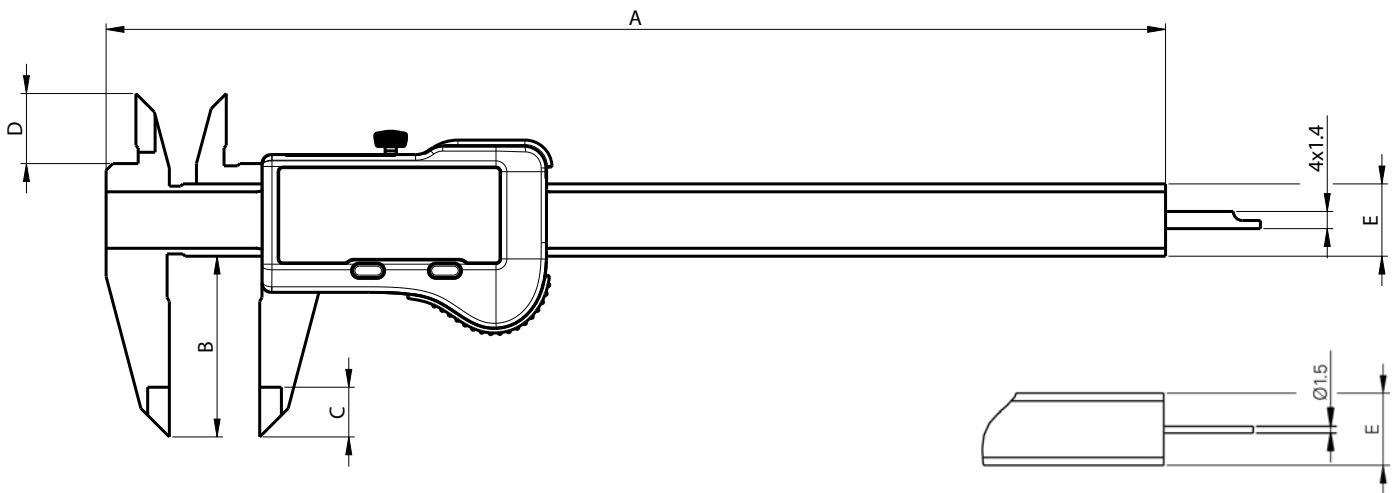
TECHNICAL SPECIFICATIONS

		810.9506	810.9516
Measuring range	mm	150	150
Max. Error G	µm	15[1]	15[1]
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	Ø 1.5
Protection rating according to IEC 60529		IP67	IP67
Output data		Bluetooth® wireless technology*	
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

[1] < 100 mm: 15 µm / > 100 mm : 30 µm / DIN 862

* Up to 8 instruments connected per dongle #981.7100
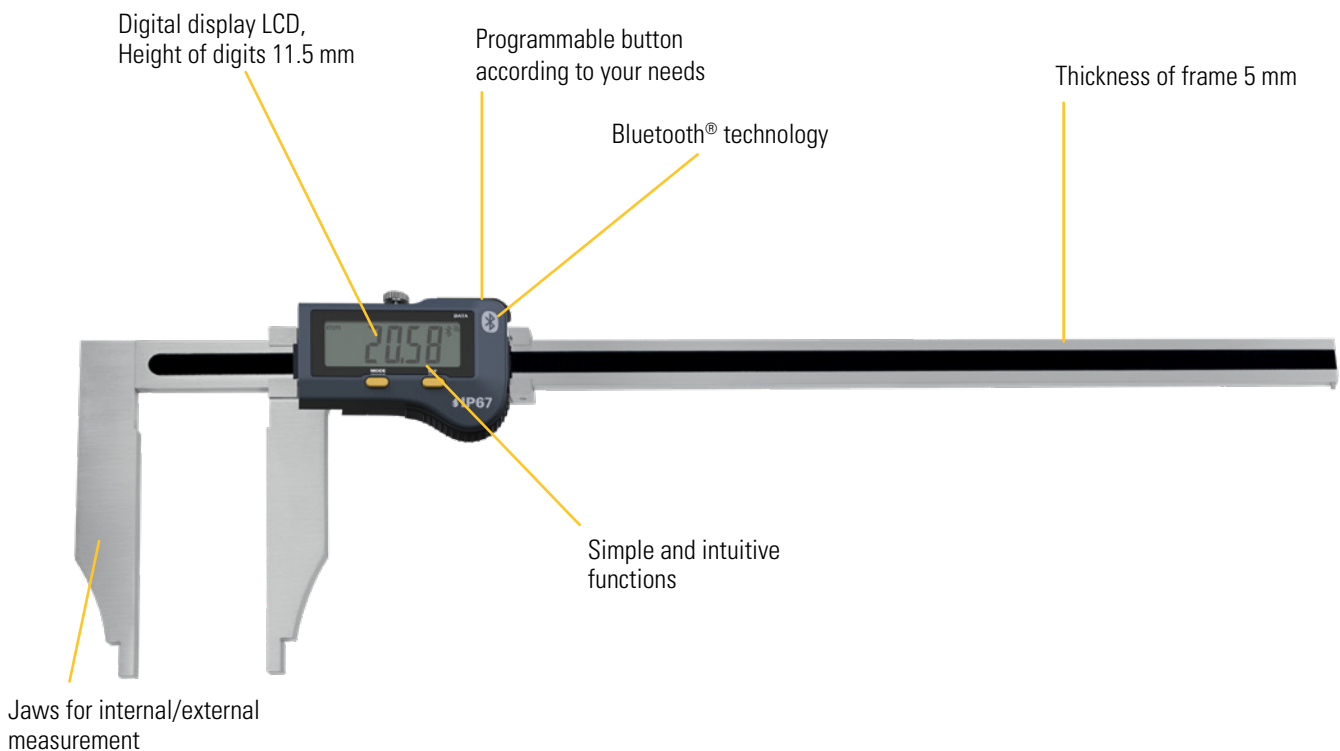**More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT**

Special caliper

S_Cal EVO

DESCRIPTION

SMART EXTERNAL GROOVE

- **Integrated *Bluetooth*® wireless 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 10 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

Built-in
Bluetooth®

Programmable button
according to your needs

Digital display LCD,
Height of digits 11.5 mm

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Special jaws for
mesuring grooves
and external seatings

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

For measuring grooves and external seatings

Special caliper

DIMENSIONAL DRAWING

S_Cal EVO

SMART EXTERNAL GROOVE

TECHNICAL SPECIFICATIONS

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

[1] > 100 mm : 30 µm / DIN 862

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT
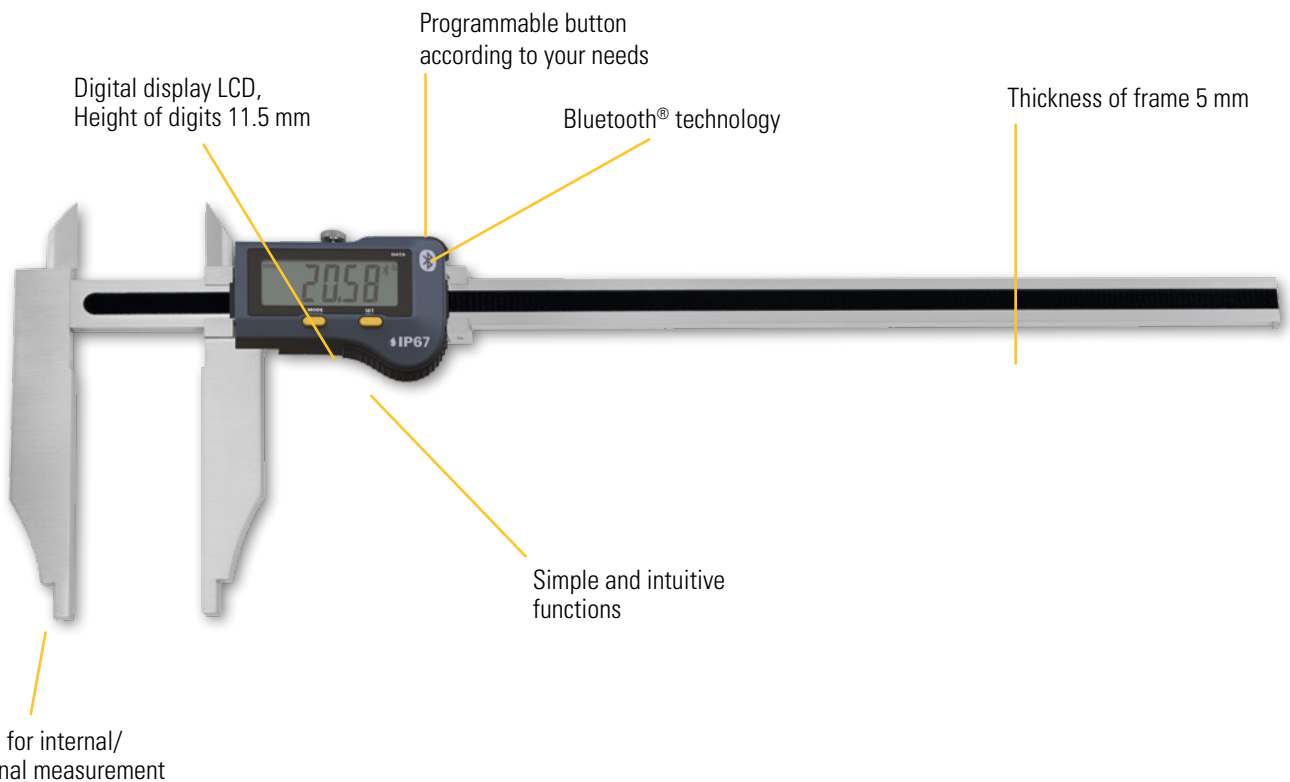
Special caliper

S_Cal EVO

- **Integrated *Bluetooth*® wireless 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 10 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

Built-in
⊛ Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button
according to your needs

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Special jaws for
mesuring grooves
and internal seatings

Built-in
⊛ Bluetooth®

SIS | Smart Inductive System

▲ ▲ ▲
WATER RESISTANT

💧**IP67**

For measuring grooves and internal seatings

* **SIS** description on page 5

Special caliper

S_Cal EVO

DIMENSIONAL DRAWING

SMART INTERNAL GROOVE
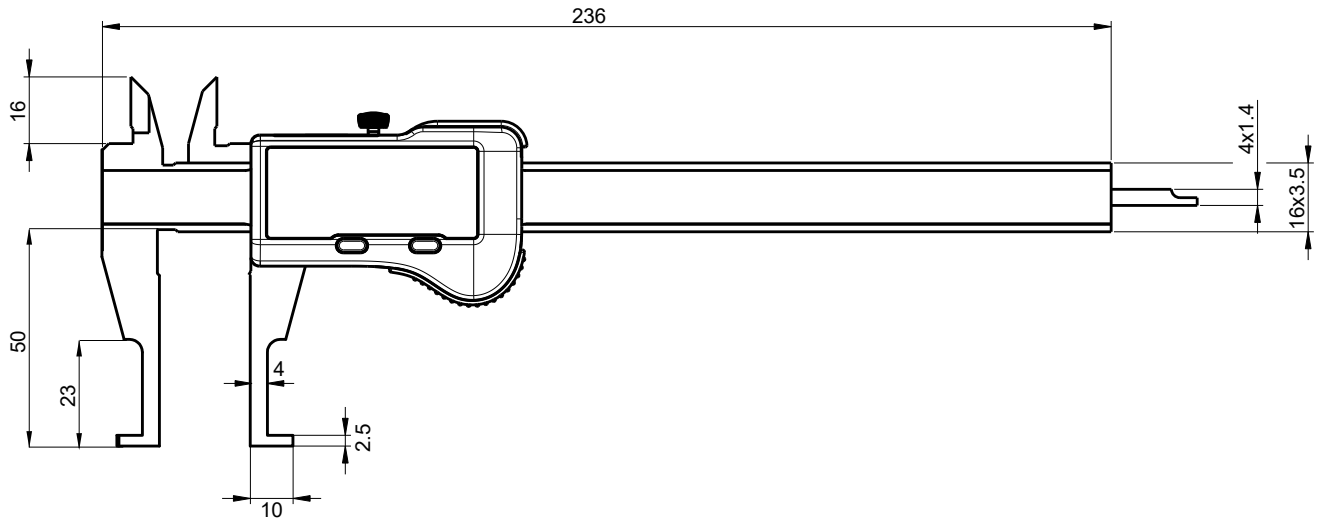
TECHNICAL SPECIFICATIONS

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

[1] > 100 mm : 30 µm / DIN 862

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

Special caliper
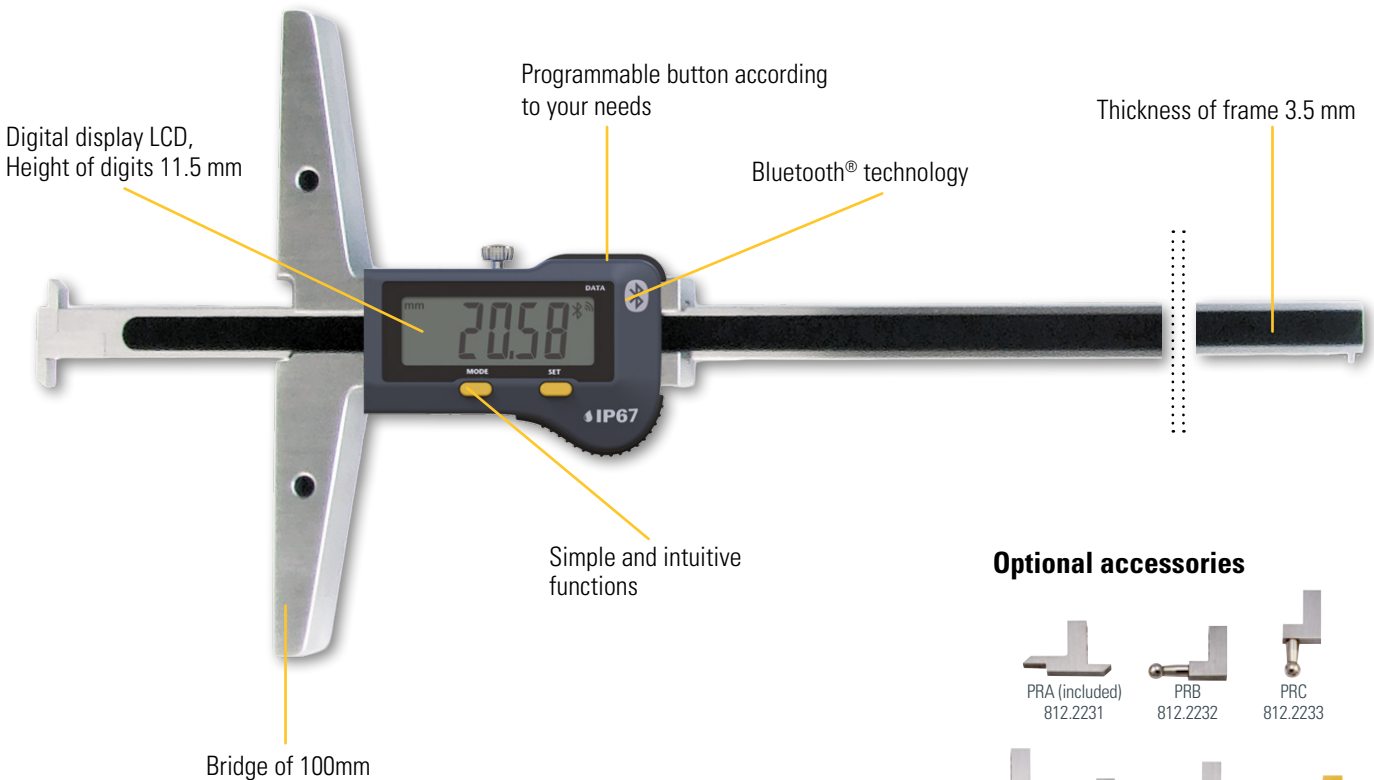
S_Cal EVO

- **Integrated *Bluetooth*® wireless 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 10 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button
according to your needs

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Long jaws

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

* SIS description on page 5

Long internal jaws for deep measurements

Special caliper

DIMENSIONAL DRAWING

SMART DEEP MEASUREMENT

C

236

45

4x1.4

16x3.5

40

11
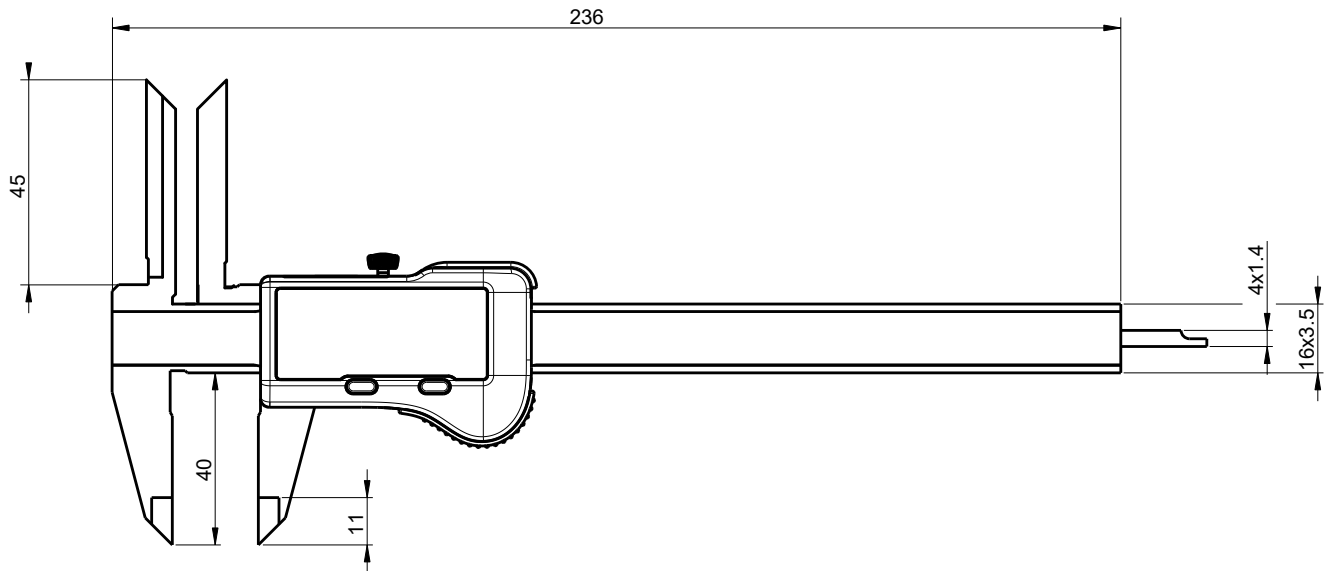
TECHNICAL SPECIFICATIONS

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

[1] > 100 mm : 30 µm / DIN 862

* 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

DESCRIPTION

SMART POINTS JAWS

- **Integrated *Bluetooth®* wireless 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)
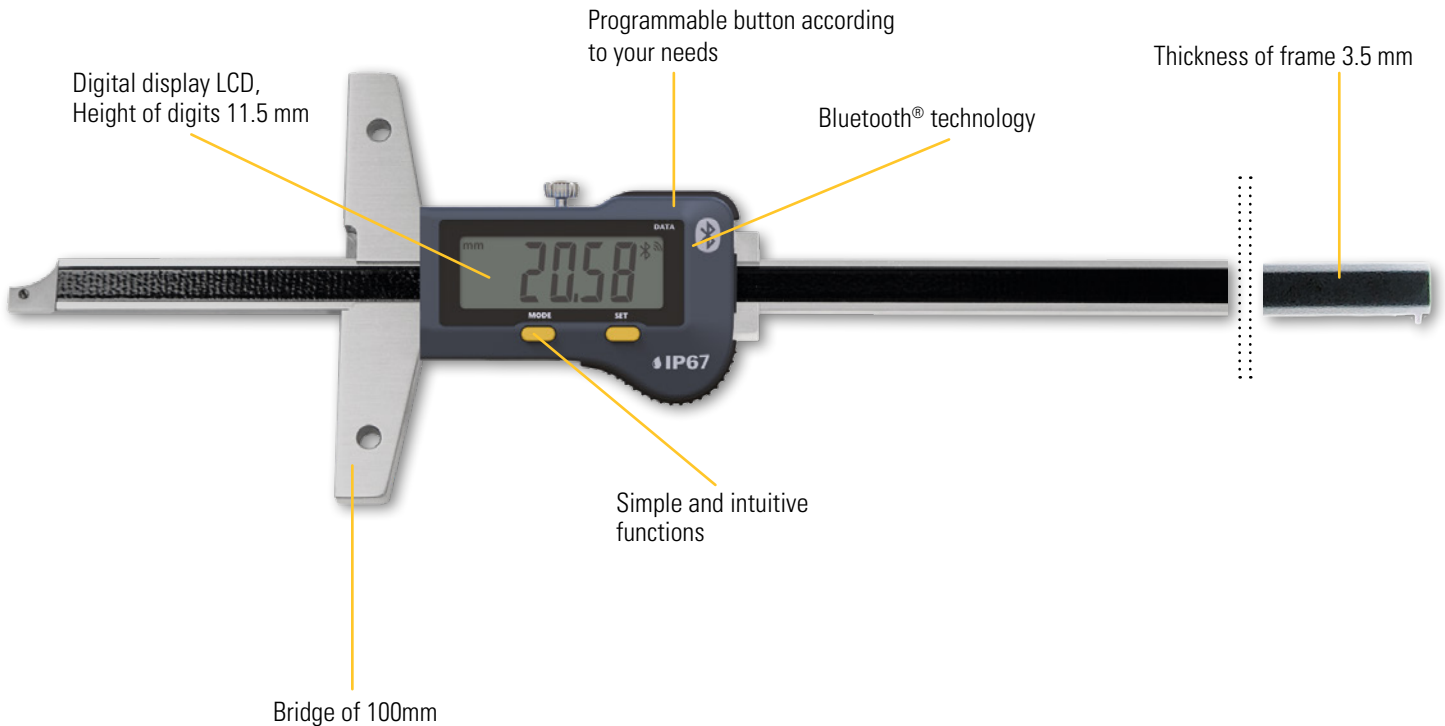
- Sleeping mode after 10 min. of no use. (Absolute System S.I.S)

- 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button
according to your needs

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Round-tipped anvils
for grooves and
internal seatings

M2.5

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

Interchangeable anvils

* **SIS** description on page 5

Special caliper

DIMENSIONAL DRAWING

S_Cal EVO

SMART POINTS JAWS
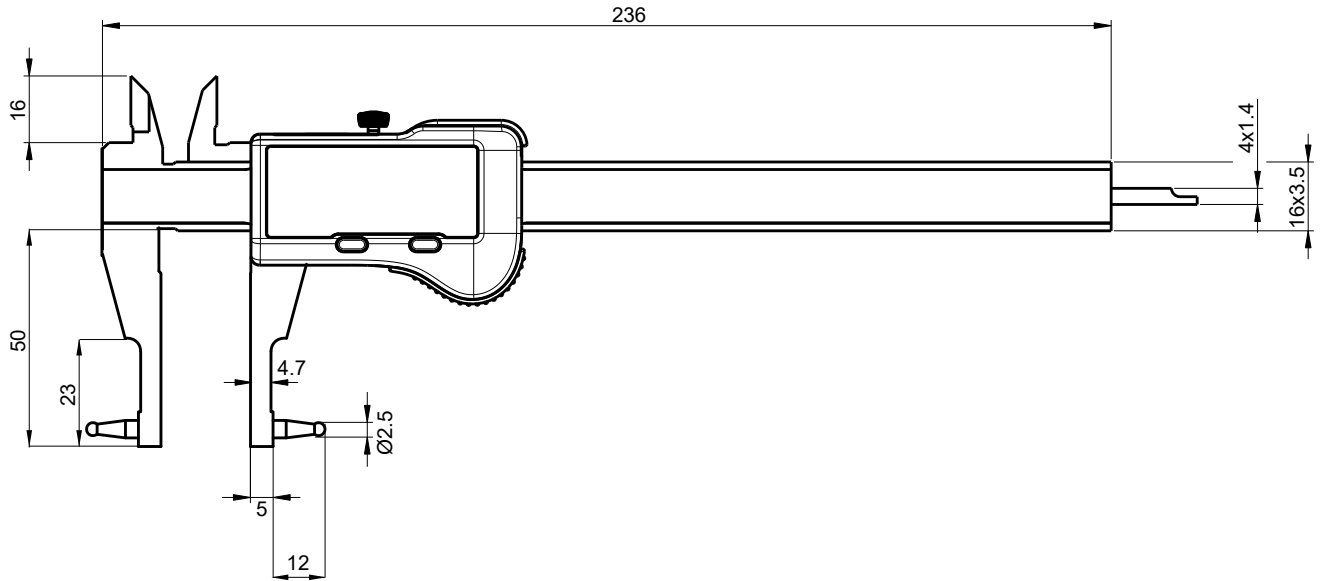
TECHNICAL SPECIFICATIONS

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

[1] > 100 mm : 30 µm / DIN 862

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT
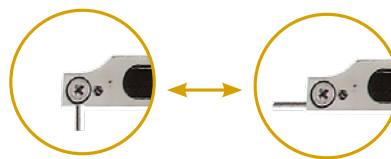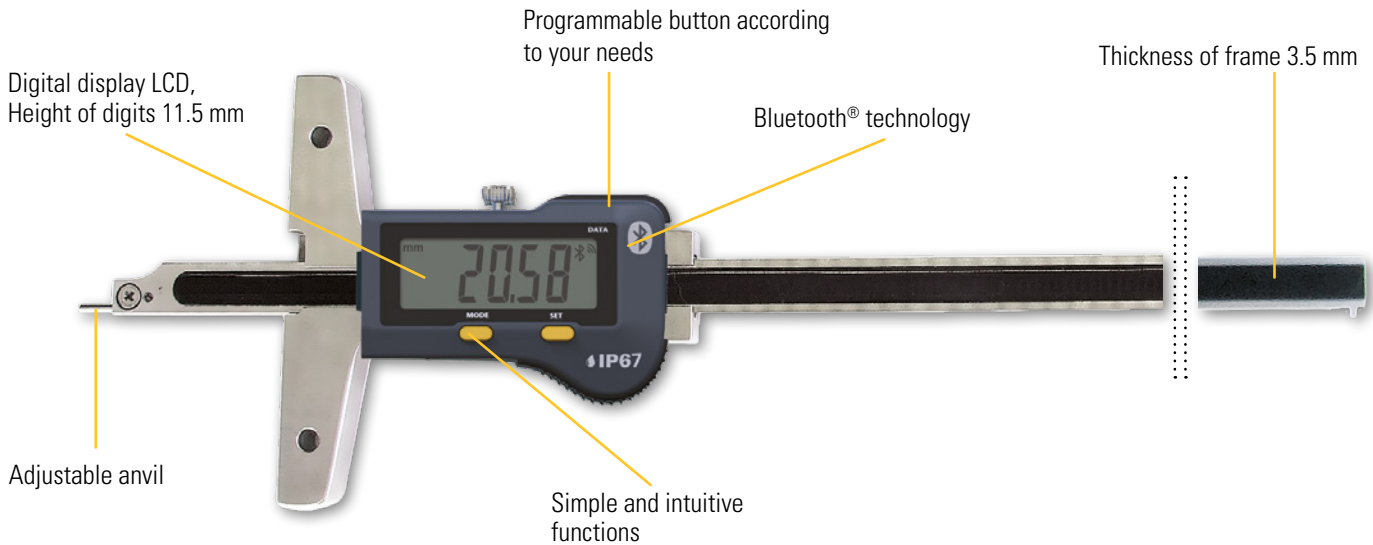

Partkey to screw/unscrew
the anvils

Caliper mid size

S_Cal EVO Form E

- **Integrated *Bluetooth*® wireless 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 10 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button
according to your needs

Thickness of frame 5 mm

Bluetooth® technology

Simple and intuitive
functions

Jaws for internal/external
measurement

Mid size caliper

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

* **SIS** |Smart Inductive System description on page 5

C

Caliper mid size

S_Cal EVO Form E

DIMENSIONAL DRAWING

MID SIZE CALIPER R5
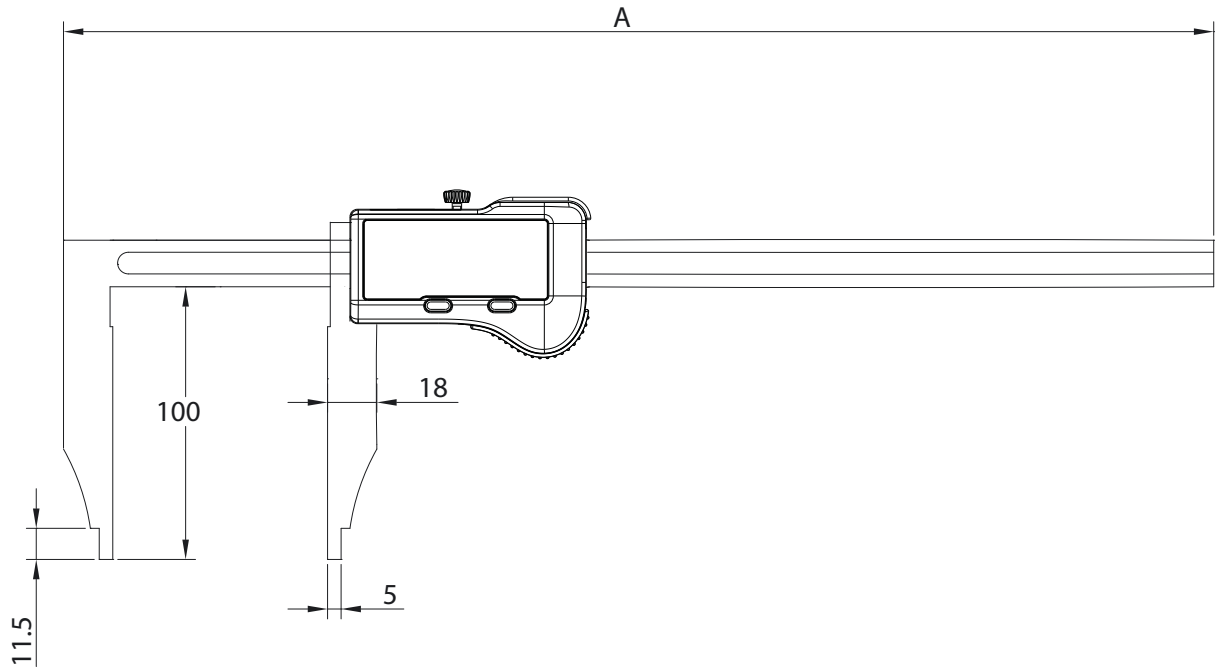
TECHNICAL SPECIFICATIONS

		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
Output data		Bluetooth® wireless technology*
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data
Smart Inductive Sensor		●

* 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*® wireless 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 10 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button
according to your needs

Bluetooth® technology

Thickness of frame 5 mm

Simple and intuitive
functions

Jaws for internal/
external measurement

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

* **SIS** | Smart Inductive System description on page 5

Mid size caliper with upper jaws

Caliper mid size

S_Cal EVO Form B

DIMENSIONAL DRAWING

MID SIZE CALIPER R5 WITH UPPER JAWS
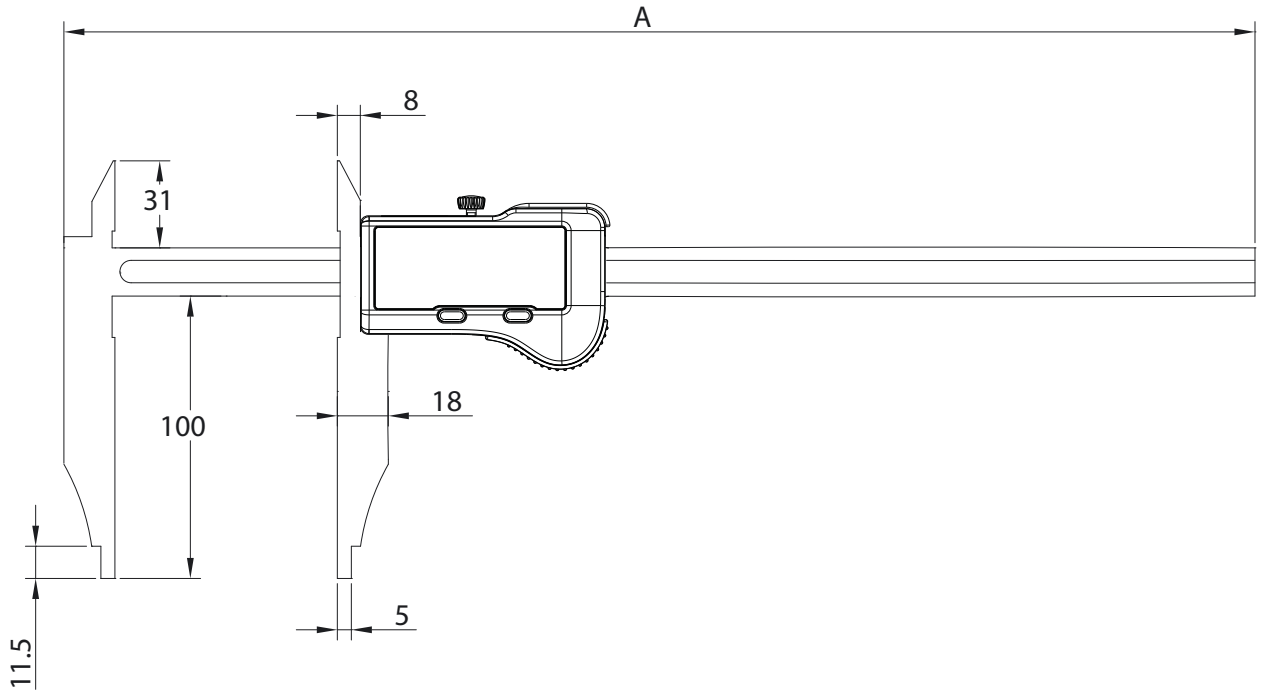
TECHNICAL SPECIFICATIONS

		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	
Output data		Bluetooth® wireless technology*	
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor		●	

* 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

DESCRIPTION

TWO FIXED MEASURING JAWS

- **Integrated *Bluetooth®* wireless 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 10 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button according
to your needs

Bluetooth® technology

Thickness of frame 3.5 mm

Simple and intuitive
functions

Bridge of 100mm

Built-in
Bluetooth®

SIS | Smart
Inductive
System

WATER RESISTANT

IP67

* **SIS** | Smart Inductive System description on page 5

Optional accessories

PRA (included)
812.2231

PRB
812.2232

PRC
812.2233

PRD
812.2234

PRE
812.2235

PRF
812.2236

PRA-W (titanium)
812.2237

Interchangeable anvils

Depth gauge

S_Depth EVO

DIMENSIONAL DRAWING

TWO FIXED MEASURING JAWS

C
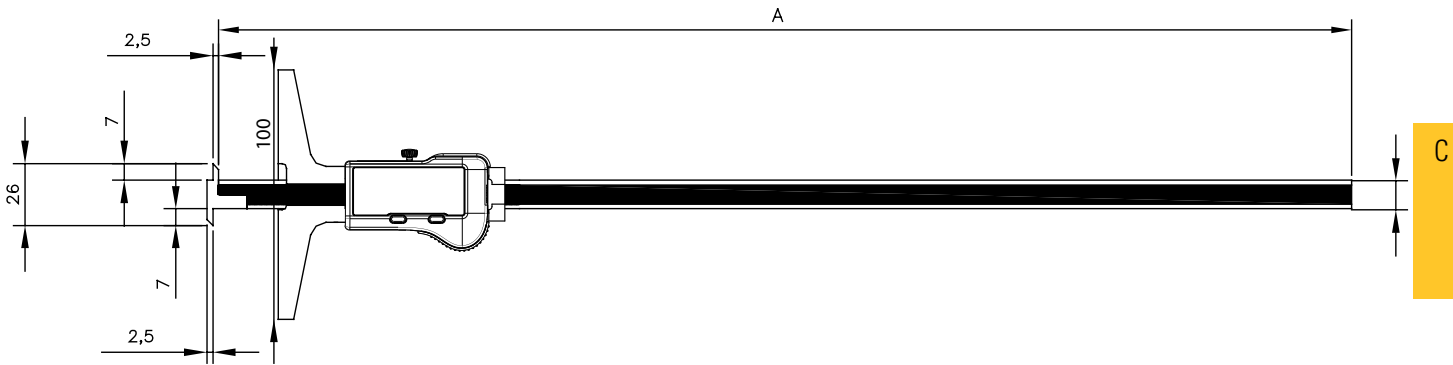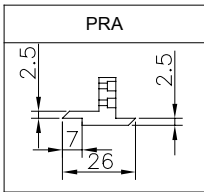
812.2231/812.2237	812.2232	812.2233	812.2234	812.2235	812.2236
PRA	PRB	PRC	PRD	PRE	PRF
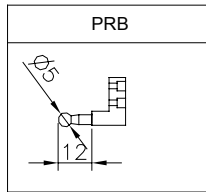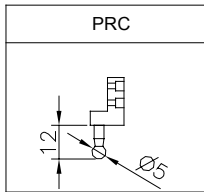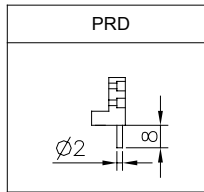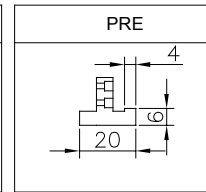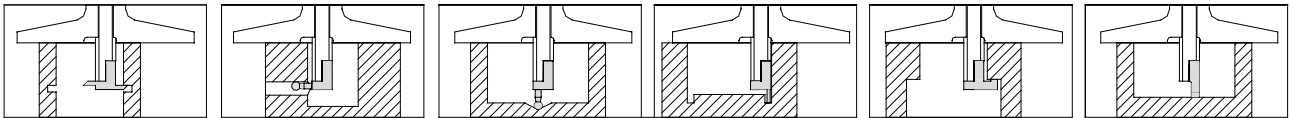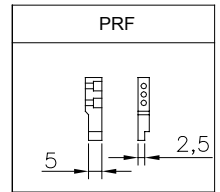
TECHNICAL SPECIFICATIONS

		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	
Output data			Bluetooth® wireless technology*	
Functions			Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor			●	

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

Depth gauge

DESCRIPTION
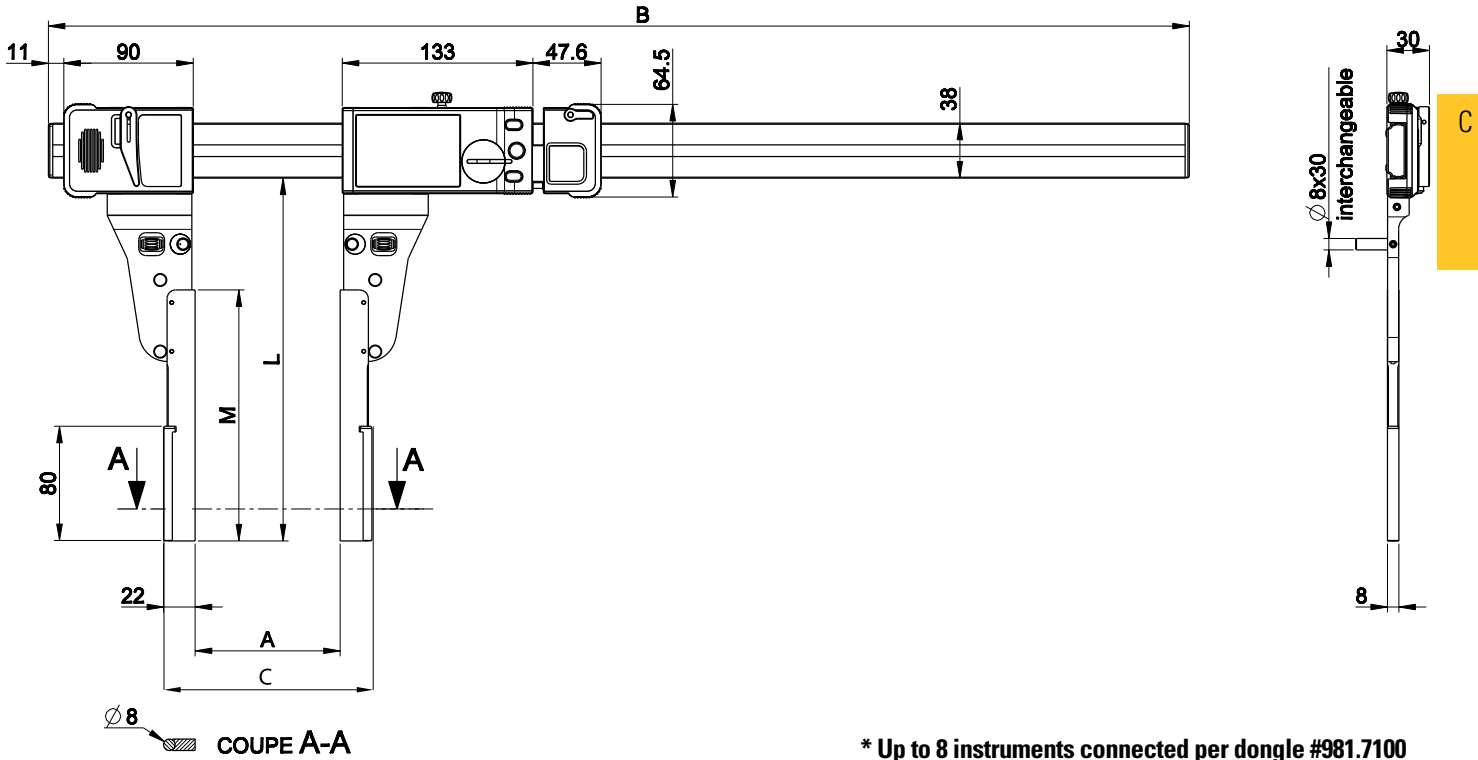
- **Integrated *Bluetooth*® wireless technology**

- 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 10 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

Built-in
Bluetooth®

Programmable button according to your needs

Thickness of frame 3.5 mm

Digital display LCD, Height of digits 11.5 mm

Bluetooth® technology

Simple and intuitive functions

Bridge of 100mm

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

* **SIS** | Smart Inductive System description on page 5

Bridge of 100mm with clamping screw

Depth gauge

S_Depth EVO

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		
Output data		Bluetooth® wireless technology*		
Functions		Zero setting, Preset (max 999.99), mm/inch, Hold, Data		
Smart Inductive Sensor		●		

* 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

DESCRIPTION

ROTARY PIN

- **Integrated *Bluetooth® * wireless 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 10 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

Built-in
Bluetooth®

Digital display LCD,
Height of digits 11.5 mm

Programmable button according
to your needs

Bluetooth® technology

Thickness of frame 3.5 mm

Adjustable anvil

Simple and intuitive
functions

Built-in
Bluetooth®

SIS | Smart Inductive System

WATER RESISTANT

IP67

* **SIS** | Smart Inductive System description on page 5

Adjustable anvil !

Depth gauge

S_Depth EVO

C

A

Ø5

5.5

100

70

B
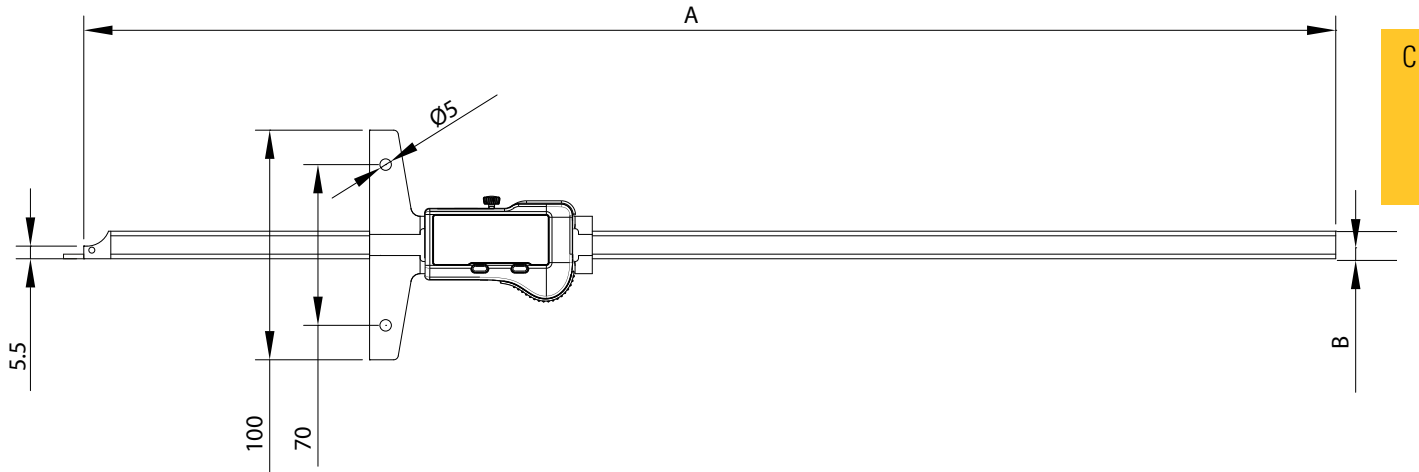
TECHNICAL SPECIFICATIONS

		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	
Output data			Bluetooth® wireless technology*	
Functions			Zero setting, Preset (max 999.99), mm/inch, Hold, Data	
Smart Inductive Sensor			●	

* 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
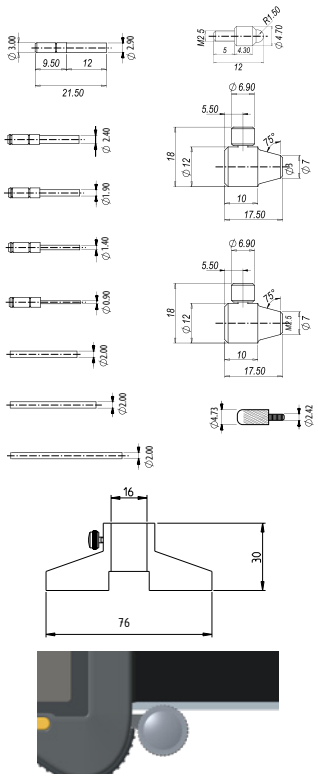
		S_Cal EVO Proximity	S_Cal EVO Proximity µm	S_Cal EVO	S_Cal EVO Smart	S_Cal EVOSmart µm
910.2207	Accessory kit for S_Cal (12 pieces)	●	●	●	●	●
910.2205	Base for Depth Measurement	●	●	●	●	●
810.2203					●	●
810.2204	Thumb wheel			●		
810.2205		●	●			

See also chapter cables.

