

Tubing Probe Catalog

Eddy Current Testing

- Eddy Current
- Remote Field
- HVAC
- Accessories



GE

Measurement & Control

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Fixed Head Eddy Current Probes

Features & Benefits

- Designed for inspection of non-ferrous tubing in balance-of-plant applications in the Oil & Gas and Power Generation industries.
- Probe diameters from 0.270 inch to 1.5 inch (6.86 mm to 38.1 mm) in 0.010 inch (0.254 mm) increments.
- Probes available with standard poly shaft lengths of 65 ft, 80 ft, 100 ft and 120 ft (19.8 m, 24 m, 30.5 m and 36.5 m).
- All probes have industry standard four-pin Amphenol® connectors
- ID probes available in Barnacle Scraper (BS) and Chamfered Barnacle Scraper (CBS) designs.
- Magnetic biased versions of both probe configurations are available.

Probes available in low, mid, and high frequency ranges:

- Low (LF) range center frequency: 150 kHz
- Mid (MF) range center frequency: 300kHz
- High (HF) range center frequency: 600kHz

Probe Part Number Example & Sizing Chart

0.610-CBS-HF-65-3/8G = Part number **6 6 1** - **6 2 1** - **0 6 1**

Probe Type	Shaft Material and Length	Frequency Range	Probe Diameter in Inches
660=BS 661=CBS 662=MBS 663=MCBS	62= 65', 3/8" Nylon Type G 63=80', 3/8" Nylon Type G 64=100', 3/8" Nylon Type G 65=120', 3/8" Nylon Type G 81=50' 1/4" Nylon Type T	1=High Freq (600kHz center freq) 2=Mid Freq (300kHz center freq) 3=Low Freq (150kHz center freq)	



BS Probes

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description (See Sizing Chart)	Part Number
0.380 to 0.650	65	0.XXX-BS-XX-65-3/8G	660-62X-XXX
0.660 to 1.000	65	0.XXX-BS-XX-65-3/8G	660-62X-XXX
1.010 to 1.500	65	1.XXX-BS-XX-65-3/8G	660-62X-XXX
0.380 to 0.650	80	0.XXX-BS-XX-80-3/8G	660-63X-XXX
0.660 to 1.000	80	0.XXX-BS-XX-80-3/8G	660-63X-XXX
1.010 to 1.500	80	1.XXX-BS-XX-80-3/8G	660-63X-XXX
0.380 to 0.650	100	0.XXX-BS-XX-100-3/8G	660-64X-XXX
0.660 to 1.000	100	0.XXX-BS-XX-100-3/8G	660-64X-XXX
1.010 to 1.500	100	1.XXX-BS-XX-100-3/8G	660-64X-XXX
0.380 to 0.650	120	0.XXX-BS-XX-120-3/8G	660-65X-XXX
0.660 to 1.000	120	0.XXX-BS-XX-120-3/8G	660-65X-XXX
1.010 to 1.500	120	1.XXX-BS-XX-120-3/8G	660-65X-XXX

Fixed Head Eddy Current Probe



CBS Probes

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description (See Sizing Chart)	Part Number
0.270 to 0.370	50	0.XXX-CBS-XX-50-1/4T	661-81X-XXX
0.380 to 0.650	65	0.XXX-CBS-XX-65-3/8G	661-62X-XXX
0.660 to 1.000	65	0.XXX-CBS-XX-65-3/8G	661-62X-XXX
1.010 to 1.500	65	1.XXX-CBS-XX-65-3/8G	661-62X-XXX
0.380 to 0.650	80	0.XXX-CBS-XX-80-3/8G	661-63X-XXX
0.660 to 1.000	80	0.XXX-CBS-XX-80-3/8G	661-63X-XXX
1.010 to 1.500	80	1.XXX-CBS-XX-80-3/8G	661-63X-XXX
0.380 to 0.650	100	0.XXX-CBS-XX-100-3/8G	661-64X-XXX
0.660 to 1.000	100	0.XXX-CBS-XX-100-3/8G	661-64X-XXX
1.010 to 1.500	100	1.XXX-CBS-XX-100-3/8G	661-64X-XXX
0.380 to 0.650	120	0.XXX-CBS-XX-120-3/8G	661-65X-XXX
0.660 to 1.000	120	0.XXX-CBS-XX-120-3/8G	661-65X-XXX
1.010 to 1.500	120	1.XXX-CBS-XX-120-3/8G	661-65X-XXX

