

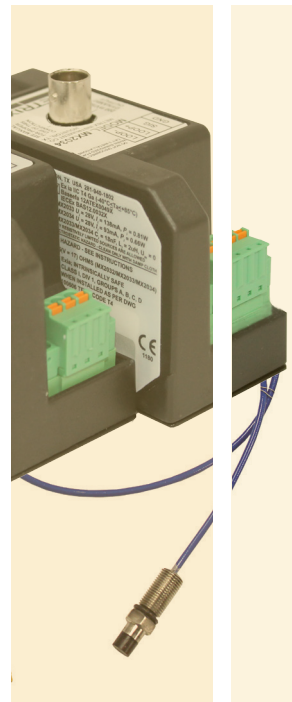


DIGITAL PROXIMITY SYSTEM (DPS)

Any Probe
(5mm, 8mm, 11mm)

Any Cable
(<12m)

Any Material
(Rotor)



Field Configurable
API 670 Compliant
World class sales and support

Metrix Digital Proximity System (DPS)

Metrix is again revolutionizing the industry with our Digital Proximity System. Imagine being able to support a multitude of cable lengths, target materials and older probe systems with just a single device. Our new Digital Proximity System (DPS) combines the performance of a fully API 670 compliant eddy-current proximity measurement system with the flexibility of digital configurability. DPS saves our customers time and money.

Full API 670 Compliance

The DPS was designed to fully comply with API 670 for linear range, interchangeability, standard probe mechanical configurations and all other details.

Reduced Spare Parts Inventory

The DPS reduces the requirements for spare parts by allowing a single type of driver or transmitter to be field-configured for a wide range of probe types, cable lengths and target materials including 8mm ceramic and 11mm probe tips.

Interchangeability

The New MX8030 triaxial probes and MX8031 triaxial extension cables with VibeLock™ connectors, as well as, MX2030 probes and MX2031 extension cables, are fully interchangeable with Bently Nevada¹ (BN) 3300 and 3300XL 5mm/8mm probe systems. This compatibility provides greater choice of suppliers without the need to replace installed probes, cables and drivers.

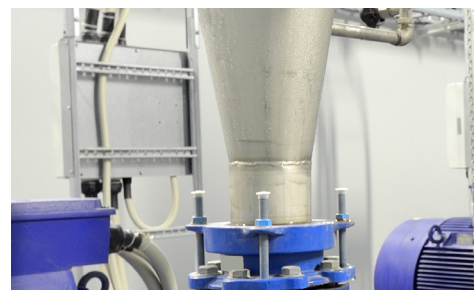
Support for Older Probe Systems

Replacing a complete proximity transducer system can be expensive, and impractical when a machine must keep running and probes/cables are buried inside. DPS supports older probe systems, cable lengths, and target materials, using a single driver or transmitter. MX2033 drivers and MX2034 transmitters allow the user to change the configuration in the field for use with virtually any Metrix or BN proximity probe and cable.

DPS Features

Digitally Configure for:

- Different Common Shaft Materials
- Unknown Common Shaft Materials
- Trimmable System Lengths
- TightView™ for Limited Clearances
- Other Manufacturer's Probes and Cables
- Older Probes and Cables
- Field Configurable Changes
- No Cross Talk
- Configurable Spike Suppression



The **DPS** is a 3-part system consisting of a **Probe Driver or Transmitter, Probe and Extension Cable**.

MX2033 (DRIVER) or MX2034 (TRANSMITTER)

A driver or transmitter is available, depending on the required signal output format: MX2033, 3-Wire Driver and MX2034, 4-20 mA Transmitter. The models are fully compatible with a large variety of probes and cables from Metrix and other manufacturers.



MX2033 3-Wire Probe Driver: Dynamic Voltage Output (mV/ μ m or mV/mil)

The MX2033 signal output is compatible with industry-standard continuous vibration monitoring systems and is in the format specified in API Standard 670. It uses -24Vdc excitation and provides the output signal in mV/ μ m (mV/mil), typically 7.87 mV/ μ m (200mV/mil).