ACCESSORIES FOR SPECIAL DEPTH CALIPER (TJ / SF / RP)
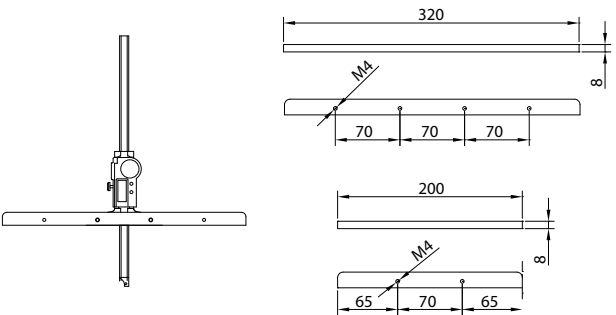
		Length	Thickness
812.2240	Additional base	320	8
812.2241	Additional base	200	8

S_Cal / S_Depth

BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate (S_Cal EVO µm)

APPLICATIONS

Depth measurement with S_Cal EVO and base 910.2205.
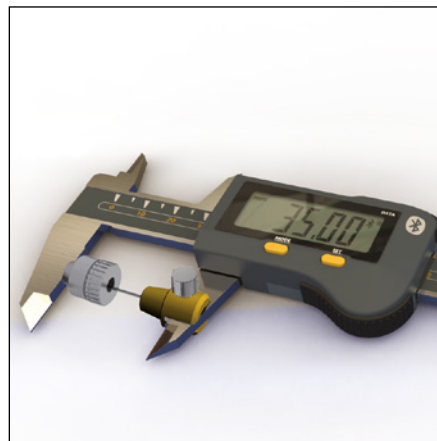
S_Cal EVO Smart with kit 910.2207
Depth measurement of small internal Ø

S_Cal EVO Standard
Comparison measurement

Part measurement with S_Cal µm

Part measurement with sending data

Depth measurement with S_Cal EVO µm

Special S_Cal & S_Depth

APPLICATIONS
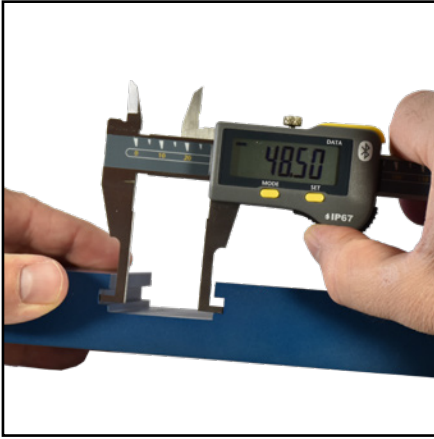
Internal groove measurement with
S_Cal EVO Smart IG
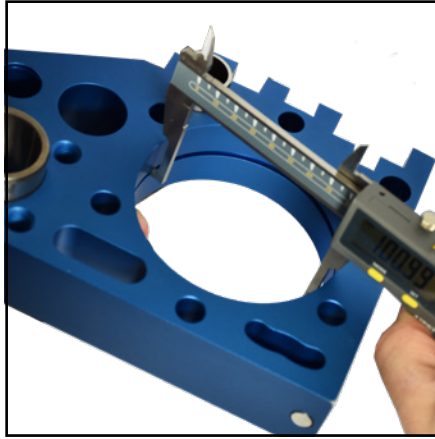
Internal groove measurement with
S_Cal EVO Smart IG

Internal measurement with S_Cal EVO Smart
PJ

Deep measurement with
S_Cal EVO Smart DM
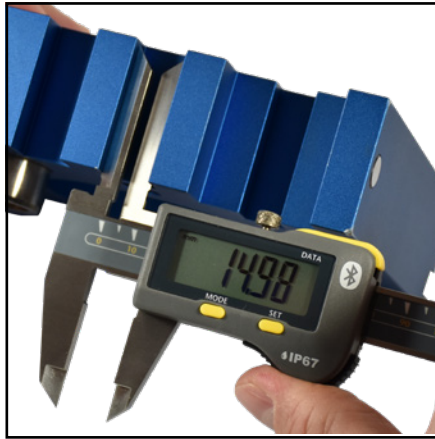
Deep measurement with
S_Cal EVO Smart DM

External groove measurement with
S_Cal EVO Smart EG

External groove measurement with
S_Cal EVO Smart EG

External groove measurement with
S_Cal EVO Smart EG

S_Depth EVO Smart TJ communicating with
Sylvac Smart App on touchpad

Ultra light caliper

UL4

DESCRIPTION

- Ultra light caliper for external and internal measurements
- **Integrated *Bluetooth*® wireless 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

Built-in
Bluetooth®

Output cable Proximity to
USB (926.6721) or RS232
(926.6723)

Upper internal
measurement anvils

Measuring scale
resistant to liquid

Left moving cursor
locking lever

3m = 3.3 kg

Force control
device

Digital display LCD,
Height of digits 20 mm

Jaws of
200mm

SWISS
MADE

Built-in
Bluetooth®

PROXIMITY
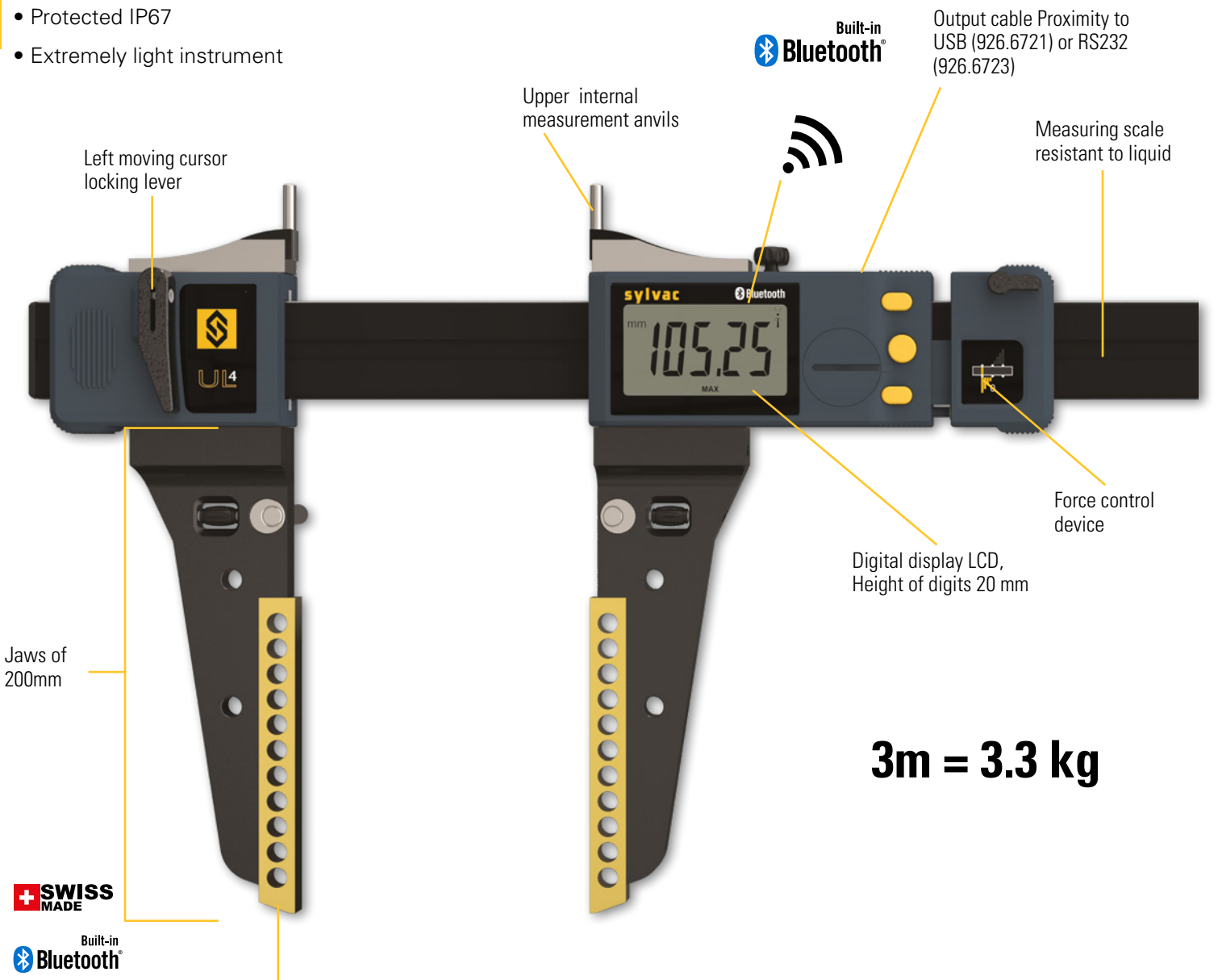
Stainless steel external jaws,
thickness 8 mm, titanium coated

WATER RESISTANT

IP67
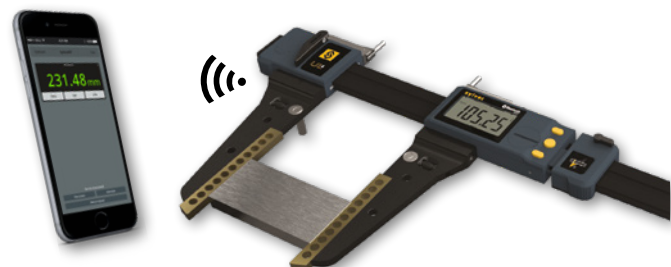
Ultra light caliper

DIMENSIONAL DRAWING
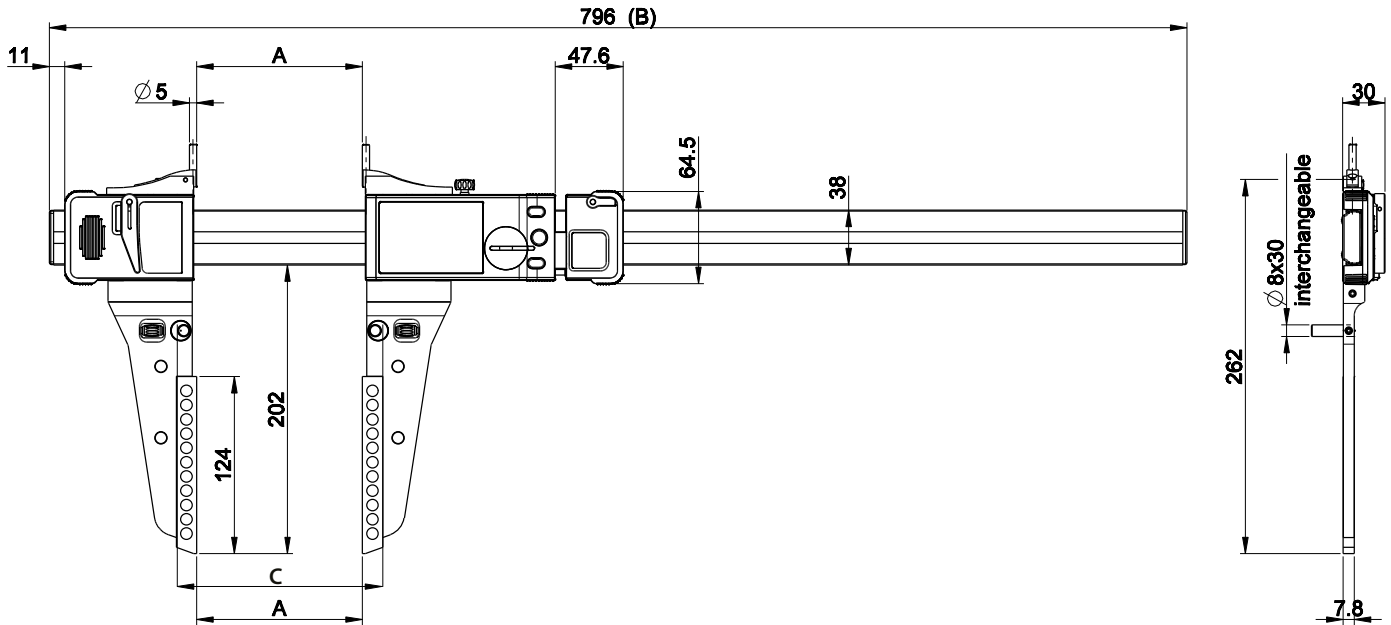
TECHNICAL SPECIFICATIONS

		811.1404	811.1406	811.1410	811.1415	811.1420	811.1425	811.1430
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	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
Measuring Force	N	7.5 - 11.5 ($\pm$20%)						
Output data		Bluetooth® wireless technology* / RS232 / USB						
IP67 Protection		●						
Preset max.		$\pm$9999.99 mm / $\pm$399.9995 IN						
Weight	kg	1.5	1.6	1.9	2.3	2.6	2.9	3.3
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

C

Ultra light caliper

UL4

SPECIAL EXECUTIONS | SPECIAL JAWS TYPE A
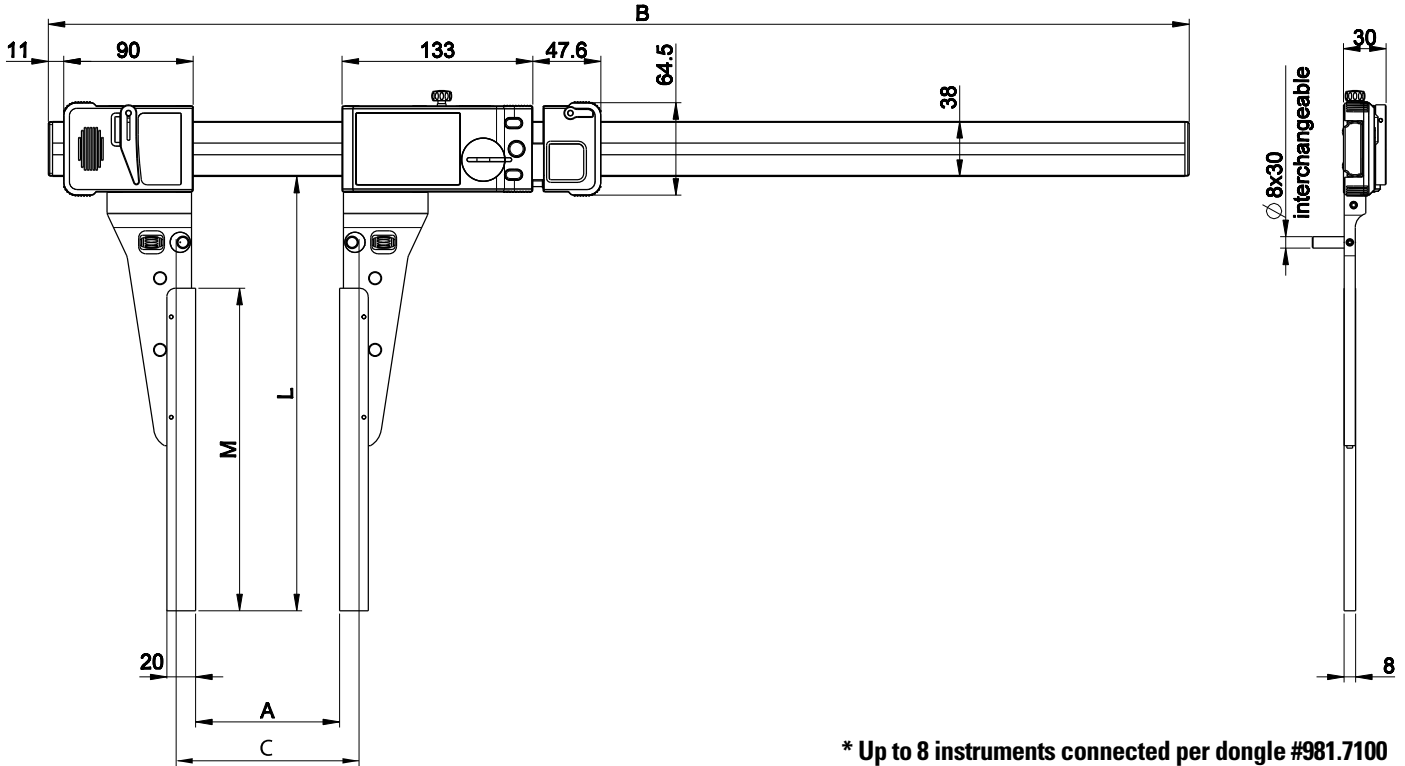
Built-in
Bluetooth®

C

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

TECHNICAL SPECIFICATIONS

		811.2316.99	811.2317.99
Special jaws (pair)		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
UL specification		Max. error. [µm] / Repeatability [µm]						
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

SPECIAL EXECUTIONS | SPECIAL JAWS TYPE C

Built-in Bluetooth®

COUPE A-A

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

TECHNICAL SPECIFICATIONS

		811.2319.99
Special jaws (pair)		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

Built-in
Bluetooth®
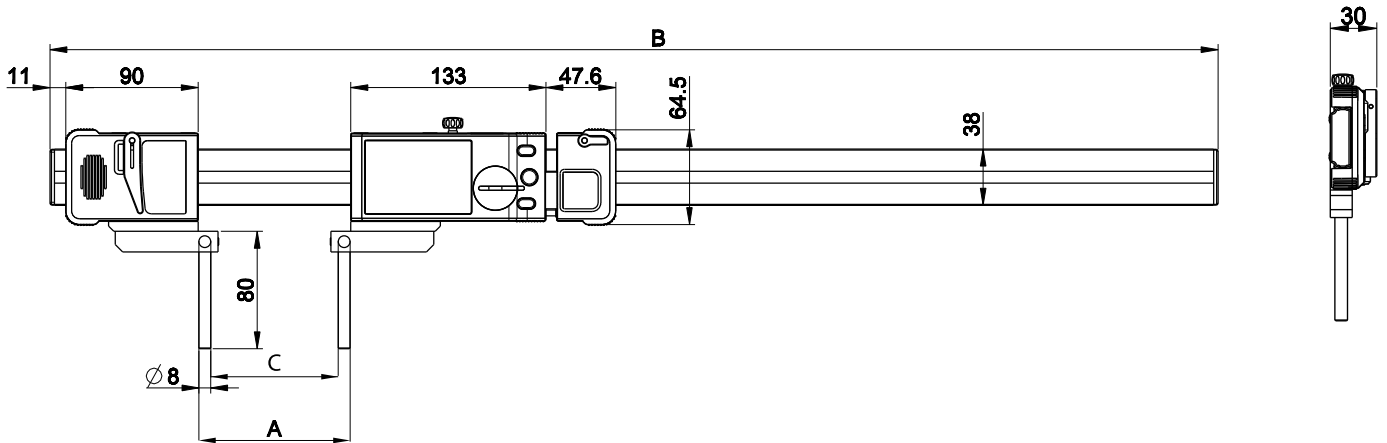
TECHNICAL SPECIFICATIONS

		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 ($\pm$20%)			
Output data				Bluetooth® wireless technology***** / RS232 / USB				
IP67 Protection					●			
Preset max.					$\pm$9999.99 mm / $\pm$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
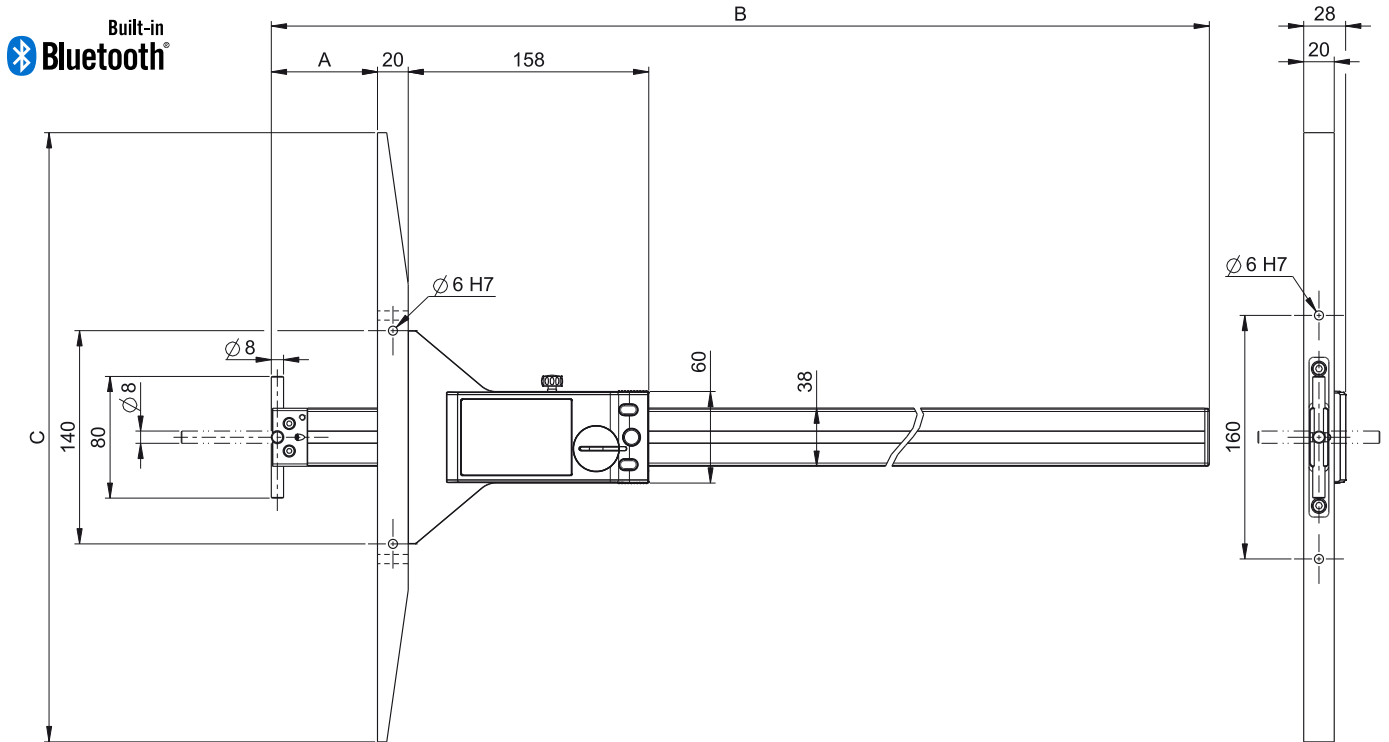
TECHNICAL SPECIFICATIONS

		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
Output data		Bluetooth® wireless technology* / 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

Ultra light digital scale UL D4

DIMENSIONAL DRAWING

Built-in Bluetooth®
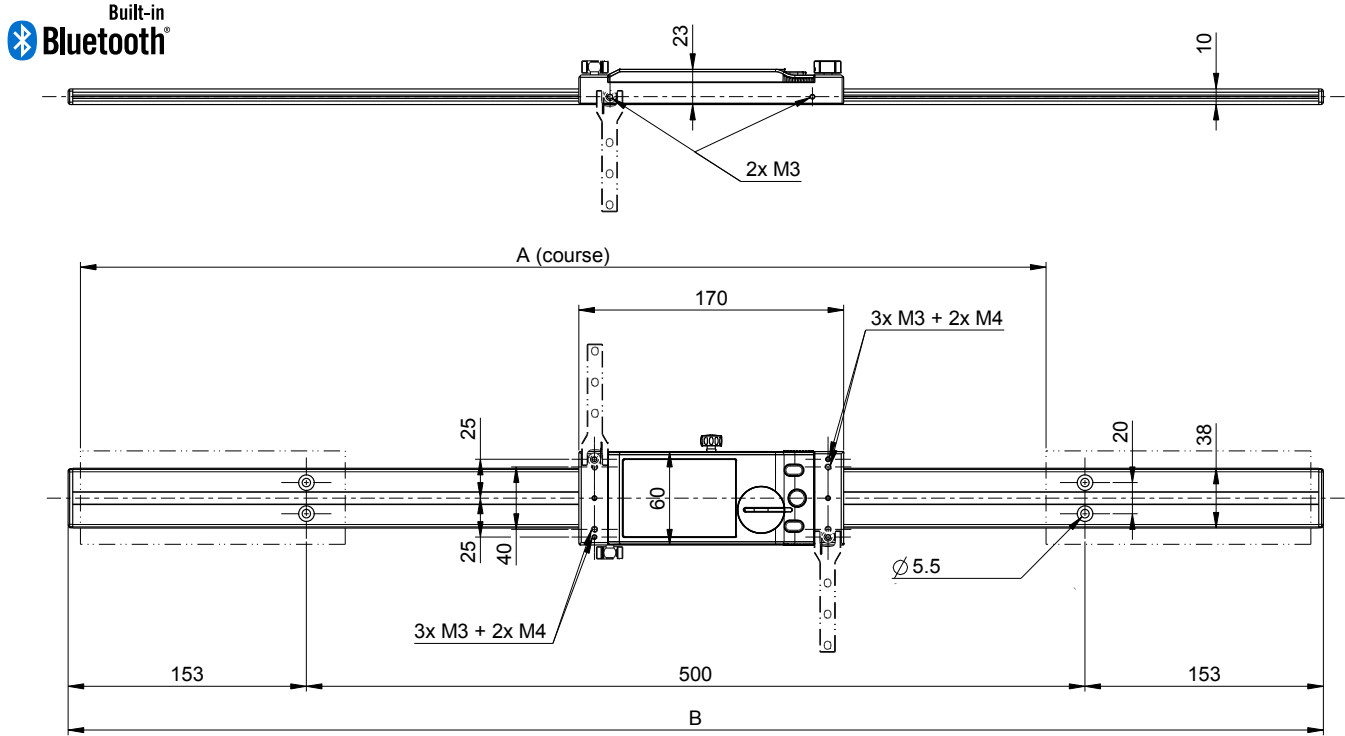
TECHNICAL SPECIFICATIONS

		814.1510	814.1515	814.1520	814.1525	814.1530
Measuring range	mm	1000	1500	2000	2500	3000
Max.Error	µm	60	90	120	150	200
Repeatability	µm			20		
Resolution	mm			0.01		
A	mm	0 - 1120	0 - 1620	0 - 2120	0 - 2620	0 - 3120
B	mm	1306	1806	2306	2806	3306
Number range of raws		3	4	5	6	7
Output data		Bluetooth® wireless technology* / RS232 / USB				
IP67 Protection				●		
Preset max.		+9999.99 mm / +399.9995 IN				
Weight	kg	1.2	1.5	1.8	2.2	2.5
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 caliper

BASIC INSTRUMENT

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
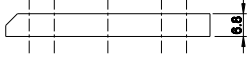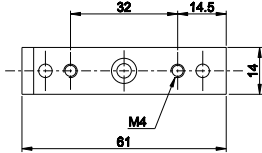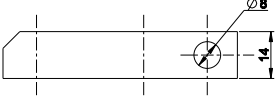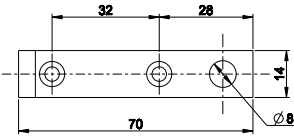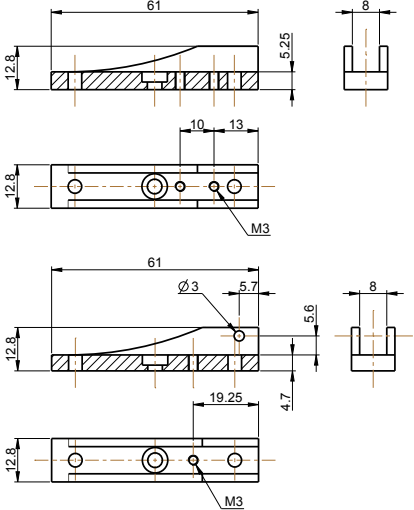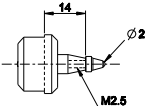
ULD4

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

Ultra light caliper

ACCESSORIES

			UL4	UL H4	ULV4	ULD4
811.2301	Universal base (2 pieces)		●	●		
811.2302	Ø8 Anvil holder (2 pieces, to combine with 811.2301)		●	●		
811.2303	Accessories holder (2 different pieces)		●	●		
811.2305	Support with int. thread M 2.5 (2 pieces)		●			

See also cables chapter

Ultra light caliper

ACCESSORIES

C
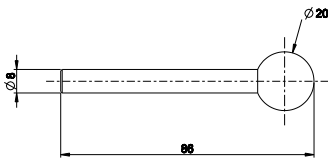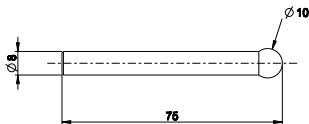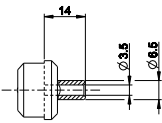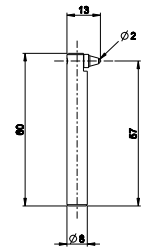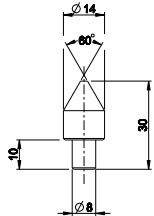
		UL4	UL H4	ULV4	UL D4
811.2307	Inserts in hardened steel, cone 60° for bore clearance measurement > 10 mm, (2 pieces)	●	●		
811.2309	Holder for dial gauge contact points for internal groove measurement, (2 pieces)	●	●		
811.2304	Thread anvils holders (2 pieces)	●			
811.2310	Anvil Ø10mm (2 pieces)	●	●		
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

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

APPLICATIONS

Internal measure with UL4
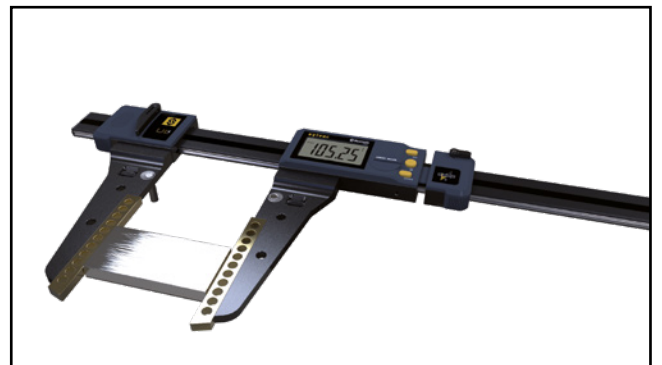
External measure with UL4

C

MICROMETERS

Our range of professional micrometers with protection against water and IP67 cutting oils is fitted with our patented Absolute System and consists of several models, equipped with a fast displacement of the spindle (10mm/rotation).

A cylindrical model, with discs, ball, knives or cable crimping, you will definitely find your solution in this chapter.

Sylvac inductive measuring system (patented)

Data output

Non-rotative spindle, quick mike

Power supply: Lithium battery 3V, Type CR 2032

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

D

Measuring surface
in hard metal

Non-rotating spindle Ø 6.5 mm

Fast handle movement
with ratchet

Output cable Proximity to USB
(926.6721) or RS232 (926.6723) or
Bluetooth® Wireless technology
(depends on model)

Simple and friendly
functions

Built-in
Bluetooth®

PROXIMITY

SIS | Smart Inductive System

WATER RESISTANT

IP67

SWISS MADE

　　* **SIS** | Smart Inductive System　description on page 5

Professional micrometer

S_Mike PRO
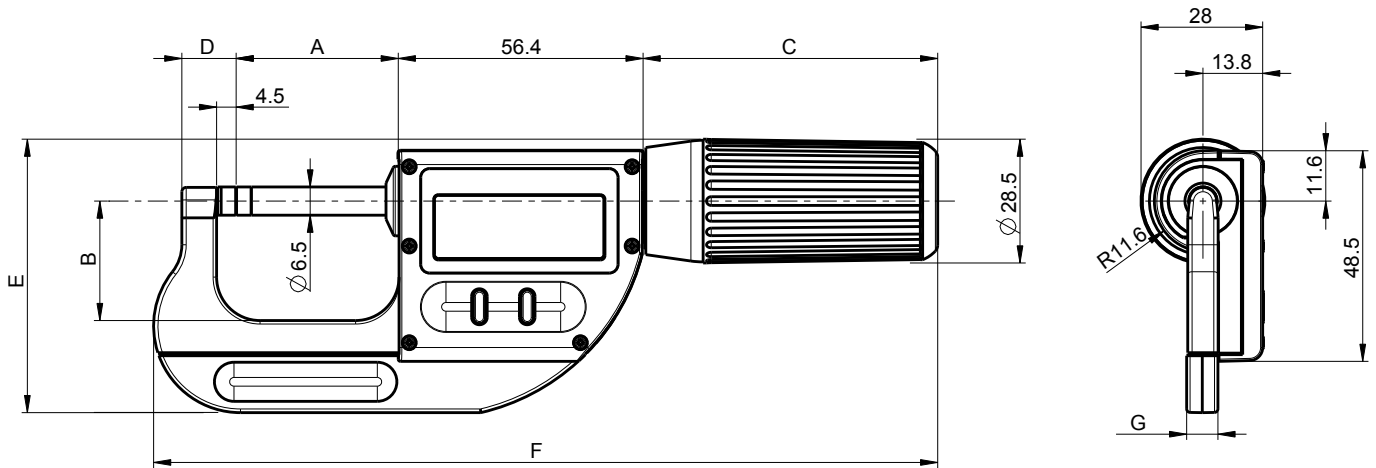
TECHNICAL SPECIFICATIONS

		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 [1]	µm	3	4	5	7	8
Repeatability [2]	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
Output data				USB / RS 232 [3]		
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				●		

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

Professional micrometer　　S_Mike PRO

DIMENSIONAL DRAWING　　　　CYLINDRICAL Ø6.5 SMART

Built-in
Bluetooth®
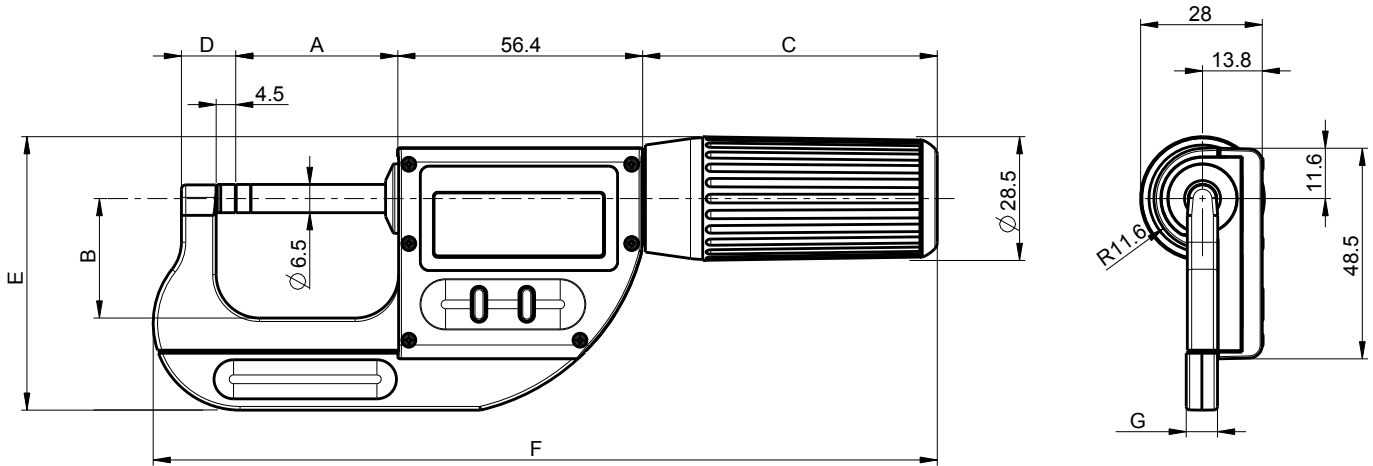
TECHNICAL SPECIFICATIONS

		803.0306	903.0606	903.1006
Measuring range	mm	0-30	30-66	66-102
Max. Error G [1]	µm	3	4	5
Repeatability [2]	µm	1	1	1
Anvils types		Ø6.5[3]		
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
Output data		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		●		

[1] according to DIN 863
[2] ± 1 digit
[3] 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

D

Professional micrometer

S_Mike PRO

DIMENSIONAL DRAWING

CYLINDRICAL Ø2
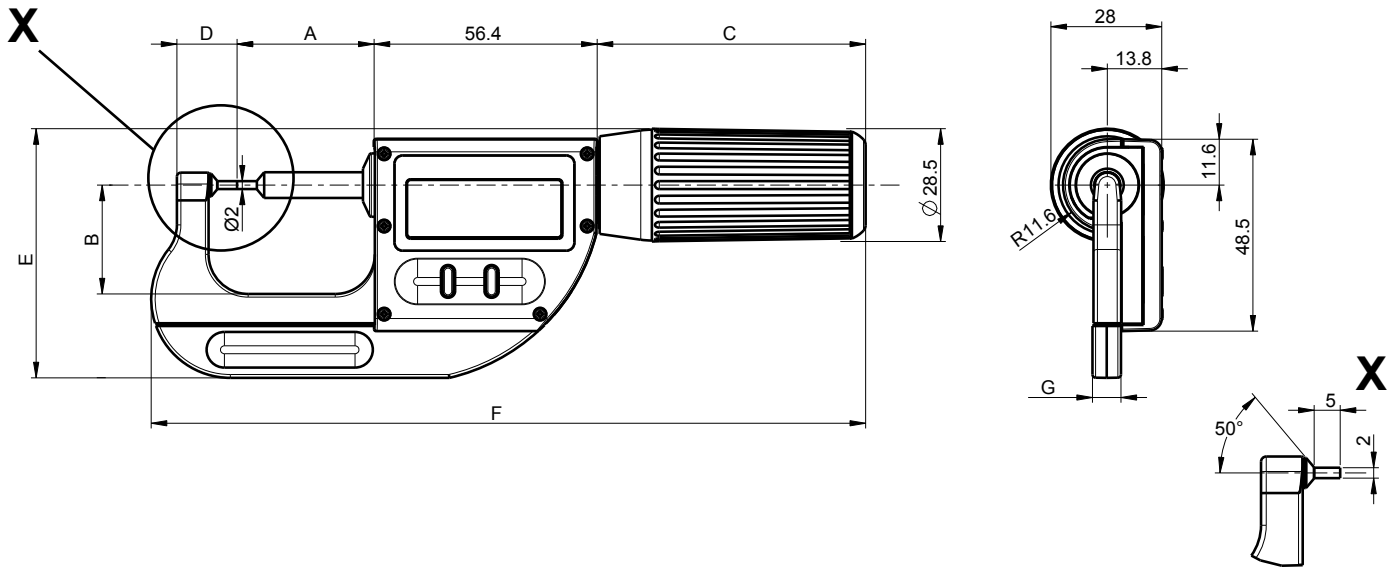
TECHNICAL SPECIFICATIONS

		803.0301	903.0601	903.1001	803.0307
Measuring range	mm	0-25	25-60	60-95	0-25
Max. Error G [1]	µm	3	4	5	3
Repeatability [2]	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
Output data			USB / RS 232 [3]		Bluetooth *
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			●		

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

D

Professional micrometer

S_Mike PRO

DIMENSIONAL DRAWING

KNIFE-SHAPED
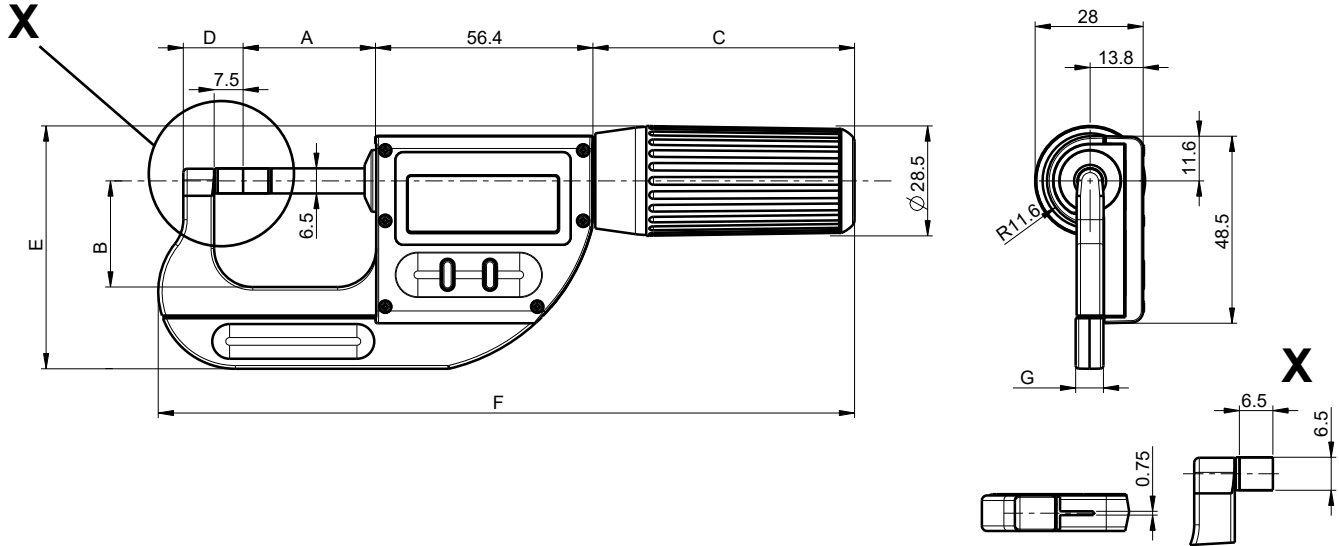
TECHNICAL SPECIFICATIONS

		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 [1]	µm	3	4	5	6	7	3
Repeatability [2]	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
Output data		USB / RS 232 [3]					Bluetooth*
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		●					

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

* 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

DISC-SHAPED
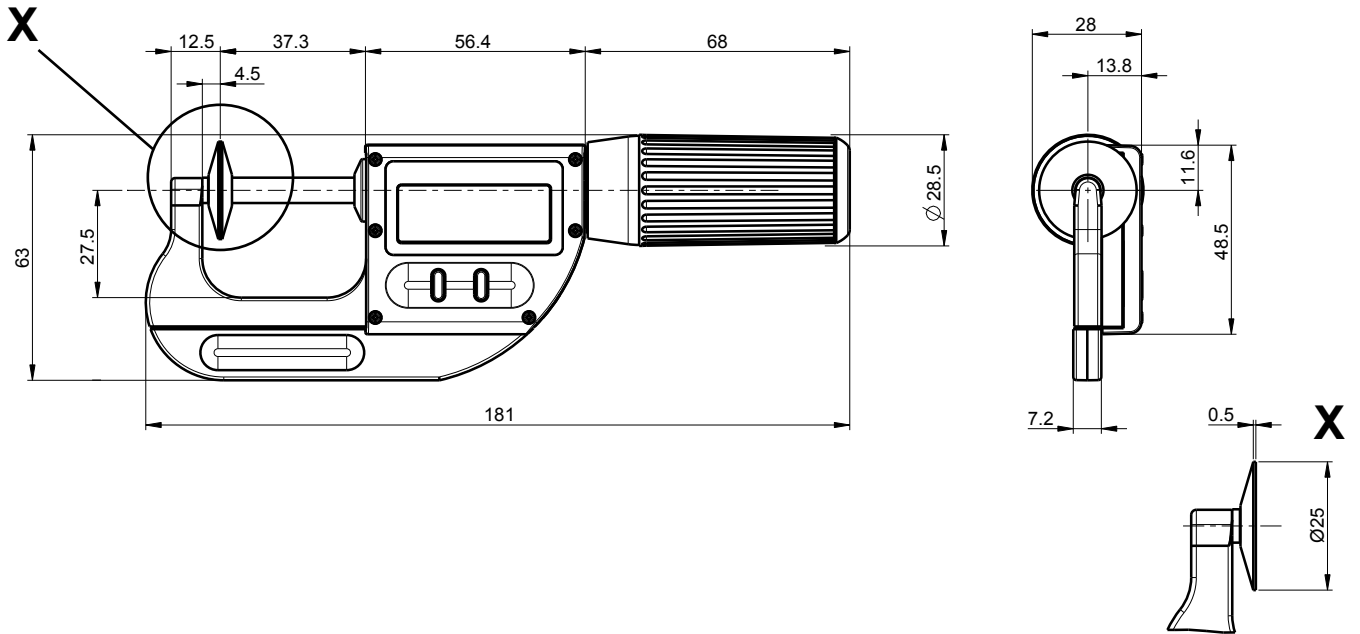
TECHNICAL SPECIFICATIONS

		803.0303
Measuring range	mm	0-30
Max. Error G [1]	µm	4 (full-touch-contact) / 10 (partial contact)
Repeatability [2]	µm	1
Flatness	µm	2
Parallelism	µm	5 (full-touch-contact) / 10 (partial contact)
Gear unit		Measurable module ≥ 0.5
Anvils types		Ø25
Output data		USB / RS 232 [3]
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		●

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

Professional micrometer   S_Mike PRO
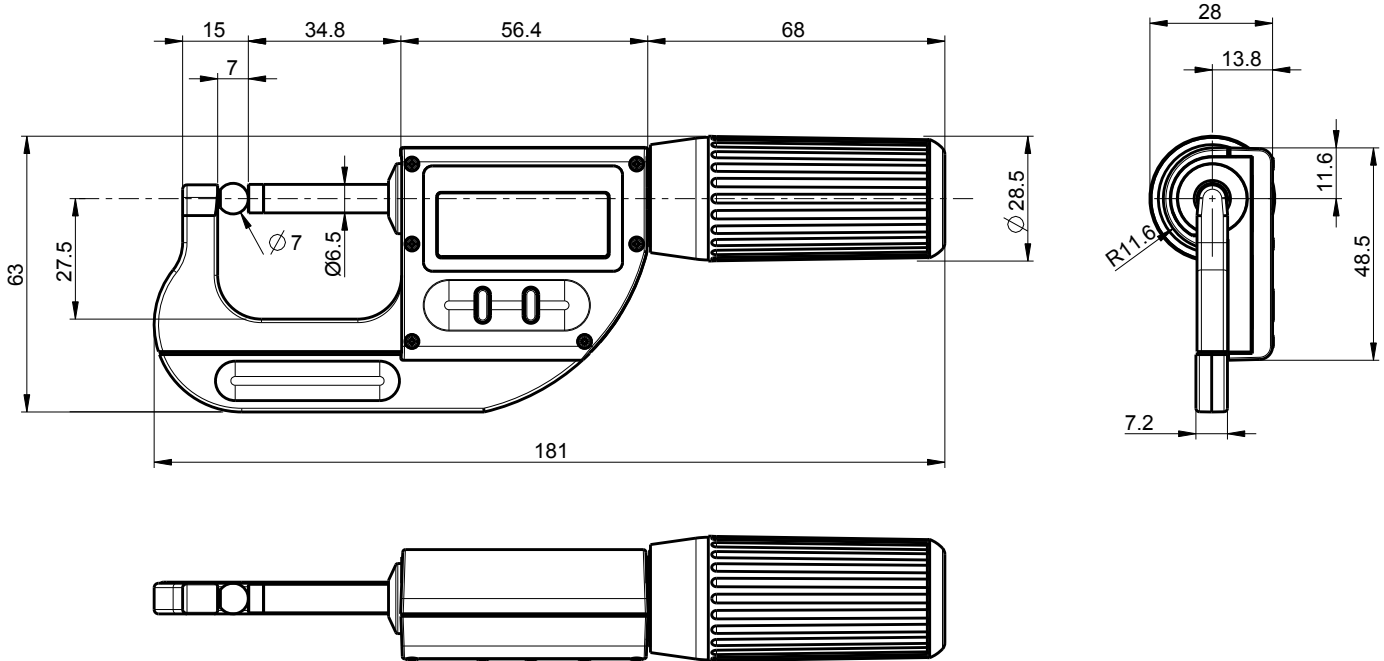
TECHNICAL SPECIFICATIONS

