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# SMALL & MID-SIZE INSTRUMENTS

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This chapter brings together various instruments, some of which may seem unusual at first glance, but which have provided a vital solution for clients for whom mistakes are forbidden. The star of this section is undoubtedly our set of digital thickness gages, which is a marvellous illustration of Sylvac's boundless ingenuity. You will also find other instruments such as an angle protractor, micrometric screws and depth gages, all of which can be connected either via Bluetooth® or cable.

## GENERAL CHARACTERISTICS :

- **Powered by lithium battery type CR2032**
- **Absolute measuring system S.I.S**
- **Automatic sleep and wake-up**
- **mm/inch conversion on all models**
- **Working temperature +5° to +40°C**





# Digital thickness gage

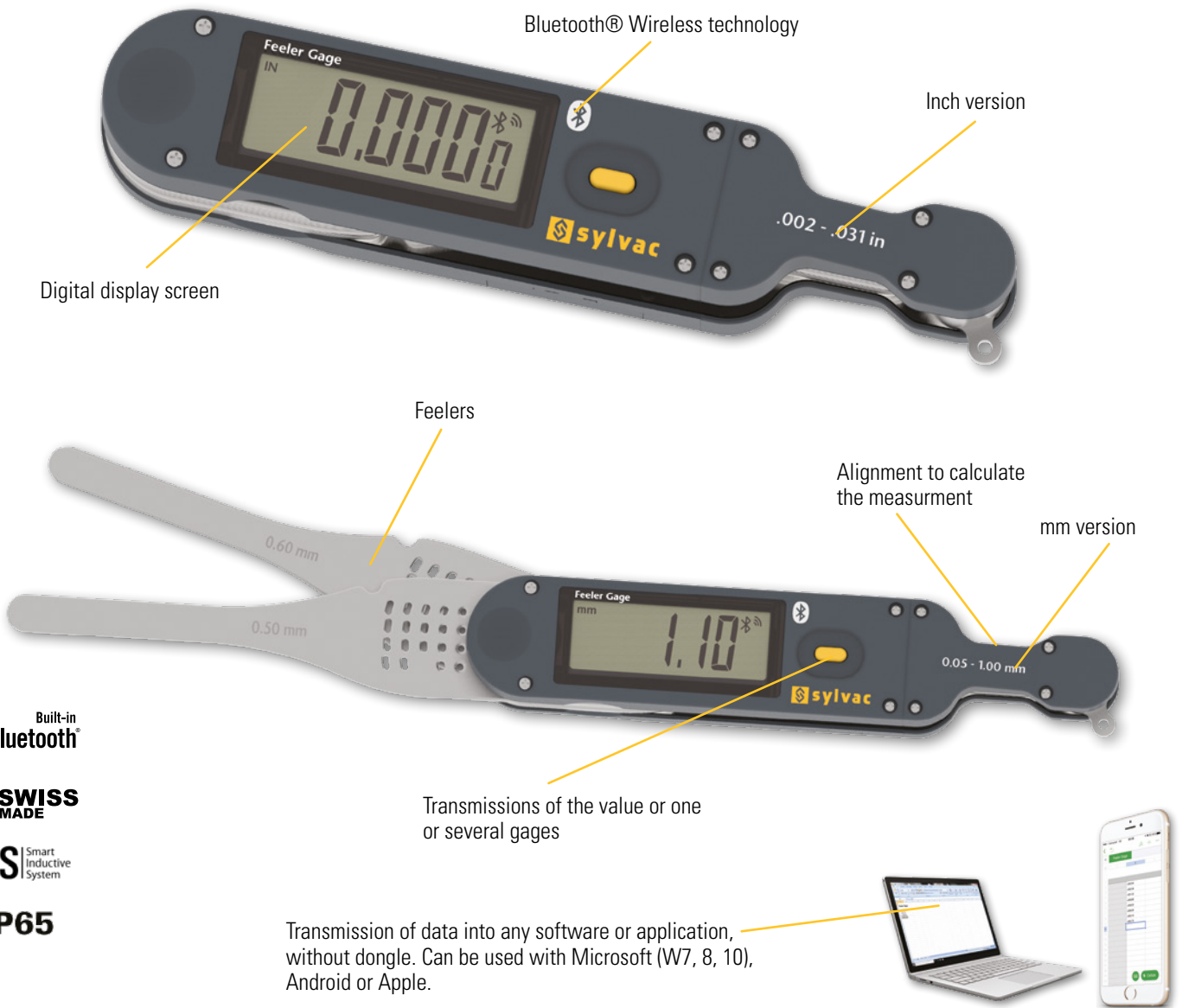
# Feeler Gage Smart

## DESCRIPTION

- World novelty, the first set of thickness gages with digital display of the total thickness of all feelers removed from the case.
- Integrated Bluetooth® system
- Developed for sensitive applications (aerospace, automotive, defence, etc.) where error is prohibited
- Available with steel feelers with thickness in mm or inches.
- Accuracy of feeler thickness according to DIN 2275: 2014-03 class TC1
- Sets in mm with 19 or 20 feelers, useful length 99 mm
- Set in inch with 14 feelers, usable length 3.9"
- Individual replacement feelers available on request
- Display resolution 0.01 mm and .001».
- IP65 protection



