

DIGITAL INDICATORS S_DIAL

The electronic indicators are equipped with a linear sensor and an engraved scale glued on the measuring spindle. A sensor replaces the gears. The analogic display is transformed into a digital display.

The SYLVAC electronic indicator program covers the entire range of mechanical indicators with resolutions 0.1 to 0.001mm and measuring range up to 150mm, and with much better accuracy.

Sylvac inductive measuring system (patented)

Data output

Power supply: Lithium battery 3V, Type CR 2032

Operational temperature: +5 to +40°C

mm/inch conversion



Digital indicators

S_Dial

SUMMARY OF ALL TYPES

	S233								S234		S_Dial ONE						
	905.4121	905.4125	905.4140	905.4521	905.4525	905.4540	905.4511	905.4515	905.4527	905.4321	905.4322	905.0121	905.0131	905.0141	905.0151	905.0161	905.0171
RANGE																	
0.5 mm											•						
0.8 mm										•							
5 mm			•			•	•	•									
12.5 mm	•	•		•	•				•			•	•				
25 mm														•	•		
50 mm																•	•
100 mm																	
150 mm																	
RESOLUTION																	
0.01 mm	•	•	•									•		•		•	
0.001 mm				•	•	•	•	•	•	•	•		•		•		•
MECHANIC																	
Diameter 8 mm h6	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•
Dove tail	•	•	•	•	•	•	•	•	•	•	•						
M1.4 contact point										•	•						
M2.5 contact point	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•
Rubber boot		•			•			•									
IP65 (IEC 60529)	•	•	•	•	•	•	•	•	•	•	•						
IP67 (IEC 60529)												•	•	•	•	•	•
DIAL																	
Diameter 44 mm	•	•	•	•	•	•	•	•	•	•	•						
Diameter 60 mm												•	•	•	•	•	•
Rotating										•	•						
Big digits												•	•	•	•	•	•
Vertical display			•			•											
FUNCTIONS																	
mm/inch	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Preset	•	•	•	•	•	•			•			•	•	•	•	•	•
Dynamic preset																	
Measuring direction	•	•	•	•	•	•			•			•	•	•	•	•	•
Hold	•	•	•	•	•	•			•								
Min / Max / Delta							•	•		•	•						
Tolerances																	
Absolute Function (ABS)	•	•	•	•	•	•			•								
Auto off	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Analog display							•	•		•	•						
Setting by PC	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•
Programmable menus																	
Powered by connector	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Multiplication factor									•								

Digital indicators

S_Dial

SUMMARY OF ALL TYPES

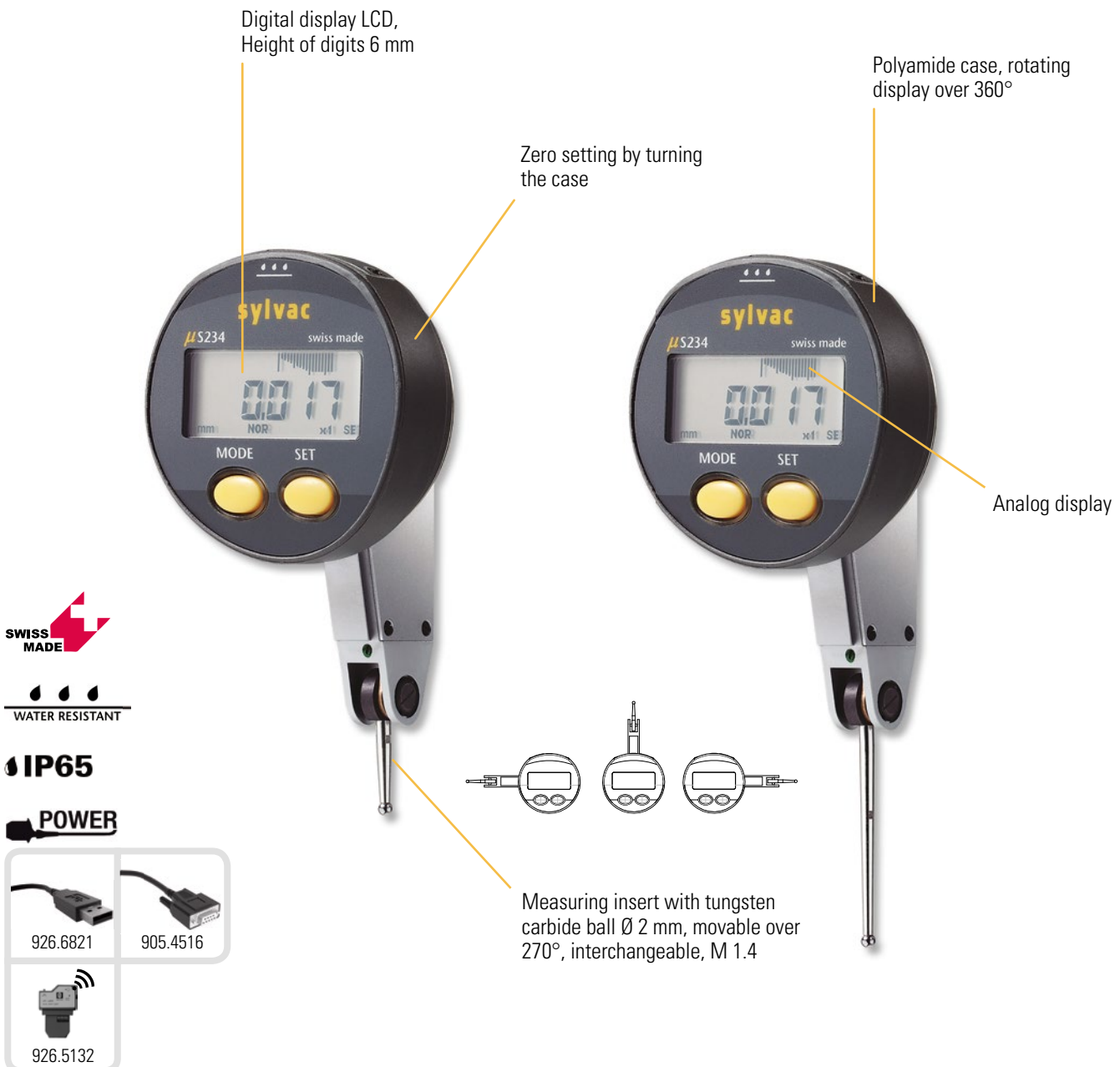
	S_Dial WORK BASIC							S_Dial WORK ADVANCED							S_Dial WORK ADV. IP67		
	805.1201	805.1301	805.1401	805.1501	805.5201	805.5301	805.5401	805.5501	805.5601	805.5621	805.5641	805.5661	805.5671	805.5681	805.5305	805.5505	805.5625
RANGE																	
0.5 mm																	
0.8 mm																	
5 mm																	
12.5 mm	●	●	●		●	●									●		
25 mm				●			●	●								●	
50 mm									●	●							●
100 mm											●	●					
150 mm													●	●			
RESOLUTION																	
0.01 mm	●		●		●		●		●		●		●				
0.001 mm		●		●		●		●		●		●		●	●	●	●
MECHANIC																	
Diameter 8 mm h6	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Dove tail																	
M1.4 contact point																	
M2.5 contact point	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rubber boot															●	●	●
IP65 (IEC 60529)																	
IP67 (IEC 60529)															●	●	●
DIAL																	
Diameter 44 mm																	
Diameter 60 mm	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Rotating	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Big digits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Vertical display																	
FUNCTIONS																	
mm/inch	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Preset	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Dynamic preset																	
Measuring direction	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hold	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Min / Max / Delta					●	●	●	●	●	●	●	●	●	●	●	●	●
Tolerances					●	●	●	●	●	●	●	●	●	●	●	●	●
Absolute system	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Auto off	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Analog display																	
Setting by PC	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programmable menus	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Powered by connector	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Multiplication factor					●	●	●	●	●	●	●	●	●	●	●	●	●