		903.0304
Measuring range	mm	0-30
Max. Error G [1]	µm	3
Repeatability [2]	µm	1
Parallelism	µm	1
Anvils types		Ø7 flat and Ø7 spherical
Output data		USB / RS 232 / Wireless [3]
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		●

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

D

Professional micrometer

S_Mike PRO

D

TECHNICAL SPECIFICATIONS

		903.0305
Measuring range	mm	0-30
Max. Error G [1]	µm	4
Repeatability [2]	µm	1
Anvils types		Ø7 2 spherical
Output data		USB / RS 232 / Wireless [3]
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		●

[1] according to DIN 863
[2] ± 1 digit
[3] see cables chapter

Built-in **Bluetooth**® **Cable crimping**
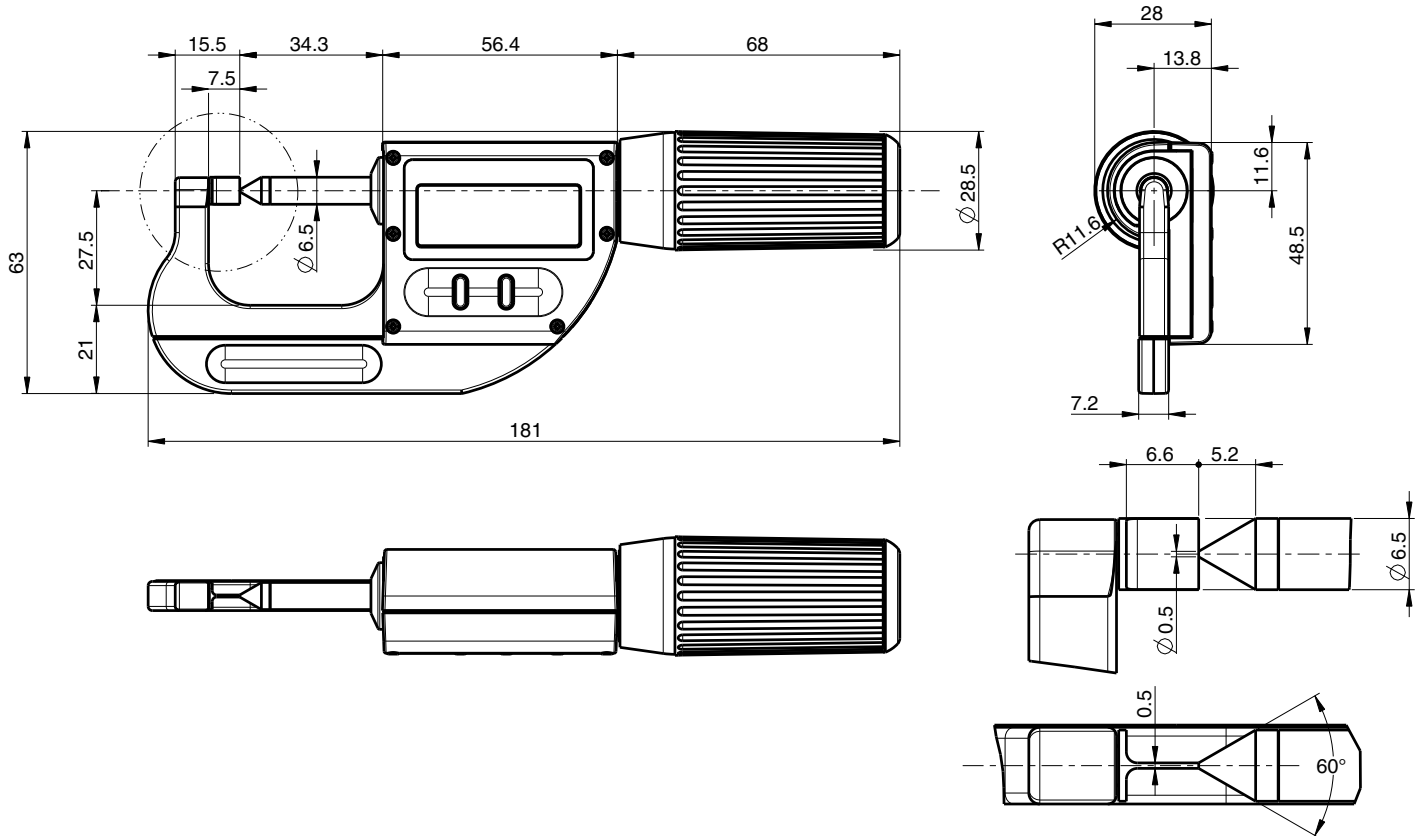
TECHNICAL SPECIFICATIONS

		803.0309
Measuring range	mm	0-25
Max. Error G [1]	µm	3
Repeatability [2]	µm	1
Anvils types		Knife 0.5mm - cone 60°/Ø0.5mm
Output data		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		●

[1] according to DIN 863
[2] ± 1 digit

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

D

Professional micrometer

S_Mike PRO

DIMENSIONAL DRAWING

POINT / SPHERICAL

Built-in
Bluetooth® **Fluted Shaft**
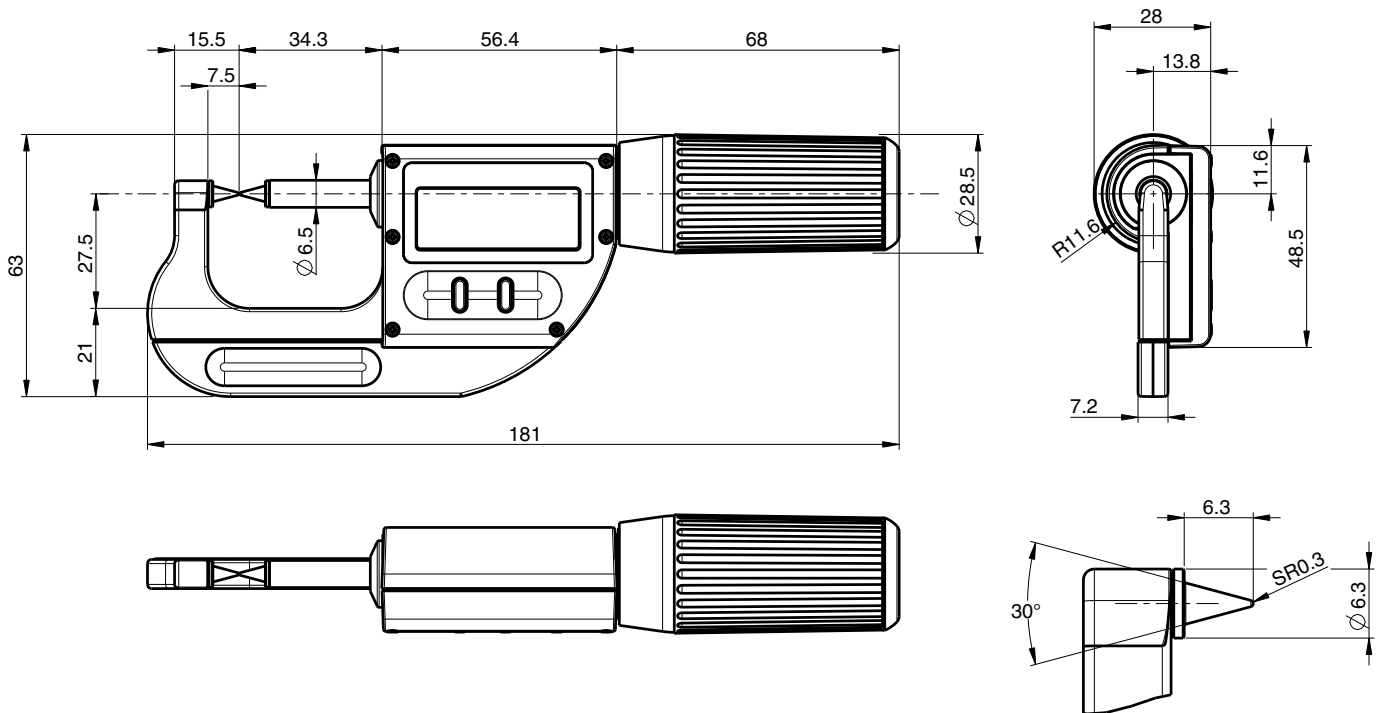
TECHNICAL SPECIFICATIONS

		803.0310
Measuring range	mm	0-25
Max. Error G [1]	μm	3
Repeatability [2]	μm	1
Anvils types		Point 30° - spherical radius 0.3mm
Output data		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		●

[1] according to DIN 863
[2] ± 1 digit

* 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

BASIC INSTRUMENT

903.1301

910.1301 including:
910.1502, 903.0300 and 903.0330

Built-in
Bluetooth®

910.1304 including:
810.1506, 803.0306 and 805.6301

	903.1300	903.1301	910.1301	910.1304	910.1306
Measuring range mm	0-102	0-102	150 / 0-30	150 / 0-30 / 12.5	0-102
Plastic case	●	-	-	●	●
Aluminium case	-	●	●	-	-
Output data	USB / RS 232			Bluetooth®	

BASIC INSTRUMENT

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

MICROMETERS SETS

- 803.0300 / 903.0600 / 903.1000
- Setting master 50 mm
- Setting master 75 mm
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate

ACCESSORIES
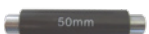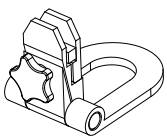
903.0330	Stand
903.0620	Setting master 50 mm
903.1020	Setting master 75 mm
903.1620	Setting master125 mm

Professional micrometer   S_Mike PRO

MODELS

Cylindrical Ø6.5mm Proximity /
Cylindrical Ø6.5mm Smart

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 Smart

Fluted Shaft - Point 30° - ball
Ø0.3mm Smart

APPLICATIONS

Part measurement with a S_Mike PRO Disk

Length measurement of a lathed part
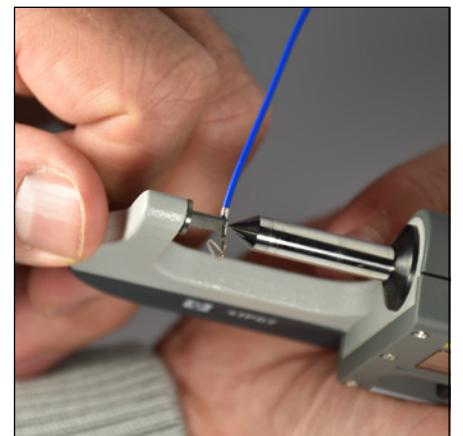
Cable cramping measurement

SMALL & MID-SIZE INSTRUMENTS

Sylvac's innovation and ingenuity are perfectly represented by the small and mid-size instruments described in this chapter.

You will find there, as a world première, the digital thickness gauge, the protractor, micrometer screws and much more.

Sylvac inductive measuring system (patented)

Data output

Power supply: Lithium battery 3V, Type CR 2032

![Sylvac logo]

Digital thickness gauge   Feeler Gage Smart

DESCRIPTION

- Digital thickness gauge with **integrated Bluetooth® Wireless technology**
- **For gap measurement and setting with data transmission**
- Thickness: 0.05...1.00mm, 0.04...1.00mm ou 0.0015...0.0300inch
- First Sylvac instrument with HID technology
- Versions with 19 or 20 gauges (according to model)
- Alignment of feelers in one crimp between the thumb and index finger
- Calculation and display of the stacking value of several gauges
- Instrument with a modern design that is easy to use

Built-in
Bluetooth®

E

Bluetooth® Wireless technology

Inch version

Digital display screen

Feelers

Alignment to calculate
the measurment

mm version

Transmissions of the value or one
or several gauges

Built-in
Bluetooth®

SWISS MADE

SIS Smart Inductive System

IP65
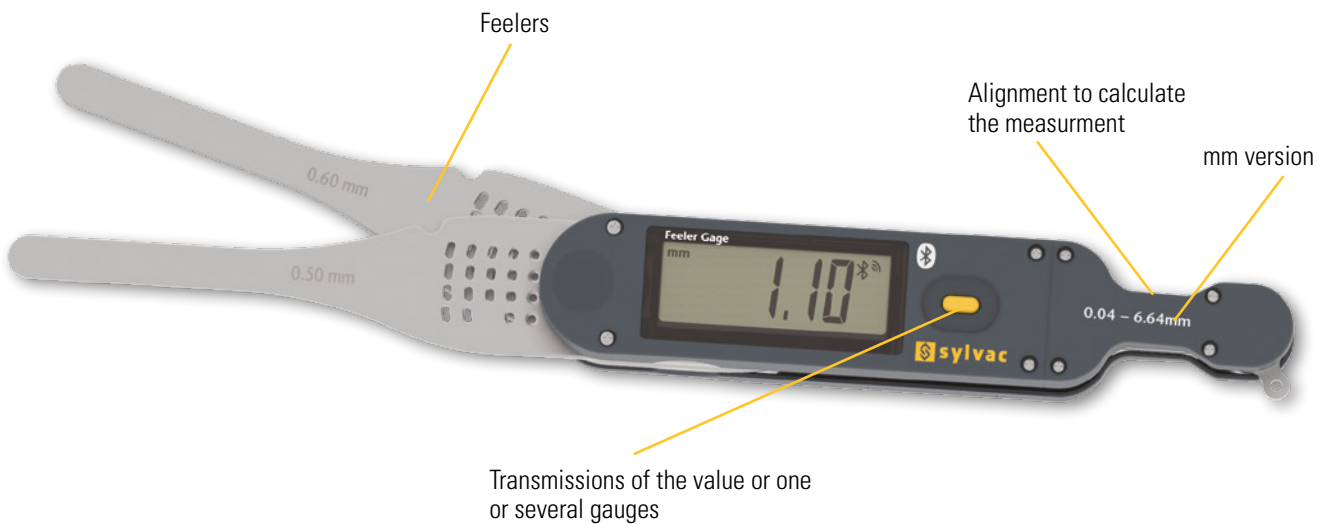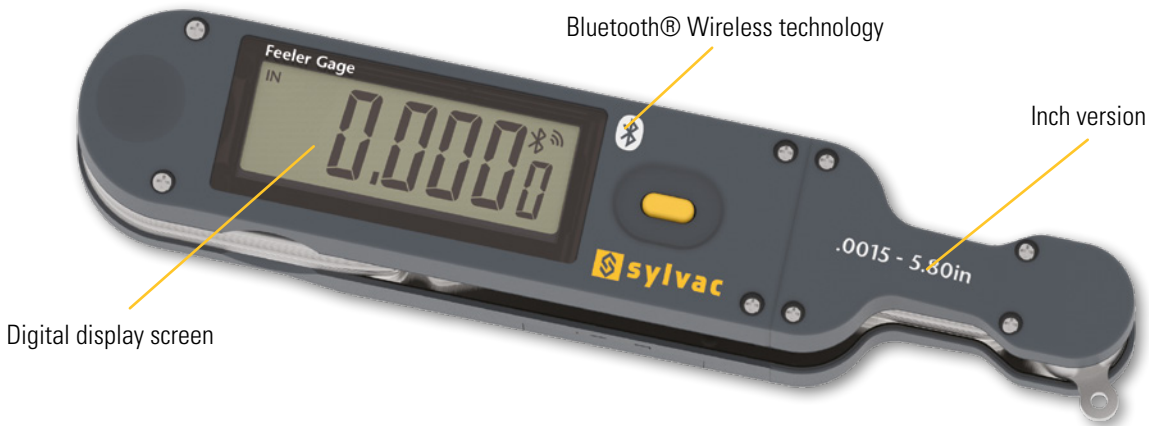
First Sylvac instrument with HID technology!

Transmission of data into any
software or application, without
dongle. Can be used with
Microsoft (W7, 8, 10), Android
or Apple.
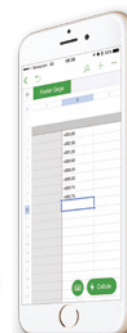
Digital thickness gauge   Feeler Gage Smart

DIMENSIONAL DRAWING
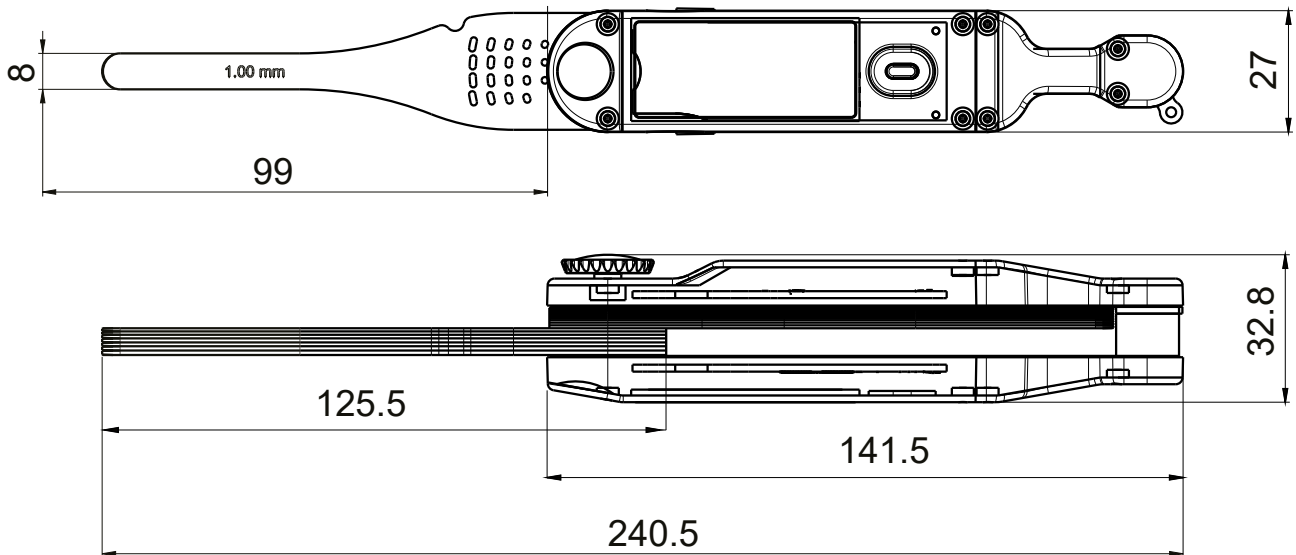
Model 921.0100
The thickness may differ slightly for the other models according to the number of gauges.

TECHNICAL SPECIFICATIONS

		921. 0100	921. 0110	921. 0114
Type of version		mm	mm	inch
Measurement capacity	mm/in	0.05...1.00 mm	0.04...1.00 mm	0.0015...0.0300 in
Feelers thickness	mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	0.0015, 0.0020, 0.0030, 0.0040, 0.0050, 0.0060, 0.0070, 0.0080, 0.0090, 0.0100, 0.0120, 0.0140, 0.0150, 0.0160, 0.0180, 0.0200, 0.0220, 0.0250, 0.0300
Usable length	mm	99		
Thickness Tolerance Class according to DIN 2275		TC1		
Protection rating according to IEC 529		IP65		
Output data		Bluetooth® wireless technology*		
Number of feelers		20	19	19
Weigth	g	280	224	212
Functions		Unit (mm/inch) & Bluetooth® HID profile		

Digital thickness gauge   Feeler Gage Smart

REPLACEMENT FEELERS
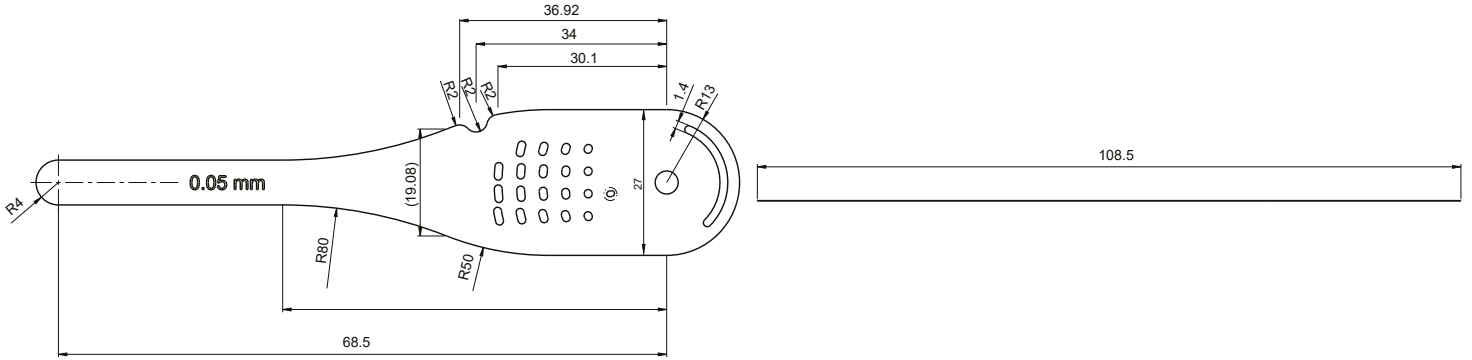
0.04...0.20mm	921.1000	921.1001	921.1002	921.1003	921.1004	921.1005	921.1006	921.1007	921.1008
Thickness mm	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.15	0.20
Tolerance mm	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.005	±0.006

0.25...0.65mm	921.1009	921.1010	921.1011	921.1012	921.1013	921.1014	921.1015	921.1016	921.1017
Thickness mm	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65
Tolerance mm	±0.006	±0.007	±0.007	±0.007	±0.007	±0.007	±0.007	±0.007	±0.007

0.70...1.00mm	921.1018	921.1019	921.1020	921.1021	921.1022	921.1023	921.1024
Thickness mm	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Tolerance mm	±0.007	±0.007	±0.009	±0.009	±0.009	±0.009	±0.009

0.0015...0.0070inch	921.1025	921.1026	921.1027	921.1028	921.1029	921.1030	921.1031
Thickness inch	0.0015	0.0020	0.0030	0.0040	0.0050	0.0060	0.0070
Tolerance mm	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.005

0.0080...0.0160inch	921.1032	921.1033	921.1034	921.1035	921.1036	921.1037	921.1038
Thickness inch	0.0080	0.0090	0.0100	0.0120	0.0140	0.0150	0.0160
Tolerance mm	±0.005	±0.006	±0.006	±0.007	±0.007	±0.007	±0.007

| 0.0180...0.0300inch	921.1039	921.1040	921.1041	921.1042	921.1043
Thickness inch	0.0180	0.0200	0.0220	0.0250	0.0300
Tolerance mm	±0.007	±0.007	±0.007	±0.007	±0.007

Digital thickness gauge   Feeler Gage Smart

BASIC INSTRUMENT

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

APPLICATIONS

Gap measurement
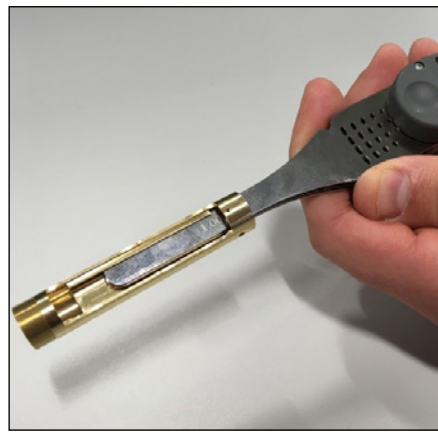
Gap measurement
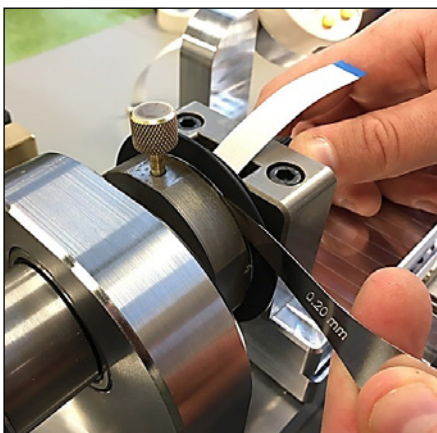
Gap setting

Valve adjustment

Data transmission via HID

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

Non-rotating spindle Ø 6.5 mm

Tungsten carbide anvil

Clamping Ø 12h6

Digital display LCD, Height of digits 6 mm

External power supply and output cable Power to USB (926.6821) or RS232 (905.4516)

Rotating display, Ø 44 mm over 270°

Handwheel Ø 50 mm (standard)
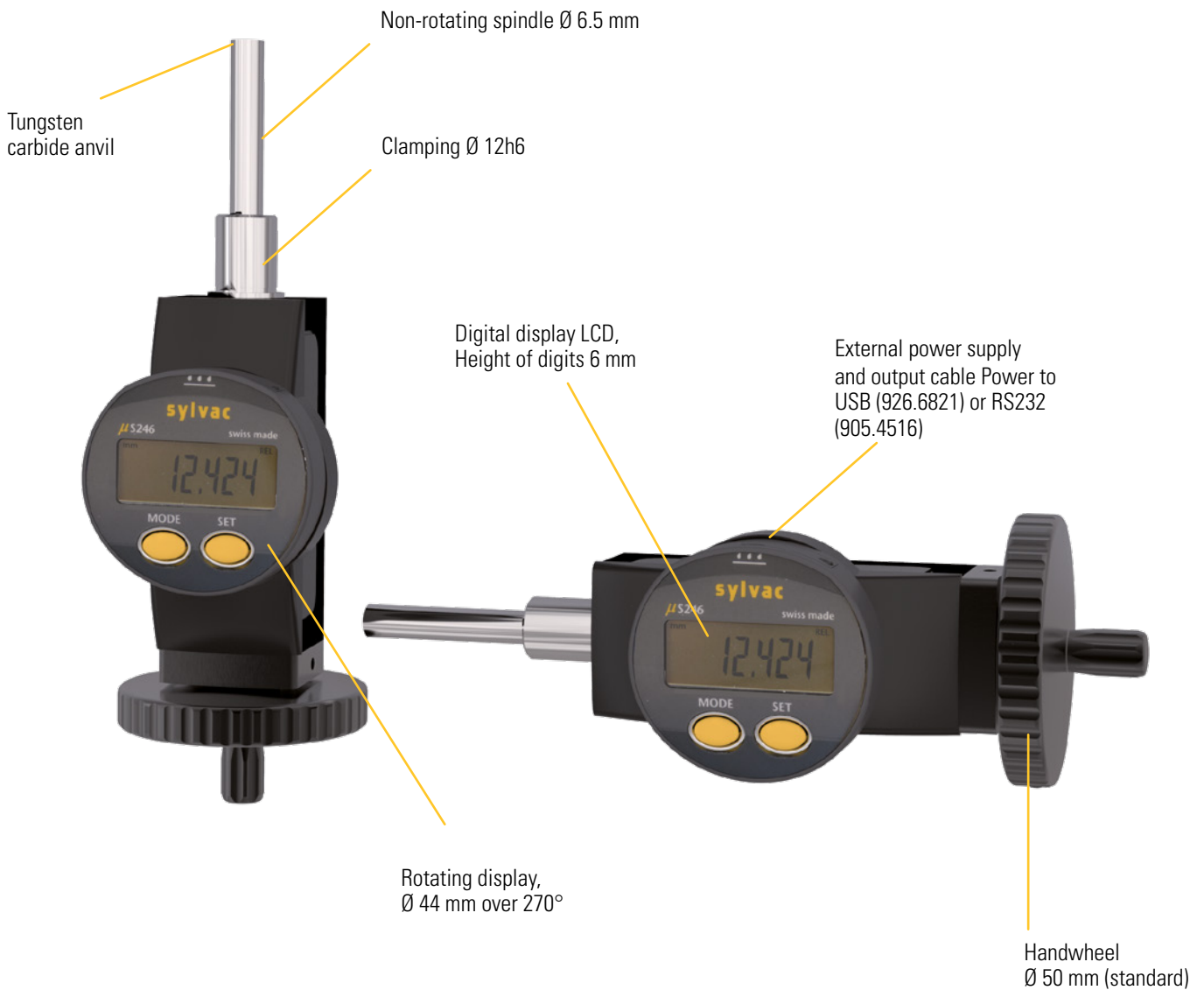
POWER

SWISS MADE

WATER RESISTANT

Digital micrometer screws

DIMENSIONAL DRAWING
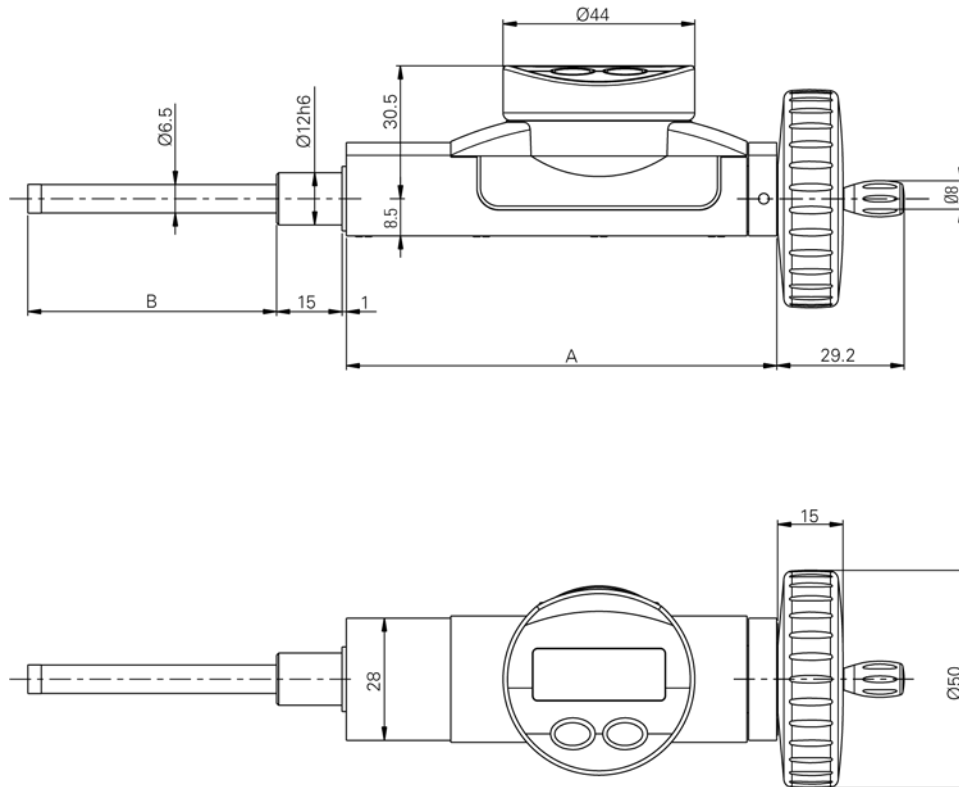
TECHNICAL SPECIFICATIONS

		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
Output data		USB / RS232 [1]	
Selection of measuring direction		●	
PRESET function		●	
Absolute or relative measurement		●	

[1] 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
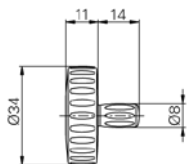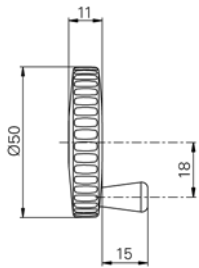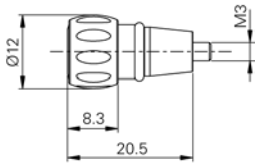
852.2310	Fine adjustment device	
852.2311	Handwheel Ø 50 mm with crank handle for fast motion	
852.2312	Handwheel Ø 34 mm	

APPLICATIONS

Fine adjustment device type 852.2310

Use on measuring microscope
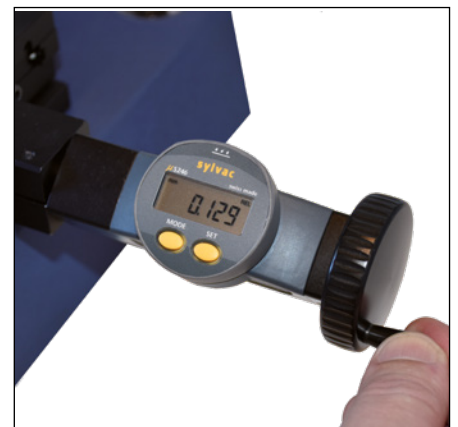
Handwheel use

Protractor

DESCRIPTION

- **Integrated Bluetooth® Wireless technology, Power & Proximity**

- Measuring range 1x360°, 2x180°, 4x90°

- Mechanical parts in stainless steel

Built-in
Bluetooth®

Output cable Proximity
to USB (926.6721) or
RS232 (926.6723)

Locking device

Digital Display LCD, rotating
display Height of digits 8.5 mm

Fine adjustment knob

External power supply and
output cable Power to USB
(926.6821/926.6838) or
RS232 (905.4516/905.4538)

Stainless steel, hardened and ground

Built-in
Bluetooth®

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

E

Protractor

S239 Smart

DIMENSIONAL DRAWING
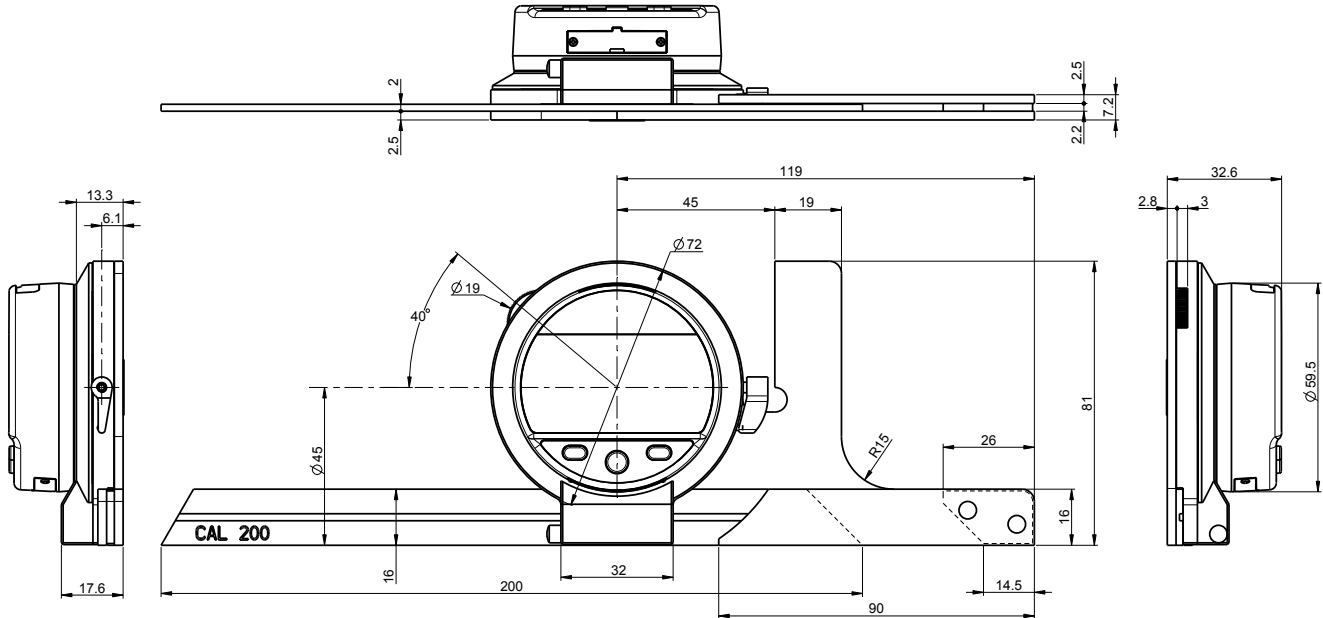
TECHNICAL SPECIFICATIONS

	820.1706
Measuring range	1x360°, 2x180°, 4x90°
Accuracy	4 minutes of arc / 0.06° / 0.0012 rad
Resolution	0.01° / 1 minute of arc (0°01') / 0.0001rad
Repeatability	0.01°
Max. rotation speed	1080° / sec
Protection rating according to IEC 529	IP54
Output data	Bluetooth® wireless technology* / USB / RS232
Functions	Unit (*dEG, rAd or d-N*), reference, Preset, Measurement direction, mode MIN/MAX/ DELTA, tolerance display, switch off, keypad lock

[1] see cables chapter

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

BASIC INSTRUMENT

- Instrument according to technical specifications
- Wooden box [2]
- Scale 200 mm (820.2420)
- Lithium battery CR2032 included
- Instruction manual

[2] Fumigated, compatible ISPM 15 and NIMP 15

Protractor
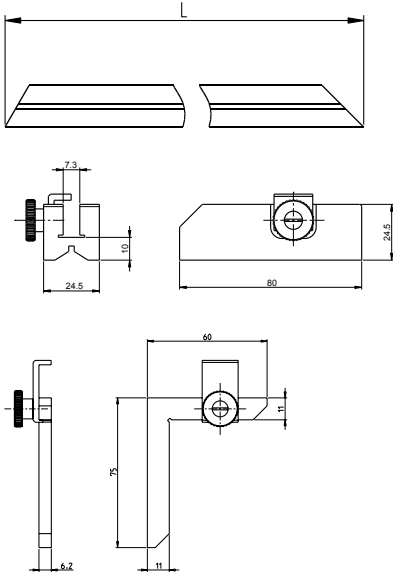
ACCESSORIES

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
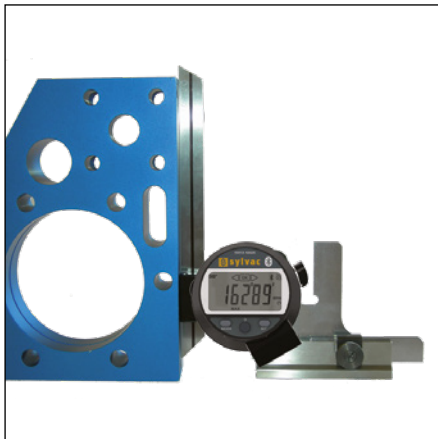
Measurement with accessory type 820.2460
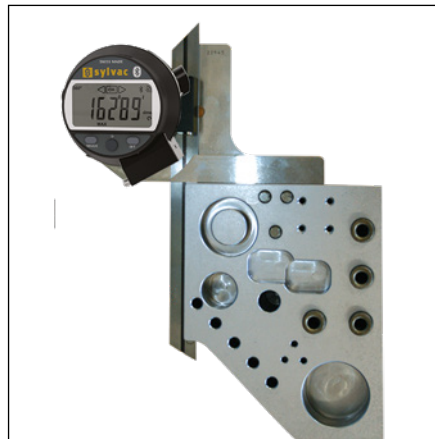
Standard measurement

Measurement with accessory type 820.2461

E

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)

Digital rotating display LCD

Automatic reference switching
(REFI/ REFII)
by the measurement inversion

Clamping knob

External power supply
and output cable Power to
USB (926.6821) or RS232
(905.4516)

Base 100mm with clamping system for additional bases.

Measuring anvil with pin ø 4 mm
(measuring ball probe M2.5 in standard)
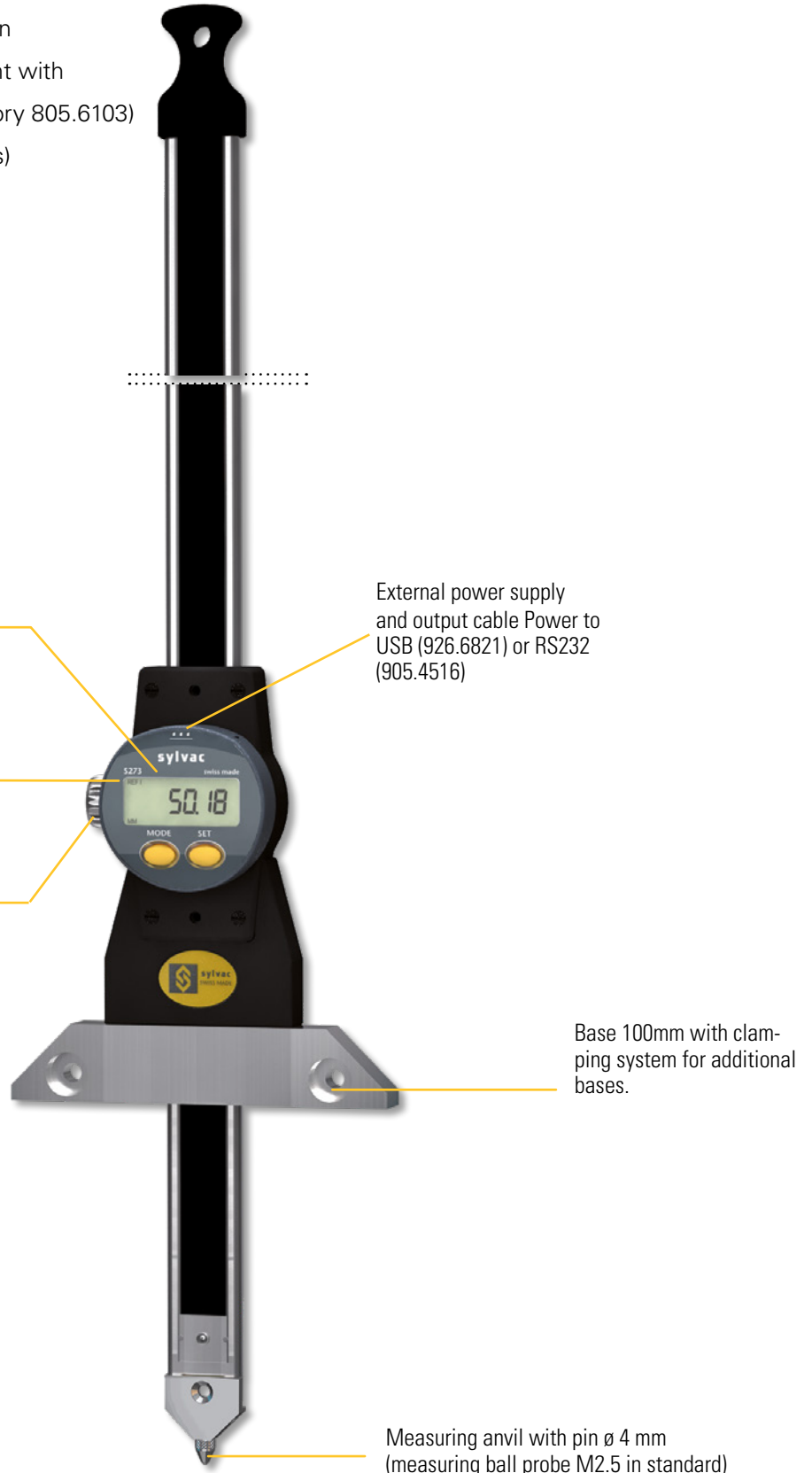
POWER

SWISS MADE

SIS | Smart Inductive System

WATER RESISTANT

IP65

Depth gauge

S_Depth PRO

DIMENSIONAL DRAWING
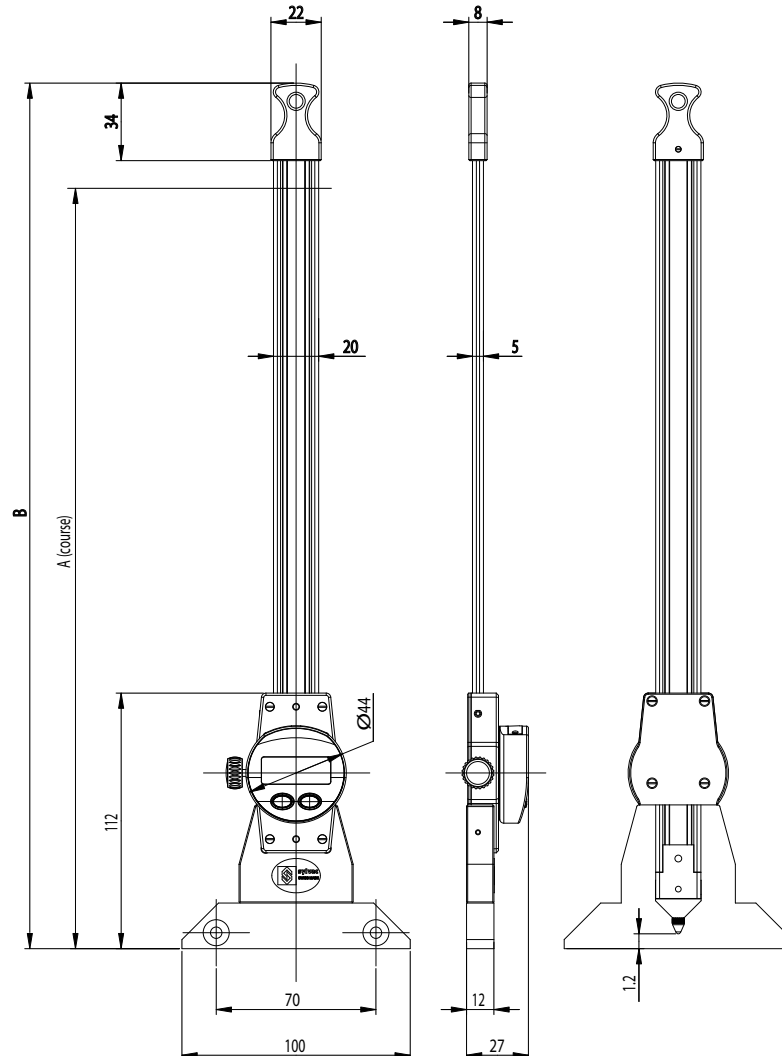
TECHNICAL SPECIFICATIONS

		805.6005	805.6006
Measuring range	mm	300	600
Max. Error	µm	30	40
Repeatability [1]	µm	10	10
A	mm	422	625
B	mm	483	773
Output data		USB / RS232 [2]	
2 References		●	
PRESET function		●	

[1] ± 1 digit
[2] see cables chapter

Depth gauge

S_Depth PRO

BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Ball probe M2.5 Ø2mm (805.6101)

COMPATIBLE ACCESSORIES
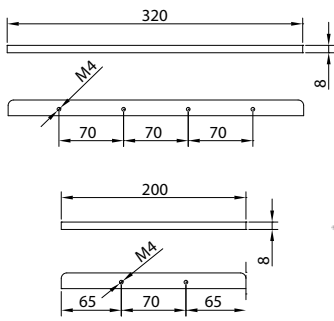
			Length	Thickness
812.2241	Additionnal base		200 mm	8 mm
812.2240	Additionnal base		320 mm	8 mm
805.6101	Ball probe M2.5 (standard)			
805.6102	Anvils UP&DOWN			
805.6103	Anvil with pin Ø4 mm			

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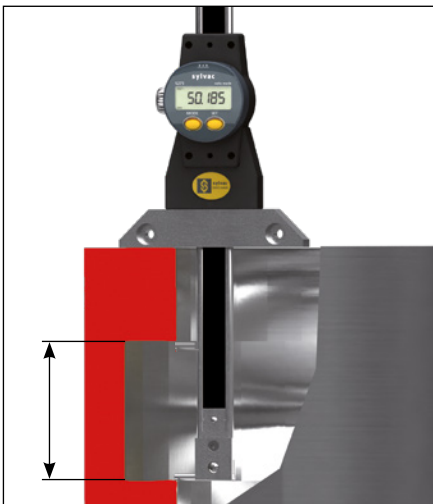
Measure of an internal groove (height) thanks to the constant.