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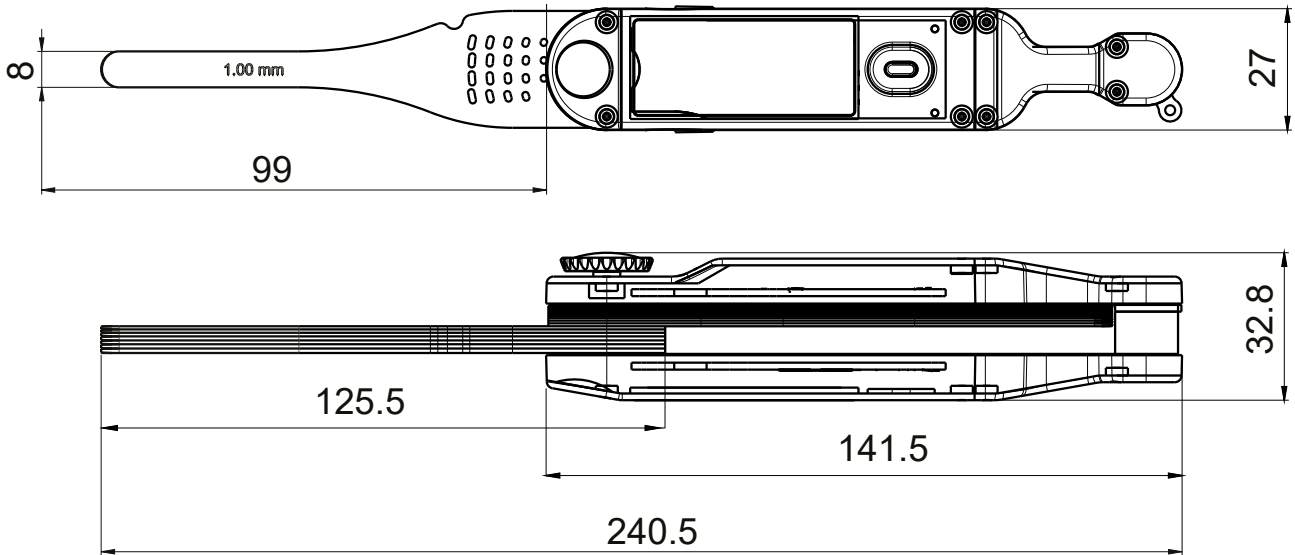




# Digital thickness gage

# Feeler Gage Smart

## DIMENSIONAL DRAWING



### Model 921-0100

The thickness may differ slightly for the other models according to the number of gages.

## TECHNICAL SPECIFICATIONS

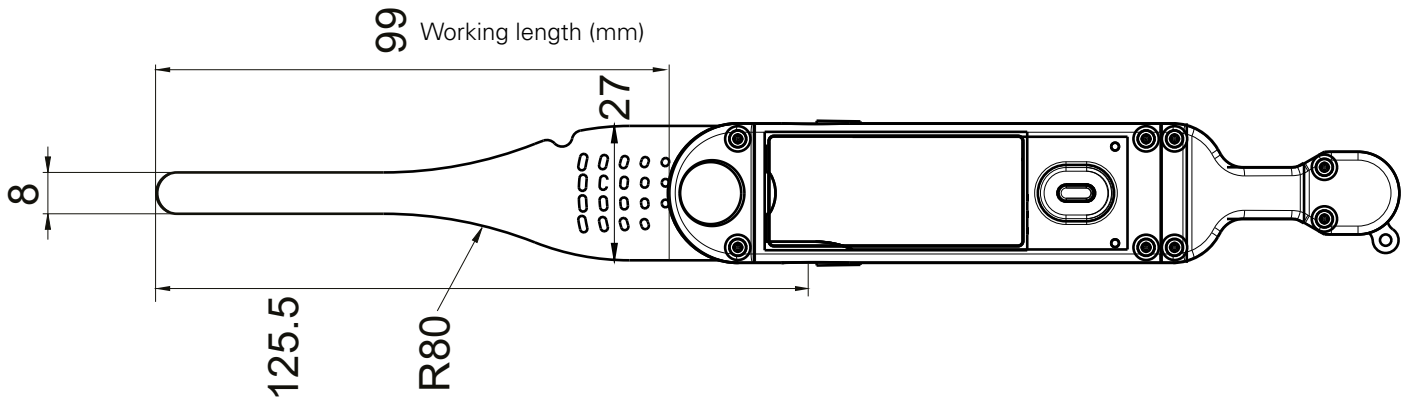
		921-0100	921-0110	921-0114
Type of version		mm	mm	inch
Measurement capacity	mm/in	0.05...1.00 mm	0.04...1.00 mm	0.0020...0.0310 in
Feelers thickness	mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	0.04, 0.05, 0.06, 0.07, 0.08, 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	0.0020, 0.0030, 0.0040, 0.0050, 0.0060, 0.0070, 0.0080, 0.0090, 0.0100, 0.0120, 0.0150, 0.0200, 0.0250, 0.0310
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	14
Weight	g	280	224	212
Functions		Unit (mm/inch)		



