

Displacement (LVDTs)

Our Linear Variable Differential Transformers (LVDT) are available in two series; Industrial and Miniature.

Industrial

This series has been designed for use in relatively harsh environments and processing areas. The following options allow you to optimise the LVDT.

Standard Spec	Build Options	
Range: ± 0.25 to ± 550 mm Body diameter: 22mm Sealed to IP65 Temperature range: -30°C to 85°C	<ul style="list-style-type: none"> Plain core and extension Spring-loaded core and extension; OR Core and extension with rod end bearings 	
Electrical Output Options Either: <ul style="list-style-type: none"> AC (4 or 6 wires) 0 to 5V DC (3 wire) 0 to 10V DC (3 wire) ± 2.5V DC (bipolar) (4 wire) ± 5V DC (bipolar) (4 wire) 4-20mA (3 wire) 	Cable outlet: <ul style="list-style-type: none"> Radial OR Axial Sealed to IP68 Temperature range: -30°C to 150°C	

Please note, not all option permutations (of options) are available. For further information, please visit www.monitran.com and download our LVDT Industrial Data-sheet which includes a detailed selection chart.

Miniature

LVDTs in this series are ideal for use in applications where space is limited. Also, their small form-factor makes them suitable for use in load cells, pressure transducers, closed-loop control systems and their OEM applications. The following options allow you to optimise the LVDT.

Standard Spec	Build Options	
Range: ± 0.25 to ± 50 mm Body diameter: Up to 9.5mm Sealed to IP54 Temperature range: -30°C to 85°C	<ul style="list-style-type: none"> Core only; Core and extension; OR Spring - loaded core and extension 	
Electrical Output Options Either: <ul style="list-style-type: none"> Ac (4 or 6 wires) In-Line signal conditioner 	Cable outlet: <ul style="list-style-type: none"> Radial OR Axial Temperature range: -30°C to 150°C	

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Proximity (Eddy Current Probes & Drivers)

Our eddy current probes consist of a precision-wound copper coil inside a chemical and temperature resistant PEEK tip, and our drivers output either voltage or current (in the 4 to 20mA range).

The MTN/EP080 (probe) and MTN/ECPD (driver) to the right are a common pairing, and are suitable for use in most industries. Applications include: pump monitors, turbines, DC gap machine tools and gauges. Cable length between probe and driver can be up to 9m.



Sensitivity:
8mV/ μ m (nominal)
Range: 0 to 2mm
Linearity: 1% nominal
Operating temperature:
-30 to 180°C
Diameter: 5mm
Length: 37mm
Thread: M8



Power requirement:
-24V DC @ 30mA
Operating temperature:
-20 to 80°C

For further information, please visit www.monitran.com and download our MTN/EP080 Data-sheet which also includes additional technical specifications for the MTN/ECPD driver.

Other probes available include:

MTN/EP200

Its operating gap is from 0 to 5mm and its sensitivity is 3.6mV/ μ m (nominal). Its dimensions are 13mm (OD) by 62mm (length, incl. tip) and it has M16 thread. A derivative, the **MTN/EP200F**, has low-profile mount. Both are supplied with an **MTN/ECPD** driver as standard.

MTN/EP340

Its operating gap is 0 to 8.5mm and its sensitivity is 2mV/ μ m (nominal). Its dimensions are 20mm (OD) and 75mm (length, incl. tip) and it has an M24 thread. A derivative, the **MTN/EP340F**, has low-profile mount. Both are supplied with an **MTN/ECPD** driver as standard.

MTN/EP480

Its operating gap is 0 to 12mm and its sensitivity is 1.4mV/ μ m (nominal). Its dimensions are 25mm (OD) and 99mm (length, incl. tip) and it has an **M30** thread. It is supplied with an **MTN/ECPD** driver as standard.

Other drivers available include:

MTN/ECPD24V

It is also a **voltage output** driver suitable for conventional +24V DC power supplies. It outputs 0 to 16V proportional to **probe gap**.

MTN/ECPD/78

It is also a **voltage output** driver suitable for conventional +24V DC power supplies. It outputs 0 to 10V proportional to **probe gap**.

MTN/ECPD60

It is +24V DC three-wired loop-powered **current output** driver. It outputs 4 to 20mA proportional to **vibration**.

MTN/ECPD2-AC

It is +24V DC two-wired loop-powered **current output** driver. It outputs 4 to 20mA proportional to **vibration**.

MTN/ECPD2-DC

It is also +24V DC two-wired loop-powered **current output** driver. It outputs 4 to 20mA proportional to **probe gap**.

MTN/ECPD85

It is +24V DC three-wired loop-powered **current output** driver, outputting 4 to 20mA proportional to **probe gap**.

Cables

As standard, each eddy current probe in our range will be supplied with 1m of integral cable; coaxial, ETFE insulation with an internal copper braid and stainless steel over braid. Extension cables (with the same characteristics) are available up to 8m in length.

About Monitran

Established in 1986 and based about 55km northwest of London, Monitran is a world leader in the design, development and manufacture of sensors and systems for vibration, proximity and displacement measurement and monitoring.

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