

Intrinsically Safe DD100170 Series



Intrinsically Safe 8 mm PRO Proximity Probe Driver for Eddy Current Probe, 4-20 mA Output

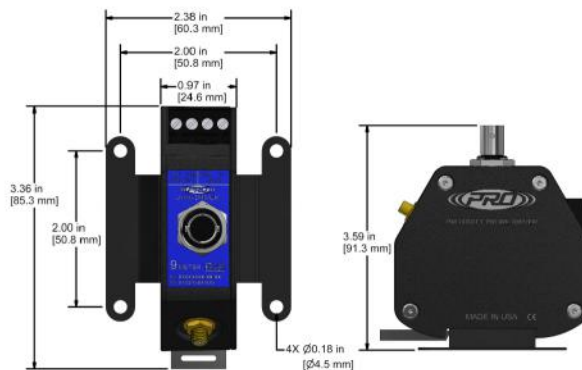


Product Features

Continuous Monitoring in Hazardous Locations

Driver Assembly offers multiple options for mounting and easy connection via screw terminals

- ▶ 4-20 mA current loop provides power to the driver, and a displacement output proportional to the DC gap
- ▶ Flexible system configuration
- ▶ Upgraded to include SecureLock connector



Specifications

Temperature Range	-49°F (-45°C) to 185°F (85°C)
Enclosure	Anodized Aluminum
Probe Connector	SecureLock
Power & Output Connector	4 Position Terminal Block & BNC
Input Voltage	17.5 to 30 VDC (Loop Powered)
Linear Range	10 - 90 mils (.25 - 2.30 mm)
Nominal Voltage Output	0.20 mA/mil (7.87 mA/mm)
4-20 mA Output Proportional To	DC Gap

Built to Order

Optional Regulatory Approvals

US & Canada:

Class I Division 1 Groups A, B, C, D
 Class II Division 1 Group E, F, G
 Class III
 Class I Zone 0 AEx ia IIC
 Class I Division 2 Groups A, B, C, D
 Class II Division 2 Groups E, F, G
 Ex ia IIC Ga

ATEX:

SIRA 16ATEX2084X
 Ex ia IIC

International (IECEx):

IECEx CSA 16.0017X
 Ex ia IIC

Temperature Codes:

T4 = -45°C to 100°C
 T5 = -35°C to 85°C



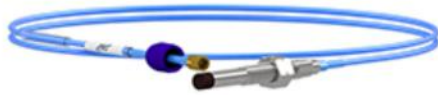
CSA, ATEX, IECEx Approvals Require Intrinsically Safe Barrier Driver must be mounted in a NEMA 4x and/or IP6x enclosure
FOR REFERENCE ONLY, PLEASE REFER TO CONTROL DRAWING

Lifetime Warranty on Materials & Workmanship

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Intrinsically Safe DP1001

Intrinsically Safe 8 mm PRO Proximity Probes



Product Features

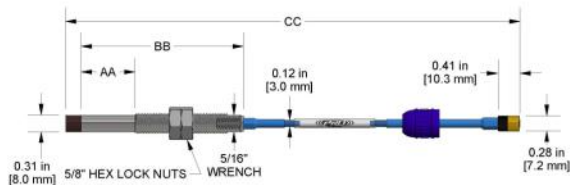
Continuous Monitoring in Hazardous Locations

Measures shaft vibration and displacement on machinery with fluid film bearings

- ▶ 8 mm probe tip diameter with 3/8-24 or M10x1 threaded body
- ▶ Probe tip and body sealed to prevent leaking through cable
- ▶ Upgraded to include SecureLock connector

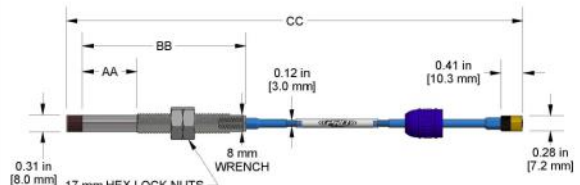
DP100101

Standard Mount



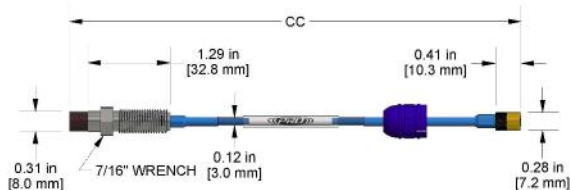
DP100103

Standard Mount



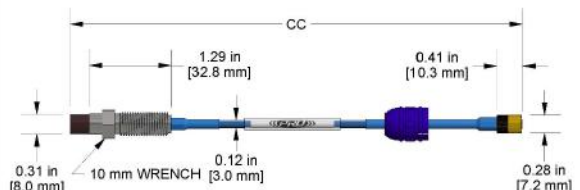
DP100105

Reverse Mount



DP100106

Reverse Mount



Lengths AA, BB, and CC are configurable

Specifications

Temperature Range	-49 to 350°F (-45 to 177°C)
Sensitivity	-200 mV/mil (-7.87 V/mm) (1 mil = 0.001")
Material	FEP Cable Jacket with 316L Stainless Steel Probe Body
Case Thread	3/8-24 or M10x1
Wrench Flats	5/16 in or 8 mm (Standard Mount), 7/16 in or 10 mm (Reverse Mount)
Rating	IP68
Connector	SecureLock

Built to Order

Regulatory Approvals

US & Canada:

Class I Division 1 Groups A, B, C, D
Class II Division 1 Groups E, F, G
Class III
Class I Zone 0 AEx ia IIC
Class I Division 2 Groups A, B, C, D
Class II Division 2 Groups E, F, G
Ex ia IIC Ga

ATEX:

SIRA 16ATEX2084X
Ex ia IIC

International (IECEx):

IECEx CSA 16.0017X
Ex ia IIC

Temperature Codes:

T4 = -45°C to 100°C
T5 = -35°C to 85°C



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Intrinsically Safe DP1001 with Armor

Armored Intrinsically Safe 8 mm PRO Proximity Probes



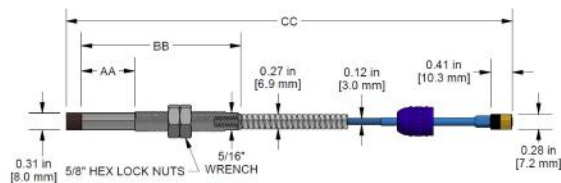
Product Features

Continuous Monitoring in Hazardous Locations

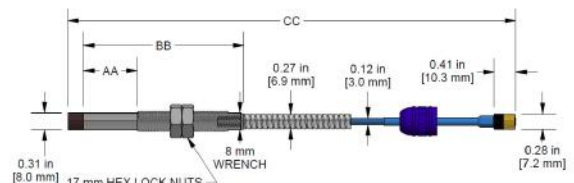
Measures shaft vibration and displacement on machinery with fluid film bearings

- ▶ 8 mm probe tip diameter with 3/8-24 or M10x1 threaded body
- ▶ Probe tip and body sealed to prevent leaking through cable
- ▶ Upgraded to include SecureLock connector

DP100102
Standard Mount



DP100104
Standard Mount



Lengths AA, BB, and CC are configurable

Specifications

Temperature Range	-49 to 350°F (-45 to 177°C)
Sensitivity	-200 mV/mil (-7.87 V/mm) (1 mil = 0.001")
Material	FEP Cable Jacket with 316L Stainless Steel Probe Body
Case Thread	3/8-24 or M10x1
Wrench Flats	5/16 in or 8 mm (Standard Mount), 7/16 in or 10 mm (Reverse Mount)
Rating	IP68
Connector	SecureLock

Built to Order

Regulatory Approvals

US & Canada:

Class I Division 1 Groups A, B, C, D
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Class III
Class I Zone 0 AEx ia IIC
Class I Division 2 Groups A, B, C, D
Class II Division 2 Groups E, F, G
Ex ia IIC Ga

ATEX:

SIRA 16ATEX2084X
Ex ia IIC

International (IECEx):

IECEx CSA 16.0017X
Ex ia IIC

Temperature Codes:

T4 = -45°C to 100°C
T5 = -35°C to 85°C



Intertek
5025350

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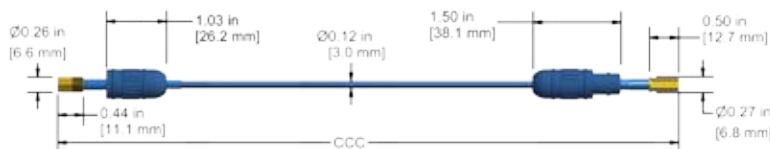
DC100130 Series

Intrinsically Safe, PRO 8mm Series, Extension Cable

Standard Cable



Armored Cable



REGULATORY APPROVALS

IECEX
CSA 16.0017X



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US & Canada (CSA):

Class I Division 1 Groups A, B, C, D
Class II Division 1 Groups E, F, G
Class III
Class I Zone 0 AEx ia IIC
Class I Division 2 Groups A, B, C, D
Class II Division 2 Groups E, F, G
Ex ia IIC Ga

ATEX:

SIRA 16ATEX2048X
Ex ia IIC

International (IECEX):

IECEX CSA 16.0017X
Ex ia IIC

Temperature Codes:

T4 = -45°C to 100°C
T5 = -35°C to 85°C

Product Features

Continuous Monitoring in Hazardous Locations

PRO DC1001 extension cables combine with DP1001 series probes and DD1001 series drivers to form a complete assembly to monitor vibration and shaft position.

- Matched with PRO 8 mm probes and driver assemblies for cost effective and reliable measurements
- Excellent chemical resistance
- Protective sleeves to cover connections

Specifications

Temperature Range: -31°F (-35°C) to 350°F (177°C)
Connector pull strength up to 70 lbs
Matched to 5 & 9 meter system lengths
Male & female miniature 12-32 threaded connectors
FEP jacketed cable, available with optional 304 stainless steel armor jacket

Ordering Information

DC100130

CCC

05

System Length
(REFERENCE ONLY)

50 = 5.0 meter

90 = 9.0 meter

Total Length of Extension Cable	Armor	Regulatory Approval
040 = 4.0 meter	02 = No, with connector protector 03 = Yes, with connector protector	05 = CSA, ATEX, IECEx Approvals
045 = 4.5 meter		
080 = 8.0 meter		
085 = 8.5 meter		



Example Part Number: **DC100130-040-02-05**

4.0 meter total length, no armor, with connector protector, CSA, ATEX, IECEx certified



Read Before Purchasing:
Important information on Regulatory Approvals and Requirements on Pages 421-423



PROTECTION & RELIABILITY INSTRUMENTS

Lifetime Warranty on Materials & Workmanship