

MEASURING PROBES, DIGITAL DISPLAYS AND BENCH TABLES

The Sylvac linear probes are based on the capacitive principle characterized by a high degree of accuracy also on long measuring ranges up to 50mm. The probes are used as measuring elements to be placed on tables, supports, bench tables, special mechanical devices or multi-gauging fixtures.

The probe signal is processed in a display unit. Sylvac offers several of them. Benefiting from the high degree of accuracy of its probes and with the aim to measure small machined parts typically used in watches, Sylvac developed a whole series of benches and tables. These supports are conceived for the control of internal, external, heights, grooves etc, starting from a few tenths to 70mm.

Absolute capacitive measuring system

Digital display units RS232 and USB

Operational temperature 0 to +50°C

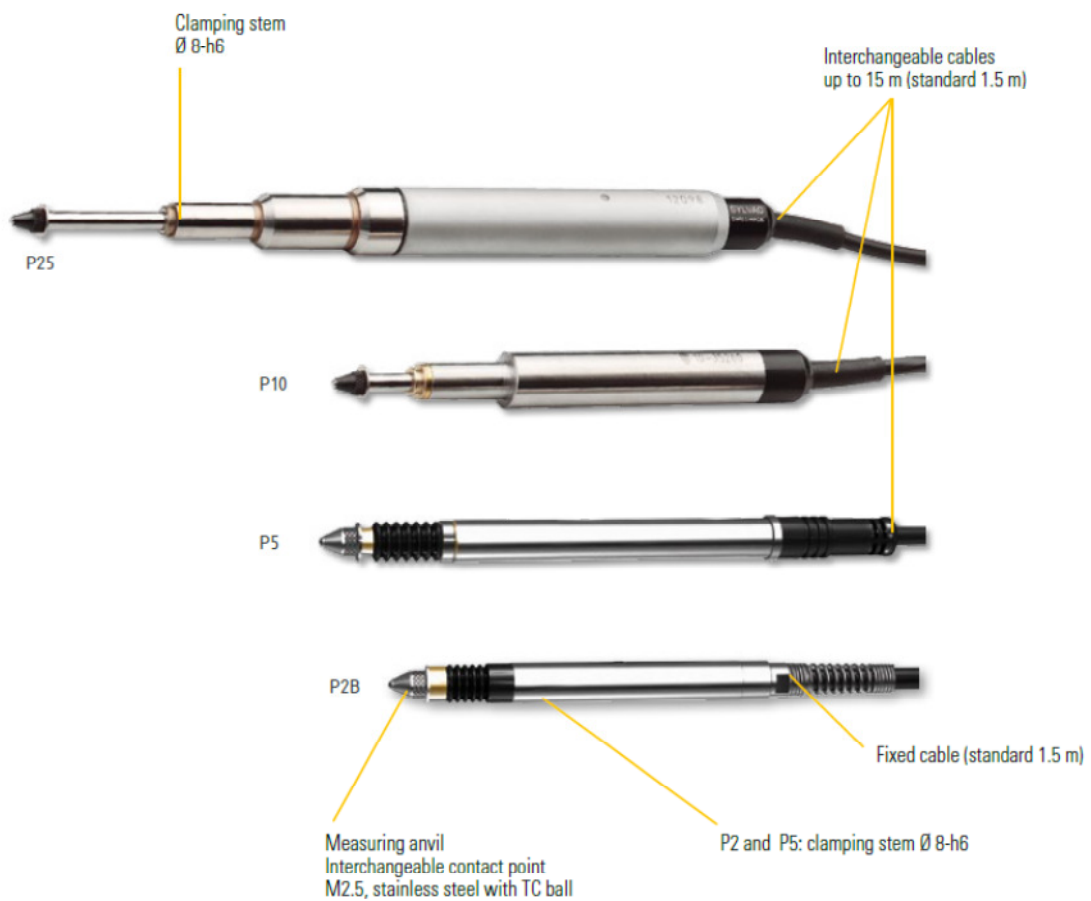




Measuring probes

DESCRIPTION

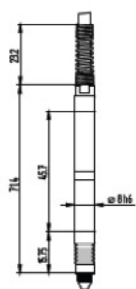
- Capacitive absolute measuring probes, plunger type
- Resolution 0.0001 mm
- Measuring range from 2 to 50 mm
- Plain bearing or ball bearing, integrated vacuum lifter on P5
- Compatible with all Sylvac digital units
- Excellent linearity
- Interchangeable cables on most types



