DIGITAL INDICATORS S_DIAL

Digital comparators have contributed greatly to Sylvac's success and reputation for decades. Sylvac can therefore be considered the world leader in this type of instrument, thanks to the wide range of products available, but also because of the specifications and advanced functions offered by the dial indicators that you will find in this chapter.

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**
- **Comparators supplied with interchangeable steel M2.5 contact point, with tungsten carbide ball Ø 2 mm**

Digital indicators S_Dial

SUMMARY OF ALL TYPES

	S_Dial MINI										S_Dial TEST			S_Dial WORK																
	BASIC				SMART									BASIC						ANALOG			CBG	ADVANCED IP67			PLC			
RANGE	805-4121	805-4125	805-4521	805-4525	805-6121	805-6123	805-6125	805-6521	805-6523	805-6525	805-4321	805-4322	805-4323	805-1201	805-1301	805-1401	805-1501	805-1601	805-1621	805-5307	805-5507	805-6308	805-6317	805-5305	805-5505	805-5625	805-7301	805-7201	805-7501	805-7401
0.8 mm											●		●																	
2.0 mm												●	●																	
12.5 mm	●	●	●	●	●	●	●	●	●	●				●	●					●		●	●	●			●	●		
25 mm																●	●				●				●				●	●
50 mm																		●	●							●				
100 mm																														
150 mm																														
RESOLUTION																														
0.01 mm	●	●			●	●	●							●		●		●										●		●
0.001 mm			●	●				●	●	●	●	●	●		●		●		●	●	●	●	●	●	●	●	●		●	
MECHANIC																														
Diameter 8 mm h6	●	●	●	●	●	●	●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Diameter 25mm g7																														
Dove tail	●	●	●	●	●	●	●	●	●	●	●	●	●																	
M1.4 contact point											●	●	●																	
M2.5 contact point	●	●	●	●	●	●	●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rubber boot		●		●			●			●														●	●	●				
IP51 (IEC 60529)														●	●	●	●	●	●											
IP54 (IEC 60529)	●		●								●	●	●							●	●	●	●					●		●
IP65 (IEC 60529)																														
IP67 (IEC 60529)		●		●	●	●	●	●	●	●														●	●	●	●		●	
DIAL																														
Diameter 45 mm	●	●	●	●	●	●	●	●	●	●	●	●	●																	
Diameter 60 mm														●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rotating											●	●	●							●	●	●	●	●	●	●	●	●	●	●
Lifting cap	●	●	●	●	●			●						●	●	●	●	●	●	●	●	●	●				●	●	●	●
FUNCTIONS																														
mm/inch	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Preset	● 1)	● 1)	● 1)	● 1)	●	●	●	●	●	●	●	●	●	● 1)	● 1)	● 1)	● 1)	● 1)	● 1)	●	●	●	●	●	●	●	●	●	●	●
Preset dynamic																				●	●	●	●							
Measuring direction	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●
Hold					●	●	●	●	●	●	●	●	●							●	●	●		●	●	●	●	●	●	●
Min / Max / Delta					●	●	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●
Tolerances																				●	●	●	●	●	●	●	●	●	●	●
Absolute system S.I.S*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Auto off	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
Analog display					●	●	●	●	●	●	●	●	●							●	●	●	●							
Setting by PC	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programmable menus					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Powered by connector	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Multiplication factor					●	●	●	●	●	●	●	●	●							●	●	●		●	●	●	●	●	●	●
Ref I / II																						2)	2)	●	●	●	●	●	●	●

* SIS description on page 5

Models with Bluetooth® technology

1) Preset configuration only by PC
2) 4 references

Digital indicators

S_Dial

SUMMARY OF ALL TYPES

	S_Dial WORK																		S_Dial PRO						
	ADVANCED										SMART				NANO & NANO SMART				ANALOG NANO SMART		SMART				
RANGE	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
0.8 mm																											
2.0 mm																											
12.5 mm	●	●									●				●		●		●								
25 mm			●	●								●				●		●		●					●	●	
50 mm					●	●							●								●	●	●	●			
100 mm							●	●						●													●
150 mm									●	●																	
RESOLUTION																											
0.01 mm	●		●		●		●		●																		
0.001 mm		●		●		●		●		●	●	●	●	●													
0.0001 mm															●	●	●	●	●	●	●	●	●	●	●	●	●
MECHANIC																											
Diameter 8 mm h6	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
Diameter 25 mm g7																							●	●			
Spring	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●		●		●
M1.4 contact point																											
M2.5 contact point	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rubber boot																											
IP51 (IEC 60529)																					●	●	●	●	●	●	●
IP54 (IEC 60529)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
DIAL																											
Diameter 60 mm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rotating	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
FUNCTIONS																											
mm/inch	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Preset	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Preset dynamic																			●	●							
Measuring direction	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hold	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Min / Max / Delta	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tolerances	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Absolute system S.I.S*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Auto off	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Analog display																			●	●							
Setting by PC	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programmable menus	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Powered by connector	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Multiplication factor	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ref I / II	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●

* SIS Smart Inductive System description on page 5

Models with Bluetooth® technology

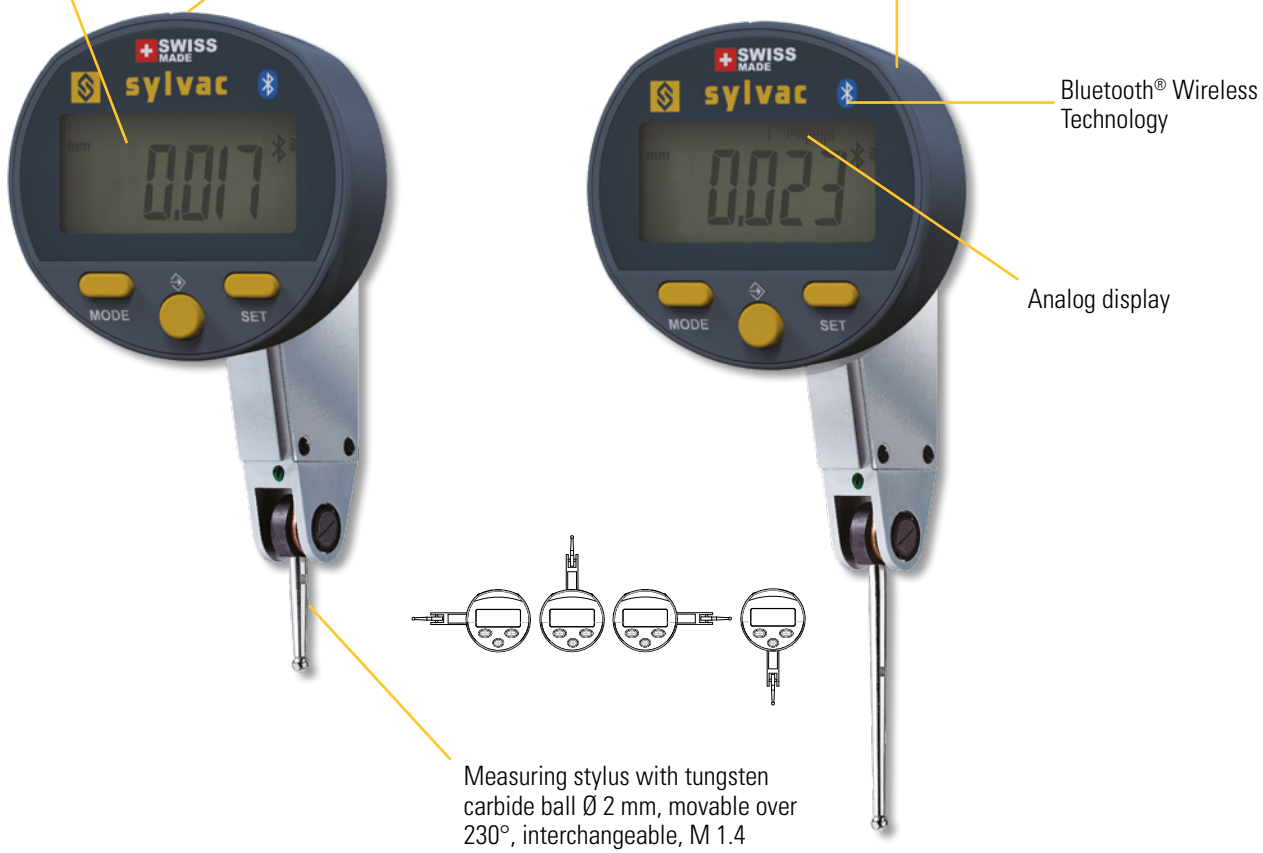
Digital test indicator S_Dial TEST Smart

DESCRIPTION

B

- First digital test indicator with integrated Bluetooth® system
- Instrument for checking roundness and flatness
- Data transfer by sending a request or by foot pedal
- Compact housing Ø 45 mm rotatable by 270°.
- Revolutionary mechanical construction, without gears or gears, which eliminates hysteresis error
- Digital display resolution 0.001 mm with analogue scale
- M1.4 stylus with Ø 2 mm tungsten carbide ball, swivelling and interchangeable
- Available in 3 versions :
  - Model with stylus length 12 mm, measuring range 0.8 mm
  - Model with stylus length 36 mm, measuring range 2.0 mm
  - Combination model for 12 and 36 mm styli (supplied with both styli), measuring range 0.8/2.0 mm
- Protected against liquids IP54

Built-in Bluetooth®



Built-in Bluetooth®

POWER

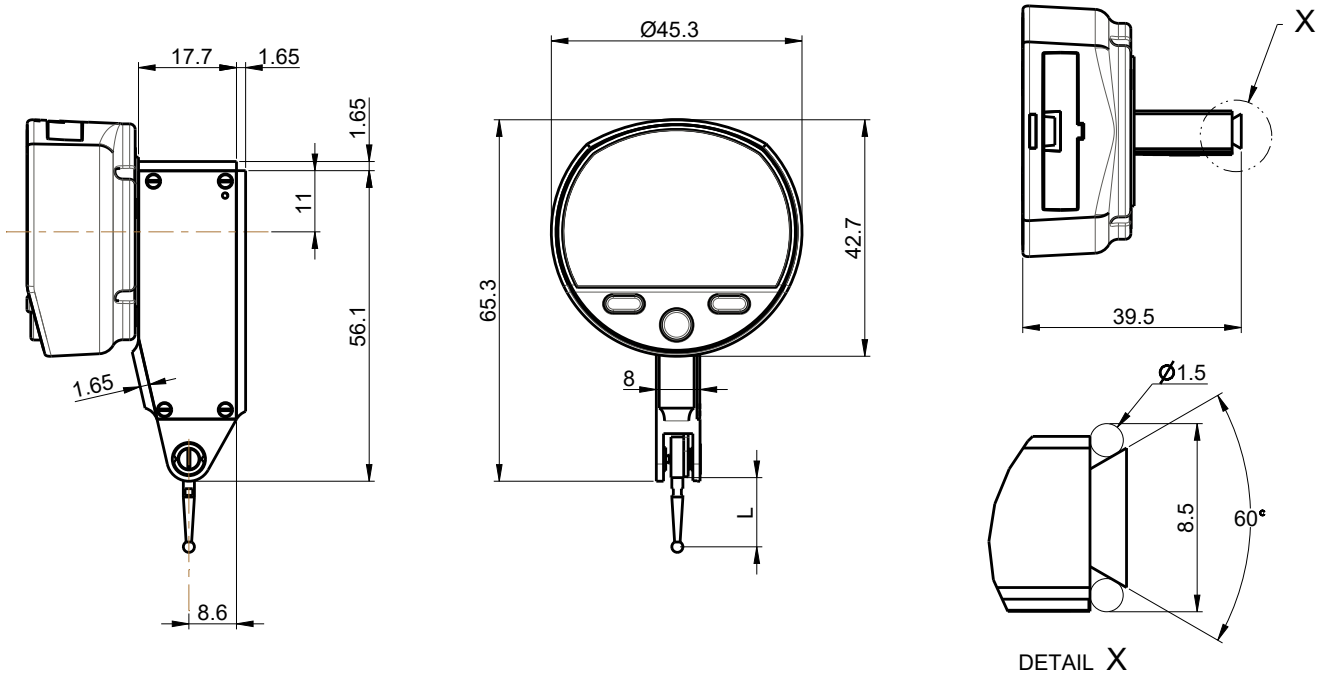
SWISS MADE

WATER RESISTANT

IP54

Digital test indicator S_Dial TEST Smart

DIMENSIONAL DRAWING



TECHNICAL SPECIFICATIONS

		805-4321	805-4322	805-4323
Measurement capacity	mm	0.8	2.0	0.8 / 2.0
Stylus length L	mm	12.5	36.5	12.5 / 36.5
Accuracy fe (α=0°)	µm	3	8	3 / 8
Total accuracy fges (α=0°)	µm	4	10	4 /10
Reversibility fu	µm	2	3	2 / 3
Resolution	mm	0.001mm / .00005"		
Repeatability fw	µm	1		
Measuring force	N	0.15	0.06	0.15 / 0.06
Friction on probe orientation	N	4	1.6	4 / 1.6
Weight	g	70		
Protection rating according to IEC 60529		IP54		
Output data		Bluetooth® wireless technology* / RS232 / USB [1]		
Zero setting		●		
min / max / delta display		●		
Analog display		●		
Selection of resolution		●		
Preset (0.01 resolution)		±99.999 mm / ±3.99995 IN (±999.99 mm / ±39.9995 IN)		

