PROBES, DISPLAY UNITS AND INTERFACES

An important chapter covering our measuring probes, display and multifunctional units as well as interfaces and multiplexers. This technical equipment is also used for control stations in workshops, laboratories or integrated in machines and automatic production lines controlled by a programmable logic controller. The most diverse solutions are presented to you in this section of our catalogue.

GENERAL CHARACTERISTICS :

- **220V power supply for all units**
- **mm/inch conversion on all models**
- **Working temperature +0° to +40°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

H

	CAPACITIVE						ABSOLUTE DIGITAL								
	P10	P10S	P10L	P10LS	P25	P25S	P12D HR USB	P12D HR USB CF	P12D USB	P12D USB LF	P12D USBWORK	P12D HR M8	P12D HR M8 CF	P12D M8	P12D M8 WORK
	900-1010	900-1012	900-1014	900-1016	900-1025	900-1027	801-1012	801-1018	801-2012	801-2017	801-0012	801-1212	801-1218	801-2212	801-0212
	●	●	●	●											
							●	●	●	●	●	●	●	●	●
					●	●									
	●	●	●	●	●	●									
							●	●	●	●	●	●	●	●	●
			●	●											
		●		●		●									
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	40	50	40	50	40	50	54	54	54	54	54	54	54	54	54

H

Absolute digital measuring probes · P12D

DESCRIPTION

- High-precision measuring probes with patented measuring system combining inductive and capacitive technologies
- Absolute system with integrated electronic error correction (no more pairing with the unit or computer) guaranteeing high accuracy over the entire measuring range
- Extremely robust ball bearing guide guarantees a minimum of 100 million cycles (30 millions with radial load)
- Stainless steel body Ø 12 mm, fixing diameter 8 h6
- Measuring range 12.7 mm
- Available in 3 versions: Standard, Work and Pro
- Measuring force selectable: low or very low for vertical use only
- Output signal in direct digital format without the need for a converter
- Reading speed up to 100 values per second depending on configuration
- Straight cable length 2m with either USB or M8 connector
- Cable outlet protected by a spring which can be tilted by 90° with the optional accessory 801-5101
- Protection class IP54

Ball bearing

Metallic holder

M8 connector

USB connector
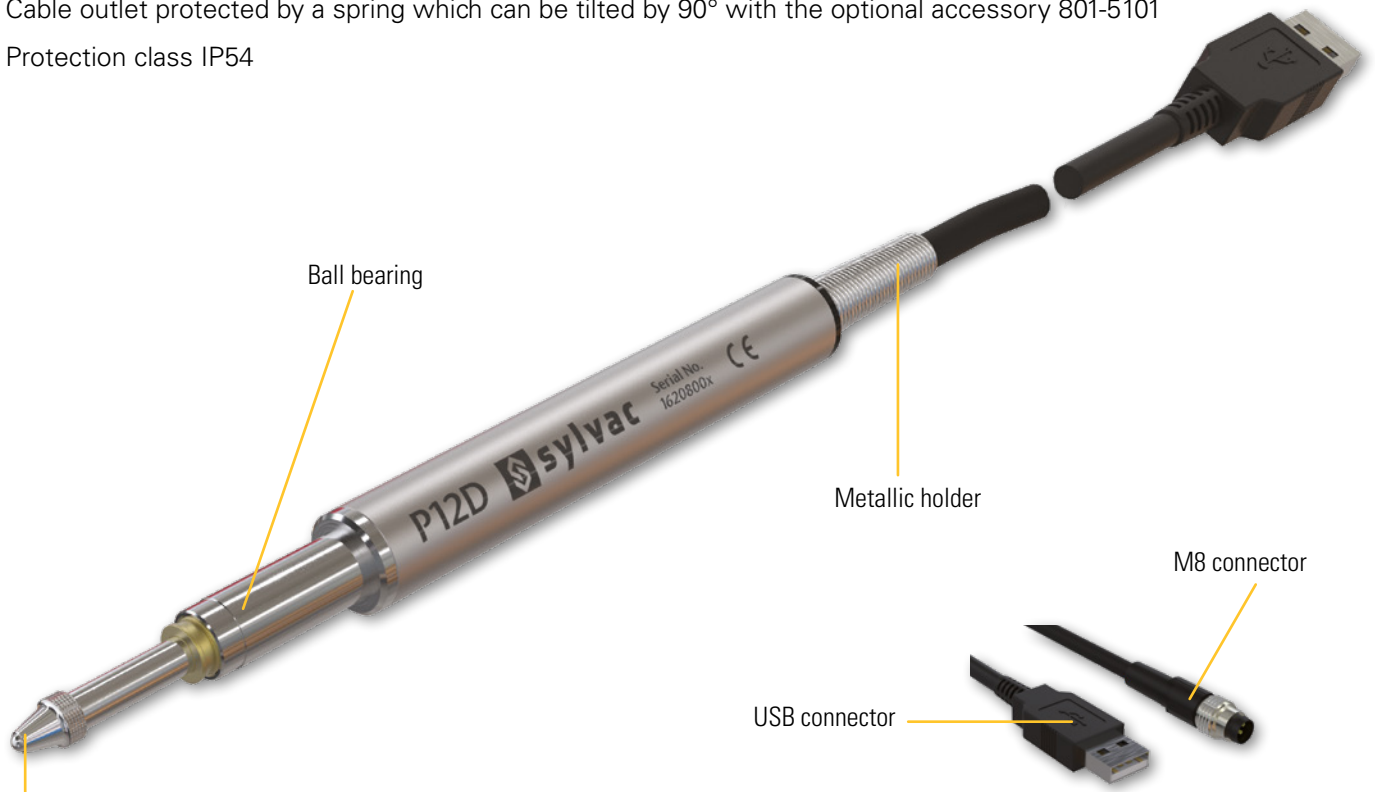
Measuring anvil
Interchangeable
contact point M2.5,
stainless steel with
TC ball
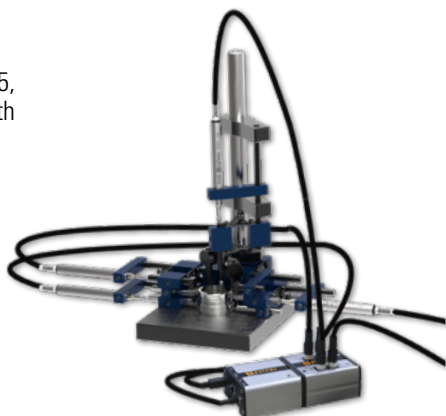
Direct output on PC displayed on Sylcom (software and PC not included)

SWISS MADE

IP54

H

Absolute digital measuring probes

P12D

DIMENSIONAL DRAWINGS
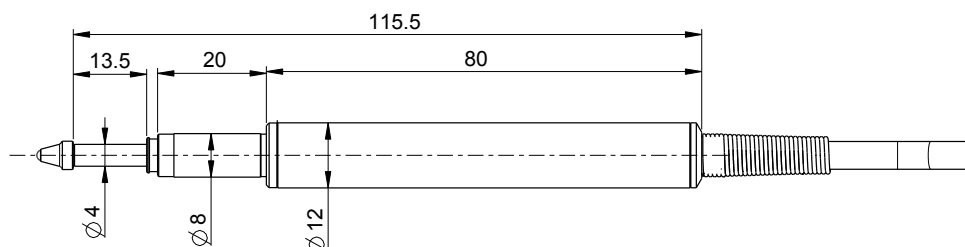
TECHNICAL SPECIFICATIONS

PRO	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	0.08	0.2 - 0.3	0.08
Measuring range mm		12.7		
Resolution µm		0.01		
Max. Error µm		0.6		
Repeatability µm		0.08		
Nb measures/s		up to 100/s, according to configuration [5]		
Output data		USB	M8	
Cable output		Straight		

STANDARD	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 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 per bus

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P12D - special version

P12D WORK

TECHNICAL SPECIFICATIONS

WORK	801-0212	801-0012
Resolution type	Standard	
Type	P12D WORK M8	P12D WORK USB
Force [1] N	0.4 - 0.8	
Measuring range mm	12.7	
Resolution µm	0.1	
Max. Error µm	1.8	
Repeatability µm	0.2	
Nb measures/s	up to 100/s, according to configuration [1]	
Output data	M8	USB
Cable output	Straight	

[1] depends on resolution and number of probes per bus

P12D - special version

P12D OPEN

DESCRIPTION

- Same specifications as P12D Work. In addition to this:
- Special execution with cable length 2 m. type «open connector» (4 coloured wires according to DIN 47100) for integration in machines or lines and communication with a PLC
- Output signal in direct digital format without the need for a converter.
- ASCII or ORBIT compatible communication protocol
- Resolution up to 0.0001 mm (0.1 µm), max. error 1.8 µm
- Measuring force 0.4 - 0.8 N

Connecteur OPEN

SWISS MADE

IP54
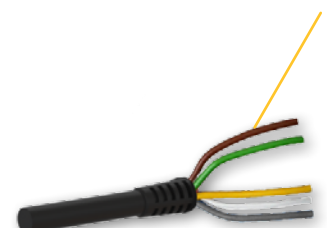
Absolute digital measuring probes
P12D

TECHNICAL SPECIFICATIONS

OPEN	801-0412
Resolution type	Standard
Type	P12D OPEN
Force [1] N	0.4 - 0.8
Measuring range mm	12.7
Resolution µm	0.1
Max. Error µm	1.8
Repeatability µm	0.2
Nb measures/s	up to 100/s, according to configuration [1]
Output data	OPEN
Cable output	Straight

[1] depends on resolution and number of probes per bus

STANDARD DELIVERY

- Probe according to technical specifications
- Cable 2 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 pencil-type measuring probes with stainless steel body Ø 8 h6 over the entire length

- Particularly suitable for comparison measurements due to their excellent repeatability (0.15 μm)

- Half-Bridge Output Type

- Reading speed up to 3900 values per second, depending on configuration

- Extremely robust ball bearing guide guarantees a minimum of 10 million cycles when the probe is not subjected to a lateral force

- Available in 2 versions :

    - Spring pressure, measuring force 0.7 N

    - Pneumatic thrust, the probe is retracted when it is not supplied with air (1 to 3 bar), pressure influencing the measuring force (0.4-0.7 N)

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

- Resolution up to 0.0001 mm (0.1 μm)

- Cable outlet protected by a spring which can be tilted by 90° with the optional accessory 901-5110

- PUR cable length 2 m.

- IP65 protection with Viton® bellows

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

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 Ø3.00 2.00 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 Ø3.00 2.00 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

STANDARD DELIVERY

- 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.
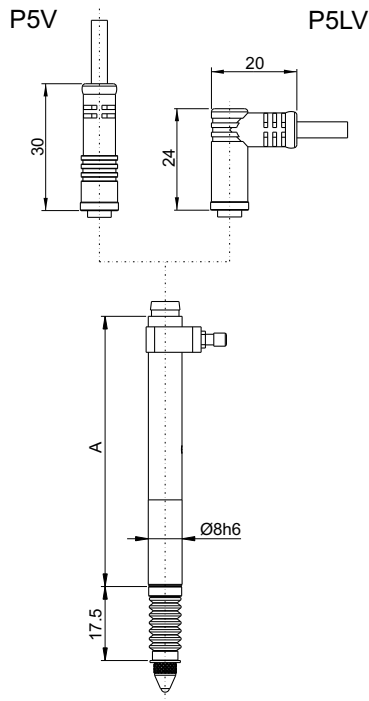
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Capacitive measuring probes

DESCRIPTION

- Capacitive measuring probes
- Measuring system for high accuracy over the entire measuring range
- Sliding bearing guide guarantees a minimum of 10 million cycles when the probe is not subjected to a lateral force. Not suitable for high load applications.
- Available in 2 versions :
    - Spring-loaded thrust
    - Spring-loaded with integrated vacuum lift (V-version)
- Measuring range 5, 10 and 25 mm
- Resolution up to 0.0001 mm (0.1 µm)
- Measuring force selectable, low, standard or high
- Fixing diameter 8 h6
- Straight or 90° cable outlet (L version)
- Interchangeable PUR cable length 1.5 m.
- IP54 protection with Viton® bellows (S version)