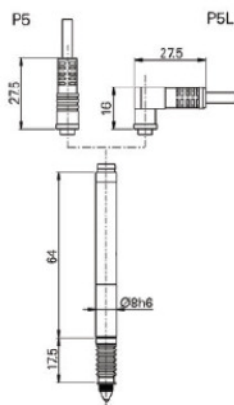
Measuring probes

DIMENSIONAL DRAWINGS

P2B



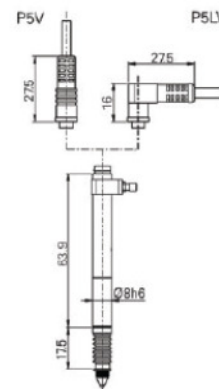
P5



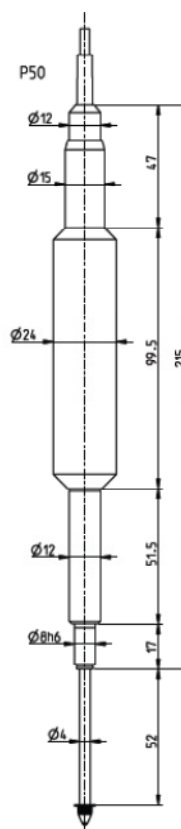
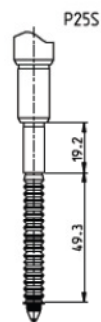
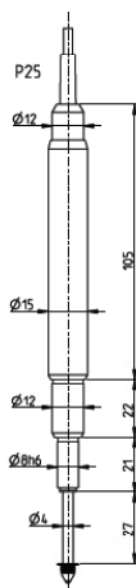
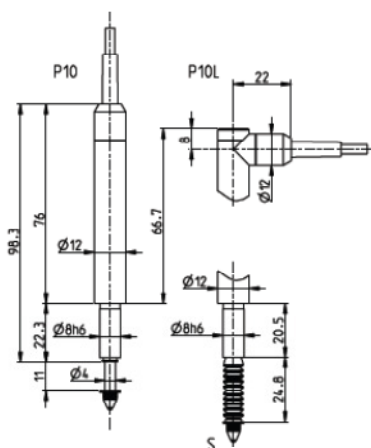
P5L



P5V



P5LV



Measuring probes

LISTING OF ALL MODELS

	800.0934 P2B	900.1001 P5	900.1003 P5V	900.1006 P5L	900.1008 P5VL	900.1010 P10	900.1012 P10S	900.1014 P10L	900.1016 P10LS	900.1025 P25	900.1027 P25S	900.1050 P50
RANGE												
2 mm	•											
5 mm		•	•	•	•							
10 mm						•	•	•	•			
25 mm										•	•	
50 mm												•
EXECUTION												
Plain bearing		•	•	•	•	•	•	•	•	•	•	•
B- Ball bearing	•											
V- Vacuum lifter			•		•							
L- 90 degrees cable				•	•			•	•			
S- with rubber boot	•	•	•	•	•		•		•		•	
MECHANIC												
Diameter 8 mm h6	•	•	•	•	•	•	•	•	•	•	•	•
Diameter 12 mm										•	•	•
Measuring anvil M2.5	•	•	•	•	•	•	•	•	•	•	•	•
LIFTING												
Integrated			•		•							
Separate accessories	•	•		•		•	•	•	•	•	•	
PROTECTION IP												
Protection rating IP (IEC 60529)	64	64	64	64	64	40	50	40	50	40	50	40

Measuring probes

TECHNICAL SPECIFICATIONS

		P2B	P5	P10	P25	P50
Pre-travel	mm	0.25	0.7	0.5	0.8	1
Max. Error ¹⁾	µm	0.8	1	1	1.2	2.5
Repeatability	µm	0.2	0.2	0.2	0.2	0.4
Moving mass	g	3.4	3.7	4.1	9.6	15.3

¹⁾ with master unit

MEASURING FORCE

		P2B	P5	P10	P10S	P25	P25S	P50
Standard	N	0.60-0.75	0.60-1.20	0.60-0.80	0.70-1.25	0.60-1.00	0.65-1.4	0.70 - 1.7
Minimum	N	---	---	< 0.10	---	< 0.15	---	---
Low	N	---	0.20-0.25	0.20-0.25	---	0.20-0.30	---	---
High	N	---	1.00-1.80	0.70-1.50	---	0.70-1.60	---	---
Lateral max	N	0.70	0.70	0.60	---	0.30	---	0.25

Tolerance $\pm 20\%$, measuring probe in vertical position, outgoing spindle.

BASIC INSTRUMENT

- Probe according to technical specifications
- Calibration certificate
- Cable 1.5 m
- Stainless steel contact point with tungsten carbide ball Ø 2 mm (905.2204)



Measuring probes

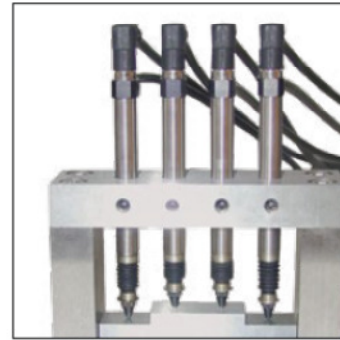
APPLICATIONS



P25 probe connected to a D80S unit measuring the height of a part



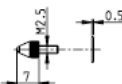
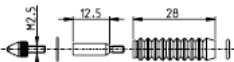
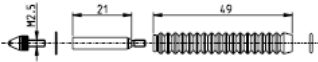
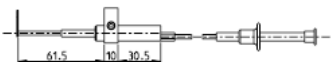

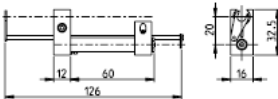
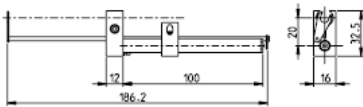
P5 probes connected to a D50S unit measuring the external diameter of a shaft



Combined probes for the measurement of several heights

Measuring probes

ACCESSORIES

		P2	P5	P10	P25	P50
	905.2204	Stainless steel contact point M2.5 with TC ball probe (other contact points, see page 50)	•	•	•	•
	901.2003	Rubber boot and contact point set		•		
	901.2004	Rubber boot and contact point set			•	
	901.2005	Lifting device with photo-cable		•	•	
	901.2006	Lifting device with photo-cable				•
	901.2010	Pneumatic lifting device		•	•	
	901.2011	Pneumatic lifting device				•
	901.2012	Tube Ø 4 mm / 2 mm, Length to be specified	•	•	•	•
	901.2013	Tube Ø 6 mm / 4 mm, Length to be specified	•	•	•	•
	901.2014	Double tube diameter 2 x 4 mm / 2 mm, Length to be specified	•	•	•	•