[1] see cables chapter

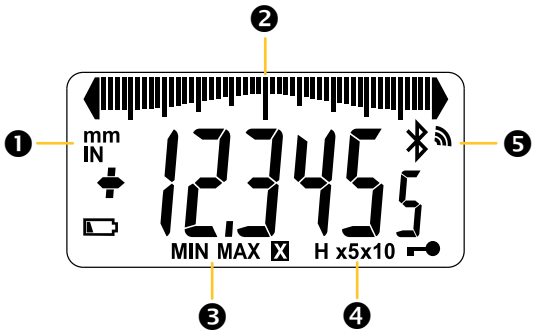
*** Up to 8 instruments connected per dongle #981-7100**

Digital test indicator S_Dial TEST Smart

DISPLAY

B

1. **Direct mm/inch conversion**
2. **Analog display**
3. **Min/max/delta mode**
4. **Analogic resolution display**
5. **Bluetooth® technology**



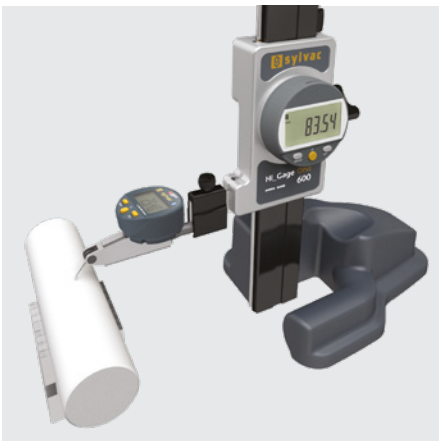
STANDARD DELIVERY

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Quickstart
- Stem Ø 8 mm (905-2247)
- Clamping key for measuring button
- 2 contact points Ø2mm, 12.5 and 36.5mm (model 805-4332 only)

APPLICATIONS

Run-out measurement

Checking the alignment on milling machine.

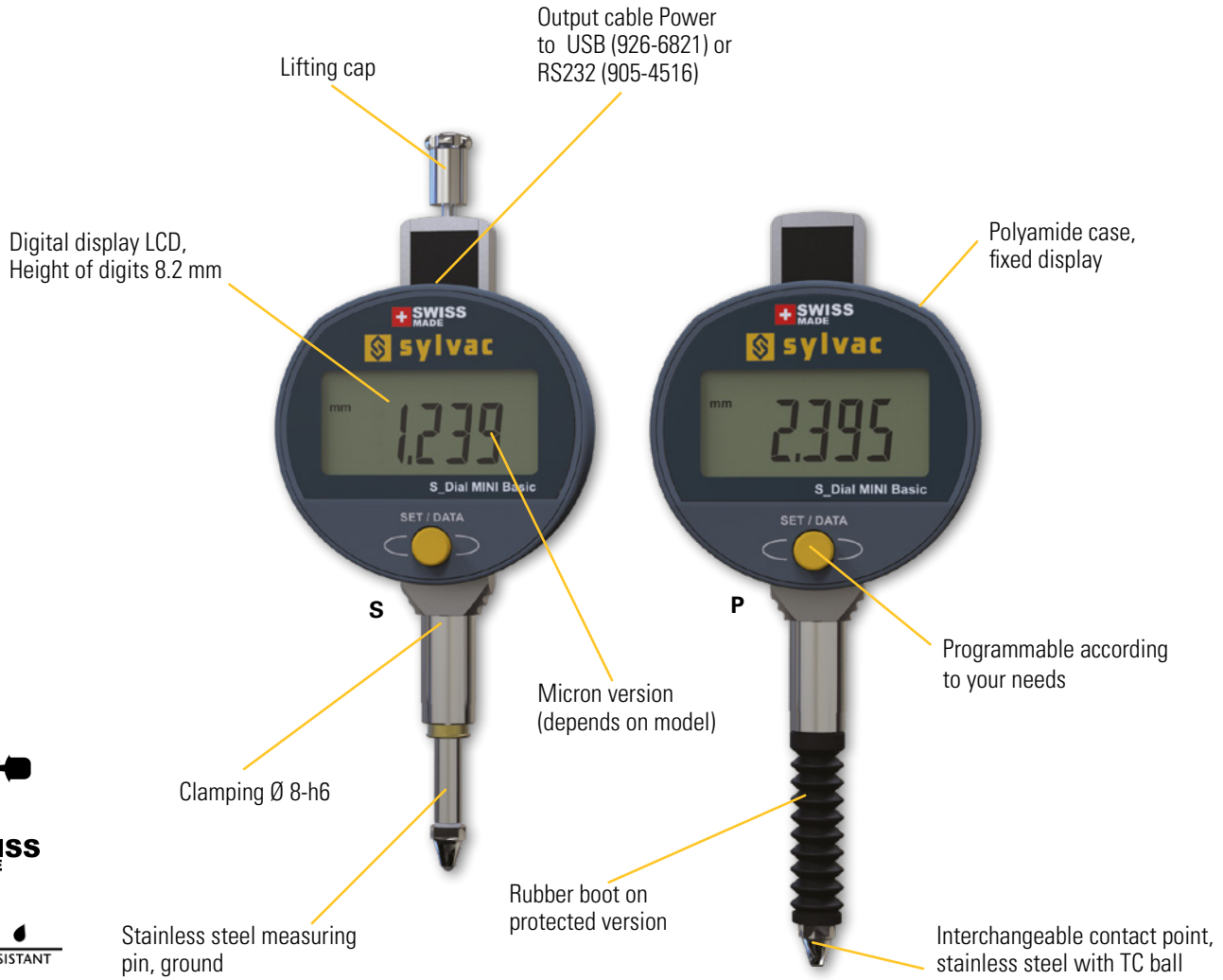


Perpendicularity measurement with a S234 mounted on a Hi_Gage ONE

Mini digital indicators S_Dial MINI Basic

DESCRIPTION

- Smallest digital comparator available on the market, with compact Ø 45 mm non-rotating housing
- New robust construction
- Ideal for integration into machines or various measuring fixtures
- Only one central button with favourite function to choose between recall of the preset or transmission of the value
- Selection of unit (mm/inch) and direction of measurement
- Data output «Power», works without battery when connected via cable
- Digital display resolution 0.01 or 0.001 mm
- Measuring range 12.5 mm
- Available in Protected or Standard execution
  - P version: IP67 with bellows-protected spindle, without lifting cap
  - S version: IP54, without bellows, with lifting cap



POWER

SWISS MADE

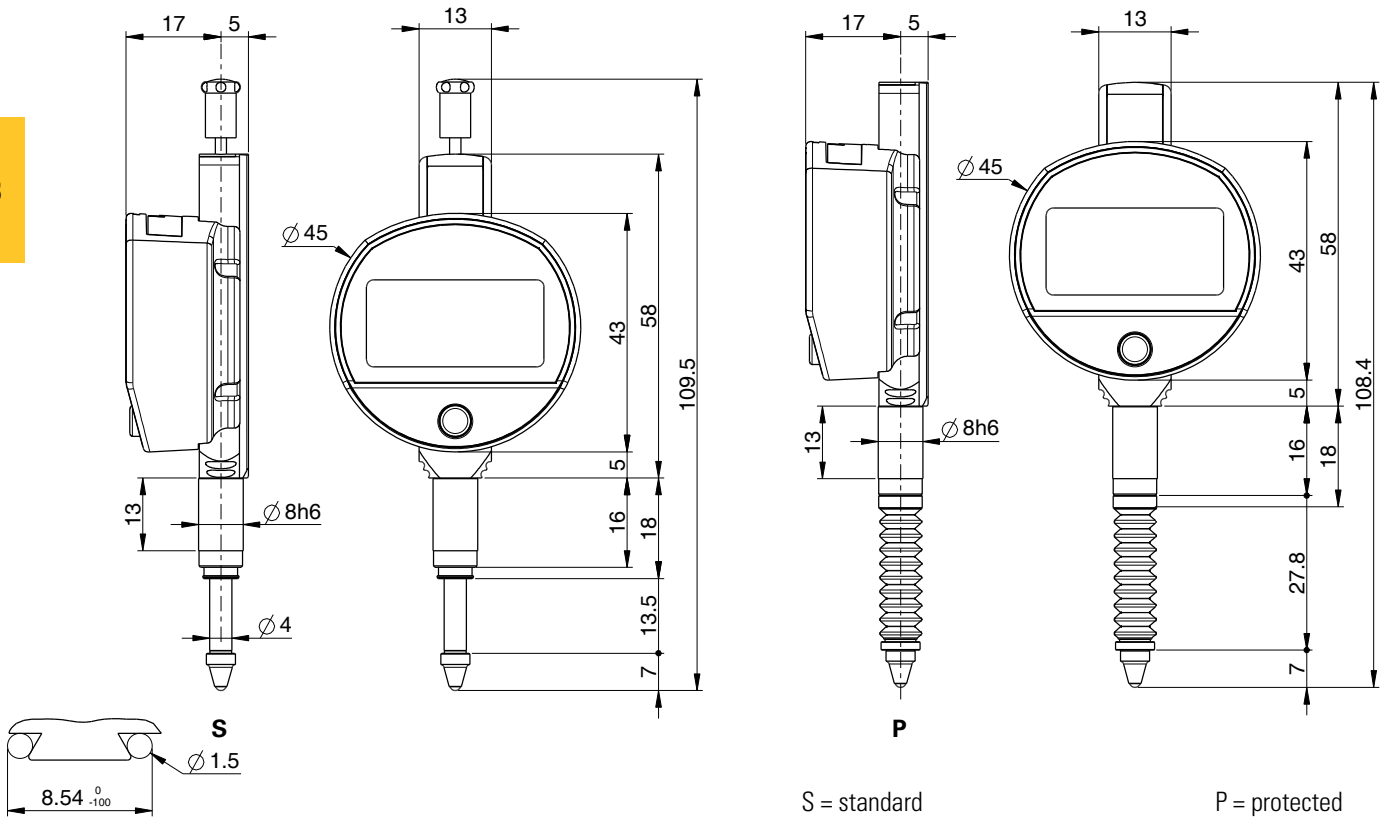
WATER RESISTANT

IP67

Mini digital indicators S_Dial MINI Basic

B

DIMENSIONAL DRAWINGS



S = standard P = protected

TECHNICAL SPECIFICATIONS

		805-4121	805-4125	805-4521	805-4525
Measuring range	mm	12.5	12.5	12.5	12.5
Analog scale		---	---	---	---
Resolution	mm	0.01	0.01	0.001	0.001
Execution [3]		S	P	S	P
Max. Error fe	µm	10[1]	10[1]	4	4
Repeatability	µm	2	2	2	2
Measuring force [2]	N	0.5 - 0.90 N	0.6 - 1.3 N	0.5 - 0.90 N	0.6 - 1.3 N
Zero setting		●			
Resolution selection		---			
PRESET = (max. ±999.99 mm)		●[5]			
Min / max / delta display		---			
Selection of measuring direction		●			
Multiplication factor		---			
Output data		USB / RS232 [4]			
IP rating		IP54	IP67	IP54	IP67

[1] ± 1 digit
[2] Values ± 20%, indicator in vertical position, outgoing measuring spindle
[3] S = Standard P = Protected
[4] see cables chapter
[4] voir chapitre câbles
[5] Preset configuration only by computer

Mini digital indicators S_Dial MINI Smart

DESCRIPTION

- Smallest digital comparator available on the market with compact Ø 45 mm non-rotating housing and integrated Bluetooth® system
- New robust construction
- Ideal for integration into machines or various measuring fixtures
- Data output «Power», works without battery when connected via cable
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Digital display resolution 0.01 or 0.001 mm with analogue scale
- Measuring range 12.5 mm
- Available in Protected or Standard execution
  - P version: IP67 with bellows-protected spindle, without lifting cap
  - S version: IP54 or IP67, without bellows, with or without lifting cap

