

# 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**



## SUMMARY OF ALL TYPES

	S_Dial WORK																											
	S233						S234		BASIC				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		
<b>RANGE</b>																												
0.5 mm											•																	
0.8 mm										•																		
5 mm			•			•		•				•	•											•	•			
12.5 mm	•	•		•	•				•			•	•					•			•			•	•			
25 mm														•	•				•		•				•	•		
50 mm																•	•					•						
100 mm																												
150 mm																												
<b>RESOLUTION</b>																												
0.01 mm	•	•	•									•		•		•									•		•	
0.001 mm				•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>MECHANIC</b>																												
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)																								•	•	•	•	
<b>DIAL</b>																												
Diameter 44 mm	•	•	•	•	•	•	•	•	•	•	•																	
Diameter 60 mm												•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Rotating										•	•																	
Vertical display			•			•																						
<b>FUNCTIONS</b>																												
mm/inch	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Preset	•	•	•	•	•	•	•	•	•			• <sup>1)</sup>	• <sup>1)</sup>	• <sup>1)</sup>	• <sup>1)</sup>	• <sup>1)</sup>	• <sup>1)</sup>	•	•	•	•	•	•	•	•	•	•	
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																												

B

# Digital indicators

# S\_Dial

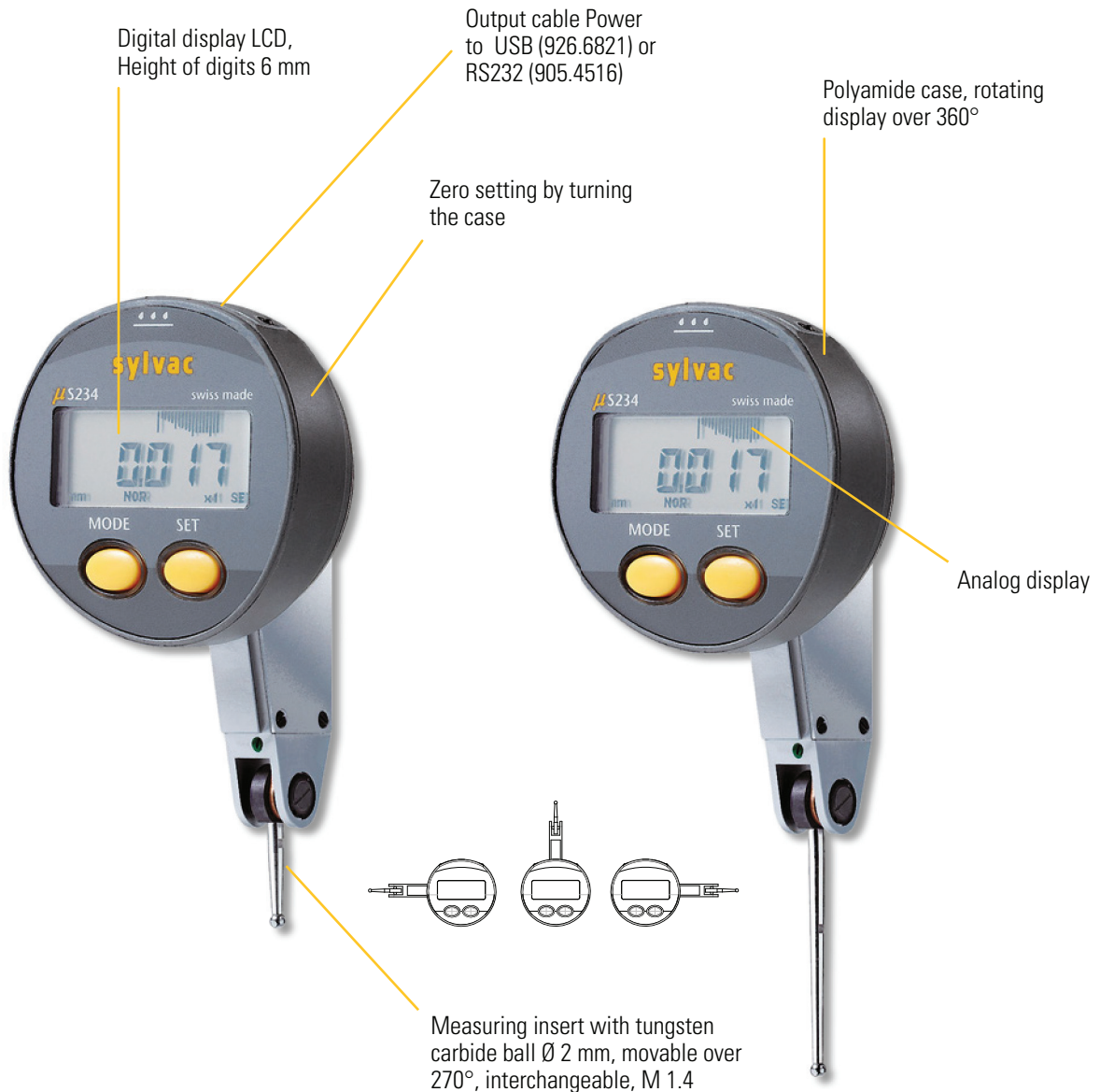
## SUMMARY OF ALL TYPES

	S_Dial WORK												NANO & NANO SMART				ANALOG NANO SMART		S_Dial PRO									
	ADVANCED						Smart						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	
<b>RANGE</b>																												
0.5 mm																												
0.8 mm																												
5 mm																												
12.5 mm	•	•									•				•		•		•									
25 mm			•	•								•				•		•		•						•	•	
50 mm					•	•							•								•		•	•	•			
100 mm							•	•						•														•
150 mm									•	•																		
<b>RESOLUTION</b>																												
0.01 mm	•	•			•		•		•																			
0.001 mm		•		•		•		•		•		•	•	•														
0.0001 mm															•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>MECHANIC</b>																												
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)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>DIAL</b>																												
Diameter 44 mm																												
Diameter 60 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rotating	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>FUNCTIONS</b>																												
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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

B

## DESCRIPTION

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



POWER 

 **SWISS MADE**

 WATER RESISTANT

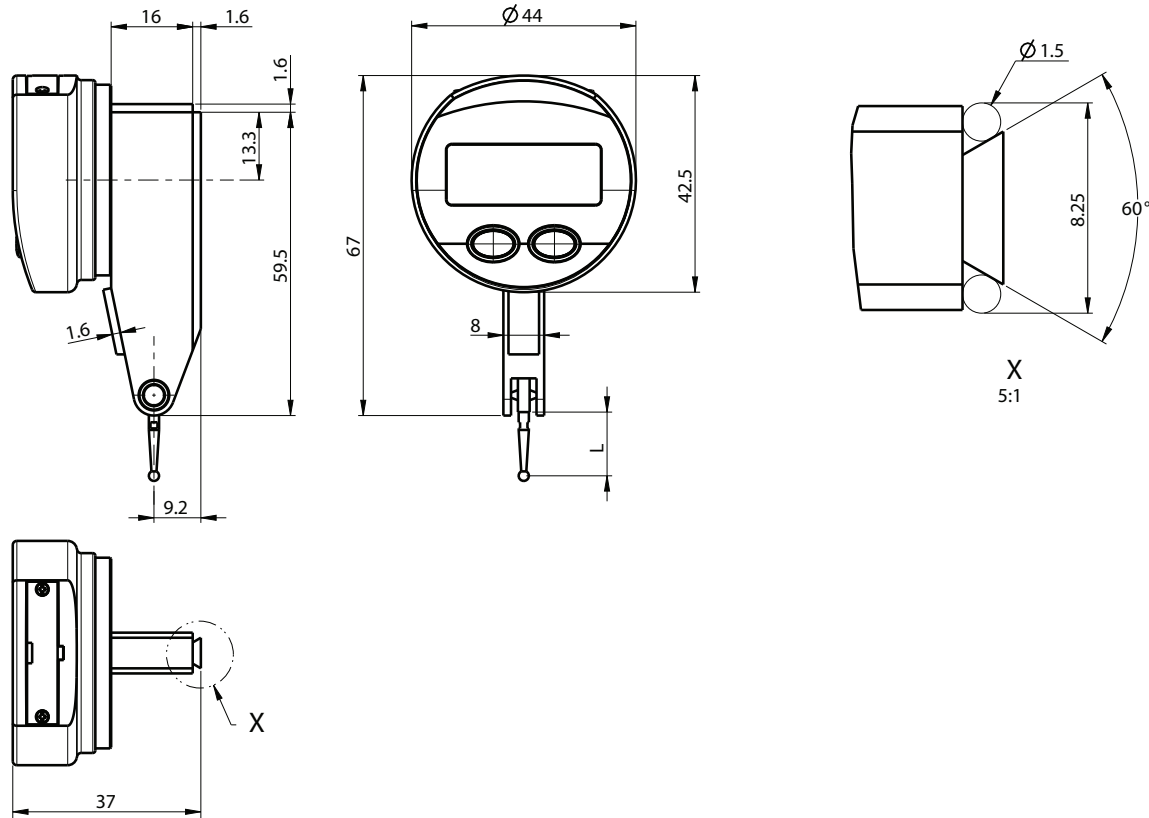
 **IP65**



# Digital test indicators

# S\_Dial S234

## DIMENSIONAL DRAWING



## TECHNICAL SPECIFICATIONS

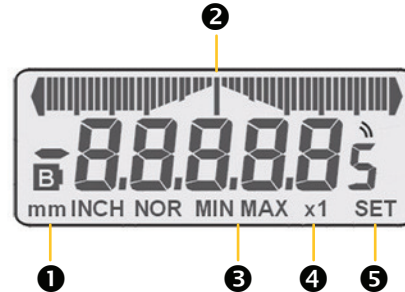
		905.4321	905.4322
Measuring range	mm	0.8	0.5
Probe length	mm	12.5	36.5
Max Error fe	µm	10	10
Hysteresis fu	µm	3 <sup>1)</sup>	4 <sup>1)</sup>
Resolution	mm	0.001	0.001
Repeatability	µm	3	3
Measuring force	N	0.13 ± 15%	0.07 ± 15%
Weight		75	75
Protection rating according to IEC 60529		IP65	
Output data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

<sup>1)</sup> ± 1 digit

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

## DISPLAY

- ➊ Direct mm/inch conversion
- ➋ Analog display
- ➌ Min/max/delta mode
- ➍ Analogic resolution display
- ➎ Zero setting



## BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Stem  $\varnothing$  8 mm

## APPLICATIONS



Run-out measurement



Checking the alignment on milling machine.