Magnetic Biased BS Probes (MBS)



Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description (See Sizing Chart)	Part Number
0.380 to 0.650	65	0.XXX-MBS-XX-65-3/8G	662-62X-XXX
0.660 to 1.000	65	0.XXX-MBS-XX-65-3/8G	662-62X-XXX
1.010 to 1.500	65	1.XXX-MBS-XX-65-3/8G	662-62X-XXX
0.380 to 0.650	80	0.XXX-MBS-XX-80-3/8G	662-63X-XXX
0.660 to 1.000	80	0.XXX-MBS-XX-80-3/8G	662-63X-XXX
1.010 to 1.500	80	1.XXX-MBS-XX-80-3/8G	662-63X-XXX
0.380 to 0.650	100	0.XXX-MBS-XX-100-3/8G	662-64X-XXX
0.660 to 1.000	100	0.XXX-MBS-XX-100-3/8G	662-64X-XXX
1.010 to 1.500	100	1.XXX-MBS-XX-100-3/8G	662-64X-XXX
0.380 to 0.650	120	0.XXX-MBS-XX-120-3/8G	662-65X-XXX
0.660 to 1.000	120	0.XXX-MBS-XX-120-3/8G	662-65X-XXX
1.010 to 1.500	120	1.XXX-MBS-XX-120-3/8G	662-65X-XXX



Magnetic Biased CBS Probes (MCBS)

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description (See Sizing Chart)	Part Number
0.380 to 0.650	65	0.XXX-CBS-XX-65-3/8G	663-62X-XXX
0.660 to 1.000	65	0.XXX-CBS-XX-65-3/8G	663-62X-XXX
1.010 to 1.500	65	1.XXX-CBS-XX-65-3/8G	663-62X-XXX
0.380 to 0.650	80	0.XXX-CBS-XX-80-3/8G	663-63X-XXX
0.660 to 1.000	80	0.XXX-CBS-XX-80-3/8G	663-63X-XXX
1.010 to 1.500	80	1.XXX-CBS-XX-80-3/8G	663-63X-XXX
0.380 to 0.650	100	0.XXX-CBS-XX-100-3/8G	663-64X-XXX
0.660 to 1.000	100	0.XXX-CBS-XX-100-3/8G	663-64X-XXX
1.010 to 1.500	100	1.XXX-CBS-XX-100-3/8G	663-64X-XXX
0.380 to 0.650	120	0.XXX-CBS-XX-120-3/8G	663-65X-XXX
0.660 to 1.000	120	0.XXX-CBS-XX-120-3/8G	663-65X-XXX
1.010 to 1.500	120	1.XXX-CBS-XX-120-3/8G	663-65X-XXX

Detachable Head CBS Probes

Features & Benefits

- Replaceable head ID tubing probes are made with high performance materials and adhesives for excellent abrasion resistance and long life.
- Proprietary snap-lock connector for easy insertion and removal of probe heads.
- Long-life kink resistant disconnect cables with snap-lock connector ensure mechanical integrity.
- Single disconnect cable supports all eddy current and remote field probe heads.
- Highly visible laser engraving of probe ID and serial number for easy identification.
- Proven long life durability based on field trials with mechanical probe pushers.

Sizes for the detachable series of CBS probes range from 0.470" to 1.500" diameter in 0.010" increments.

