



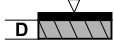
Probe model	FGABI1.3-150	FGABI1.3-260	FGABI1.3-400	EGABI1.3-150	EGABI1.3-260	
Part no. ¹	604-175	604-339	604-468	601-932	601-961	
Applications	Measurement of electrically non-conductive and non-ferrous metal coatings on steel or iron base material (NC/Fe and NF/Fe). Suited for measurements in bore holes, 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: 11.5 mm (0.45 ").					
Examples	Steel or iron base materials (Fe) <ul style="list-style-type: none"> • Paint, varnish or plastic coatings on steel or iron (NC/Fe) • Copper, brass, zinc, tin and chrome coatings on steel or iron (NF/Fe) 					
Probe design	Single tip inside probe with spring-loaded measuring system					
Applications	NC/Fe or NF/Fe					
*	<i>The values for measurement range, trueness, repeatability precision and measurement deviations are valid for electrically non-conductive coating materials on steel or iron (NC/Fe). The values may differ for measurements on non-ferrous coating materials (NF).</i>					
Measurement range*	Steel or iron base materials (Fe) 0 ... 1000 µm / 0 ... 39.37 mils					
Trueness*	Steel or iron base materials (Fe)					
based on factory calibration standards of the Helmut Fischer GmbH	0 ... 50 µm: ≤ 0.5 µm	0 ... 1.97 mils: ≤ 0.02 mils			50 ... 1000 µm: ≤ 1 % of nominal value	1.97 ... 39.37 mils: ≤ 1 % of nominal value
Repeatability precision*	Steel or iron base materials (Fe)					
based on factory calibration standards of the Helmut Fischer GmbH 5 single readings per standard	0 ... 50 µm: ≤ 0.15 µm	0 ... 1.97 mils: ≤ 0.006 mils			50 ... 1000 µm: ≤ 0.3 % of reading	1.97 ... 39.37 mils: ≤ 0.3 % of value
Influences*	Steel or iron base materials (Fe)					
	<i>The following values are valid for a coating thickness with a nominal value of 75 µm / 2.95 mils.</i>					
Curvature (R), measurement deviation from the nominal value with reference to master calibration on flat surface						
Measuring spot	Measurement deviation ≥ 10 % for R ≤ 17.5 mm / R ≤ 0.69 " Probe needs a minimum of R = 5.75 mm (support stand necessary) / R = 0.23 "					
Curvature (R), measurement deviation from the nominal value with reference to master calibration on flat surface						
Measuring spot	Measurement deviation ≥ 10 % for R ≤ 8 mm / R ≤ 0.31 " Probe needs a minimum of R = 1 mm (support stand necessary) / R = 0.04 "					
Edge distance (R), specification from probe pole centre, measurement deviation from the nominal value						
Measuring spot in the centre of the circular surface	Measurement deviation ≥ 10 % for R ≤ 4 mm / R ≤ 0.16 " Probe needs a minimum of R = 1 mm (support stand necessary) / R = 0.04 "					
Edge distance (X), specification from probe pole centre, measurement deviation from the nominal value						
Measuring spot = Probe pole centre	No specification					

Influences* **Steel or iron base materials (Fe)**

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

Base material thickness (D), measurement deviation from the nominal value

Measuring spot



Measurement deviation $\geq 10\%$ for $D \leq 0.2\text{ mm}$ / $D \leq 7.87\text{ mils}$

Admissible ambient temperature at operation -10 °C ... +40 °C / +14 °F ... +104 °F

Admissible specimen temperature max. +40 °C / max. +104 °F

Probe tip material PVD-coated steel

Probe tip replaceable Yes, by an authorized Fischer service centre

Probe tip radius 0.75 mm / 29.53 mils

Measuring method Magnetic induction method according to ISO 2178, ASTM D7091

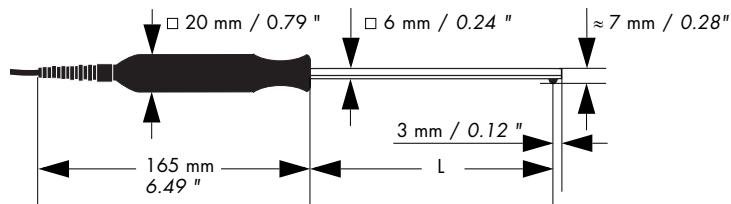
Scope of supply Probe, metal plate NF/FE for instrument check, calibration foil set 602-444

Option Adapter for support stand: 601-691

FGAB1.3 probes work with All DUALSCOPE® and DELTASCOPE® hand-held instruments of the series FMP as well as the bench top instruments FISCHERSCOPE® MMS® PC and FISCHERSCOPE® MMS® PC2 with F-Module PERMASCOPE® (12-pin connecting socket)

EGAB1.3 probes work with All DUALSCOPE® and DELTASCOPE® hand-held instruments of the series MP10 to MP40 as well as the bench top instruments FISCHERSCOPE® MMS®, FISCHERSCOPE® MMS® PC and FISCHERSCOPE® MMS® PC2 with E-Module PERMASCOPE® (8-pin connecting socket)

Dimensions



Probe model	FGAB1.3-150	FGAB1.3-260	FGAB1.3-400	EGAB1.3-150	EGAB1.3-260
L (other lengths on request)	150 mm / 5.91 "	260 mm / 10.24 "	400 mm / 15.75 "	150 mm / 5.91 "	260 mm / 10.24 "

¹ FGAB1.3 and EGAB1.3 probes with special cable lengths have own part no. and probe model names. This data sheet is also valid for these probes.



7952 Nieman Road, Lenexa, KS 66214-1560 USA
 Phone: 913-685-0675, Fax: 913-685-1125
www.ndtsupply.com, sales@ndtsupply.com