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

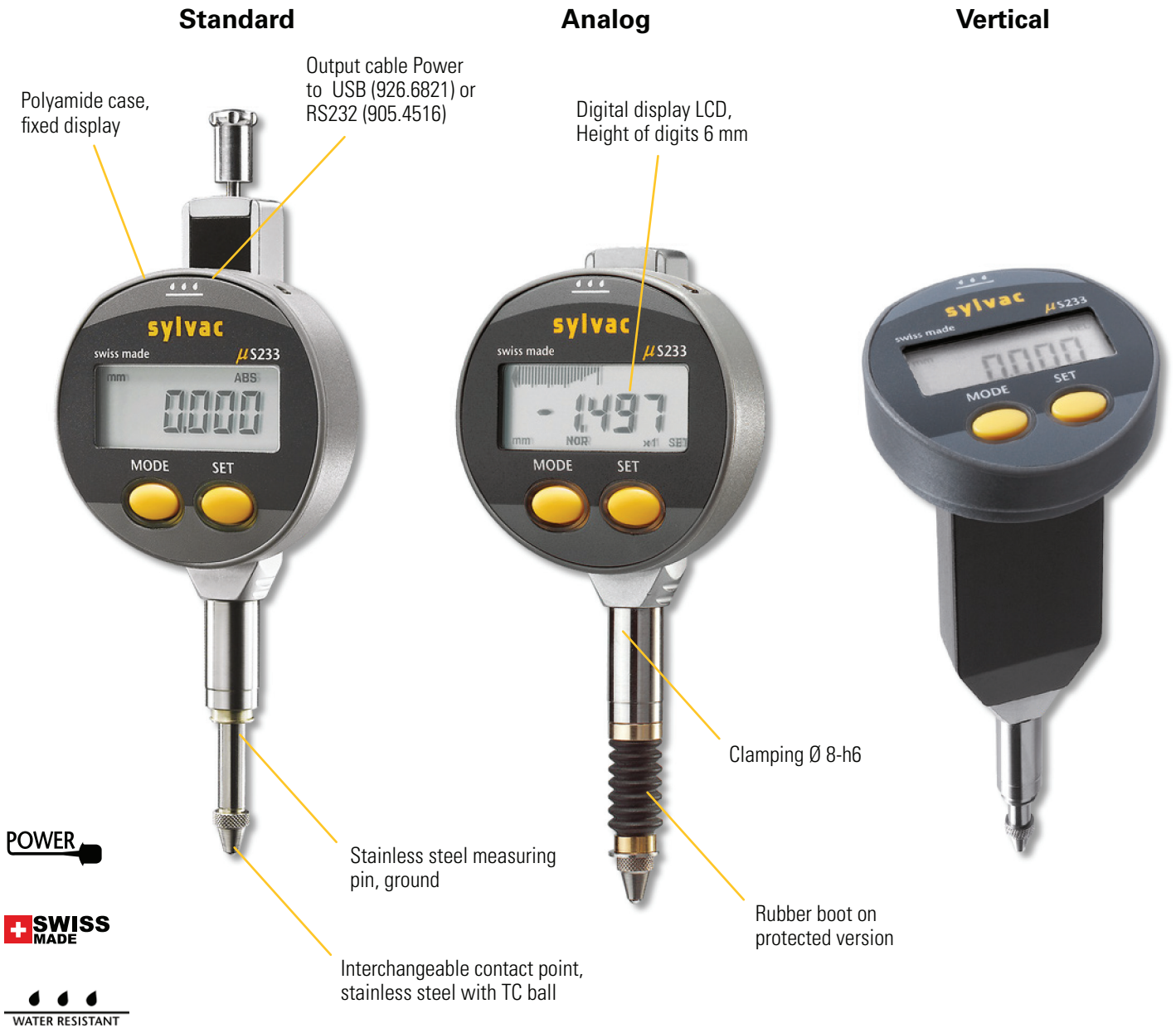


# Mini digital indicators

# 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



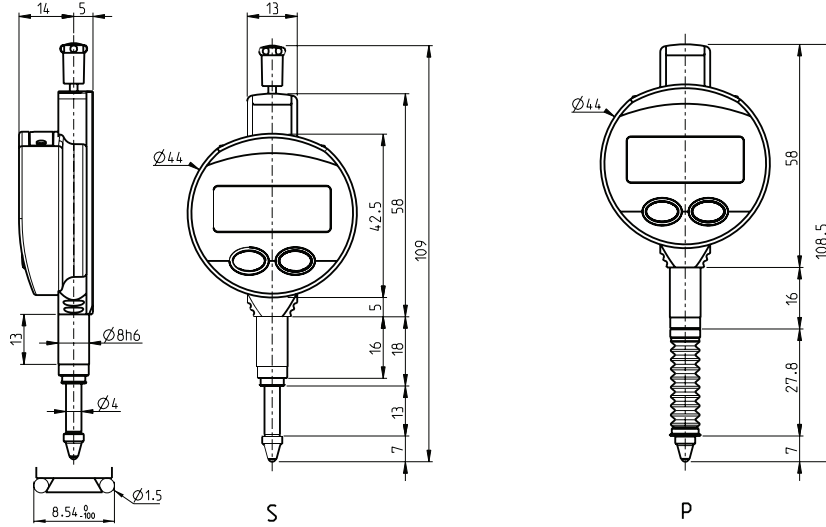
IP65

# Mini digital indicators

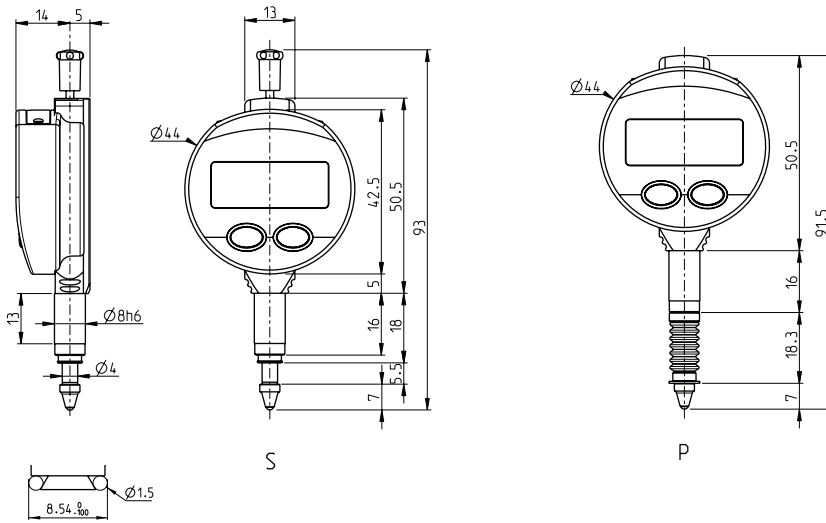
# S\_Dial S233

## DIMENSIONAL DRAWINGS

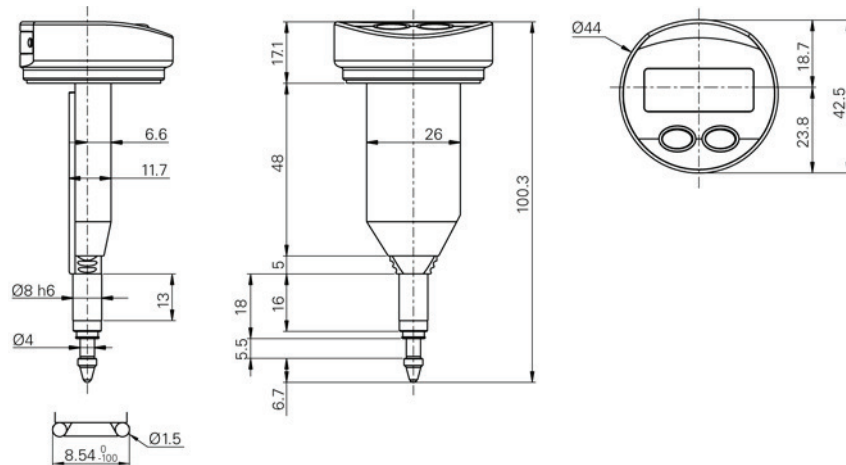
### Standard



### Analog



### Vertical



S = standard

P = protected



## TECHNICAL SPECIFICATIONS

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

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

<sup>1)</sup> ± 1 digit

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

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

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

# Mini digital indicators

# S\_Dial S233

## BASIC INSTRUMENT

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

B

## MEASURING FORCE FOR RANGE 12.5 mm

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

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

<sup>1)</sup> on request

## APPLICATIONS



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



Measurement of the vertical displacement of an element



Measurement of internal chamfer

# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## BASIC

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



PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

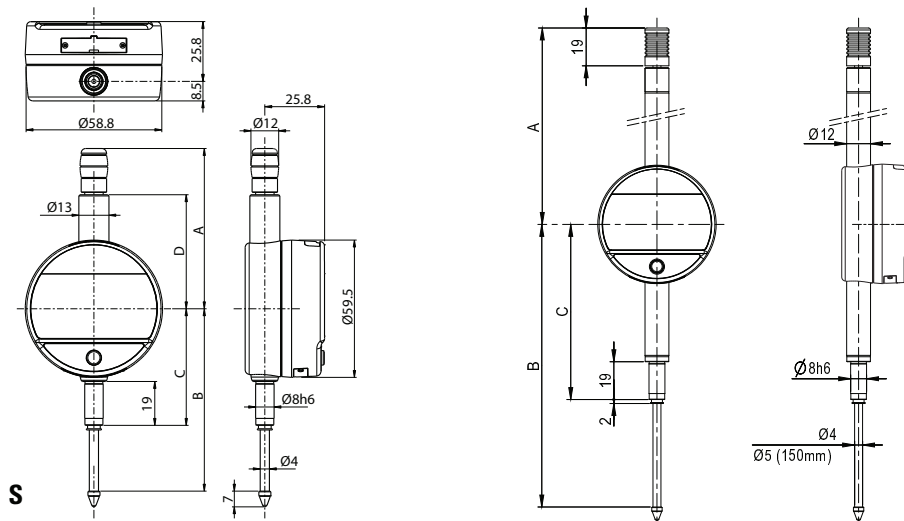
\* SIS Smart Inductive System description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## BASIC