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

SWISS MADE

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Capacitive measuring probes

DIMENSIONAL DRAWINGS

P5V P5LV P5 P5L

P10 P10L
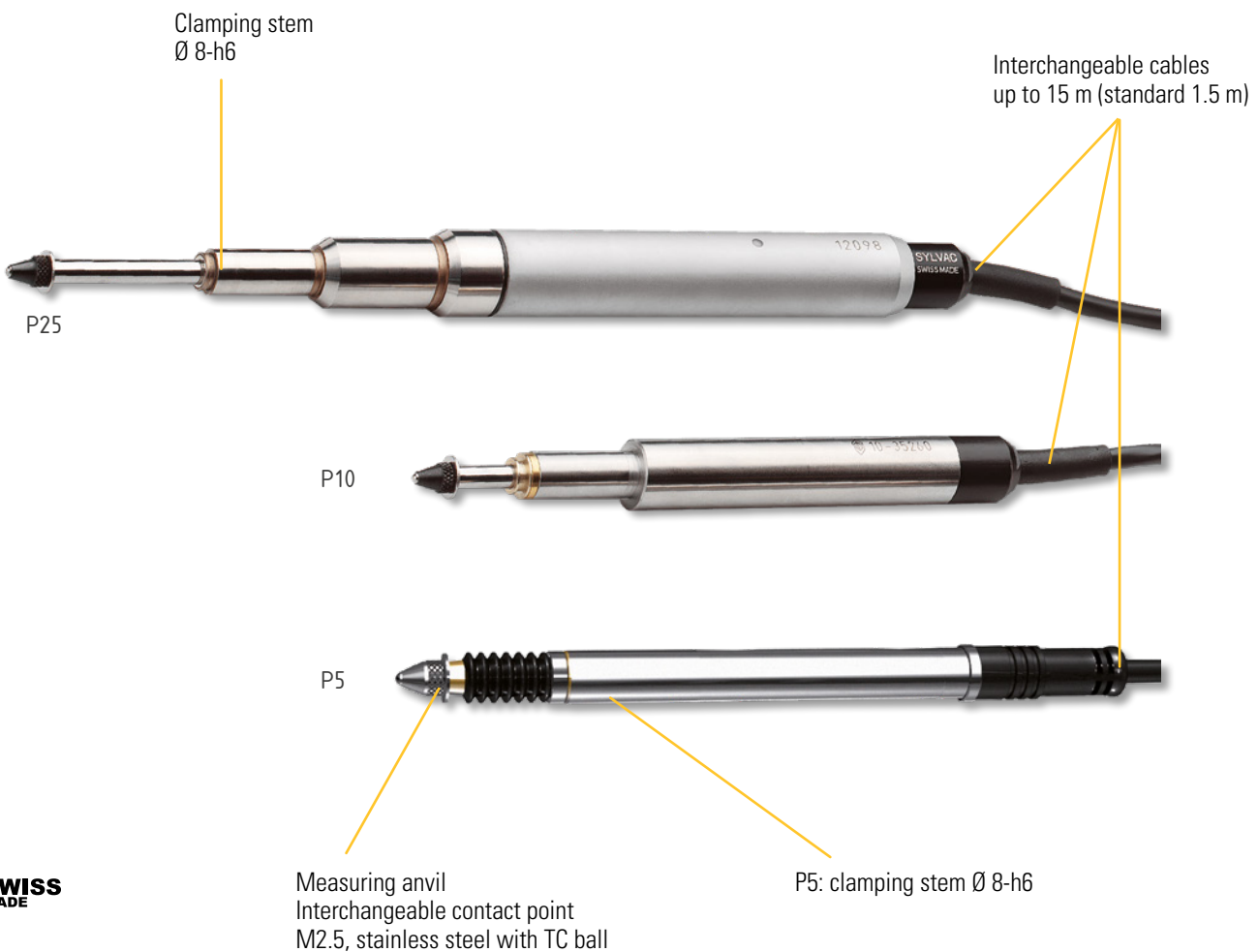
P25 P25S
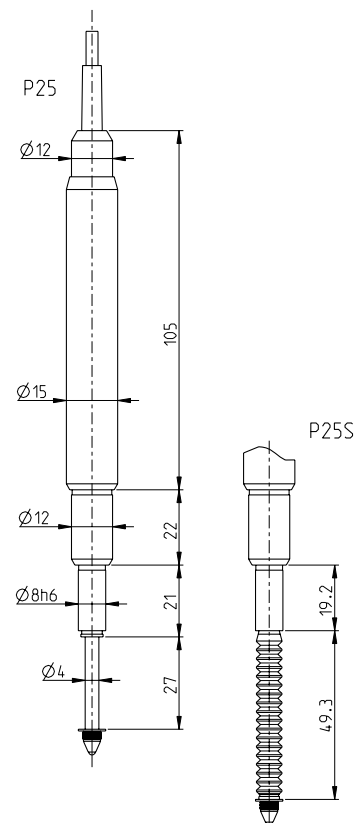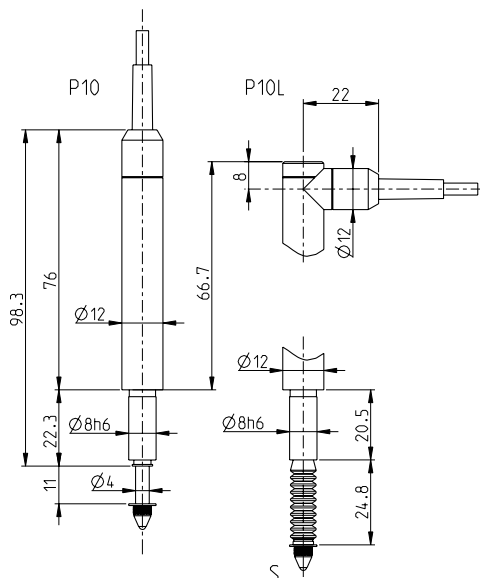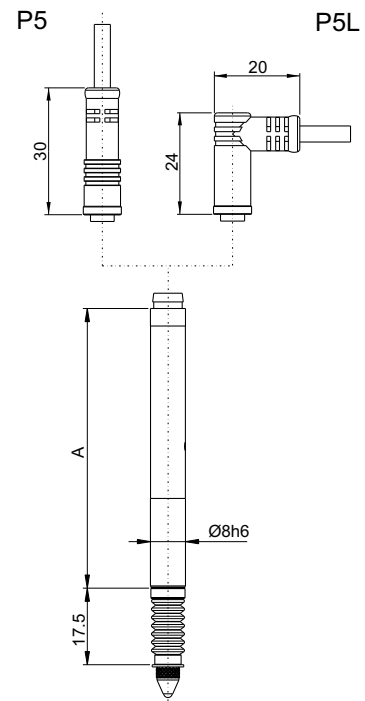
P5/P5L - P5V/P5LV

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	P5B	P10	P10S	P25	P25S
Standard	N	0.50-0.90	0.50-0.90	0.60-0.80	0.70-1.25	0.60-1.00	0.65-1.4
Minimum	N	0.20-0.25*	0.25-0.50	< 0.10	---	< 0.15	---
Low	N	0.30-0.65	0.30-0.65	0.20-0.25	---	0.20-0.30	---
High	N	0.80-1.40	---	0.70-1.50	---	0.70-1.60	---

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

* without rubber boot

LIST OF REFERENCES

P5				P10				P25			
P5	900-1001	P5BV	900-1005	P10	900-1010	P10L LF	900-1014.91				
P5BL	900-1002	P5L	900-1006	P10 LF	900-1010.91			P25	900-1025	P25S	900-1027
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

STANDARD DELIVERY

- 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
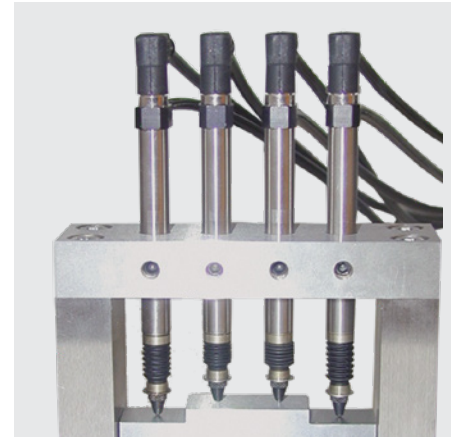
Combined probes for the measurement of several heights

Capacitive probes connected to a D70S.
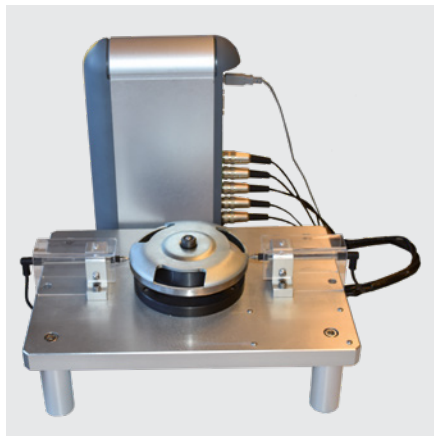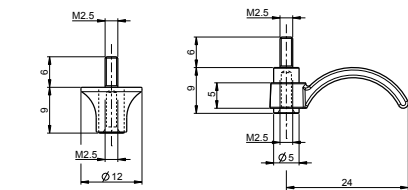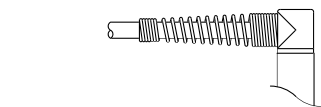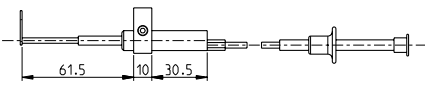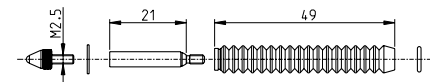

Capacitive probes connected to a D200S


Capacitive probes on a jig

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Measuring probes

ACCESSORIES
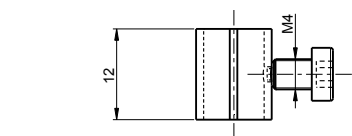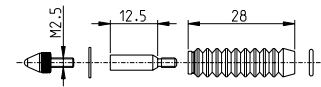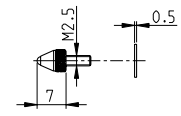
			P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
905-2204	Stainless steel contact point M2.5 with TC ball probe (other contact points, see chapter digital indicators)						●	●	●	●	●
901-2003	Rubber boot and contact point set								●		
901-2004	Rubber boot and contact point set									●	
901-2005	Lifting device 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		●	●	●	●	●	●	●	●	●

Measuring probes

ACCESSORIES
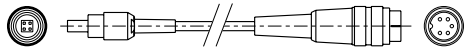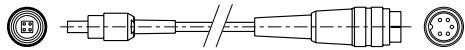
			P2i	P2iP	P5i	P5iP	P2	P5	P10	P25	P12D
	901-5002	Cable 1.5 m							●		
	901-5012	Cable 1.5 m								●	
	901-5032	Cable 1.5 m bent							●		
	901-5042	Cable 1.5 m						●			
	901-5052	Cable 1.5 m bent						●			
	905-2231	Adapting socket + screw	●	●	●	●	●	●	●	●	●
	801-5101	Bridle 90°									●
	801-5202	2m extension for probe P12D M8									●
	801-5210	10m extension for probe P12D M8									●
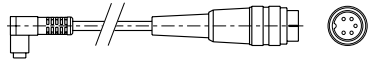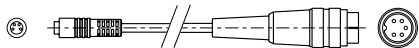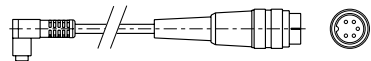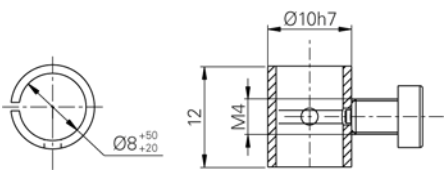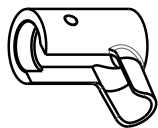
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Digital display

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 module 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)

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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 D50S

DESCRIPTION

- Compact and simple display units for capacitive measuring probes
- Large, bright display
- 2 probe inputs :
    - display of channel 1 value
    - display of channel 2 value
    - display of the combined value of channel 1 - or + that of channel 2
- Resolution up to 0.0001 mm (0.1 μm)
- Available in 2 versions :
    - D50S Standard
    - D50S Pro to pair a probe by entering a point-by-point correction (up to 25 points) in order to increase the accuracy of the whole system.
- Connector for optional pedal 904-4101
- RS232 data output
- IP54 liquid-proof front panel for workshop use

Combination of channels A+B; A-B

Resolution up to 0.0001 mm

Great clear and luminous display

Direct functions

Output cable RS232 to USB (925-1142), RS232 (925-5609) or Digimatic (926-8116)

Feet

IP40

SWISS MADE

RS232

Correction of linearity. Higher precision

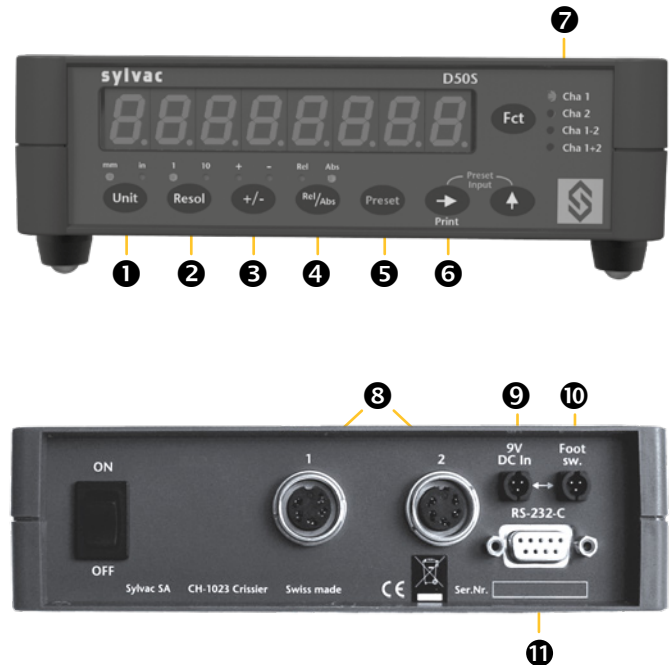**D50S PRO**

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

STANDARD DELIVERY

- Unit according to technical specifications
- Feet (pair)
- Charging unit according to country (904-4200)
- Instruction manual

H

Digital display   D50S

APPLICATIONS

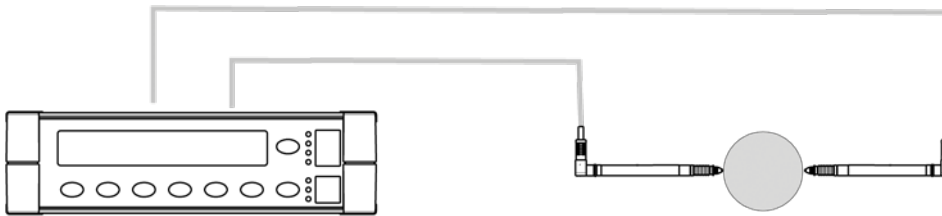Measuring a shaft with 2 probes (A+B)
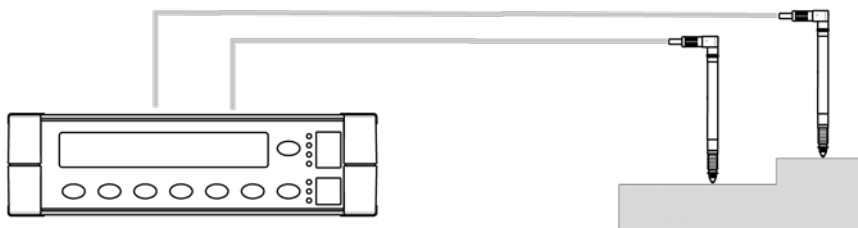

PS15 with connected to a D50S

Simple measurement with one probe
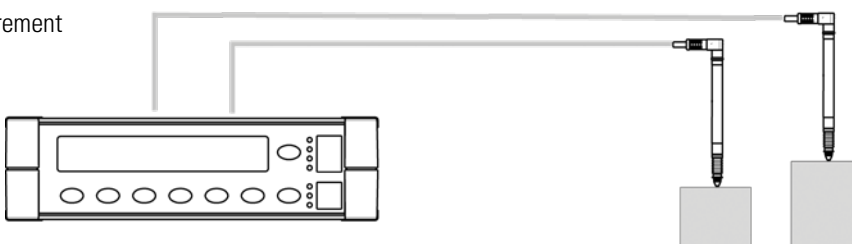
COMBINATIONS OF PROBES