# Digital thickness gage

# Feeler Gage Smart

## REPLACEMENT FEELERS



**Model 921-0100**  
Metric Feeler Gage  
0.05...1.00mm  
20 blades

**Model 921-0110**  
Metric Feeler Gage  
0.04...1.00mm  
19 blades

**Model 921-0114**  
Imperial Feeler Gage  
0.0020...0.0310in  
14 blades

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Reference	Thickness (mm)	Tolerance (mm)
921-1001	0.05	±0.004
921-1006	0.10	±0.005
921-1007	0.15	±0.006
921-1008	0.20	±0.006
921-1009	0.25	±0.007
921-1010	0.30	±0.007
921-1011	0.35	±0.008
921-1012	0.40	±0.009
921-1013	0.45	±0.009
921-1014	0.50	±0.010
921-1015	0.55	±0.011
921-1016	0.60	±0.011
921-1017	0.65	±0.012
921-1018	0.70	±0.012
921-1019	0.75	±0.013
921-1020	0.80	±0.014
921-1021	0.85	±0.014
921-1022	0.90	±0.015
921-1023	0.95	±0.016
921-1024	1.00	±0.017

Reference	Thickness (mm)	Tolerance (mm)
921-1000	0.04	±0.004
921-1001	0.05	±0.004
921-1002	0.06	±0.004
921-1003	0.07	±0.004
921-1004	0.08	±0.004
921-1005	0.09	±0.004
921-1006	0.10	±0.005
921-1007	0.15	±0.006
921-1008	0.20	±0.006
921-1009	0.25	±0.007
921-1010	0.30	±0.007
921-1011	0.35	±0.008
921-1012	0.40	±0.009
921-1014	0.50	±0.010
921-1016	0.60	±0.011
921-1018	0.70	±0.012
921-1020	0.80	±0.014
921-1022	0.90	±0.015
921-1024	1.00	±0.017

Reference	Thickness (in)	Tolerance (mm)
921-1025	0.0020	±0.004
921-1026	0.0030	±0.004
921-1027	0.0040	±0.004
921-1028	0.0050	±0.005
921-1029	0.0060	±0.005
921-1030	0.0070	±0.006
921-1031	0.0080	±0.006
921-1032	0.0090	±0.006
921-1033	0.0100	±0.006
921-1034	0.0120	±0.007
921-1035	0.0150	±0.008
921-1036	0.0200	±0.009
921-1037	0.0250	±0.011
921-1038	0.0301	±0.012