## TECHNICAL SPECIFICATIONS

		805.1201	805.1301	805.1401	805.1501	805.1601	805.1621
Measuring range	mm	12.5	12.5	25	25	50	50
Resolution	mm	0.01	0.001	0.01	0.001	0.01	0.001
Max. Error fe	µm	10 <sup>1)</sup>	<b>4</b>	10 <sup>1)</sup>	<b>5</b>	20 <sup>1)</sup>	<b>7</b>
Repeatability	µm	2					
IP rating		IP51					
A	mm	56.7		69.9		121.3	
B	mm	66.1		78.5		142	
C	mm	50.5		50.5		88	
D	mm	36.6		49.4		-	
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					

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

		S 12.5	S 25	S 50
• Instrument according to technical specifications				
• Lithium battery CR2032 included				
• Instruction manual				
• Calibration certificate for instruments 0.001 mm				
Standard	N	0.65 - 0.90	0.65 - 1.15	1.1 - 2.6
Low <sup>3)</sup>	N	0.4 - 0.55	0.45 - 0.9	---
High <sup>3)</sup>	N	1.0 - 1.6	0.9 - 1.8	---

Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>3)</sup> on request

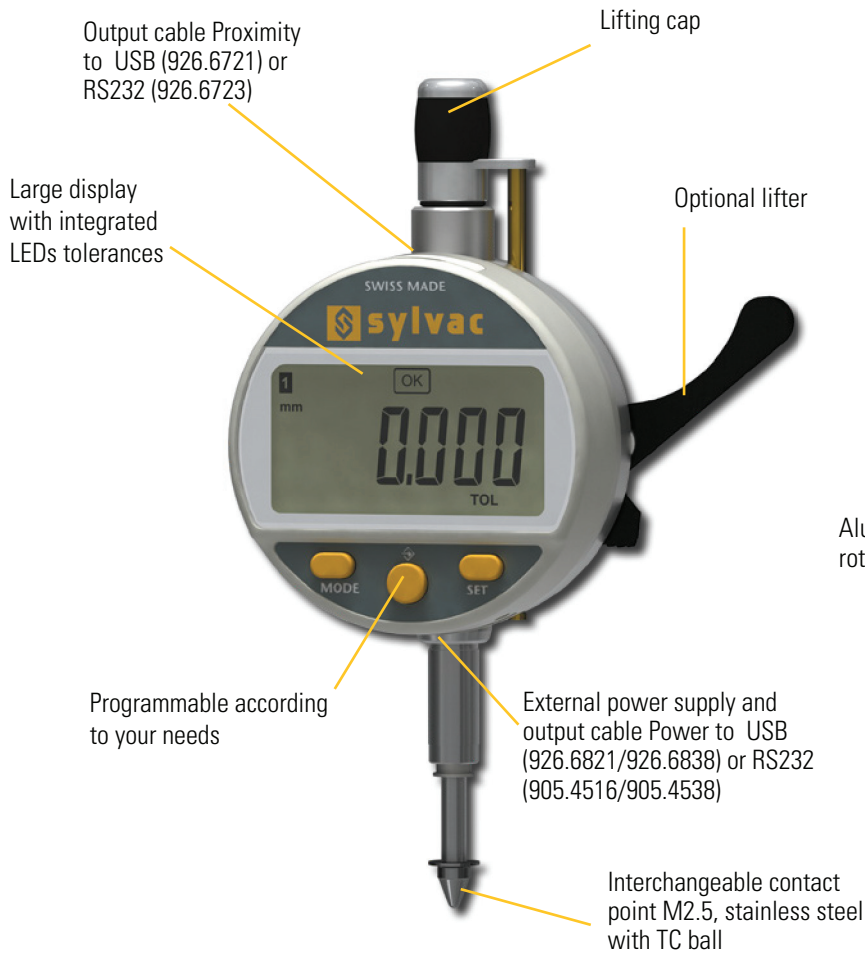
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## ADVANCED

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

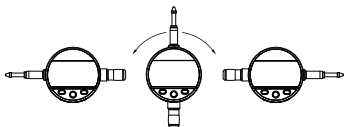


PROXIMITY

POWER

SWISS MADE

WATER RESISTANT



\* SIS description on page 5

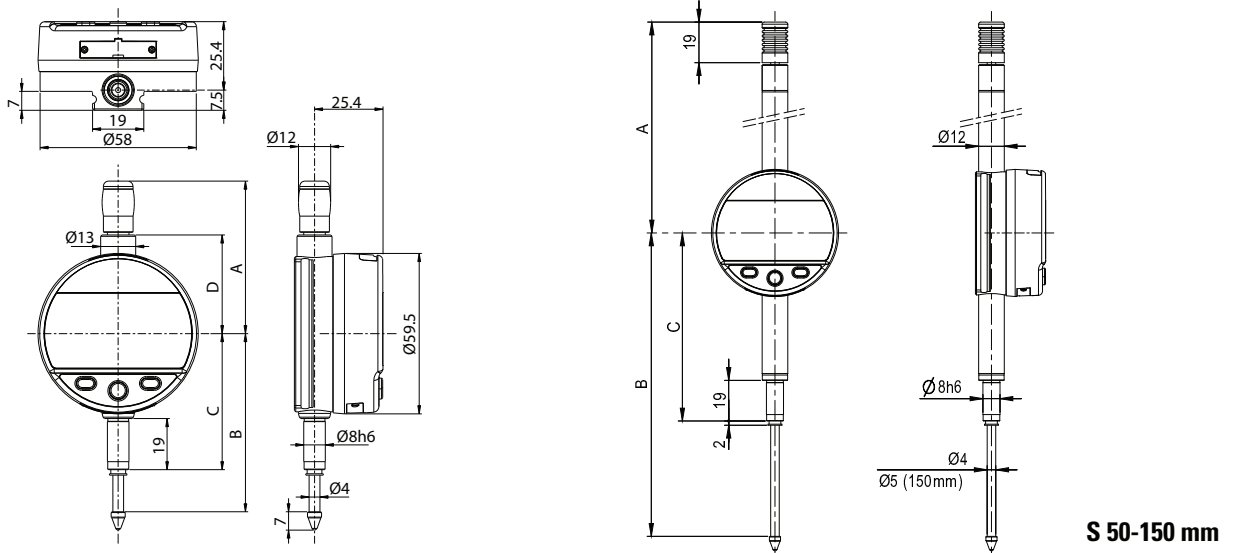


# Digital indicators

# 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 <sup>1)</sup>	<b>3</b>	10 <sup>1)</sup>	<b>4</b>	20 <sup>1)</sup>	<b>5</b>	20 <sup>1)</sup>	<b>6</b>	20 <sup>1)</sup>	<b>10</b>
Repeatability	µm	2									
IP rating		IP54									
A	mm	56.7		69.4		121		172		224	
B	mm	66.1		78.5		142		244		349	
C	mm	50.5		50.5		88		139		193	
D	mm	36.6		49.4		-		-		-	
Output data		USB / RS232									
Programmable by PC		●									
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock									

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

<ul style="list-style-type: none"> <li>Instrument according to technical specifications</li> <li>Lithium battery CR2032 included</li> <li>Instruction manual</li> <li>Calibration certificate for instruments 0.001 mm</li> </ul>			<b>12.5</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>150</b>
Standard	N	0.65 - 0.9	0.65 - 1.15	1.1 - 2.6	1.8 - 3.8	2.6 - 5.7	
Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9	---	---	---	
High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8	---	---	---	

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

B

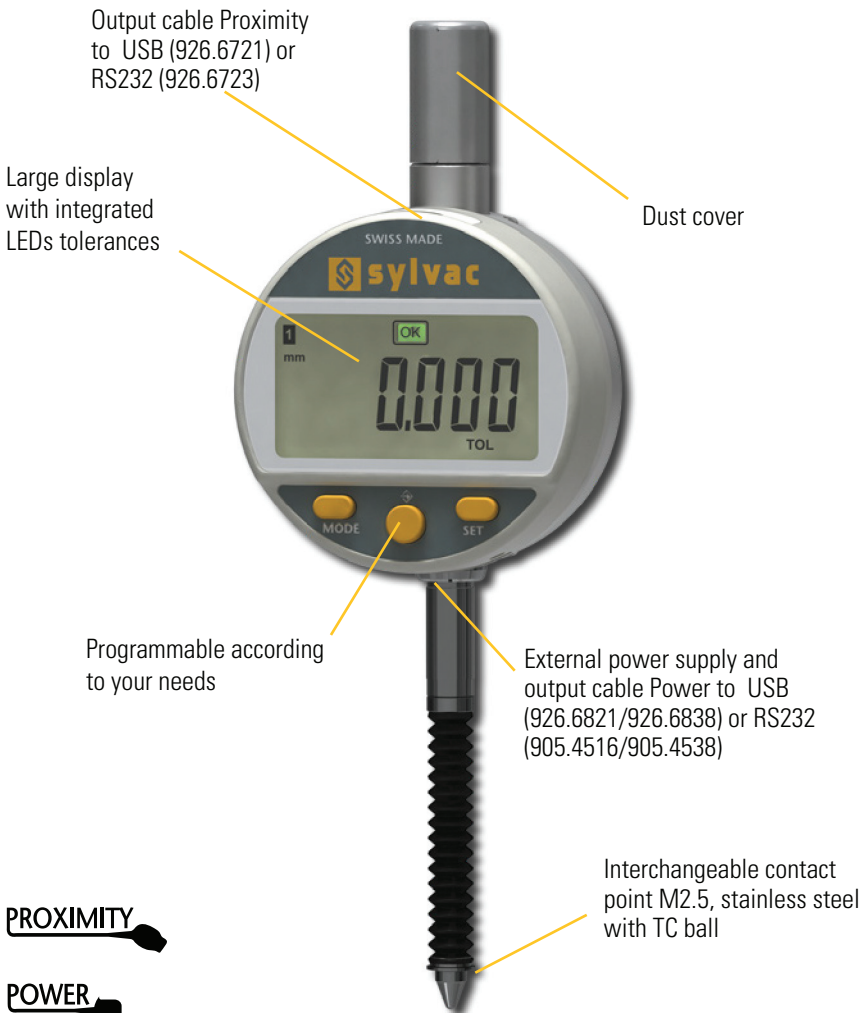
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