Digital test indicators

S_Dial S234

DESCRIPTION

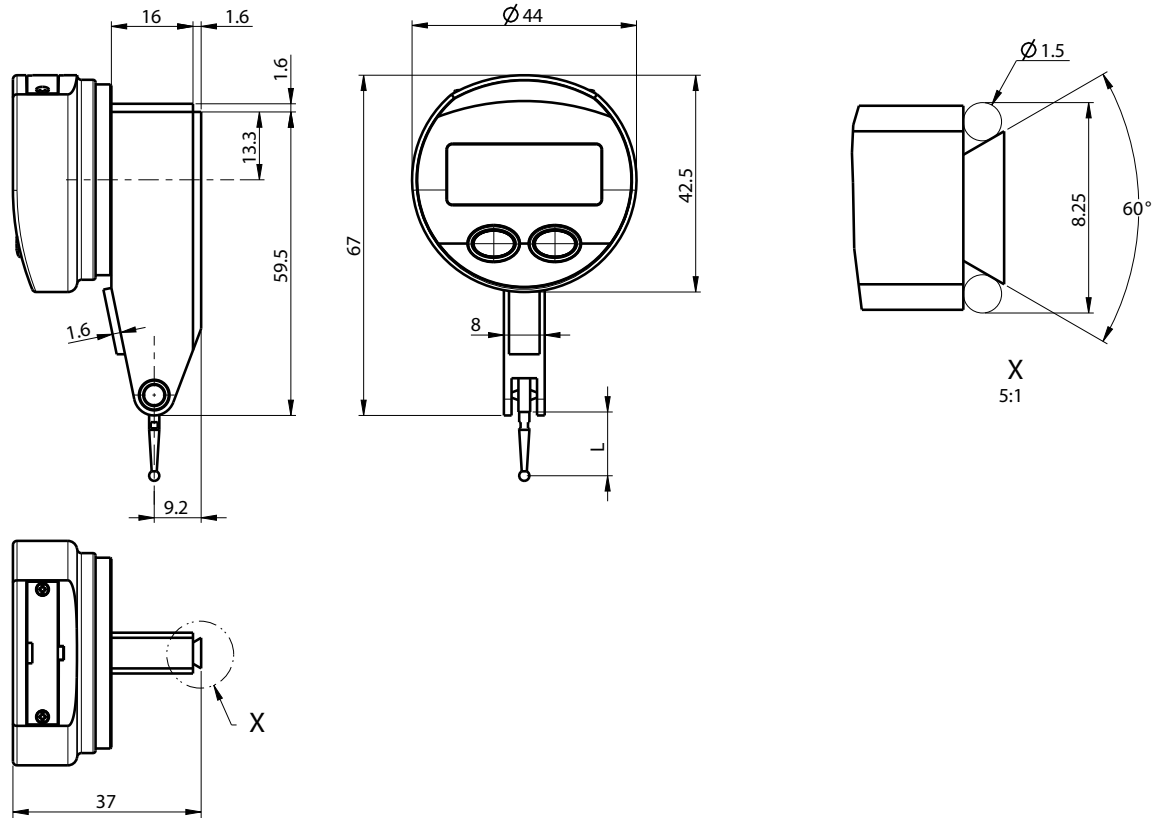
- Digital and analog display
- Water and coolant resistant
- Data output RS 232 combined with external power
- Automatic switch OFF
- Stem Ø 8 mm and dovetail back
- Rotating display over 360°



Digital test indicators

S_Dial S234

DIMENSIONAL DRAWING



TECHNICAL SPECIFICATIONS

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

¹⁾ ± 1 digit

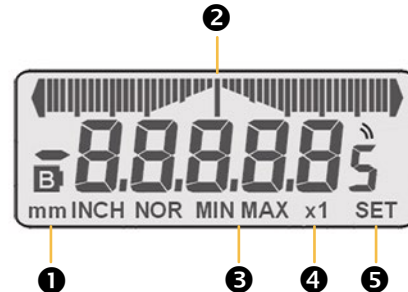
²⁾ see cables chapter

Digital test indicators

S_Dial S234

DISPLAY

- ❶ Direct mm/inch conversion
- ❷ Analog display
- ❸ Min/max/delta mode
- ❹ Analogic resolution display
- ❺ Zero setting



BASIC INSTRUMENT

- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Stem Ø 8 mm

APPLICATIONS



Run-out measurement



Checking the alignment on milling machine.

Mini digital indicators

S_Dial S233

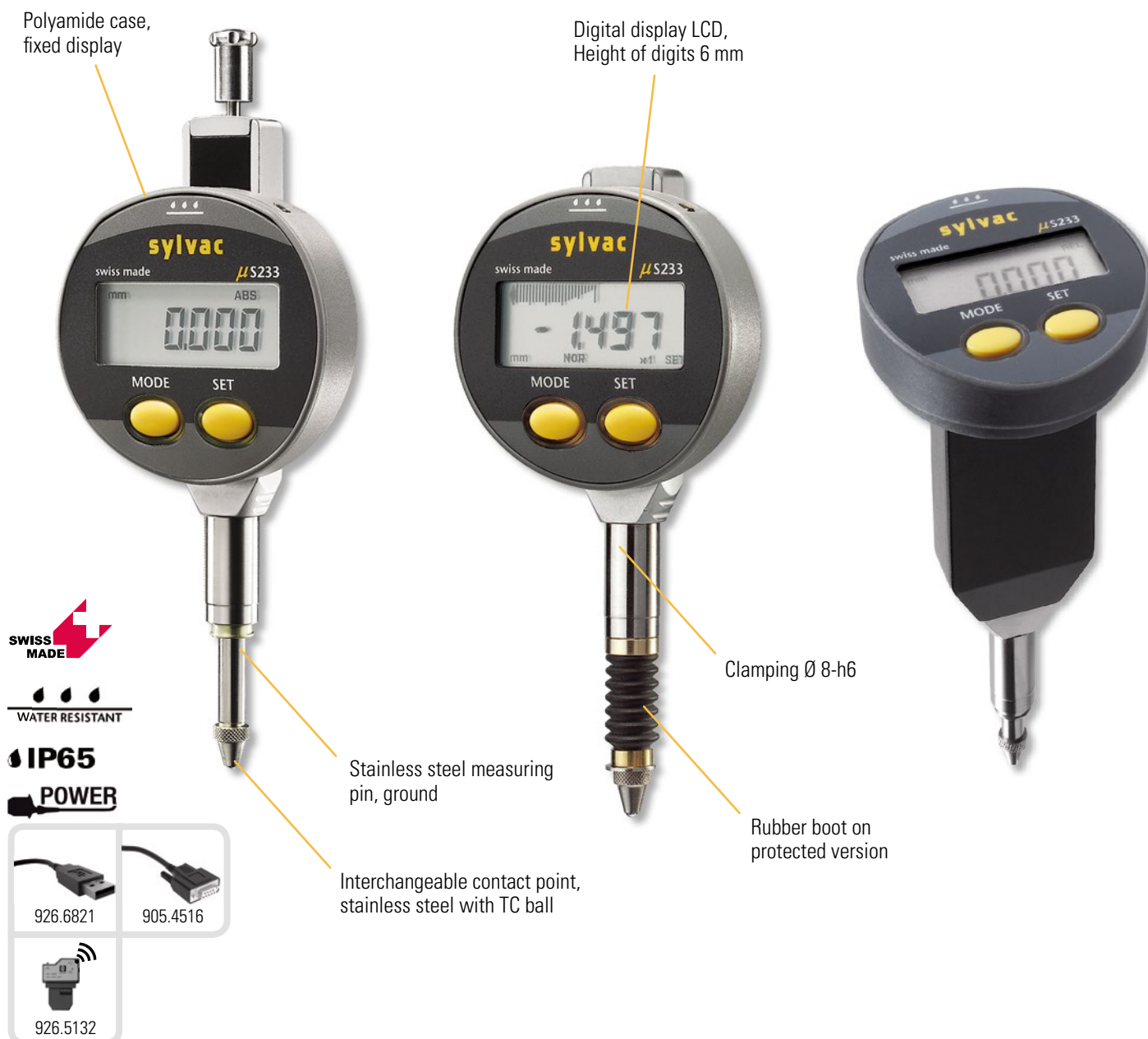
DESCRIPTION

- Compact, small diameter (Ø44 mm)
- Water and coolant resistant, protection rating IP65 according to IEC 60529
- Data output RS 232 combined with external power supply.
- Interchangeable contact point M2.5
- Clamping stem Ø 8-h6 of hardened and ground stainless steel. Dovetail back
- Automatic power shut down