Built-in Bluetooth®

Built-in Bluetooth®

POWER

SWISS MADE

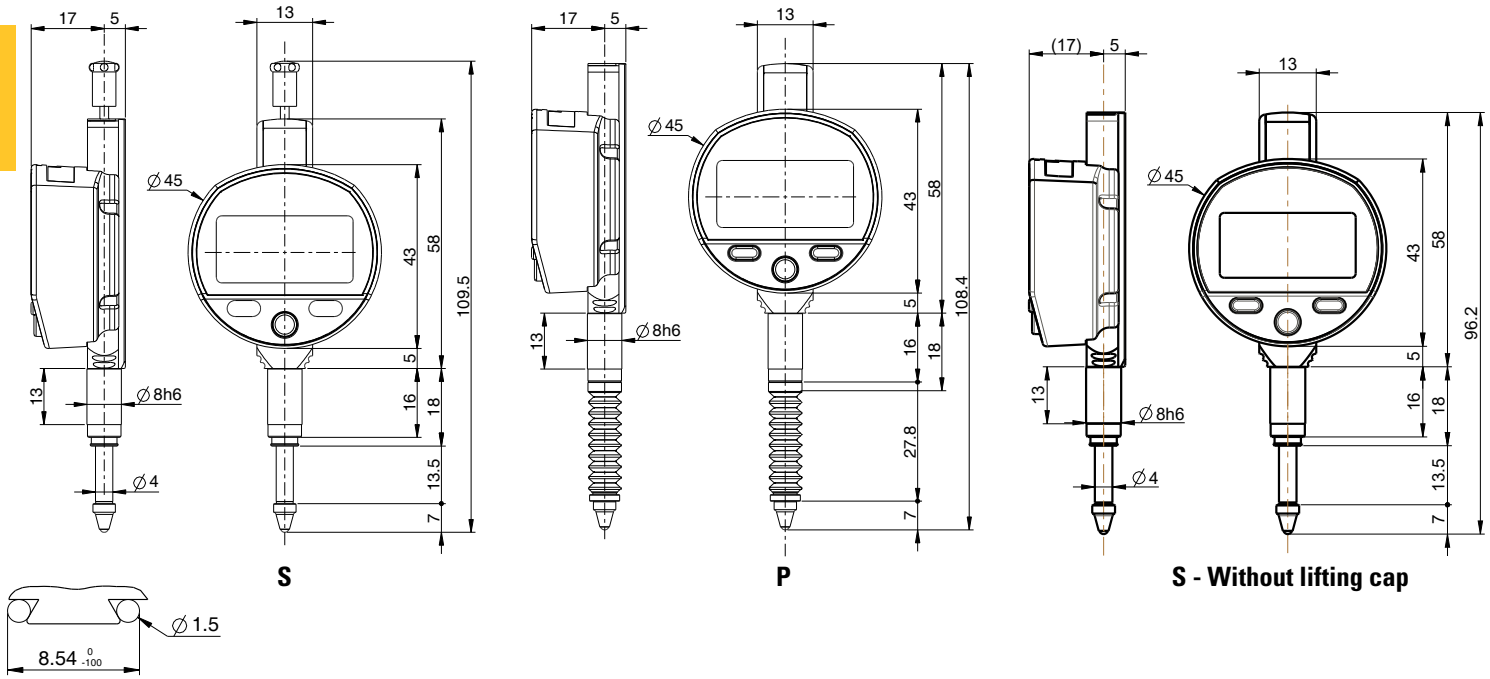
WATER RESISTANT

IP67

Mini digital indicators

S_Dial MINI Smart

B



Smart		805-6121	805-6123	805-6125	805-6521	805-6523	805-6525
Measuring range	mm	12.5	12.5	12.5	12.5	12.5	12.5
Analog scale		●	●	●	●	●	●
Resolution	mm	0.01	0.01	0.01	0.001	0.001	0.001
Execution [3]		S	S	P	S	S	P
Max. Error fe	µm	10[1]	10[1]	10[1]	4	4	4
Repeatability	µm	2	2	2	2	2	2
Measuring force [2]	N	0.5 - 0.90 N	0.5 - 0.90 N	0.6 - 1.3 N	0.5 - 0.90 N	0.5 - 0.90 N	0.6 - 1.3 N
Lifting cap		●			●		
Zero setting		●					
Resolution selection		●					
PRESET = (max. ±999.99 mm)		●					
Min / max / delta display		●					
Selection of measuring direction		●					
Multiplication factor		●					
Output data		Bluetooth® wireless technology* / RS232 / USB [4]					
IP rating		IP67	IP67	IP67	IP67	IP67	IP67

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

*** Up to 8 instruments connected per dongle #981-7100**

Mini digital indicators S_Dial MINI Smart

STANDARD DELIVERY

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

MEASURING FORCE FOR RANGE 12.5 mm

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

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

APPLICATIONS

Checking of an internal Ø with a mechanical device

Measurent of the vertical displacement of an element

Measurement of internal chamfer

Digital indicators

S_Dial WORK

DESCRIPTION

BASIC

B

- Simple and robust digital comparator with Ø 59.5 mm non-rotating housing
- One central button with favourite function to choose between preset recall or value transmission
- Selection of unit (mm/inch) and direction of measurement
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Available in version with display resolution 0.01 mm and 0.001 mm
- Measuring range selectable: 12.5, 25 and 50 mm

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT

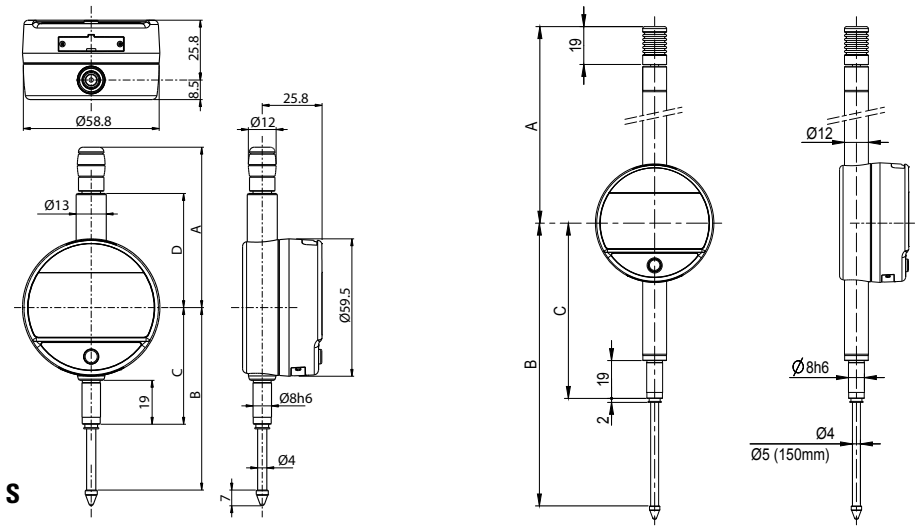
* SIS description on page 5

Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

BASIC



TECHNICAL SPECIFICATIONS

		805-1201	805-1301	805-1401	805.1501	805-1601	805-1621
Measuring range	mm	12.5	12.5	25	25	50	50
Resolution	mm	0.01	0.001	0.01	0.001	0.01	0.001
Max. Error fe	µm	10 [1]	**4**	10 [1]	**5**	20 [1]	**7**
Repeatability	µm	2					
IP rating		IP51					
A	mm	56.7		69.9		121.3	
B	mm	66.1		78.5		142	
C	mm	50.5		50.5		88	
D	mm	36.6		49.4		-	
Output data		USB / RS232					
Programmable by PC		●					
Standard functions (customized by PC)		Preset (max 999.999) only programmable by PC with cable, mm/inch, direction of measurement					

[1] ± 1 digit

STANDARD DELIVERY

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

MEASURING FORCE

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

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

Digital indicators

S_Dial WORK

DESCRIPTION

ADVANCED

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Large display with colour LED tolerance status indication
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Available with display resolution 0.01 mm or 0.001 mm
- Measuring range selectable: 12.5, 25, 50, 100 and 150 mm
- The 12.5 and 25 mm versions are available in special low or high pressure versions on request.
- Protected IP54

Output cable Proximity to USB (926-6721) or RS232 (926-6723)

Lifting cap

Large display with integrated LEDs tolerances

Optional lifter

Programmable according to your needs

External power supply and output cable Power to USB (926-6821/926-6838) or RS232 (905-4516/905-4538)

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

Aluminium case rotating display over 270°

Reinforced clamping shaft

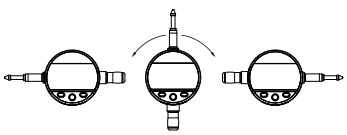
Hardened steel clamping Ø 8-h6

POWER

SWISS MADE

PROXIMITY

WATER RESISTANT



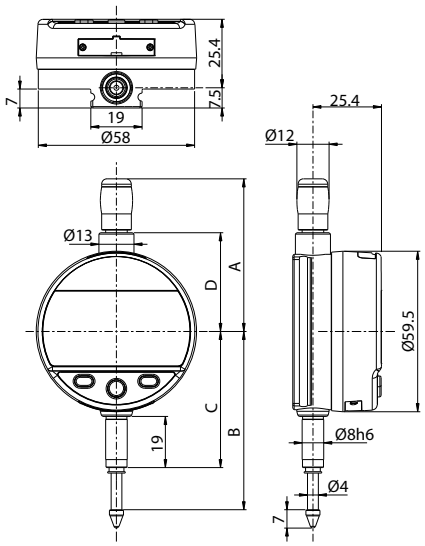
* SIS description on page 5

Digital indicators

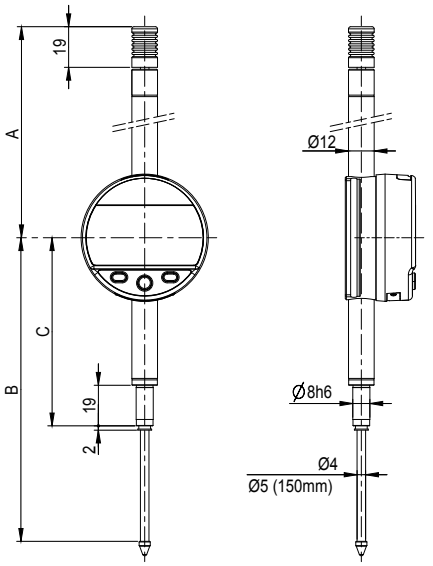
S_Dial WORK

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

[1] ± 1 digit

STANDARD DELIVERY

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

MEASURING FORCE

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

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

Digital indicators

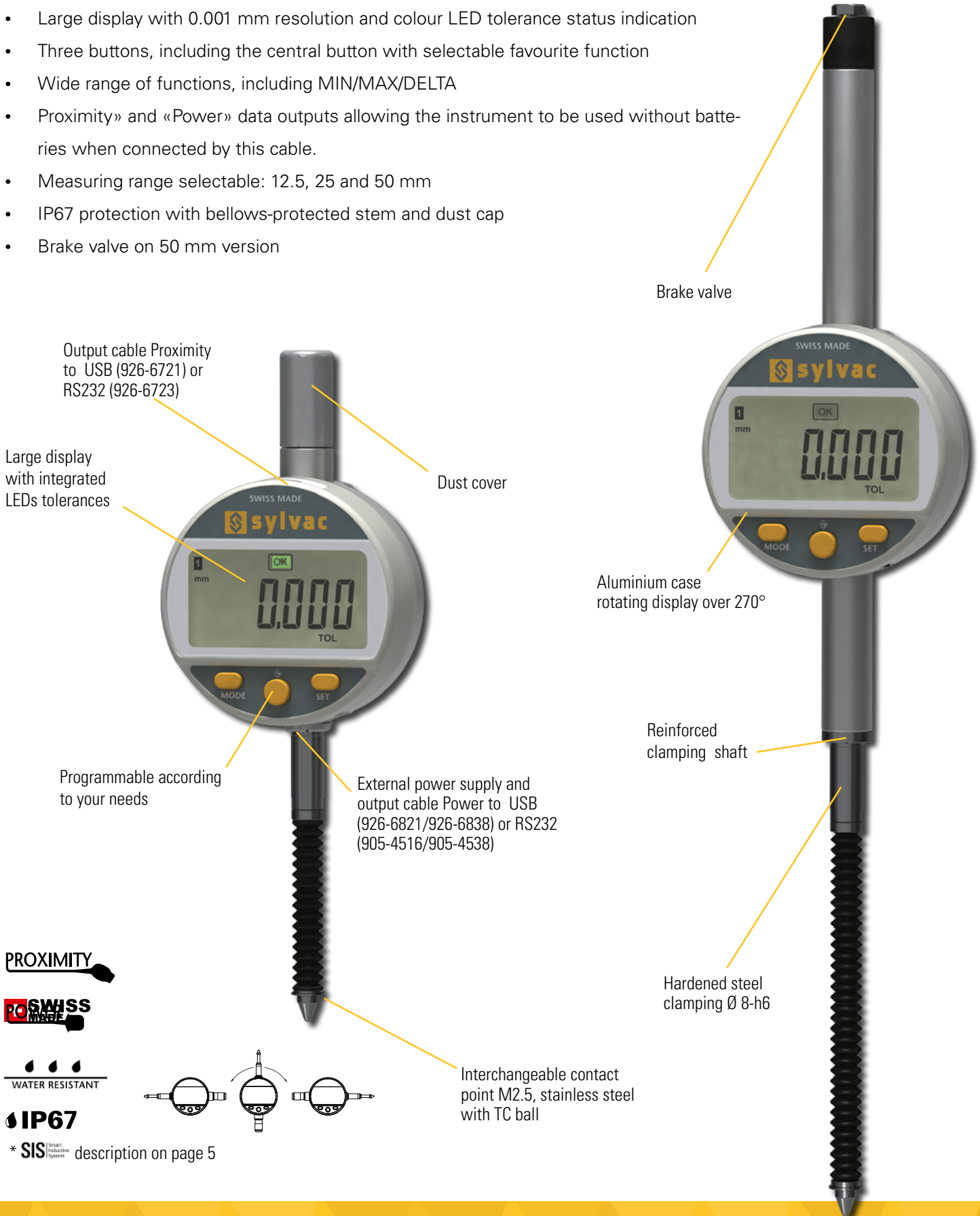
S_Dial WORK

DESCRIPTION

ADVANCED IP67

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Large display with 0.001 mm resolution and colour LED tolerance status indication
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Measuring range selectable: 12.5, 25 and 50 mm
- IP67 protection with bellows-protected stem and dust cap
- Brake valve on 50 mm version