Material of the feelers : spring tempered stainless steel 1.4310 / alloy 301



# Digital thickness gage

# Feeler Gage Smart

## STANDARD DELIVERY

- 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

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# Digital micrometer screws

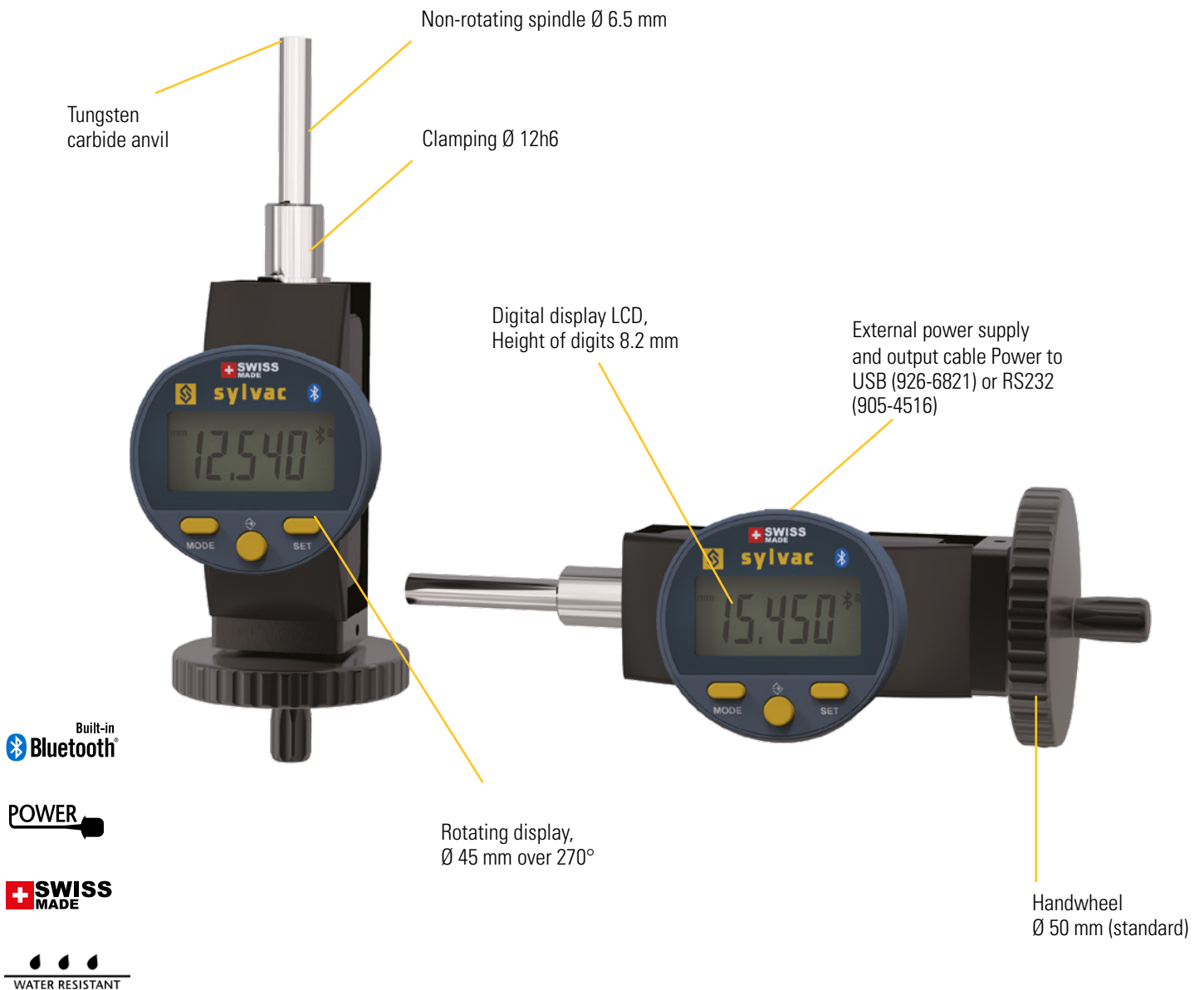
# S\_Screw Smart

## DESCRIPTION

- Digital micrometric screws with  $\varnothing$  45 mm dial rotatable by 270° allowing use in the X or Y axis
- Integrated Bluetooth® system
- Developed mainly to equip X-Y measuring tables (measuring microscopes)
- Display resolution 0.001 mm
- Non-turnable spindle  $\varnothing$  6.5 with hard metal tip
- Fixing by  $\varnothing$  12 h6
- Steering wheel  $\varnothing$  50 mm
- Additional data output Power
- Measuring range 25 and 50 mm
- IP54 protection



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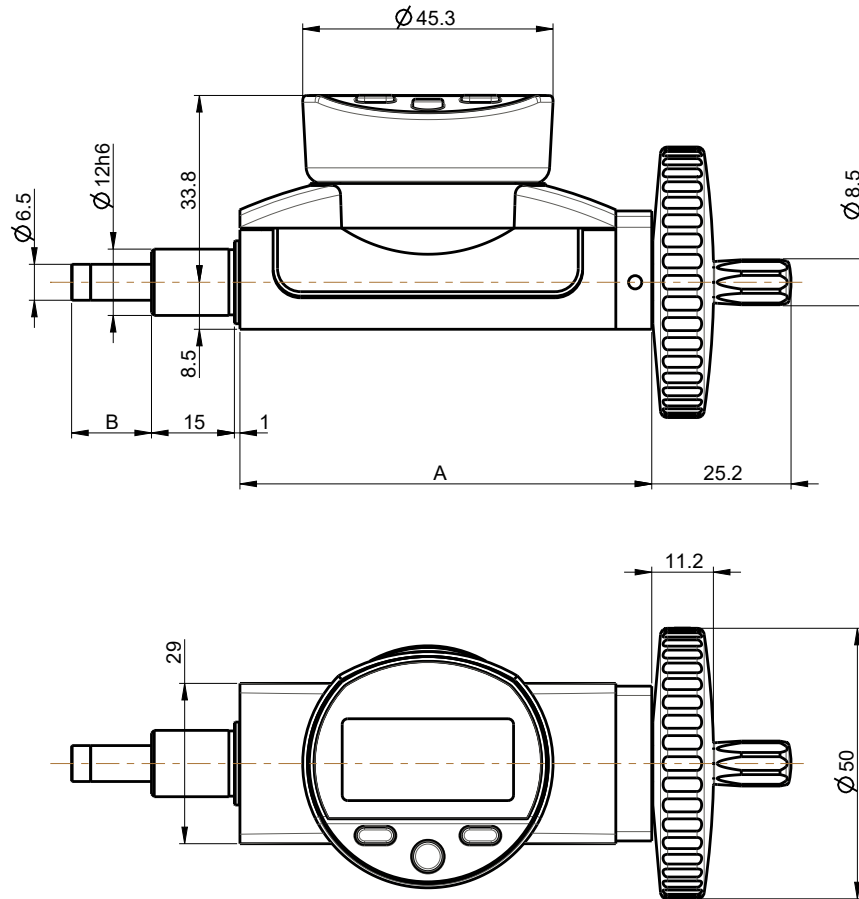




# Digital micrometer screws

# S\_Screw Smart

## DIMENSIONAL DRAWING



## TECHNICAL SPECIFICATIONS

		852-2601	852-2611
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	Bluetooth® wireless technology* / USB / RS232 <sup>1)</sup>		
Selection of measuring direction	●		
PRESET function	●		
4 measurement references	●		
Multiplication factor	●		

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



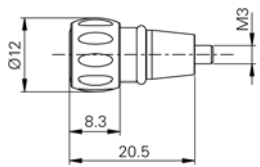
# Digital micrometer screws

# S\_Screw Smart

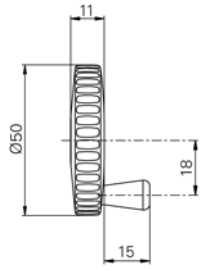
## STANDARD DELIVERY

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Quickstart
- Handwheel Ø 50 mm (852-2311)
- Calibration certificate

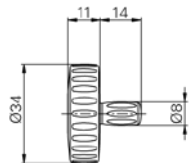
## ACCESSORIES



<b>852.2310</b>	Fine adjustment device
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<b>852.2311</b>	Handwheel Ø 50 mm with crank handle for fast motion
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<b>852.2312</b>	Handwheel Ø 34 mm
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## APPLICATIONS