Probe Part Number Example & Sizing Chart

0.610-CBSD-HF = Part number **671** - **101** - **061**

Probe Type	Probe Type	NA	Frequency Range	Probe Diameter in Inches
671=CBS	1=Differential 5=RFT	Will always be 0 for these probes	1=High Freq (600kHz center freq) 2=Mid Freq (300kHz center freq) 3=Low Freq (150kHz center freq)	



Detachable Head CBS Probes

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description (See Sizing Chart)	Part Number
0.470" to 1.500"	See Probe shaft information below	0.XXX-CBSD-XX (freq range)-65-3/8G	671-10X-XXX

Detachable Probe Shaft Options

Connector Option	Poly Shaft Length (Feet)	Poly Type	Supports	Description	PART #
19 Pin Amph.	2	Type G	ET / RFT	IDP QUICK DISCO 2'	640-010-247
12 Pin Lemo	2	Type P	ET	IDP QUICK DISCO 2'	640-010-262
12 Pin Lemo	12	Type P	ET	IDP QUICK DISCO 12'	640-010-275
4 Pin Amph.	12	Type P	ET	IDP QUICK DISCO 12'	640-010-284
19 Pin Amph.	12	Type P	ET / RFT	IDP QUICK DISCO 12'	640-010-286
19 Pin Amph.	65	Type G	ET / RFT	IDP QUICK DISCO 65'	640-010-243
4 Pin Amph.	65	Type G	ET	IDP QUICK DISCO 65'	640-010-261
4 Pin Amph.	65	Type P	ET	IDP QUICK DISCO 65'	640-010-280
19 Pin Amph.	65	Type P	ET / RFT	IDP QUICK DISCO 65'	640-010-281
19 Pin Amph.	80	Type G	ET / RFT	IDP QUICK DISCO 65'	640-010-239
4 Pin Amph.	80	Type G	ET	IDP QUICK DISCO 80'	640-010-249
4 Pin Amph.	80	Type P	ET	IDP QUICK DISCO 80'	640-010-259
4 Pin Amph.	100	Type G	ET	IDP QUICK DISCO 100'	640-010-255

Note Type G - Poly Material is Nylon (Hard)
Type P - Poly Material is High Density Polyethylene (Soft)

Petal Centered Probes

Features & Benefits

- Designed for the inspection of non-ferrous tubing in balance of plant applications.
- Probe diameters range from 0.460 inch to 0.870 inch (11.68 mm to 22.09 mm).
- Probes come standard with a poly length of 80 ft. (24.3 m).
- All probes have industry standard four pin amphenol connectors.

Probe Part Number Example & Sizing Chart

0.610-UFP-MF-80'-3/8G = Part number **664** - **632** - **061**

Probe Type	Shaft Material and Length	Frequency Range	Probe Diameter in Inches
664=UFP	63=80', 3/8" Nylon Type G	1=High Freq (600kHz center freq) 2=Mid Freq (300kHz center freq) 3=Low Freq (150kHz center freq)	



U-Bend Flex, Petal Centered Probes (UFP)

Standard Probes			Designed For		
Size Range (Inch)	Part Number	Model Number	Tube OD (Inch)	Tube Wall (Inch)	Material
.460-.490	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.527)	0.625	0.049	Per application
.500-.520	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.555)	0.625	0.035	Per application
.530-.550	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.584)	0.750	0.083	Per application
.560-.580	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.620)	0.750	0.065	Per application
.590-.600	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.652)	0.750	0.049	Per application
.610-.650	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.680)	0.750	0.035	Per application
.720-.740	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.805)	0.875	0.035	Per application
.750-.780	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.834)	1.000	0.083	Per application
.790-.820	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.870)	1.000	0.065	Per application
.830-.870	664-63X-XXX	XXX-UFP-XX-80-3/8G,(.930)	1.000	0.035	Per application

Remote Field Probes (RFT) for Ferrous Tubing

Features & Benefits

- Designed for inspection of ferrous tubing in the Oil & Gas and Petrochemical industries
- All probes encased in a stainless steel sleeve.
- Probe diameters from 0.312 inch (7.92 mm) to 1.00 inch (25.4 mm).
- Probes available with standard poly shaft length of 65 ft (19.8 m).