Standard

Analog

Vertical

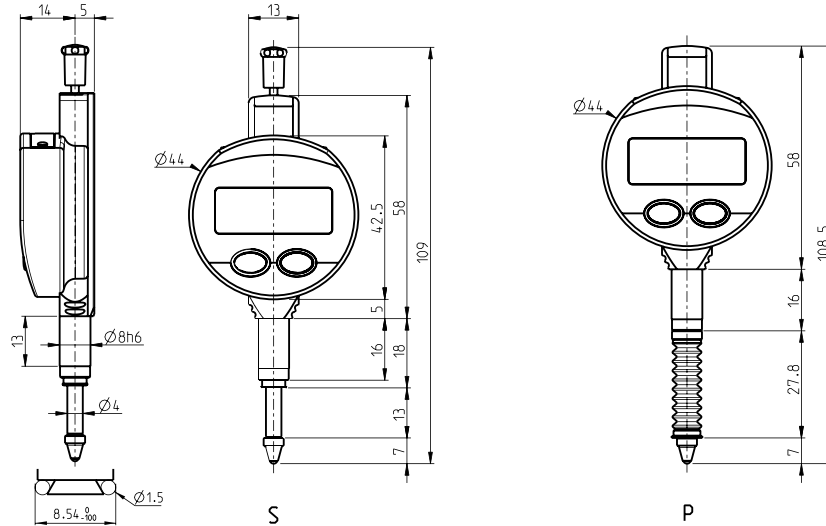


Mini digital indicators

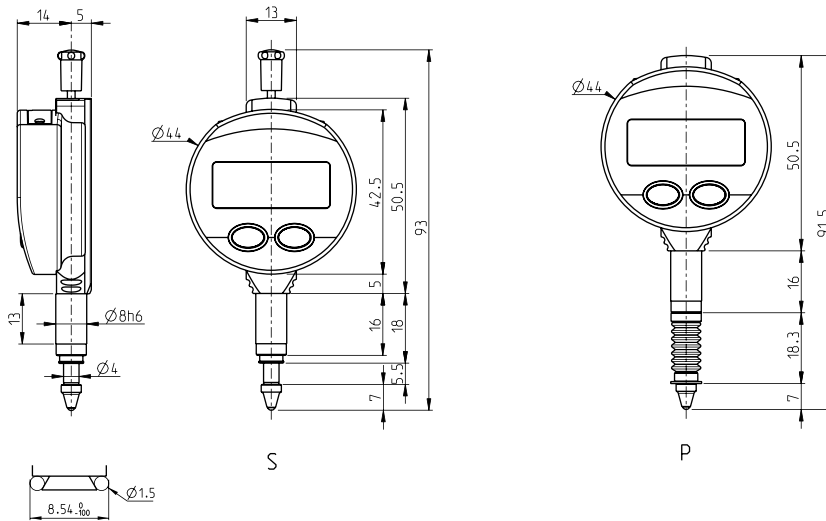
S_Dial S233

DIMENSIONAL DRAWINGS

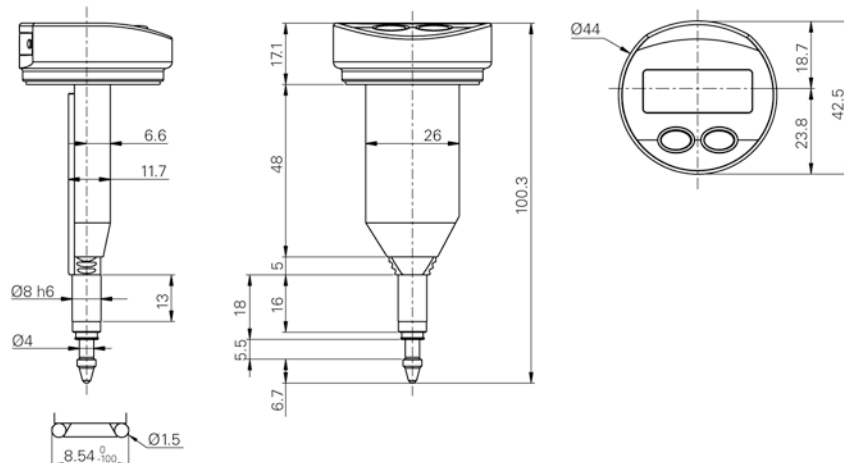
Standard



Analog



Vertical



S = standard

P = protected

Mini digital indicators

S_Dial S233

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

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

¹⁾ ± 1 digit

²⁾ Values ± 20%, indicator in vertical position, outgoing measuring spindle

³⁾ S = Standard P = Protected

⁴⁾ see cables chapter

Mini digital indicators

S_Dial S233

BASIC INSTRUMENT

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

MEASURING FORCE FOR RANGE 12.5 mm

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

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

¹⁾ on request

APPLICATIONS



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



Measurement of the vertical displacement of an element



Measurement of internal chamfer

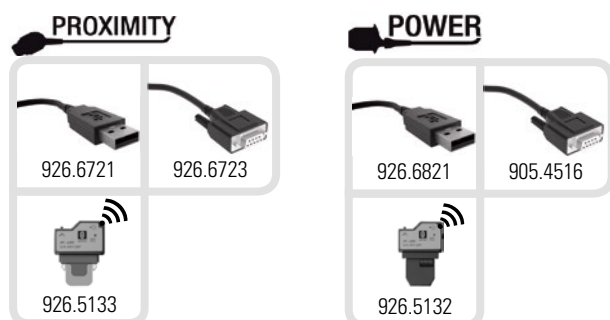
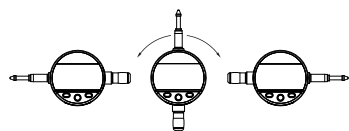
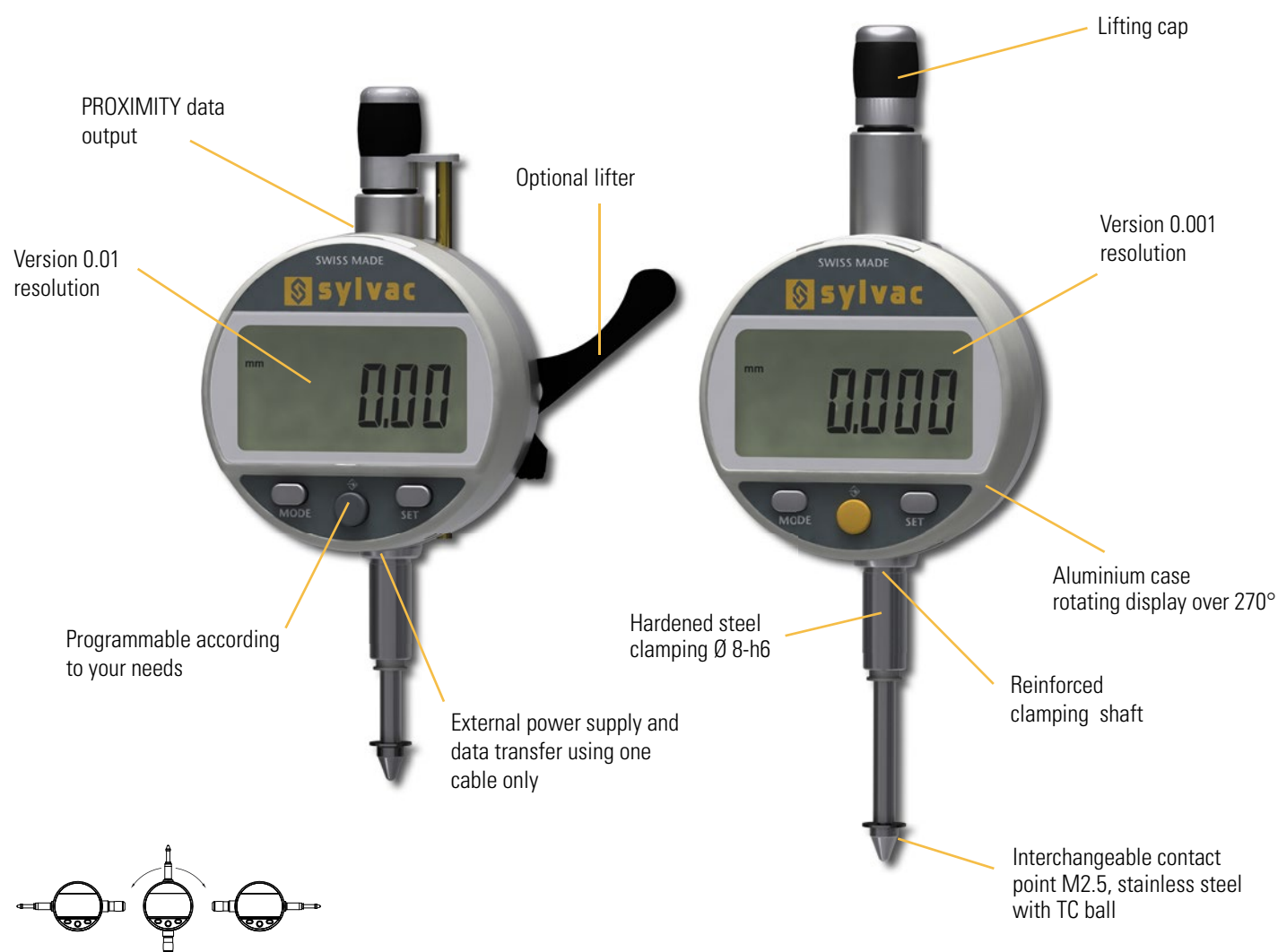
Digital indicators

S_Dial WORK

DESCRIPTION

BASIC

- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- Automatic wake-up and sleeping mode (S.I.S system), **absolute System**

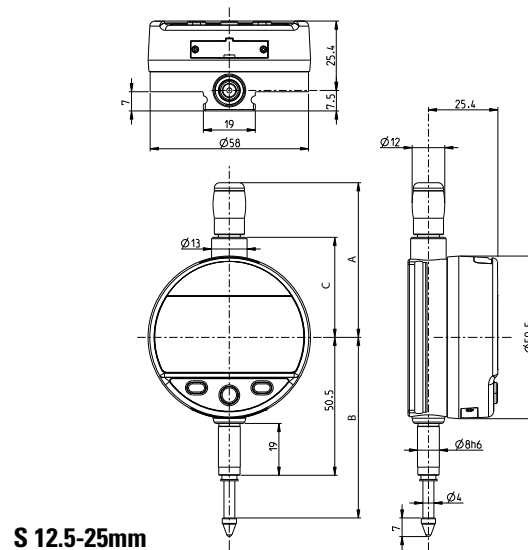


Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

BASIC



TECHNICAL SPECIFICATIONS

		805.1201	805.1301	805.1401	805.1501
Measuring range	mm	12.5	12.5	25	25
Resolution	mm	0.01	0.001	0.01	0.001
Max. Error fe	μm	10 ¹⁾	4	10 ¹⁾	5
Repeatability	μm	2			
Model type ²⁾		S			
A		56.6		69.3	
B		66.1		79	
C		36.6		49.4	
S_Connect : Proximity / Power		USB / RS232 / Wireless			
Programmable by PC		●			
Standard functions (customized by PC)		mm/inch, preset (max 999.999), direction of measurement, hold			

¹⁾ ± 1 digit

²⁾ S = Standard

BASIC INSTRUMENT

MEASURING FORCE

● Instrument according to technical specifications			S 12.5	S 25
● Lithium battery CR2032 included	Standard	N	0.65 - 0.9	0.65 - 1.15
● Instruction manual	Low ³⁾	N	0.40 - 0.55	0.45 - 0.9
● Calibration certificate for instruments 0.001 mm	High ³⁾	N	1.0 - 1.6	0.9 - 1.8

Tolerance ± 20%, spindle in outgoing measurement position.

²³⁾ on request

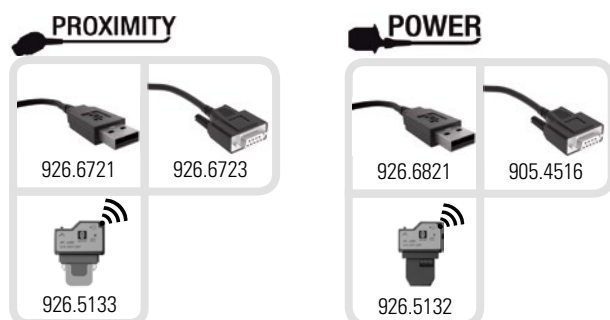
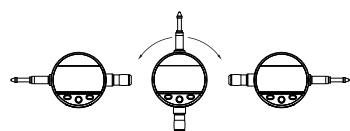
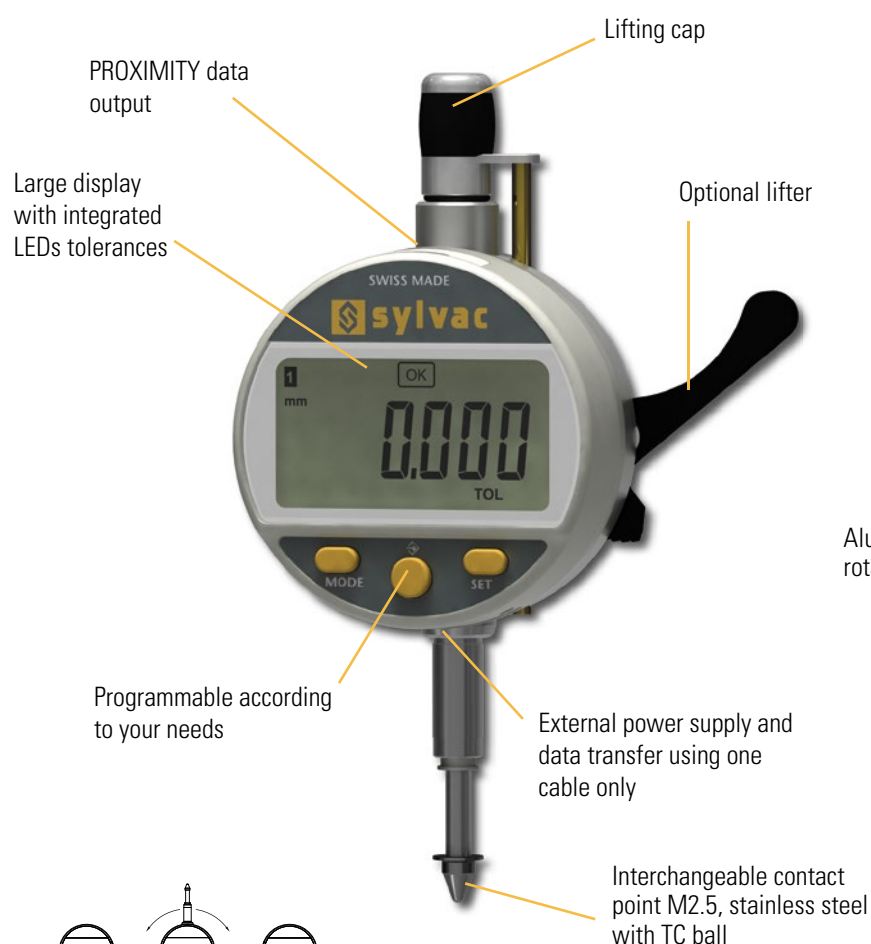
Digital indicators

