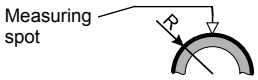
	FAW3.3
Probe model	**604-193**
Applications	Measures electrically non-conducting coatings on non-ferrous metal base material (NC/NF). Suited for measurements on plane specimens or in pipes bore holes and recesses. Can possibly also be used when surfaces exhibit a damp condition (acidic contamination of test surface).
Examples	• Paint, varnish or plastic coatings on aluminum, copper or brass (NC/NF) The probe features 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 angle probe with spring-loaded measuring system
Applications	NC/NF
Measurement range	**Non-ferrous metal base materials (NF)** 0 ... 1200 µm / *0 ... 47.24 mils*
Trueness based on Fischer standards	**Non-ferrous metal base materials (NF)** 0 ... 100 µm: ≤ 1 µm 100 ... 800 µm: ≤ 1 % of reading 800 ... 1200 µm: ≤ 3 % of reading *0 4... 3.94 mils: ≤ 0.04 mils* *3.94 ... 31.50 mils: ≤ 1 %* of reading *31.50 ... 47.24 mils: ≤ 3 %* of reading
Repeatability precision based on Fischer standards	**Non-ferrous metal base materials (NF)** 0 ... 100 µm: ≤ 0.5 µm 100 ... 1200 µm: ≤ 0.5 % of reading *0 ... 3.94 mils: ≤ 0.02 mils* *3.94 ... 47.24 mils: ≤ 0.5 %* of reading
Influences	**Aluminum base material**

The following values are valid for a reference coating thickness of 75 µm / 2.95 mils.

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

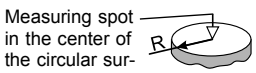
Measurement error ≥ 10 % for R ≤ 31 mm / *R ≤ 1.22 "*
Probe needs a minimum of R = 13 mm (support stand necessary) / *R = 0.51 "*

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



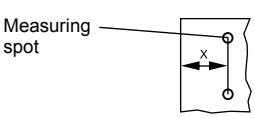
Measurement error ≥ 10 % for R ≤ 27 mm / *R ≤ 1.06 "*
Probe needs a minimum of R = 1 mm (support stand necessary) / *R = 39.37 mils*

Edge distance (R), specification from probe pole center

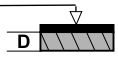
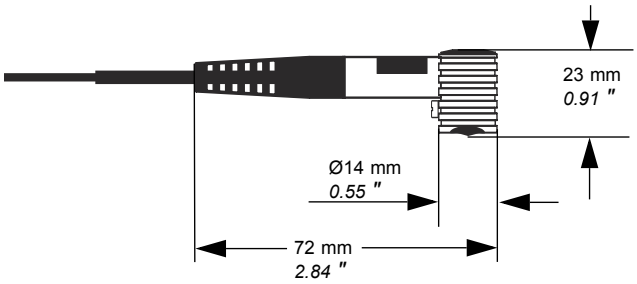


No measurement error as of R > 6 mm / *R > 0.24 "*
Measurement error ≥ 10 % for R ≤ 1.5 mm / *R = 59.06 mils*
Probe needs a minimum of R = 1 mm (support stand necessary) / *R = 39.37 mils*

Edge distance (X), specification from probe pole center



No measurement error as of X > 2 mm / *X > 78.74 mils*
Measurement error ≥ 10 % for X ≤ 1.2 mm / *X ≤ 47.24 mils*

Influences	**Aluminum base material**
The following values are valid for a reference coating thickness of 75 µm / 2.95 mils.	
Base material thickness (D) Measuring spot 	Measurement error ≥ 10 % for D ≤ 0.1 mm / *D = 3.94 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	Jewel 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, Non-conductive coatings on non-magnetic electrically conductive basis materials - Measurement of coating Thickness - Amplitude-sensitive eddy current method
Scope of supply	Probe, metal plate ISO/NF for instrument check, calibration foils
Works with instruments	All DUALSCOPE® and ISOSCOPE® hand-held instruments of the series FMP and FISCHERSCOPE® MMS® PC2 with F-Module PERMASCOPE®
Dimensions	 Cable length: 1.50 m / *59.06 "*

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