



## Absolute digital measuring probes

P12D

#### **DESCRIPTION**

- High-precision measuring probes with patented measuring system combining inductive and capacitive technologies
- Absolute system with integrated electronic error correction (no more pairing with the unit or computer)
  guaranteeing high accuracy over the entire measuring range
- Extremely robust ball bearing guide guarantees a minimum of 100 million cycles (30 millions with radial load)
- Stainless steel body Ø 12 mm, fixing diameter 8 h6
- Measuring range 12.7 mm
- Available in 3 versions: Standard, Work and Pro
- Measuring force selectable: low or very low for vertical use only
- Output signal in direct digital format without the need for a converter
- Reading speed up to 100 values per second depending on configuration
- Straight cable length 2m with either USB or M8 connector



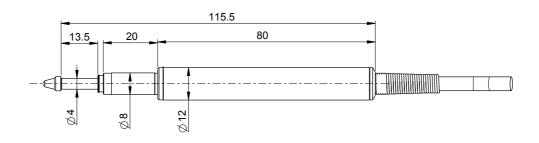




# Absolute digital measuring probes

## **P12D**

### **DIMENSIONAL DRAWINGS**



### **TECHNICAL SPECIFICATIONS**

PRO		801-1012	801-1018	801-1212	801-1218
Resolution type		High resolution			
Туре		P12D HR USB	P12D HR USB CF 2)	P12D HR M8	P12D HR M8 CF <sup>2)</sup>
Force 1)	N	0.2 - 0.3	0.08	0.2 - 0.3	0.08
Measuring range	mm	12.7			
Resolution	μm	0.01			
Max. Error	μm	0.6			
Repeatability	μm	0.08			
Nb measures/s		up to 100/s, according to configuration 5)			
Output data		USB M8		18	
Cable output		Straight			

STANDARD		801-2012	801-2017	801-2212
Resolution type			Standard	
Туре		P12D USB P12D USB LF 3) P12D N		P12D M8
Force 1)	N	0.4 - 0.8	0.2 - 0.3	0.4 - 0.8
Measuring range	mm	12.7		
Resolution	μm	0.1		
Max. Error	μm	1		
Repeatability	μm	0.2		
Nb measures/s		up to 100/s, according to configuration <sup>5)</sup>		
Output data		USB M8		
Cable output		Straight		

 $<sup>^{1)}</sup>$   $\pm$  20%, vertical position

<sup>&</sup>lt;sup>2)</sup> CF = constant force : usable only vertically, rod pointing downwards (without spring)

<sup>3)</sup> LF = low force

<sup>4)</sup> depends on resolution and software

<sup>&</sup>lt;sup>5)</sup> depends on resolution and number of probes per bus



## P12D - special version

### P12D WORK

### **TECHNICAL SPECIFICATIONS**

WORK		801-0212	801-0012	
Resolution type		Standard		
Туре		P12D WORK M8	P12D WORK USB	
Force 1)	N	0.4	- 0.8	
Measuring range	mm	12.7		
Resolution	μm	0.1		
Max. Error	μm	1.8		
Repeatability	μm	0.2		
Nb measures/s		up to 100/s, according to configuration 1)		
Output data		M8	USB	
Cable output		Straight		

<sup>1)</sup> depends on resolution and number of probes per bus

## P12D - special version

## P12D OPEN

#### **DESCRIPTION**

- Same specifications as P12D Work. In addition to this:
- Special execution with cable length 2 m. type «open connector» (4 coloured wires according to DIN 47100) for integration in machines or lines and communication with a PLC
- Output signal in direct digital format without the need for a converter.
- ASCII or ORBIT compatible communication protocol
- Resolution up to 0.0001 mm (0.1 μm), max. error 1.8 μm
- Measuring force 0.4 0.8 N







# Absolute digital measuring probes

### **P12D**

### **TECHNICAL SPECIFICATIONS**

OPEN		801-0412	
Resolution type		Standard	
Туре		P12D OPEN	
Force 1)	N	0.4 - 0.8	
Measuring range	mm	12.7	
Resolution	μm	0.1	
Max. Error	μm	1.8	
Repeatability	μm	0.2	
Nb measures/s		up to 100/s, according to configuration 1)	
Output data		OPEN	
Cable output		Straight	

<sup>1)</sup> depends on resolution and number of probes per bus

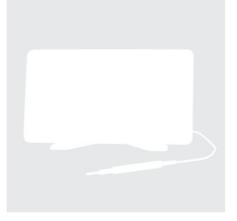
#### STANDARD DELIVERY

- Probe according to technical specifications
- Cable 2 m
- $\bullet$  Stainless steel contact point with tungsten carbide ball Ø 2 mm
- Quickstart
- Calibration certificate

### **APPLICATIONS**



Probe P12D USB connected to a PC, measures displayed by Sylcom.



Probe P12D USB connected to a D300S (maximum resolution 0.1µm)



Probes P12D M8 connected to a D62S.