PROXIMITY

SWISS MADE

WATER RESISTANT

IP67

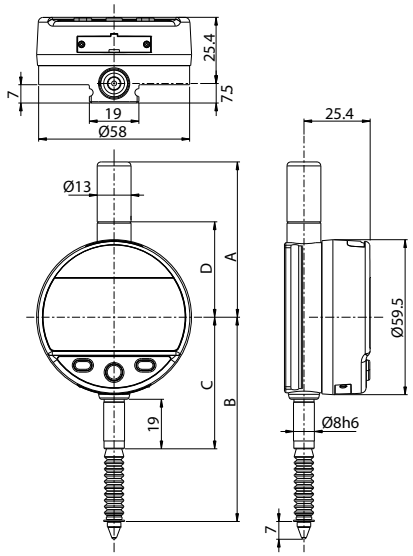
* SIS description on page 5

Digital indicators

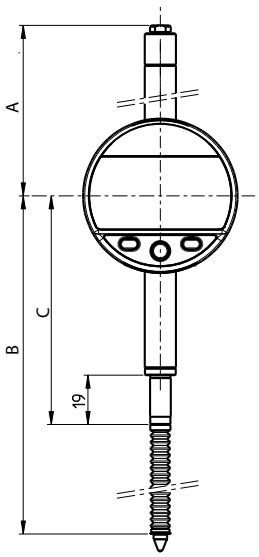
S_Dial WORK

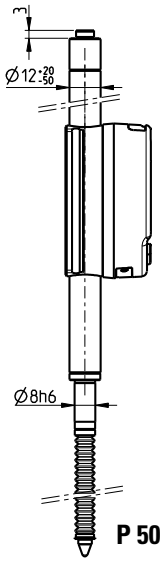
DIMENSIONAL DRAWINGS

ADVANCED IP67



P 12.5-25 mm





P 50 mm

TECHNICAL SPECIFICATIONS

		805-5305	805-5505	805-5625
Measuring range	mm	12.5	25	50
Resolution	mm	0.001	0.001	0.001
Max. Error fe	µm	**3**	**4**	**5**
Repeatability	µm	2		
IP rating		IP67		
A	mm	59.6	85.4	104.4
B	mm	78.4	99.7	175.3
C	mm	50.5	50.5	88
D	mm	36.6	49.4	-
Output data		USB / RS232		
Programmable by PC		●		
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, toleances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock		

STANDARD DELIVERY

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

MEASURING FORCE

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

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

Digital indicators

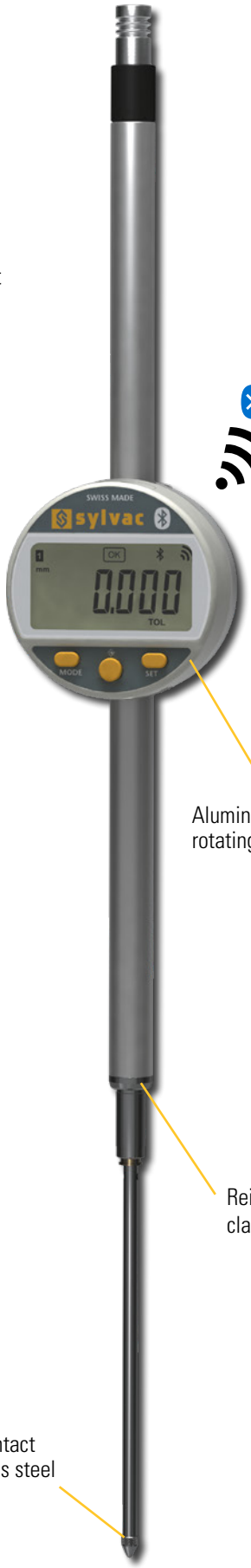
S_Dial WORK

DESCRIPTION

SMART

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Large display resolution 0.001 mm
- Integrated Bluetooth® system
- Large display with colour LED tolerance status indication
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Measuring range selectable: 12.5, 25, 50 and 100 mm
- Protection class IP54



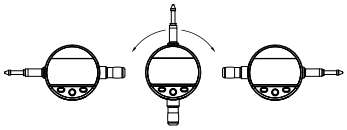
Built-in Bluetooth®

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT



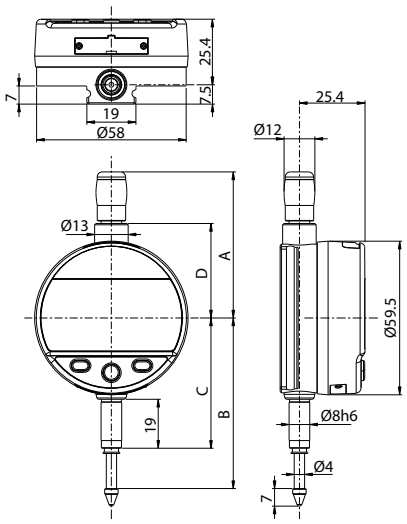
* SIS description on page 5

Digital indicators

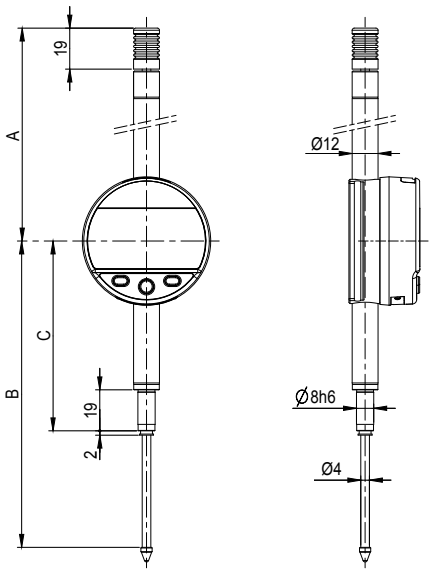
S_Dial WORK

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	**3**	**4**	**5**	**6**
Repeatability	µm	2			
IP rating		IP54			
A	mm	56.7	69.4	121	172
B	mm	66.1	78.5	142	244
C	mm	50.5	50.5	88	139
D	mm	36.6	49.4	-	-
Output data		USB / RS232 / Bluetooth® wireless technology*			
Programmable by PC		●			
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, toleances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

[1] ± 1 digit

*** Up to 8 instruments connected per dongle #981-7100**

STANDARD DELIVERY

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

MEASURING FORCE

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

Tolerance ± 20%, spindle in outgoing measurement position.

[2] on request

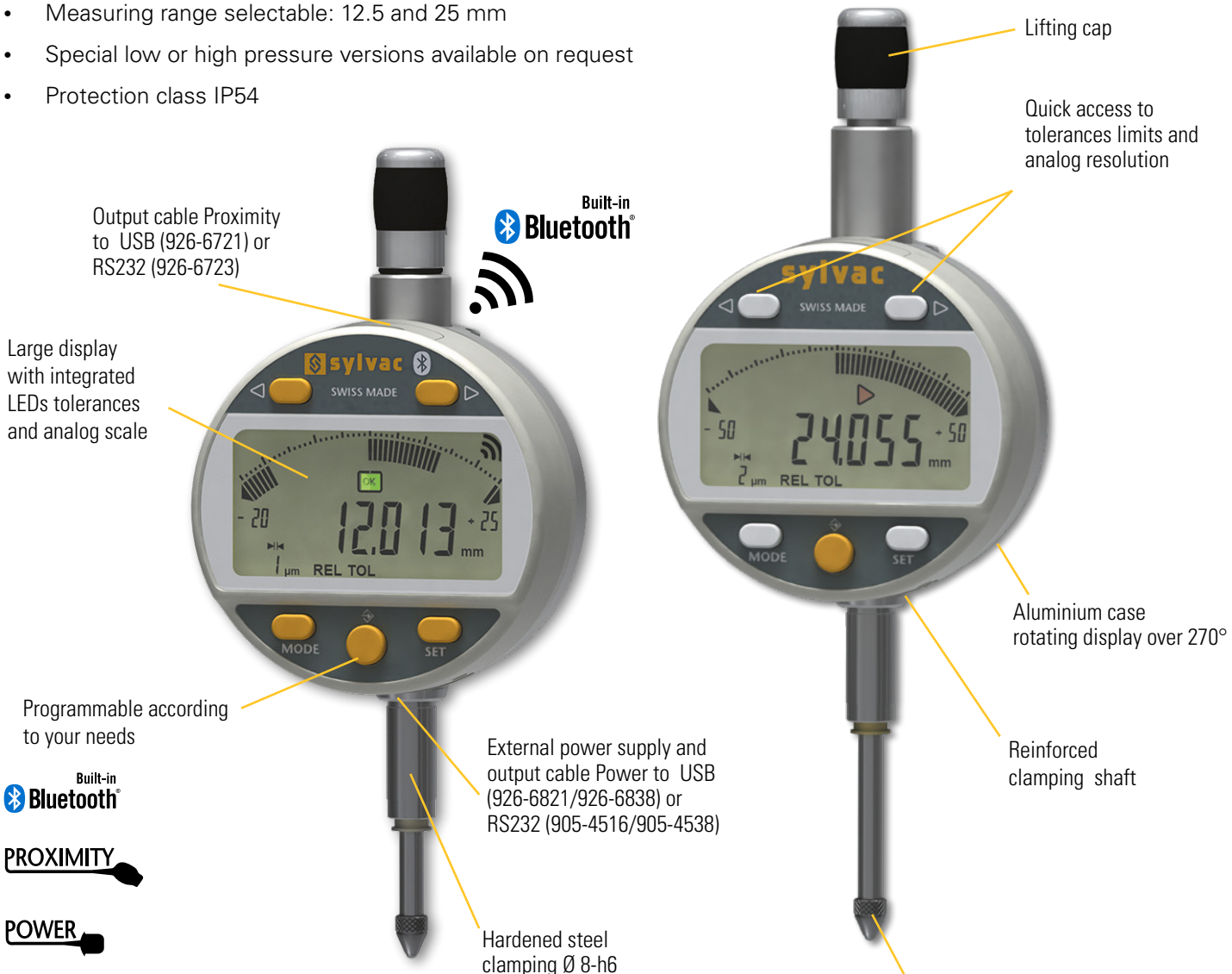
Digital indicators

S_Dial WORK

DESCRIPTION

ANALOG & ANALOG SMART

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Integrated Bluetooth® system on Smart model
- Large display with 0.001 mm resolution and colour LED tolerance status indication
- Analogue display with selectable scale (from 0.2 µm per division)
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Measuring range selectable: 12.5 and 25 mm
- Special low or high pressure versions available on request
- Protection class IP54



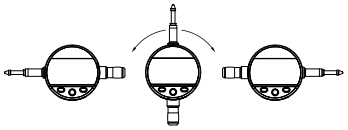
Built-in Bluetooth

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT



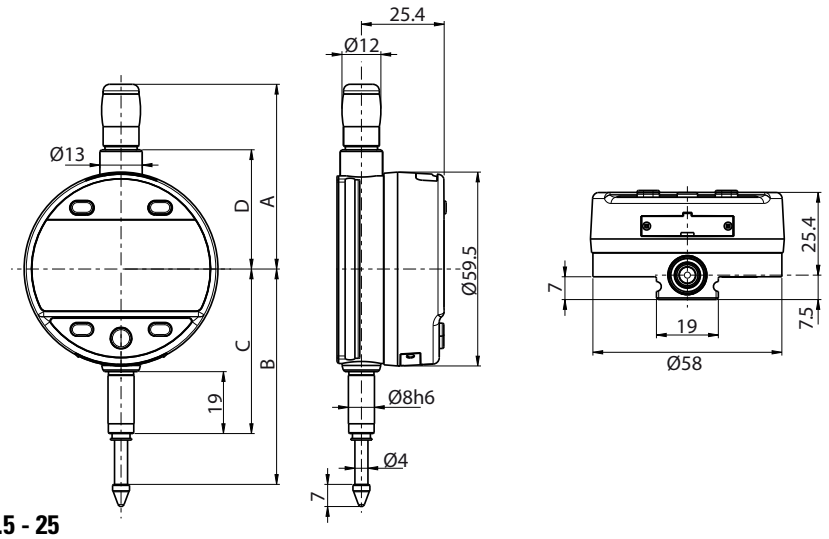
* SIS description on page 5

Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

ANALOG & ANALOG SMART



S 12.5 - 25

TECHNICAL SPECIFICATIONS

		805-5307	805-5507	805-6308
Measuring range	mm	12.5	25	12.5
Resolution	mm	0.001		
Max. Error fe	µm	**3**	**4**	**3**
Repeatability	µm	2		
IP rating		IP54		
A	mm	56.7	69.4	56.7
B	mm	66.1	78.5	66.1
C	mm	50.5	50.5	50.5
D	mm	36.6	49.4	36.6
Output data		USB / RS232		USB / RS232 / Bluetooth® *
Programmable by PC		●		
Standard functions (customized by PC)		mm/inch, preset (max 999.999) min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock		

[1] ± 1 digit

*** Up to 8 instruments connected per dongle #981-7100**

STANDARD DELIVERY

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

MEASURING FORCE

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

Tolerance ± 20%, spindle in outgoing measurement position.