ADVANCED IP67

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



PROXIMITY 

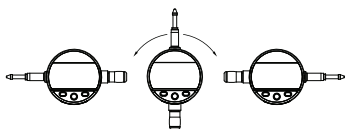
POWER 

 **SWISS MADE**

 WATER RESISTANT

 **IP67**

\* SIS  description on page 5

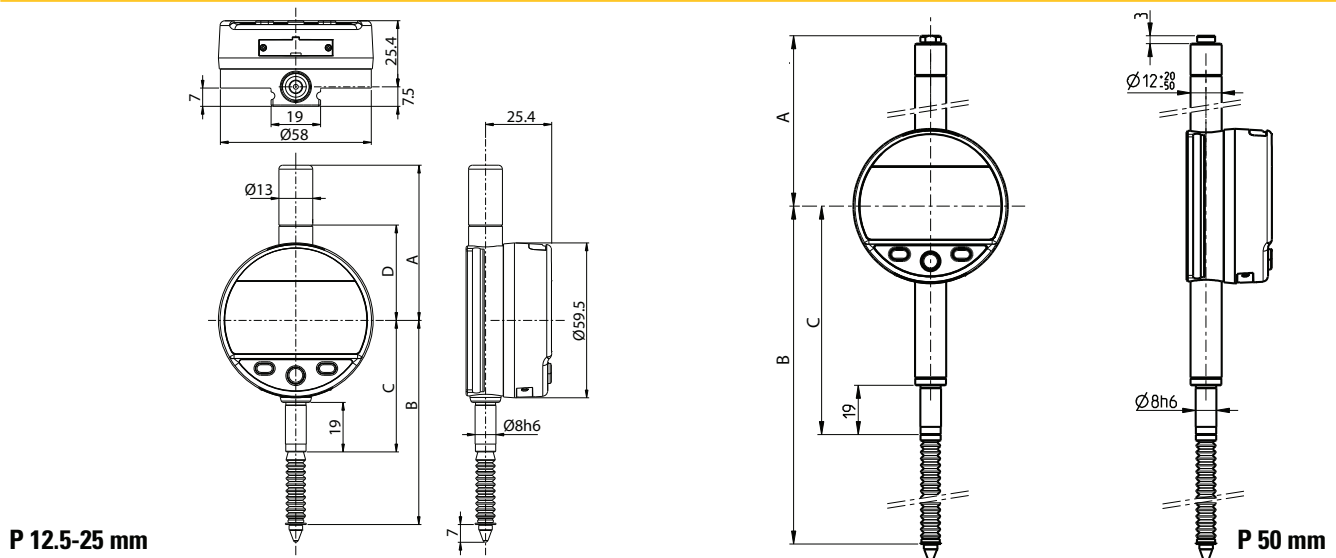


# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ADVANCED IP67



## TECHNICAL SPECIFICATIONS

		805.5305	805.5505	805.5625
Measuring range	mm	12.5	25	50
Resolution	mm	0.001	0.001	0.001
Max. Error fe	µm	<b>3</b>	<b>4</b>	<b>5</b>
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, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock		

## BASIC INSTRUMENT

## MEASURING FORCE

		P 12.5	P 25	P 50	
● Instrument according to technical specifications					
● Lithium battery CR2032 included					
● Instruction manual					
● Calibration certificate for instruments 0.001 mm					
	Standard	N	0.7 – 1.4	0.65 – 1.8	0.9 – 2.8
	Low <sup>2)</sup>	N	---	---	---
	High <sup>2)</sup>	N	---	---	---

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

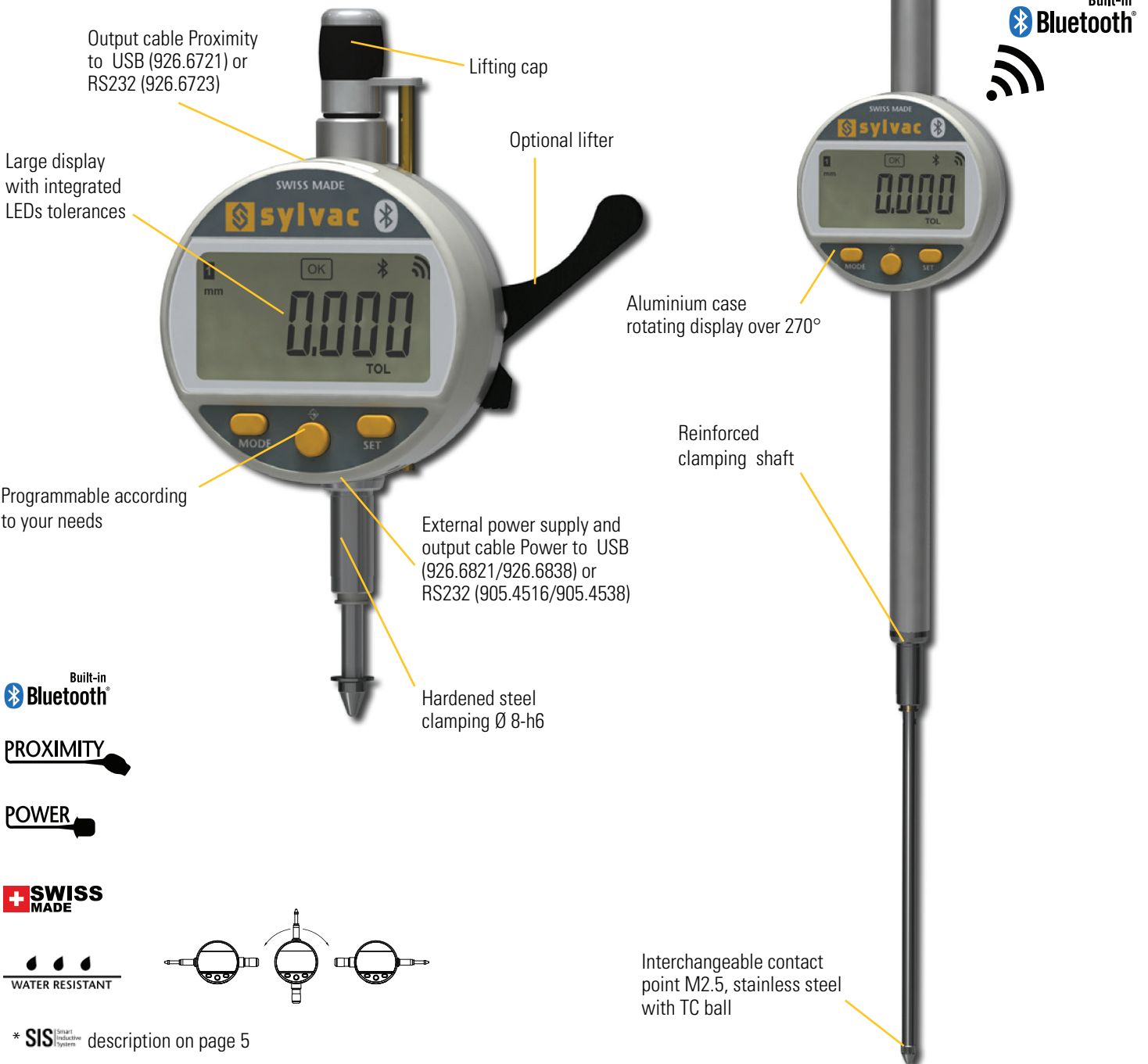
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

SMART

- **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**



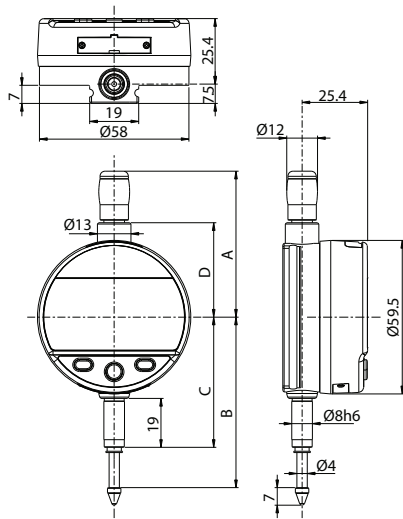
\* SIS description on page 5

# Digital indicators

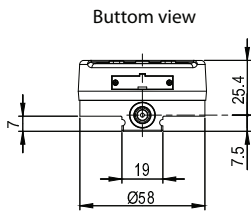
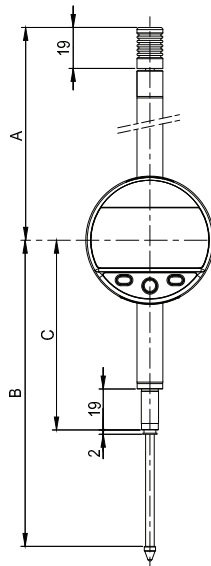
# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## SMART



**S 12.5 - 25**



**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	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
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, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