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 (S.I.S system), **absolute System**
- **Maximum error of 3 µm**

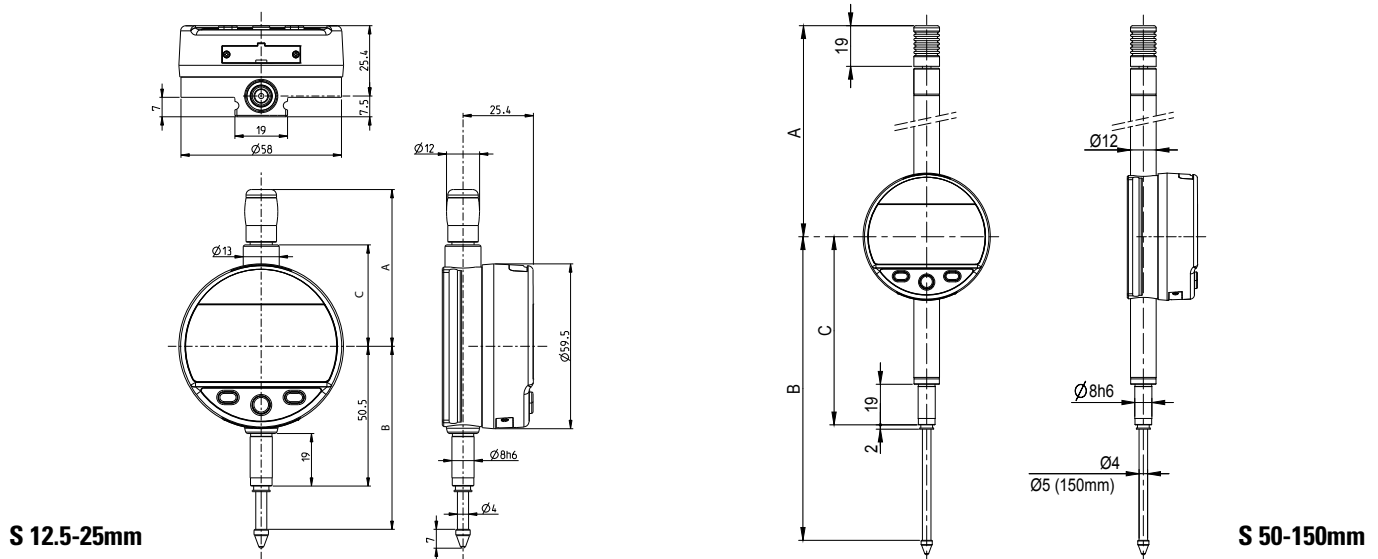


Digital indicators

S_Dial WORK

DIMENSIONAL DRAWINGS

ADVANCED



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									
Model type ²⁾		S									
A	mm	56.6		69.3		121		172		224	
B	mm	66.1		79		142		244		349	
C	mm	36.6		49.4		88		139		193	
S_Connect : Proximity / Power		USB / RS232 / Wireless									
Programmable by PC		●									
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999), hold min/max/delta, toleances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock									

¹⁾ ± 1 digit

²⁾ S = Standard

BASIC INSTRUMENT

MEASURING FORCE

		S 12.5	S 25	S 50	S 100	S 150
● Instrument according to technical specifications						
● Lithium battery CR2032 included						
● Instruction manual						
● Calibration certificate for instruments 0.001 mm						
Standard	N	0.65 - 0.9	0.65 - 1.15	1.0 - 2.6	1.8 - 3.0	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

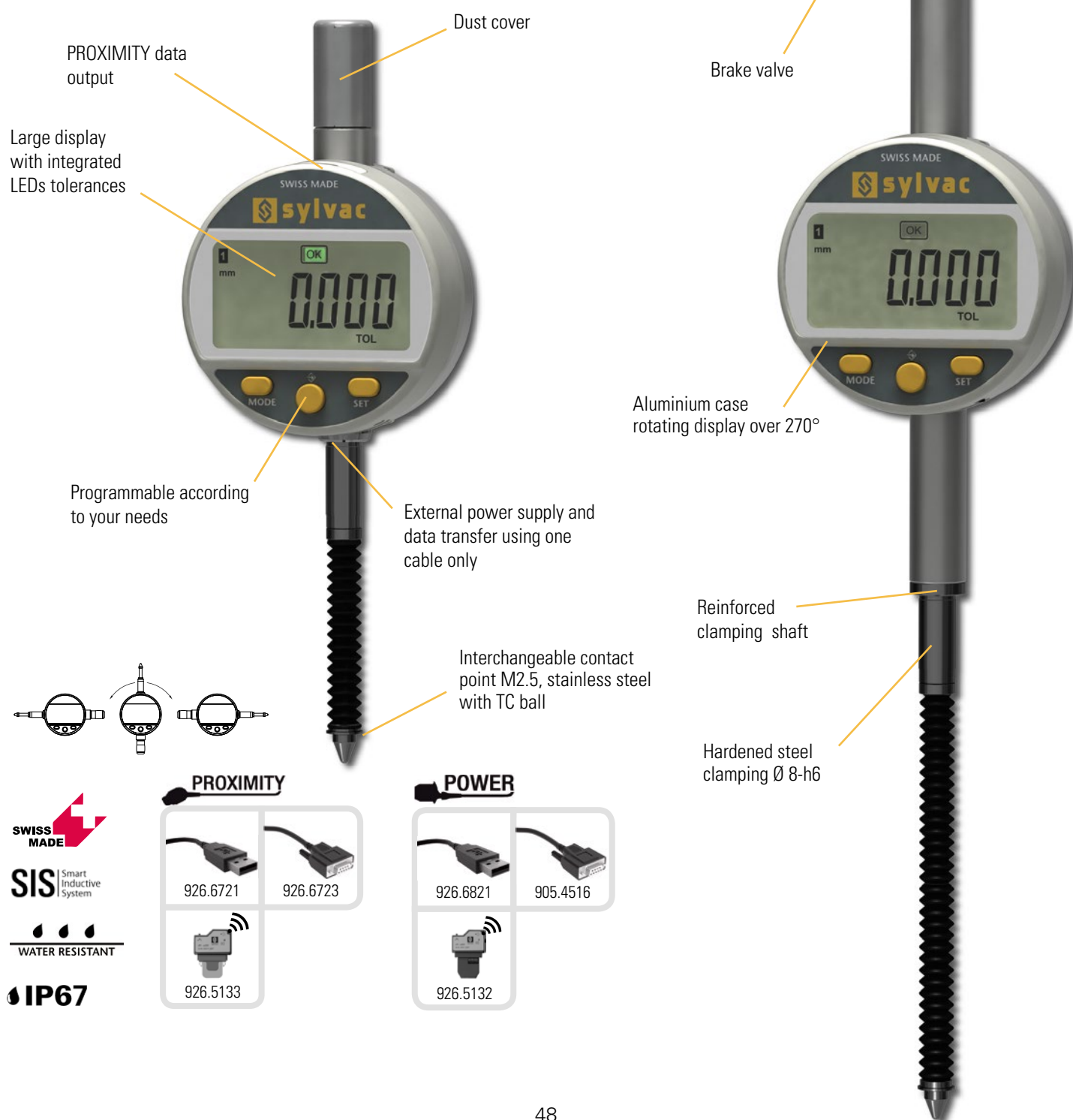
Digital indicators

S_Dial WORK

DESCRIPTION

ADVANCED IP67

- 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 (S.I.S system), **absolute System**
- **Maximum error of 3 µm**