MX2034 4-20 mA Transmitter: 4-20 milliamp Current Output (mA/ μ m or mA/mil)

The MX2034 signal output provides **thrust, radial vibration, or shaft speed** measurements directly to PLCs, DCSs, SCADA systems, or other instrumentation that accepts an ISA-standard 4-20 mA signal, without the use of a separate monitor system. The transmitter is powered by +24 Vdc, supplied by the current loop. The device is user-configurable to function as a radial vibration transmitter (where the 4-20 mA signal is proportional to peak-peak vibration amplitude), as an axial position transmitter (where the 4-20 mA signal is proportional to average probe gap), or as a tachometer (where the 4-20 mA signal is proportional to shaft speed). A short-circuit protected BNC connector provides convenient access to the raw vibration signal when connecting to signal analyzers, portable data collectors and test instrumentation.

PROBE SERIES MX8030 and MX2030



MX8030 probe series consist of 5mm and 8mm tip diameter probes with VibeLock™* Connectors and Triaxial Cables. The 8mm probe comes in a ceramic tip version used in harsh environments. These models are available with all standard thread sizes and body configurations required in API 670 Standard. Both probes offer a full 80 mil (2mm) range, and are designed to offer full API 670-compliant performance characteristics when used with a matching MX8031 extension cable and MX2033 driver. MX8030 probes are fully interchangeable with Bently Nevada** (BN) 3300 and 3300 XL 5mm/8mm probes.

MX2030 probe series is the same as the MX8030 series except it is used with a matching MX2031 extension cable and does not include VibeLock* connectors or triaxial cables.











EXTENSION CABLE SERIES MX8031 AND MX2031



MX8031 extension cables are available with and without protective armor and feature VibeLock™* Connectors and Triaxial Cables. They are compatible with all Metrix MX8030 series 5mm & 8mm probe systems, and Bently Nevada** (BN) 3300 / 3300XL 5mm & 8mm probe systems.

MX2031 extension cables are the same as the MX8031 series except it is used with a matching MX2030 proximity probe and does not include VibeLock* connectors or triaxial cables.

HAZARDOUS AREA APPROVALS

AREA	PROBE/CABLE	DRIVER
North America	Class I, Div 1, Grps A,B,C,D -40°C to +177°C Intrinsically Safe and Non-Incendive 	Class I, Div 1, Grps A,B,C,D, T4 -40°C ≤ Ta ≤ +85°C Intrinsically Safe (MX2034) 
		Class I, Div 2, Grps A,B,C,D, T4 -40°C ≤ Ta ≤ +85°C Non-Incendive (MX2034) 
International ATEX/IECEX 	 II 1G Ex ia IIC T3 Ga -40°C ≤ Ta ≤ +177°C  II 1G Ex ia IIC T4 Ga -40°C ≤ Ta ≤ +110°C Intrinsically Safe	 II 1G Ex ia IIC T4 Ga -40°C ≤ Ta ≤ +85°C Intrinsically Safe
	 II 3G Ex nA IIC T3 Gc -40°C ≤ Ta ≤ +177°C  II 3G Ex nA IIC T4 Gc -40°C ≤ Ta ≤ +110°C Non-Incendive	 II 3G Ex nA IIC T4 Gc -40°C ≤ Ta ≤ +85°C Non-Incendive

All Metrix proximity probes and cables fall under the 10,000 series.

MX203X SERIES COMPATIBILITY TABLE	
Series	System Length (m)
10000 & 7200	5 & 9
3300XL	5 & 9
3300 NSV	5 & 7
3000	15 & 20 feet

NOTES:

1. Registered trademark(s) of Bently Nevada®.

Accessories

- MX8030 Probe
- MX8031 Extension cable
- MX2030 Probe
- MX2031 Extension cable
- 100527 DPS user label kit
- 9647 DIN to 4 hole flat base mounting adapter
- 5497PM Reverse Probe Mount
- 5499 Heavy Duty Proximity Probe Housing
- 9060 Static Calibrator
- MX2040 Dynamic Signal Checker

Visit our website for a full list of proximity accessories.



Metrix Instrument Co. • 8824 Fallbrook Dr. Houston, TX 77064
 Call +1 281.940.1802 www.metrixvibration.com • dps@metrixvibration.com