Depth measurement

Depth measurement in a drilling with an additionnal base

E

144

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

Clamping device supplied in standard

Digital display LCD, Height of digits 6 mm

Beam in stainless steel, hardened and grounded

E
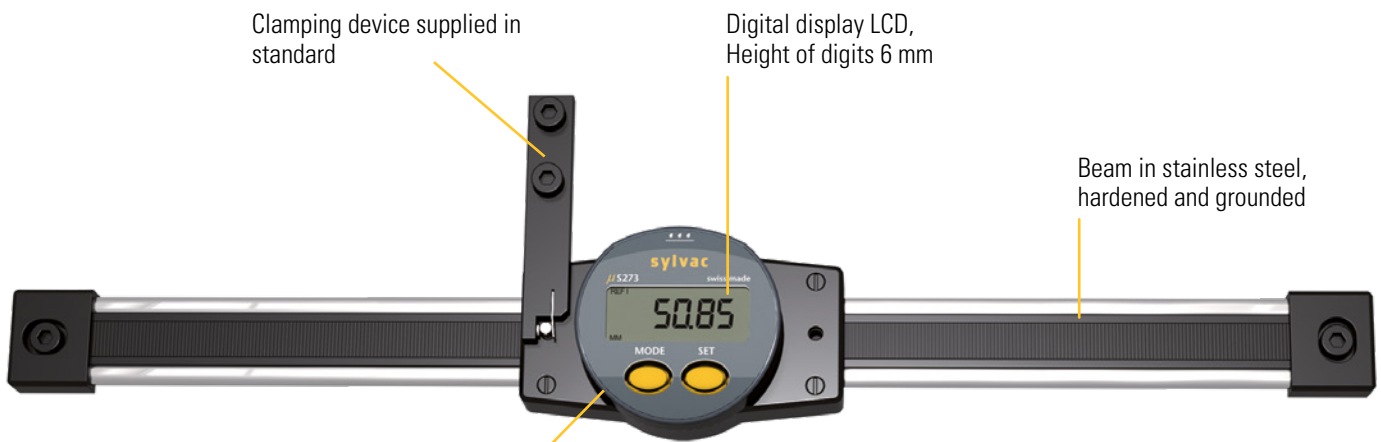
Aluminium carriage
Plastic rotating
display on 270°

External power supply
and output cable Power to
USB (926.6821) or RS232
(905.4516)

POWER

SWISS MADE

SIS | Smart Inductive System

WATER RESISTANT

IP65

Digital scales

S_Scale WORK

DIMENSIONAL DRAWINGS
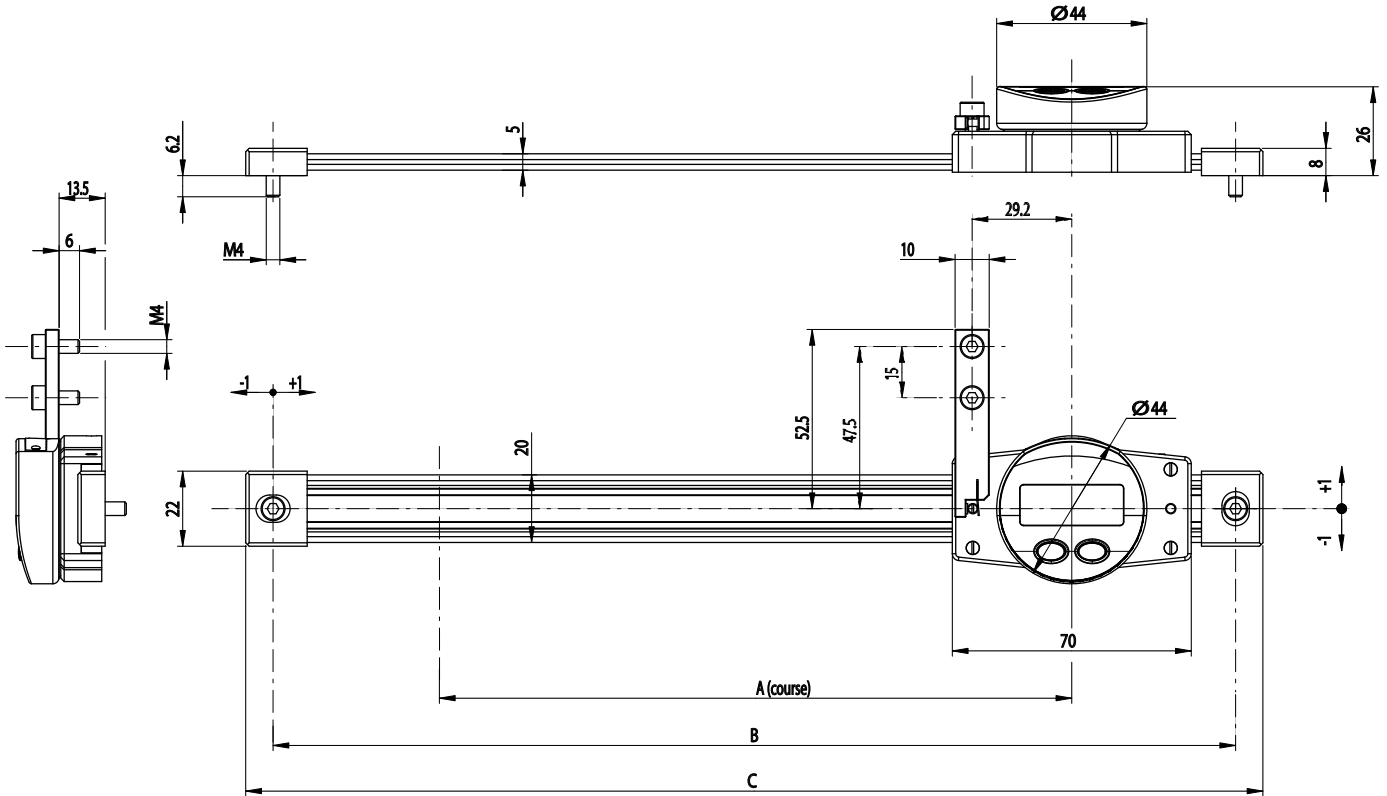
TECHNICAL SPECIFICATIONS

		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 [1]	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
Output data		USB / RS232 [2]			
Selection of measuring direction		●			
PRESET function		●			
2 references		●			

[1] ± 1 digit
[2] see cables chapter

INTERNAL
MEASURING
INSTRUMENTS

SYLVAC offers a wide range of internal measuring instruments consisting of mechanical measuring heads interchangeable at 2 or 3 points which guarantee rapid and precise measurements of 2 to 500mm depending on the type of instrument.

We also regularly propose special or customised solutions, such as threading, grooves, splines or deep bores.

Sylvac inductive measuring system (patented)

Bluetooth® Wireless technology for the entire range

Power supply: Lithium battery 3V, Type CR 2032

Operational temperature: +5 to +40°C

Repeatability: ≤ 2 µm
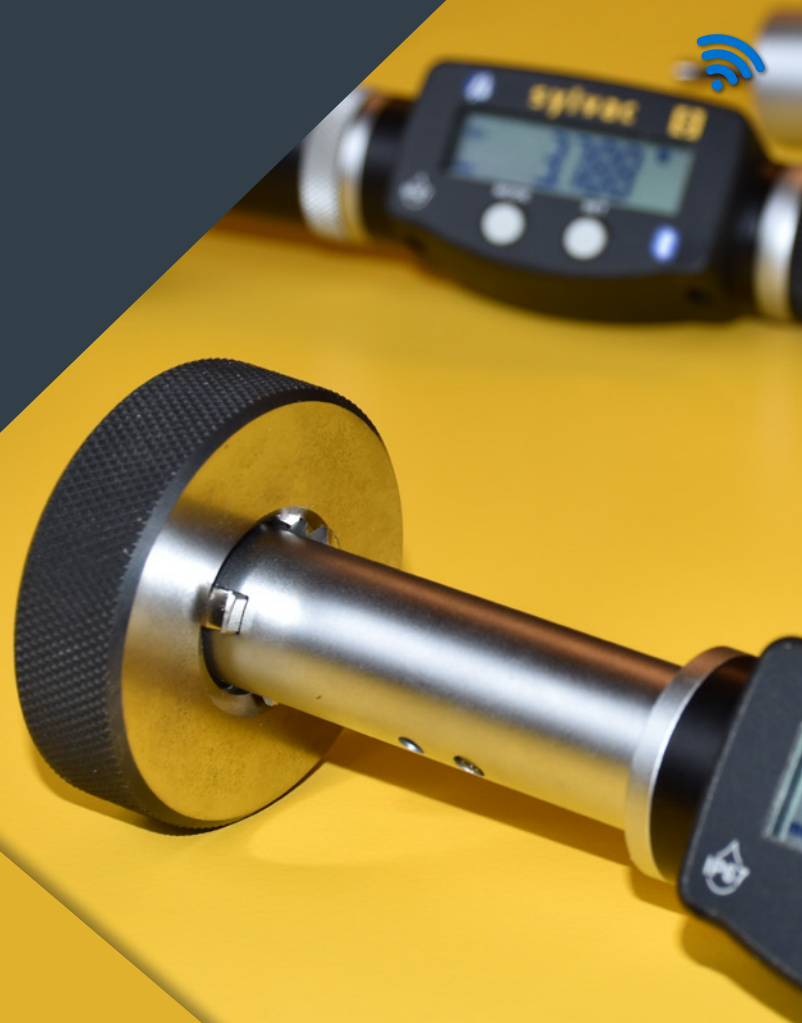
Bore gauges

DESCRIPTION

SMART

- 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
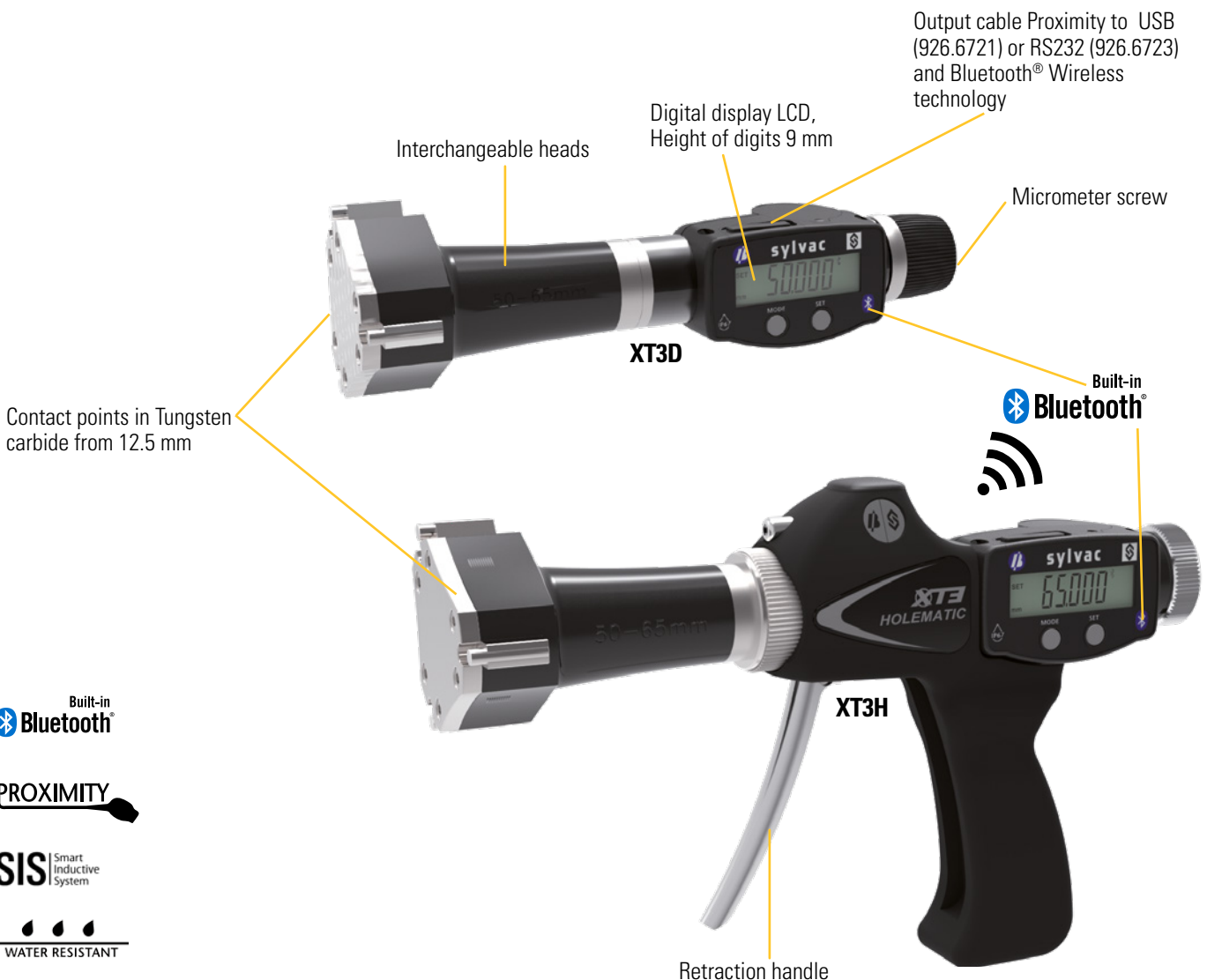
F

Interchangeable heads

Digital display LCD, Height of digits 9 mm

Output cable Proximity to USB (926.6721) or RS232 (926.6723) and Bluetooth® Wireless technology

Micrometer screw

XT3D

Built-in

Bluetooth®

Contact points in Tungsten carbide from 12.5 mm

XT3H

HOLEMATIC

Built-in

Bluetooth®

PROXIMITY

SIS | Smart Inductive System

WATER RESISTANT

IP67

Retraction handle

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

Bore gauges

TECHNICAL SPECIFICATIONS INDIVIDUAL INSTRUMENTS XT3D

SMART

XT3D		950.6006	950.6007	950.6008	950.6009	950.6010	950.6011	950.6012	950.6013
Meas. range	mm	2-2.5	2.5-3	3-4	4-5	5-6	6-8	8-10	10-12.5
Type		XT3D BT 1M	XT3D BT 2M	XT3D BT 3M	XT3D BT 4M	XT3D BT 5M	XT3D BT 6M	XT3D BT 8M	XT3D BT 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

XT3D		950.6014	950.6015	950.6016	950.6017	950.6018	950.6019	950.6020	950.6021
Meas. range	mm	12.5-16	16-20	20-25	25-35	35-50	50-65	65-80	80-100
Type		XT3D BT 12M	XT3D BT 16M	XT3D BT 20M	XT3D BT 25M	XT3D BT 35M	XT3D BT 50M	XT3D BT 65M	XT3D BT 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

XT3D		950.6022	950.6023	950.6024	950.6025	950.6026	950.6027	950.6028	950.6029
Meas. range	mm	100-125	125-150	150-175	175-200	200-225	225-250	250-275	275-300
Type		XT3D BT 100M	XT3D BT 125M	XT3D BT 150M	XT3D BT 175M	XT3D BT 200M	XT3D BT 225M	XT3D BT 250M	XT3D BT 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

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TECHNICAL SPECIFICATIONS INDIVIDUAL INSTRUMENTS XT3H — SMART

XT3H	954.6006	954.6007	954.6008	954.6009	954.6010	954.6011	954.6012	954.6013
Meas. range mm	2-2.5	2.5-3	3-4	4-5	5-6	6-8	8-10	10-12.5
Type	XT3H BT 1M	XT3H BT 2M	XT3H BT 3M	XT3H BT 4M	XT3H BT 5M	XT3H BT 6M	XT3H BT 8M	XT3H BT 10M
Depth	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

XT3H	954.6014	954.6015	954.6016	954.6017	954.6018	954.6019	954.6020	954.6021
Meas. range mm	12.5-16	16-20	20-25	25-35	35-50	50-65	65-80	80-100
Type	XT3H BT 12M	XT3H BT 16M	XT3H BT 20M	XT3H BT 25M	XT3H BT35M	XT3H BT 50M	XT3H BT 65M	XT3H BT 80M
Depth	62	62	66	66	80	80	80	85
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

F

XT3H	954.6022	954.6023	954.6024	954.6025	954.6026	954.6027	954.6028	954.6029
Meas. range mm	100-125	125-150	150-175	175-200	200-225	225-250	250-275	275-300
Type	XT3H BT100M	XT3H BT 125M	XT3H BT 150M	XT3H BT 175M	XT3H BT 200M	XT3H BT 225M	XT3H BT 250M	XT3H BT 275M
Depth	100	100	100	100	100	103	103	103
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
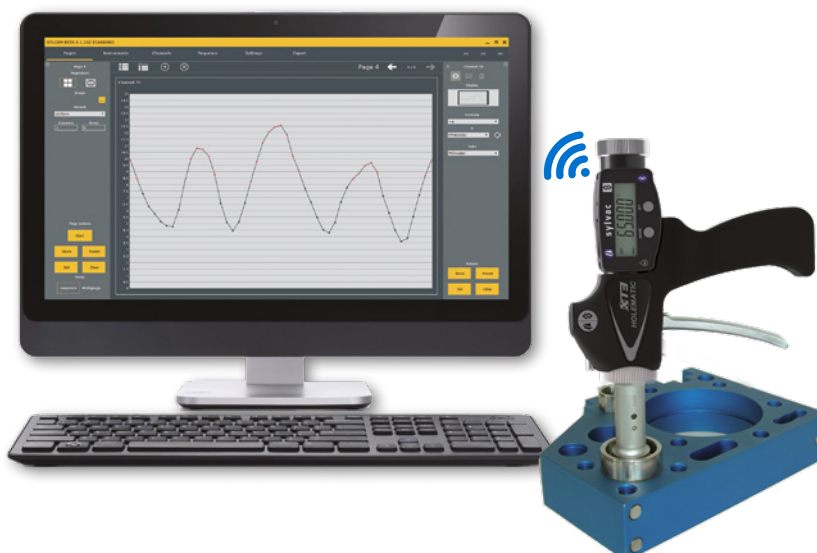
Bore gauges

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) [1]
- Rings according to technical specifications + UKAS certificate
- 1 x digital display XT3DU or XT3PG
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate

[1] Fumigated compatible ISPM 15 and NIMP 15

TECHNICAL SPECIFICATIONS ELECTRONIC UNITS XT3DU AND XT3PG

XT3DU	951.6001	951.6002	951.6003	951.6004	951.6005	951.6006	951.6007
Meas. range mm	2-6	6-10	10-20	20-50	50-100	100-300	200-300
Type	XT3DU BT 2M	XT3DU BT 6M	XT3DU BT 10M	XT3DU BT 20M	XT3DU BT 50M	XT3DU BT 100M	XT3DU BT 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	955.6001	955.6002	955.6003	955.6004
Meas. range mm	2-6	6-20	20-100	100-300
Type	XT3PG BT 01M	XT3PG BT 02M	XT3PG BT 03M	XT3PG BT 04M
Thread	1/4''x 40 TPI	5/16''x 40 TPI	5/8''x 24 TPI	5/8''x 24 TPI

XT3DU

XT3PG

F

TECHNICAL SPECIFICATIONS MEASURING HEADS XTHD   SMART

	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
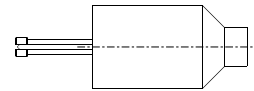
2 points head

	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.
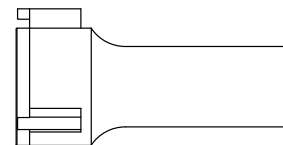
3 points head

Bore gauges

Xtreme 3

TECHNICAL SPECIFICATIONS SETTING RINGS XTR

SMART

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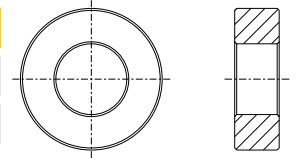
		953.2604	953.2605	953.2606	953.2607	953.2608	953.2609	953.2610
Size	mm	35	65	80	125	175	225	275
Type		XTR35	XTR65	XTR80	XTR125	XTR175	XTR225	XTR275

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

F

APPLICATIONS

Pistol measuring system

Measuring with ratchet XTD system

Measuring with pistol XTH system

DESCRIPTION

SMART

- **Instruments sets** covering a large measuring range (2 - 200 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

Output cable Proximity to USB
(926.6721) or RS232 (926.6723)
and Bluetooth® Wireless
technology

Electronic unit

951.6105

Ring

955.6105

Head

Built-in
Bluetooth®

PROXIMITY

SIS | Smart Inductive System

WATER RESISTANT

IP67

* Up to 8 instruments connected per dongle #981.7100
More informations on How to use Bluetooth® leaflet SYL_1401_EN_BT

F

Sets XT3D	951.6102	951.6103	951.6104	951.6105
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

Sets XT3D	951.6106	951.6107	951.6108	951.6109
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

Sets XT3H	955.6102	955.6103	955.6104	955.6105	955.6106
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

Sets XT3H	955.6107	955.6108	955.6114	955.6115	955.6116
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

F

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...)

F

Resolution up to 0.0001 mm

Big display

Retractable handle

Ceramic anvils from 12 mm

Capacitive probe with high linearity

New ergonomic handle

Fast clamping head system FASTFIT

Display unit

SWISS MADE

RS232

Output cable Proximity to USB (925.1142) or RS232 (925.5609)

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

F

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 [1]
- 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 [1]
- Instruction manual + certificate

[1] 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

F

Special 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

Built-in
Bluetooth®

PROXIMITY

SIS | Smart Inductive System

WATER RESISTANT

IP67

F

HEIGHT GAUGES
Hi_Cal, Hi_Gage ONE & Z5

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

PROXIMITY

POWER

SWISS MADE

Output cable Proximity to USB (926.6721) or RS232 (926.6723)
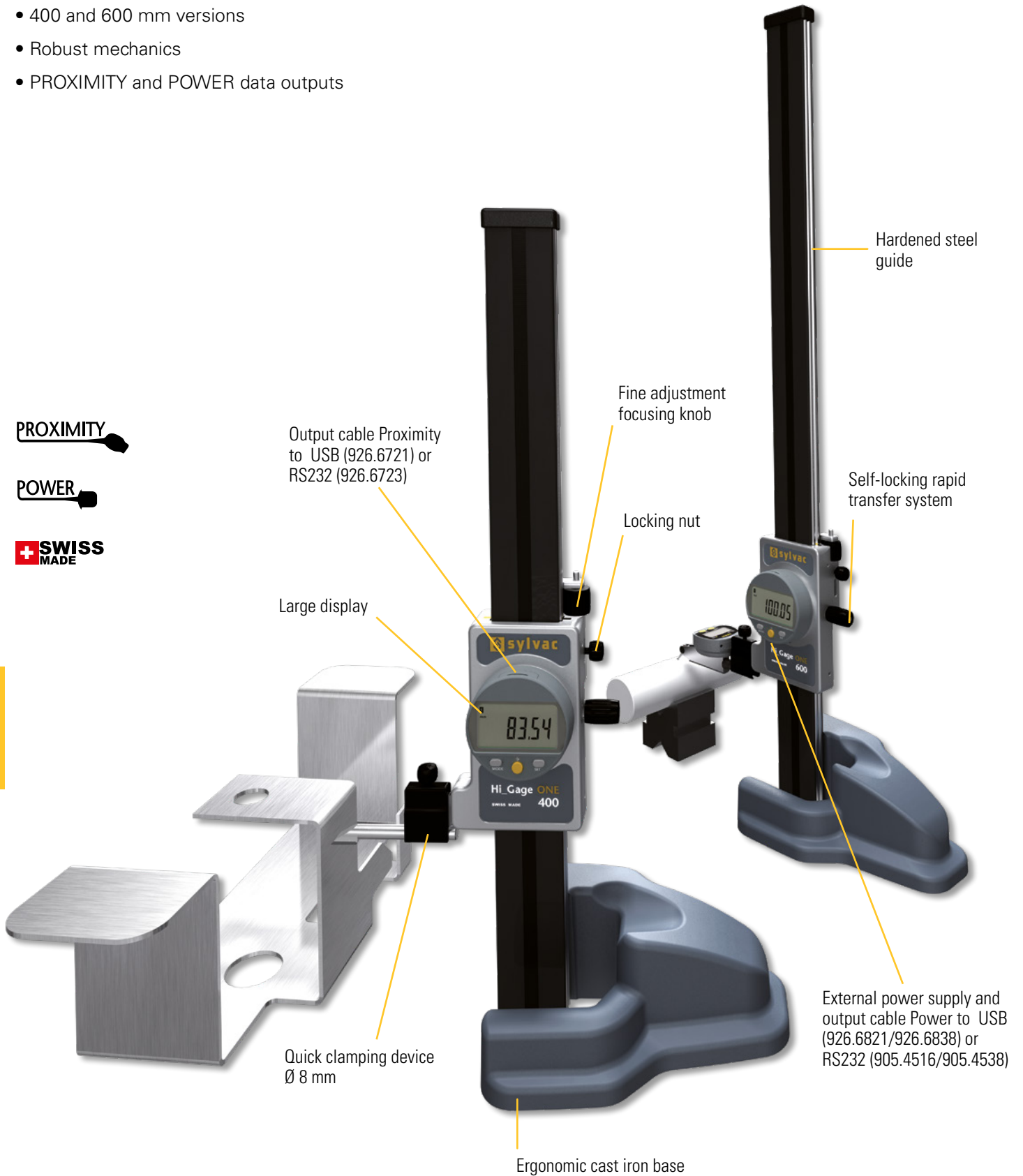
Large display

Fine adjustment focusing knob

Locking nut

Hardened steel guide

Self-locking rapid transfer system

Quick clamping device Ø 8 mm

External power supply and output cable Power to USB (926.6821/926.6838) or RS232 (905.4516/905.4538)

Ergonomic cast iron base

Height gauge

DIMENSIONAL DRAWINGS

65

120

Hi_Gage One 400 = 583.5
Hi_Gage One 600 = 783.5

54

170

140

TECHNICAL SPECIFICATIONS

		840.0400	840.0600
Measurement range mm		400	600
Resolution	mm	0.01	0.01
Max. error	µm	40	50
Repeatability	µm	10 [1]	10 [1]
2 references		●	●
PRESET		9999.99	
Selection of measuring direction		●	
Smart Inductive Sensor (S.I.S)		●	
Output data		USB / RS232	

[1] ± 1 digit

ACCESSORIES

	Description
840.9001	Ball probe Ø8 mm
840.9002 [1]	Tracing probe
905.2247	Clamping stem

[1] supplied in standard

840.9001

840.9002

905.2247

G

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**

Aluminium profile

Hi_Cal 450

Hi_Cal 300

Hi_Cal 150

Ergonomic keyboard

Fix clamping probe holder

Large screen with multiple displays

86.002

108503

150.002

256.000

Interchangeable probes Ø 4 mm

FCT

FCT

FCT
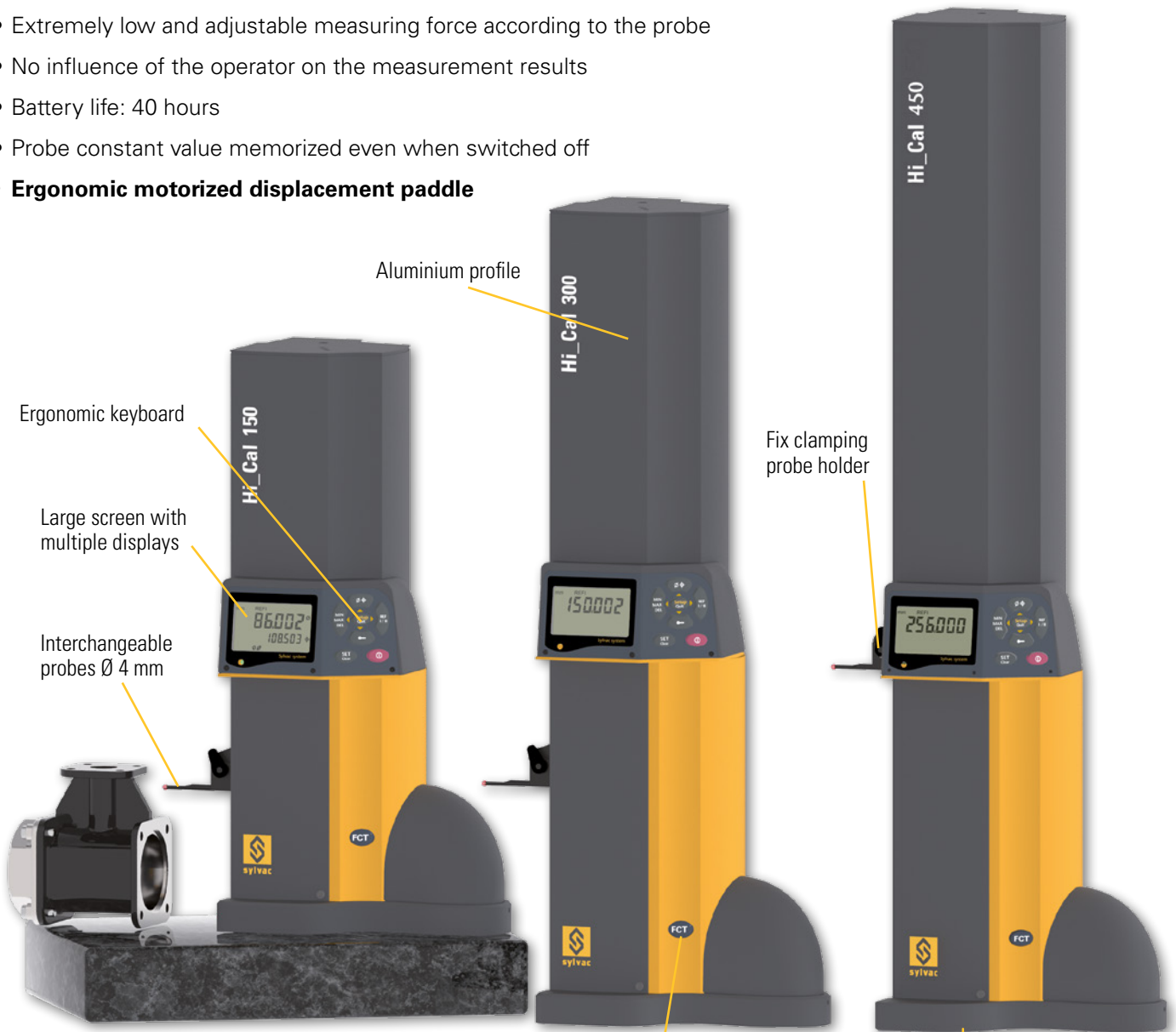
mini-USB

RS232

SWISS MADE

Output cable RS232 to USB (925.1142) or RS232 (925.5609) or output cable mini-USB to USB (926.6001)

Programmable multi-functional key

Reduced base area for effective use close to the machine

Switch on and measure!

G

Height gauge

DIMENSIONAL DRAWINGS

105

379 / 529 / 679

17

187

101

64

219

142/142/172
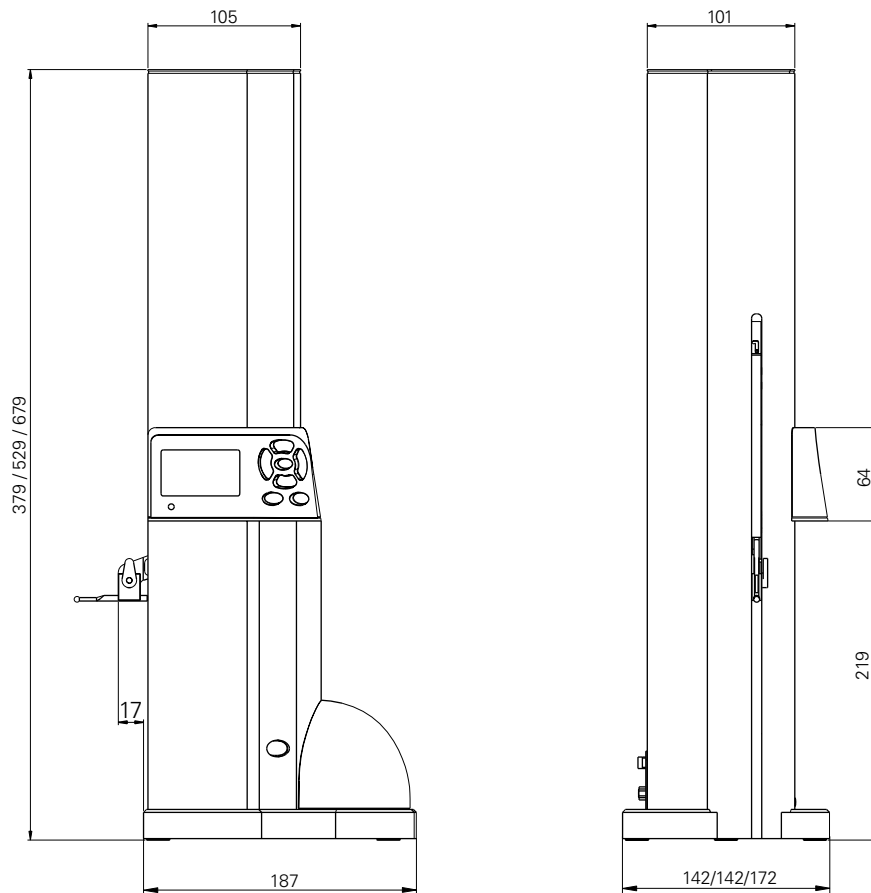
DISPLAYS

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**

mm   REFI

6.189 ⌀

166.202 ⊕

⌀

SYLVAC system

Height gauge

Hi_Cal
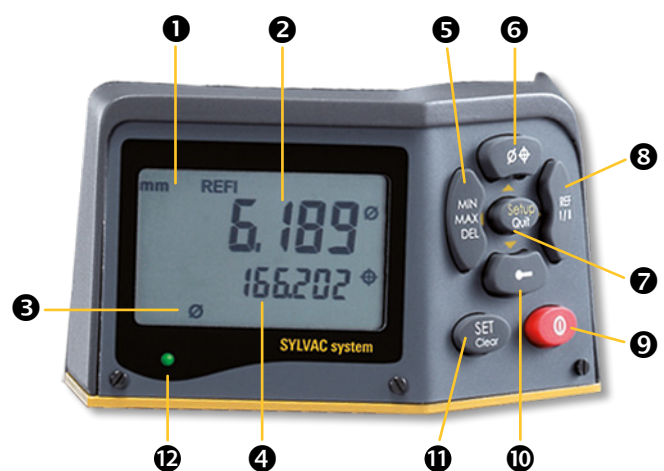
TECHNICAL SPECIFICATIONS

		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[1]		
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 [2] probes		
Output data		USB / RS232 [3]		
Programmable by PC			●	
Zero setting			●	
Min / max / delta			●	
PRESET function			●	
2 references			●	
Height measurement, Ø and centerlines			●	
2 types of progressive speed			●	

[1] With standard probe, in laboratory conditions
[2] With adjustement of the measuring force
[3] 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[1]/01/03/04/05)
- Ruby ball probe Ø 3 mm
- Setting gauge
- Calibration certificate
- Instruction manual

[1] according to country

Height gauge

APPLICATIONS

Hi_Cal
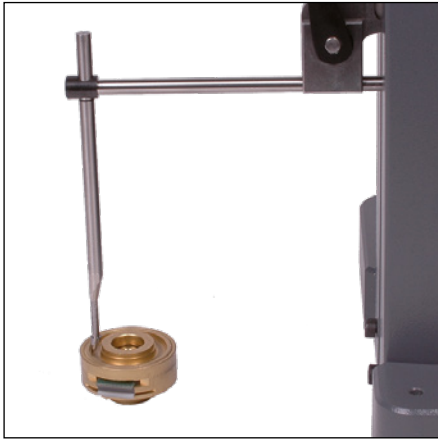
Depth measurement with accessories 930.2108 and 930.2105

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)
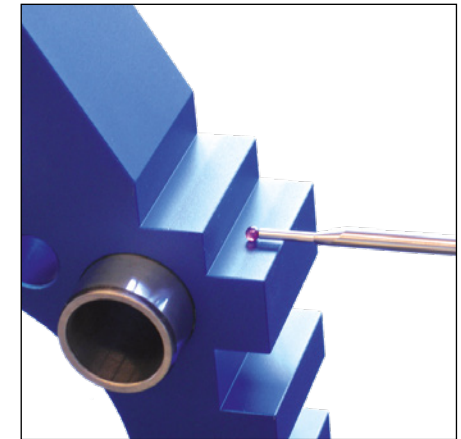
Heights and thicknesses measurements with the standard probe 930.2101
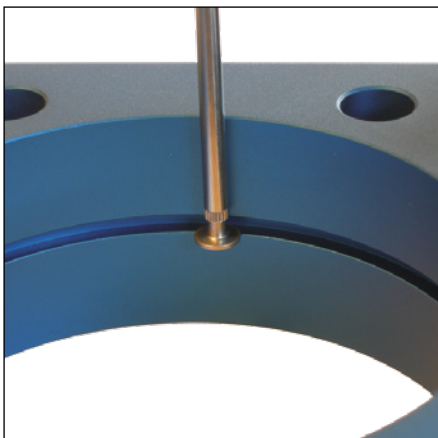
Internal groove measurement with accessories 930.2108, 930.2110 and 905.2205
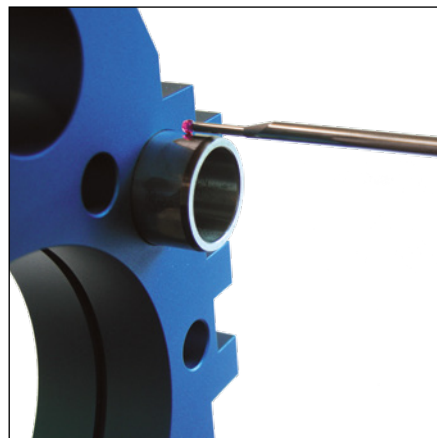
External diameter measurement with the standard probe 930.2101
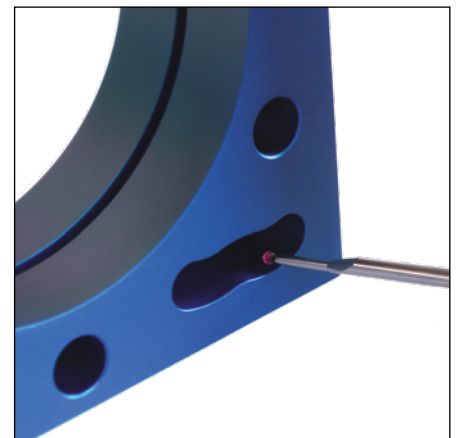
Min/Max/Delta measurements

G

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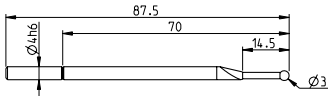
	930.2101	Ruby ball probe Ø 3 mm
	930.2103	Ruby ball probe Ø 2 mm
	930.2104	Tungsten carbide ball probe Ø 1 mm
	930.2105	Knife-edged measuring probe TC Ø 3 mm
	930.2106	Cylindrical measuring probe TC Ø 3 mm
	930.2107	Probe holder 90° M2.5
	930.2108	Probe holder 90° Ø 4 mm
	930.2002	Setting gauge
	904.4200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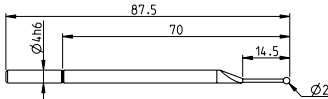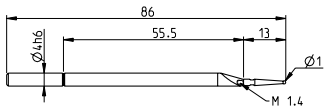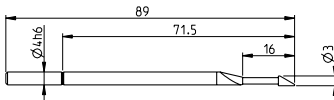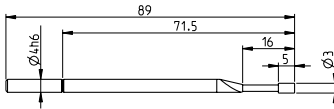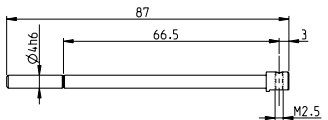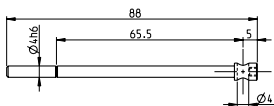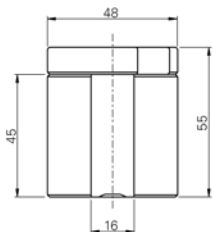
G

ACCESSORIES
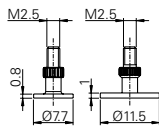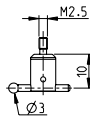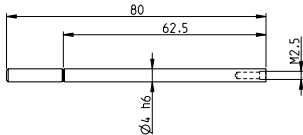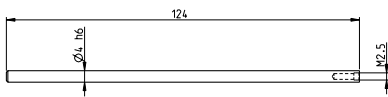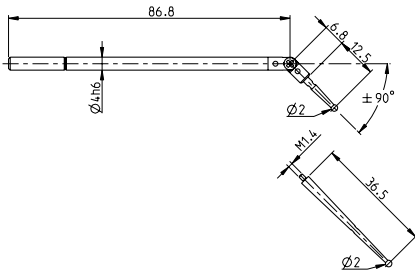
	930.2102	Swivelling tungsten carbide ball probe (M1.4)
	930.2109	Extension 124 mm M2.5
	930.2110	Extension 80 mm M2.5
	905.2207	Probe holder and ruby ball probe Ø 3 mm, M2.5
	905.2205	Disk shaped anvils Ø 7.7 mm and Ø 11.5 mm, M2.5
	930.2150	Full accessory set in wooden box Content : 930.2103, 930.2104, 930.2105, 930.2106, 930.2107, 930.2108, 930.2109, 930.2110, 905.2204, 905,2205, 905.2207
	930.2151	Basic accessory set in wooden box Content : 930.2103, 930.2104, 930.2105, 930.2106
	904.4101	External contact (foot-pedal)

G

ACCESSORIES

	930.2111	Carbon probe-holder 200mm, Ø4mm
	930.2112	Demonstration piece
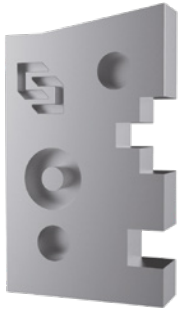
Height gauge

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

mini-USB

RS232

SWISS MADE

Additional probe holder

«Black Mask» display with user-friendly functions

Easy balance adjustment system

Interchangeable insert holder and probe

Measuring carriage displacement handwheel

Output cable RS232 to RS232 (926.5505) or output cable mini-USB to USB (926.6001)

Horizontal displacement handle with buttons for functions and air cushion

Cast iron base

Let's measure higher !

G

Height gauge
Z5

DIMENSIONAL DRAWINGS

210

L 40

1084

278

270
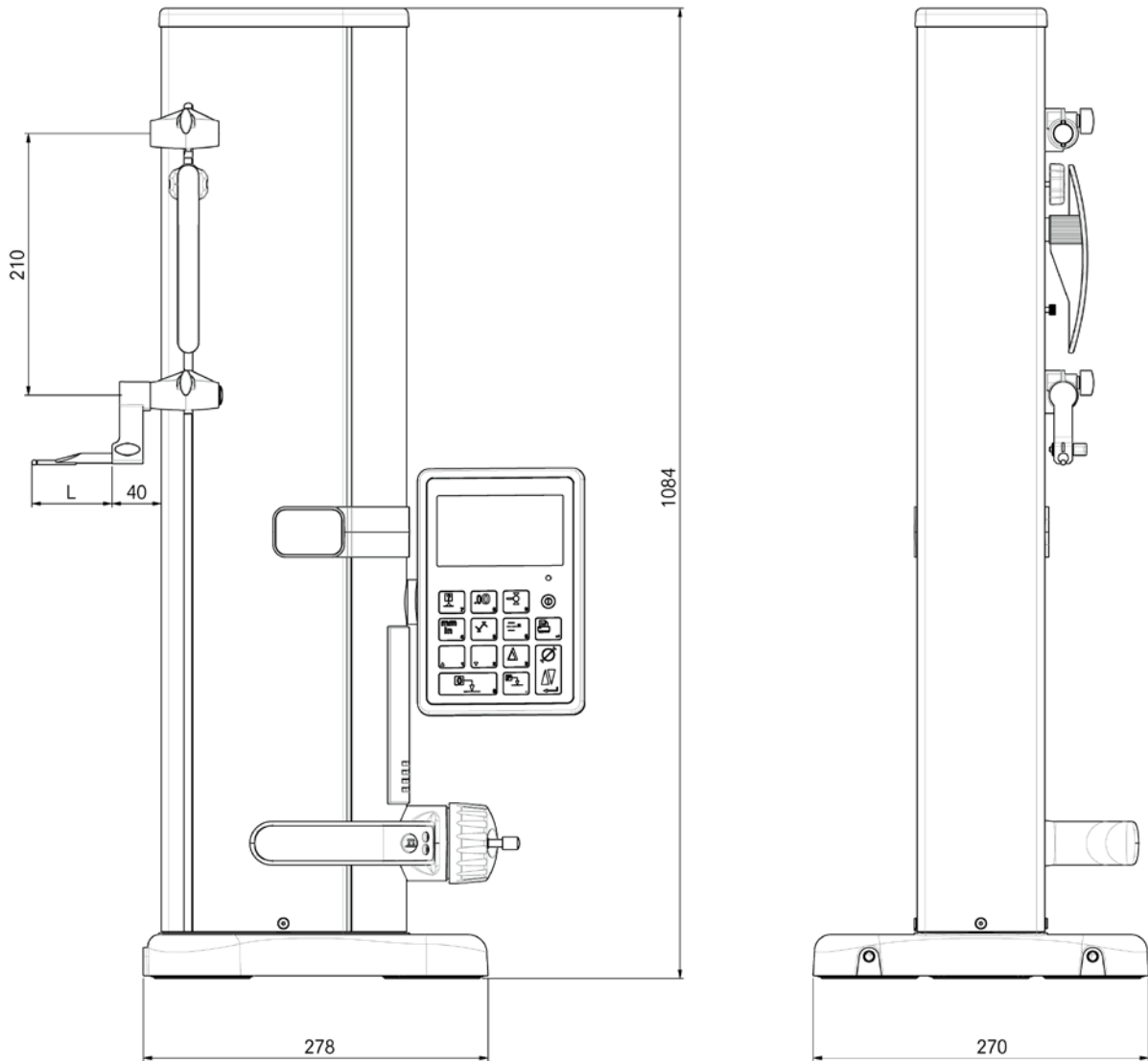
BASIC INSTRUMENT

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

[1] according to country

G

Height gauge

Z5

TECHNICAL SPECIFICATIONS

		936.0700
Measuring range	mm	711
Measuring range with extension	mm	1023
Max. Error	µm	2.5 + L / 300
Repeatability R_{MPE}	µm	2
Frontal squareness deviation S_{MPE}	µm	8
Maximum resolution	mm	0.001
Measuring force	N	0.75 ÷ 1.5
Autonomy	h	12
Output data		USB / RS232
Air cushion		●
Weight	kg	24
Programmable by PC		●
Zero setting		●
Min / max / delta		●
PRESET function		●
Simultaneous display of diameters and centerlines		●
Thickness, chain and height measurements		●
Manual and motorised displacement		●

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

G

APPLICATIONS
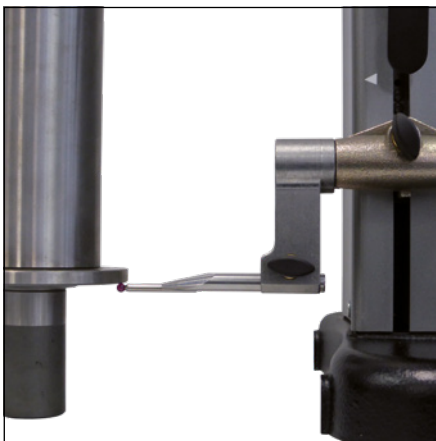
Thickness, chain and height measurements
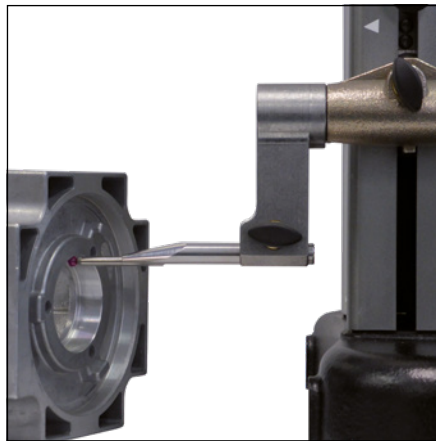
Simultaneous display of diameters and centerlines
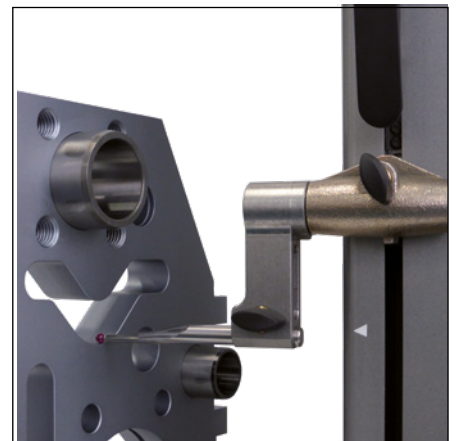
The motorisation guarantees a perfectly constant measuring force

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

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MEASURING PROBES
AND DIGITAL DISPLAYS

Sylvac proposes three types of probe depending on the area of measurement applications.