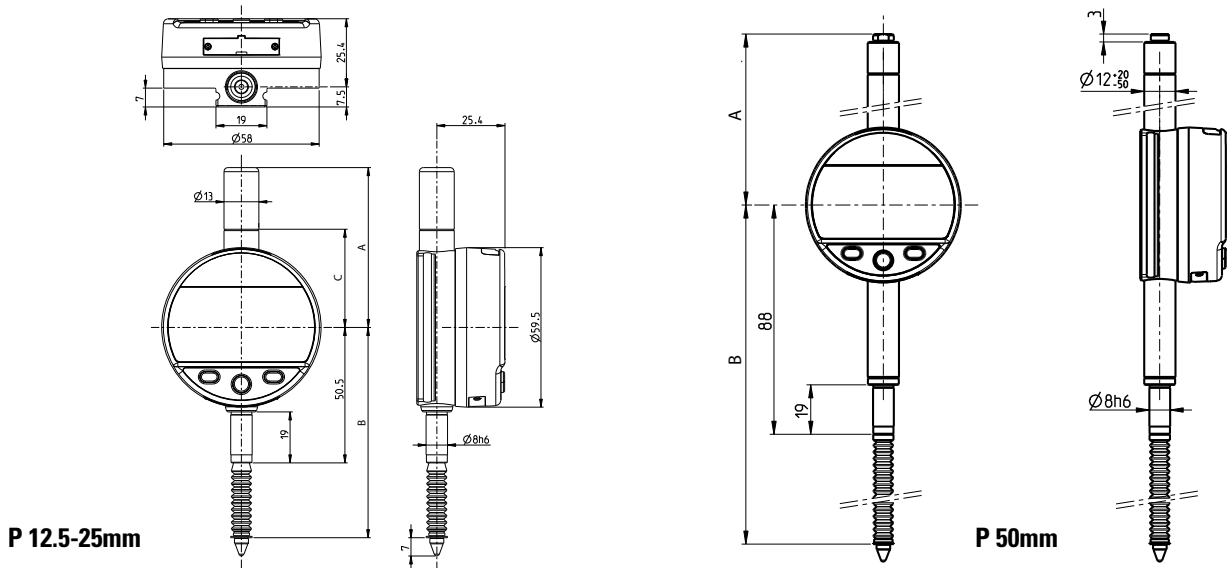


Digital indicators

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	3	4	5
Repeatability	µm		2	
Model type ²⁾			P	
IP67 (IEC 60529)			●	
A	mm	59.6	85.4	104.4
B	mm	78.4	100.2	175.4
C	mm	36.6	49.4	
S_Connect : Proximity / Power		USB / RS232 / Wireless		
Programmable by PC			●	
Standard functions (customized by PC)		mm/inch, ref I/II, preset (max 999.999), hold min/max/delta, tolerances, resolution, direction of measurement, multiplication factor, automatic or manual switch off, key lock		

¹⁾ ± 1 digit

²⁾ P= Protected

BASIC INSTRUMENT

MEASURING FORCE

		P 12.5	P 25	P 50
Standard	N	0.65 - 1.40	1.0 - 2.25	0.9 - 2.8
Tolerance ± 20%, spindle in outgoing measurement position.				

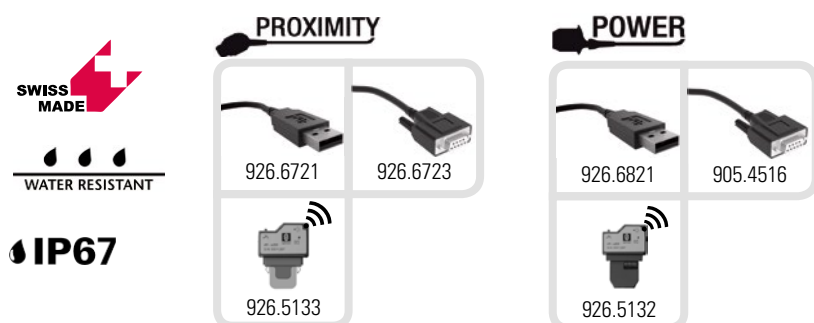
- Instrument according to technical specifications
- Lithium battery CR2032 included
- Instruction manual
- Calibration certificate for instruments 0.001 mm

Digital indicators

S_Dial ONE

DESCRIPTION

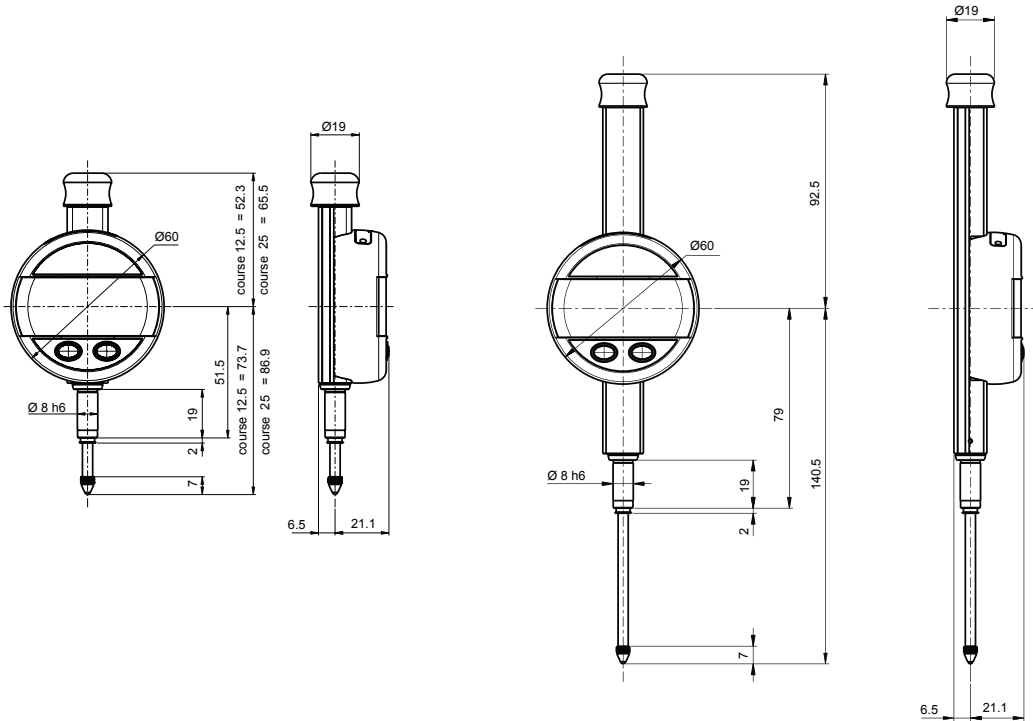
- Strong construction
- Water and coolant resistant, protection rating IP67 according to IEC 60529, **even connected**
- Increased accuracy to 5 µm
- Automatic switch-off



Digital indicators

S_Dial ONE

DIMENSIONAL DRAWINGS



TECHNICAL SPECIFICATIONS

		905.0121	905.0131	905.0141	905.0151	905.0161	905.0171
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⁾	5	10 ¹⁾	6	20	8
Repeatability	µm	2					
S_Connect : Proximity / Power		USB / RS232 / Wireless					
Programmable by PC		●					
Zero setting		●					
Preset		max 199.000					
Selection of measuring direction		●					

¹⁾ ± 1 digit

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
Standard	N	0.6 - 0.90	0.6 - 1.20	0.7 - 1.4

Tolerance ± 20%, spindle in outgoing measurement position.