[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

CBG

B

- Special version for cylindrical bore gauges
- Data output Power, Proximity & Bluetooth®
- Introduction of the Preset value on the saved Min value
- Quick measure of the reversal point
- Robust construction
- Water and coolant resistant
- Broad choice of functions (MIN/MAX/DELTA, TOL, PRESET, AUTO OFF, etc.)
- Automatic wake-up and sleeping mode, Absolute System S.I.S*
- Maximum error of 3 µm

Accessory not included

Output cable Proximity to USB (926-6721) or RS232 (926-6723)

Built-in Bluetooth®

Large display with integrated LEDs tolerances and analog scale

Preset Master

Programmable according to your needs

External power supply and output cable Power to USB (926-6821/926-6838) or RS232 (905-4516/905-4538)

Hardened steel clamping Ø 8-h6

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

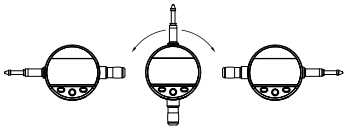
Built-in Bluetooth®

PROXIMITY

POWER

SWISS MADE

WATER RESISTANT



Lifting cap

Aluminium case rotating display over 270°

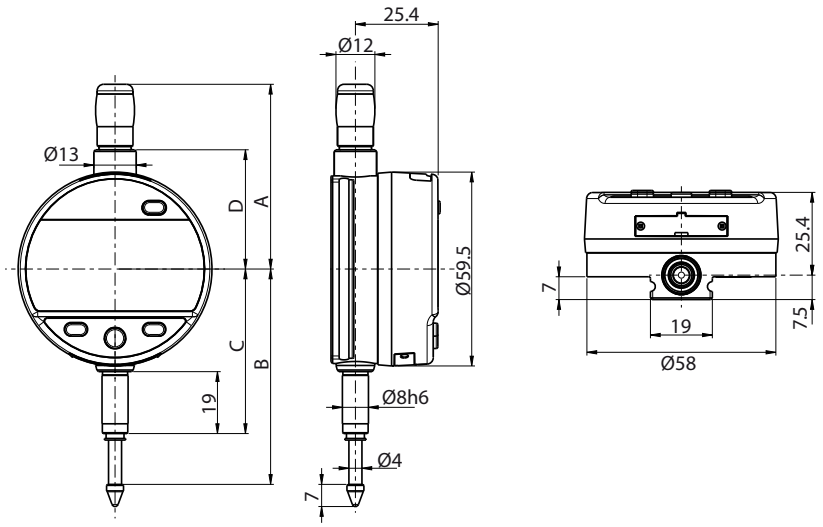
* SIS description on page 5

Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

CBG



TECHNICAL SPECIFICATIONS

		805-6317
Measuring range	mm	12.5
Resolution	mm	0.001
Max. Error fe	µm	**3**
Repeatability	µm	2
IP rating		IP54
A	mm	56.7
B	mm	66.1
C	mm	50.5
D	mm	36.6
Output data		USB / RS232 / Bluetooth® wireless technology*
Programmable by PC		●
Standard functions (customized by PC)		mm/inch, preset (max 999.999) min/max/delta, tolerances, resolution, multiplication factor, automatic or manual switch off

[1] ± 1 digit

*** Up to 8 instruments connected per dongle #981-7100**

STANDARD DELIVERY

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

MEASURING FORCE

		S 12.5
Standard	N	0.65 - 0.90
Low [2]	N	0.4 - 0.55
High [2]	N	1.0 - 1.6

Tolerance ± 20%, spindle in outgoing measurement position.

[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

NANO & NANO SMART

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Integrated Bluetooth® system on Smart model
- Large display resolution 0.0001 mm (0.1 µm) with tolerance status indication by colour LEDs
- High accuracy and repeatability
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Measuring range selectable: 12.5 and 25 mm
- Special low or high pressure versions available on request
- Protection class IP54

Output cable Proximity to USB (926-6721) or RS232 (926-6723)

Lifting cap

Large display with integrated LEDs tolerances

Programmable according to your needs

External power supply and output cable Power to USB (926-6821/926-6838) or RS232 (905-4516/905-4538)

Hardened steel clamping Ø 8-h6

Built-in Bluetooth®

Aluminium case rotating display over 270°

Reinforced clamping shaft

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

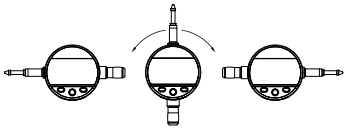
PROXIMITY

POWER

Built-in Bluetooth®

SWISS MADE

WATER RESISTANT



* SIS description on page 5

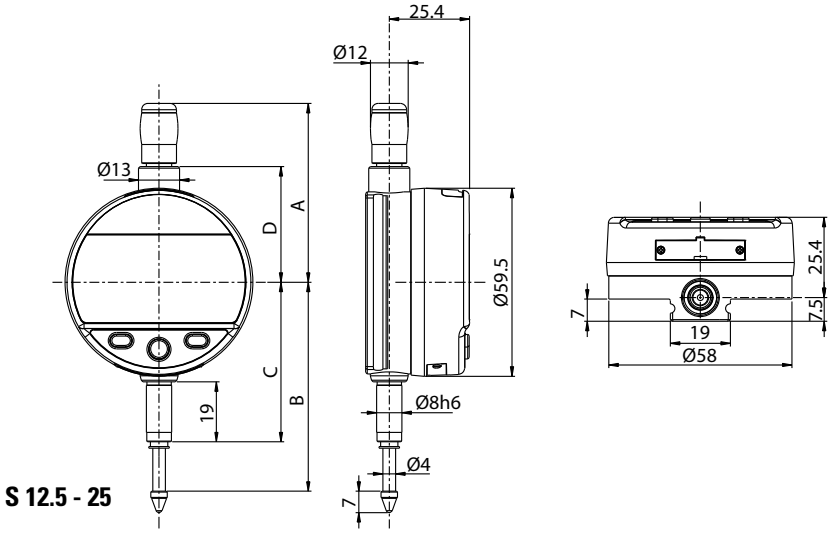
Max error 1.2 µm
Repeatability 0.3 µm

Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

NANO & NANO SMART



TECHNICAL SPECIFICATIONS

		805-5306	805-5506	805-6306	805-6506
Measuring range	mm	12.5	25	12.5	25
Resolution	mm	0.0001	0.0001	0.0001	0.0001
Max. Error fe	µm	**1.2**	**1.6**	**1.2**	**1.6**
Repeatability	µm	0.3			
IP rating		IP54			
A	mm	56.7	69.4	56.7	69.4
B	mm	66.1	78.5	66.1	78.5
C	mm	50.5	50.5	50.5	50.5
D	mm	36.6	49.4	36.6	49.4
Output data		USB / RS232		USB / RS232 / Bluetooth® wireless technology*	
Programmable by PC		●			
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999) min/max/delta, toleances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock			

*** Up to 8 instruments connected per dongle #981-7100**

STANDARD DELIVERY

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

MEASURING FORCE

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

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

Digital indicators

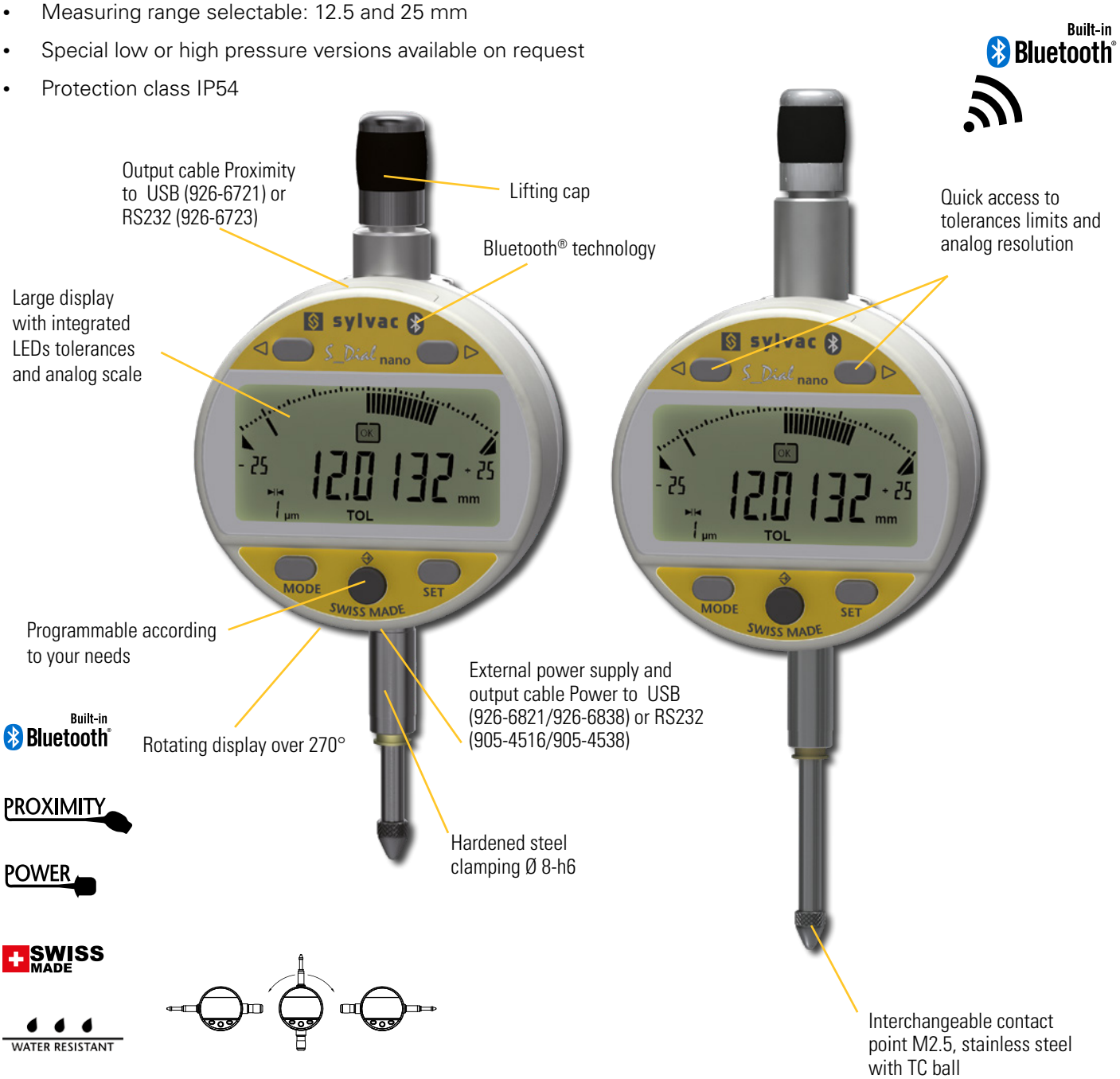
S_Dial WORK

DESCRIPTION

ANALOG NANO SMART

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Integrated Bluetooth® system on Smart model
- Large display resolution 0.0001 mm (0.1 µm) with tolerance status indication by colour LEDs
- High accuracy and repeatability
- Five buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Measuring range selectable: 12.5 and 25 mm
- Special low or high pressure versions available on request
- Protection class IP54



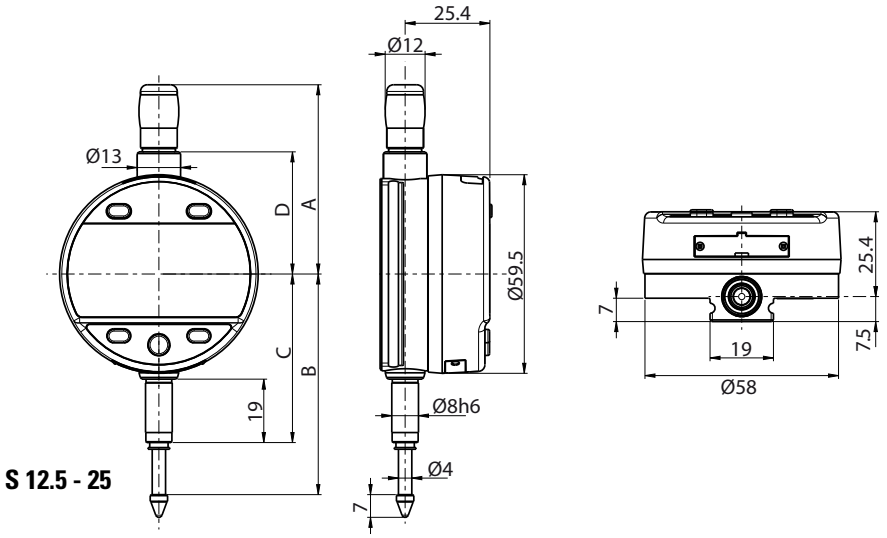
* SIS description on page 5

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	**1.2**	**1.6**
Repeatability	µm	0.3	
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**

STANDARD DELIVERY

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

MEASURING FORCE

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

Tolerance ± 20%, spindle in outgoing measurement position.