<sup>1)</sup> ± 1 digit

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

## BASIC INSTRUMENT

## MEASURING FORCE

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

		12.5	25	50	100
Standard	N	0.65 - 0.90	0.65 - 1.15	1.1 - 2.6	1.8 - 3.8
Low <sup>2)</sup>	N	0.4 - 0.55	0.45 - 0.9	---	---
High <sup>2)</sup>	N	1.0 - 1.6	0.9 - 1.8	---	---

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

B



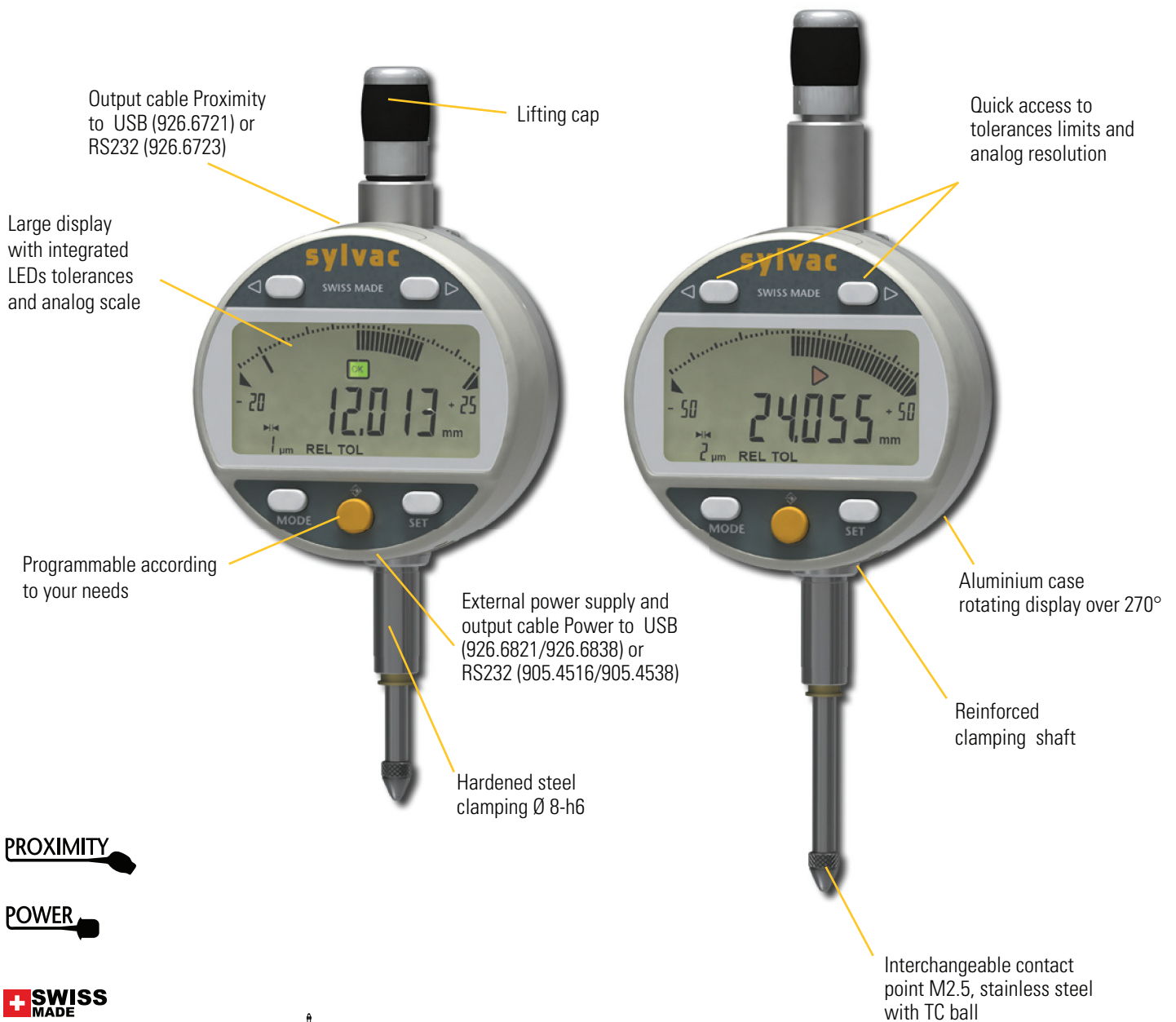
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

ANALOG

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

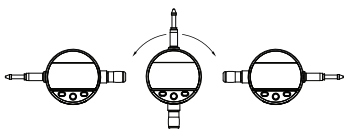


PROXIMITY

POWER

SWISS MADE

WATER RESISTANT



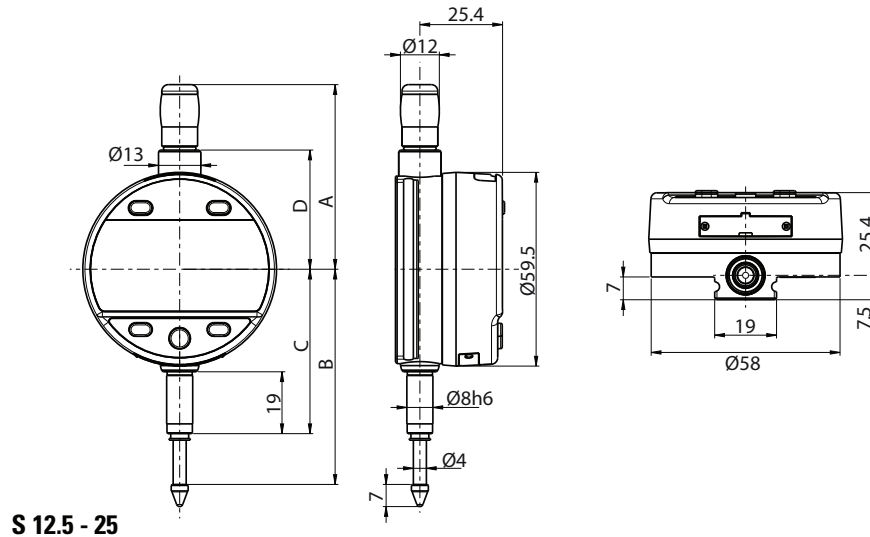
\* SIS description on page 5

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ANALOG



## TECHNICAL SPECIFICATIONS

		805.5307	805.5507
Measuring range	mm	12.5	25
Resolution	mm	0.001	
Max. Error fe	µm	<b>3</b>	<b>4</b>
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	

<sup>1)</sup> ± 1 digit

## BASIC INSTRUMENT

## MEASURING FORCE

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

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

Tolerance ± 20%, spindle in outgoing measurement position.

<sup>2)</sup> on request

B

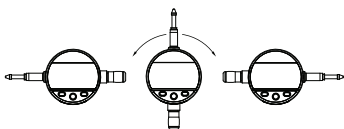
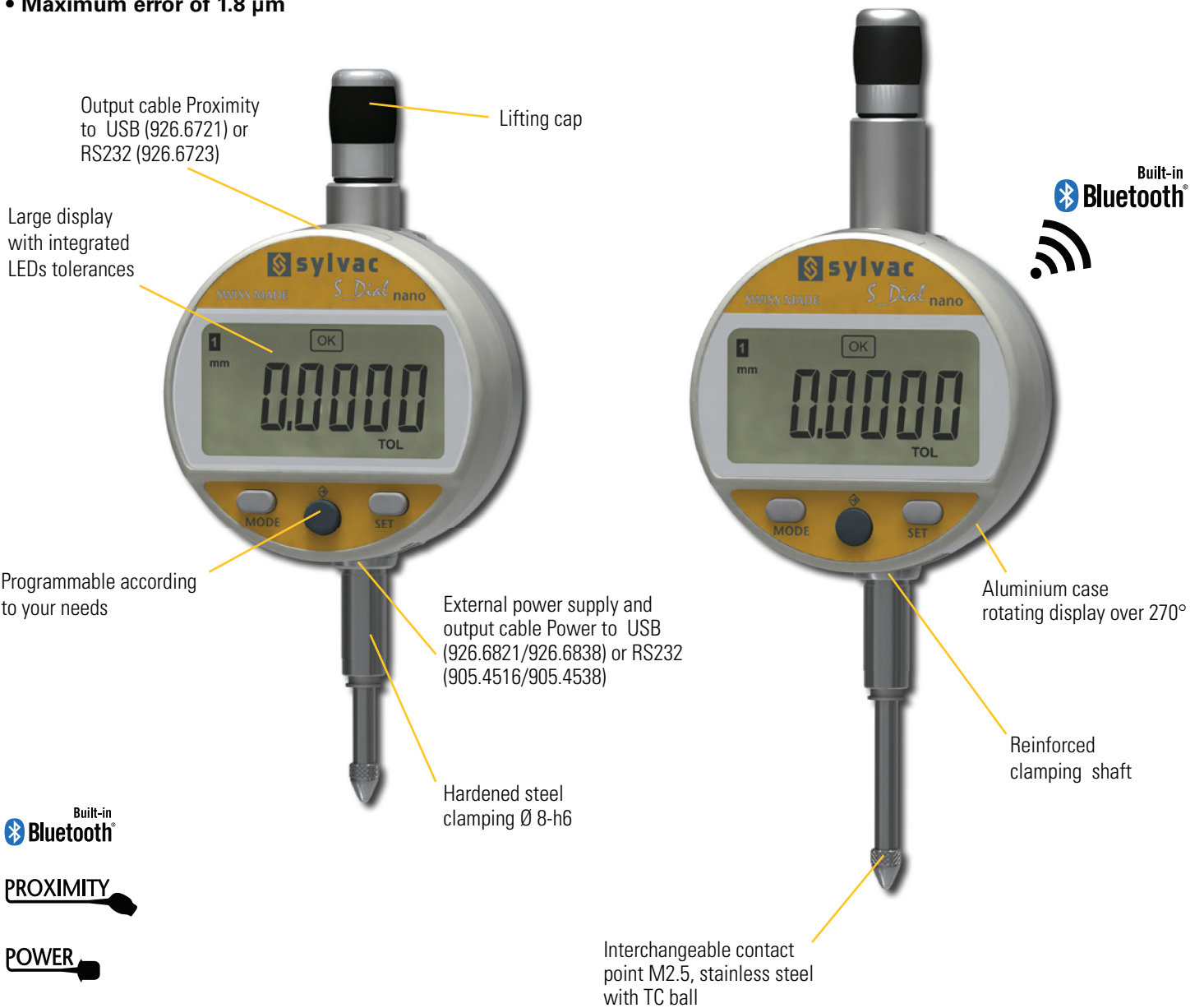
# Digital indicators