Switchable Dual Exciter RFT Probes, (6 Pin & 5 Pin Connectors)

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description	Part Number
0.375	65	0.375-SDE-LF-65-3/8G	666-623-037
0.400	65	0.400-SDE-LF-65-3/8G	666-623-040
0.440	65	0.440-SDE-LF-65-3/8G	666-623-044
0.470	65	0.470-SDE-LF-65-3/8G	666-623-047
0.500	65	0.500-SDE-LF-65-3/8G	666-623-050
0.560	65	0.560-SDE-LF-65-3/8G	666-623-056
0.625	65	0.625-SDE-LF-65-3/8G	666-623-063
0.690	65	0.690-SDE-LF-65-3/8G	666-623-069
0.750	65	0.750-SDE-LF-65-3/8G	666-623-075
0.875	65	0.875-SDE-LF-65-3/8G	666-623-088
1.000	65	1.000-SDE-LF-65-7/16P	666-923-100

Switchable Dual Exciter RFT Probes, (19 Pin Connector)

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description	Part Number
0.375	65	0.375-DE-LF-65-3/8G	668-623-037
0.400	65	0.400-DE-LF-65-3/8G	668-623-040
0.440	65	0.440-DE-LF-65-3/8G	668-623-044
0.470	65	0.470-DE-LF-65-3/8G	668-623-047
0.500	65	0.500-DE-LF-65-3/8G	668-623-050
0.560	65	0.560-DE-LF-65-3/8G	668-623-056
0.625	65	0.625-DE-LF-65-3/8G	668-623-063
0.690	65	0.690-DE-LF-65-3/8G	668-623-069
0.750	65	0.750-DE-LF-65-3/8G	668-623-075
0.875	65	0.875-DE-LF-65-3/8G	668-623-088
1.000	65	1.000-DE-LF-65-7/16P	668-923-100

Dual Exciter RFT Probes, (6 Pin & 3 Pin Connectors)

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description	Part Number
0.375	65	0.375-DE-LF-65-3/8G	665-623-037
0.400	65	0.400-DE-LF-65-3/8G	665-623-040
0.440	65	0.440-DE-LF-65-3/8G	665-623-044
0.470	65	0.470-DE-LF-65-3/8G	665-623-047
0.500	65	0.500-DE-LF-65-3/8G	665-623-050
0.560	65	0.560-DE-LF-65-3/8G	665-623-056
0.625	65	0.625-DE-LF-65-3/8G	665-623-063
0.690	65	0.690-DE-LF-65-3/8G	665-623-069
0.750	65	0.750-DE-LF-65-3/8G	665-623-075
0.875	65	0.875-DE-LF-65-3/8G	665-623-088
1.000	65	1.000-DE-LF-65-7/16P	665-923-100

Single Exciter RFT Probes, (6 Pin & 3 Pin Connectors)

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description	Part Number
0.312	65	0.312-SE-LF-65-5/16T	667-323-031
0.250	35	250-SE-LF-35-1/4T	667-873-025



Quick Disconnect Switchable Dual Exciter RFT Probe Heads

Probe Diameter (Inch)	Poly Shaft Length (Feet)	Description	Part Number
0.470	N/A	0.470-SDE-LF	676-503-047
0.500	N/A	0.500-SDE-LF	676-503-050
0.560	N/A	0.560-SDE-LF	676-503-056
0.625	N/A	0.625-SDE-LF	676-503-063
0.690	N/A	0.690-SDE-LF	676-503-069
0.750	N/A	0.750-SDE-LF	676-503-075
0.875	N/A	0.875-SDE-LF	676-503-088
1.000	N/A	1.000-SDE-LF	676-503-100