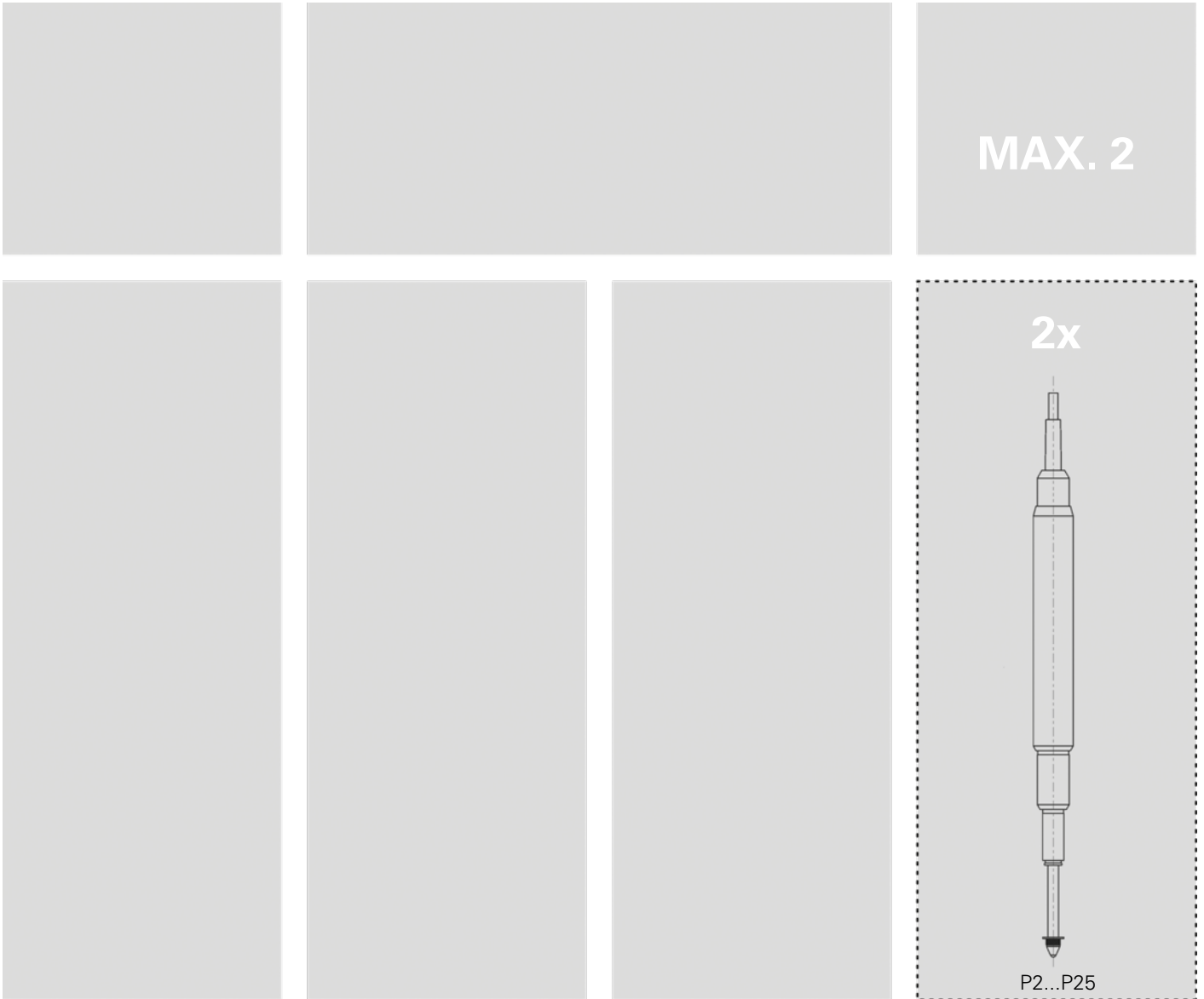Diameter = 1+2

Difference = 1-2

Individual measurement

POSSIBILITIES OF CONNECTION
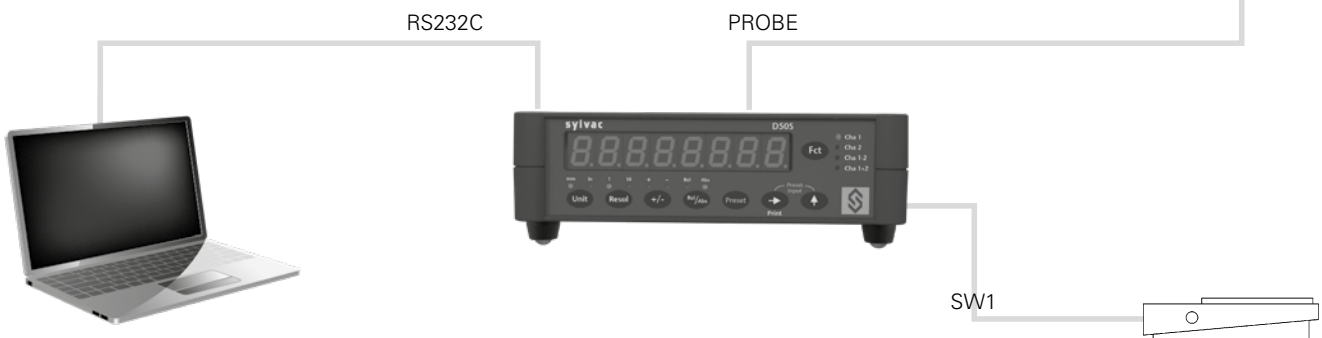
MAX. 2

2x

P2...P25

RS232C

PROBE

SW1

Digital display D62S

DESCRIPTION

- New table display unit for digital P12D measuring probes

- Shockproof construction

- 2 inputs with connectors type M8 :

    - display of channel 1 value

    - display of channel 2 value

    - display of the combined value of channel 1 - or + that of channel 2

    - Automatic detection and display of the channel used

- Large 4.3" colour touch screen with intuitive functions

- Resolution up to 0.00001 mm (0.01 µm)

- Central button with selectable favourite function

- Wide range of functions, including MIN/MAX/DELTA

- Connector for optional pedal 904-4101

- USB and RS232 data outputs

- IP54 liquid-proof front panel for workshop use

- Advanced version with battery, Bluetooth® system and tolerance status indication via integrated LED bar

Built-in Bluetooth®

Indication of the global tolerance status (model D62S Advanced)

Indication of the battery status

Favourite key

MESURE

C1

12.700

- 0.400   + 0.100

MIN

+12.618 75 mm

+12.630 45 mm

(+C1 - C2) * X1

SET

Large touch screen display

Rubber protection - shockproof

H

◖ IP54

(front face)

mini-USB

RS232

RS232

PC

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

Digital display — D62S

DISPLAY

1. **Menu display**
2. **Favourite key**
3. **SET**
4. **Selection of channels**
5. **Formula** [1]
6. **Analog display**
7. **Current value, mode MIN/MAX/DELTA** [1]
8. **Measuring mode MIN/MAX/DELTA** [1]
9. **ON/OFF switch**
10. **Probe inputs (M8 - P12D)**
11. **RS232 inputs/outputs**
12. **Power-supply**
13. **mini/USB Device (PC connection)**
14. **Footswitch input**
15. **Light indicator of the global tolerances** [1]
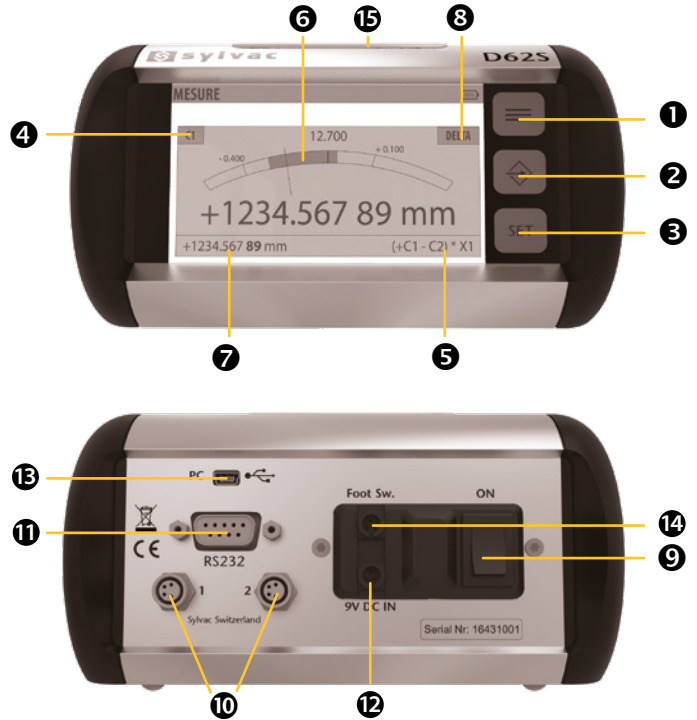
[1] only on Advanced model

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	g	613	665
Case		Aluminium and thermoplastic elastomer	
Protection according to IEC 60529		IP40 (Front face : IP65)	
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

STANDARD DELIVERY

- Unit according to technical specifications
- Charging unit according to country (904-4200)
- Instruction manual

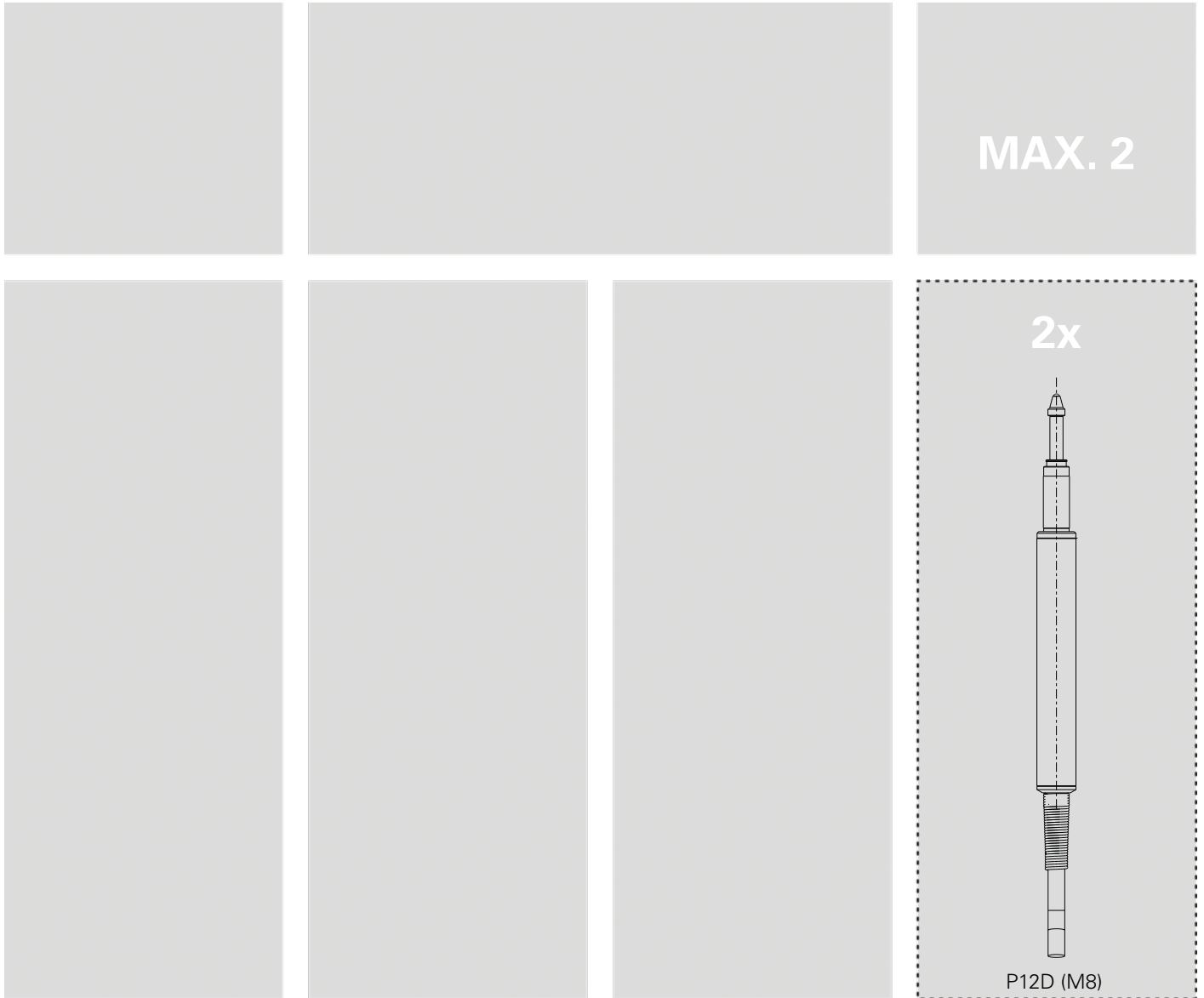## APPLICATIONS

Probes P12D connected to a D62S.