# S\_Dial WORK

## DESCRIPTION

## 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**



\* SIS Smart Inductive System description on page 5

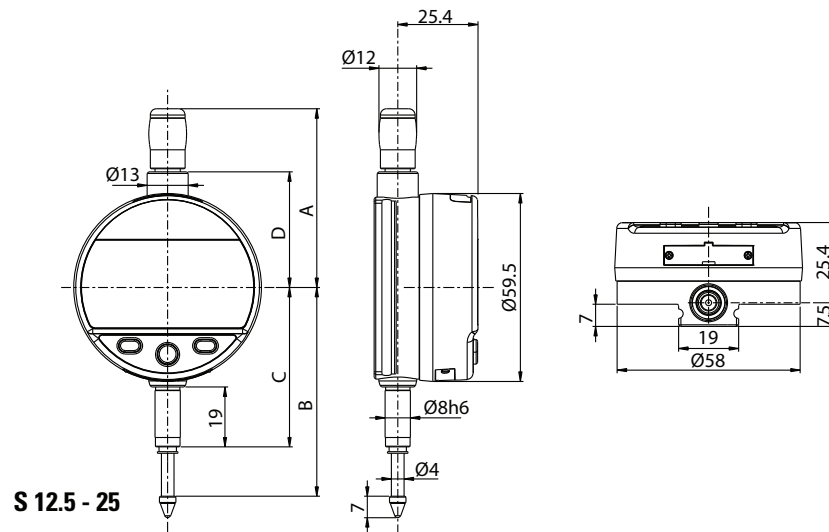
**Max error 1.8 µm**  
**Repeatability 0,5 µm**

# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## NANO & NANO SMART



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	<b>1.8</b>	<b>2.2</b>	<b>1.8</b>	<b>2.2</b>
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, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

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

## BASIC INSTRUMENT

## MEASURING FORCE

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

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

# Digital indicators

# S\_Dial WORK

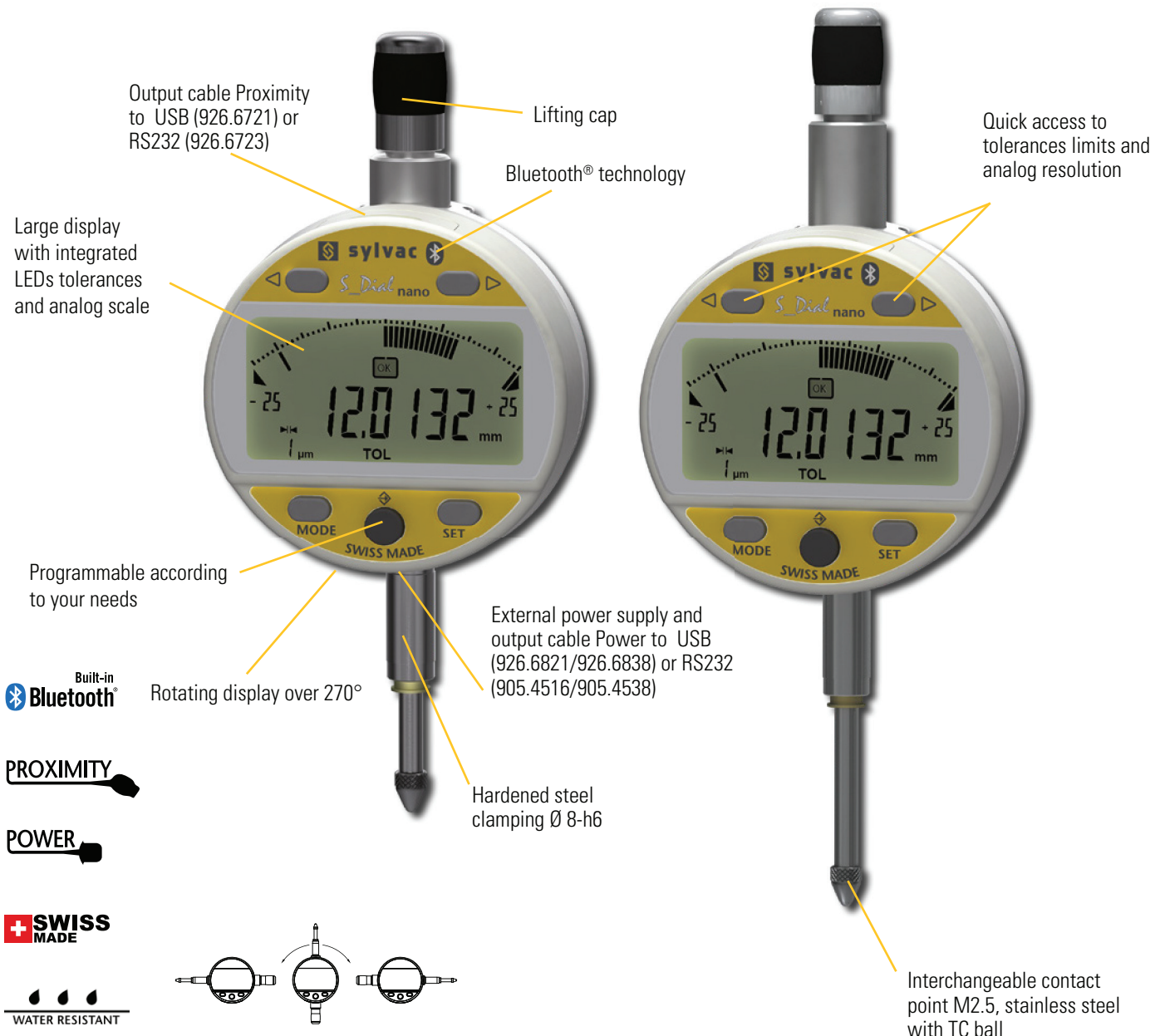
## DESCRIPTION

## ANALOG NANO SMART

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



B



\* SIS description on page 5

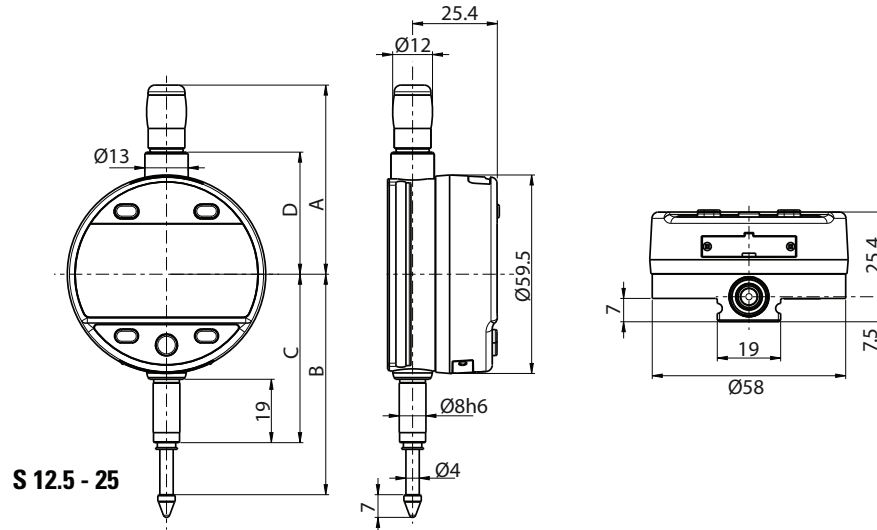


# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

## ANALOG NANO SMART



## TECHNICAL SPECIFICATIONS

		805.6307	805.6507
Measuring range	mm	12.5	25
Resolution	mm	0.0001	
Max. Error fe	µm	<b>1.8</b>	<b>2.2</b>
Repeatability	µm	0.5	
IP rating		IP54	
A	mm	56.7	69.4
B	mm	66.1	78.5
C	mm	50.5	50.5
D	mm	36.6	49.4
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