[2] on request

Digital indicators

S_Dial WORK

DESCRIPTION

PLC

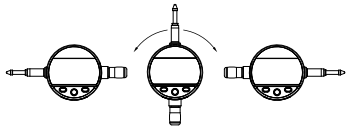
- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Instrument for automation and robotics
- Large display resolution 0.01 mm or 0.001 mm with tolerance status indication by colour LEDs
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Data outputs «Open connector» for using the instrument without batteries (powered by the device) and «Proximity».
- Selection of the communication protocol to be chosen between ASCII, MODBUS and ORBIT
- Measuring range selectable: 12.5 and 25 mm
- Special low or high pressure versions available on request
- Protection IP54 for the 0.01 mm resolution version and IP67 for the 0.001 mm resolution version

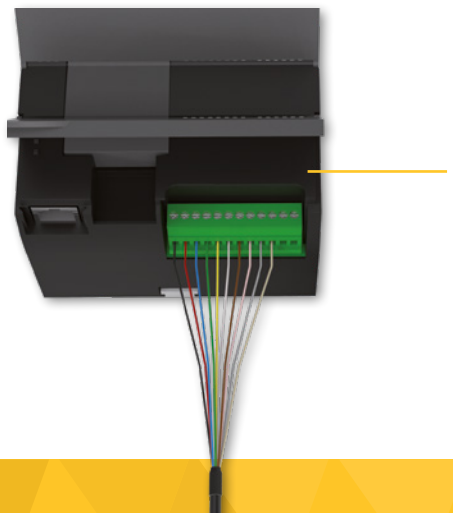
PLC

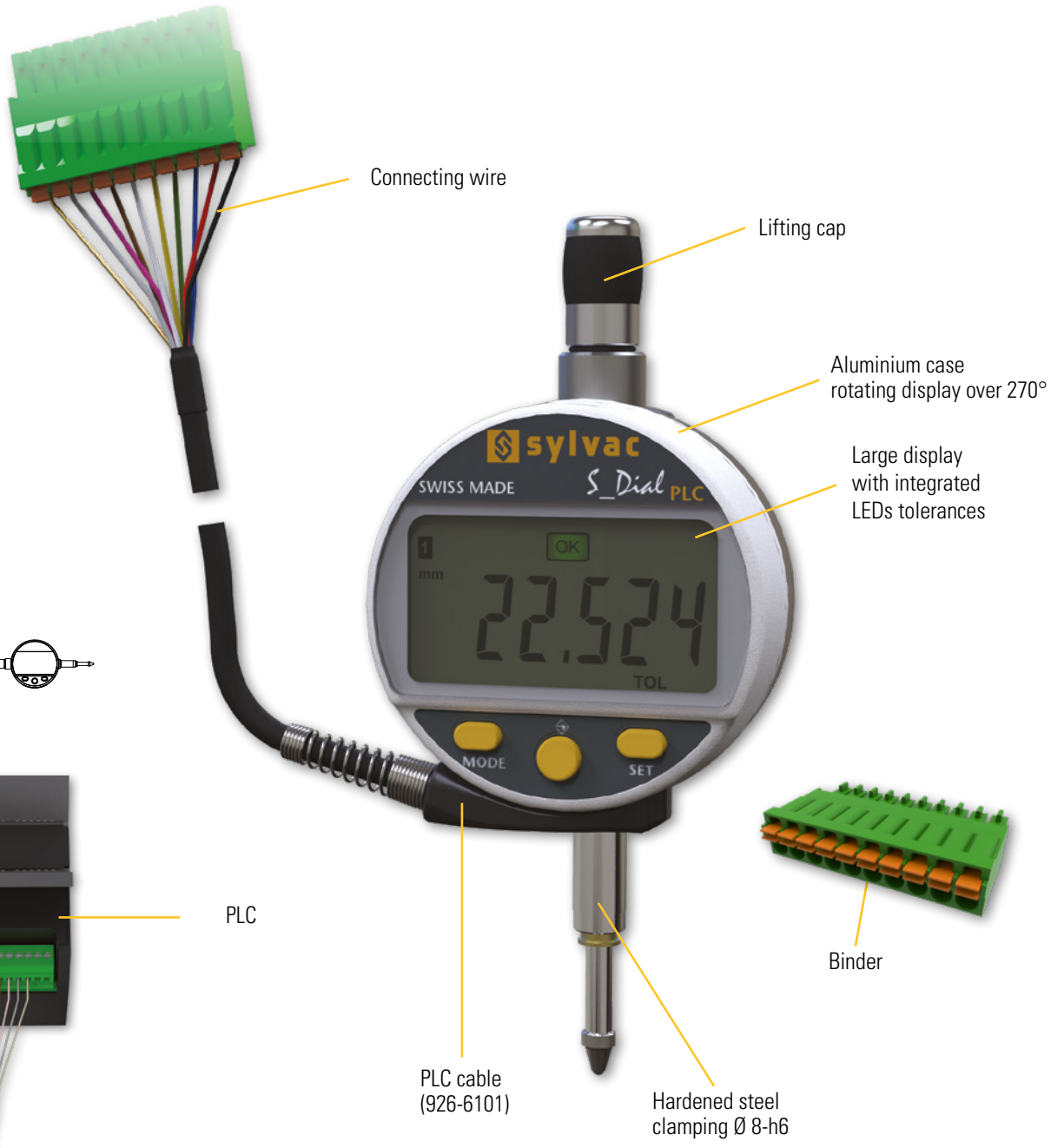
SWISS MADE

WATER RESISTANT

IP67





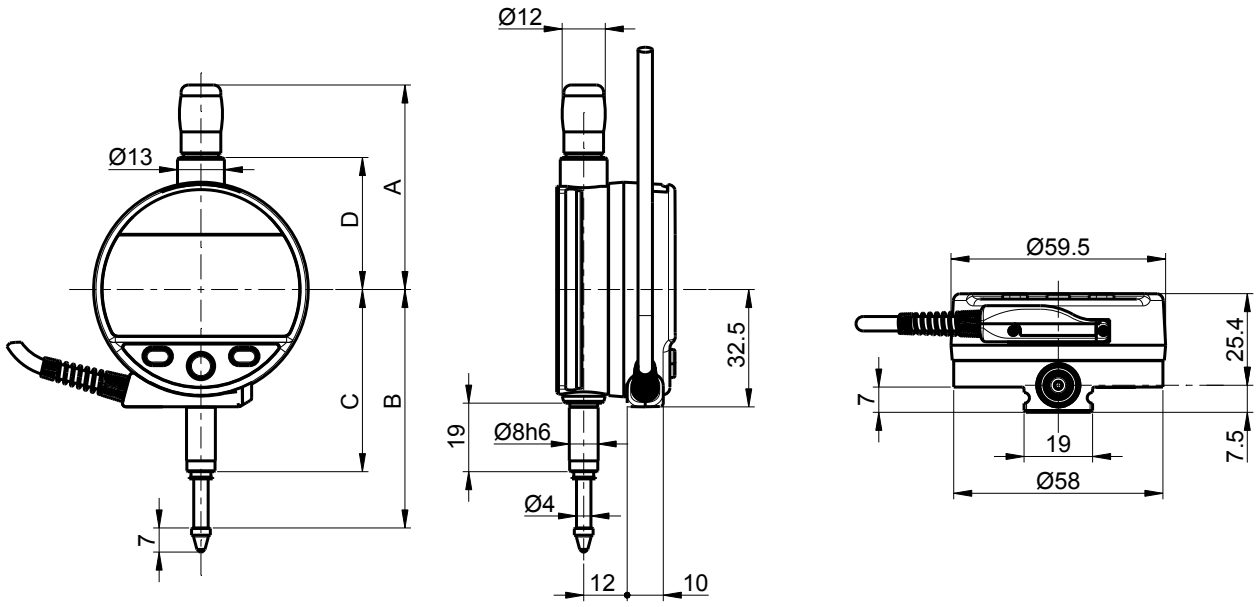


Digital indicators

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

Digital indicators

S_Dial PRO

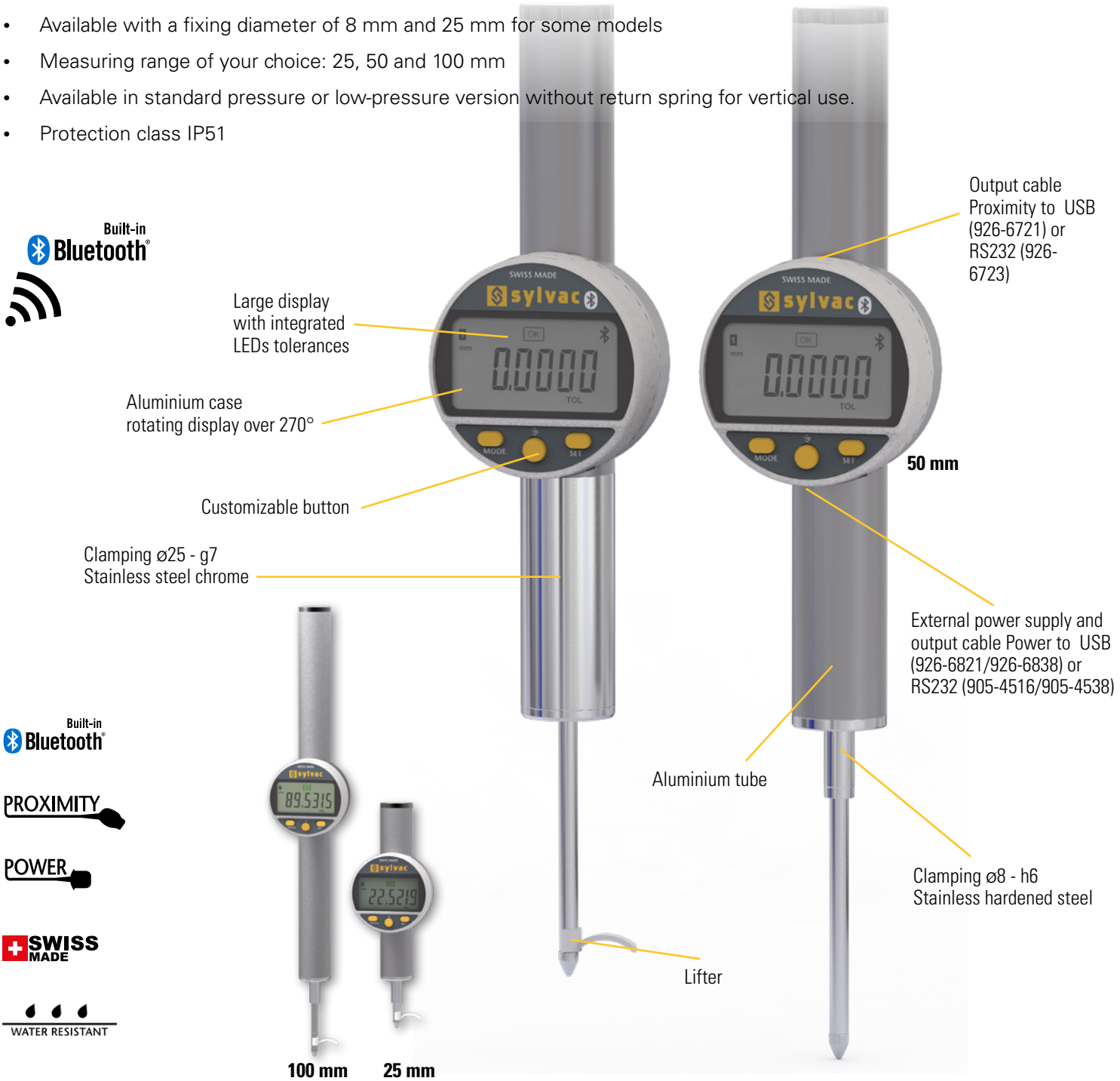
DESCRIPTION

SMART

B

- Robust digital comparator with Ø 59.5 mm housing rotatable by 270°.
- Large display resolution 0.0001 mm (0.1 µm) with tolerance status indication by colour LEDs
- High accuracy over the entire measuring range thanks to an electronically corrected scale system with reference marks
- Measuring error less than 1.2 µm over 50 mm
- Three buttons, including the central button with selectable favourite function
- Wide range of functions, including MIN/MAX/DELTA
- Bluetooth®, Proximity» and «Power» data outputs allowing the instrument to be used without batteries when connected by this cable.
- Available with a fixing diameter of 8 mm and 25 mm for some models
- Measuring range of your choice: 25, 50 and 100 mm
- Available in standard pressure or low-pressure version without return spring for vertical use.
- Protection class IP51

