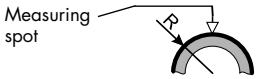
	FAI3.3-150	FAI3.3-260	FAI3.3-400
Probe model	**604-187**	**604-336**	**605-163**
Applications	Measures electrically non-conducting coatings on non-ferrous metal base material (NC/NF) Suited for measurements in bore holes, pipes or grooves. To achieve a very small measurement uncertainty, externally triggered measurement acquisition should be used when measuring small inside diameters. Smallest permissible inside diameter: 9 mm *(0.35 ")*.		
Examples	**Non-ferrous metal base materials (NF)** • Paint, varnish or plastic coatings on aluminum, copper or brass (NC/NF) 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.		
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 based on Fischer standards	**Non-ferrous metal base materials (NF)** 0 ... 100 µm: ≤ 2 µm 100 ... 800 µm: ≤ 2 % of reading		*0 ... 3.49 mils: ≤ 0.08 mils* *3.49 ... 31.49 mils: ≤ 2 % of reading*
Repeatability precision based on Fischer standards 5 single readings per standard	**Non-ferrous metal base materials (NF)** 0 ... 100 µm: ≤ 0.6 µm 100 ... 800 µm: ≤ 0.6 % of reading		*0 ... 3.94 mils: ≤ 0.024 mils* *3.94 ... 31.49 mils: ≤ 0.6 % of value*
Influences	**Aluminum base material**		

The following values are valid for a reference coating thickness of 100 µm (3.49 mils).

Curvature (R), measurement with reference to master calibration on flat surface

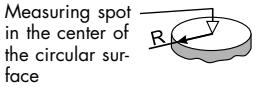
Measurement error ≥ 10 % for R ≤ 27.5 mm / *R ≤ 1.08 "*
Probe needs a minimum of R = 4.5 mm (support stand necessary) / *R = 0.18 "*

Curvature (R), measurement with reference to master calibration on flat surface



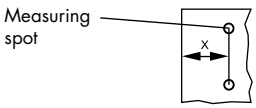
Measurement error ≥ 10 % for R ≤ 25 mm / *R ≤ 0.98 "*
Probe needs a minimum of R = 1 mm (support stand necessary) / *R = 0.04 "*

Edge distance (R), specification from probe pole center

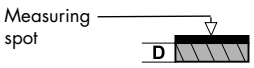
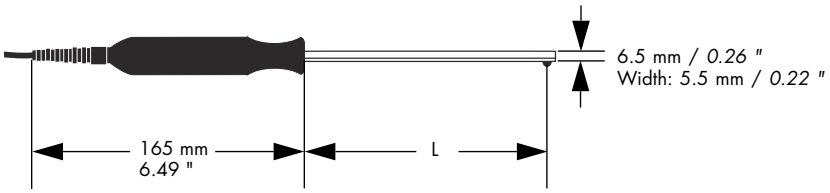


Measurement error ≥ 10 % for R ≤ 2 mm / *R = 0.08 "*
Probe needs a minimum of R = 1 mm (support stand necessary) / *R = 0.04 "*

Edge distance (X), specification from probe pole center



No specification

Influences	**Aluminum base material**
The following values are valid for a reference coating thickness of 100 µm (3.49 mils).	
Base material thickness (D) 	Measurement error ≥ 10 % for D ≤ 0.09 mm / *D ≤ 3.54 mils*
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** max. 150 mm / *5.91 "*	**FAI3.3-260** max. 260 mm / *10.24 "*	**FAI3.3-400** 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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