



**THE INDUSTRY'S BEST**

**PROXIMITY PROBE SYSTEMS**



# WHAT WE OFFER

CTC offers a complete line of proximity probe systems designed, built and tested to endure prolonged use in the harshest industrial environments. PRO Line proximity probe systems are available in FFv, 8 mm, 11 mm, and 25 mm systems. The variety of probe sizes offered allows for accurate and precise machinery measurements for applications involving radial dynamic, axial rotor position, 4-20 mA, and thermal case expansion measurements. Complete PRO proximity probe systems are compatible with all standard condition monitoring software, including Bently Nevada® software.

## PROBE TIP OPTIONS:

- ▶ 5 mm FFv, 8 mm, 11 mm, and 25 mm tip
- ▶ Standard cable and armor cable
- ▶ AISI 316L stainless steel probe case material



## PROXIMITY PROBE ACCESSORIES:



ENCLOSURES



REVERSE  
MOUNT  
HOUSING

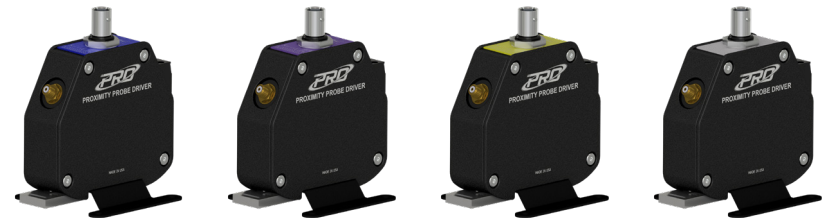


MOUNTING  
BLOCKS &  
BUSHINGS

## COMPLETE YOUR PROXIMITY PROBE ASSEMBLY:

### DRIVERS

- ▶ 5 mm FFv, 8 mm, 11 mm, and 25 mm
- ▶ BNC isolated output
- ▶ 4-20 mA or voltage terminal block output



### EXTENSION CABLES

- ▶ Standard cable and armor cable



- ▶ Single-sided and double-sided NPT Fittings



# PROXIMITY PROBE MOUNTING OPTIONS

LEARN ABOUT THE THREE MAIN WAYS TO MOUNT PROXIMITY PROBES

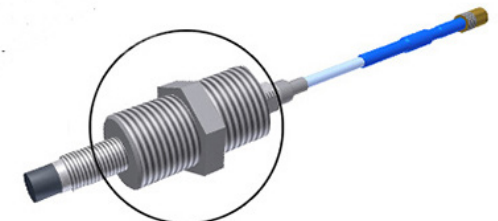
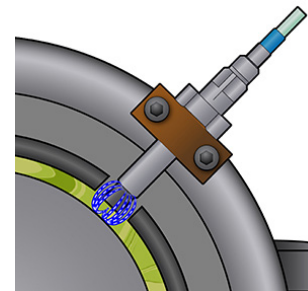
## 1. INTERNAL MOUNTING:

Internal mounting refers to the mounting of eddy current probes completely inside the machine or bearing housing with **PRO Line DM902** series brackets (or with custom-designed and manufactured brackets). Internal mounting allows the probe to measure the shaft surface, minimizes installation costs, and offers very precise measurement of the shaft position and vibration.



## 2. THROUGH MOUNTING:

Through mounting, also known as 'internal / external' mounting, is where the probe is mounted through the bearing casing using a mounting adapter bushing like **PRO Line DM901 and DM903**, and the casing is counter bored to prevent the probe from side sensing or providing false readings from the bearing housing. This allows external access to the probe while also allowing the probe tip to be internal to the bearing housing or machine.



## 3. REVERSE MOUNT HOUSING (PRO Line DM91000):

External proximity probe mounting is typically used when other methods are not available. Special care must be given to the quality of the shaft surface, and mechanical protection of the exposed probes and cables is required. This method offers easy access to the probes and low installation costs. However, exposed areas of the shaft may experience scuffing, scratching, or rust which limits the measurement quality of the probes.



# PRO LINE HIGHLIGHTS

*THE PRO LINE OF PROXIMITY PROBES FEATURES CTC'S BEST-IN-CLASS CONSTRUCTION, OFFERINGS AND WARRANTY. SEE WHY CUSTOMERS PURCHASE PRO LINE PROXIMITY PROBE PRODUCTS TIME AND TIME AGAIN:*



FASTER LEAD TIMES



ENHANCED DURABILITY:

- ▶ AISI 316L stainless steel probe case
- ▶ IP68 rated
- ▶ Aluminum driver case design ensures robust driver mounting



DRIVER CALIBRATION OPTIONS FOR A VARIETY OF TARGET MATERIALS:

- ▶ AL7075-T6 Aluminum Alloy
- ▶ 360 Brass Alloy
- ▶ 4140 Steel
- ▶ C1045 Steel
- ▶ 17-4 Stainless Steel
- ▶ 304 Stainless Steel
- ▶ 316L Stainless Steel
- ▶ 420 Stainless Steel



COMPREHENSIVE OFFERINGS:

- ▶ FFv 5 mm, 8 mm, 11 mm, and 25 mm options
- ▶ Variety of thread sizes
- ▶ Intrinsically safe offerings
- ▶ Mounting hardware, enclosures and drivers



BUILT TO LAST. PROTECTED FOR LIFE.

All PRO Line products are backed by an industry-leading lifetime warranty on materials and workmanship.

