

GE  
Measurement & Control

# 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

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