Fine adjustment device type 852.2310



Use on measuring microscope



Handwheel use

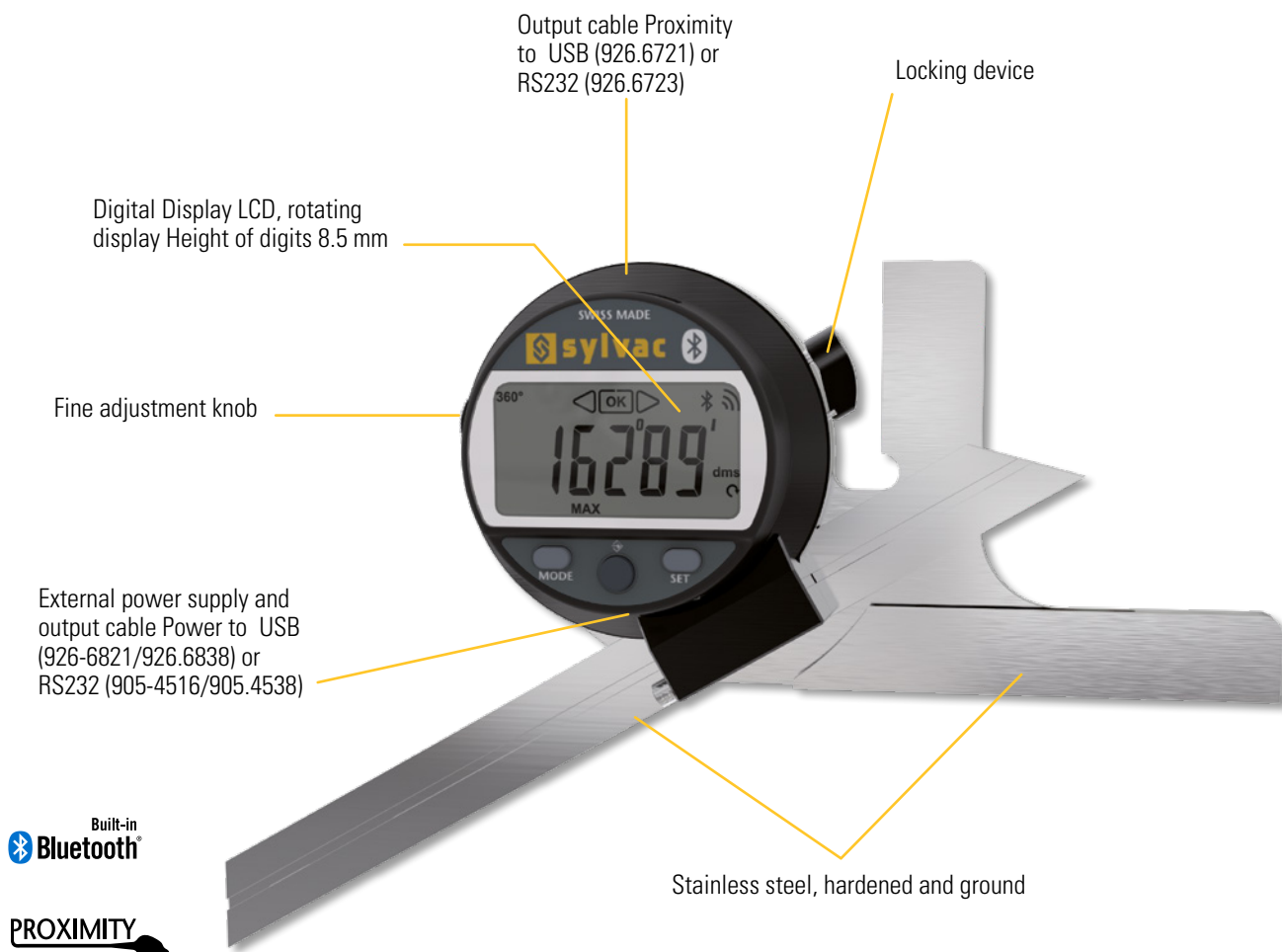


# Protractor

# Protractor Smart

## DESCRIPTION

- Protractor with integrated Bluetooth® system
- Housing Ø 59.5 mm rotatable by 270°.
- Large display with colour LED tolerance status indication
- Angular value display in : Degrees, resolution 0.01° / Degrees/minute, resolution 0°01' / Radian, resolution .0001
- Three buttons, including the central button with selectable favourite function
- Ruler length 200 mm (other lengths available as an option)
- Measuring range: 1 x 360°, 2 x 180°, 4 x 90°.
- Additional data outputs Proximity and Power
- Protection class IP54