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

D62S

MAX. 2

2x

P12D (M8)

RS232

PROBE

Bluetooth® technology

USB (Device)

MESURE

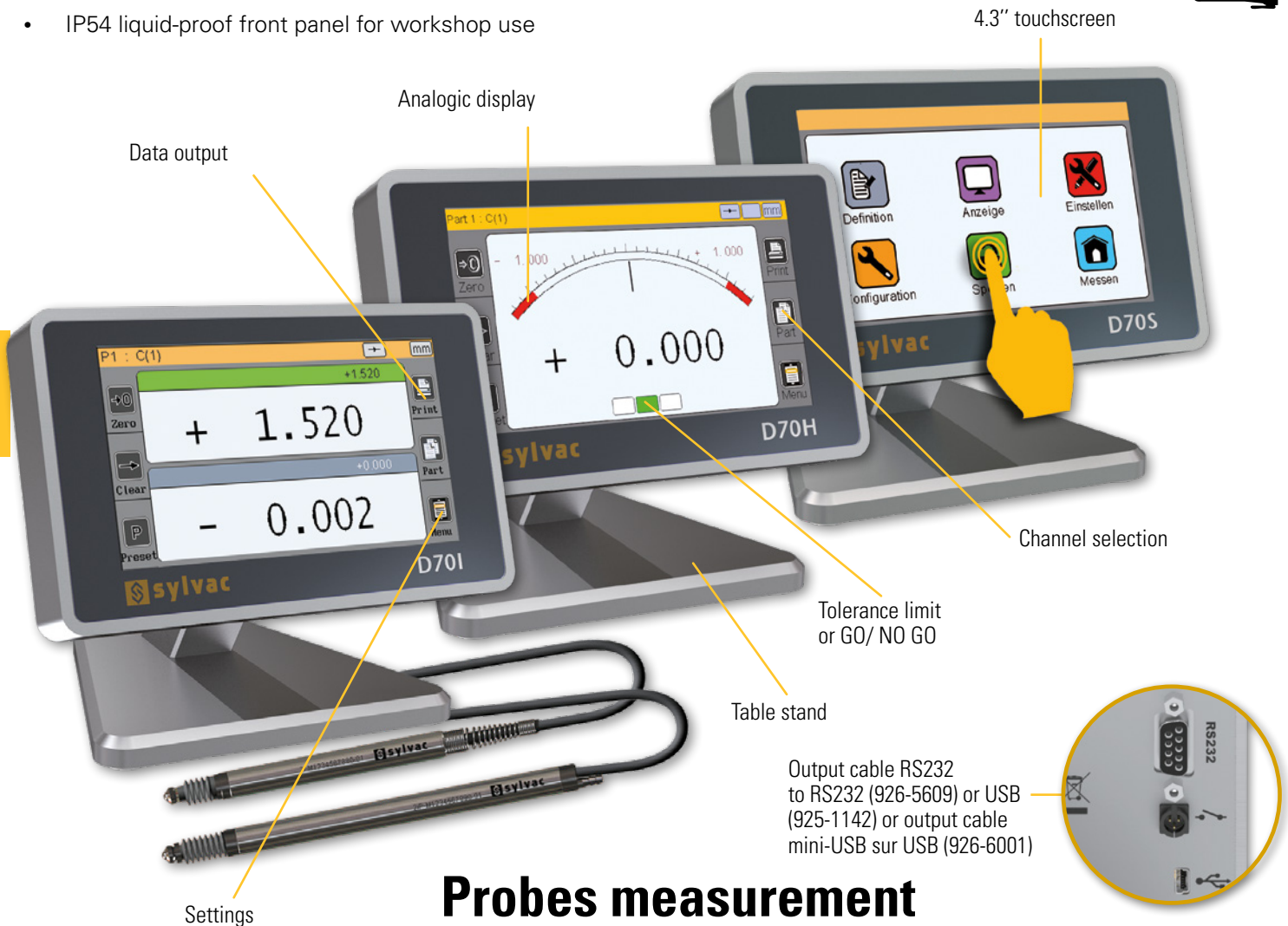+1234.567 89 mm

SW1

H

Digital display   D70S/H/I

DESCRIPTION

- Compact display units for measuring probes
- Extremely robust aluminium housing
- Available in 3 versions with 2 probe inputs :
    - D70H = for HEIDENHAIN touch probes type ST/MT
    - D70I = for SYLVAC inductive probes
    - D70S = for SYLVAC capacitive probes
- Large 4.3" colour touch screen with intuitive functions
- Display in different modes (possibility to display the 2 values simultaneously)
- Resolution up to 0.0001 mm (0.1 μm) and 0.00001 mm (0.01 μm) for version D70H
- Extensive choice of functions including MIN/MAX/DELTA and channel combinations
- Connector for optional pedal 904-4101 (D70S) and 904-4102 (D70H and D70I)
- Powered by USB cable, the unit is detected as an «external keyboard» when connected to the computer, allowing for easy data transfer.
- USB and RS232 data outputs
- Connector for Mbus
- IP54 liquid-proof front panel for workshop use

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   D70S/H/I

DISPLAY

❶ **4.3'' Touchscreen display**

❷ **User friendly interface**

❸ **Analogic display**

❹ **Digital display**

❺ **ON/OFF**

❻ **2 Capacitive / Inductive / 1VPP probes input (depending model)**

❼ **RS232 output**

❽ **1 external contact**

❾ **Mini-usb and and supply/data**

❿ **Input M-Bus / M8 (depending model)**

⓫ **Power-supply 24VDC (depending on model)**
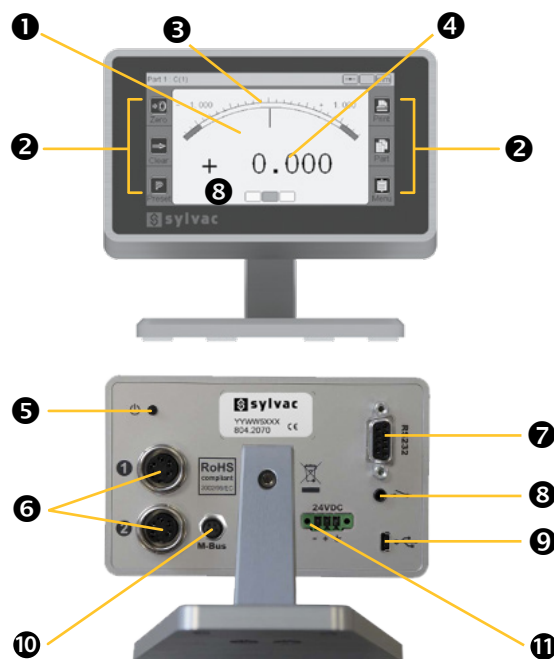
TECHNICAL SPECIFICATIONS

		804-2070
Type		D70S
Overall dimensions	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP65
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		IP65
Output data		USB / RS232 (1x1)
Probes		Heidenhain ST/MT probes (Mitutoyo & Magescale with adapter) / P12D
Programmable by PC		●

* Not available in Switzerland

H

Digital display

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) / P12D
Programmable by PC		●

* Mahr probes : only probes compatible Tesa
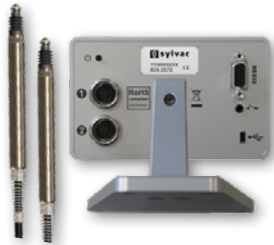
D70S : Capacitive probes   D70I : Inductive probes   D70H : Heidenhain probes

APPLICATIONS

D70S with capacitive Sylvac probes   D70H with Heidenhain probes   D70I with inductive probes

STANDARD DELIVERY

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

Digital display

D70S/H/I

POSSIBILITIES OF CONNECTION

MAX.2	MAX.2	MAX.2 MAX. 1 or 2
P10	Heidenhain	P2i
P25	Spectro	P5i
...	I2 / 30	Tesa GT21
	MT	...
	I2/25	
	60/100	
	Certo	
	...	
D70S	D70H	D70I

USB /RS232C   PROBES

+ 0.000

sylvac

SW1
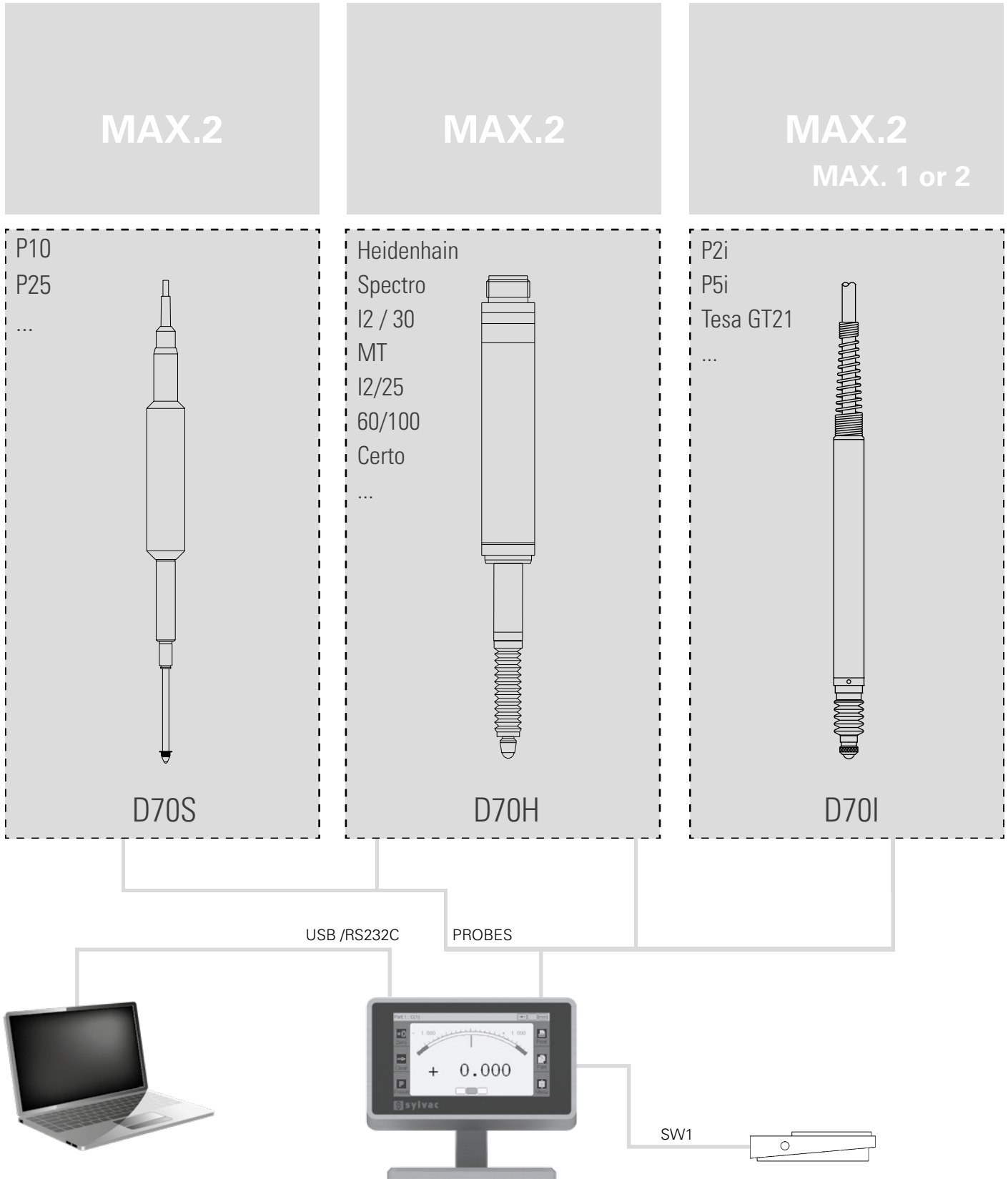
Digital display   D70A

DESCRIPTION

- Compact display units for air measurement equipped with a digital pressure sensor acting as a converter to convert a pressure value into a highly accurate dimensional value.
- Available in 2 versions :
    - D70A1 with one air inlet
    - D70A2 with two air inlets
- Features similar to the other D70 units, but with some special features specific to air measurement:
    - Each inlet is equipped with a throttle to define the volume of air entering the unit according to the specificities of the connected air buffer.
    - Calibration of the unit with 2 or 3 standards
    - Possibility to activate an alarm in case of a change in supply pressure or a change in temperature
    - Unit fully configurable by QR code
- Display resolution up to 0.00001 mm (0.01 µm)
- Requires no maintenance or calibration
- Compatible with all brands of air pads
- Delivered with a set of 6 different choke valves.
- Connector for M-BUS modules
- IP54 liquid-proof front panel for workshop use

Air measurement

4.3'' touchscreen

mini-USB

RS232

+ 18.9000   + 20.9000
Zero
+ 14.8616
Clear   - 1.000   + 1.000

+ 18.729

D70A

§ sylvac

Table stand

* plug and air gages
available on request

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

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**
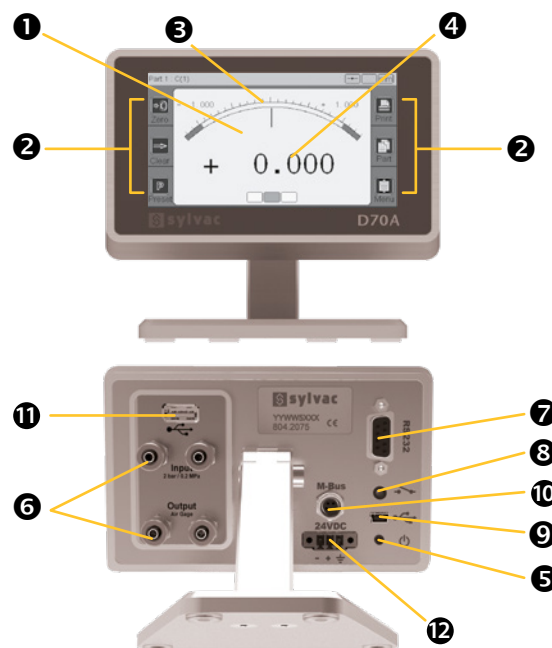
TECHNICAL SPECIFICATIONS

		804-2074
Type		D70A - 1 input
Overall dimensions	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP65
Output data		USB / RS232
Instruments		Plug gages and air gages / P12D
Programmable by PC		●

		804-2075
Type*		D70A - 2 inputs
Overall dimensions	mm	140x105x111
Weight	kg	0.6
Case		Aluminium
Protection according to IEC 60529		IP65
Output data		USB / RS232 (1x1)
Instruments		Plug gages and air gages / P12D
Programmable by PC		●

H

Digital display   D70A

TECHNICAL SPECIFICATIONS
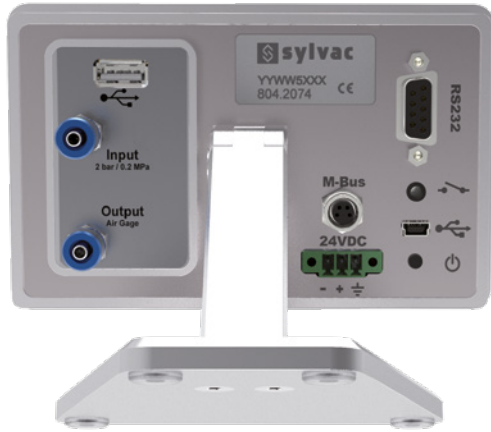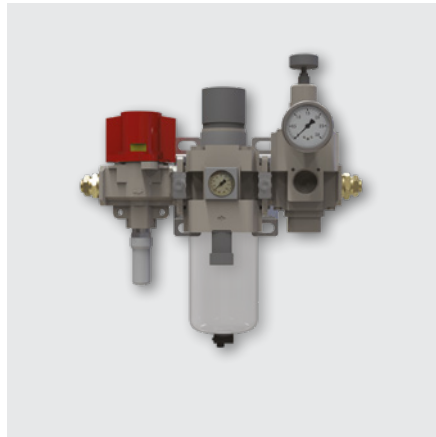

D70A - 1 input

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)