# HAVE THE CONFIDENCE OF A PRO

## PROXIMITY PROBE COMPARISON

SPECIFICATION FEATURE	PRO LINE PROBES	COMPETITORS' PROBES
<b>WARRANTY</b>	<b>Lifetime warranty on materials and workmanship</b>	<i>Three year limited warranty</i>
<b>LEAD TIME</b>	<b>Weeks</b>	<i>Months</i>
<b>PROBE CASE MATERIAL</b>	<b>AISI 316L stainless steel</b>	<i>AISI 304 stainless steel</i>
<b>PROBE TIP RATING</b>	<b>IP68</b>	<i>Specialty probes needed</i>
<b>PROBE TIP PRESSURE RATING</b>	<b>Viton® O-ring seal tested to 100 psi.</b>	<i>Sealing material consists of a Viton® O-ring</i>
<b>CABLE JACKET</b>	<b>Thicker cable jacket for increased durability when pulling through conduit</b>	<i>Tears through when pulling through conduit</i>
<b>REVERSE MOUNT FFv PROBE OPTIONS</b>	<b>1/4-24 thread, M8x1 thread, 3/8-24 thread, M10x1 thread</b>	<i>3/8-24 thread, M10x1 thread</i>
<b>TEMPERATURE RATINGS</b>	<b>-51 °C to 177 °C (-60 °F to 350 °F)</b>	<i>-51 °C to 177 °C (-60 °F to 350 °F)</i>
<b>LINEAR RANGE 5 mm (FFv)</b>	<b>10 - 70 Mils (60 Mils)</b>	<i>10 - 70 Mils (60 Mils)</i>
<b>LINEAR RANGE 8 mm</b>	<b>10 - 90 Mils (80 Mils)</b>	<i>10 - 90 Mils (80 Mils)</i>
<b>LINEAR RANGE 11 mm</b>	<b>20 - 180 Mils (160 Mils)</b>	<i>20 - 180 Mils (160 Mils)</i>
<b>RECOMMENDED GAP 5 mm FFv PROBE</b>	<b>40 Mils</b>	<i>40 Mils</i>
<b>RECOMMENDED GAP 8 mm PROBE</b>	<b>50 Mils</b>	<i>50 Mils</i>
<b>RECOMMENDED GAP 11 mm PROBE</b>	<b>100 Mils</b>	<i>100 Mils</i>

# HAVE THE CONFIDENCE OF A PRO

## PROXIMITY PROBE DRIVER COMPARISON

SPECIFICATION FEATURE	PRO LINE DRIVERS	COMPETITORS' PROBES
<b>WARRANTY</b>	Lifetime warranty on materials and workmanship	Three year limited warranty
<b>LEAD TIME</b>	Weeks	Months
<b>DRIVER OUTPUTS</b>	BNC isolated output and terminal block	Terminal block
<b>DRIVER INPUT CONNECTIONS</b>	Four position, screw clamp, pluggable terminal block	Spring cage connections
<b>4-20MA GAP DRIVER</b>	FFv, 8 mm, 11 mm, 25 mm	Not available
<b>4-20mA RADIAL AND AXIAL DRIVER</b>	FFv, 8 mm, 11 mm, 25 mm	Probes only
<b>4-20mA SPEED DRIVER</b>	FFv, 8 mm, 11 mm	Not available
<b>ROBUST DRIVER MOUNTING</b>	Aluminum mounting hardware	Plastic mounting hardware
<b>MATERIAL SPECIFICATIONS</b>	Standard offerings of: 17-4, 304, 316L, 360, 420, 4140, 7075	4140
<b>4-20mA RADIATED IMMUNITY*</b>	Maximum current increase of 3.13% of 16 mA current range	maximum current increase of 54.38% of 16mA current range
<b>TEMPERATURE RATINGS</b>	-51 °C to 177 °C (-60 °F to 350 °F)	-51 °C to 177 °C (-60 °F to 350 °F)
<b>FREQUENCY RESPONSE 5 mm</b>	0 - 10 kHz: +0, -3 dB typical with up to 1000 ft of field wiring	0 - 10 kHz: +0, -3 dB typical with up to 1000 ft of field wiring
<b>FREQUENCY RESPONSE 8 mm</b>	0 - 10 kHz: +0, -3 dB typical with up to 1000 ft of field wiring	0 - 10 kHz: +0, -3 dB typical with up to 1000 ft of field wiring
<b>FREQUENCY RESPONSE 11 mm</b>	0 - 8 kHz: +0, -3 dB typical with up to 1000 ft of field wiring	0 - 8 kHz: +0, -3 dB typical with up to 1000 ft of field wiring

\* tested frequencies of 103 MHz - 180 MHz

# YES, IT'S COVERED!

At CTC, we understand that predictive maintenance is vital across a wide array of industrial applications. That's why we've developed the industry's most durable and reliable line of proximity probe systems including proximity probes, cables, drivers, enclosures, and mounting hardware and accessories - all compatible with any standard condition monitoring software.

For more than a quarter of a century, CTC has stood behind its promise to bring you the best industrial solutions to simplify 24/7 protection of critical machinery and applications, designed to withstand long-term use in the harshest industrial environments.

**We're so proud of our PRO Line proximity probe systems we back them with the industry's best-in-class lifetime warranty on materials and workmanship.**

***Faulty materials?*** Covered.

***Faulty workmanship?*** Covered.

***Loose connector assemblies or any other material or workmanship defects?*** Yes, it's covered.

We wouldn't have you do business any other way.



TODD COOK  
Co-Owner



LAURA COOK  
Co-Owner



CHARLOTTE COOK  
Director of  
Engineering &  
Marketing



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# CONTACT CTC

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*CTC IS HERE TO HELP WITH YOUR VIBRATION ANALYSIS NEEDS*

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