Digital absolute probes:
- Ultra-high precision
- Direct USB output or M8

Capacitive probes:
- Measuring range up to 25mm
- High-precision measurement across the range of the probe
- Very good repeatability
- Reduction of intrinsic error if coupled to the SYLVAC display units

Inductive probes:
- Small footprint and very good repeatability
- Ideal for multi-dimension applications of 2 to 255 probes

SYLVAC display units connect a wide range of products such as Sylvac linear probes, linear rulers, handtools and digital indicators.

Absolute capacitive measuring system

Digital display units RS232 and USB

Operational temperature 0 to +50°C

Measuring probes

LISTING OF ALL MODELS

	INDUCTIVE				CAPACITIVE						
TYPE	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
RANGE											
±2 mm	●	●									
5 mm					●	●	●	●		●	●
± 5 mm			●	●							
10 mm											
12.7 mm											
25 mm											
EXECUTION											
Plain bearing					●		●			●	●
B- Ball bearing	●	●	●	●		●		●	●		
Pneumatic push		●		●							
V- Vacuum lifter							●		●		●
L- 90 degrees cable	*		*			●			●	●	●
S- with rubber boot	●	●	●	●	●	●	●	●	●	●	●
MECHANIC											
Diameter 8 mm h6	●	●	●	●	●	●	●	●	●	●	●
Diameter 12 mm											
Measuring anvil M2.5	●	●	●	●	●	●	●	●	●	●	●
LIFTING											
Integrated		●		●			●		●		●
Separate accessories					●	●		●		●	
PROTECTION IP											
Protection rating IP (IEC 60529)	65	65	65	65	64	64	64	64	64	64	64

* by accessories, see next pages

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	CAPACITIVE						ABSOLUTE DIGITAL						
	P10	P10S	P10L	P10LS	P25	P25S	P12D HR USB	P12D HR USB CF	P12D USB	P12D USB LF	P12D HR M8	P12D HR M8 CF	P12D M8
	900.1010	900.1012	900.1014	900.1016	900.1025	900.1027	801.1012	801.1018	801.2012	801.2017	801.1212	801.1218	801.2212
	•	•	•	•									
							•	•	•	•	•	•	•
					•	•							
	•	•	•	•	•	•							
							•	•	•	•	•	•	•
			•	•									
		•		•		•							
	•	•	•	•	•	•	•	•	•	•	•	•	•
					•	•	•	•	•	•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•	•	•
	40	50	40	50	40	50	54	54	54	54	54	54	54

H

Absolute digital measuring probes   P12D

DESCRIPTION

- New very high accuracy P12D probes Series

- Measuring range 12.7mm (½in)

- Resolution up to 0.01 um

- 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

Ball bearing

Metallic holder

M8 connector

USB connector

Measuring anvil
Interchangeable
contact point M2.5,
stainless steel with
TC ball

Direct output on PC dis-
played on Sylcom (software
and PC not included)

8.341 26 mm

SWISS MADE

IP54

H

Absolute digital measuring probes   P12D

DIMENSIONAL DRAWINGS
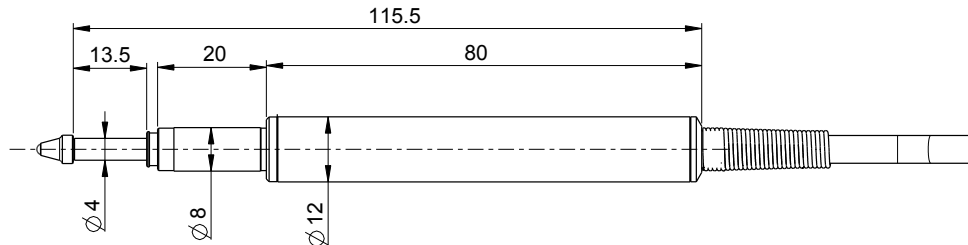
TECHNICAL SPECIFICATIONS

High resolution		801.1012	801.1018	801.1212	801.1218
Resolution type		High resolution			
Type		P12D HR USB	P12D HR USB CF [2]	P12D HR M8	P12D HR M8 CF [2]
Force [1]	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 [4]		up to 100/s, according to configuration [5]	
Output data		USB		M8	
Cable output		Straight			

Standard resolution		801.2012	801.2017	801.2212
Resolution type		Standard		
Type		P12D USB	P12D USB LF [3]	P12D M8
Force [1]	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 [4]		up to 100/s, according to configuration [5]
Output data		USB		M8
Cable output		Straight		

[1] ± 20%, vertical position
[2] CF = constant force : usable only vertically, rod pointing downwards (without spring)
[3] LF = low force
[4] depends on resolution and software
[5] depends on resolution and number of probes

H

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

Probe P12D USB connected to a PC, measures displayed by Sylcom.

Probe P12D USB connected to a D300S (maximum resolution 0.1μm)

Probes P12D M8 connected to a D62S.

H

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 µm

- Measuring range +/- 2mm and +/- 5 mm

- Compatible with D300SV2, D70i and D400S units through M-Bus multiplexer units

- High data speed

- Operating temperature +5 to +80°C

- IP65 protected

Silicone rubber boot

Machined from solid, hardened stainless steel (series 400)

Metallic holder which allows 90° output, with accessory

Measuring anvil
Interchangeable contact point
M2.5, stainless steel with TC ball

Long life precision bearing guidance

Clamping stem
Ø 8-h6

Pneumatic tube connector on version P

H

💧 IP65

Inductive measuring probes

DIMENSIONAL DRAWINGS

P2i

30.00
3.50
Ø8h6
Ø3.50
1.00
53.00
15.65 FULLY EXTENDED
10.65 FULLY RETRACTED

P2iP

7.50
2.00
Ø3.00
Ø8h6
Ø3.50
4.50
71.00
17.40 FULLY EXTENDED
11.40 FULLY RETRACTED

P5i

30.00
4.00
Ø8h6
Ø3.50
1.00
87.00
25.40 FULLY EXTENDED
14.40 FULLY RETRACTED

P5iP

7.50
2.00
Ø3.00
Ø8h6
Ø3.50
4.50
96.00
25.40 FULLY EXTENDED
14.40 FULLY RETRACTED

H

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 <0.1um			
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

Clamping stem
Ø 8-h6

Interchangeable cables
up to 15 m (standard 1.5 m)

P25

P10

P5

Measuring anvil
Interchangeable contact point
M2.5, stainless steel with TC ball

P5: clamping stem Ø 8-h6

H

SWISS
MADE
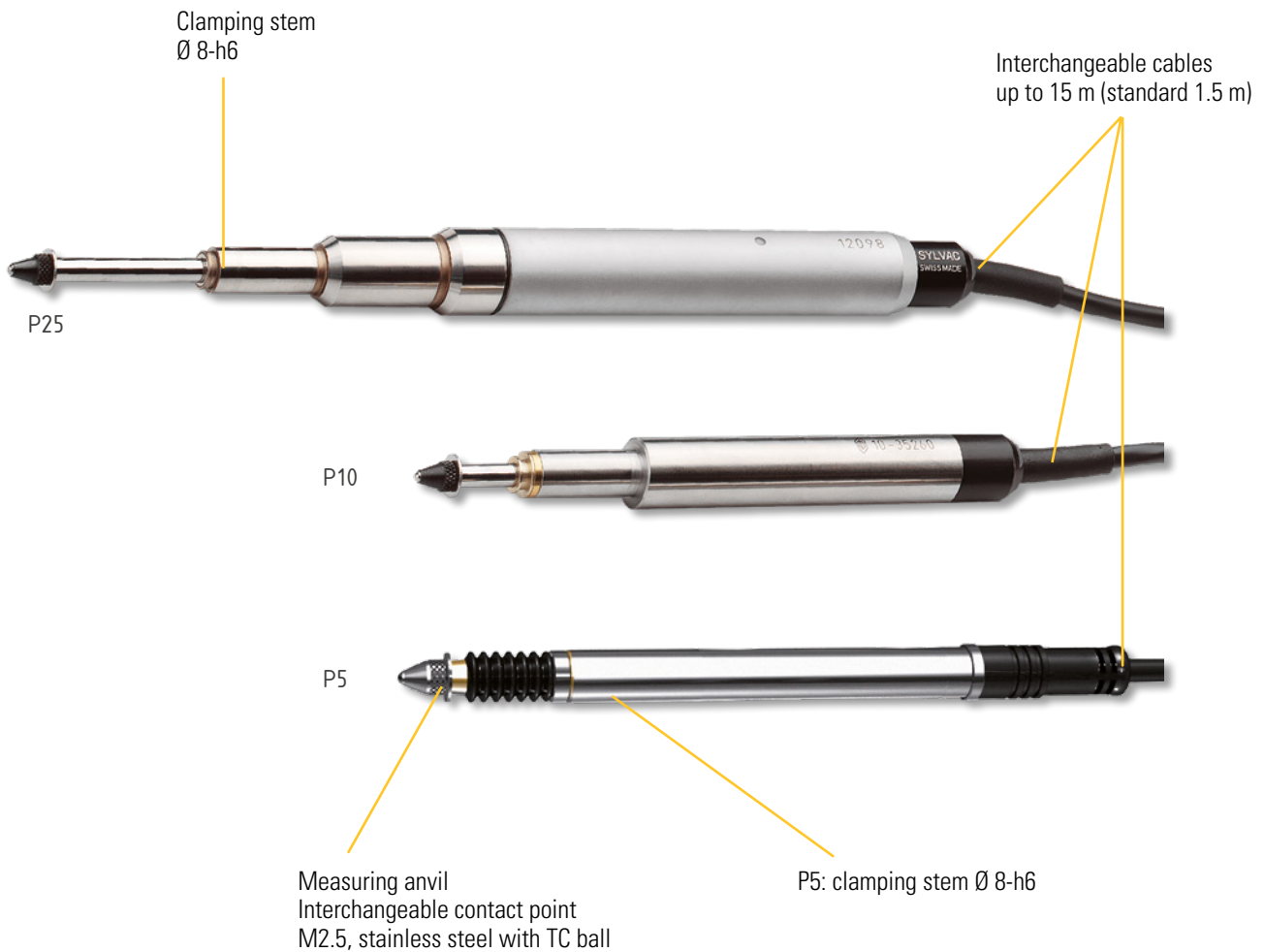
Capacitive measuring probes

DIMENSIONAL DRAWINGS
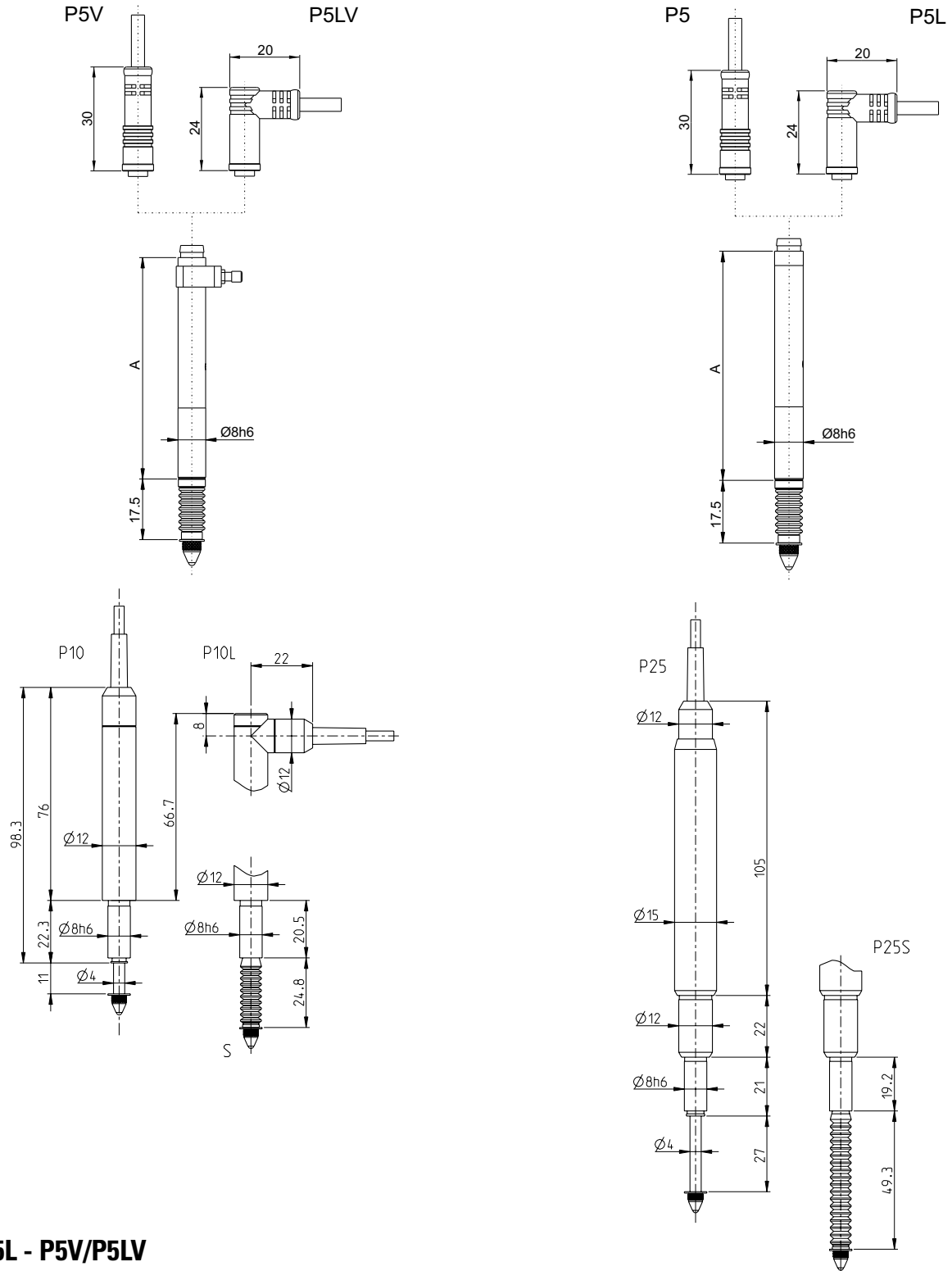
P5/P5L - P5V/P5LV

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 [1]	µm	1	1	1.2
Repeatability	µm	0.2	0.2	0.2
Moving mass	g	3.7	4.1	9.6

[1] 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

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
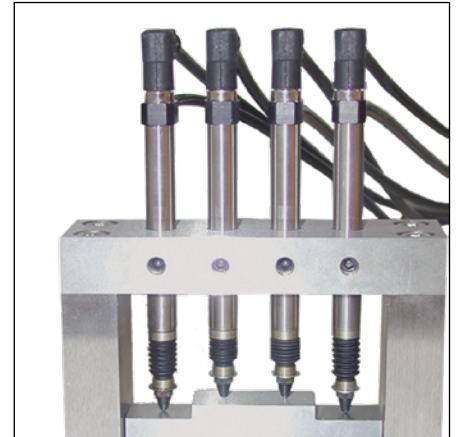
Combined probes for the measurement of several heights

Capacitive probes connected to a D70S.
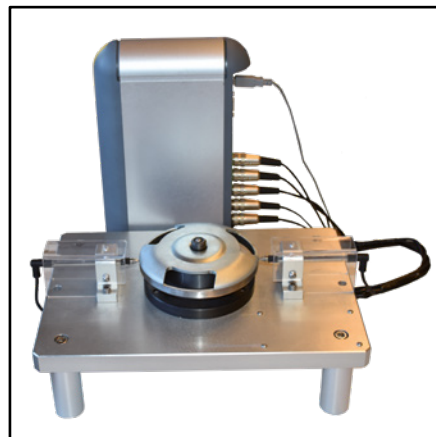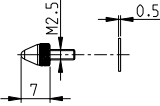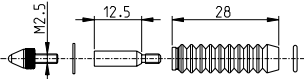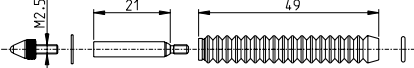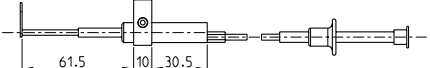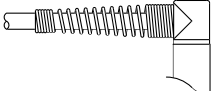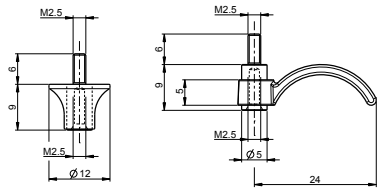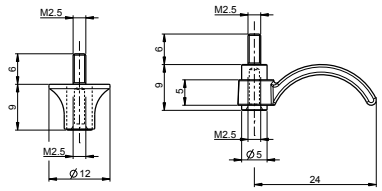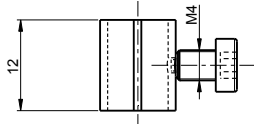
Capacitive probes connected to a D200S

Capacitive probes on a jig
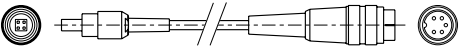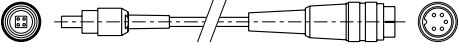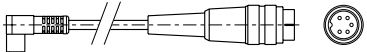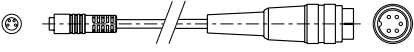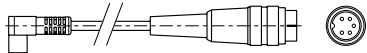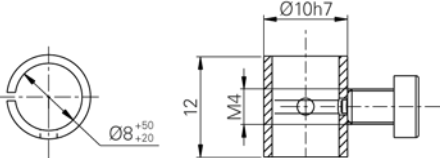
H

Measuring probes

ACCESSORIES

			P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
905.2204	Stainless steel contact point M2.5 with TC ball probe (other contact points, see chapter digital indicators)						●	●	●	●	●
901.2003	Rubber boot and contact point set								●		
901.2004	Rubber boot and contact point set									●	
901.2005	Lifting device with photo-cable								●	●	●
901.2012	Tube Ø 4 mm / 2 mm, Length to be specified							●	●	●	
901.2013	Tube Ø 6 mm / 4 mm, Length to be specified							●	●	●	
901.2014	Double tube diameter 2 x 4 mm /2 mm, Length to be specified							●	●	●	
901.5110	Bridle 90°		●		●						
905.2225	Plastic lifting ring (bottom)		●	●	●	●	●	●	●	●	●
905.2224	Plastic lifting lever (bottom)		●	●	●	●	●	●	●	●	●
905.2231	Sleeve Ø8 -->10mm with locking screw		●	●	●	●	●	●	●	●	●

H

Measuring probes

ACCESSORIES

			P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
	901.5002	Cable 1.5 m							●		
	901.5012	Cable 1.5 m								●	
	901.5032	Cable 1.5 m bent							●		
	901.5042	Cable 1.5 m						●			
	901.5052	Cable 1.5 m bent						●			
	905.2231	Adapting socket + screw	●	●	●	●	●	●	●	●	●

H

Digital display

TABLE OF CORRESPONDENCES

		D50S	D50S PRO	D62S	D62S Adv.	D70S	D70H
Direct input	Probes	2 c)	2 c)	2 a)	2 a)	2 c)	2 H)
	RS/USB instruments						
	External contact	1	1	1	2	1 p)	1 p)
	Mbus						
	Air gages						
	Instrument with Bluetooth® technology						
Additional input	Probes						
	USB instruments						
	Analog display			●	●	●	●
Output	RS 232	●	●	●	●	●	●
	RS 485						
	USB			● 10)	● 10)	● 10)	● 10)
	Opto-coupled output						
	Analogic						
	Bluetooth® technology (slave)				●		
Functions	Direct zero setting	●	●	●	●	●	●
	Direct zero setting per channel	●	●	●	●	●	●
	Selection of resolution	●	●	●	●	●	●
	Selection of measuring direction	●	●	●	●	●	●
	PRESET	●	●	●	●	●	●
	Tolerance indicators			●	●	●	●
	Classification (max 8 classes)				●	● 11)	● 11)
	Min, Max, Delta				●	●	●
	A ± B (predifined functions)	●	●	●	●	●	●
	Mathematics functions				●		
	Scanning of the channels					●	●
	Histogram						
	Statistics						
	Memorization				●		
	Simultaneous display of the channels			●	●	●	●
	Dynamic measurement				●	●	●
	Calibration (max. 25 points)		●			●	
	Time and date display				●		
	Battery				●		

1) with unit (s) additional (s) D108
2) with 3 D200S units
3) 32 probes with units D200S or maximum 32 with D302 / D304 or M-Bus
4) with USB-Hub powered
5) depending on model, see details on pages D300S

6) with modul MB-IO
7) with dongle Smart for D300S & MB-BT for D400S
8) A± B± C± D±, depending on model
9) Maximum 99 instruments on D400S through M-BUS (MB-4D & MB-8D digimatic)

H

Digital display

TABLE OF CORRESPONDENCES

D70I	D70A	D200S	D300S [*]	D302	D302 a	D304	D304 a	D400S
2 [i]		8 [c]	2 (4) [c]	2 [c]	2 [c]	4 [c]	4 [c]	
			1 / 6					
1 [p]	1 [p]	1	2	1	1	1	1	1
			● [5]					●
	2							
			● [7]					● [7]
		24 [2]	32 [3]					99 [9]
			6 [4]					99 [9]
●	●							●
●	●	●	●					●
				●	●	●	●	
● [10]	● [10]	●	●	●	●	●	●	●
		●	●					● [6]
					●		●	
●	●	●	●					●
●	●	●	●					●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●					●
● [11]	● [11]		●					● [11]
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●			● [12]
		●	●			● [8]	● [8]	●
●	●		●					●
			●					●
			●					●
		●	●					●
●	●	●	●					●
●	●	●	●					●
●		●	●	●	●	●	●	●
			●					

10) Mini-USB

11) Up to 16 classes for 1 channel only

p) Binder 3 poles for D70S and D62S or Jack for D70H, D70A and D70I

c) capacitive, H) Heidenhain, i) inductive, a) absolute digital

* Maximum 62 mixed on the D300S instruments

12) Model 2018

Digital display

<div align="right">

D50S

</div>

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

Output cable RS232 to USB (925.1142), RS232 (925.5609) or Digimatic (926.8116)

IP40

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**
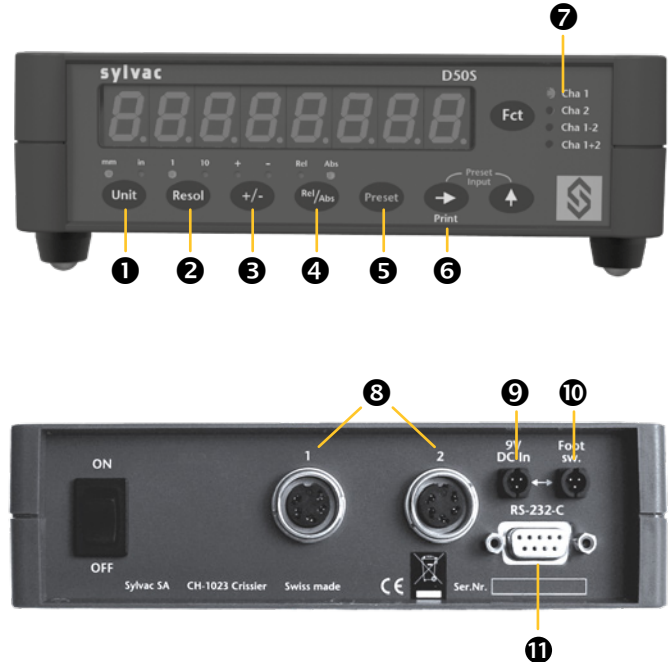
TECHNICAL SPECIFICATIONS

		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
Overall dimensions	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
Output data		RS232 / USB / Digimatic [2]	RS232 / USB / Digimatic [2]
Programmable by PC		●	●

[1] Max error on D50S PRO paired with a probe
[2] see cable chapter

BASIC INSTRUMENT

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

Digital display   D50S

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
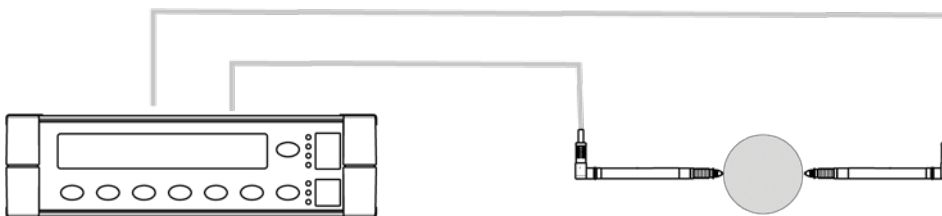
Difference = 1-2
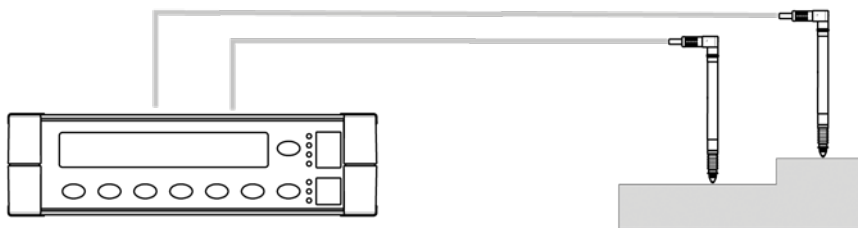
Individual measurement

POSSIBILITIES OF CONNECTION

MAX. 2

2x

P2...P25

RS232C

PROBE

sylvac

D50S

Cha 1
Cha 2
Cha 1-2
Cha 1+2

Fct

Unit   Resol   +/-   Ref/abs   Preset   →   ↑   Preset Input

Print

SW1

H
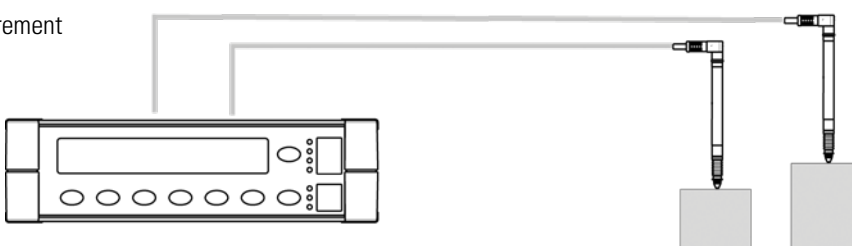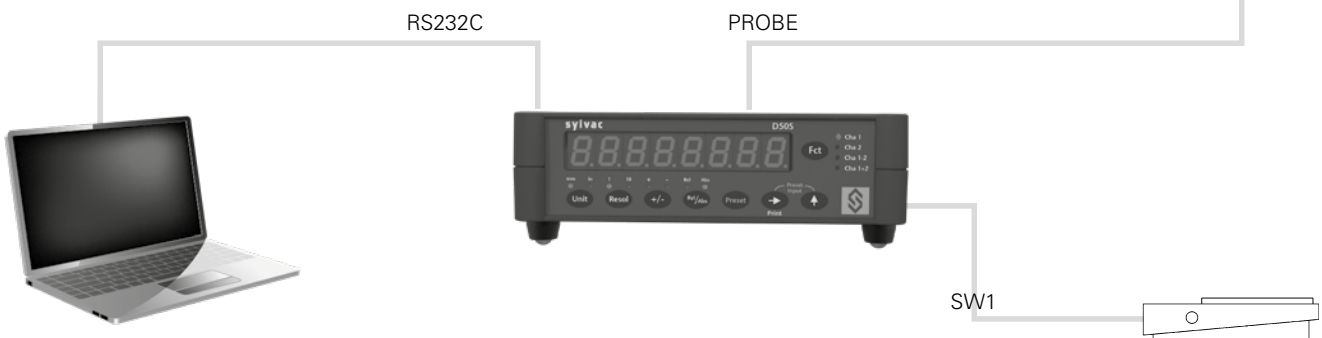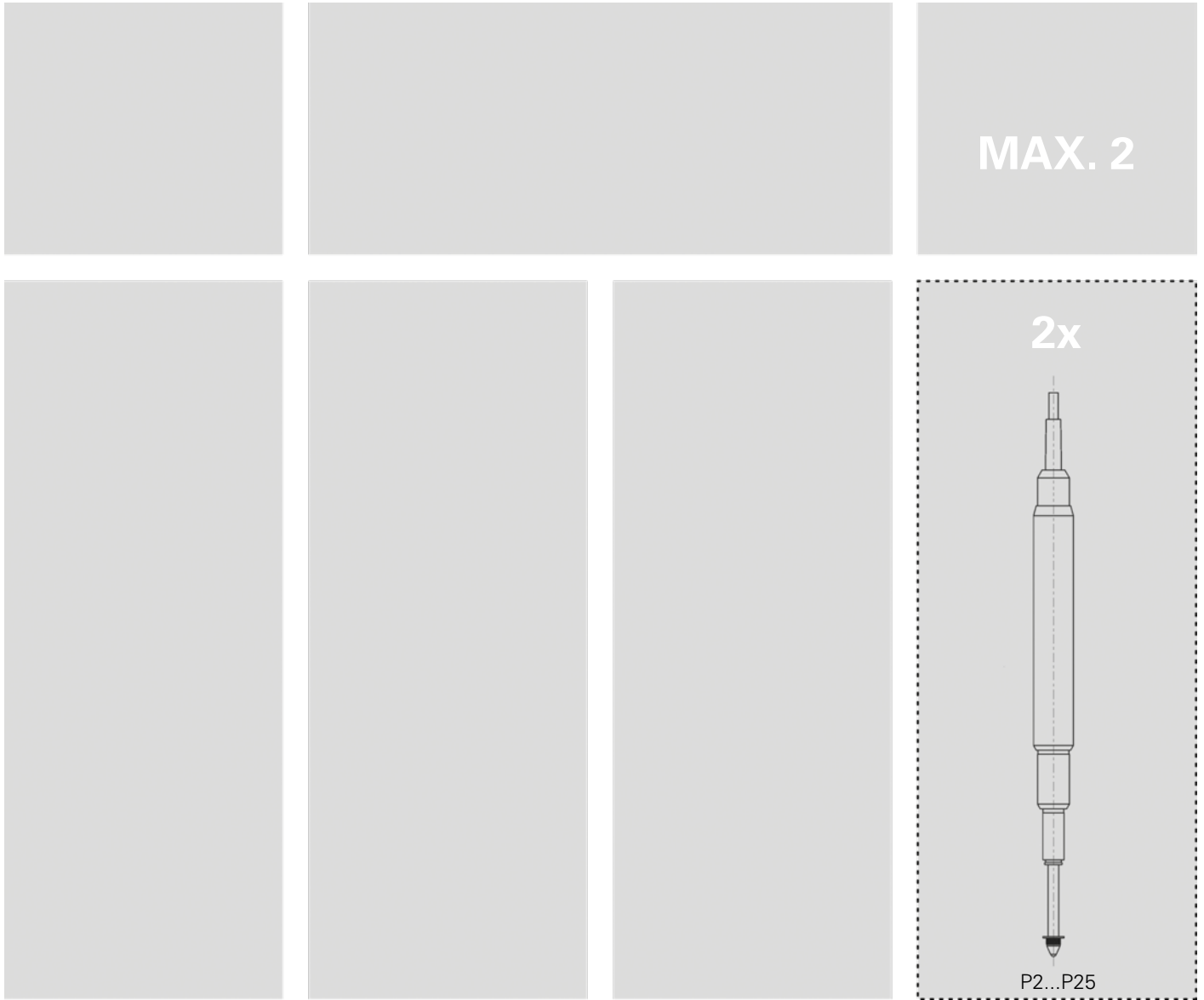
Digital display

<div style="text-align:right">

D62S

</div>

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

Built-in
Bluetooth®

Indication of the global tolerance status (model D62S Advanced)

Indication of the battery status

Favourite key

Large touch screen display

Rubber protection - shockproof

IP54
(front face)

mini-USB

RS232

Output cable RS232 to RS232 (926.5609) or USB (925.1142) or output cable mini-USB sur USB (926.6001)

Digital display

D62S

DISPLAY

❶ Menu display

❷ Favourite key

❸ SET

❹ Selection of channels

❺ Formula [1]

❻ Analog display

❼ Current value, mode MIN/MAX/DELTA [1]

❽ Measuring mode MIN/MAX/DELTA [1]

❾ ON/OFF switch

❿ Probe inputs (M8 - P12D)

⓫ RS232 inputs/outputs

⓬ Power-supply

⓭ mini/USB Device (PC connection)

⓮ Footswitch input

⓯ Light indicator of the global tolerances [1]
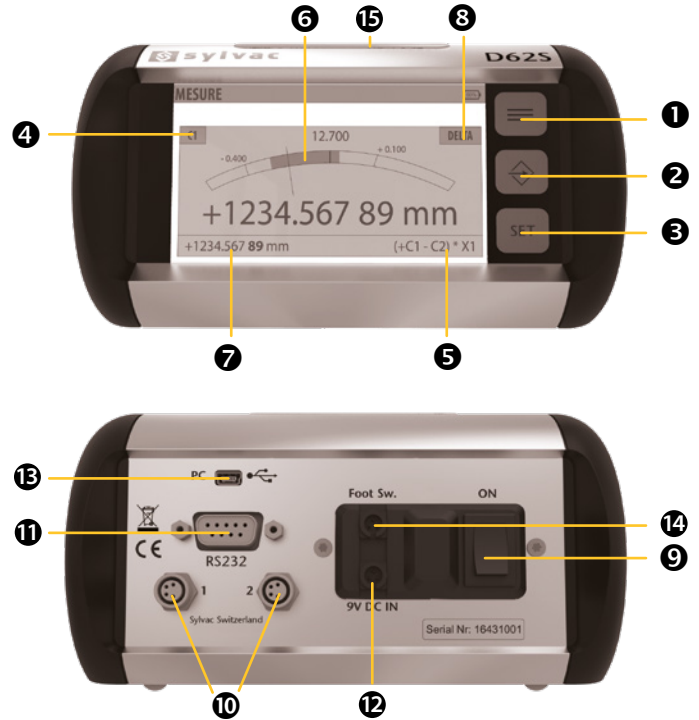
[1] only on Advanced model

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	
Overall dimensions	mm	170 x 90 x90	
Weight	kg	0.75	
Case		Aluminium and thermoplastic elastomer	
Protection according to IEC 60529		IP40 (Front face : IP54)	
Output data		USB (Device) [1], RS232	Bluetooth® wireless technology, RS232, USB (Device) [1]
Indicator of the global tolerance			●
Battery			●
Time and date display (RTC)			●

[2] see cables chapter

H

Digital display

<div style="text-align: right">

D62S

</div>

BASIC INSTRUMENT

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

APPLICATIONS

Probes P12D connected to a D62S.

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

MAX. 2

2x

P12D (M8)

RS232

PROBE

Bluetooth® technology

USB (Device)

+1234.567 89 mm

SW1

H
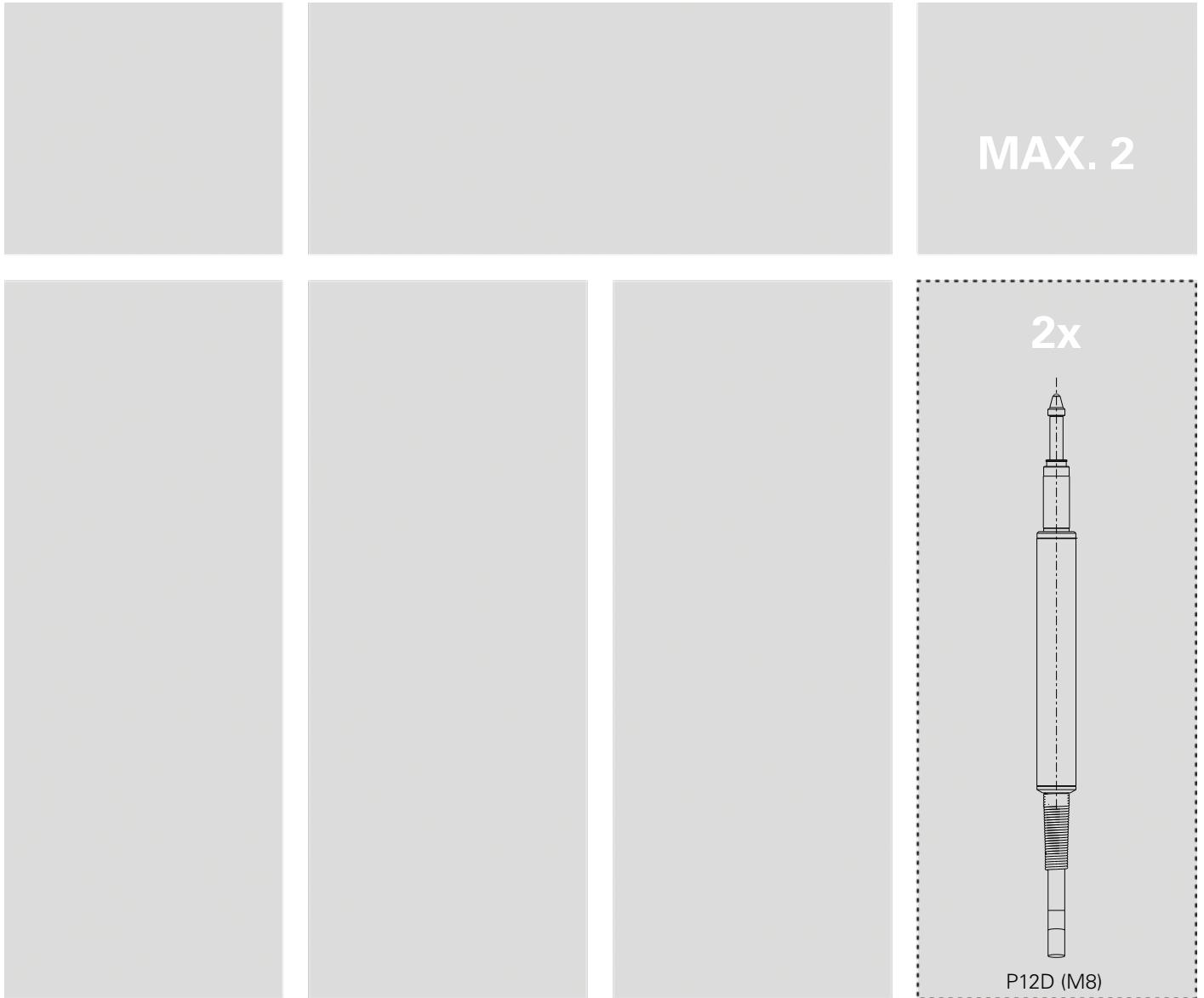
Digital display

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

mini-USB

RS232

4.3'' touchscreen

Analogic display

Data output

Channel selection

Tolerance limit
or GO/ NO GO

Table stand

Output cable RS232
to RS232 (926.5609) or USB
(925.1142) or output cable
mini-USB sur USB (926.6001)

Settings
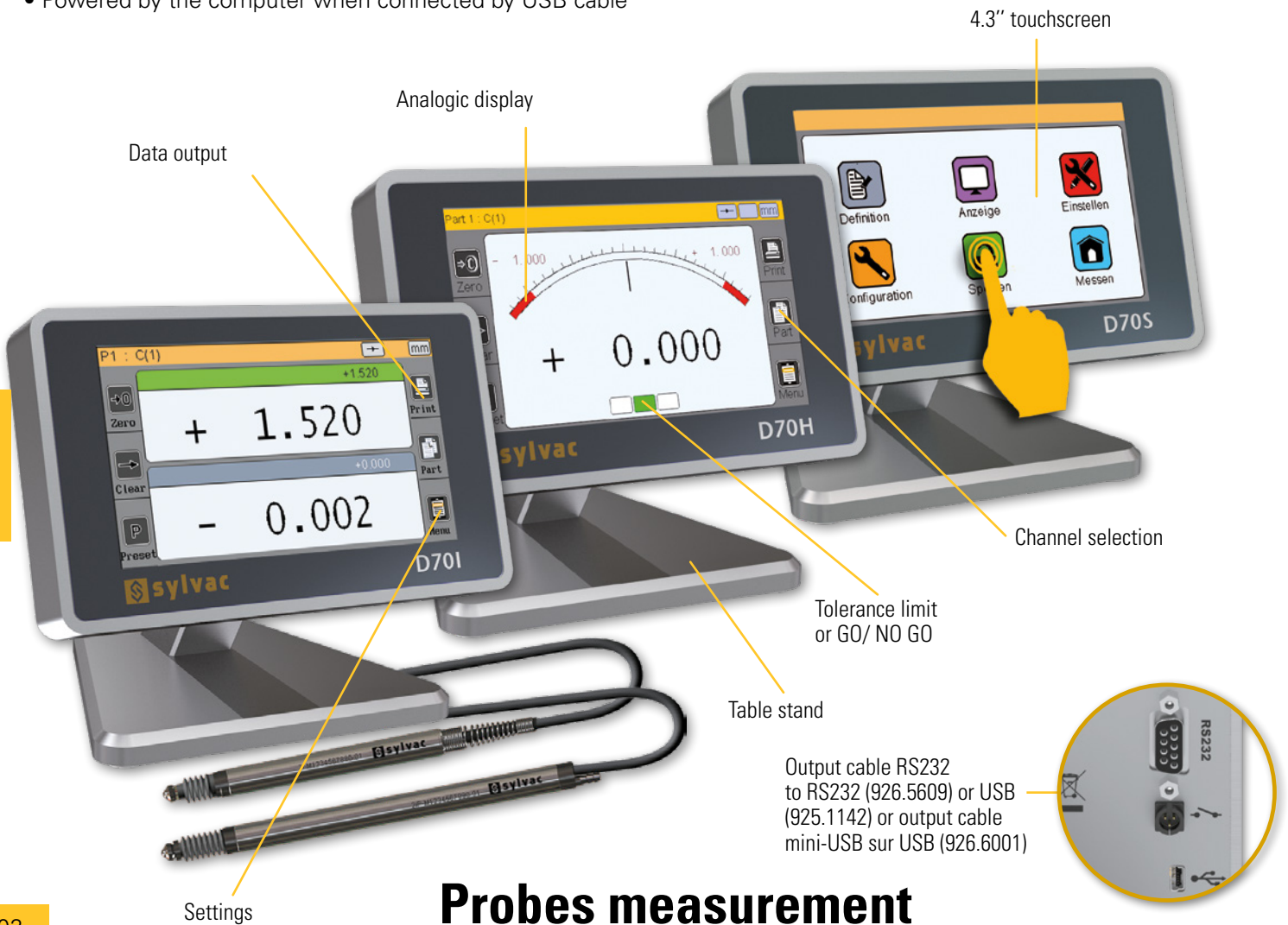
Probes measurement

Digital display

<div align="right">

D70S/H/I

</div>

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**
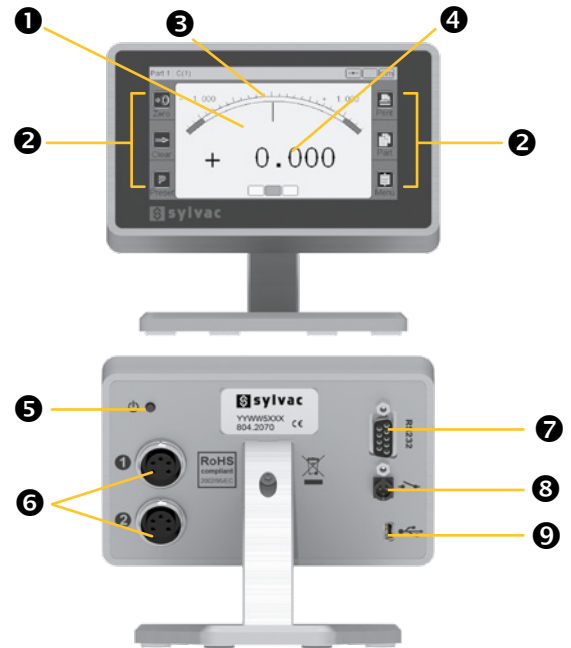
TECHNICAL SPECIFICATIONS

		804.2070
Type		D70S
Overall dimensions	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
Output data		USB / RS232
Probes		Sylvac Capacitive probes
Programmable by PC		●

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

* Not available in Switzerland

H

Digital display

D70S/H/I/

TECHNICAL SPECIFICATIONS

		804.2071
Type		D70I
Overall dimensions	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP40
Output data		USB / RS232 (1x1)
Probes		Sylvac Inductive probes (Tesa & Mahr compatible)
Programmable by PC		●
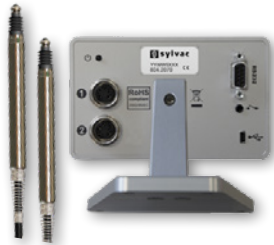
D70S : Capacitive probes

D70I : Inductive probes

D70H : Heidenhain probes

APPLICATIONS

D70S with capacitive Sylvac probes

D70H with Heidenhain probes

D70I with inductive probes

H

BASIC INSTRUMENT

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

POSSIBILITIES OF CONNECTION

MAX.2	MAX.2	MAX.2
		MAX. 1 or 2

P10
P25
...

Heidenhain
Spectro
I2 / 30
MT
I2/25
60/100
Certo
...

P2i
P5i
Tesa GT21
...