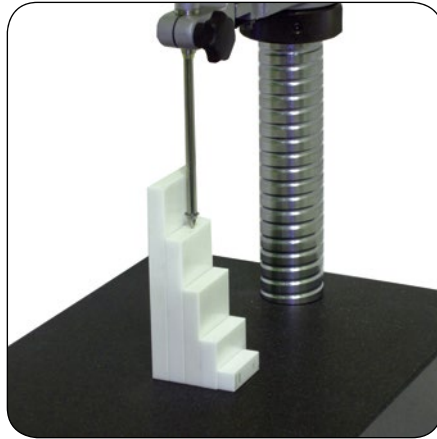
Digital indicators

S_Dial

APPLICATIONS



Measurement of a span with S_Dial WORK equipped with measuring ball probe 905.2207



Indicator S_Dial WORK, range 150 mm on stand



S_Dial WORK mounted on a Sylvac PS15 bench

Digital indicators

S_Dial

LIFTING DEVICES



Lower lifting lever, type 905.4214



Pneumatic lifting device type 905.2218



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



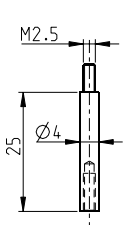
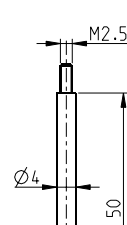
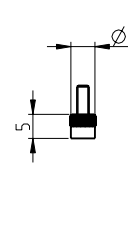
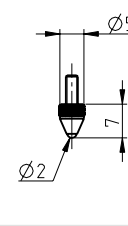
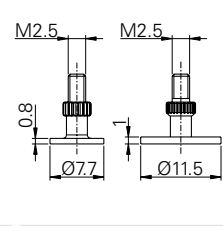
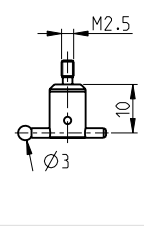
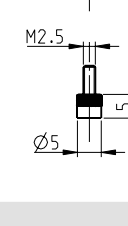
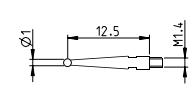
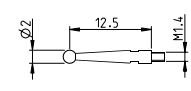
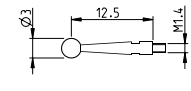
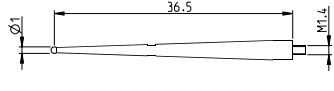
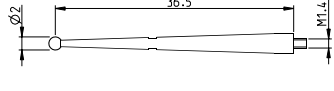
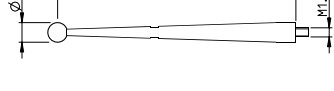
Upper lifting lever type, 905.4215

Digital indicators

S_Dial

ACCESSORIES

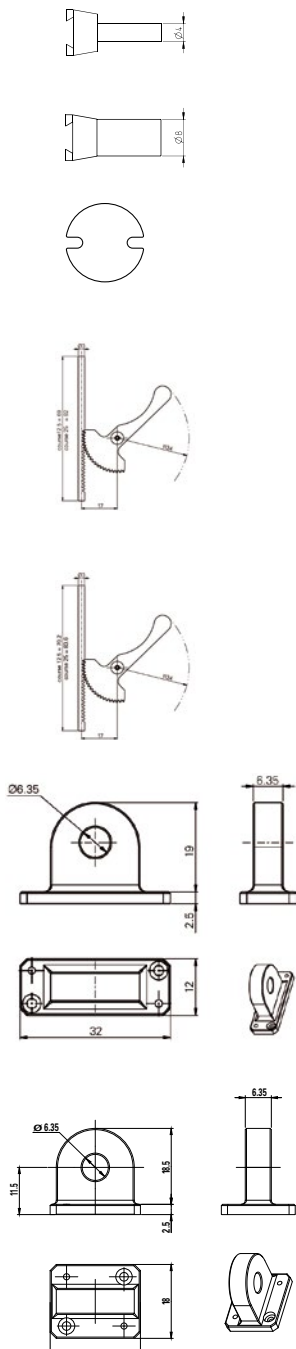
Contact points M2.5

					S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial ONE
 									
	905.2201	905.2202	905.2203		•		•	•	•
	905.2204	905.2205	905.2207		•		•	•	•
	905.2240	Short probe, TC ball				•			
	905.2241	Short standard probe, TC ball				•			
	905.2242	Short probe, TC ball				•			
	905.2243	Long probe, TC ball				•			
	905.2244	Long standard probe, TC ball				•			
	905.2245	Long probe, TC ball				•			

Digital indicators

S_Dial

ACCESSORIES

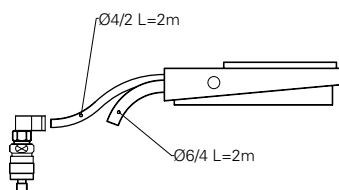
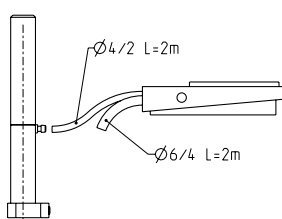
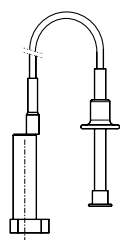
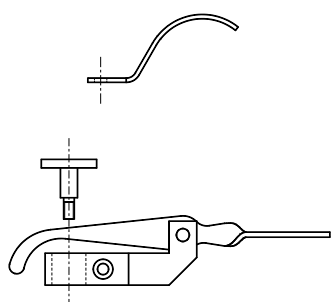


		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial ONE
905.2246	Clamping stem	•	•			
905.2247	Clamping stem	•	•			
905.2248	Spanner for probe		•			
905.0214	Lifting device, range 12.5 mm					•
905.0215	Lifting device, range 25 mm					•
905.0216	Lifting device, range 50 mm					•
805.0214	Lifting device, range 12.5 mm			•		
805.0215	Lifting device, range 25 mm			•		
905.0211	Lug back					•
805.0211	Lug back			•	•	

Digital indicators

S_Dial

ACCESSORIES

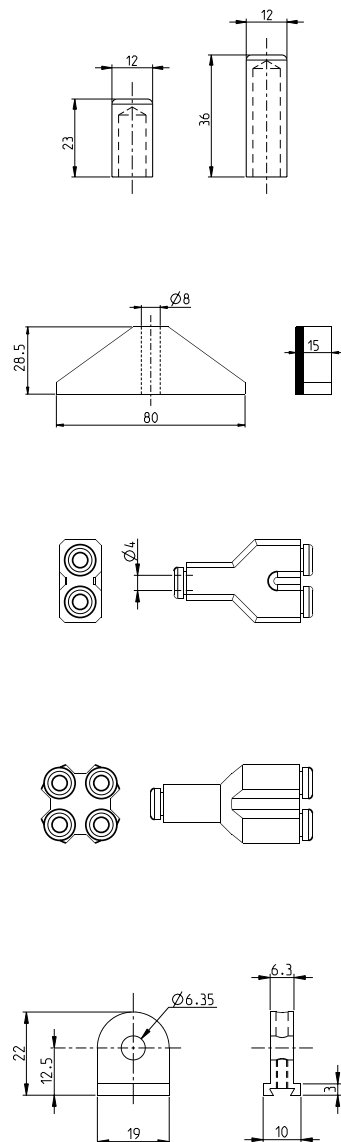


		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial ONE
905.2214	Lifting device	•		•	•	•
905.2215	Upper lifting device			•		
905.2216	Lifting device with photo-cable			•		
905.2218	Pneumatic lifting device with foot pedal			•		
905.2217	Lifter only for 905.2218			•		
905.2219	Pneumatic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