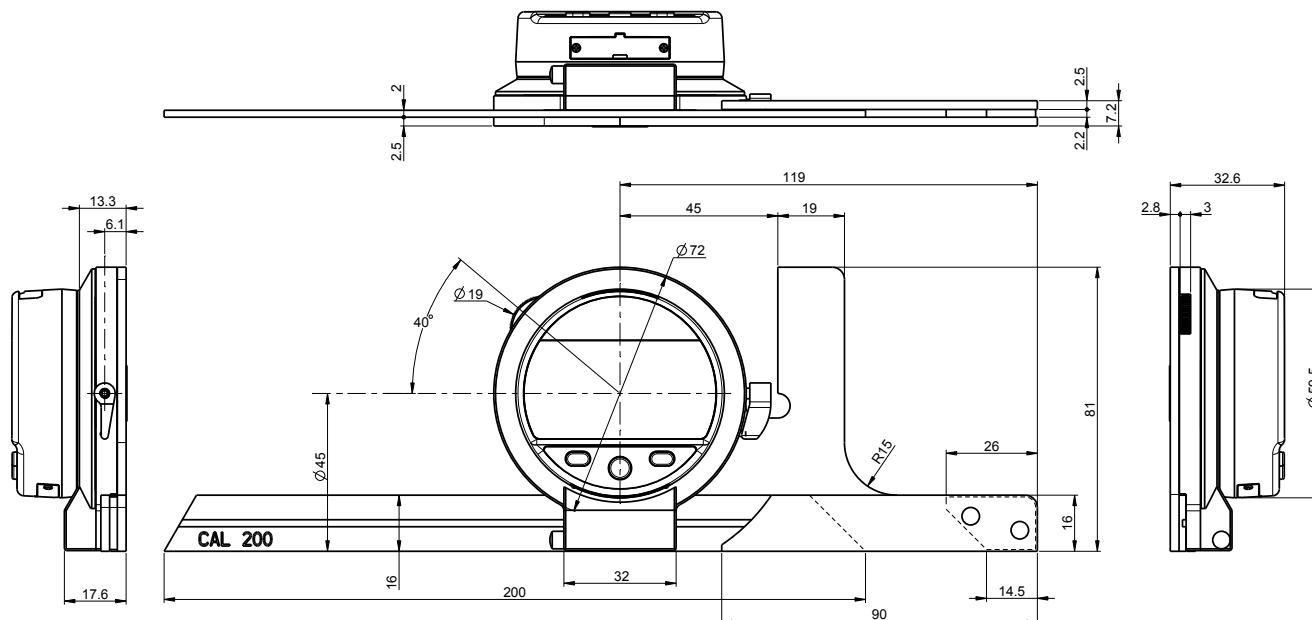


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# Protractor

# Protractor 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') / 0.0001 rad
Repeatability	0.01°
Max. rotation speed	1080° / sec
Protection rating according to IEC 529	IP54
Output data	Bluetooth® wireless technology* / USB / RS232
Functions	Unit ( <i>dEG</i> , <i>rAd</i> or <i>d-R</i> ), reference, Preset, Measurement direction, mode MIN/MAX/DELTA, tolerance display, switch off, keypad lock

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

**\* Up to 8 instruments connected per dongle #981-7100**  
**More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT**

## STANDARD DELIVERY

- Instrument according to technical specifications
- Wooden box <sup>2)</sup>
- Scale 200 mm (820-2420)
- Lithium battery CR2032 included
- Instruction manual

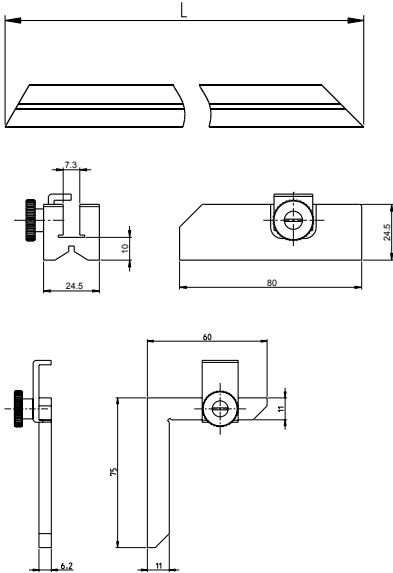
<sup>2)</sup> Fumigated, compatible ISPM 15 and NIMP 15



# Protractor

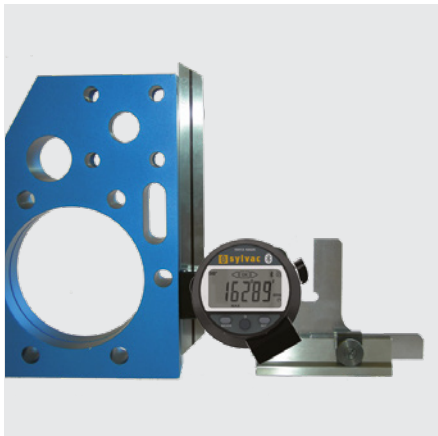
# Protractor Smart

## ACCESSORIES



<b>820-2420</b>	Scale L 200 mm
<b>820-2430</b>	Scale L 300 mm
<b>820-2450</b>	Scale L 500 mm
<b>820-2460</b>	Stand for vertical application and small angular measurements
<b>820-2461</b>	Square for small angular measurements

## APPLICATIONS



Measurement with accessory type 820-2460



Standard measurement



Measurement with accessory type 820-2461



# Depth gage

# S\_Depth PRO Smart

## DESCRIPTION

- Depth gages equipped with a compact Ø 45 mm rotating housing and integrated Bluetooth® system
- 100 mm wide bridge with holes for the attachment of an additional wider bridge
- Flat pole 20 x 5 mm in hardened and ground stainless steel
- Cursor locking screw
- Three buttons, including the central button with selectable favourite function
- Input of the constant for cylindrical or spherical touch button (with accessory 805-6103) for groove height measurement
- Digital display resolution 0.01 mm
- Measuring range 300 and 600 mm
- Additional data output «Power», works without battery when connected via this cable
- Interchangeable measuring key M2.5
- IP54 protection