D70S

D70H

D70I

USB /RS232C

PROBES

SW1

H
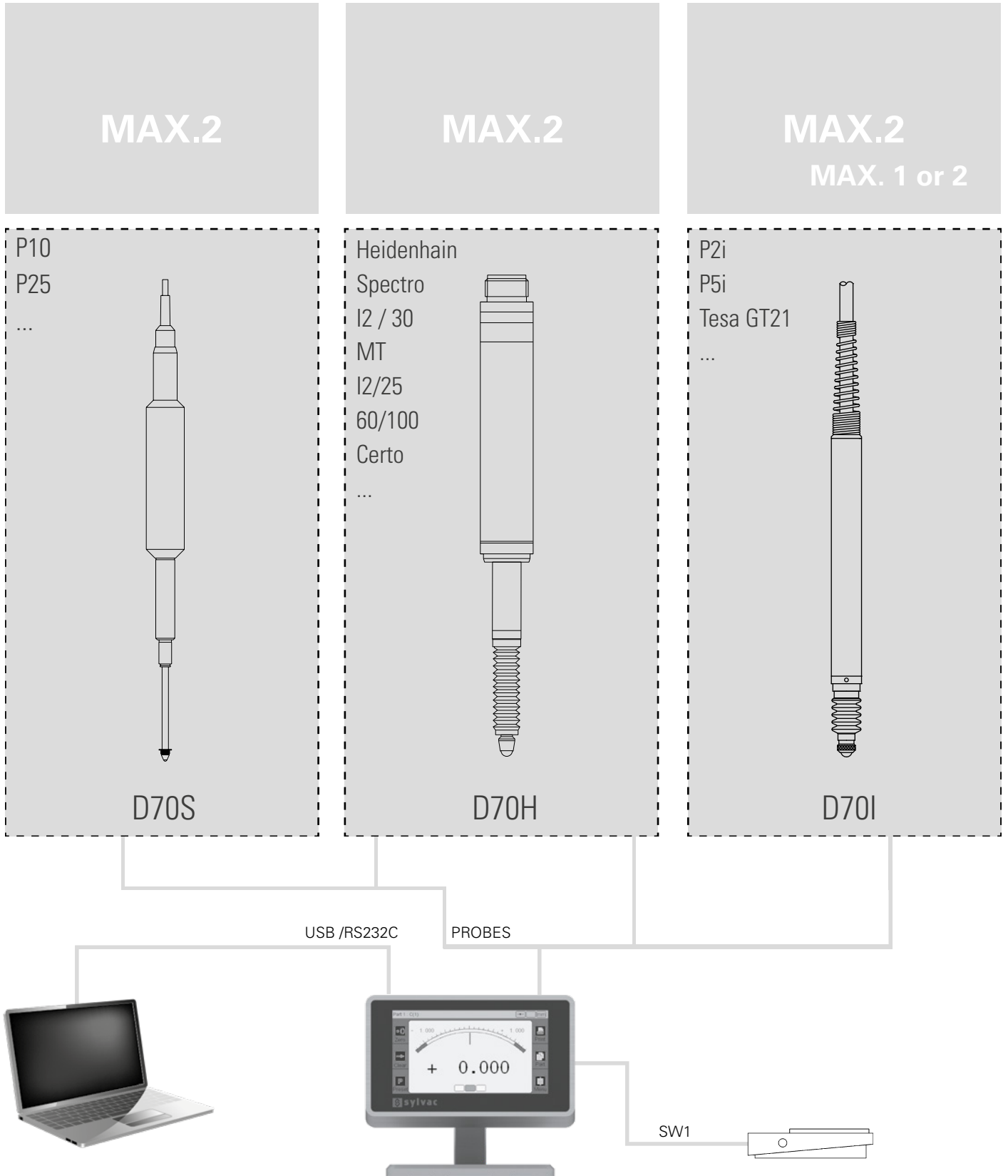
Digital display D70A

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

mini-USB

RS232

Air measurement

4.3'' touchscreen

Table stand

Output cable RS232
to RS232 (926.5609) or USB
(925.1142) or output cable
mini-USB sur USB (926.6001)

* plug and air gages available on request

H

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 **M-Bus Input**

⓫ **USB key input**

⓬ **Power-supply 24VDC**
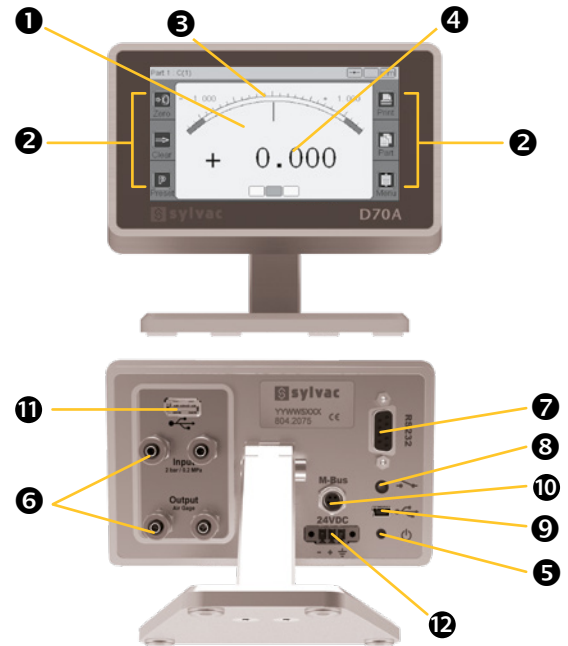
TECHNICAL SPECIFICATIONS

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

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

H

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

D70A

MAX.2

USB /RS232C

USB

MB-IO

SW1

+ 0.000
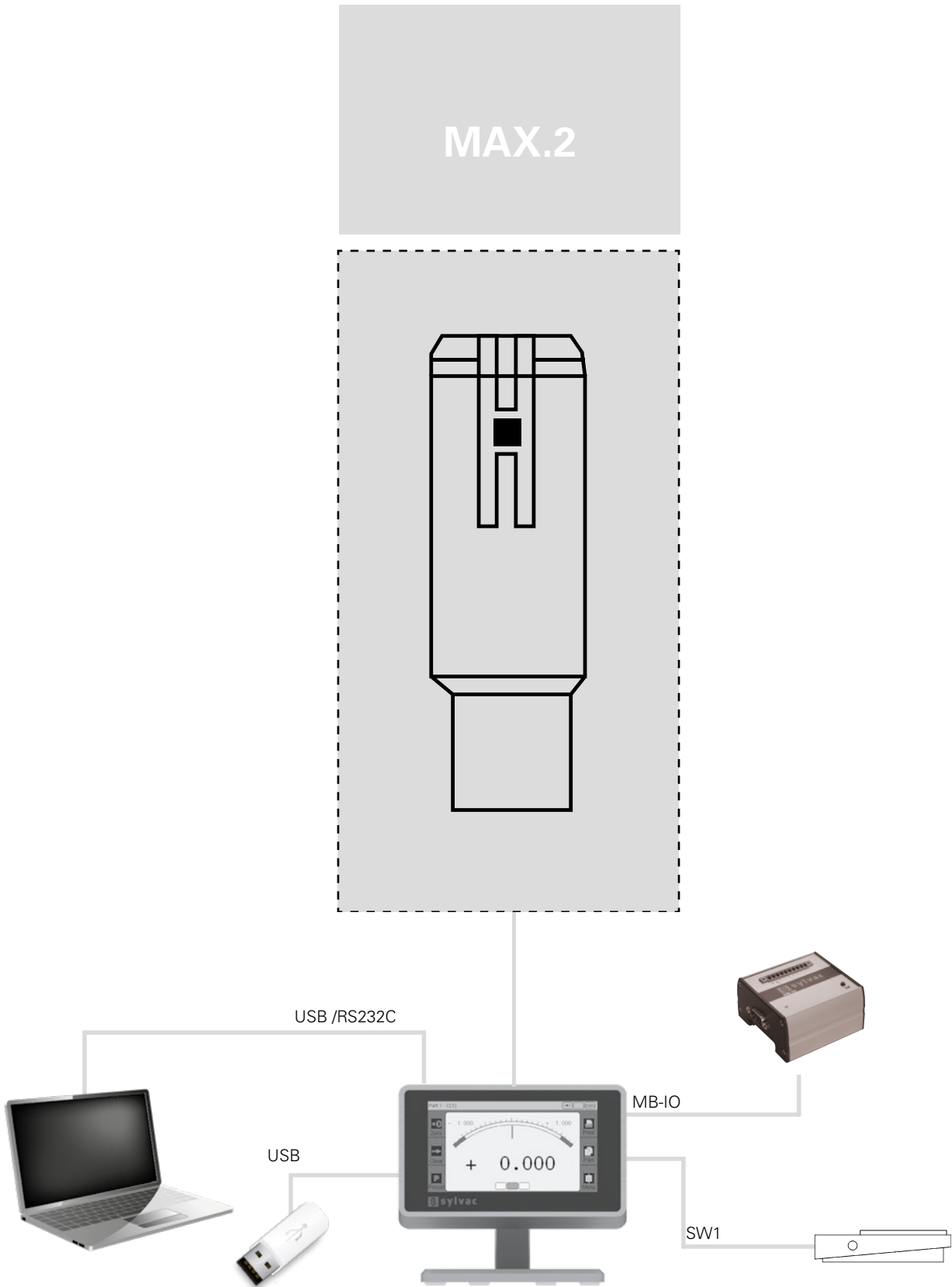
Multiplexer unit D200S

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)

Output cable USB to USB (804.1210) or output cable RS232 to RS232 (925.5609)
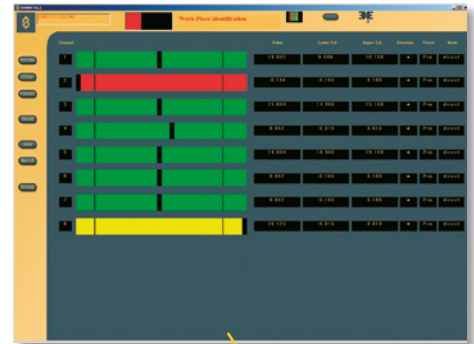
Tolerance indicators

Opto-coupled digital output rack

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

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

SWISS MADE

USB

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**
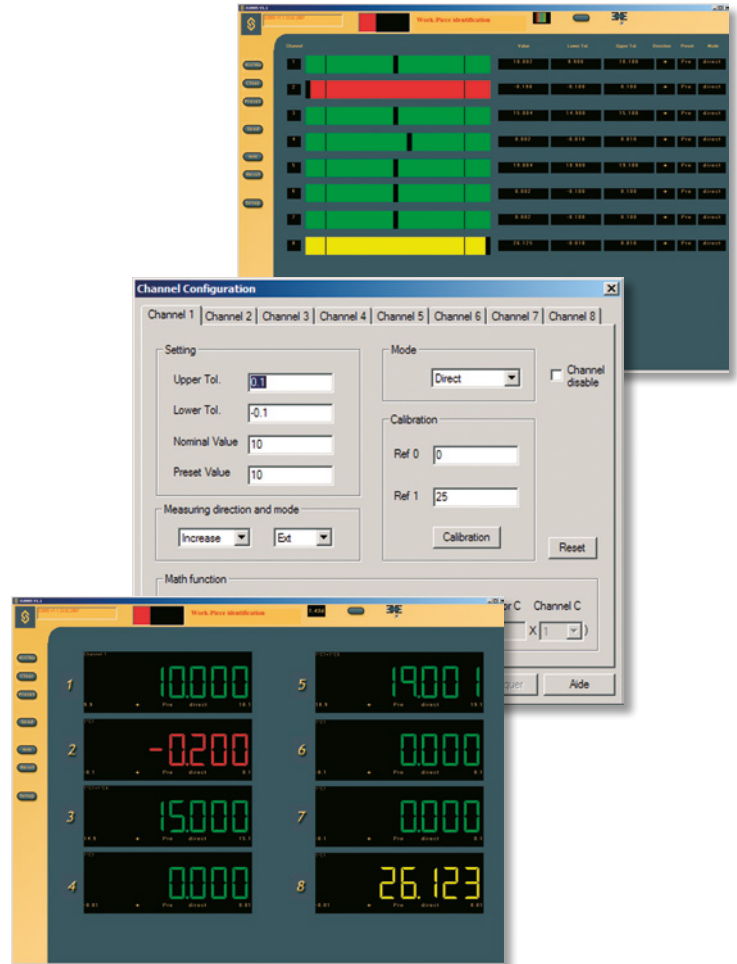
TECHNICAL SPECIFICATIONS

		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
Overall dimensions	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
Output data		USB / RS232 [1]
Programmable by PC		●

[1] see cables chapter

H

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
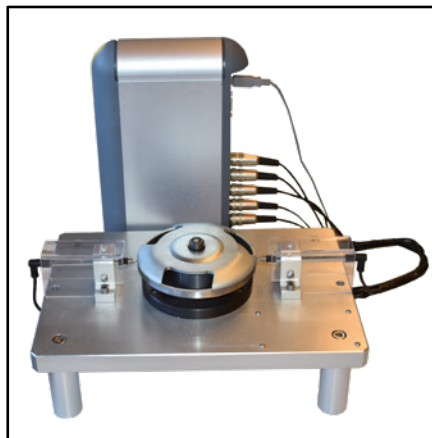
Capacitive probes connected to a D200S.

Multi-gauging application

Multiplexer unit

<div align="right">

D200S

</div>

POSSIBILITIES OF D110V PNEUMATIC LIFTER
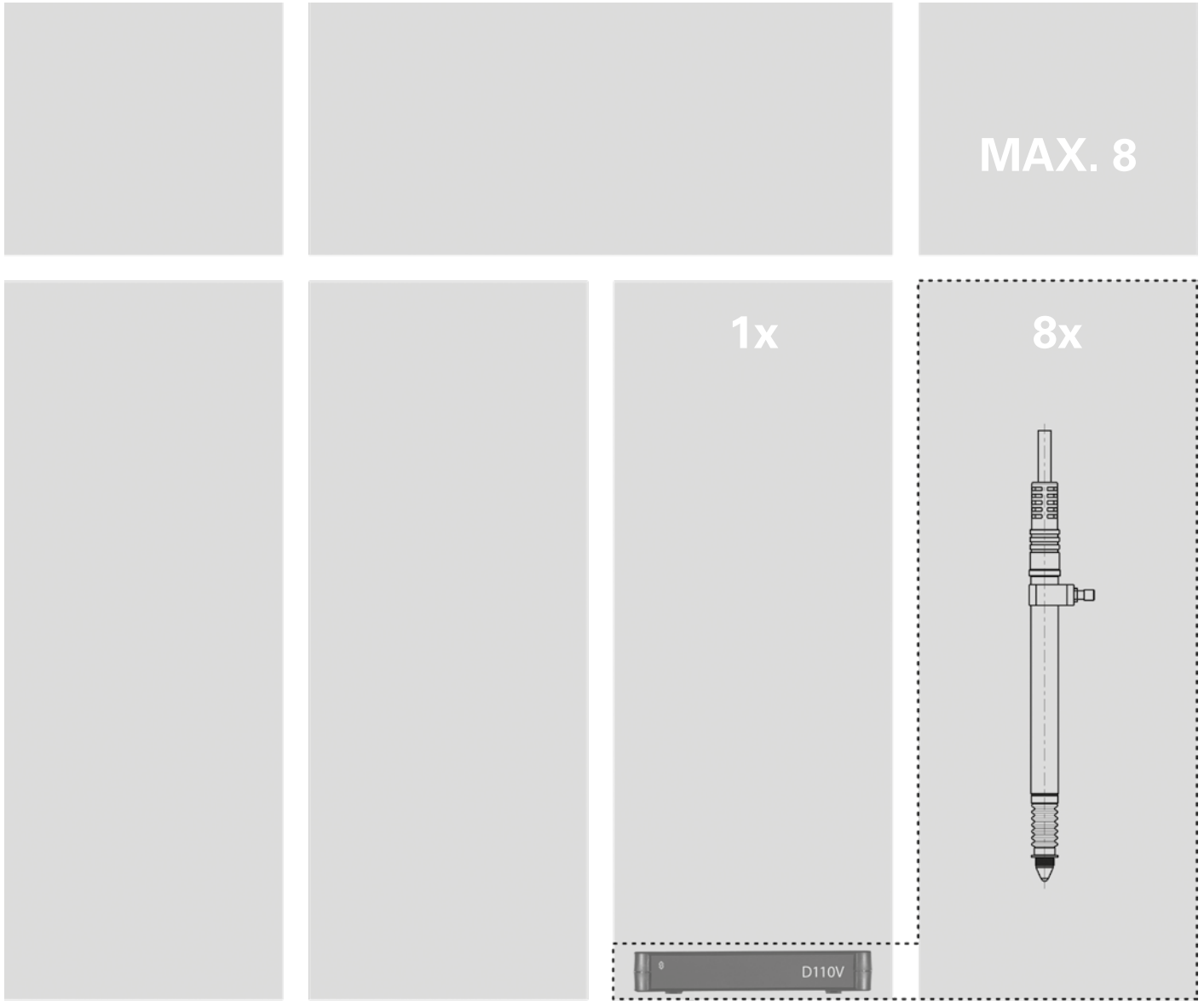
MAX. 8

1x

8x

D110V

USB / RS232C

OUTPUT

SW1

Multiplexer unit   D200S

POSSIBILITIES OF CONNECTION

MAX. 8   MAX. 8   MAX. 8

8x   8x   8x

P2...P25   P2...P25   P2...P25

H

Digital display

D300S V2
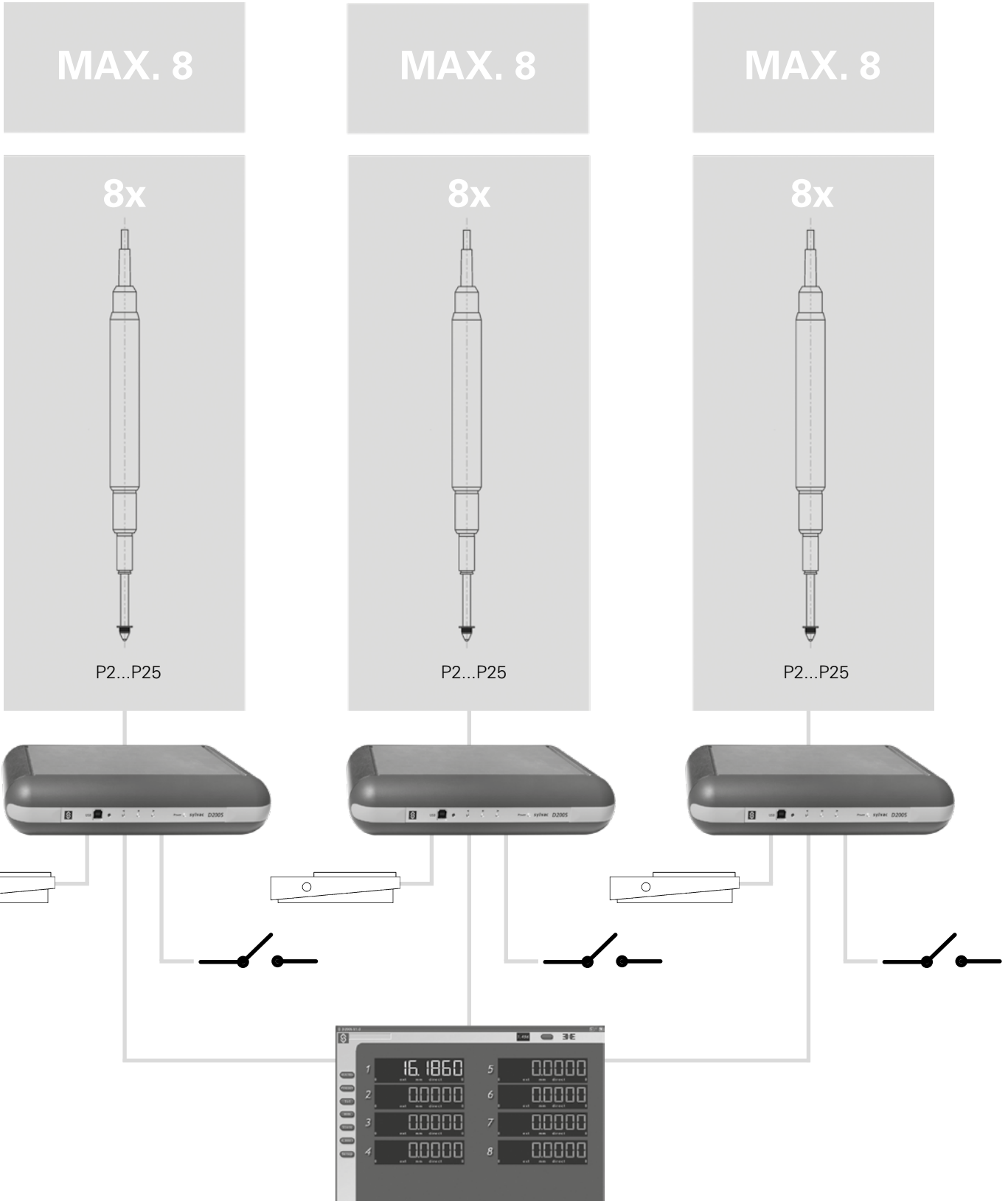
DESCRIPTION

- 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

- CPU 5 times faster that 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 instruments with Bluetooth® Wireless technology*

Output cable USB to USB (804.1210) and output cable RS232 to RS232 (925.5609)

Large touchscreen 8.5″ protected against liquids IP65

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

Ergonomic keyboard
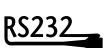
USB

RS232

* Dongle Smart required

H

Digital display

INTERFACE | HARDWARE

❶	Touchscreen 8.5 ''
❷	ON/OFF button for LCD
❸	Numeric keyboard
❹	Navigation keyboard
❺	ON/OFF switch
❻	Capacitive probes inputs
❼	RS-232 instrument input
❽	RS-485 input
❾	VGA output
❿	Opto-coupled digital output
⓫	2 inputs for external contacts
⓬	RJ-45 Ethernet
⓭	USB Device connector
⓮	6 USB Host inputs
⓯	24VDC connector
⓰	Audio jack connector
⓱	RS485 connector for connecting MB-X modules
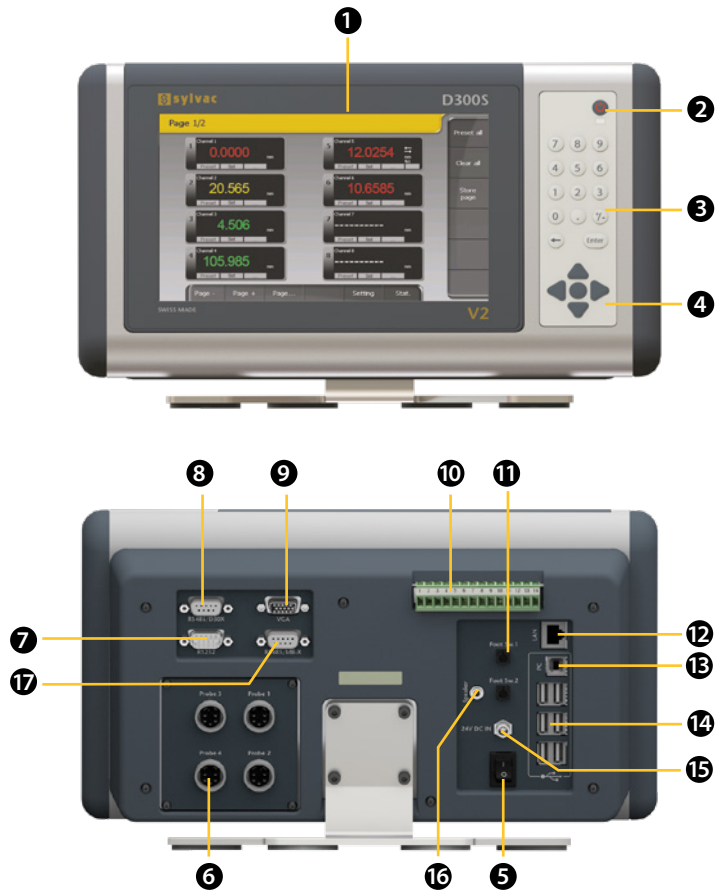
TECHNICAL SPECIFICATIONS

		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 [1]	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		
Output data		USB / RS232		
Programmable by PC		●		

[1] Probe and unit calibrated
* Extandable to 32 probes and 30 USB instruments
** On request, all the units can be provided with M-Bus modules connectors

H

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® wireless technology

Multiple instruments connection through M-BUS inputs

Dial gauges with Bluetooth® wireless technology connected to D300S

H

POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 6
Power supplied by D300S

MAX. 30
Power supplied
by USB-HUB

MAX. 30
Via D200S

6x USB
1x RS-232

4x

8x

SIMPLEX

DUPLEX

D200S

P2...P25

USB

USB

USB

OUTPUT

USB

SW1

SW2

H

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

OUTPUT

USB

USB

SW1

SW2
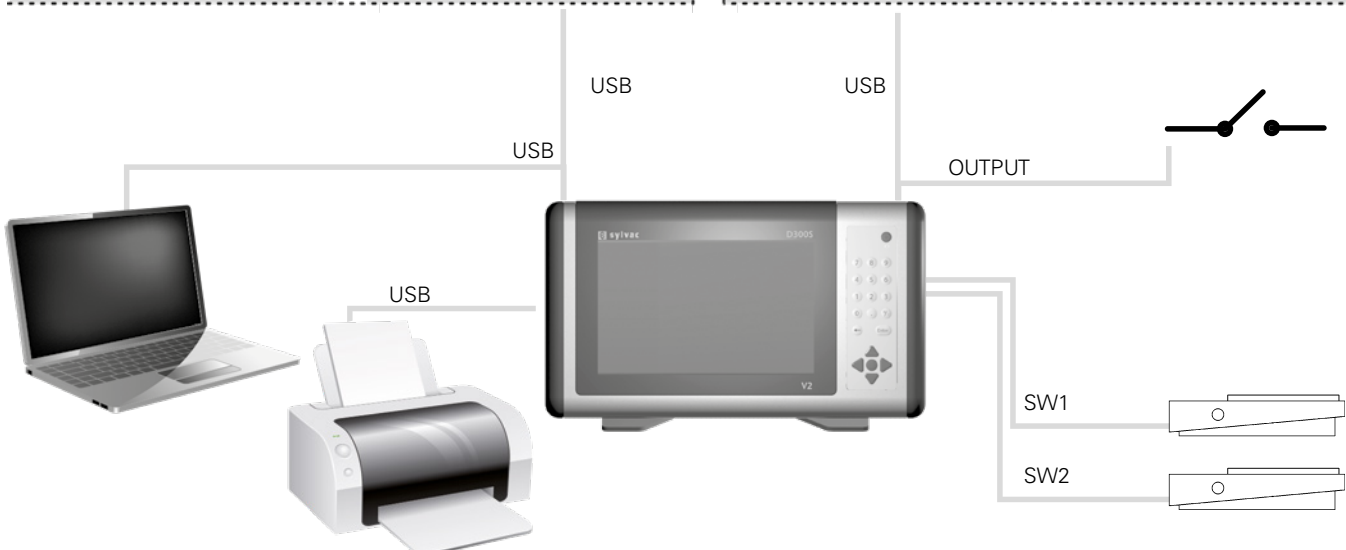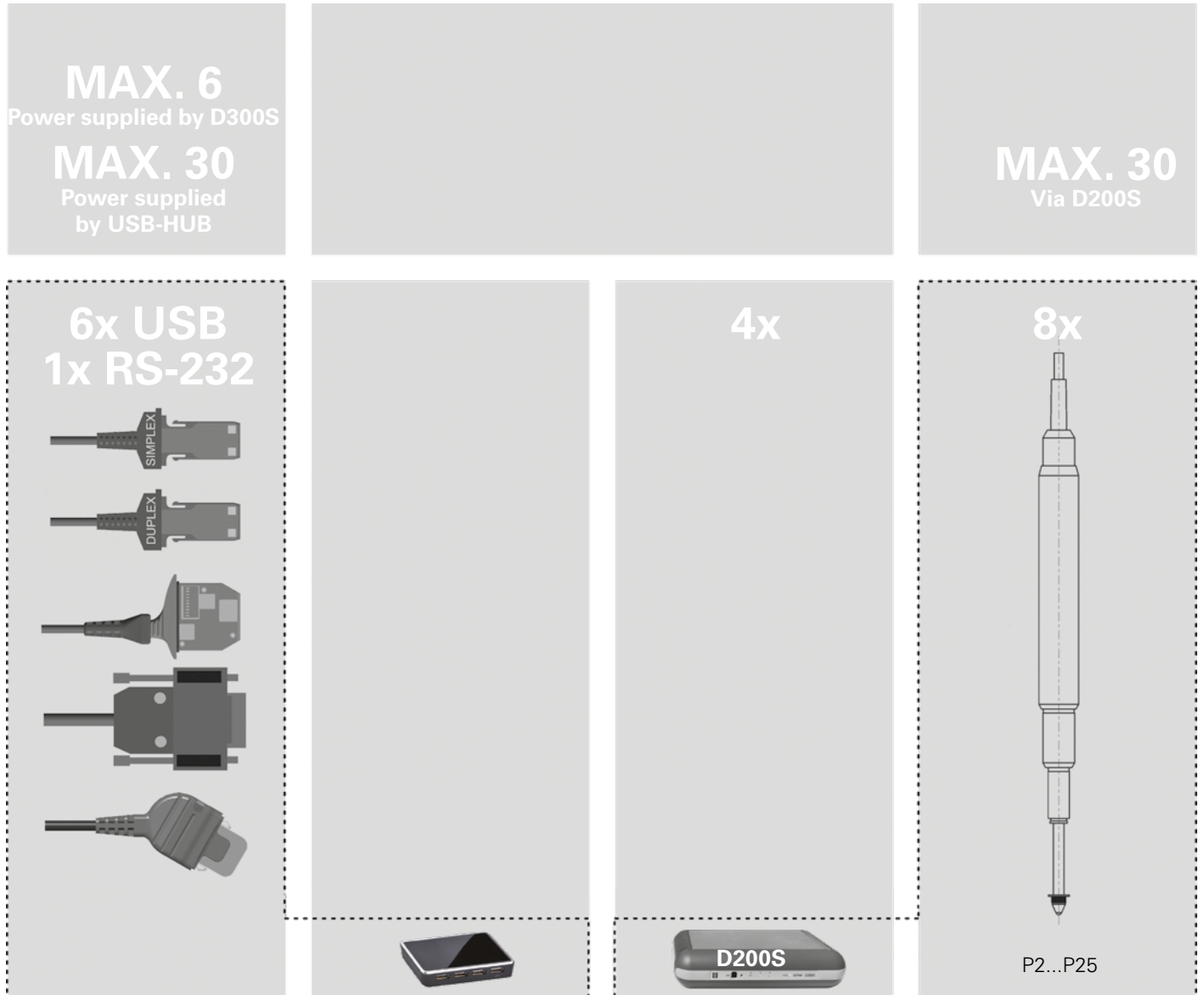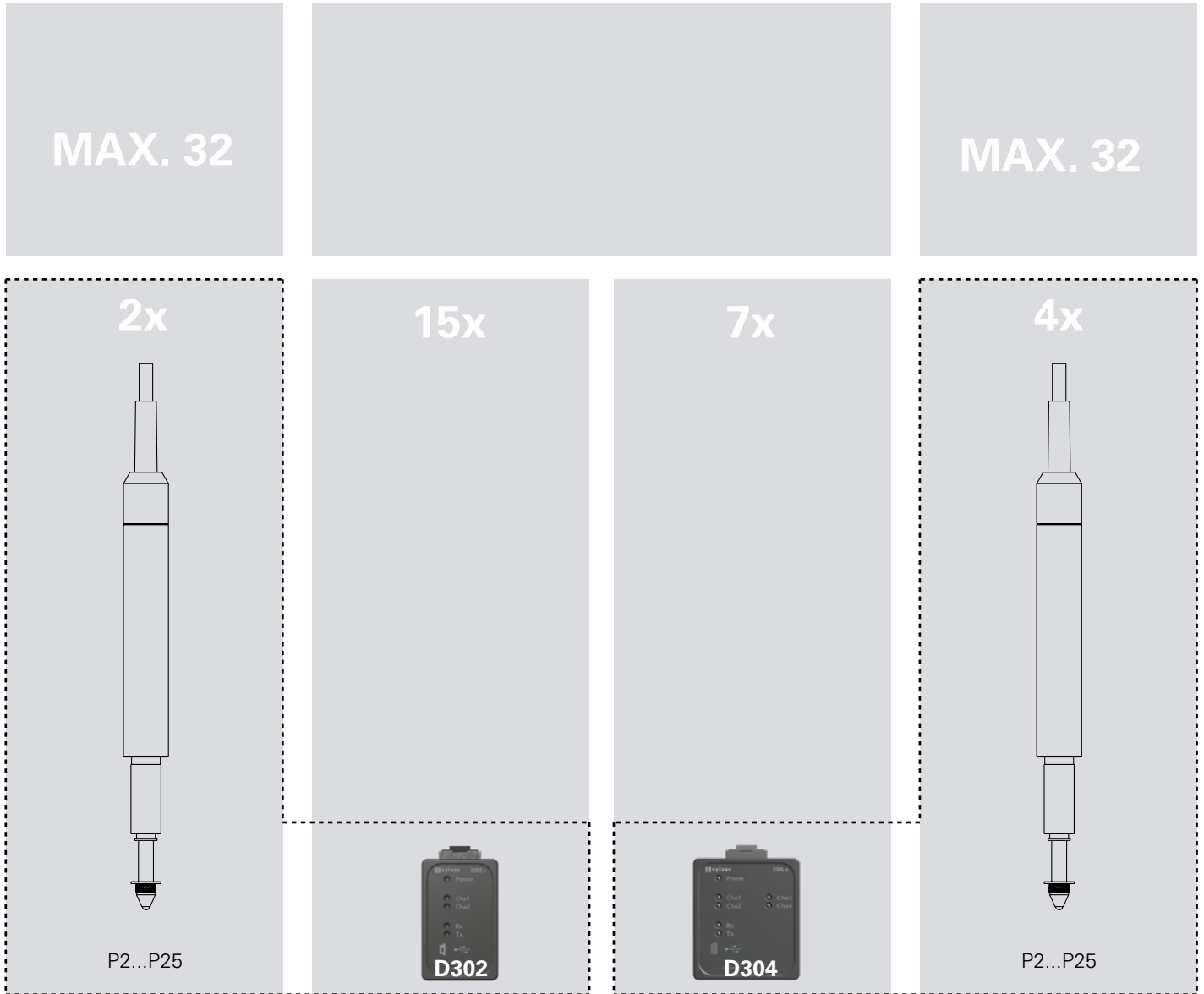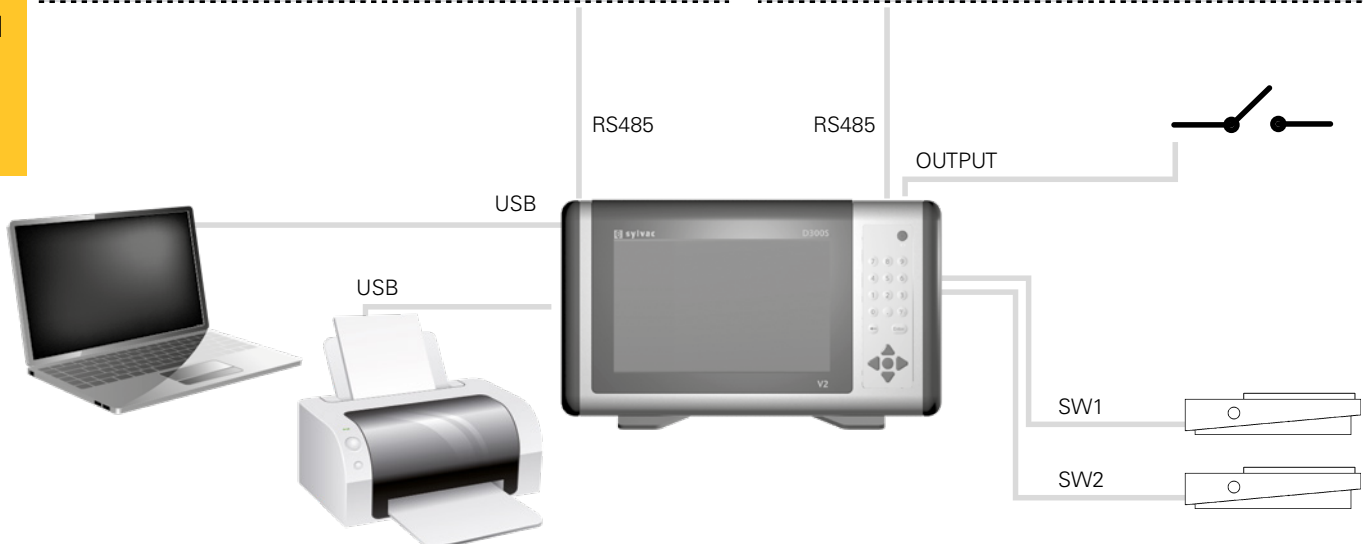
Digital display

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*

2 - 8x*

P2i / P2iP / P5i / P5iP

P2i / P2iP / P5i / P5iP

* Depends of the M-Bus

RS485

RS485

OUTPUT

USB

USB

SW1

SW2
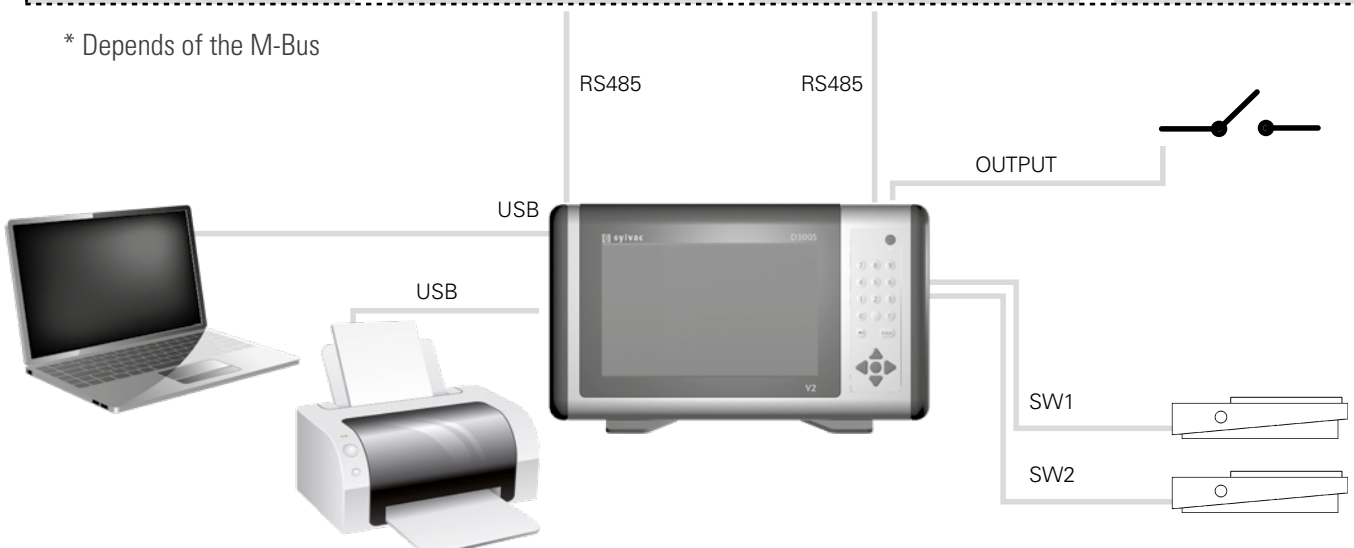
POSSIBILITIES OF CONNECTION WITH BLUETOOTH® WIRELESS TECHNOLOGY

MAX. 8

Instruments

Bluetooth®

1x

981.7100

USB

USB

OUTPUT

USB

SW1

SW2

H

Digital display

D400S
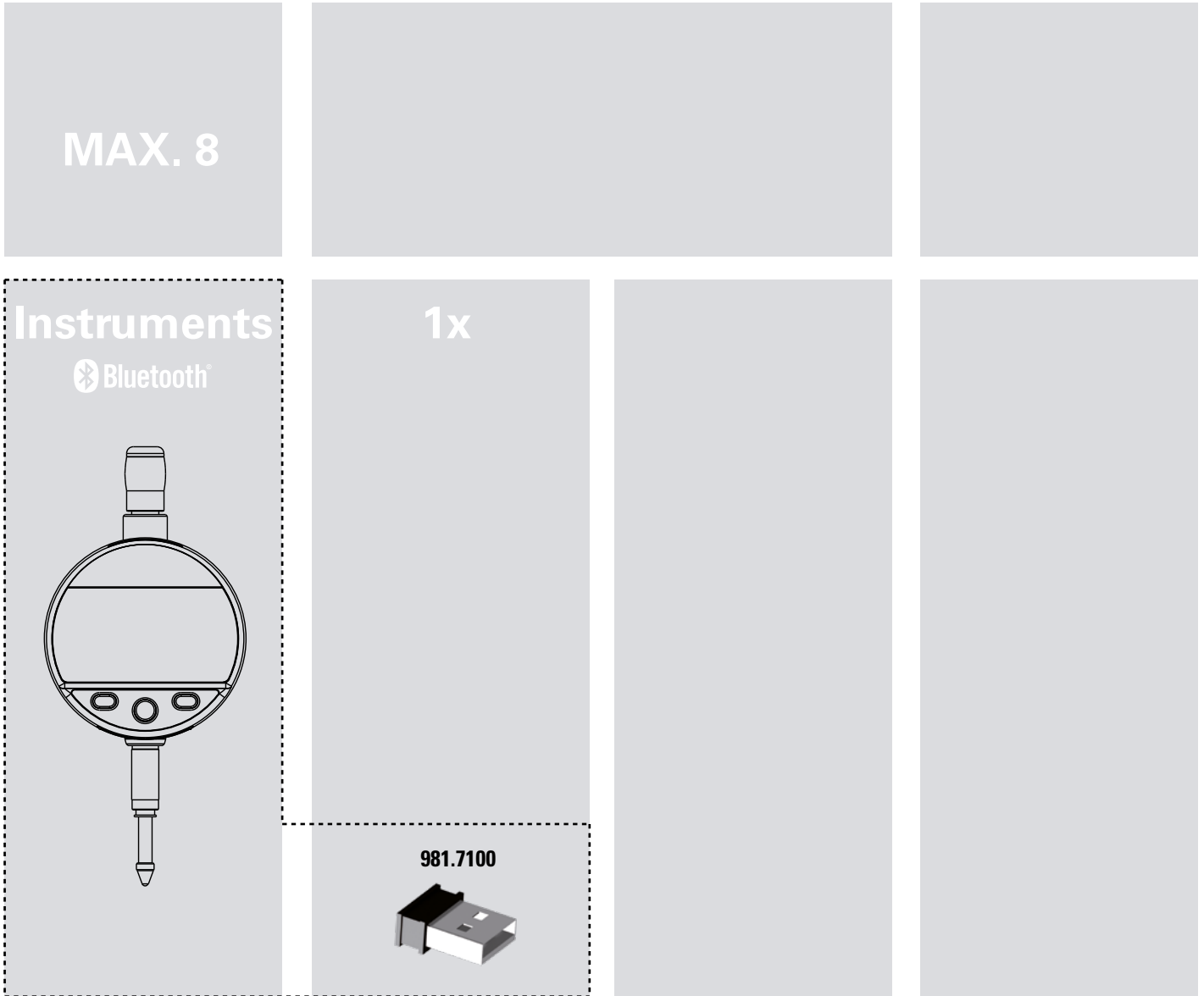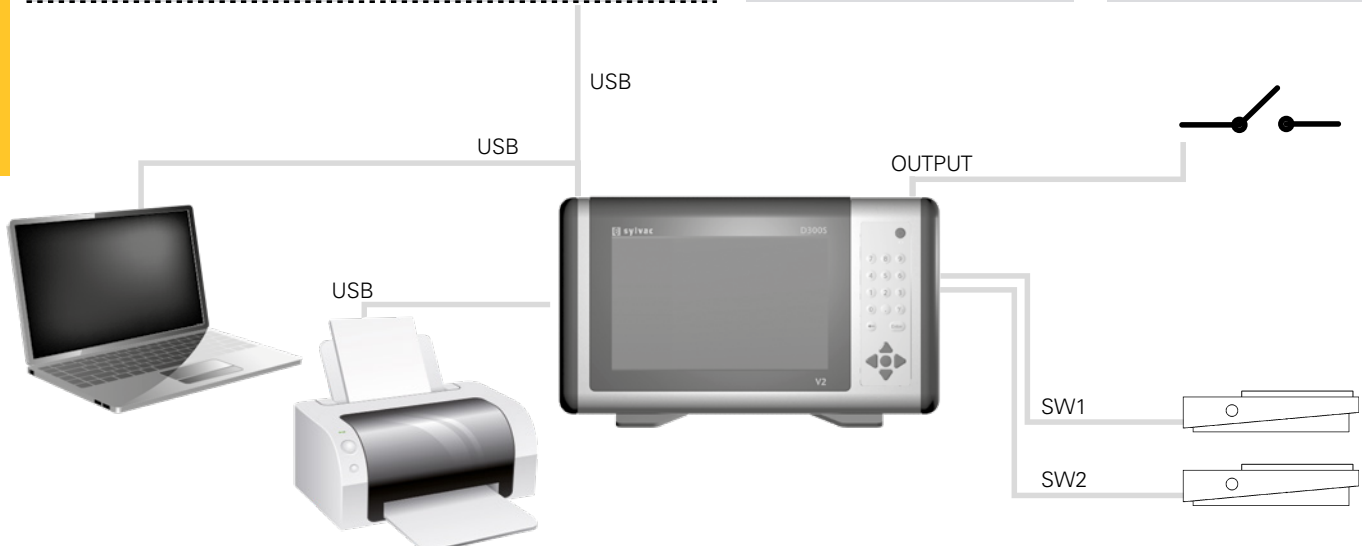
DESCRIPTION

- 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

Output cable USB to USB (804.1210) or RS232 (925.5609)

USB

Digital display

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**
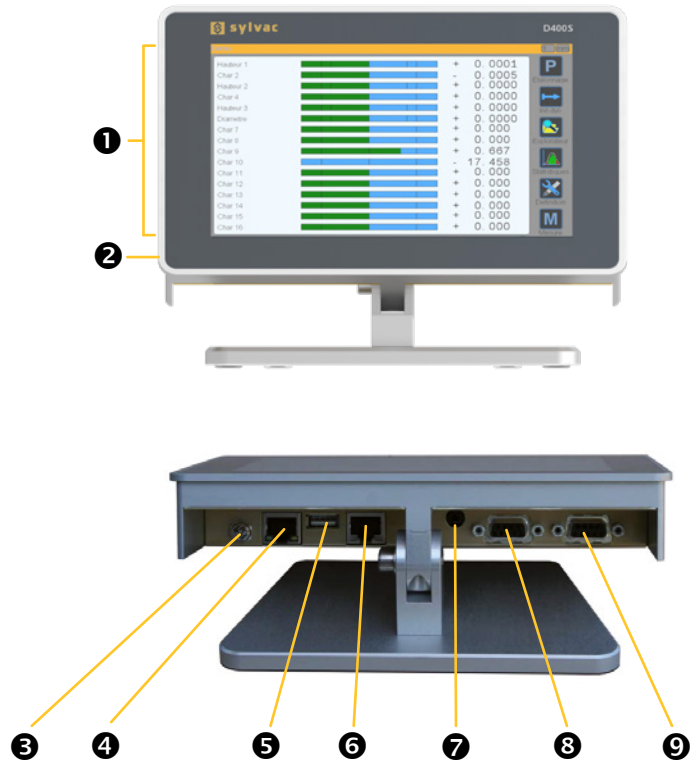
TECHNICAL SPECIFICATIONS