STANDARD DELIVERY

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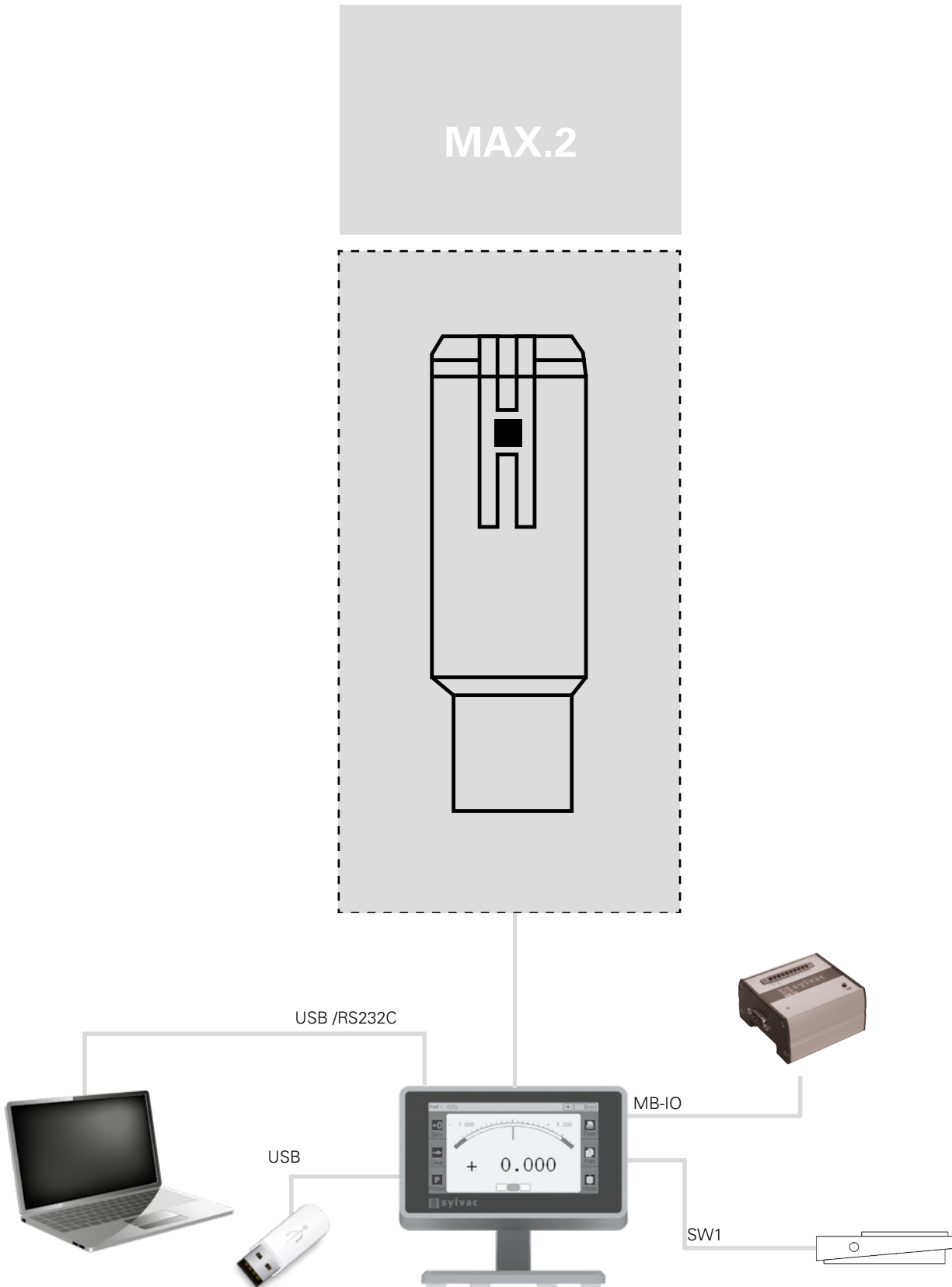- Instruction manual
- 2 additional sets of restrictors

POSSIBILITIES OF CONNECTION

MAX.2

USB /RS232C

MB-IO

USB

SW1

+ 0.000

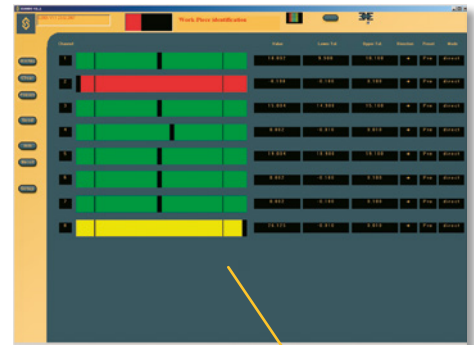# Multiplexer unit   D200S

DESCRIPTION

- Unit for connecting up to 8 SYLVAC capacitive probes and visualising the results on a PC (software included) or exporting the data.
- Housing made of aluminium profile and ABS plastic that can be placed vertically or horizontally
- 8 inputs for capacitive sensors P5, P10 and P25
- I/O terminal block with opto-coupled inputs/outputs
- Free software to view up to 24 channels simultaneously, create channel combinations, perform dynamic measurements or create sequences.
- Up to 3 units can be connected to the software, so that up to 24 probe inputs can be used.
- Possibility to connect a D110V unit for lifting the vacuum probes
- 2 connectors for optional pedal 904-4101
- USB and RS232 data outputs
- IP50 protection

8 inputs for Sylvac probes

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

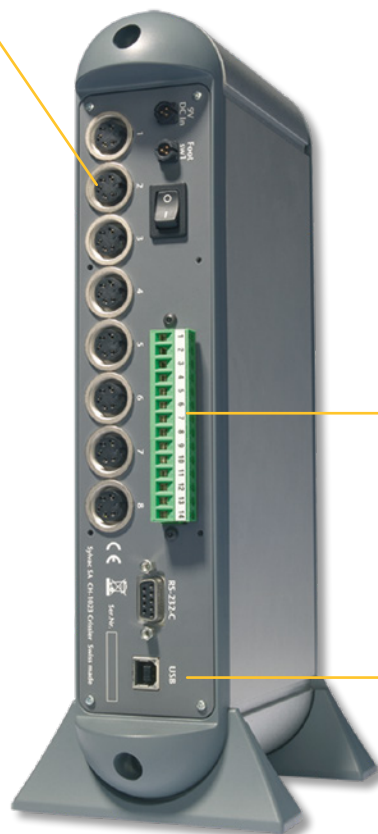Output cable USB to USB (804-1210) or output cable RS232 to RS232 (925-5609)

Tolerance indicators

Opto-coupled digital output rack

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

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

H

SWISS MADE

USB

226

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
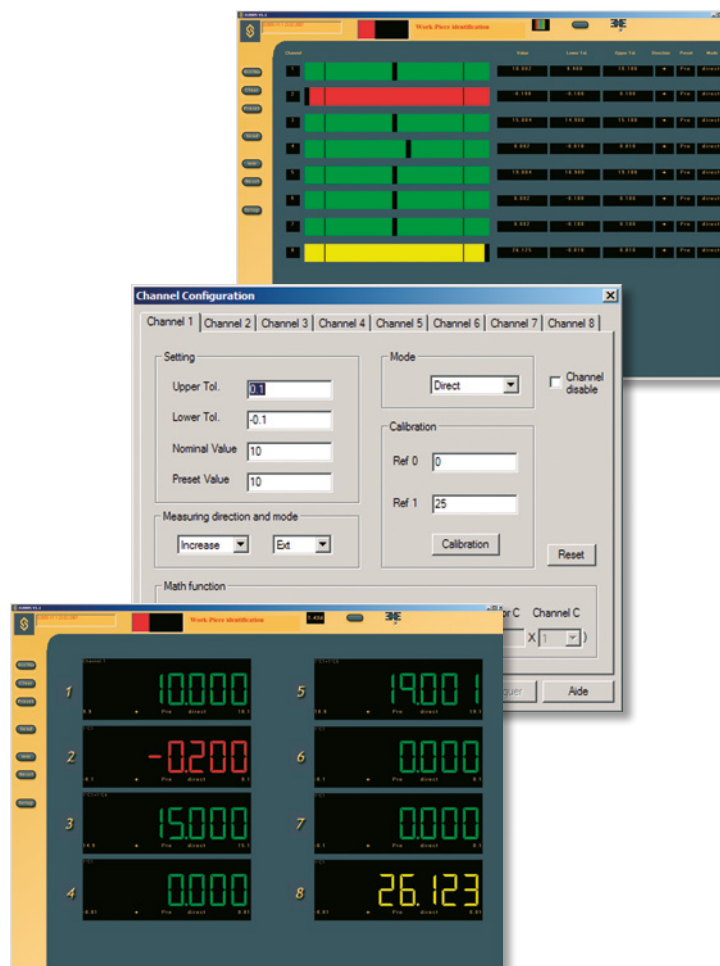
TECHNICAL SPECIFICATIONS

	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

STANDARD DELIVERY

- 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

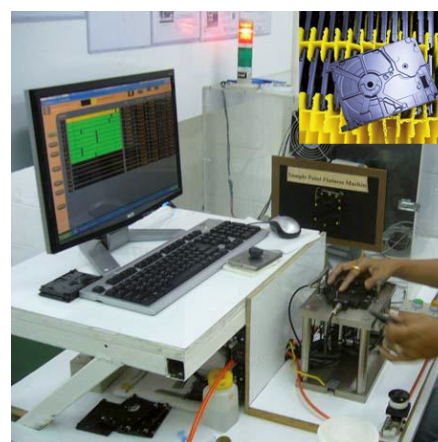Dynamic measurement of several diameters, (OD and ID) of a shaft

Capacitive probes connected to a D200S.

Multi-gauging application

H

POSSIBILITIES OF D110V PNEUMATIC LIFTER

MAX. 8

1x

8x

D110V

USB / RS232C

OUTPUT

SW1

H
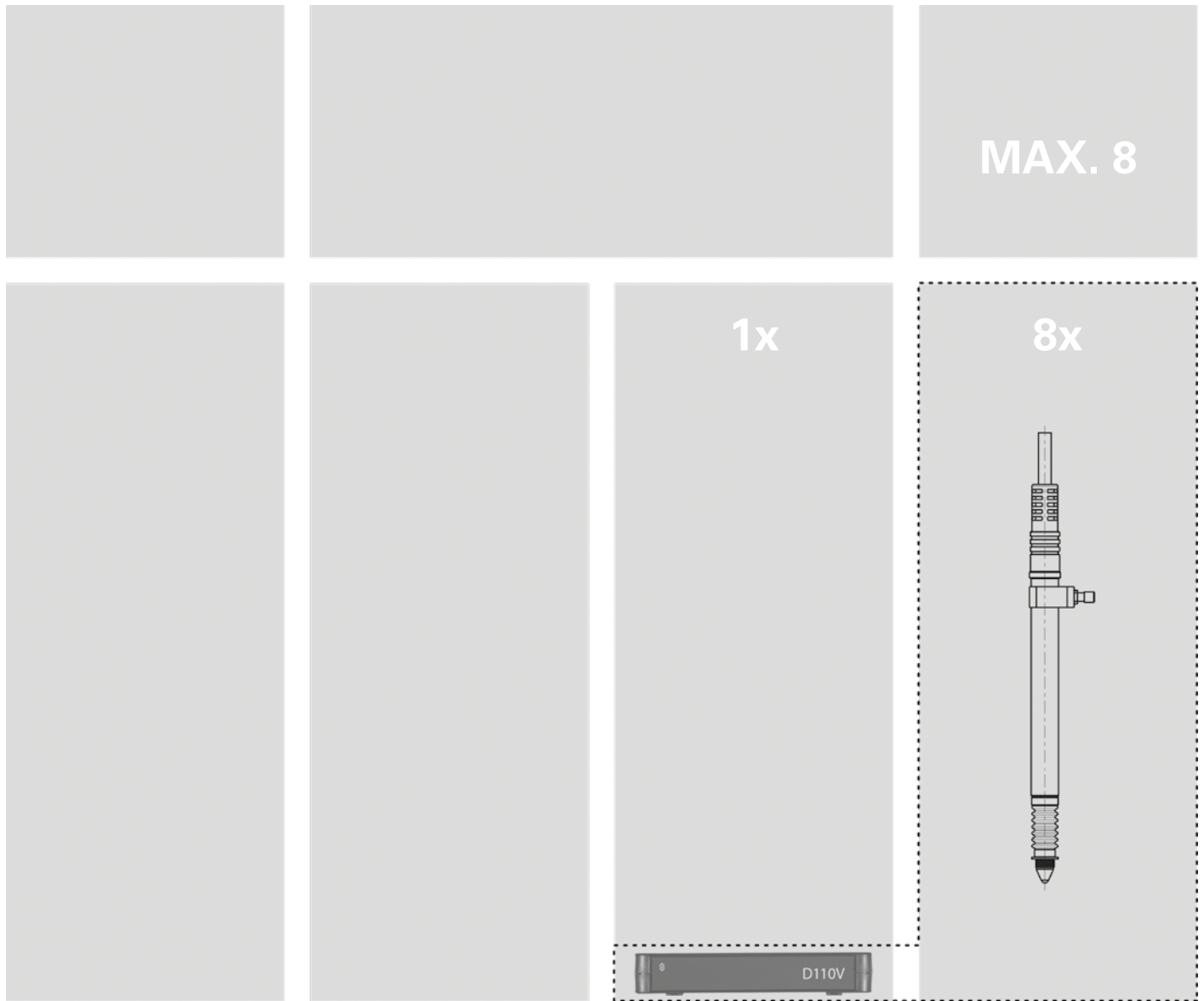
Multiplexer unit

D200S

POSSIBILITIES OF CONNECTION

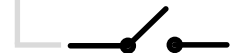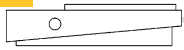| MAX. 8	MAX. 8	MAX. 8
8x	8x	8x
P2...P25	P2...P25	P2...P25

Digital display   D300S V2

DESCRIPTION

- Multifunctional units for connecting both capacitive probes and handheld instruments connected via USB cable or Bluetooth®

- Housing made of aluminium profile and ABS plastic

- Large 8.5″ colour touch screen

- Available in several versions with different connection possibilities :
    - 804-1300: 2 inputs for capacitive sensors and 6 USB inputs
    - 804-1310: 4 inputs for capacitive sensors and 6 USB inputs
    - 804-1320: input for M-BUS modules and 6 USB inputs
    - 804-1330: input for M-BUS modules, 2 inputs for capacitive sensors and 6 USB inputs
    - 804-1340: input for M-BUS modules, 4 inputs for capacitive sensors and 6 USB inputs