## MEASURING FORCE

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

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

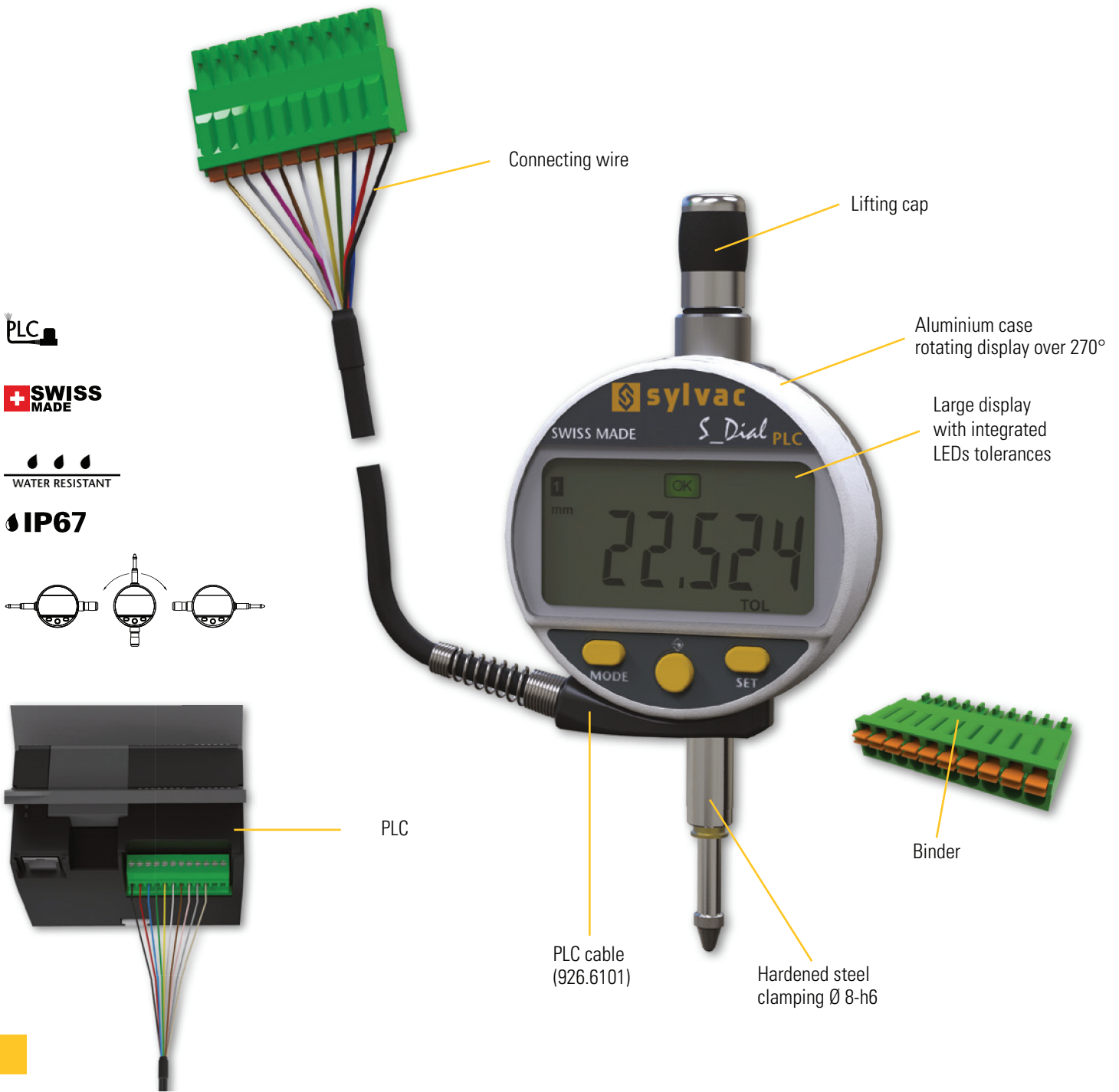
Tolerance ± 20%, spindle in outgoing measurement position.  
<sup>2)</sup> on request

## DESCRIPTION

PLC

### Indicator with PLC connector

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

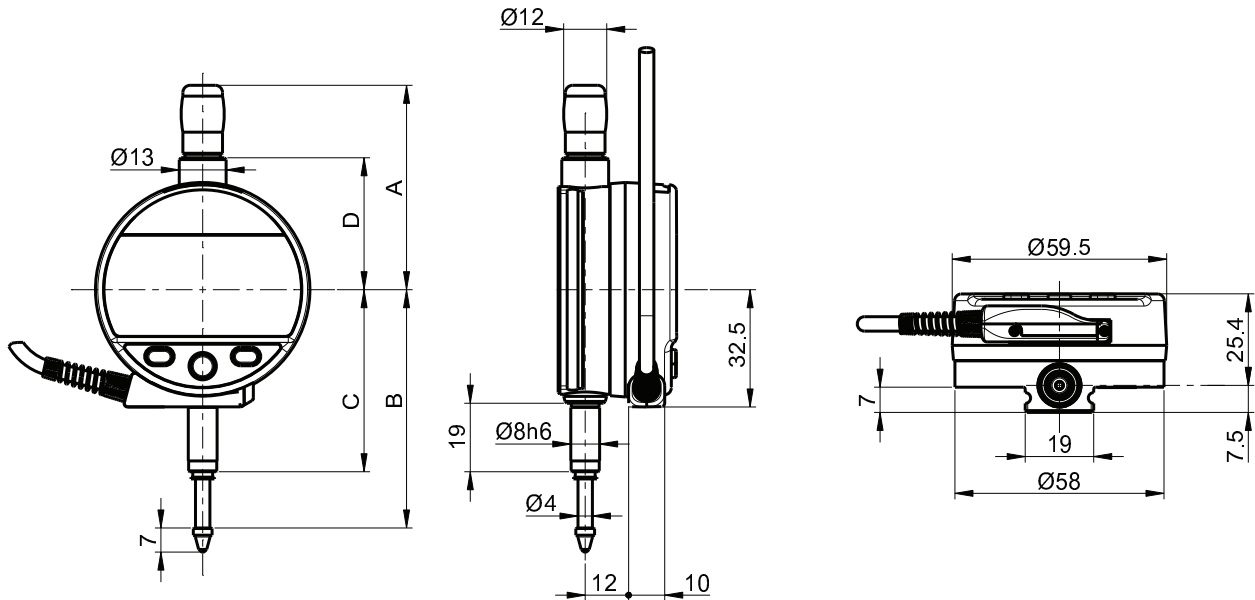


# Digital indicators

# S\_Dial WORK

## DIMENSIONAL DRAWINGS

PLC



## TECHNICALS SPECIFICATIONS

		805.7301	805.7201	805.7501	805.7401
Measuring range	mm	12.5	12.5	25	25
A	mm	56.7		69.4	
B	mm	66.1		78.5	
C	mm	50.5		50.5	
D	mm	36.6		49.4	
Resolution	mm	0.001	0.01	0.001	0.01
Max. Error fe	µm	4	10	5	10
Repeatability	µm	2			
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