Instrument Adapters

PART #	DESCRIPTION	USED ON	CONNECTORS
640-015-066	RFT Adapter Amplifier	Apollo	41P to 5P&6P
640-015-086	RFT Adapter Amplifier	Apollo	41P to 19P
640-015-058	ET Adapter	Apollo	41P to (2) 4P
640-015-085	MS-5800 Simulator	Apollo	41P to 19P
640-015-105	ET Internal Reference Adapter	Apollo	41P to (2) 4P
640-015-070	RFT Adapter Amplifier	MS-5800	19P to 19P
640-015-005	ET Adapter	Phasec	12P Lemo to 4P
640-015-109	RFT Adapter	MIZ-28	6P & 5P to 19P
640-015-067	ET Adapter (Rigid Body)	Quick Disconnect Cable	19P to 4P
640-015-069	ET Adapter (Flex Body)	Quick Disconnect Cable	19P to 4P



Eddy Current Probes for Air Conditioner Tubing

Features & Benefits

- Designed for inspection of non-ferrous tubing in industrial HVAC units.
- All probes are encased in a stainless steel sleeve.
- Cross-wound coil design for detection of omni-directional defects.
- Probe sizes: 0.409 inch (10.4 mm) to 0.800 inch (20.32 mm)
- Probes available with standard poly shaft length of 35 ft (10.7 m).
- Probes come with standard 4-pin Amphenol connectors.



Air Conditioning Probes

Probe Diameter	Poly Shaft Length	Description	Part Number
(Inch)	(Feet)		
0.409	35	ECIDP 0.409 A/C DIFF.	622-352-012
0.495	35	ECIDP 0.495 A/C DIFF.	622-352-013
0.516	35	ECIDP 0.516 A/C DIFF.	622-352-014
0.560	35	ECIDP 0.560 A/C DIFF.	622-352-015
0.620	35	ECIDP 0.620 A/C DIFF.	622-352-016
0.650	35	ECIDP 0.650 A/C DIFF.	622-352-017
0.800	35	ECIDP 0.800 A/C DIFF.	622-352-033

Probe Diameter	Poly Shaft Length	Description	Part Number
(Inch)	(Feet)		
0.409	35	ECIDP 0.409 A/C X-AXIS	622-352-018
0.495	35	ECIDP 0.495 A/C X-AXIS	622-352-019
0.516	35	ECIDP 0.516 A/C X-AXIS	622-352-020
0.560	35	ECIDP 0.560 A/C X-AXIS	622-352-021
0.620	35	ECIDP 0.620 A/C X-AXIS	622-352-022
0.650	35	ECIDP 0.650 A/C X-AXIS	622-352-023
0.800	35	ECIDP 0.800 A/C X-AXIS	622-352-034

Regional Offices

For local contact information, please visit our website: www.geinspectiontechnologies.com.

Americas

United States

50 Industrial Park Road
Lewistown, PA 17044
+1 866 243 2638 (toll free)
+1 717 242 0327

Brazil

Av. Maria Coelho de Aguiar, 215
Building C, 6th floor
São Paulo, SP 05804-900
+ 55 11 3614 1840

Europe

Germany

Robert Bosch Strasse 3
50354 Huerth
+49 2233 6010

Hungary

East Gate Business Park, Building F2
Fót 2151
Hungary
+36 27 565 000

Asia & Middle East

Singapore

31 Kaki Bukit Road 3
#04-09/11 Techlink
Singapore 417818
Tel: +65 6213 5500

China

5F, Building 1, No.1 Huatuo Road,
Zhangjiang High-Tech Park,
Shanghai 201203
+86 800 915 9966 (toll-free)
+86 (0) 21-3877 7888

United Arab Emirates

11th Floor, City Tower 2
P.O. Box 11549
Sheikh Zayed Road
Dubai
+971 43131234

India

Technosoft Knowledge Gateway
2nd Floor, Plot No. B-14, Road No.-1
Near MIDC Bldg, Wagle Estate,
Near Mulund Check Naka,
Thane (West) - 400 604
+9122-40793105



www.gesensinginspection.com

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