- Intuitive interface to create up to 64 pages with up to 8 display channels per page, create channel combinations, perform dynamic measurements or create sequences

- Display resolution up to 0.0001 mm (0.1 µm)

- I/O terminal block with opto-coupled inputs/outputs

- 2 connectors for optional pedal 904-4101

- VGA output for external display connection

- Ethernet RJ-45 connector

- USB and RS232 data outputs

- IP65 liquid-proof front panel for workshop use

Large touchscreen 8.5″ protected against liquids IP65
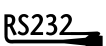
Output cable USB to USB (804-1210) and output cable RS232 to RS232 (925-5609)

SWISS MADE

USB

RS232

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

Ergonomic keyboard

* Dongle Smart required

Digital display D300S V2

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 or PC connection** [1]

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**

[1] depends on configuration
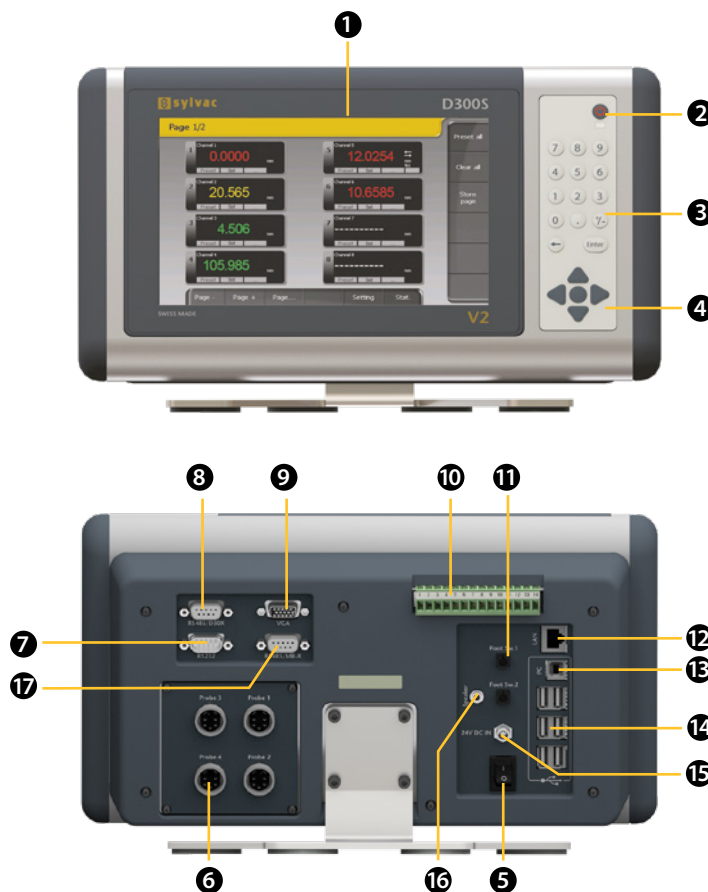
TECHNICAL SPECIFICATIONS

		804-1300	804-1320	804-1310	804-1330	804-1340
Model		D300S-2	D300S-4	D300S		
Inputs *		2 probes**	4 probes**	M-Bus**	2 probes / M-Bus**	4 probes / M-Bus**
Max error	μm	6 USB**				
Max. Error [1]	μm	P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9	---	---	---	
Repeatability	μm	P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8	---	---	---	
Overall dimensions	mm	P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2	---	---	---	
Weight	kg	330 x 175 x 77				
Case		3.3				
Protection rating according to IEC 60529		Steel / Plastic				
Output data		IP40				
Programmable by PC		USB / RS232				
				•		

[1] Probe and unit calibrated
* Extandable to 32 probes and 12 USB instruments

H

Digital display   D300S V2

STANDARD DELIVERY

- 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

POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 6
Power supplied by D300S

MAX. 12
Power supplied
by USB-HUB

MAX. 30
Via D200S

6x USB
1x RS-232

SIMPLEX

DUPLEX

4x

8x

D200S

P2...P25

USB

USB

USB

OUTPUT

USB

SW1

SW2

H

235

Digital display

D300S V2

POSSIBILITIES OF CONNECTION WITH ACCESSORIES

MAX. 32

MAX. 32

2x	15x	7x	4x

P2...P25

D302

D304

P2...P25

H

RS485

RS485

OUTPUT

USB

USB

SW1

SW2
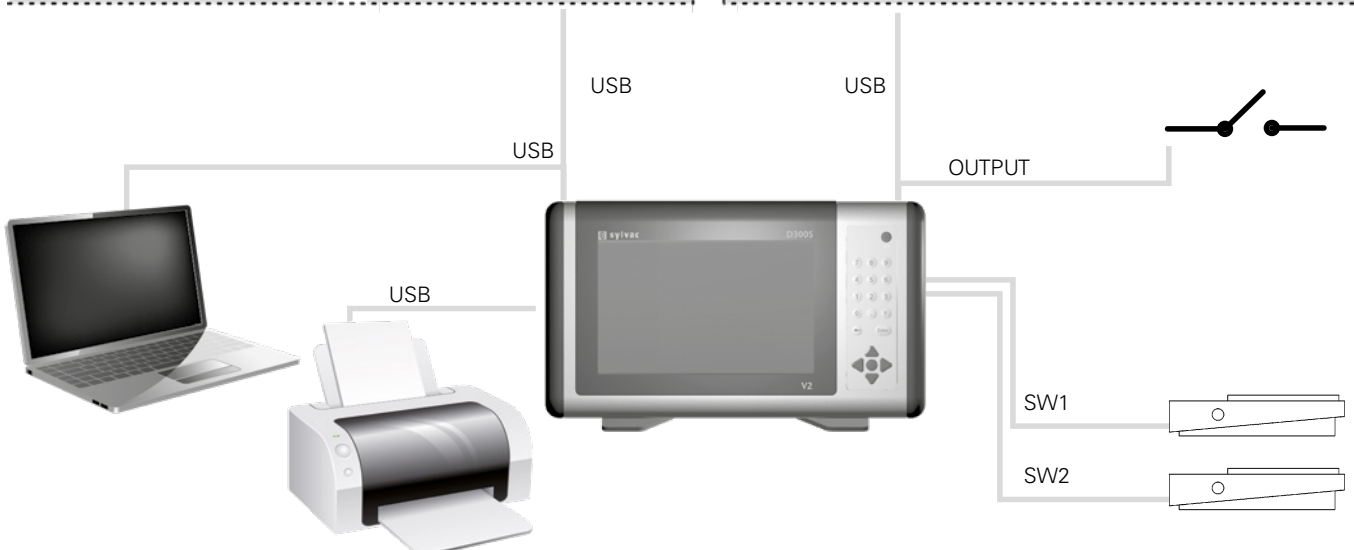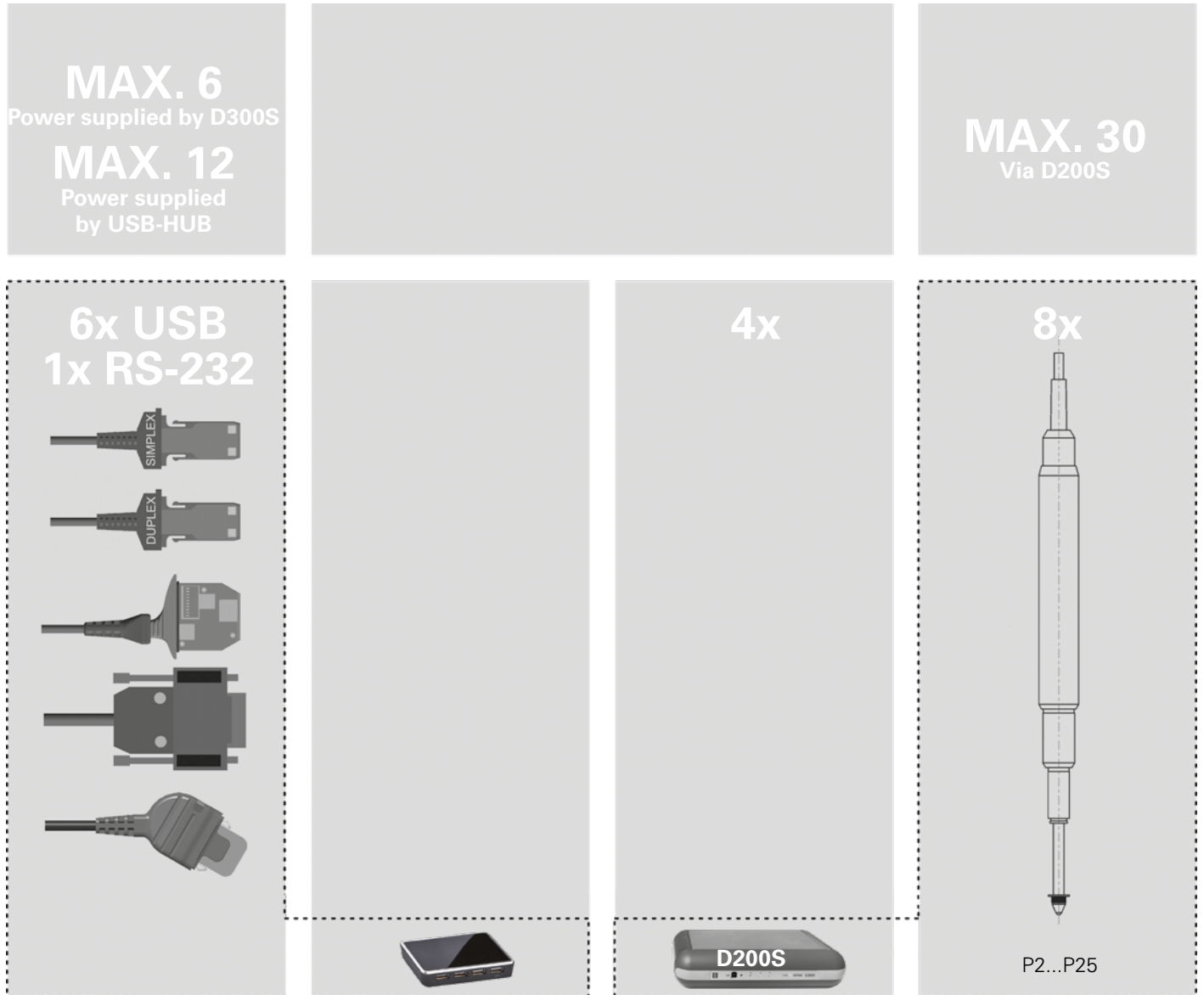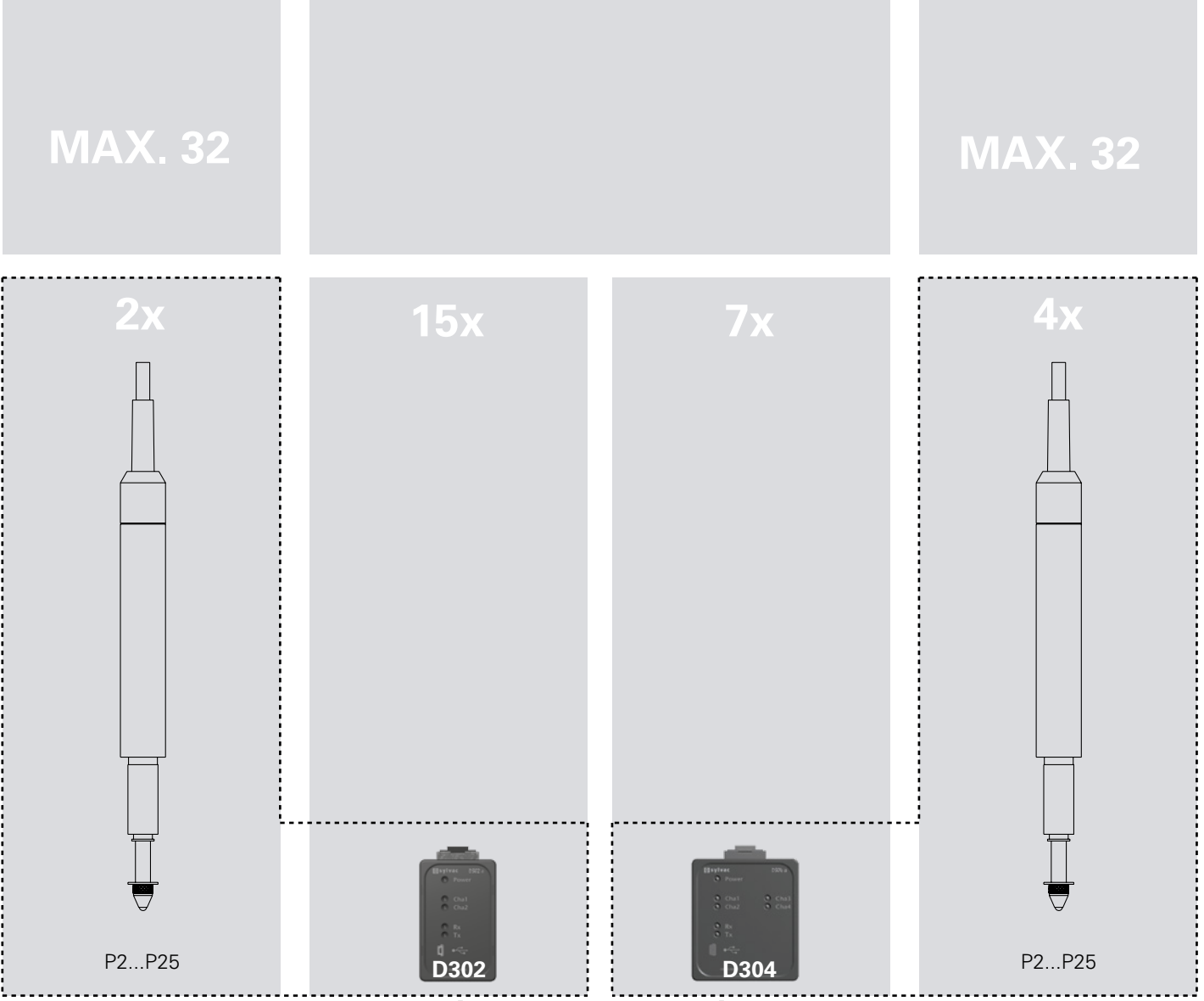
POSSIBILITIES OF CONNECTION WITH ACCESSORIES

