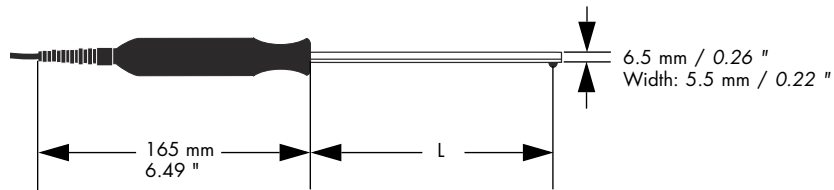




	FAI3.3-150	FAI3.3-260	FAI3.3-400
Probe model	604-187	604-336	605-163
Applications	Measures electrically non-conducting coatings on non-ferrous metal base material (NC/NF) Suited for measurements in bore holes, pipes or grooves. To achieve a very small measurement uncertainty, externally triggered measurement acquisition should be used when measuring small inside diameters. Smallest permissible inside diameter: 9 mm (0.35 ").		
Examples	<p>Non-ferrous metal base materials (NF)</p> <ul style="list-style-type: none"> •Paint, varnish or plastic coatings on aluminum, copper or brass (NC/NF) <p>The probes feature a patented conductivity compensation. So that the different electrical conductivities of e.g. various aluminum alloys have no effect of the coating thickness measurement.</p>		
Probe design	Single tip inside probes with spring-loaded measuring system		
Applications	NC/NF		
Measurement range	Non-ferrous metal base materials (NF) 0 ... 800 μm / 0 ... 31.49 mils		
Trueness	Non-ferrous metal base materials (NF)		
based on Fischer standards	0 ... 100 μm : $\leq 2 \mu\text{m}$ 100 ... 800 μm : $\leq 2\%$ of reading		0 ... 3.49 mils: $\leq 0.08 \text{ mils}$ 3.49 ... 31.49 mils: $\leq 2\%$ of reading
Repeatability precision	Non-ferrous metal base materials (NF)		
based on Fischer standards 5 single readings per standard	0 ... 100 μm : $\leq 0.6 \mu\text{m}$ 100 ... 800 μm : $\leq 0.6\%$ of reading		0 ... 3.94 mils: $\leq 0.024 \text{ mils}$ 3.94 ... 31.49 mils: $\leq 0.6\%$ of value
Influences	Aluminum base material		
	<i>The following values are valid for a reference coating thickness of 100 μm (3.49 mils).</i>		
Curvature (R), measurement with reference to master calibration on flat surface			
Measuring spot	Measurement error $\geq 10\%$ for $R \leq 27.5 \text{ mm}$ / $R \leq 1.08 \text{ ''}$ Probe needs a minimum of $R = 4.5 \text{ mm}$ (support stand necessary) / $R = 0.18 \text{ ''}$		
Curvature (R), measurement with reference to master calibration on flat surface			
Measuring spot	Measurement error $\geq 10\%$ for $R \leq 25 \text{ mm}$ / $R \leq 0.98 \text{ ''}$ Probe needs a minimum of $R = 1 \text{ mm}$ (support stand necessary) / $R = 0.04 \text{ ''}$		
Edge distance (R), specification from probe pole center			
Measuring spot in the center of the circular surface	Measurement error $\geq 10\%$ for $R \leq 2 \text{ mm}$ / $R = 0.08 \text{ ''}$ Probe needs a minimum of $R = 1 \text{ mm}$ (support stand necessary) / $R = 0.04 \text{ ''}$		
Edge distance (X), specification from probe pole center			
Measuring spot	No specification		

Influences	Aluminum base material
<i>The following values are valid for a reference coating thickness of 100 µm (3.49 mils).</i>	
Base material thickness (D)	Measurement error ≥ 10 % for D ≤ 0.09 mm / D ≤ 3.54 mils
Measuring spot	
Base material	Influence of the el. conductivity of the base material (NF) in the range from 30 to 100 % IACS: deviation of the coating thickness is ≤ 2 % valid for the total measurement range
Admissible ambient temperature at operation	-10 °C ... +40 °C / +14 °F ... +104 °F
Probe tip material	Sapphire tip
Probe tip replaceable	Yes
Probe tip radius	1.2 mm / 47.24 mils
Measuring method	Amplitude sensitive eddy current method according to ISO 2360, ASTM D7091
Scope of supply	Probe, metal plate ISO/NF for instrument check, calibration foil set 602-457
Option	Adapter for support stand: 601-691
Works with instruments	All DUALSCOPE® and ISOSCOPE® hand-held instruments of the series FMP and FISCHERSCOPE® MMS® PC2 with F-Module PERMASCOPE®

Dimensions



Insertion depth L	FAI3.3-150	FAI3.3-260	FAI3.3-400
	max. 150 mm / 5.91 "	max. 260 mm / 10.24 "	max. 400 mm / 15.75 "
Cable length	1.50 m / 59.06 "	1.50 m / 59.06 "	1.50 m / 59.06 "

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