		804.2400
Model		D400S
Overall dimensions	mm	200x143x151.6
Weight	kg	1.3
Case		Aluminium
Protection rating according to IEC 60529		IP65 (front face)
Output data		USB / RS232
Programmable by PC		●

H

Digital display

D400S

BASIC INSTRUMENT

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

APPLICATIONS

Probes connection through M-BUS inputs
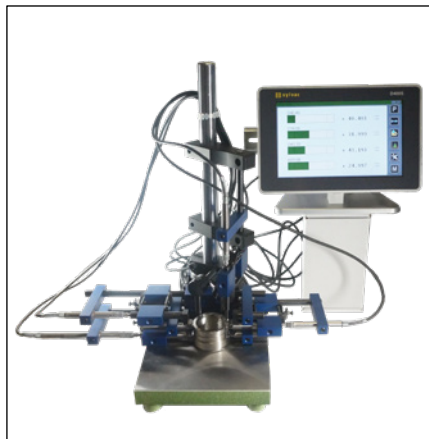
Inductive probes connection on a jig

Probes and indicators connection through M-BUS inputs

POSSIBILITIES OF CONNECTION WITH ACCESSORIES

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

MAX.99

M-BUS

M-BUS

USB

OUTPUT

USB

SW1

H

![Sylvac logo]
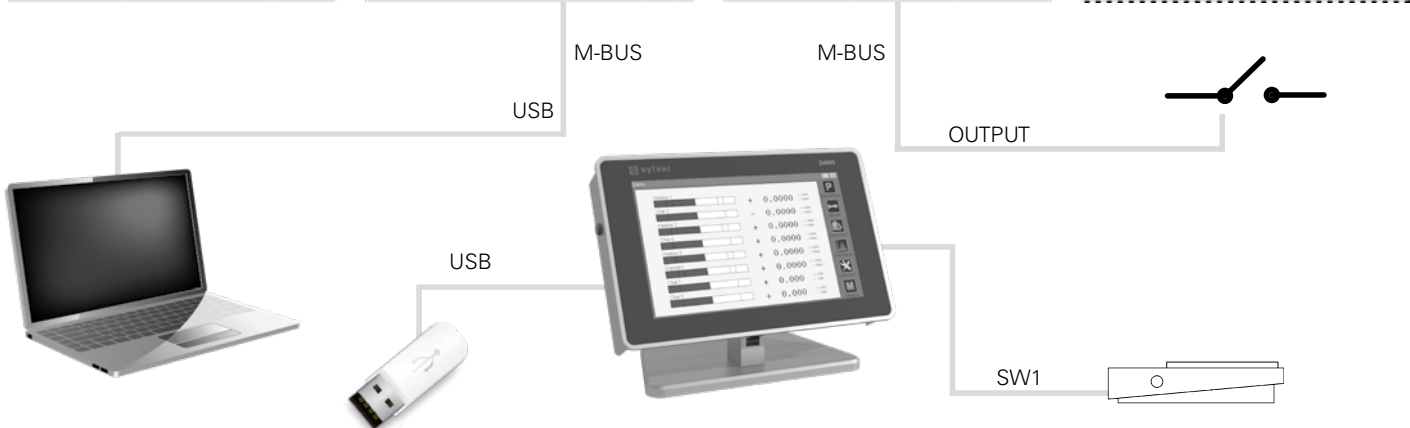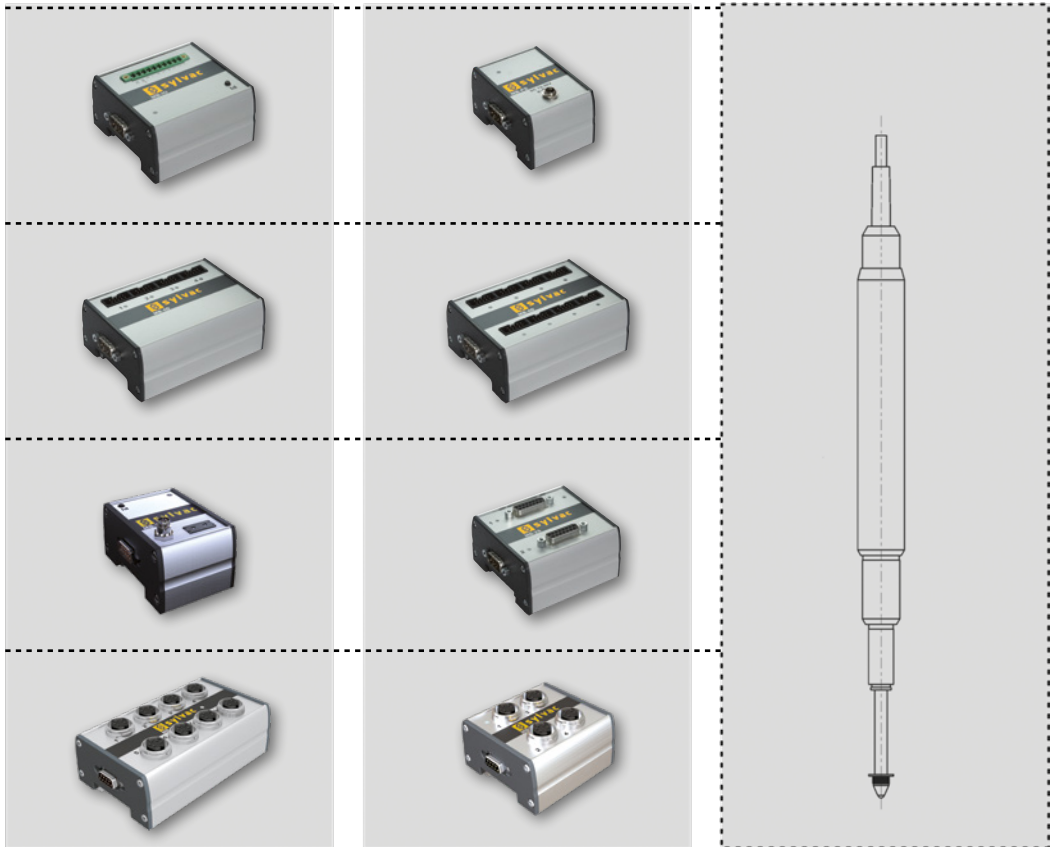
Multiplexer unit   # D302 / D304

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

Output cable RS485 to
RS485 (925.5609)

Output cable mini-USB to USB
(926.6001)

H

SWISS MADE

RS485

mini-USB

228
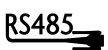
Multiplexer unit

D302 / D304

HARDWARE DESCRIPTION

1. **LED Power**
2. **LEDS 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. **Analogic output / 24 VDC (only version a)**
12. **Probes input**
13. **9V power supply input**
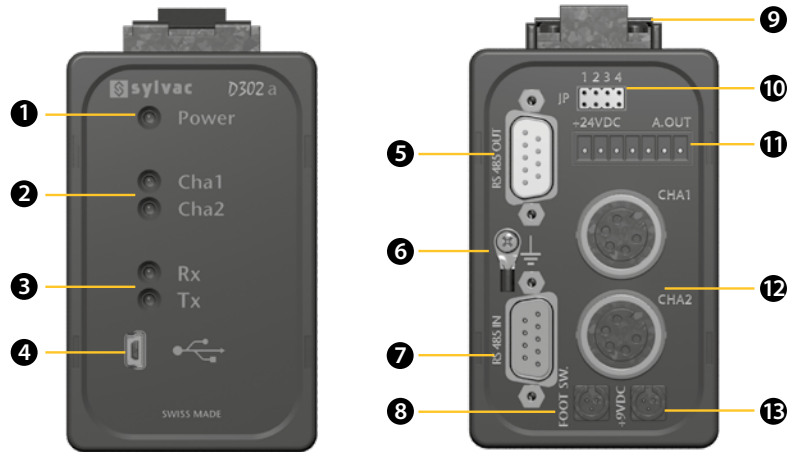
TECHNICAL SPECIFICATIONS

		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 [1]	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			
Output data		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

H

Multiplexer unit

M-Bus

DESCRIPTION

- Muliplexer 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

Multiplexer units M-Bus

RS485

HARDWARE DESCRIPTION

❶ **Probes input**

❷ **M-Bus input**

❸ **M-Bus output**

❹ **DIN mounting groove**

❺ **LED / Power module**

❻ **DIN rail**
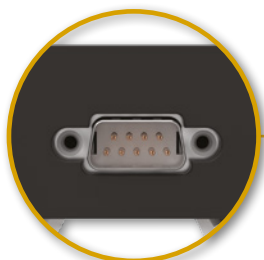
Output cable RS485 to RS485 (925.5609)
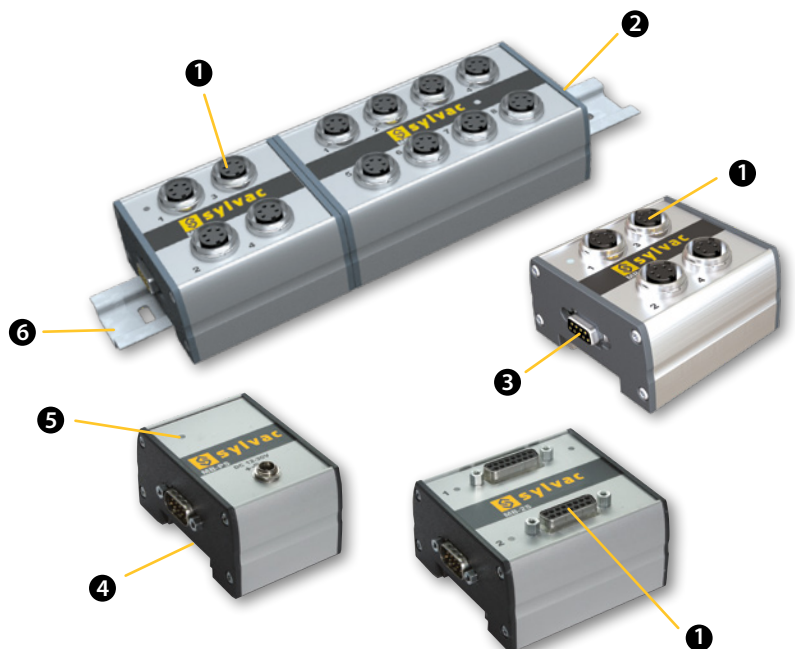
Multiplexer unit

TECHNICAL SPECIFICATIONS

	804.2104	804.2108	804.2122	804.2114	804.2118	804.2105
Modele	MB-4C	MB-8i	MB-2S	MB-4D	MB-8D	MB-4P
Instrument type	Sylvac capacitive probes	Inductive[1]	Heidenhain probes (11µmA/1VPP)	Digimatic		Probes P12D
Compatibility			D300S & D400S			
Dimensions (L x h x w) mm	107x42x74	131x44x74	82x43x74	107x39x74	107x39x74	107x42x74
Weight kg	0.2	0.3	0.2	0.2	0.2	0.2
Inputs	4	8	2	4	8	4
Case			Anodized aluminium profile			
Output data			RS 485			

[1] Half-bridge: see 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	Instruments with Bluetooth® wireless technology	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			
Output data			RS 485			

MB-4C

MB-8i

MB-2S

MB-4D

MB-8D

MB-4P

MB-IO

MB-PS

MB-RS

MB-TP

MB-BT

MB-AG

BASIC INSTRUMENT

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

H

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 multplexer units

Digimatic instruments connected to a MB-4D

Probes connected to a MB-8i
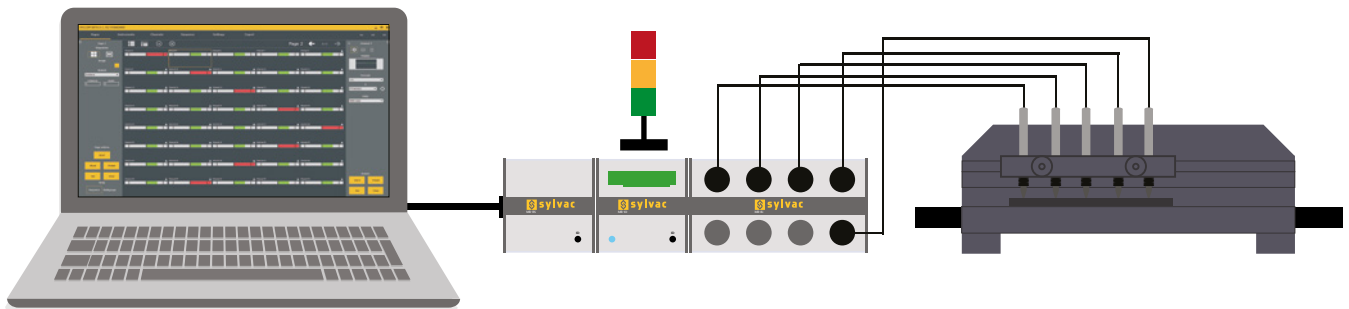
Connection of probes via Mbus on Sylcom

Display units

ACCESSORIES

			D50S	D62S	D70S	D70H	D70I	D70A	D200S	D300S	D302 D304	D400S	P12D
	904.1108	D108-additional 8 input unit for probes											
	904.1112	D110V-control unit with 16 vacuum outputs							●	●			
	904.4200	Charging set 100-240V / 9V	●	●					●			●	
	904.4205	EUR cable, included in 904.4200	●	●					●			●	
	904.4204	UK cable, included in 904.4200	●	●					●			●	
	904.4203	USA/JPN cable, included in 904.4200	●	●					●			●	
	904.4201	CH cable, included in 904.4200	●	●					●			●	
	804.4000	Charging set 100-240V / 24V								●			
	904.4001	EUR cable included in 804.4000								●			
	904.4003	UK cable included in 804.4000								●			
	904.4002	USA/JPN cable included in 804.4000								●			
	804.4010	Charging set 100-240V / 24V										●	
	804.4011	EUR cable included in 804.4010										●	
	804.4013	UK cable included in 804.4010										●	
	804.4012	USA/JPN cable included in 804.4010										●	
	904.4101	External contact (footpedal)	●	●	●				●	●	●	●	
	904.4102	Footpedal (jack)				●	●	●					
	926.7022	Footpedal Smart								● [1]			
	904.6001	Dust cover								●			
	804.1211	Connection cable D200S - D110/V							●				
	804.2104	MB-4C								●		●	
	804.2108	MB-8i								●		●	
	804.2122	MB-2S								●		●	
	804.2114/18	MB-4D & MB-8D								●		●	
	804.2130	MB-IO								●		●	
	804.2140	MB-PS								●		●	
	804.2160	MB-RS											
	804.2170	MB-TP								●		●	
	804.2180	MB-BT										●	
	804.2190	MB-AG										●	
	804.2105	MB-4P											●

[1] Dongle Smart required

H

233

Display units

ACCESSORIES
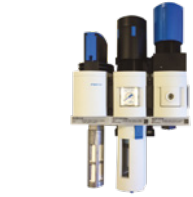
	Ref.	Description	D50S	D70S	D70H	D70I	D70A	D200S	D300S	D302 D304	D400S	MB-AG
	804.2203	Air kit					●					
	804.2202	Bracket for panel mounting					●					
	804.4101	Restrictor Ø 0.3mm					●					●
	804.4102	Restrictor Ø 0.4mm					●					●
	804.4103	Restrictor Ø 0.5mm					●					●
	804.4104	Restrictor Ø 0.7mm					●					●

H

MEASURING BENCH
PS15/16/17

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

Bench table   PS15

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 µm 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 µm and a repeatability of 0.2 µm 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 Ø 1.5 mm (908.2175)
- Compatible with Sylvac Ø 1.5 mm and Cary type spindle

Probe or dial gauge fixation

Standard anvils

Fixation table

Equipped with two retraction levers (left and right)

I

SWISS MADE
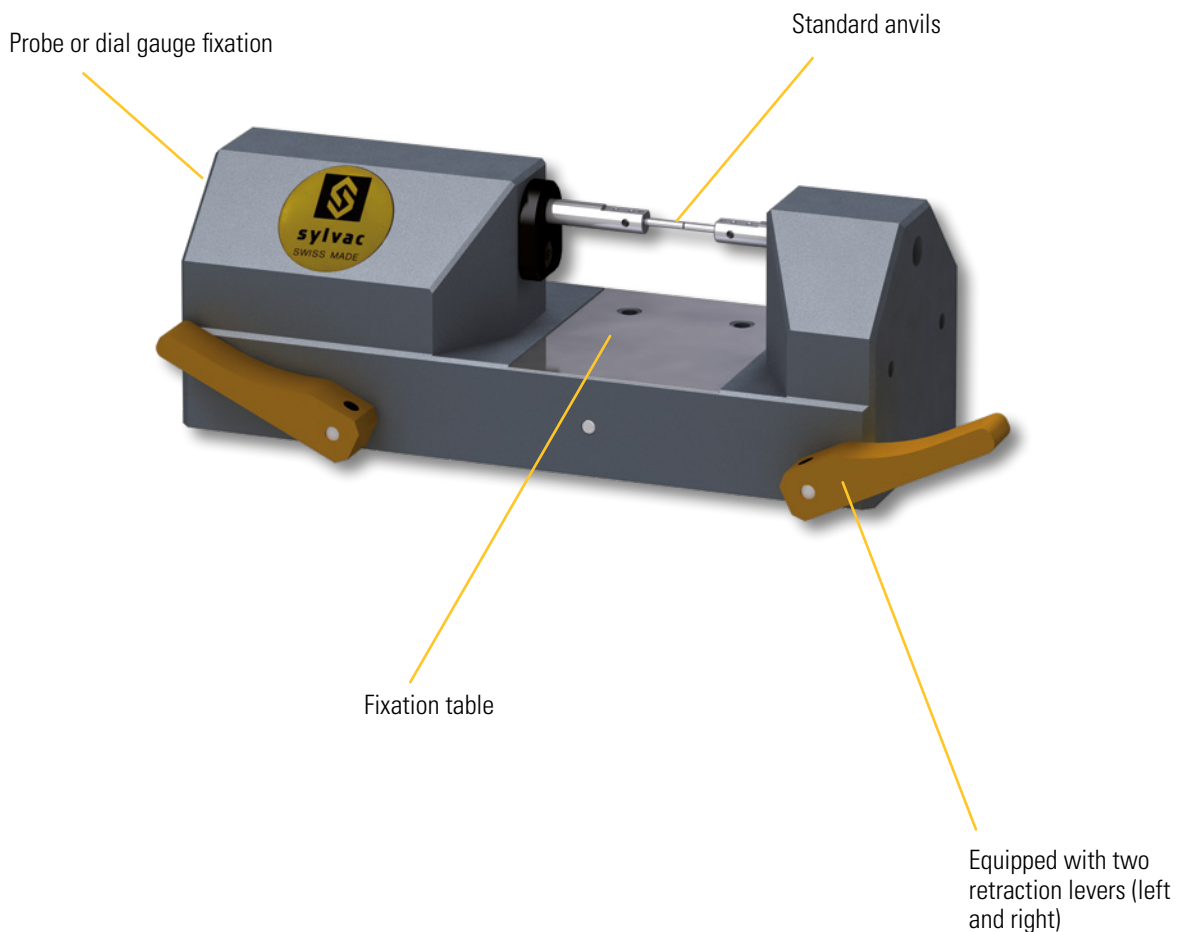
Bench table

PS15

DIMENSIONAL DRAWINGS

ECHELLE 1:1

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

Bench table

PS15

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 µm and a repeatability of 0.2 µm 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

Standard anvils

Retraction levers

Table 908.2172 (option)

Bench table

DIMENSIONAL DRAWINGS

ECHELLE 1:1

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

I

Bench table

TABLES, PLATES AND LAPPING

N°	Designation	PS15BH	PS15BV / BV+
908.2170	Supporting table adjustable in XYZ	●	
908.2160	Supporting table with fine adjustement XYZ	●	
908.2161	Supporting table with fine adjustement 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.

I

APPLICATIONS
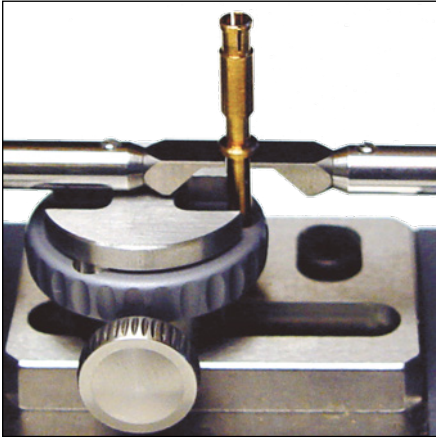
XYZ table with plate with fine adjustment.
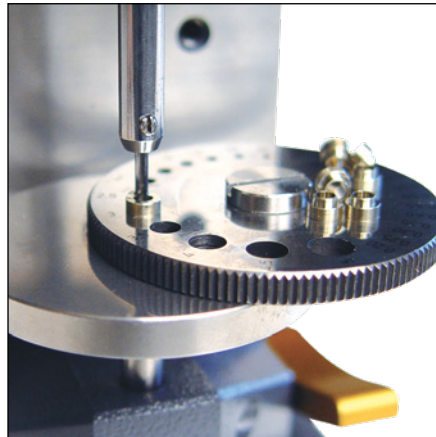
Measurement of small parts with PS15V+and rotation 25 holes support
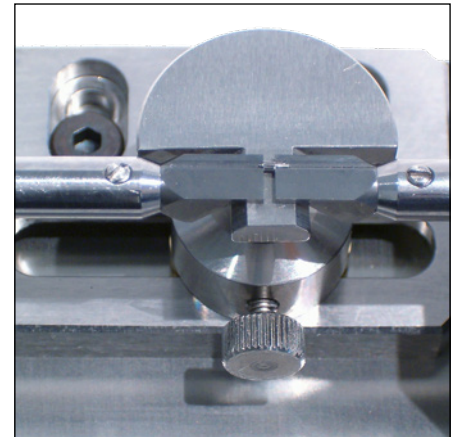
Special anvils
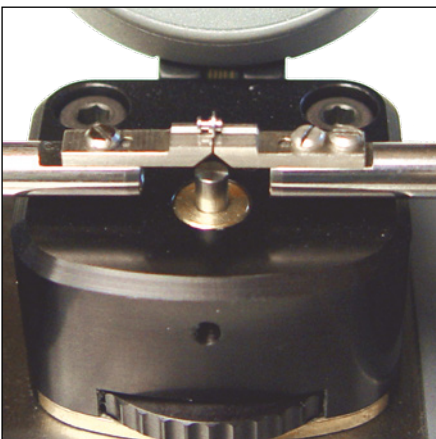
Table with plate Ø 3 mm and fine adjustment. Indication of the height integrated.

Multi-functional measuring station
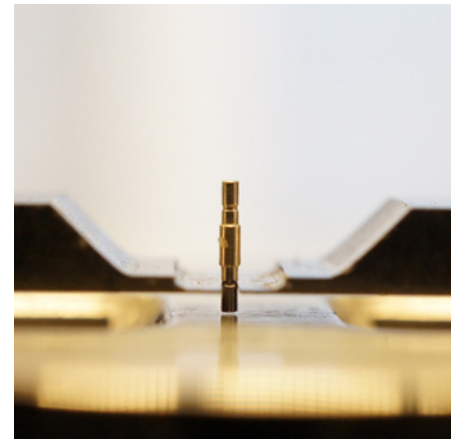
Gear measuring anvils. On request

Bench table

PS16 V2

- **Integrated Bluetooth® Wireless 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 and Proximity

- Standard measuring anvils Ø 1.5 mm

Built-in
Bluetooth®

Cable output Proximity to USB
(926.6721) or RS232 (926.6723)

Standard anvils

Integrated display

Fixation table

Release lever

SWISS MADE

Built-in Bluetooth®

USB
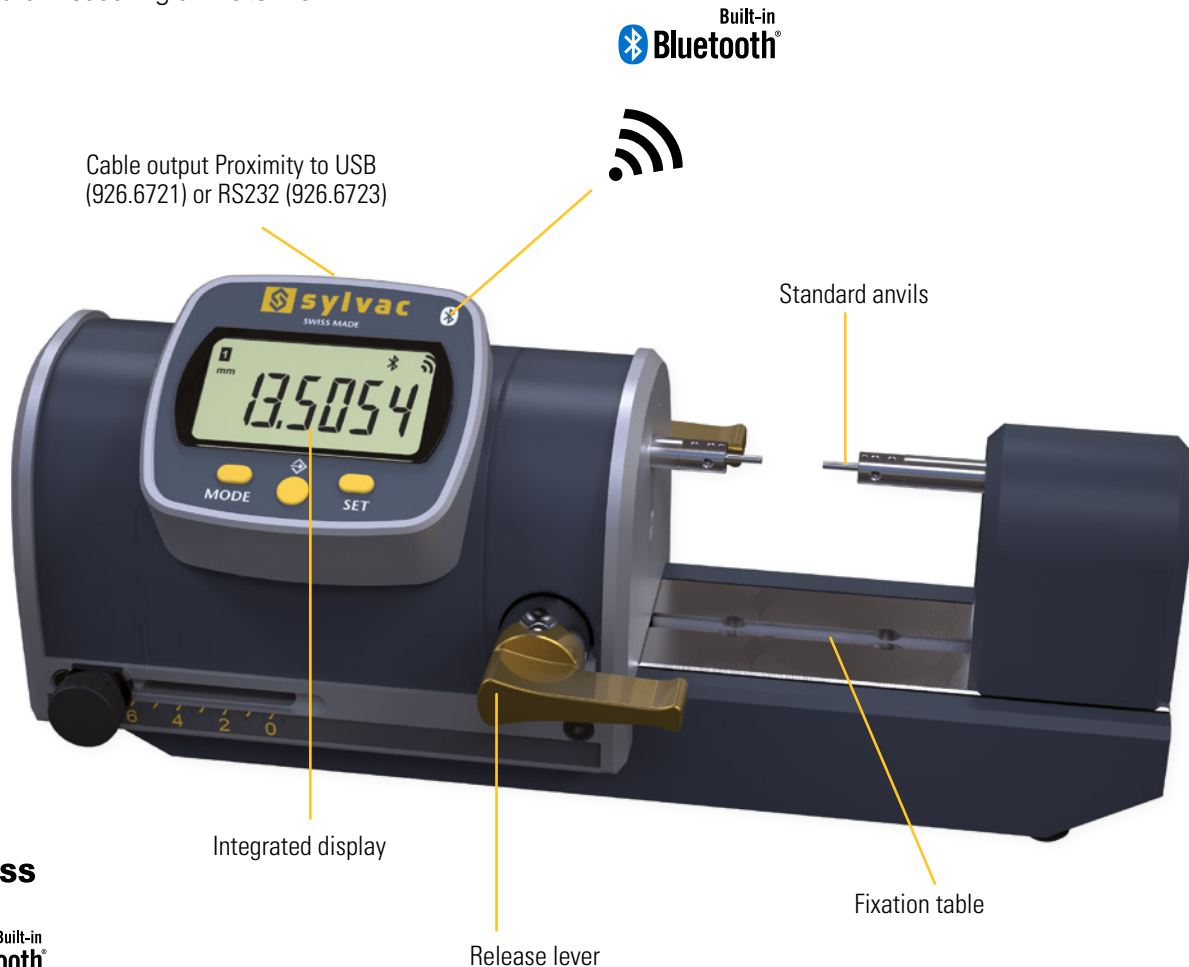
PROXIMITY

WATER RESISTANT

IP67

Cable output mini-USB to USB
(926.6001)
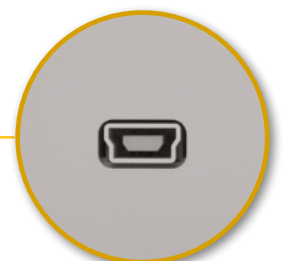
# Bench table

PS16 V2

DIMENSIONAL DRAWINGS

SMART
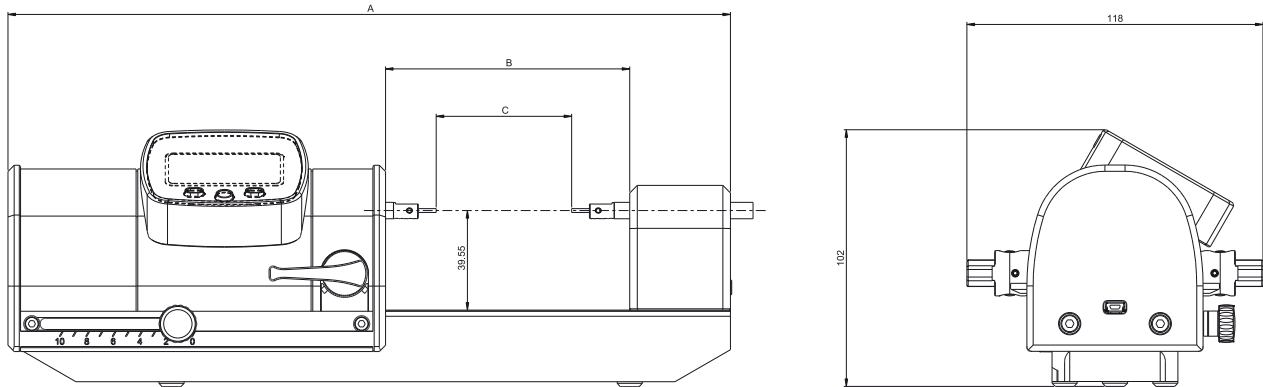
TECHNICAL SPECIFICATIONS

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 [1]	
Weight	kg	3.6	4.2
Output data		Bluetooth® wireless technology* / RS232 / USB	
Anvils clamping dimension	mm	Ø 1.5	
Cary compatibility		●	
A	mm	232	287
B	mm	66	97

[1] ± 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

<div align="right">SMART</div>

- LV version are designed to check internal dimensions up to 70 mm (depends on model)
- **Integrated Bluetooth® Wireless 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 and Proximity
- Standard measuring anvils 0.4 mm
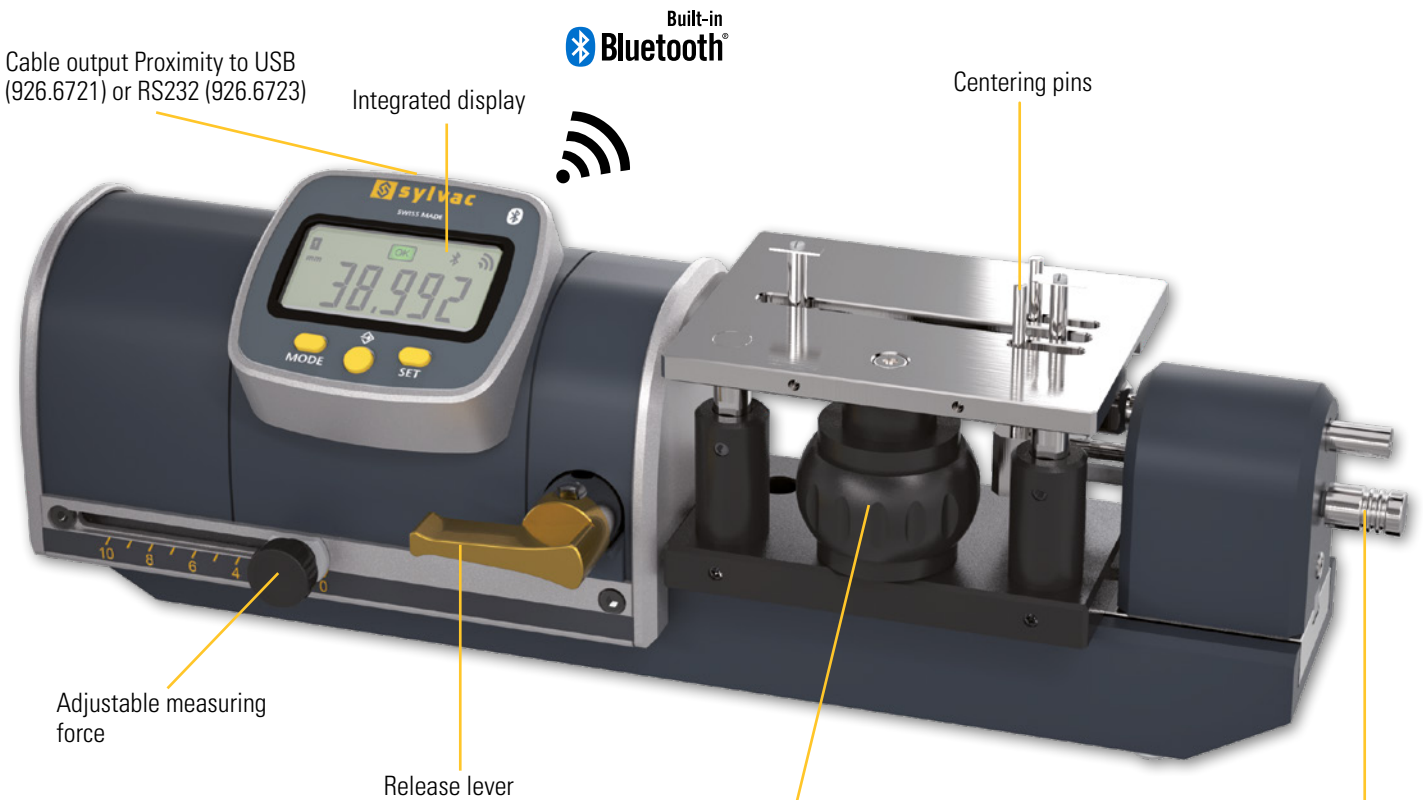
Built-in
Bluetooth®

Cable output Proximity to USB
(926.6721) or RS232 (926.6723)

Integrated display

Centering pins

Adjustable measuring force

Release lever

Quick setting of the table

Auto-centering pins

SWISS MADE

Built-in Bluetooth®

USB

PROXIMITY

WATER RESISTANT

IP67

Cable output mini-USB to USB
(926.6001)
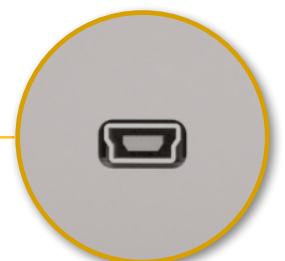
Bench table

DIMENSIONAL DRAWINGS
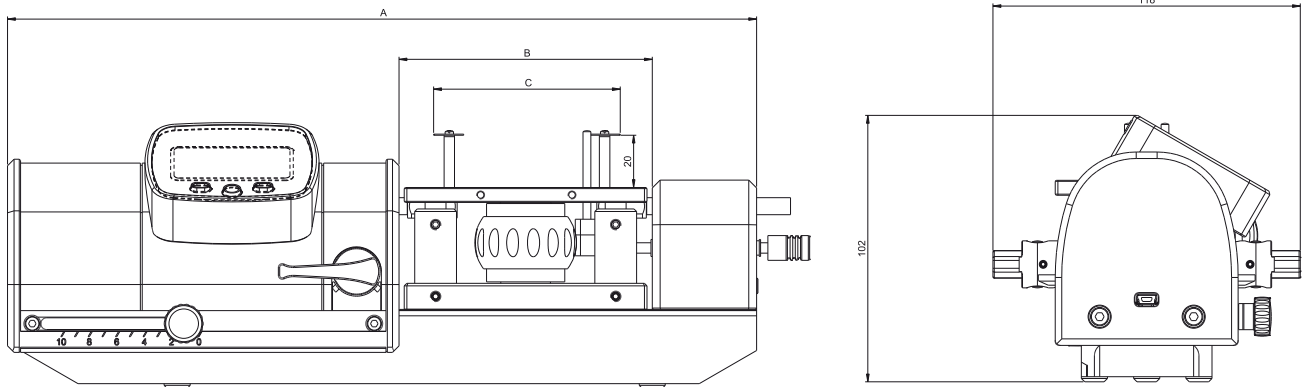
TECHNICAL SPECIFICATIONS

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 [1]	
Weight	kg	5.1	5.1
Output data		Bluetooth® wireless technology* / RS232 / USB	
Anvils clamping dimension	mm	Ø 1.5	

[1] ± 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® Wireless 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 and Proximity
- Set including: bench table PS16VP25 with integrated probe, table, anvils and 2 setting rings

Cable output Proximity to USB
(926.6721) or RS232 (926.6723)

Integrated display

Built-in
Bluetooth®

3 points measure

Indicator to display the
position of the table

SWISS MADE

Built-in
Bluetooth®

USB

PROXIMITY

WATER RESISTANT

IP67

Adjustable measuring
force

Release
lever

3 points table

Cable output mini-USB to USB
(926.6001)

Bench table

DIMENSIONAL DRAWINGS

SMART

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[1]				
Weight	kg	4.1				
Data output		Bluetooth® wireless technology* / RS232 / USB				
Anvils clamping dimension	mm	Ø1.5				
A	mm	232				
B	mm	60				

[1] ± 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

I

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® Wireless technology**
- Adjustable and rectractable table with a lever allowing to place and bring the piece in measuring position
- Quick and simple adjustement 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 and Proximity
- Set including: bench table, special table and anvils
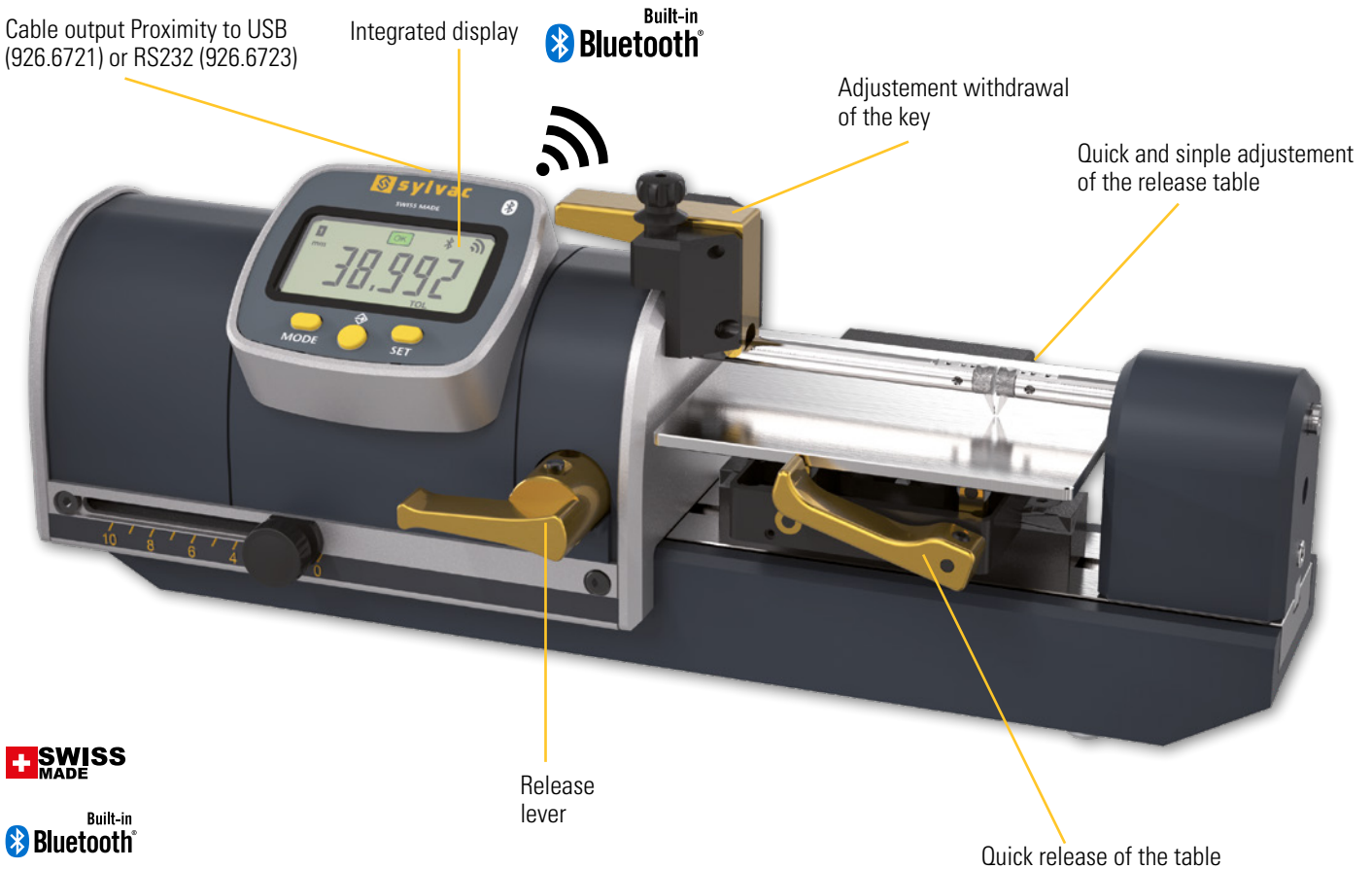
Cable output Proximity to USB (926.6721) or RS232 (926.6723)

Integrated display

Built-in **Bluetooth®**

Adjustement withdrawal of the key

Quick and sinple adjustement of the release table

Release lever

Quick release of the table

SWISS MADE

Built-in **Bluetooth®**

USB

PROXIMITY

WATER RESISTANT

IP67

Cable output mini-USB to USB (926.6001)
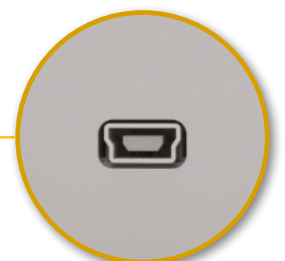
Bench table

PS16 V2 Goutte

DIMENSIONAL DRAWINGS
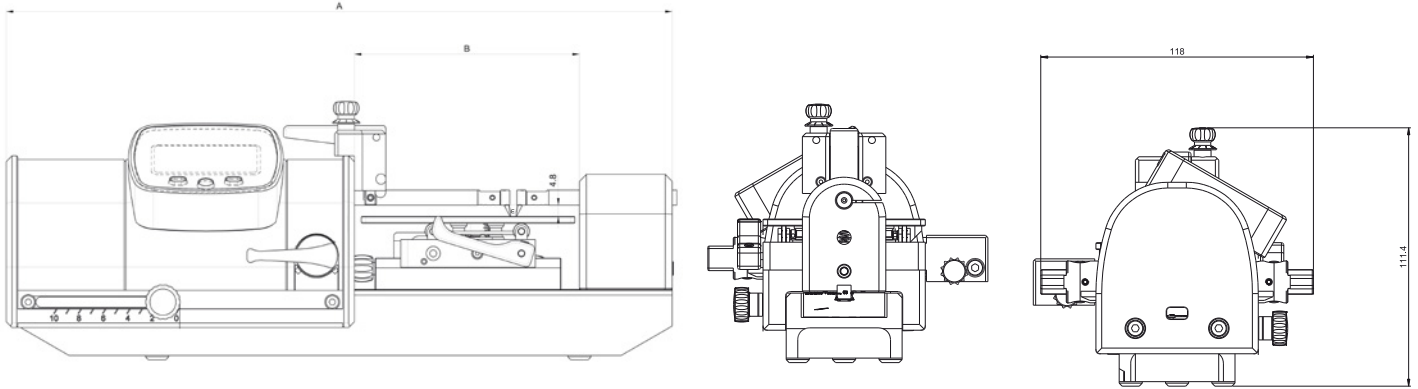
TECHNICAL SPECIFICATIONS

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[1]	
Weight	kg	4.0	4.7
Output data		Bluetooth® wireless technology* / RS232 / USB	
A	mm	232	287
B	mm	66	97

[1] ± 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

I

Bench table

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

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

APPLICATIONS
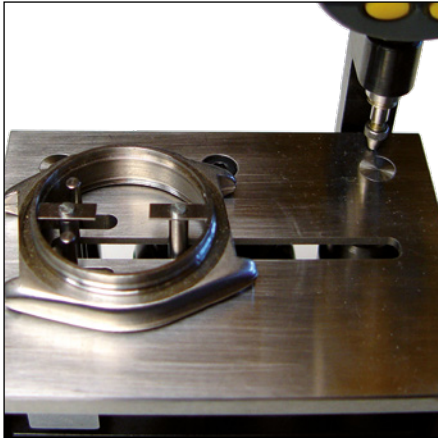
Internal measurement in 2 – points with auto-centering of the part on LVS 50
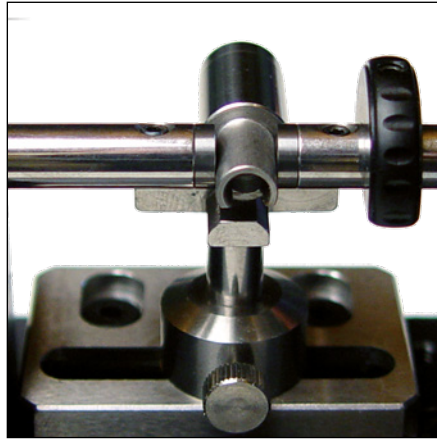
External measurement with anvils Ø 6.5 and XYZ table
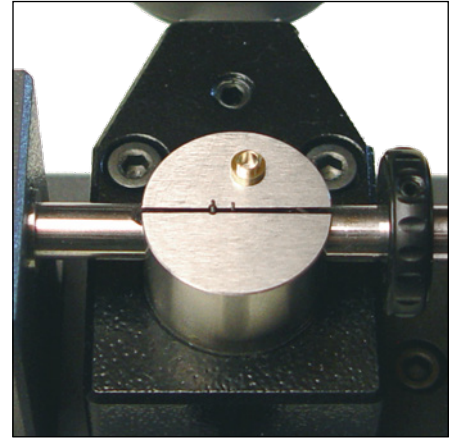
Table and anvils for internal measurement in 3 - points 1.3 - 2.5 mm
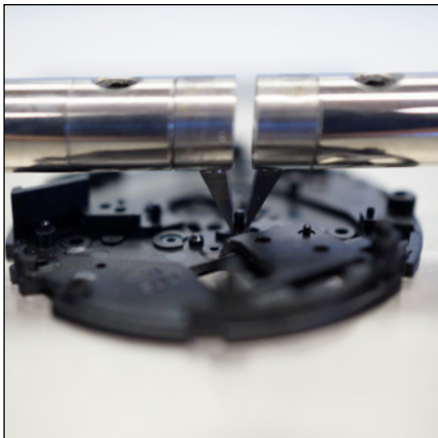
Table with adjustable plate (height). Different Ø plates available
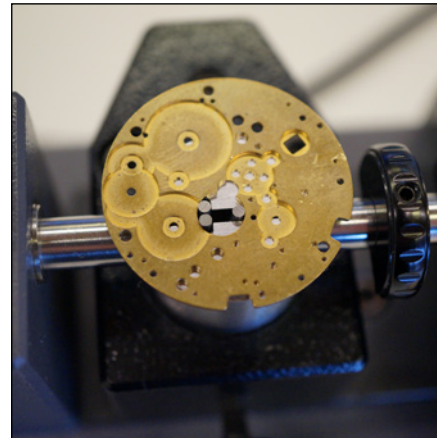
3 – points internal measurement
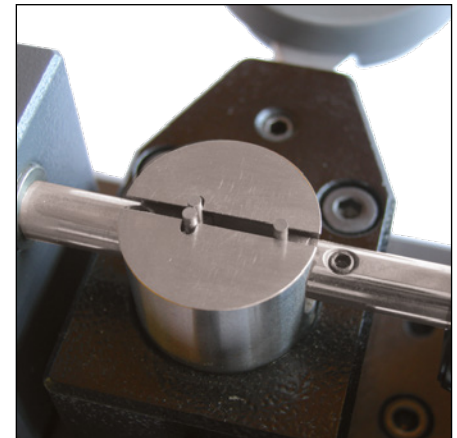
Table and anvils for internal measurement in 3 - points 2.5 - 4 mm