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

H
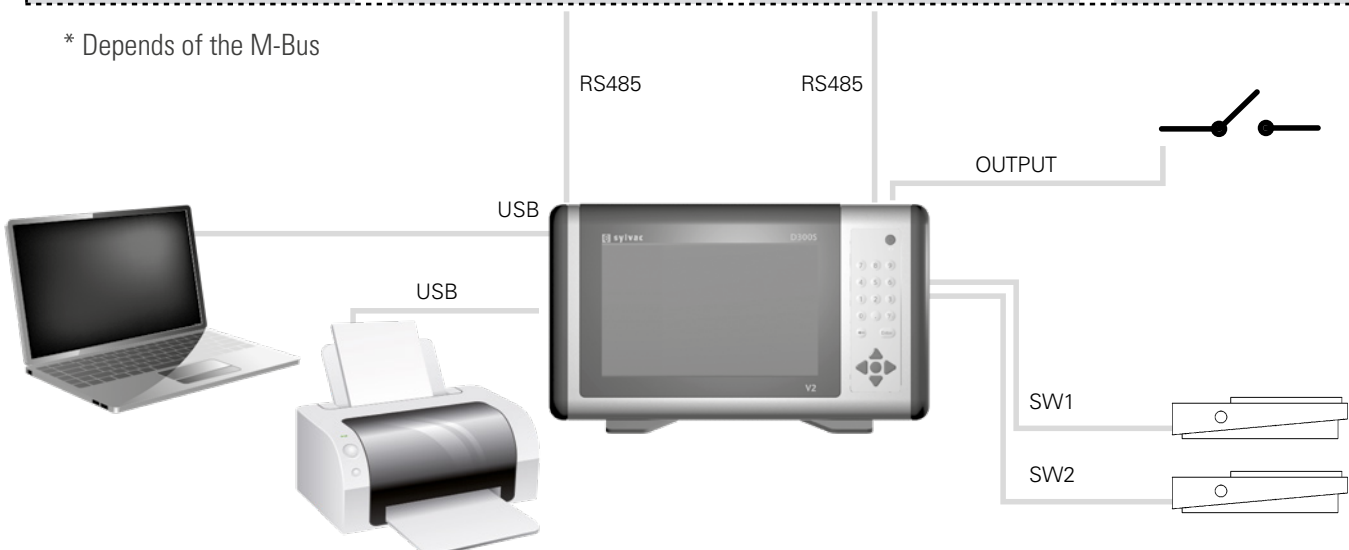
Digital display

D300S V2

POSSIBILITIES OF CONNECTION WITH BLUETOOTH® WIRELESS TECHNOLOGY

MAX. 8

Instruments

Bluetooth®

1x
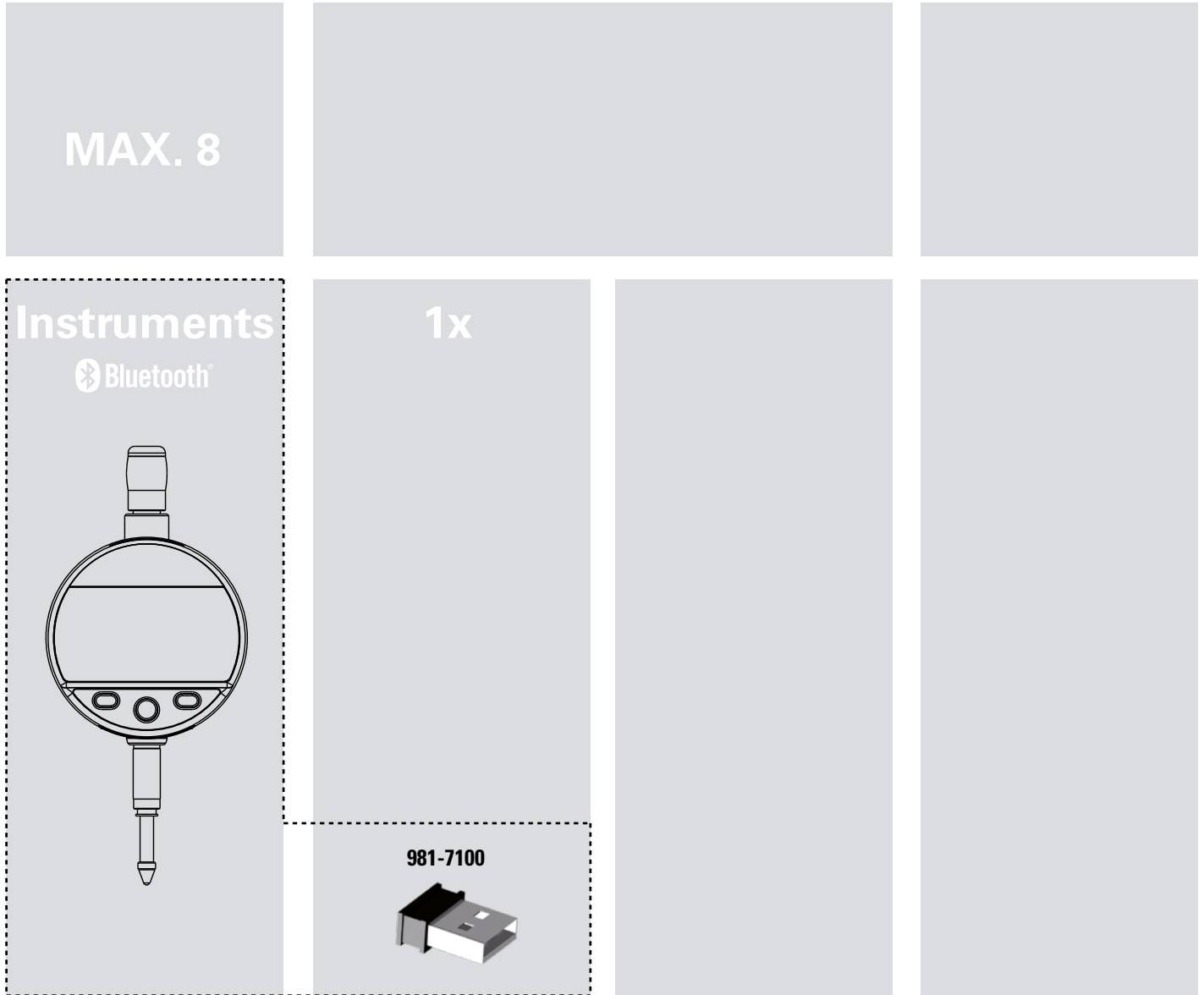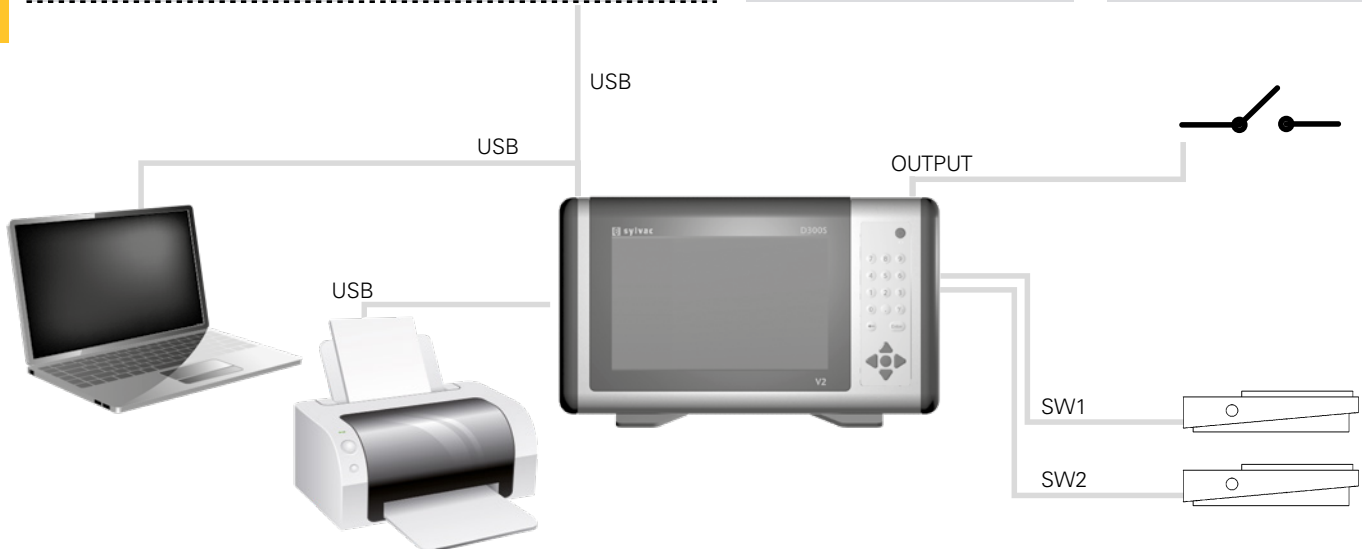
981-7100

USB

USB

USB

OUTPUT

SW1

SW2

Digital display   D400S

DESCRIPTION

- Multifunctional unit for connecting up to 99 Sylvac instruments of different makes via M-BUS modules (the unit itself has no inputs for the instruments)
- Ideal for multi-dimensional control stations and automation applications
- Robust aluminium housing with table stand or can be integrated into a panel
- Large 7" colour touch screen
- Displays up to 32 channels simultaneously (on the same screen) or spread over several pages (max. 32)
- Intuitive interface for creating channel combinations, performing dynamic measurements, editing mathematical formulas or creating sequences
- Up to 128 room configurations can be stored and up to 30,000 values can be saved per configuration or saved on a USB stick.
- Basic SPC functions (Cp, Cpk, run chart, Pareto, histogram with Gauss curve, etc.).
- Display resolution up to 0.0001 mm (0.1 µm)
- Connectors for optional pedal 904-4101
- USB and RS2323 data outputs
- ASCII and Modbus communication protocols
- IP54 liquid-proof front panel for workshop use

Panel mounting
(accessory 804-2202)

Large touchscreen 7'' protected against liquids IP65

Output cable USB to USB (804-1210) or RS232 (925-5609)

H

Digital display　　　　　　　　　　　　　　　　　　　　　　D400S

INTERFACE | HARDWARE

❶ **Customizable display interface**

❷ **Aluminium body**

❸ **24VDC Power supply**

❹ **Nut for DIN rail mounting (optional)**

❺ **USB key connector or QR code reader**

❻ **USB for HID keyboard emulation**

❼ **Virtual Com Port**

❽ **Footswitch 1 and 2**

❾ **Mbus connector**

❿ **Com Port (ASCII communication, Modbus RTU and Profinet module connection)**
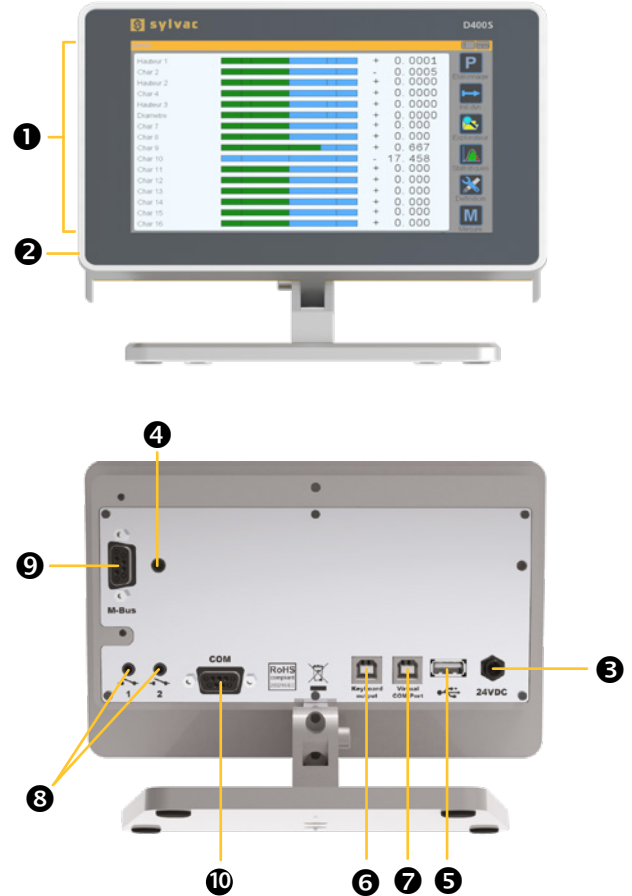
TECHNICAL SPECIFICATIONS

		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

STANDARD DELIVERY

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

APPLICATIONS

Probes connection through M-BUS inputs

Inductive probes connection on a jig
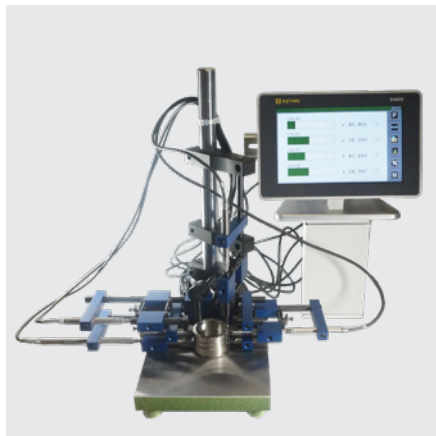

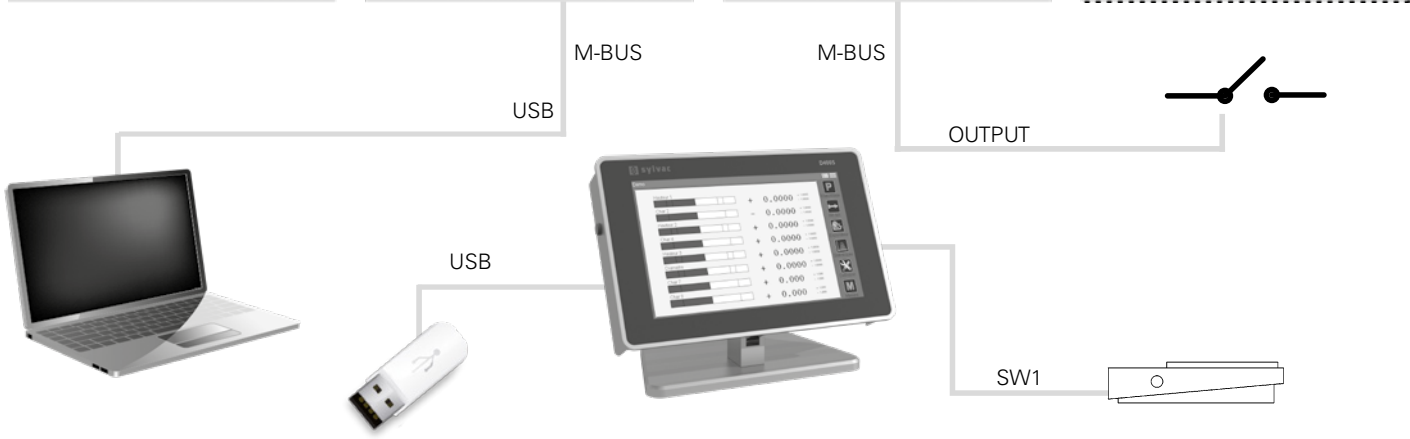Probes and indicators connection through M-BUS inputs

