# PROXIMITY PROBES



### WHAT WE OFFER

### COMPLETE LINE OF PROXIMITY PROBES AND RELATED HARDWARE, COMPATIBLE WITH ALL STANDARD CONDITION MONITORING SOFTWARE

CTC offers a complete line of proximity probe systems designed, built and tested to endure prolonged use in the harshest industrial environments. PRO 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 Bentley Nevada® software.

#### PROBE TIP FEATURED OPTIONS:

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





#### **COMPLETE YOUR PROXIMITY PROBE ASSEMBLY:**

#### **DRIVERS**

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



#### **EXTENSION CABLES**

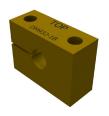
Standard cable and armor cable



#### **PROXIMITY PROBE ACCESSORIES:**



1-6 channels



MOUNTING BLOCKS



MOUNTING BUSHINGS



## PROXIMITY PROBE MOUNTING OPTIONS

#### LEARN ABOUT THE THREE MAIN WAYS TO MOUNT PROXIMITY PROBES

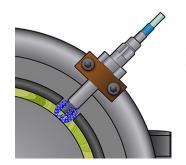
#### 1. INTERNAL MOUNTING:

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 prove 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:

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 a 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**

Standard 10 day lead time



#### **ENHANCED DURABILITY**

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



#### DRIVER CALIBRATION OPTIONS TO A VARIETY OF TARGET MATERIALS

▶ 4140 Steel

- ► 17-4 Stainless Steel
- 420 Stainless Steel
- ► 360 Brass Alloy

► AL7075-T6

#### **COMPREHENSIVE OFFERINGS:**

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



BUILT TO LAST. PROTECTED FOR LIFE.
ALL PRO PRODUCTS ARE BACKED BY A LIFETIME WARRANTY ON MATERIALS AND WORKMANSHIP.

# HAVE THE CONFIDENCE OF A PRO

#### PROXIMITY PROBE COMPARISON

SPECIFICATION FEATURE	COMPETITORS' PROBES	PRO PROXIMITY PROBES
WARRANTY	Three year limited warranty	Lifetime warranty on materials and workmanship
LEAD TIME	Weeks	Days
PROBE CASE MATERIAL	AISI 304 stainless steel	AISI 316L stainless steel
PROBE TIP RATING	Specialty probes needed	IP68
PROBE TIP PRESSURE RATING	Sealing material consists of a Viton® O-ring. Probes are not pressure tested prior to shipment	Viton® O-ring seal tested to 100 psi. Probes are not pressure tested prior to shipment
CABLE JACKET	Tears through when pulling through conduit	Thicker cable jacket for increased durability when pulling through conduit
REVERSE MOUNT FFv PROBE OPTIONS	%-24 thread, M10x1 thread	1/4-24 thread, 3/4-24 thread, M8x1 thread, M10x1 thread
TEMPERATURE RATINGS	-51 °C to 177 °C (-60 °F to 350 °F)	-51 °C to 177 °C (-60 °F to 350 °F)
LINEAR RANGE 5 mm (FFv)	10 - 70 Mils (60 Mils)	10 - 70 Mils (60 Mils)
LINEAR RANGE 8 mm	10 - 90 Mils (80 Mils)	10 - 90 Mils (80 Mils)
LINEAR RANGE 11 mm	20 - 180 Mils (160 Mils)	20 - 180 Mils (160 Mils)
RECOMMENDED GAP 5 mm FFv PROBE	40 Mils	40 Mils
RECOMMENDED GAP 8 mm PROBE	50 Mils	50 Mils
RECOMMENDED GAP 11 mm PROBE	100 Mlls	100 Mils

## HAVE THE CONFIDENCE OF A PRO

#### PROXIMITY PROBE DRIVER COMPARISON

SPECIFICATION FEATURE	COMPETITOR'S DRIVERS	PRO PROX PROBE DRIVERS
WARRANTY	Three year limited warranty	Lifetime warranty on materials and workmanship
LEAD TIME	Weeks to months	10 days
DRIVER OUTPUTS	Terminal block	BNC isolated output and terminal block
DRIVER INPUT CONNECTIONS	Spring cage connections	Four position, screw clamp, pluggable terminal block
4-20 mA GAP DRIVER	Not available	FFv, 8 mm, 11 mm, 25 mm
4-20 mA RADIAL AND AXIAL DRIVER	Probes only	FFv, 8 mm, 11 mm, 25 mm
4-20 mA SPEED DRIVER	Not available	FFv, 8 mm, 11 mm
ROBUST DRIVER MOUNTING	Plastic mounting hardware	Aluminum mounting hardware
MATERIAL SPECIFICATIONS	4140	Standard offerings of: 4140, 17-4, 420, 360, 7075
4-20 mA RADIATED IMMUNITY*	Maximum current increase of 54.38% of 16 mA current range	Maximum current increase of 3.13% of 16 mA current range
TEMPERATURE RATINGS	-51 °C to 177 °C (-60 °F to 350 °F)	-51 °C to 177 °C (-60 °F to 350 °F)
FREQUENCY RESPONSE 5 mm	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
FREQUENCY RESPONSE 8 mm	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
FREQUENCY RESPONSE 11 mm	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

<sup>\*</sup> 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, 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 Proximity Probe Systems**, which is why we back our products with the industry's best-in-class Lifetime Warranty on materials and workmanship.

All PRO products are backed by a 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



ANDREW COOK
Director
of Sales



Charlotte Cook

CHARLOTTE COOK

Director of

Marketing



CTC IS HERE TO HELP WITH YOUR VIBRATION ANALYSIS NEEDS

+01 585.924.5900

SALES@CTCONLINE.COM

CONNECTION TECHNOLOGY CENTER, INC. | 7939 RAE BLVD | VICTOR, NY 14564 | USA