Built-in Bluetooth®



Built-in Bluetooth®

PROXIMITY

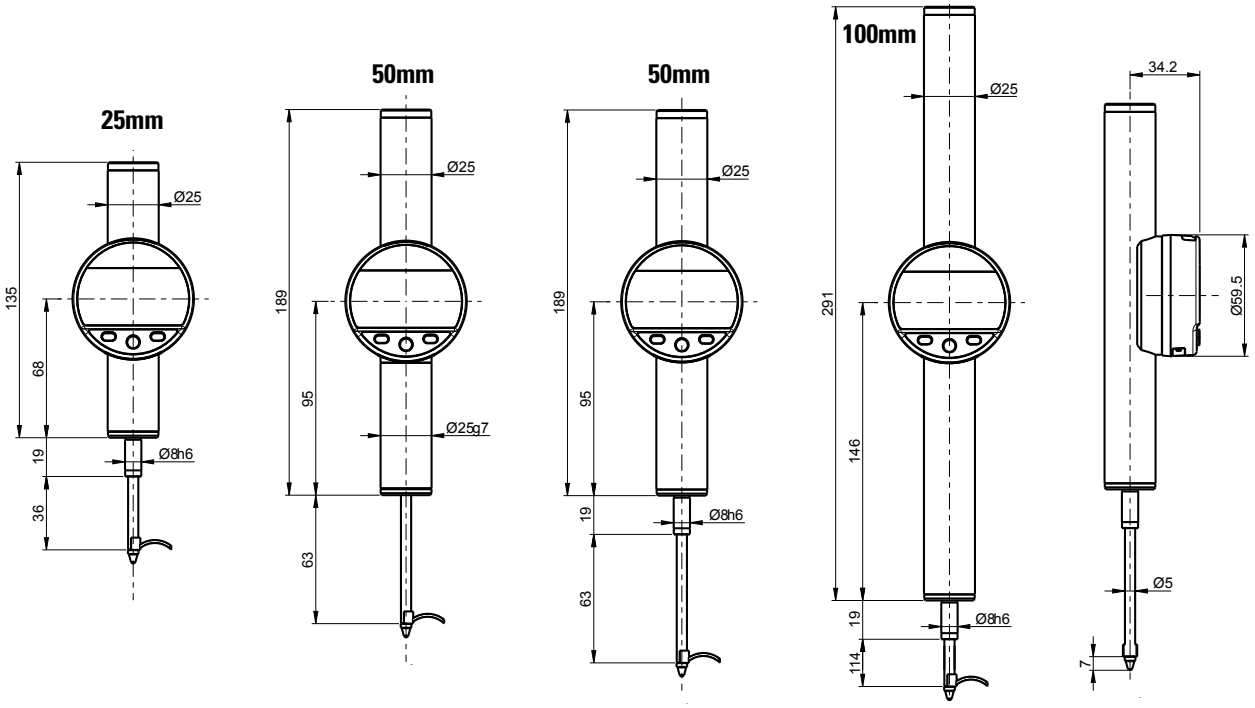
POWER

SWISS MADE

WATER RESISTANT

Digital indicators S_Dial PRO

DIMENSIONAL DRAWINGS SMART



TECHNICALS SPECIFICATIONS

		805-8501	805-8502	805-8601	805-8701	805-8602	805-8702	805-8661
Measuring range	mm	25		50				100
Resolution	mm	0.0001						
Max. Error fe	µm	**1.0**		**1.2**				**1.8**
Repeatability	µm	0.2						
Output data		USB / RS232 / Bluetooth® wireless technology*						
Programmable by PC		●						
Clamping		ø8 h6				ø25 g7		ø8 h6
Spring		●	[1]	●	[1]	●	[1]	●
Measuring force	N	0.75 - 1.00 [2]	0.30 [2]	0.85 - 1.2 [2]	0.40 [2]	0.85 - 1.2 [2]	0.40 [2]	0.90 - 1.30 [2]
IP rating		IP51						
Standard functions (customizable by PC)		mm/inch, ref I/II, preset (max 99.9999) min/max/delta, tolerances, resolution, measuring direction, multiplier, automatic extinction/manual, keylock						

[1] Model without spring : Constant measuring force, use only in a vertical position
[2] The values agree within ± 20% (vertical down, measuring rod outgoing)

*** Up to 8 instruments connected per dongle #981-7100**

INSTRUMENT DE BASE

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

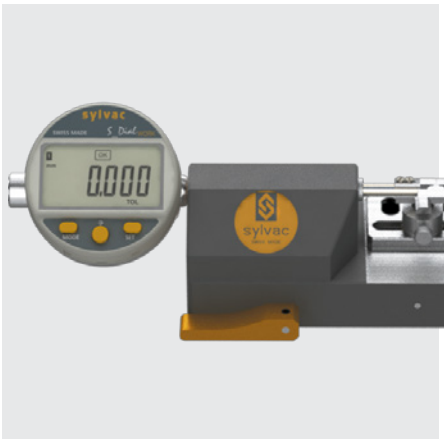
Digital indicators

S_Dial

APPLICATIONS

Measurement of a span with S_Dial WORK equipped with measuring ball probe 905-2207

S_Dial WORK CBG measuring with bore gauge system

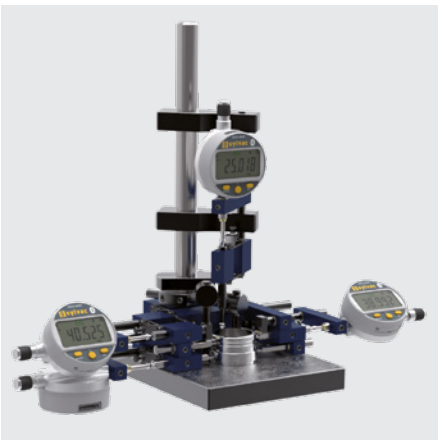


S_Dial WORK mounted on a Sylvac PS15 bench

S_Dial WORK Smart working in duplex mode and connected to D300S to measure concentricity, roundness, etc.

S_Dial WORK PLC connected to a PLC

S_Dial WORK Analog used on bore gauge system



Indicators with Bluetooth® Wireless technology on a 4 points jig

Indicators with Bluetooth® Wireless technology on an iPad through the Sylvac BT Smart App

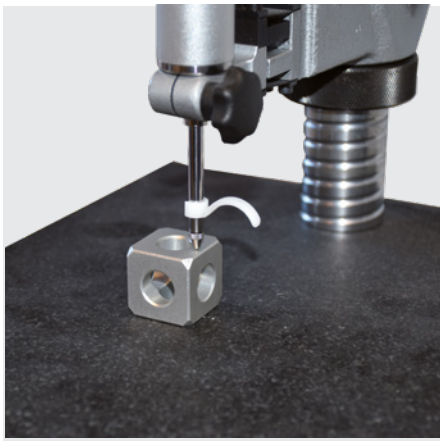
S_Dial PRO on ceramic stand

Digital indicators

S_Dial

LIFTING DEVICES

Lower lifting lever, type 905-4214



Lifting device on S_Dial PRO Basic

Upper lifting device type 905-4215

Pneumatic lifting device type 905-2218

Vacuum lifting device type 905-2220

Lifting device with photo-cable type 905-2216

Lifting device type 905-2214

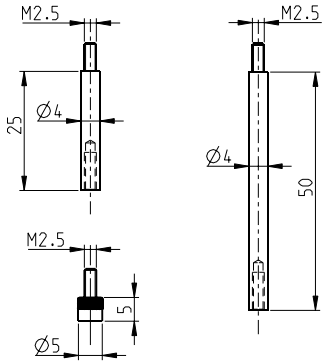
Lifting device on S_Dial WORK Smart

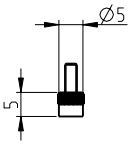
Upper lifting lever type, 905-2215

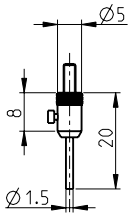
ACCESSORIES

B

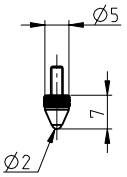
Contact points M2.5

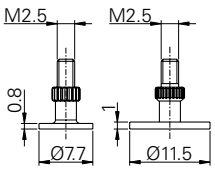


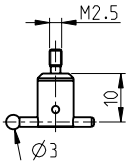




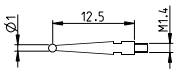
			S_Dial Mini	S_Dial TEST (805-4321)	S_Dial TEST (805-4322)	S_Dial TEST (805-4323)	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO
905-2201 (carbide)	**905-2202**	**905-2203**	•				•	•	•



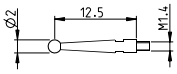




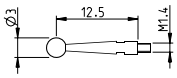
905-2206	**905-2204**	**905-2205**	**905-2207**	•				•	•	•



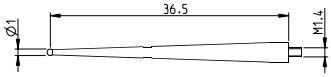
905-2240	Short stylus, TC ball			•		•			



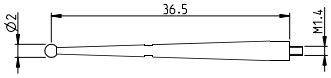
905-2241	Short standard stylus, TC ball			•		•			



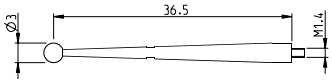
905-2242	Short stylus, TC ball			•		•			



905-2243	Long stylus, TC ball				•	•			

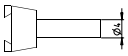


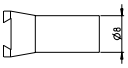
905-2244	Long standard stylus, TC ball				•	•			

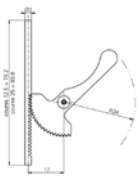


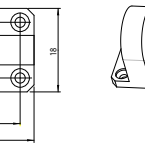
905-2245	Long stylus, TC ball				•	•			

ACCESSORIES







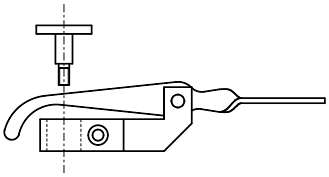


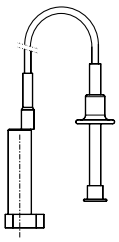
		S_Dial Mini	S_Dial TEST	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm
905-2246	Clamping stem	●	●		
905-2247	Clamping stem	●	●		
905-2248	Spanner for probe		●		
805-0214	Lifting device, range 12.5mm			● [1]	
805-0215	Lifting device, range 25mm			● [1]	
805-0213	Lug back (delivered with 4 screws M2x4 DIN 963A)			● [1]	● [1]
905-2231	Sleeve Ø8 --> 10mm with locking screw	●	●	●	●
905-4212	Screwdriver for S_Dial MINI & TEST	●	●		

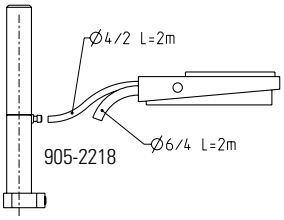
[1] Except S_Dial WORK Basic

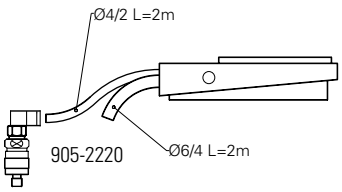
ACCESSORIES

B

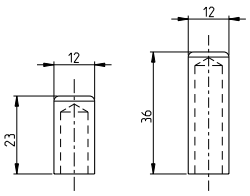
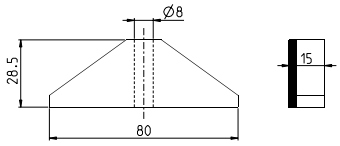
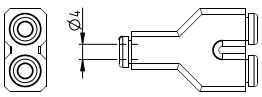
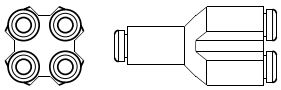
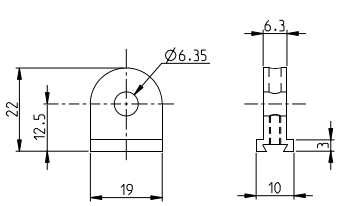
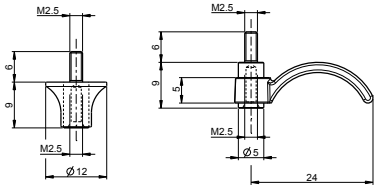


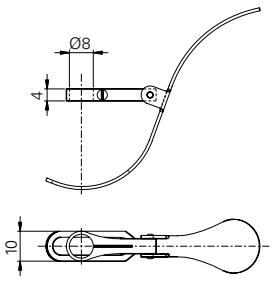


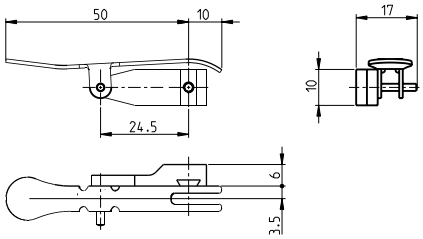


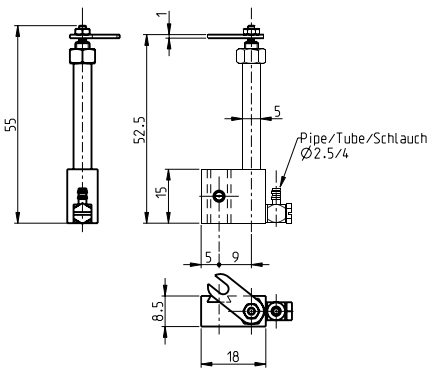


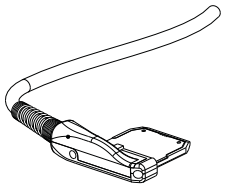
		S_Dial Mini	S_Dial TEST	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO
905-2214	Lifting device	•		•	•	•
905-2215	Upper lifting device			•		
905-2216	Lifting device with photo-cable			•		
905-2218	Pneumatic lifting device with foot pedal			•		
905-2217	Lifter only for 905-2218			•		
905-2219	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				•	

		S_Dial Mini	S_Dial TEST	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial PRO
	**905-2221** Dust protection for indicator, range 12.5 mm			•		
	905-2222 Dust protection for indicator, range 25 mm			•		
	**905-2223** Depth measuring base			•	•	
	**905-2261** Snap connector for pneumatic lifter x2	•		•	•	
	**905-2262** Snap connector for pneumatic lifter x4	•		•	•	
	**905-4211** Center lug back	•	•			
	**905-2224** Plastic lifting lever (bottom)	•		•	•	•
	905-2225 Plastic lifting ring (bottom)	•		•	•	•









