



SERIES 2100 NON-FLUSH LONG RANGE INDUCTIVE PROXIMITY SENSORS

MD2180-50



MD2195-75



MD21160-130

- ◆ **Base mount onto steel framework**
- ◆ **Long range of 50, 75 or 160mm when fully covered**
- ◆ **Robust encapsulated watertight design**
- ◆ **DC Sensors in 3-wire NPN or PNP connection**
- ◆ **AC Sensors in 2-wire connection**
- ◆ **Dual LED indication**
- ◆ **Fully Adjustable Sensitivity**
- ◆ **Short Circuit Protected**

Typical Applications

Mill & Process Control : Tracking the position of bar, pipe, tube or structural shapes in the Rolling Mill.

Material Handling : Replacing limit switches on automated machinery

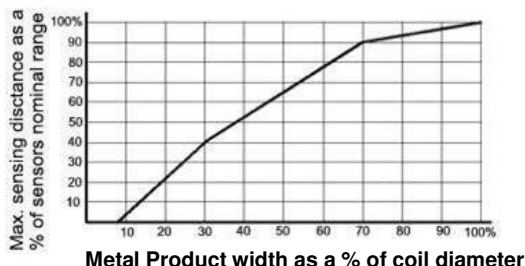
Product Description

These MD2100 Series Inductive Proximity Sensors are built specifically for installation in the harshest of industrial environments. Being that these sensors are base mounting, they are ideal for mounting into the floor-pan of roller tables in metal free area and other conveyor systems providing surrounding metalwork is greater than the set range or more from the detector front face.

The combination of large sensing distances with base mounting embedded in steel surround greater than set range allows their installation with complete physical protection. Available in two configurations, these Sensors offer a very practical solution to the detection of metal product, regardless of its shape and size.

Available in AC or DC formats for direct feedback to PC systems, while at the same time capable of switching contactors.

Establishing sensing range relative to product



As a general guideline, for reliable detection of bar, section rod or tube as it passes by the sensor, the product should cover at least 20% of the sensor length as well as be within 50% of the effective sensor range.

Sensing Distance Correction factors for various materials

Fe: 1.0 CrNi: 0.85 Brass: 54

Al: 0.5 Cu: 0.46

Where the product is expected to be above 100°C, ceramic insulation should be placed across the top face of the sensor. Sensors mounted end to end will necessitate the utilisation of alternate frequency units.

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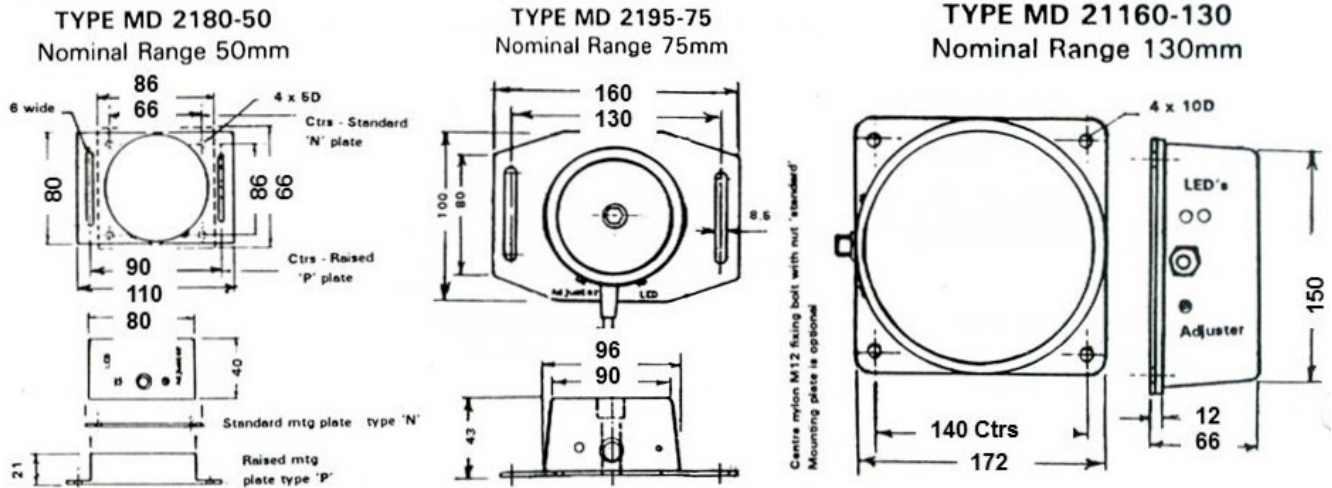
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Dimensions

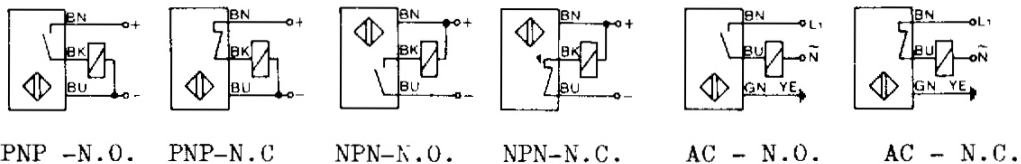


Performance

Model	2180-50	2195-75	21160-130
Nominal Range when fully covered by steel	50mm	75mm	130mm
Fully Covered Detection Area Diameter	30mm dia	90mm dia	140mm dia
Typical Min Range (20% detector diameter coverage)	30mm	20mm	40mm

General Specifications

Housing	ABS Plastic for 2180/2195 & Glassfibre for 21160
Encapsulation	Polyurethane Resin
Supply Voltage	20 to 30 vdc / 110 or 230 VAC 50/60 Hz
Switching Frequency	5 Hz
Short Circuit Protection (AC Types)	350mA
Short Circuit Protection (DC Types)	450mA
Min Load (2 wire AC Types)	7mA
Leakage Current at 110 VAC (2 wire AC)	5mA
Voltage Drop at 110 VAC (2 wire AC type)	30mA load / 16V 220 mA load / 21 V
Vibration & Shock Resistance	Better than DIN 89011 Cat 2
Watertight specification	IP65
Operating Temperature Range	10°C + 70°C
Supply Connection Cable	1.5 mtrs olifex 2/4 x 0.5mm ² standard



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We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

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