B

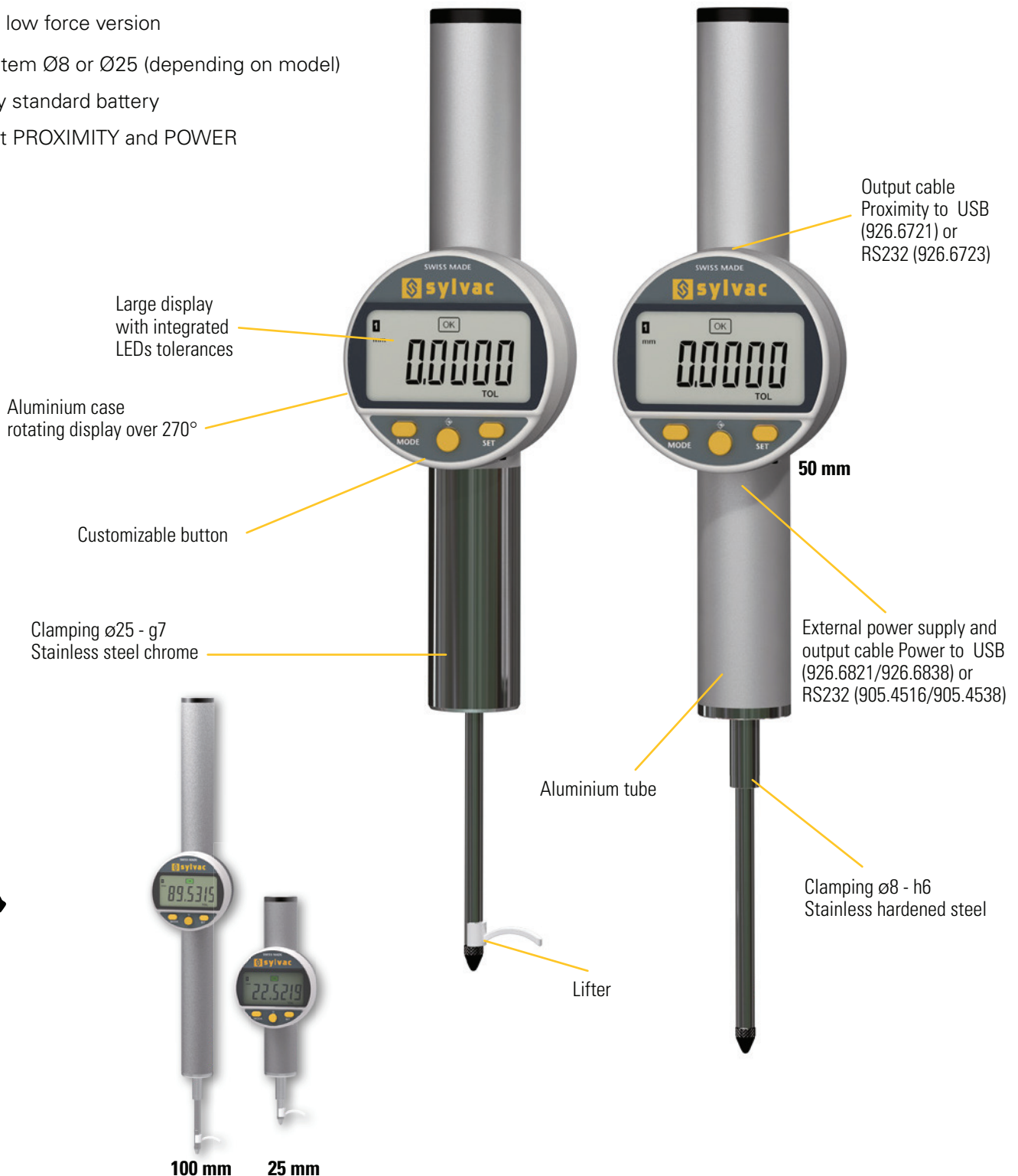
# Digital indicators

# S\_Dial PRO

## DESCRIPTION

## BASIC

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

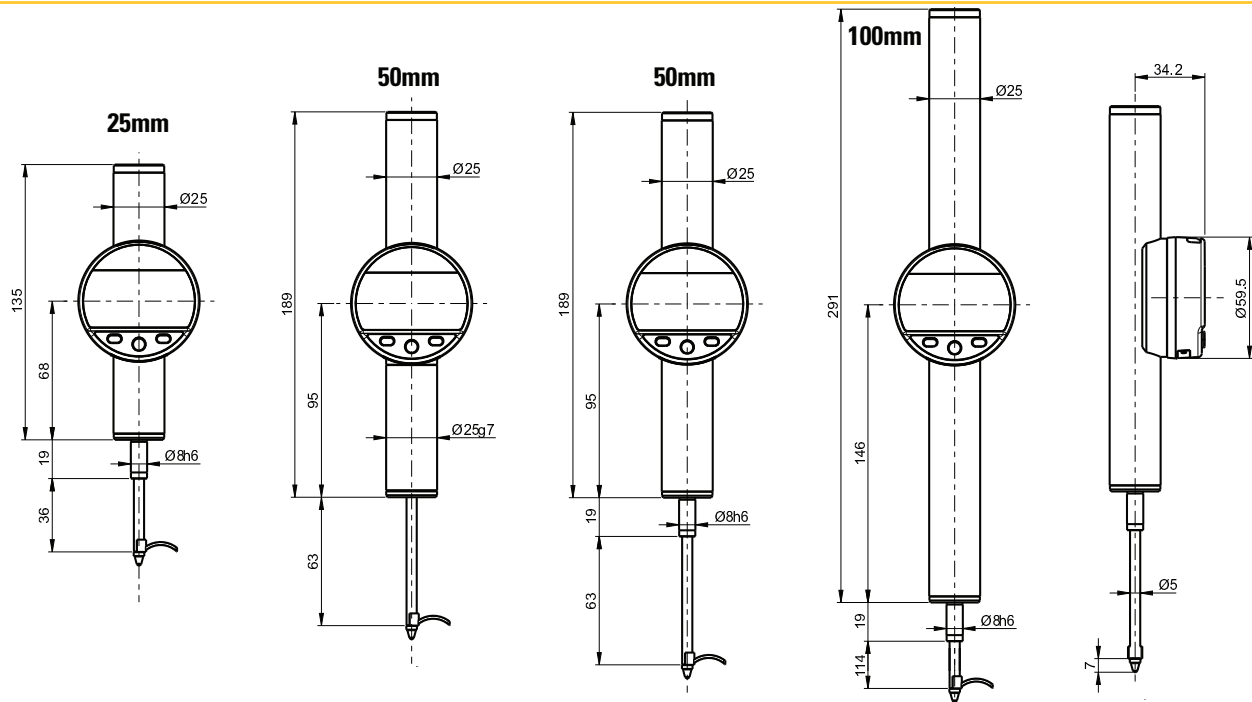


# Digital indicators

# S\_Dial PRO

## DIMENSIONAL DRAWINGS

## BASIC



## TECHNICALS SPECIFICATIONS

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

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

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

## INSTRUMENT DE BASE

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

## APPLICATIONS

B



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



S\_Dial WORK Analog measuring with bore gauge system



S\_Dial WORK mounted on a Sylvac PS15 bench



S\_Dial WORK 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

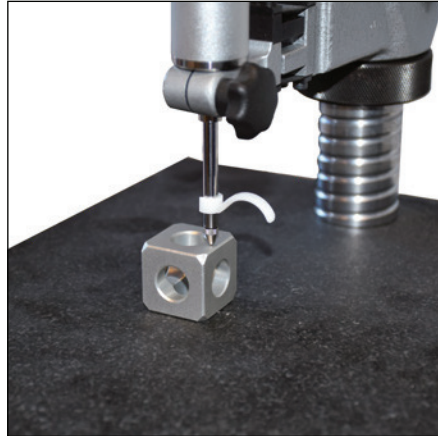
# S\_Dial

## LIFTING DEVICES

B



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



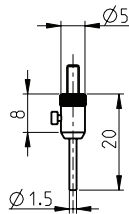
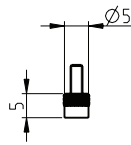
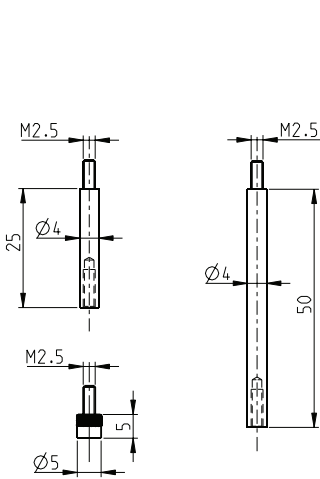
Upper lifting lever type, 905.2215



## 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

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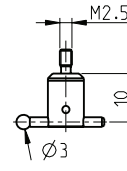
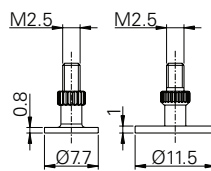
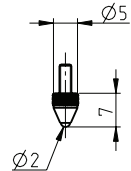
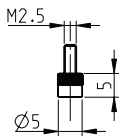
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905.2206

905.2204

905.2205

905.2207

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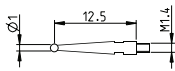
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905.2240

Short probe, TC ball

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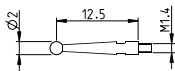
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905.2241

Short standard probe, TC ball

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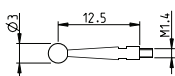
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905.2242

Short probe, TC ball

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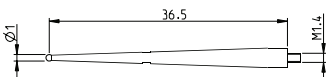
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905.2243

Long probe, TC ball

•

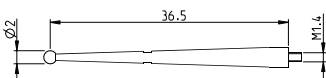
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905.2244

Long standard probe, TC ball

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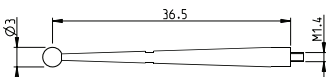
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905.2245

Long probe, TC ball

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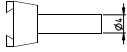


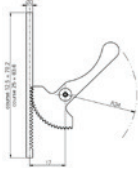
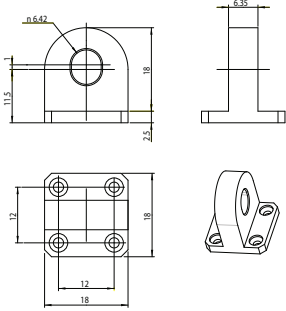
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# Digital indicators

# S\_Dial

## ACCESSORIES

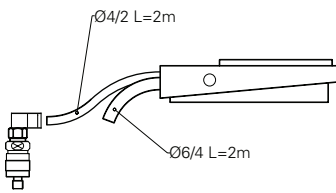
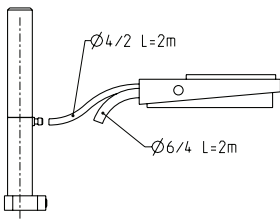
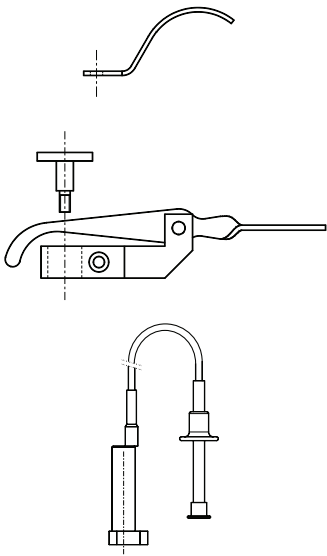
B

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

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

## ACCESSORIES

B



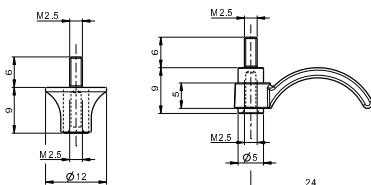
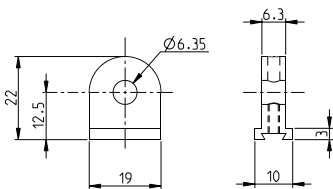
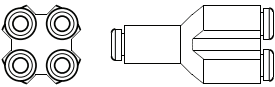
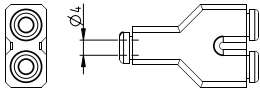
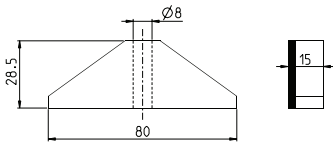
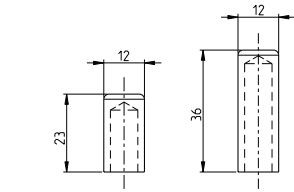
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO Basic
905.2214	Lifting device	•		•	•	•
905.2215	Upper lifting device			•		
905.2216	Lifting device with photo-cable			•		
905.2218	Pneumatic lifting device with foot pedal			•		
905.2217	Lifter only for 905.2218			•		
905.2219	Pneumatic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

# Digital indicators

# S\_Dial

## ACCESSORIES

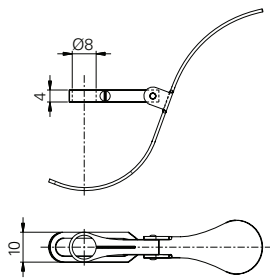
B



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

## ACCESSORIES

B



**905.4214**

Lower lifting device, range 12.5 mm

S233

S234

S\_Dial WORK  
12,5 - 25 mm

S\_Dial WORK  
50 - 150 mm

S\_Dial WORK  
PLC

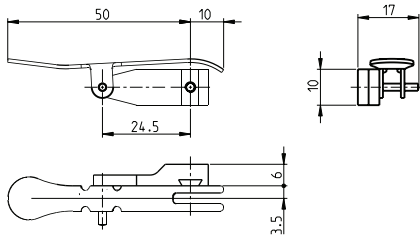
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1)

1)

1)

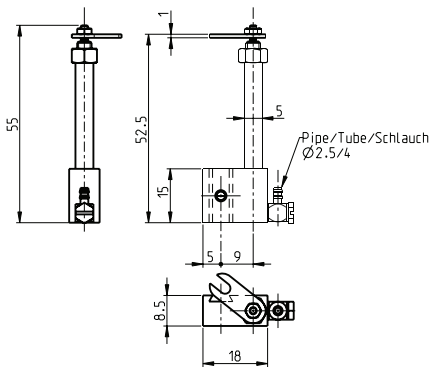
1)



**905.4215**

Upper lifting device for S (Standard) execution, except vertical type

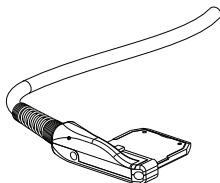
●



**905.4217**

Pneumatic lifting device for standard type

●



**926.6101**

Replacement cable for digital indicator PLC

●

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