Bench table

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)

Fixation for probe or dial gauge

Standard anvil

Adjustable tailstock (depending on model)

Micrometer screw for pre-positioning

Release lever

Fixation table

Setting X
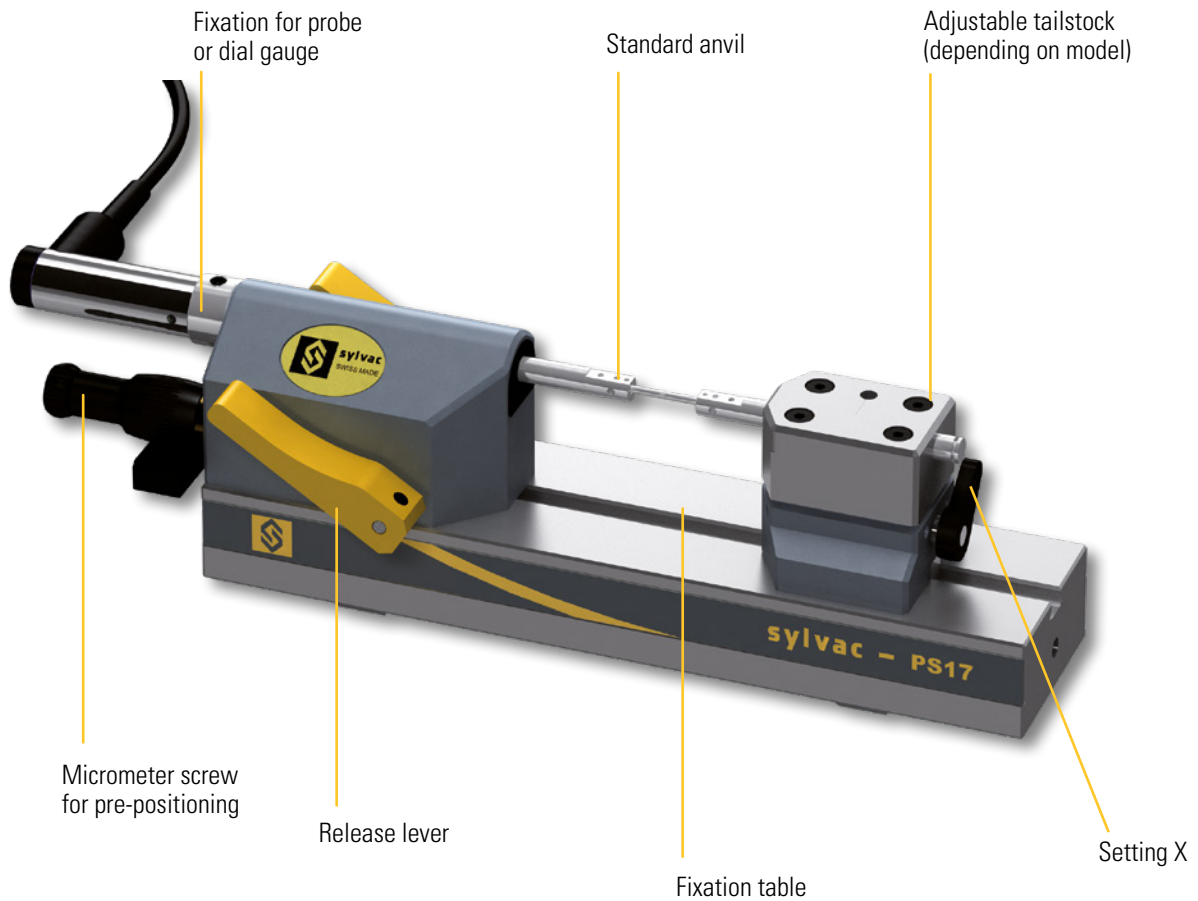
Bench table

PS17 VS/VP

DIMENSIONAL DRAWING
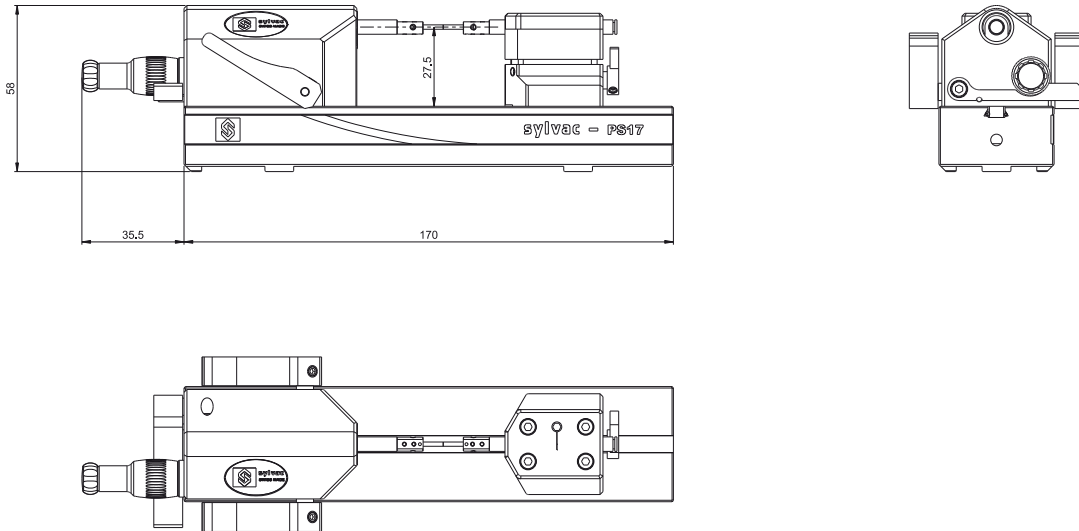
TECHNICAL SPECIFICATIONS

		908.1240	908.1241	908.1242	908.1243
Type		VS [1]	VP [1]	VS [1]	VP [1]
Measuring system		Dial gauge [2]	Probe 10 mm	Dial gauge [2]	Probe 10 mm
Tailstock adjustable in Z ±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 Ø 1.5 mm		●			
Compatibility with Cary		●			
Micrometer screw		●			

BASIC INSTRUMENT

- Instrument according to technical specifications
- Instruction manual
- Measuring anvils Ø 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)

Fixation for probe
or dial gauge

Standard anvil

Dial fixation (delivered)

Micrometer screw
for pre-positioning

Release lever

Fixation table

Setting X
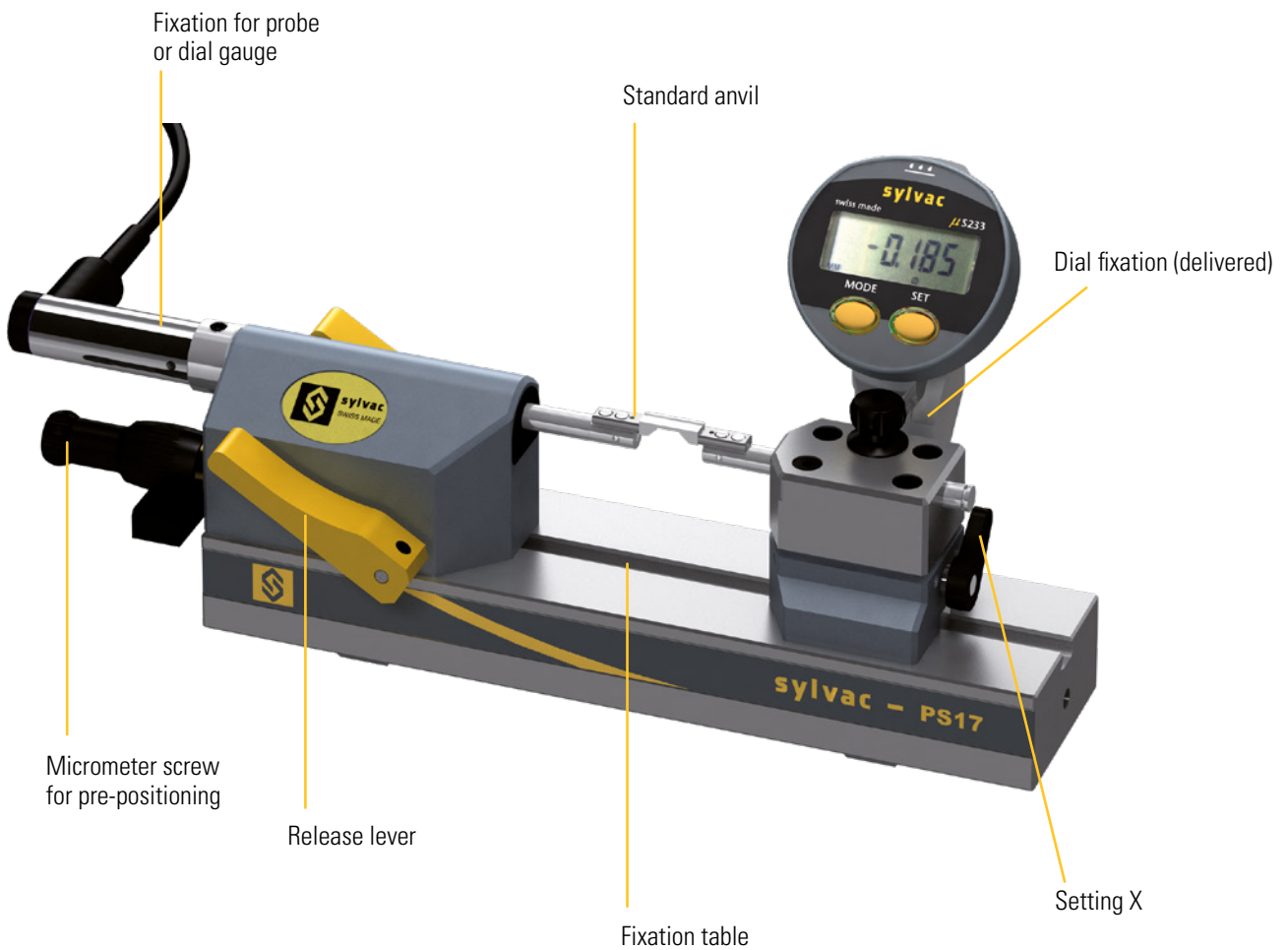
Bench table

PS17 Entre-portée

DIMENSIONAL DRAWINGS
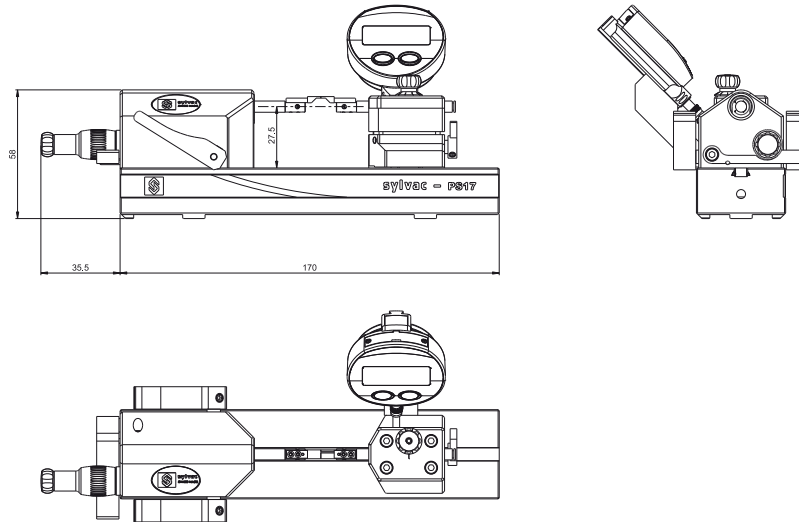
TECHNICAL SPECIFICATIONS

		908.1245	908.1244
Type		VP	VS
Measuring system		Probe 10 mm	Dial gauge [1]
Tailstock adjustable in Z ±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		●	

[1] 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

I

Bench table

TABLES, PLATES AND LAPPING

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

ACCESSORIES

N°	Designation	PS17 VS / VP
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.

I

Bench table

PS17

APPLICATIONS STANDARD
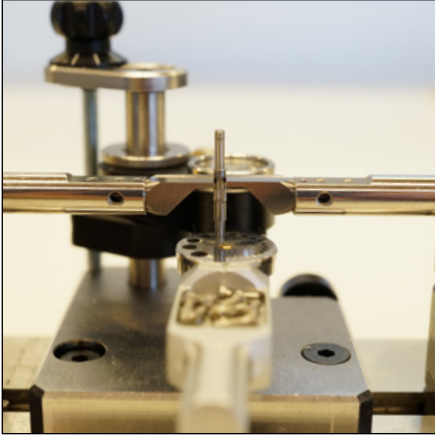
Measure of a small part on a floating table

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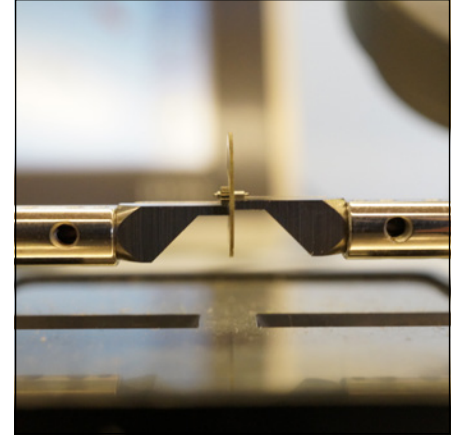
Measure of a distance width with the Z axis adjustable tailstock.

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	●		●	●	●
908.2202	Knife-shaped anvils standard TC 1.5 mm	1.5	2.2	4	●		●	●	●

I

Anvils Cary

N°	Designation	B	F	C	PS15 BH	PS15 BV	PS15 BV+	PS16 V2	PS 17
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	●			●	●

I

OPTICAL MEASURING MACHINES

SYLVAC SCAN
Dedicated to fast, precise, non-contact measurement of cylindrical parts. Our new SCAN machines reproduce high resolution images of the components profile in just a few seconds. Thanks to the easy to use REFLEX-SCAN software, parts can be measured with just a click of a button, offering over 150 different types of measurement 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

DESCRIPTION
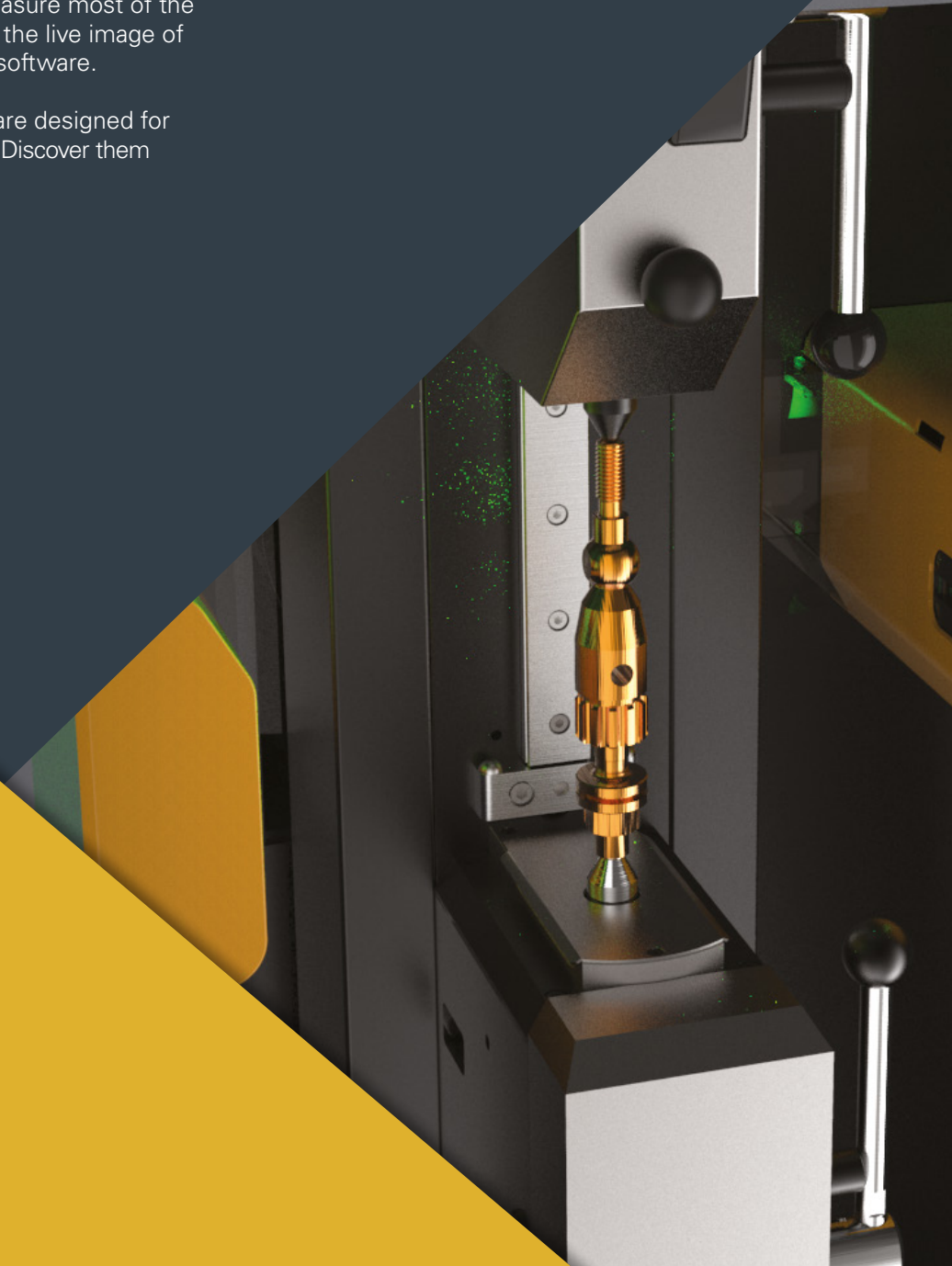
- Horizontal SCAN machine, measuring in landscape format, the same as the parts are produced
- Robust construction with granite column for use in workshop or control laboratory
- Concept Reflex SCAN patented for measuring cylindrical workpieces without preprogramming
- Measurements performed in seconds 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
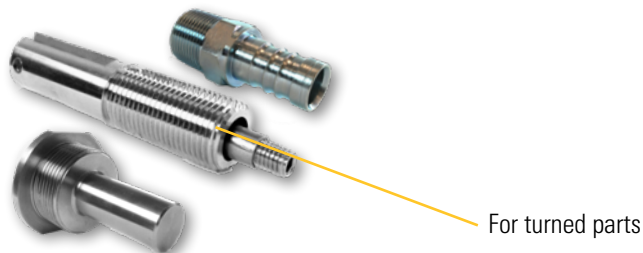
One click
measurement

Sylvac Reflex SCAN Software

For turned parts

SWISS MADE

J

Optical measurement

DIMENSIONAL DRAWINGS

1000

840

435
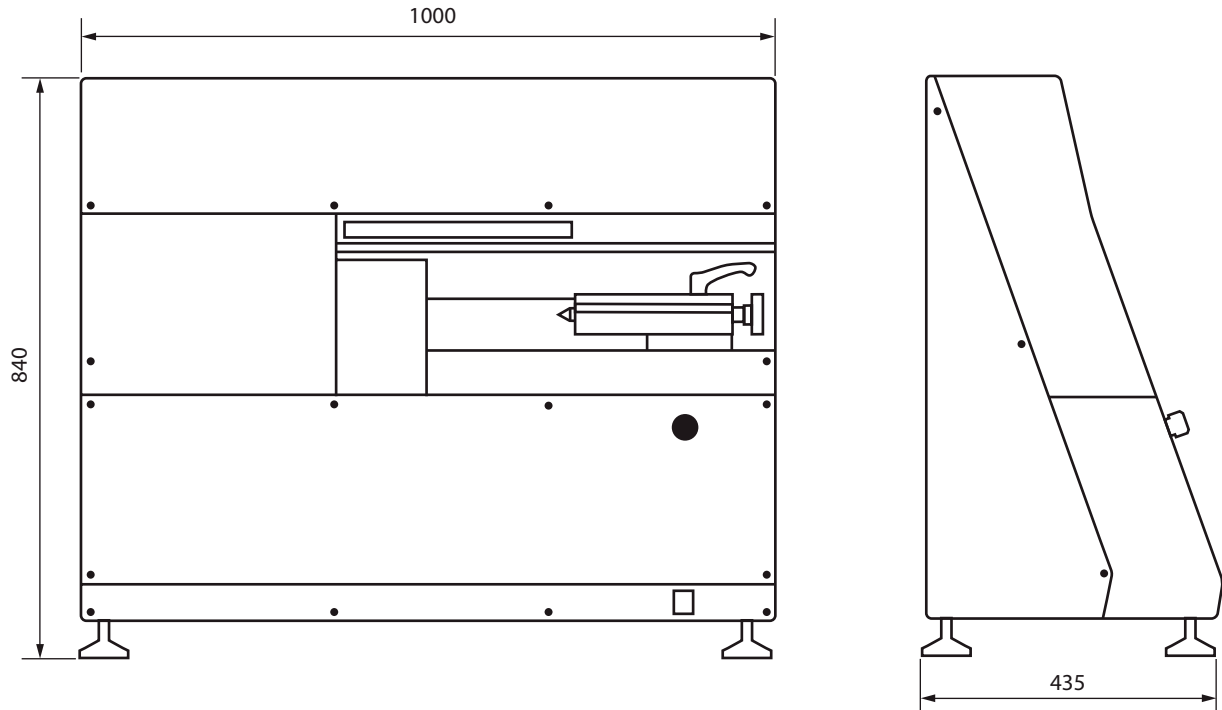
TECHNICAL SPECIFICATIONS

		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. weigth of part	kg	4			
Machine's weight	kg	103			

BASIC INSTRUMENT

- Instrument according to technical specifications
- Accessories : 2x 902.6202, 902.6161, 902.6212
- Computer with screen, keyboard and mouse
- Windows multilingual operating system
- Sylvac Reflex SCAN Software
- Manual

J

Optical measurement

DESCRIPTION

- Concept Reflex SCAN patented for measuring cylindrical workpieces without preprogramming
- Part measurement from **0.2 to 64mm diameter and up to 300mm** length
- Complete 2D part scan in <3 seconds !
- Reduce inspection time, scrap and increase productivity
- Exclusive helix tilting system for thread measurements (only on T models)
- Quick return of investment, typically < 6 months
- New software Reflex SCAN + : advanced programming and functions
- Quick release tooling

LED status light indicator

New software
Reflex SCAN +

Emmergency
button

Start button

One click
measurement

Door for dust
protection

Exclusive system

Exclusive helix tilting system by Sylvac, for more comprehensive thread measurements.

SWISS MADE

Optical measurement

SYLVAC-SCAN

TECHNICAL SPECIFICATIONS

		902.4060		902.4065	
		Sylvac SCAN F60		Sylvac SCAN F60T	
		Diameter	Length	Diameter	Length
Measuring range	mm	64	300	64	300
Resolution up to	mm	0.0001	0.0001	0.0001	0.0001
Max. error	µm	(1 + D[mm]/100) µm	(3 + L[mm]/200) µm	(1 + D[mm]/100) µm	(3 + L[mm]/200) µm
Repeatability	µm	0.5	1.0	0.5	1.0
Holding capacity diameter	mm	120	315	120	315
Headstock		Rotary headstock for static and dynamic measurements			
Tilting for thread measurement		-		● 30°	
Max. weigth of part	kg	10			
Machine's weight	kg	265			

BASIC INSTRUMENT

- ● Instrument according to technical specifications
- ● Accessories : 2x 902.6202, 902.6161, 902.6212
- ● Computer with screen, keyboard and mouse
- ● Windows multilingual operating system
- ● Sylvac Reflex SCAN Software +
- ● Manual

![Sylvac logo]

Optical measurement

SYLVAC-SCAN

- Concept Reflex SCAN patented for measuring cylindrical workpieces without preprogramming

- Part measurement from **0.2 to 64mm diameter and up to 500mm** length

- Complete 2D part scan (500mm) in <5 seconds !

- Reduce inspection time, scrap and increase productivity

- Exclusive helix tilting system for thread measurements (only on T models)

- Quick return of investment, typically < 6 months

- New software Reflex SCAN + : advanced programming and functions

- Quick release tooling

Exclusive system

Exclusive helix tilting
system by Sylvac, for more
comprehensive thread
measurements.

New software
Reflex SCAN +

One click
measurement

LED status light indicator

SCAN F60LT

Door for dust
protection

SWISS MADE

J

Optical measurement

SYLVAC-SCAN

DIMENSIONAL DRAWINGS

F60L & F60LT

400 (accès)
(porte ouverte)

1000 (accès)
(porte ouverte)

192

1763

625

889.5

725
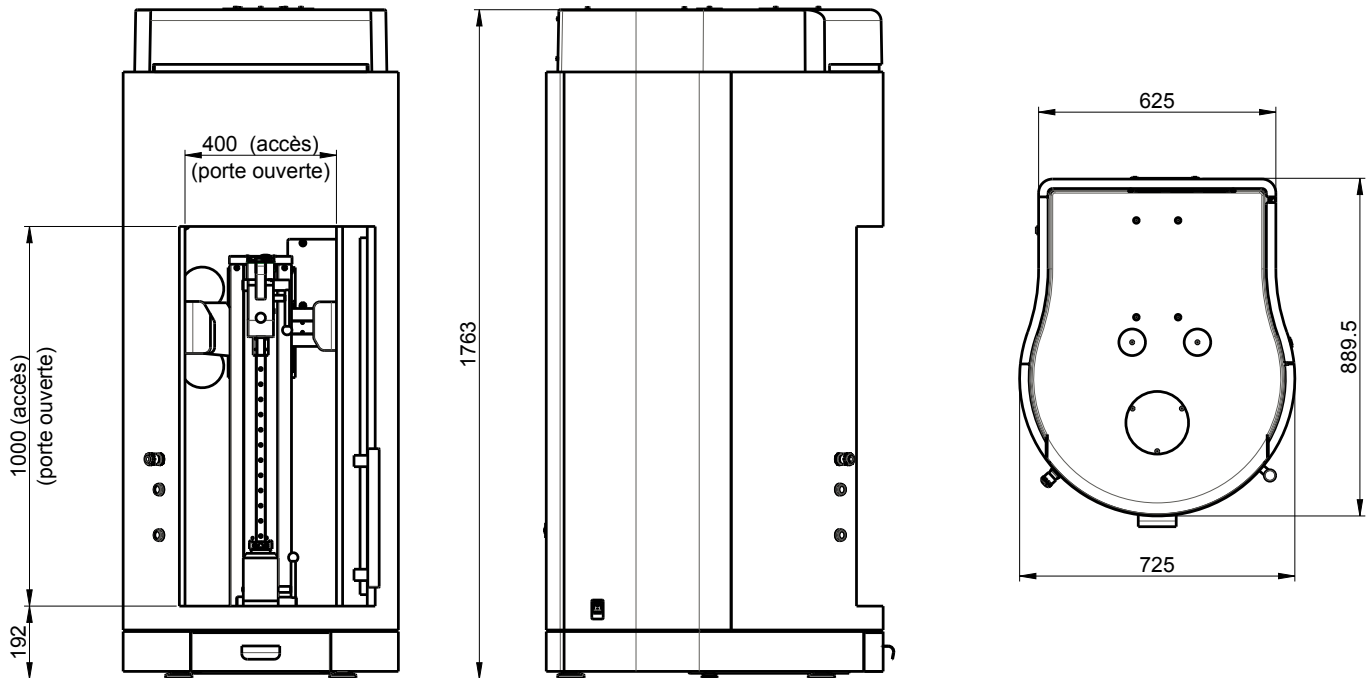
TECHNICAL SPECIFICATIONS

		902.4062		902.4067	
		Sylvac SCAN F60L		Sylvac SCAN F60LT	
		Diameter	Length	Diameter	Length
Measuring range	mm	64	500	64	500
Resolution up to	mm	0.0001	0.0001	0.0001	0.0001
Max. error	µm	(1 + D[mm]/100) µm	(3 + L[mm]/200) µm	(1 + D[mm]/100) µm	(3 + L[mm]/200) µm
Repeatability	µm	0.5	1.0	0.5	1.0
Holding capacity diameter	mm	120	500	120	500
Headstock		Rotary headstock for static and dynamic measurements			
Tilting for thread measurement		-		● 30°	
Max. weigth of part	kg	10			
Machine's weight	kg	330			

BASIC INSTRUMENT

- Instrument according to technical specifications
- Accessories : 2x 902.6202, 902.6161, 902.6212
- Computer with screen, keyboard and mouse
- Windows multilingual operating system
- Sylvac Reflex SCAN Software +
- Manual

J

Optical measurement

SYLVAC-SCAN

TECHNICAL SPECIFICATIONS

SOFTWARES

FUNCTIONS		
	SYLVAC REFLEX SCAN	**SYLVAC REFLEX SCAN+**
Automatic measurement of the main features (diameters, lenghts, angles, radius)	●	●
Automatic parts / program recognition	●	●
Off-line programming		option
Advanced dust filtering		●
Statistic view		●
CAD import		●
Reports editor	●	●
Data export	●	●
SPC basic calculations	●	●
Script function		option
SPC software	On request	On request
Access management - security lever	1	multiple

GEOMETRICAL TOLERANCING - FEATURES SUMMARY		
	SYLVAC REFLEX SCAN	**SYLVAC REFLEX SCAN+**
Diameters	●	●
Lenghts, 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	●	● advanced
Concentricity	●	●
Roundness	●	●
Cylindricity	●	●
Across flats	●	●
Straightness	●	●
Interrupted parts (splines, turbines)		●

ACCESSORIES

		Morse 2 SCAN 52 / F60
902.6220	Two-jaw gripper External clamping for manual use	● Requires 902.6360
902.6231 H=22	Raising blocks for external jaws, in pairs	● *(Morse 1 requires 902.6220)*
902.6141 0÷6 mm T = 1.5 **902.6142** 0÷6 mm T = 3 **902.6143** 6÷12mm T = 3 **902.6144** 12÷18mm T = 6 **902.6145** 18÷24mm T = 9 **902.6152** 0÷6mm T = 6 **902.6153** 0÷6mm T = 15 **902.6140** 6÷12mm T = 15	External jaws, in pairs	● For 902.6220 *(also for Morse 1)*

J

ACCESSORIES
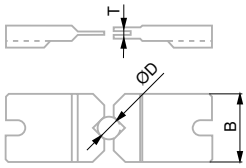
			Morse 2 SCAN 52 / F60
902.6154 Set with: 902.6141 902.6142 902.6143 902.6144 902.6145	External jaws, in pairs 902.6141 : Jaws dia 0-6mm, T1=1.5mm 902.6142 : Jaws dia 0-6mm, T1=1.3mm 902.6143 : Jaws dia 6-12mm, T1=3mm 902.6144 : Jaws dia 12-18mm, T1=6mm 902.6145 : Jaws dia 18-24mm, T1=9mm		●
902.6250	Center adapter with a 6 mm dia. coupling bore		*Only for Morse 1*
902.6251	Center adapter with a 6 mm dia. coupling bore		●
902.6360	Reduction sleeve, Morse 2 to 1		●
902.6000	Extra male center, 10 mm (2 items provided with SYLVAC-SCAN 25)		*Only for Morse 1*
902.6202	Extra male center, 17.78 mm (2 items provided with SYLVAC-SCAN F60 and SYLVAC-SCAN 52 Reflex-Click)		● Standard
902.6203	Drive centre (Diamond coated 10 mm)		*Only for Morse 1*
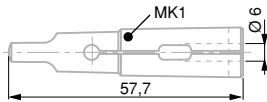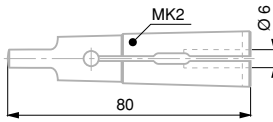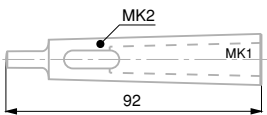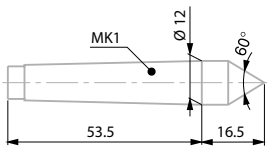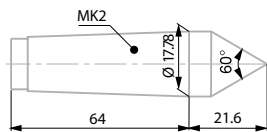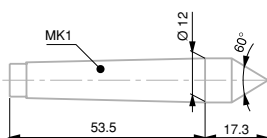
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			Morse 2 SCAN 52 / F60
	902.6160	Rotation center with a B12 male taper plus a Morse 1 taper shank (For added sleaves 902.6206/902.6207)	*Only for Morse 1*
	902.6161	Rotation center, Morse 2 (1 item provided with SYLVAC-SCAN F60 and SYLVAC-SCAN 52 Reflex-Click)	● Standard
	902.6162	Rotation center with a B18 male taper plus a Morse 2 shank	●
	902.6163	Rotation center, Morse 1	*Only for Morse 1*
	902.6380	Rotation center, Morse 2	●
	902.6204	Female center, 10 mm dia.	● Requires 902.6251 (*also for Morse 1, with 902.6250*)
	902.6212	Extra male center, 17.78 mm, diamond coated (1 item provided with SYLVAC-SCAN F60 and SYLVAC-SCAN 52 Reflex-Click)	● Standard
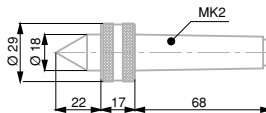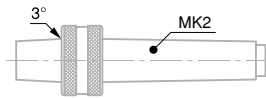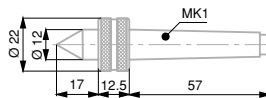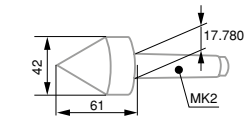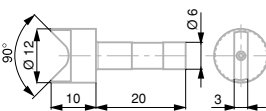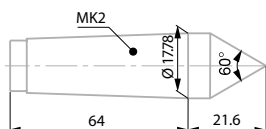
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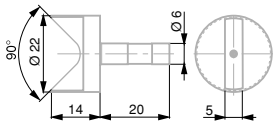
			Morse 2 SCAN 52 / F60
	902.6205	Female center, 20 mm dia.	● Requires 902.6251 (*Morse 1 requires 902.6250*)
	902.6206	Female center, 10 mm dia. Also with internal B12 taper	*Only for Morse 1* (*requires 902.6160*)
	902.6207	Female center, 12 mm dia. Also with internal B12 taper	*Only for Morse 1* (*requires 902.6160*)
	902.6208	Platten, 30 mm dia.	*Only for Morse 1*
	902.6300	3-jaw chuck, clamping range 1÷15 mm (Clamping capacity: outside 1÷15 mm inside 11÷26 mm)	● Requires 902.6360 (*also for Morse 1*)
	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)	●
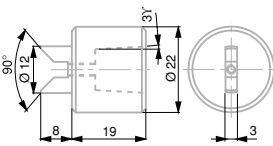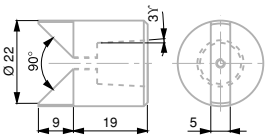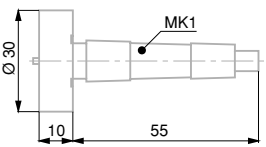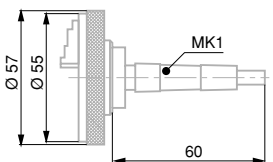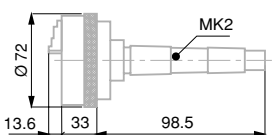
Optical measurement

SYLVAC-SCAN

ACCESSORIES
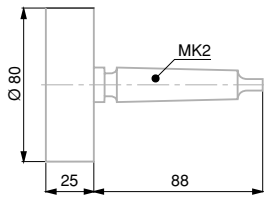
			Morse 2 SCAN 52 / F60
	902.6209	Platten, 80 mm dia. with a Morse 2 taper shank	●
	902.6210	Drive centre, Ø 40 mm. Diamond coated with a Morse 2 taper shank	●
	902.6340	Female centre, 40 mm dia. with a Morse 2 taper shank	●
	902.6341	Male centre, 15÷40 mm dia. with a Morse 2 taper shank	●
	902.6310	Female 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
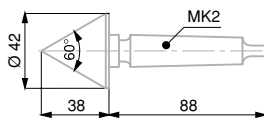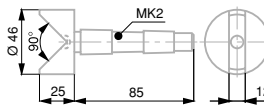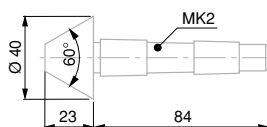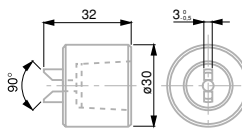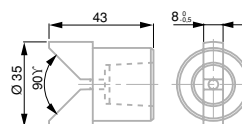
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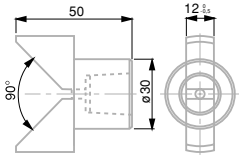
			Morse 2 SCAN 52 / F60
	902.6312	Female center, 45 mm dia., with a B18 internal taper	● Requires 902.6162
	902.6410	Drive centre - diamond coated, 42 mm dia. max.	●
	902.7015	Reflex SCAN+ Offline Software	
	902.7016	Reflex SCAN+ Script programming	
	902.7017	REFLEX-SCAN+ Automation software module	
	902.7018	REFLEX-SCAN+ CAD compare software	
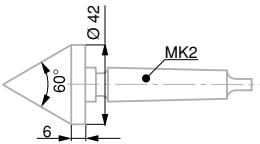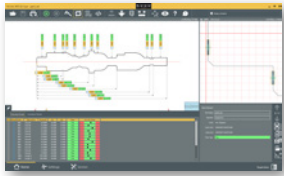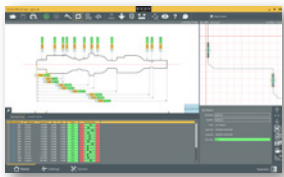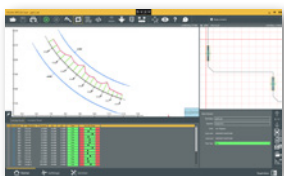
ACCESSORIES

			SCAN 52	SCAN F60
	902.6012	Gold demo part	●	●
	902.6013	Gold demo part for threads	●	●
	902.6600	Table for Sylvac SCAN F60 (85x85x70mm)		●
	902.6601	Furniture for Sylvac SCAN F60 storage for PC, drawer with lock and arm for keyboard and screen.		●
	902.6605	Height-adjustable table (71-1140mm) for keyboard, screen and mouse (80x60)		●
	902.6607	Accessories tidy insert for drawer (combined with 902.6601)		●
	902.6608	Pneumatic tailstock		●

Our Sylvac Scan range can be fully automated with a robot that can load all your workpieces for you directly on the machine for measurement. Available on request.

J

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 diascopic light

- Multilingual Sylvac VISTA software easy to use

Fine adjustement in Z

Motorised zoom

Manual zoom

Manual table stage with fixing holes

Lifter to release table movement

Sylvac Reflex Vista Software, Touch compatible

Granit structure

Optical measurement

DIMENSIONAL DRAWINGS

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)	µm	1.9 + 10L/1000 (L = mm) [1]/[3]		1.9 + 4L/1000 (L = mm) [1]/[3]
XY Accuracy (E_2, XY)	µm	2.4 + 10L/1000 (L = mm) [1]/[3]		2.4 + 4L/1000 (L = mm) [1]/[3]
Z Accuracy (E_1, Z) [2]	µm	2.9 + 10L/1000 (L = mm)		2.9 + 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		

[1] m ≤ 5 kg   [2] mechanical accuracy   [3] 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

J

Optical measurement
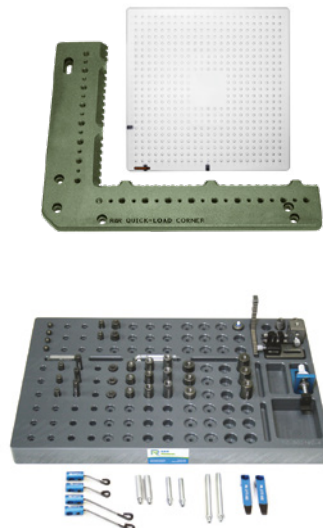
ACCESSORIES

			VISIO 200	VISIO 300
	902.6020	Visio demo part	●	●
	902.7370	Diascopic illumination, parallel light	●	●
	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

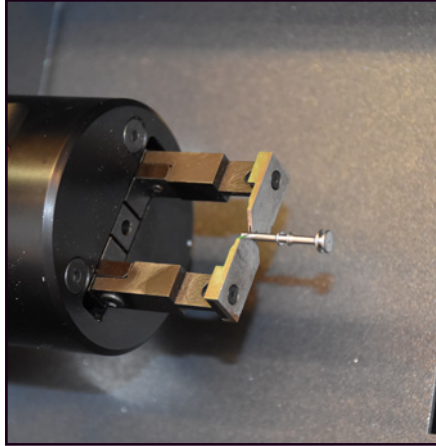|			VISIO 200	VISIO 300
	902.7300	Basic fixtures Kit : • 1x Quick-Load Corner Fixture (QLC) • 1x 13mm x 150mm x 150mm R&R Acrylic Multi-Hole Fixture Plate • 1x (3) Dowel Pins • 3x 6mm Dia. x 10 and x 25mm Standoff • 3x 9mm Dia. x 5, x 10, x 20 and x 25mm Standoff • 3x 12mm Dia. x 10 and x 25mm Standoff • 2x 6mm Dia. x 10mm Pin Standoff • 2x 9mm Dia. x 10mm Pin Standoff • 2x 40mm Tension Clamp with Rubber Coated Tip • 2x 25mm Wire Clamp with Rubber Coated Tip • 2x 50mm Wire Clamp with Rubber Coated Tip • 4x Aluminium Resting Pin with M4 Thread • 1x 50mm x 50mm Corner Viewer for M4 • 1x 9mm Dia. Adjustable Jackstand with M4 Thread • 1x M4 Pusher Clamp • 1x 30mm and 1x 45mm Long Adjustable Slide with M4 Thread • 1x M4 Tower Block • 1x Micro-Clamp Vise with Base for M4 Components • 1x 12mm Dia. x10mm Spring Pusher Standoff Clamp • 1x 300mm x 190mm x 25mm Component Tray to Hold M4 Components	●	●
	902.7301	Advanced fixtures Kit : All Basic fixtures (acrylic plate 13x200x200mm) kit added with : • 3x 6mm Dia. x 5, x 10 and x 25mm Standoff • 3x 9mm Dia. x 10, x 20, x 25mm Standoff • 3x 12mm Dia. x 10, x25mm Standoff • 2x 6mm Dia. x 10mm Pin Standoff • 2x 9mm Dia. x 10mm Pin Standoff • 4x 12mm Dia. x 10mm Pin Standoff • 2x 40mm Tension Clamp with Rubber Coated Tip • 2x 25mm Wire Clamp with Rubber Coated Tip • 2x 50mm Wire Clamp with Rubber Coated Tip with 50mm Post • 1x 9mm Dia. Adjustable Jackstand with M4 Thread • 1x 30mm and 1x 45mm Long Adjustable Slide with M4 Thread • 1x Base 16mm Sq x 19mm (for M4 Tower Block)	●	●
	902.7104	Fresnel kit 0.5x Fresnel lens + lens 0.5x + fixation screws (for Ringlight)	●	
	902.7105	Fresnel kit 0.75x Fresnel lens + lens 0.75x + fixation screws (for Ringlight)	●	
	902.7106	Fresnel kit 1.5x Fresnel lens + lens 1.5x + fixation screws (for Ringlight)	●	

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Optical measurement

APPLICATIONS

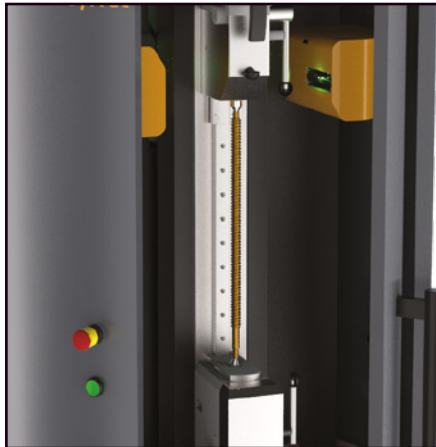Measurement of a turned part with SCAN 52

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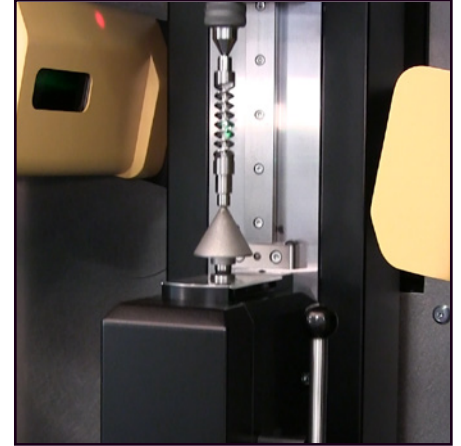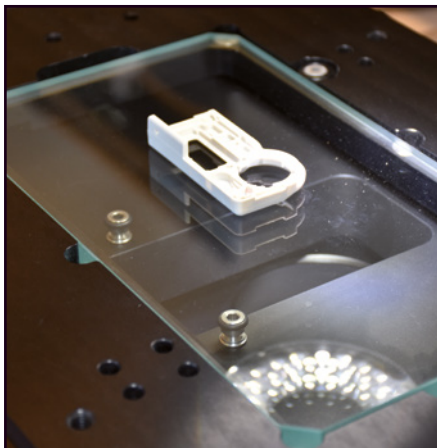

Thread measurement with SCAN F60T

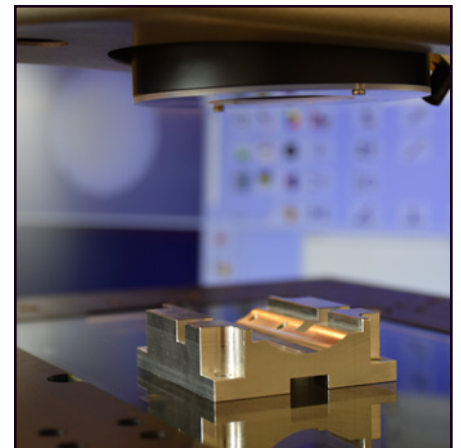Part measurement with SCAN F60

Part measurement with SCAN F60L

SCAN 52 and robot : closed loop with automatic correction of the part

Part lighted by ring light on VISIO

Part lighted by diascopic light on VISIO

Part lighted by coaxial light on VISIO

sylvac