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
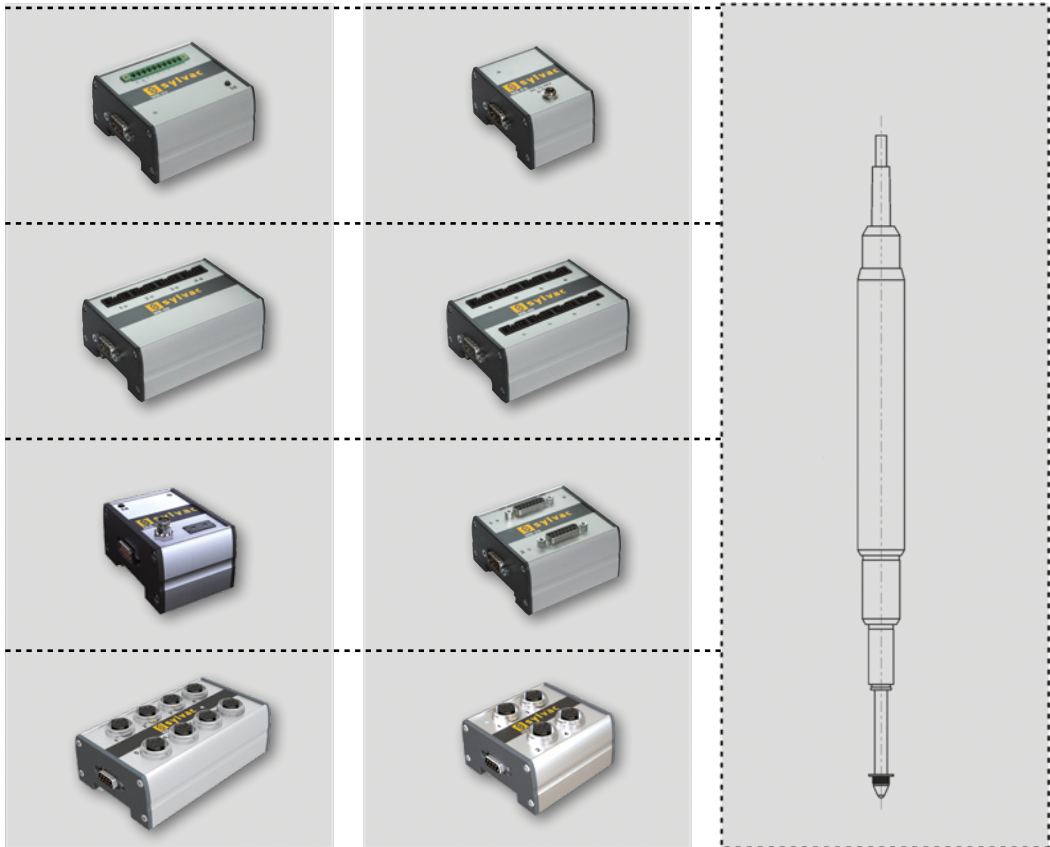
Multiplexer unit

DESCRIPTION

- Multiplexing units for connecting Sylvac capacitive probes to a computer or a PLC

- 2 or 4 inputs for capacitive sensors P5, P10 or P25

- Aluminium and plastic housing

- Available in 2 versions :

    - D302/D304 allowing the reading and conversion of the position value of Sylvac capacitive probes up to a resolution

       of 0.1µm. The results are available on a USB port and on a MODBUS RS485 port.

    - D302a/D304a equipped with an extension to provide analogue voltages

       corresponding to the position of the probes, with a range of +/-10V and a resolution of up to 0.025 mV

- Baud rate 10-20 measurements per second depending on resolution

- Up to 16 D304 units can be coupled together to have a maximum of 64 probe inputs.

- IP40 protection

Output cable RS485 to RS485 (925-5609)

Output cable mini-USB to USB (926-6001)
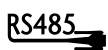
SWISS MADE

RS485

mini-USB

Multiplexer unit

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
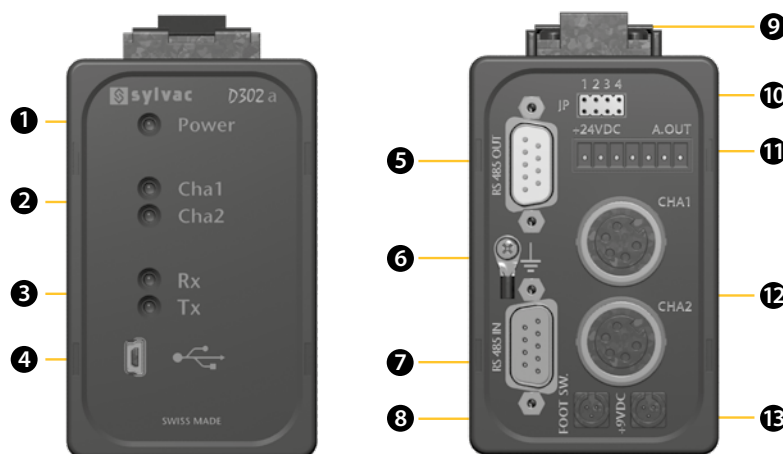
TECHNICAL SPECIFICATIONS

		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

STANDARD DELIVERY

- 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

- Interfacing modules for connecting Sylvac instruments (hand instruments and probes) as well as instruments of other brands to the D300S and D400S units, to a computer (Sylcom Advanced and Pro) or to a PLC
- Manufactured from an anodised aluminium profile for mounting on a DIN rail, our M-Bus modules are suitable for use in harsh industrial environments.
- RS485 data output
- The following modules are available:

804-2160 MB-RS module
Master module for communication with the computer or PLC via USB or RS232.

804-2130 MB-I/O module
Module with 8 opto-coupled inputs/outputs for communication with a PLC or peripherals such as an alarm signal. It is possible to connect several I/O modules in order to have up to 32 inputs/outputs.

804-2104 Module MB-4C
Module with 4 connectors for Sylvac capacitive probes.

804-2105 Module MB-4P
Module with 4 connectors type M8 for Sylvac P12D digital probe.

804-2107 Module MB-4I / 804-2108 Module MB-8I
Module with 4 or 8 connectors for Sylvac inductive probes. These modules are also suitable for Half-Bridge probes from other manufacturers using the Tesa protocol (Mahr, Dong-Do, Tesa, Peter Hirt, etc.).

804-2111 Module MB-1D / 804-2114 Module MB-4D
Module with 1 or 4 Digimatic type connectors for Mitutoyo instruments and instruments of other Digimatic compatible brands.

804-2122 Module MB-2S
Module with 2 connectors for Heindenhain incremental probes 11µmA/1VPP .

804-2180 MB-BT module
Module for connecting 8 Sylvac Smart Bluetooth® instruments (only compatible with D400S unit).

804-2190 Module MB-AG
Module with one inlet for tampon or air ring, supplied with a set of 6 different throttles.

804-2170 MB-TP module
Module with one input for a thermocouple or PT100 temperature sensor/probe.

804-2140 MB-PS module
Additional power supply module that may be required when a large number of M-BUS modules are connected together.

804-21xx MB-NET module
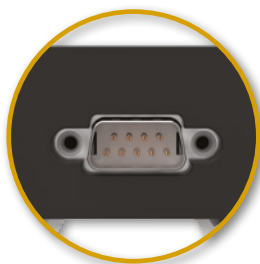Module with Ethernet connector to transfer values to a server (only compatible with D400S unit).

RS485

Multiplexer units M-Bus

Multiplexer unit

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)
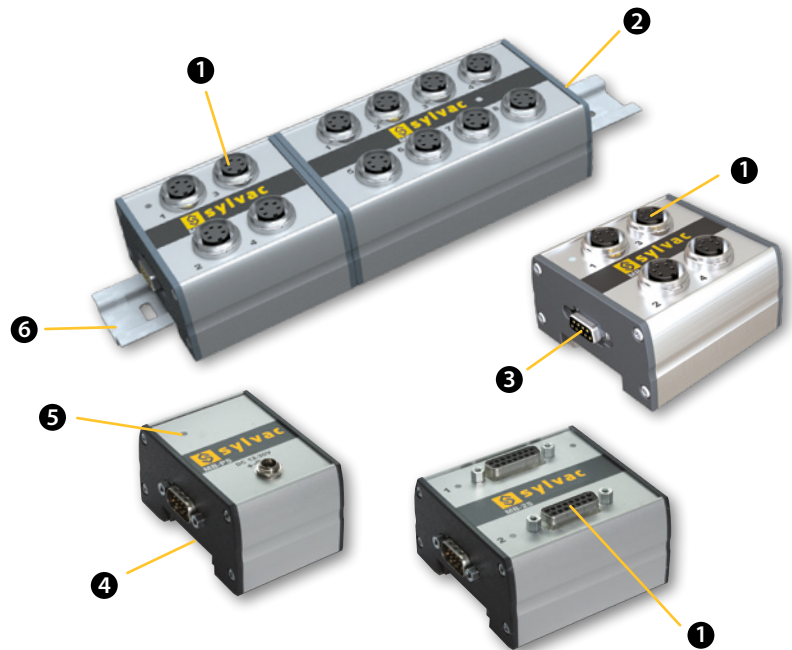
TECHNICAL SPECIFICATIONS

	804-2104	804-2108	804-2122	804-2114	804-2111	804-2107	804-2105
Modele	MB-4C	MB-8i	MB-2S	MB-4D	MB-1D	MB-4i	MB-4P
Instrument type	Sylvac capacitive probes	Inductive[1]	Heidenhain probes (11µmA/1VPP)	Digimatic		Inductive[1]	Probes P12D
Compatibility	D300S & D400S						
Dimensions (L x h x w) mm	107x42x74	131x44x74	82x43x74	107x39x74	52x39x74	107x39x74	107x42x74
Weight kg	0.2	0.3	0.2	0.2	0.1	0.2	0.2
Inputs	4	8	2	4	1	4	4
Case	Anodized aluminium profile						
Output data	RS 485						

[1] Half-bridge: see www.sylvac.ch for information on compatibility

Multiplexer unit

M-Bus

TECHNICAL SPECIFICATIONS

	804-2130	804-2140	804-2160	804-2170	804-2180	804-2190	804-21xx
Modele	MB-IO	MB-PS	MB-RS	MB-TP	MB-BT	MB-AG	MB-NET
Instrument type	PLC I/O	Power-Supply	Computer	Temperature sensor input PT100 and Thermocouple	Instruments with Bluetooth® wireless technology	Plug gauges and Air gauges	Ethernet connector for server sending
Compatibility	D300S & D400S			D400S			
Dimensions (L x h x w) mm	82x39x74	52x42x74	82x39x74	52x51x74	52x39x74	52x64x74	52x64x74
Weight kg	0.2	0.2	0.2	0.1	0.1	0.15	0.15
Inputs	8	12-30 VDC	254	1 / 1	8	1	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

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STANDARD DELIVERY

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

Probes connection through M-BUS inputs

Probes connection on PC through MB-RS

Probes and indicators connection through M-BUS inputs

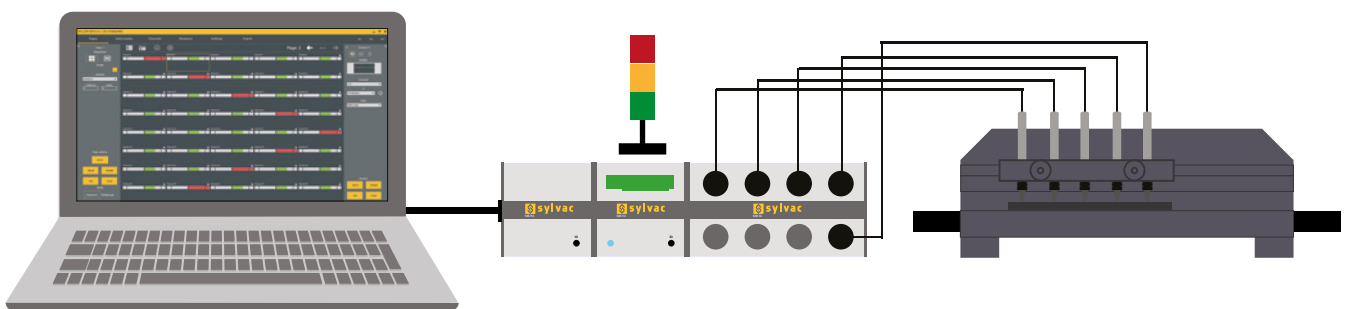
Probes connection on a D300S through D302 multplexer units

Digimatic instruments connected to a MB-4D

Probes connected to a MB-8i

Connection of probes via Mbus on Sylcom

Multiplexer unit

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)			
926-7020	Footpedal USB						PC only					
926-7021	Footpedal USB robust						PC only					
904-6001	Dust cover									●		
804-1211	Connection cable D200S - D110/V							●				

1) Dongle Smart required
2) The right country cable, depending on the delivery location, will be delivered with 904-4200, 804-4000 and 804-4010.

Display units

ACCESSORIES
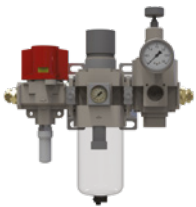
		D50S	D62S	D70S	D70H	D70I	D70A	D200S	D300S	D302 D304	D400S	P12D
804-2104	MB-4C								●		●	
804-2108	MB-8i								●		●	
804-2122	MB-2S								●		●	
804-2114/18	MB-4D & MB-8D								●		●	
804-2130	MB-IO								●		●	
804-2140	MB-PS								●		●	
804-2160	MB-RS											
804-2170	MB-TP								●		●	
804-2180	MB-BT										●	
804-2190	MB-AG										●	
804-2105	MB-4P											●
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						●				●	
804-4105	Restrictor Ø 0.9mm						●				●	

H