		S_Dial Mini	S_Dial TEST	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial WORK PLC
905-4214	Lower lifting device, range 12.5 mm	●	1)	1)	1)	1)
905-4215	Upper lifting device for S (Standard) execution	●				
905-4217	Pneumatic lifting device for standard type	●				
926-6101	Replacement cable for digital indicator PLC					●

1) used on range 20 mm max

Digital indicator testing stand M3

DESCRIPTION

- Set for the periodic calibration of analogue and digital comparators up to 50 mm stroke as well as for lever indicators
- Set consisting of the M3 bench that can be used vertically or horizontally, the reference instrument and the Sycopro II software integrating several international standards.
- Bench with rapid manual movement and fine final approach
- Available in 2 versions, with different reference instruments and different measuring ranges :
  - Set with capacitive touch probe paired with display unit, 10 and 25 mm (max. error 0.8 µm)
  - Set with precision dial gauge with integrated display, 25 and 50 mm (max. error 1.2 µm)
- Calibration according to the ABBE principle
- Real-time display of instrument status
- Creation of customised test certificates

B

PROXIMITY

Kit M3 with digital indicator : output cable Proximity to USB (926-6721)

RS232

Kit M3 with probe and D50S PRO : output cable RS232 to USB (926-6621) or to RS232 (925-5609)

SWISS MADE

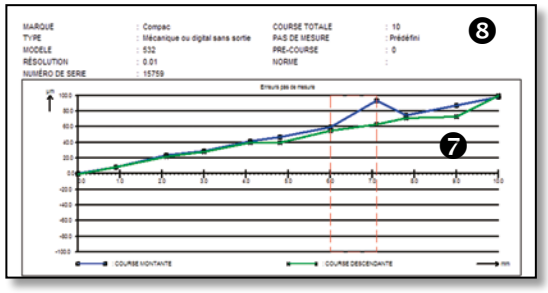
1) PC not included

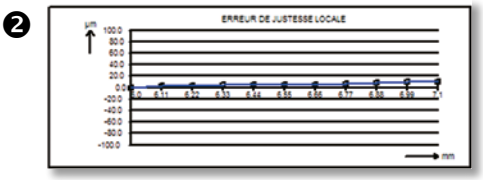
Digital indicator testing stand M3

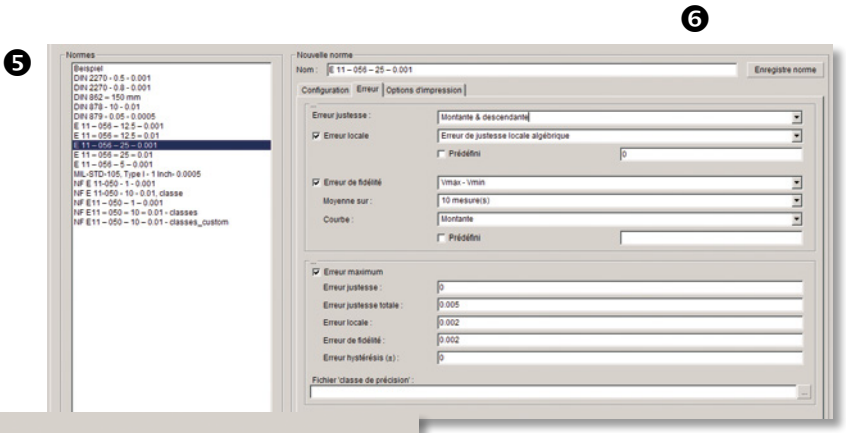
DISPLAY/SOFTWARE

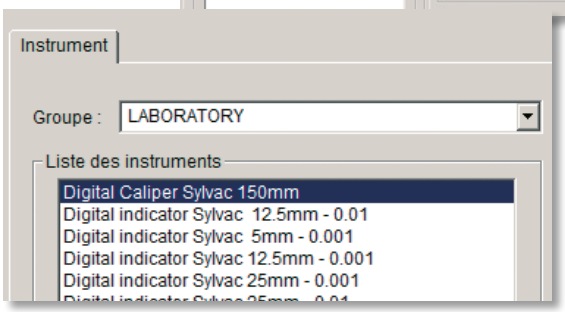
B

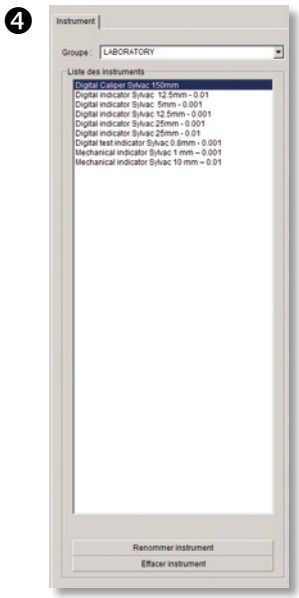
1. **Display the curves of measurement**
2. **Check the error and repeatability**
3. **Creation and management of instrument groups**
4. **Fast access to all of stored instruments**
5. **Integrated standards**
6. **Personalisation of the standards**
7. **Display the measured values**
8. **Possibility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











TECHNICAL SPECIFICATIONS

		Kit with probe and D50S PRO		Kit with digital indicator	
		809-1303	809-1301	809-1305	809-1304
Measuring range	mm	M3 Kit probe 10 mm	M3 Kit probe 25 mm	M3 Kit S_Dial PRO M3 25 mm	M3 Kit S_Dial PRO M3 50 mm
Max. Error	µm	0.6	0.8	1.0	1.2

Digital indicator testing stand M3

STANDARD DELIVERY

- M3 support
- 3 ceramic shims precision DIN861 Grade 1: 2 x 1.5 mm and 1 x 4 mm
- CD with Sycopro II software and its activation licence
- Accessory 909-2010 for the control of lever indicators
- Calibration certificate

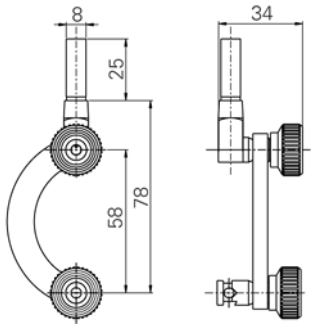
Set with probe and units

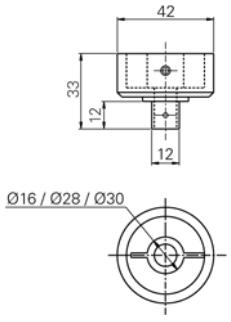
- Pair measuring probe with unit D50S Pro
- Charging unit according to country
- External contact (pedal) 904-4101
- RS232 connection cable 925-5609

Set with precision digital indicator

- S_Dial Pro M3 dial gauge with special measuring force
- Proximity-USB connection cable 926-6721
- External USB contact (footswitch) 926-7020

ACCESSORIES





909-2010	Clamping device for test indicator
909-2011	Clamping device for dial gauges Ø 16 / 28 / 30 mm

Measuring stands

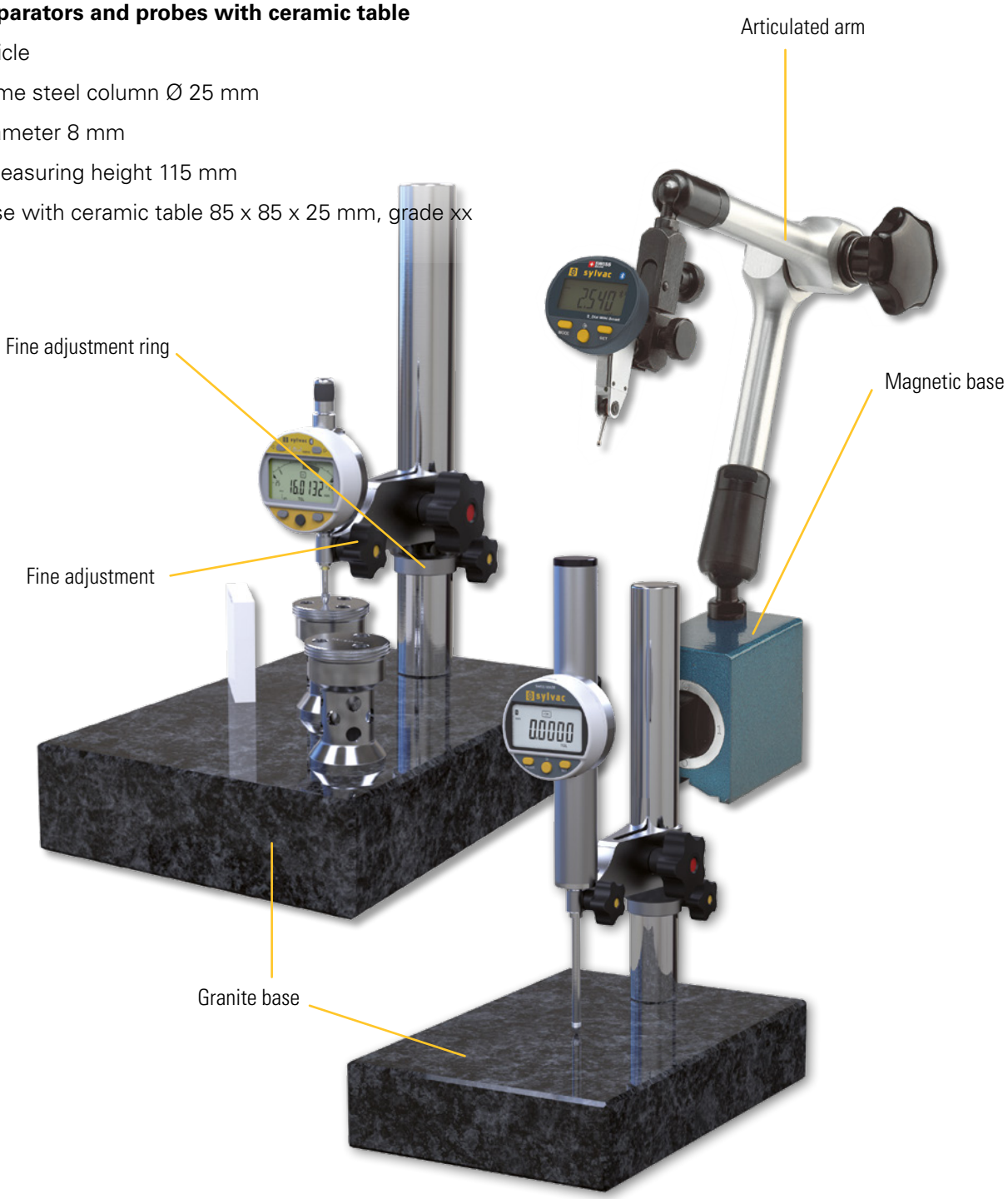
DESCRIPTION

Stands with magnetic base for lever indicators

- Imported article
- Vertical rod Ø 16 mm and hinged horizontal rod Ø 12 mm
- Maximum measuring height 350 mm
- Magnetic base with attraction force 80 kg
- Clamping diameter 8 mm

Stands for comparators and probes with ceramic table

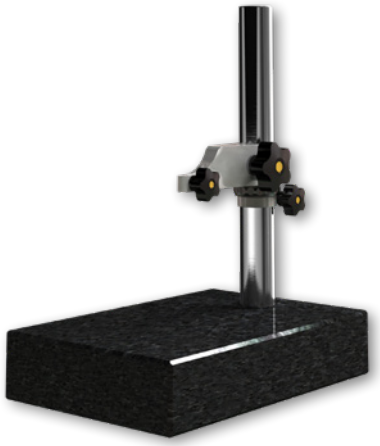
- Imported article
- Vertical chrome steel column Ø 25 mm
- Clamping diameter 8 mm
- Maximum measuring height 115 mm
- Cast iron base with ceramic table 85 x 85 x 25 mm, grade xx



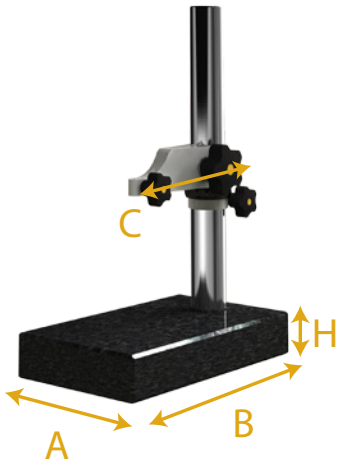
Measuring stands

TECHNICAL SPECIFICATIONS

908-1201



808-1204



		908-1201	808-1204	808-1205
Base		magnetic [1]	granit grade 00	granit grade 00
Base dimensions AxBxH	mm	70x46x65	300x210x60	300x210x60
Central locking		●	---	---
Column	mm	---	Steel Ø 35	Steel Ø 35
Clamping dimension	mm	Ø 8	Ø 8	Ø 25
Dist. Column.-meas. point. C	mm	---	115	115
Measuring range	mm	---	0 - 260	0 - 260
Total height	mm	430	360	360
Weight	kg	2.2	13.4	13.5
Fine adjustment		---	●	●

[1] Gripping coefficient : 600N