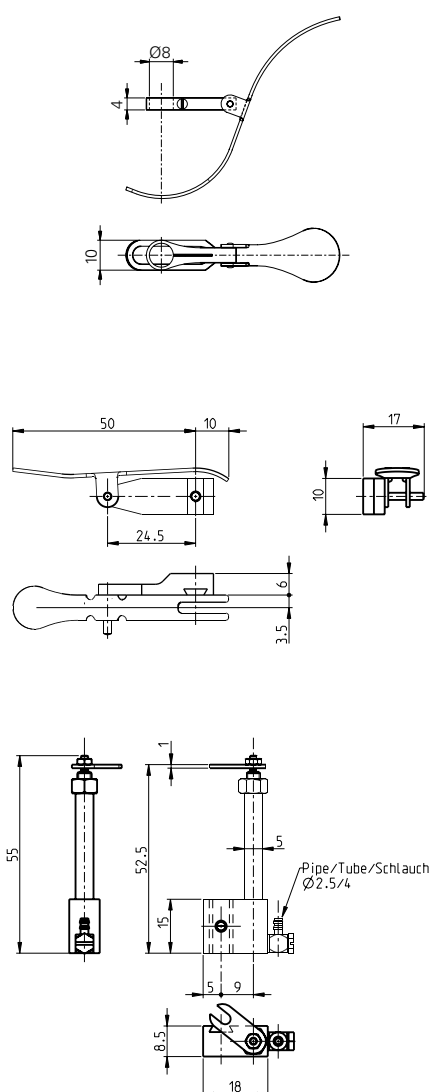


		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial ONE
905.2221	Dust protection for indicator, range 12.5 mm			•		
905.2222	Dust protection for indicator, range 25 mm			•		
905.2223	Depth measuring base			•	•	•
905.2261	Protection for front face	•		•	•	
905.2262	Snap connector for pneumatic lifter x2	•		•	•	
905.4211	Snap connector for pneumatic lifter x4	•	•			

Digital indicators

S_Dial

ACCESSORIES



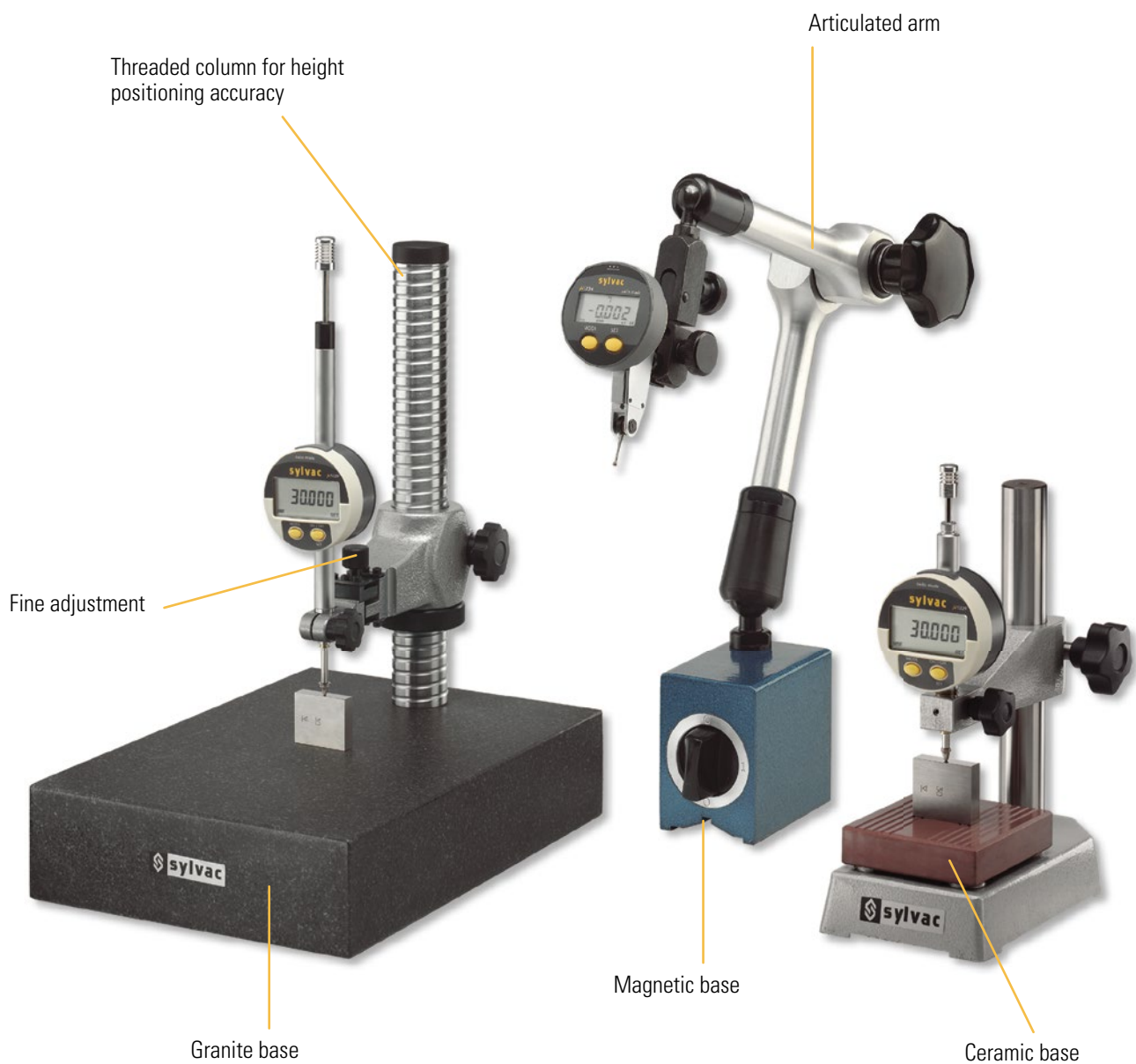
		S233	S234	S_Dial WORK 12,5 - 25 mm	S_Dial WORK 50 - 150 mm	S_Dial ONE
905.4214	Lower lifting device, range 12.5 mm	●	1)	1)	1)	1)
905.4215	Upper lifting device for S (Standard) execution, except vertical type	●				
905.4217	Pneumatic lifting device for standard type	●				

¹⁾ used on range 20 mm max

Measuring stands

DESCRIPTION

- A selection of universal measuring stands for fixing all probes, test indicators and dial gauges
- Clamping on Ø 8 mm or dovetail on magnetic stand



Measuring stands

TECHNICAL SPECIFICATIONS



908.1201



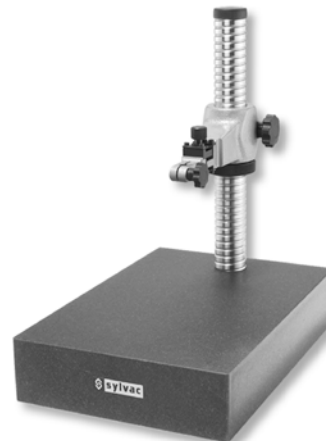
908.1206



908.1209



908.1203



908.1204

	908.1201	908.1206	908.1209	908.1203	908.1204
Base	magnetic ¹⁾	granite grade 00	cast iron, ceramic table	granite grade 00	granite grade 00
Base dimensions	70x46x65 mm	100x150x40 mm	85x85x25 mm	240x140x50mm	300x210x60
Central locking	1 handle	---	---	---	---
Column	---	Steel Ø 20 mm	Chr.st. Ø 25 mm	Hard Chr. Ø 35 mm	Hard Chr. Ø 35 mm
Clamping dimension	Ø 8 mm	Ø 8 mm	Ø 8 mm	Ø 8 mm	Ø 8 mm
Dist. Column.-meas. point.	---	60 mm	78 mm	67 mm	100 mm
Measuring range	---	0 - 170 mm	0 - 115 mm	0 - 150 mm	0 - 210 mm
Total height	430 mm	240 mm	215 mm	280 mm	360 mm
Weight	2.2 kg	2.6 kg	4.3 kg	8 kg	16 kg
Fine adjustment	---	---	---	•	•

¹⁾ Gripping coefficient : 600N