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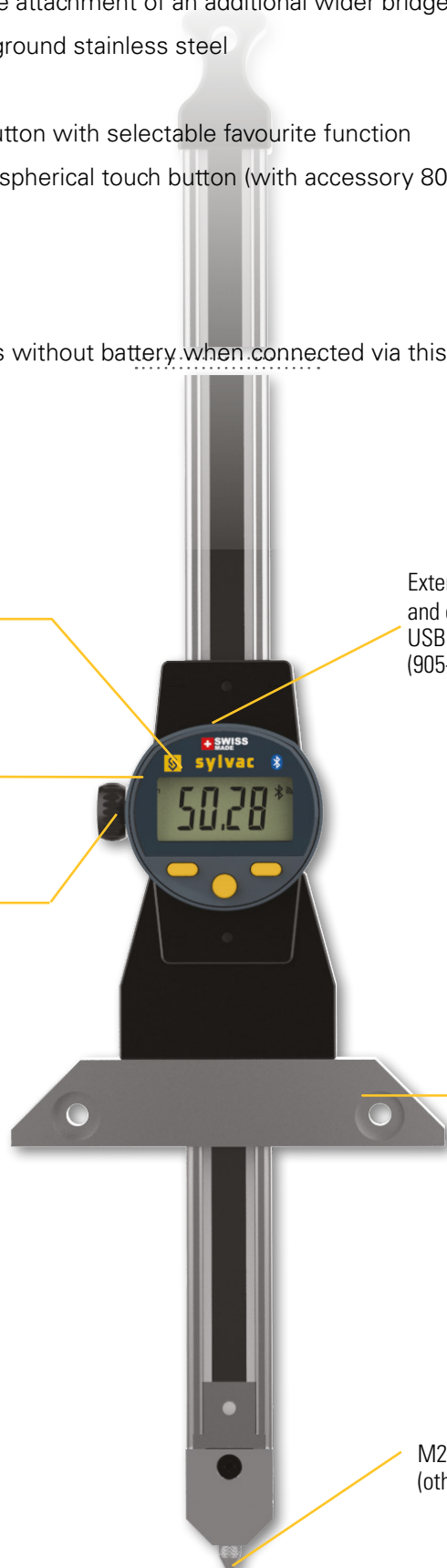
Digital LCD display with 8.2mm high digits and 270° rotating display

External power supply and output cable Power to USB (926-6821) or RS232 (905-4516)

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

Cursor locking screw

Base 100mm with clamping system for additional bases.



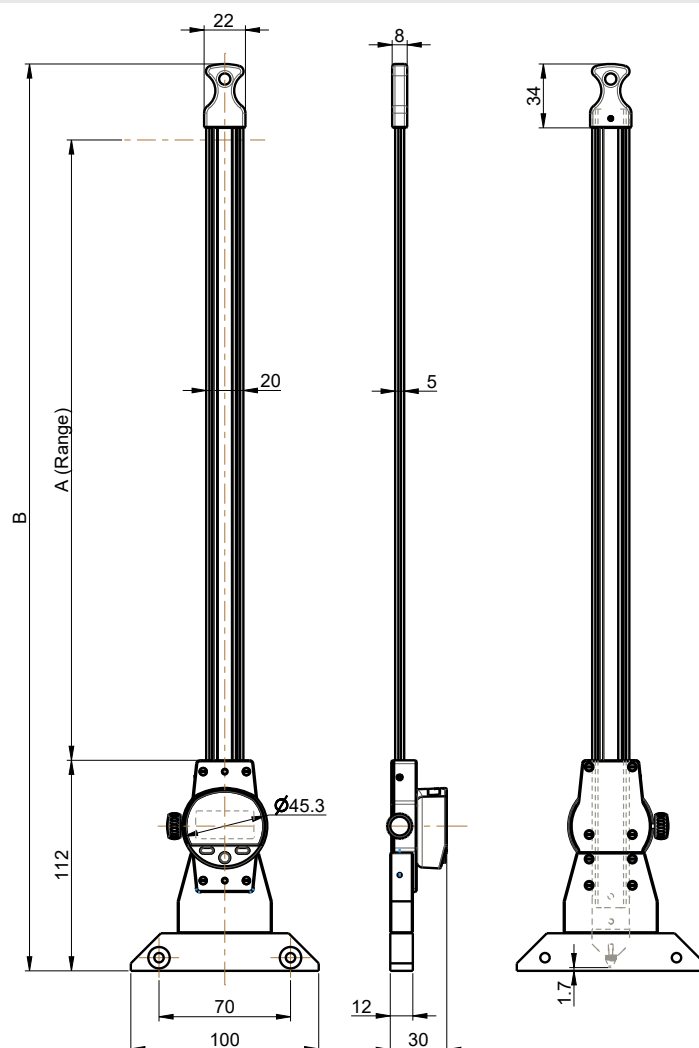
M2.5 ball key Ø2mm as standard (other keys as accessories)



# Depth gage

# S\_Depth PRO Smart

## DIMENSIONAL DRAWING



## TECHNICAL SPECIFICATIONS

		805-6605	805-6606
Measuring range	mm	300	600
Max. Error	µm	30	40
Repeatability <sup>1)</sup>	µm	10	10
A	mm	335	625
B	mm	483	773
Output data	Bluetooth® wireless technology* / USB / RS232 <sup>2)</sup>		
2 References			●
Automatic reference			●
PRESET function			●
Multiplication factor			●

