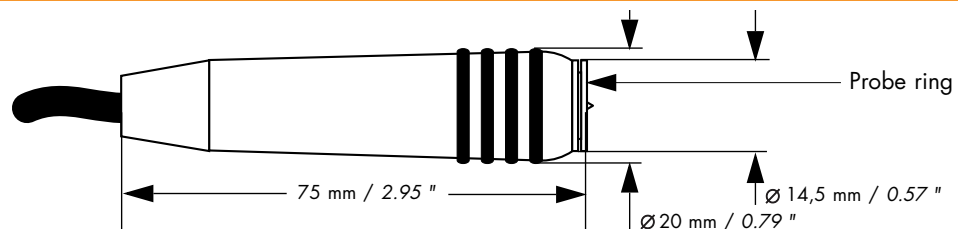




Probe model	FPR1	
Part no.*	605-179	
Applications	The profile probe FPR1 measures the depths of surface profiles. The probe measures the peak-to-valley distances according to ASTM 4417, Method B. Therefore, profile measurements of the surface by using the probe FPR1 are conform to many standards and guidances, e.g., SSPC-PA17.	
Examples	• Assessment of blasted surfaces whether they are appropriate for varnishing	
Probe design	Axial probe with spring-loaded measuring tip	
Applications	Measuring the peak-to-valley distances of surface profiles	
Measurement range	0 ... 500 µm	0 ... 19.69 mils
Trueness		
based on factory calibration standards of the Helmut Fischer GmbH	0 ... 100 µm: ≤ 3 µm 100 ... 500 µm: ≤ 3 % of nominal value	0 ... 3.94 mils: ≤ 0.12 mils 3.94 ... 19.69 mils: ≤ 3 % of nominal value
Repeatability precision		
based on factory calibration standards of the Helmut Fischer GmbH; 5 single readings per standard	0 ... 100 µm: ≤ 1.5 µm 100 ... 500 µm: ≤ 1.5 % of reading	0 ... 3.94 mils: ≤ 0.06 mils 3.94 ... 19.69 mils: ≤ 1.5 % of reading
Influences		
Curvature	Probe unsuitable for measurements on curved surfaces	
Edge distance	No influence. For measurement the probe ring must be placed completely on the surface.	
Admissible ambient temperature at operation	-10 °C ... +40 °C	+14 °F ... +104 °F
Probe tip material	Hard metal	
Probe tip replaceable	Yes, by customer using the probe tip replacement tool 605-434 (option)	
Probe tip	60° tip angle, probe tip radius: 50 µm / 1.97 mils	
Number of measurements	Perform a visual check before each measurement! After approximately 20,000 measurements the intact probe tip may show signs of wear and should be replaced.	
Measuring methods	ASTM D4417, Method B and magnetic induction method according to ISO 2178, ASTM D7091	
Scope of supply	Probe and calibration standard set 605-308	
Works with instruments	DUALSCOPE® FMP40, DELTASCOPE® FMP30, ISOSCOPE® FMP30, DUALSCOPE® FMP20, DELTASCOPE® FMP10 and ISOSCOPE® FMP10	

Dimensions



Cable length: 1.5 m / 59.06 ", other cable lengths on request*

* FPR1 probes with special cable lengths have own part no. and probe model names. This data sheet is also valid for these probes.

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