<sup>1)</sup> ± 1 digit

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

**\* Up to 8 instruments connected per dongle #981-7100**  
 More informations on How to use Bluetooth® leaflet SYL\_1401\_EN\_BT

# Depth gage

# S\_Depth PRO Smart

## STANDARD DELIVERY

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Quickstart
- Ball probe M2.5 Ø2mm (805-6101)

## COMPATIBLE ACCESSORIES

		Length	Thickness	
	<b>812-2241</b>	Additional base	200 mm	8 mm
	<b>812-2240</b>	Additional base	320 mm	8 mm
	<b>805-6101</b>	Ball probe M2.5 (standard)		
	<b>805-6102</b>	Anvils UP&DOWN		
	<b>805-6103</b>	Anvil with pin Ø4 mm		

## APPLICATIONS



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



Depth measurement



Depth measurement in a drilling with an additional base

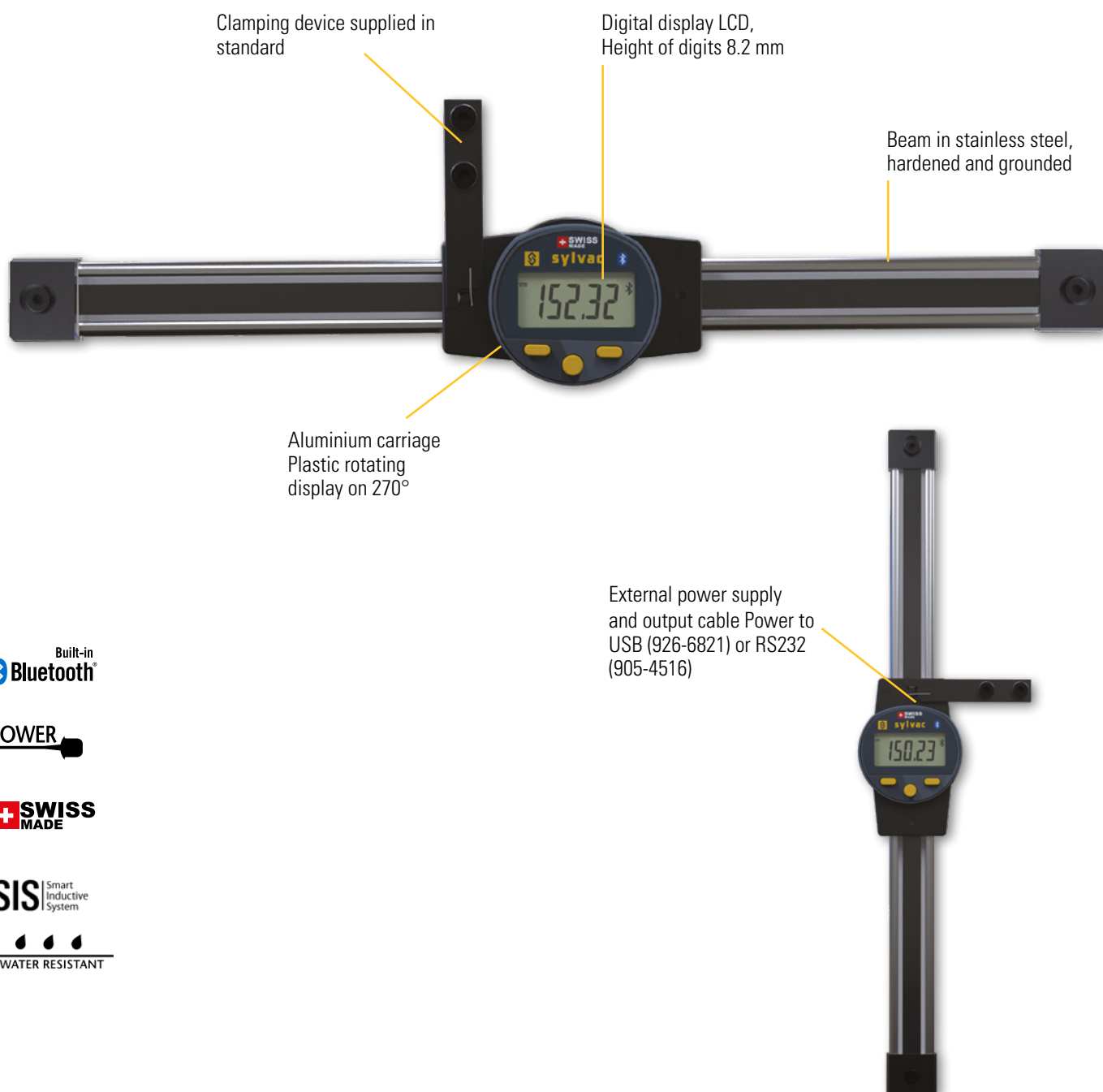


# Digital scales

# S\_Scale EVO Smart

## DESCRIPTION

- Digital scales with integrated Bluetooth® system
- Housing Ø 45 mm rotatable by 270° for horizontal or vertical use
- Flat pole 20 x 5 mm in hardened and ground stainless steel
- Digital display resolution 0.01 mm
- Three buttons, including the central button with selectable favourite function
- Supplied with a drive bar that can be positioned at the top or bottom of the display.
- Measuring range 150, 200, 300 and 600 mm
- Additional data output «Power», works without battery when connected via this cable
- IP54 protection



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