TE Connectivity’s (TE) PLCD25 platform position sensor is a highly accurate, non-contact position sensor measuring travel position in gearboxes, clutches, drivetrain and EGR valve applications. It can be configured with analog or PWM output.

The core of this sensor consists of a unique variable transformer measuring system developed by TE. A permanent magnet attached to the moving component generates a saturation zone in the high permeable core inside the transformer. The sensor detects the travel of the target magnet by sensing the position of the saturation zone which is then transformed to output position signals. The output is given as an original and complementary signal allowing the ECU to check the validity of the received signal.

This platform sensor is designed for very harsh automotive and industrial transport environments such as powertrain applications with high temperature, high vibration, shock and sealing requirements. The sensor comes pre-programmed and ready to work with the platform magnet requiring only an offset calibration.

**PRODUCT HIGHLIGHTS**

- Highly accurate, non-contact sensing for linear movement
- Robust in very harsh environments
- Plug and play deployment readiness

**PRODUCT SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Solution Name</th>
<th>Platform Position Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Focus</td>
<td>Gearbox, Clutch, Drivetrain, EGR Valve Position Sensing</td>
</tr>
<tr>
<td>Sensor Type</td>
<td>Linear Position Sensor</td>
</tr>
</tbody>
</table>

**PART NUMBERS**

x-2177733-y
PLCD25 Platform Position Sensor
for the Automotive, Industrial and Commercial Transport Industry

FEATURES & BENEFITS
• Highly accurate, non-contact sensing for linear movements
• Robust in very harsh environments: Vibration, shock, operating temperature up to +150°C
• PWM and analog interface (SENT in next generation also possible)
• Plug and play readiness
• +20 years proven deployment

MAIN SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Standard Configuration</th>
<th>Programmable (same Hardware)</th>
<th>New Hardware and Programming</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>PWM (1000 Hz): X-2177733-3 or analog X-2177733-2</td>
<td>PWM (1000 Hz) or analog</td>
<td>PWM (1000 Hz) or analog</td>
<td>-</td>
</tr>
<tr>
<td>Linear Range</td>
<td>0 … 25mm</td>
<td>0 … 25mm</td>
<td>0 … 25mm</td>
<td>-</td>
</tr>
<tr>
<td>Rotary Range</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>5V ± 0.5V</td>
<td>5V ± 0.5V</td>
<td>5V ± 0.5V</td>
<td>-</td>
</tr>
<tr>
<td>Transfer Function</td>
<td>0 … 25 mm² 10 … 90% Ua / PWM 90 … 10% Uak / PWMk Any Any</td>
<td>Magnet selection depends on travel range and airgap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnet</td>
<td>TE P/N Magnet: 2141965-1 Flexible Flexible</td>
<td>Magnet selection depends on travel range and airgap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airgap</td>
<td>6 ±0.2 mm</td>
<td>Up to 8 mm in general</td>
<td>Up to 8 mm in general</td>
<td>Airgap depends on travel range and magnet selection</td>
</tr>
</tbody>
</table>

DIMENSIONS

| Width       | 18 mm | Length | 58.4 mm (± 0.4 mm) | Height  | 40.4 mm |

CONTACT INFORMATION

NORTH AMERICA
Tel +1 800 522-6752
EUROPE
Tel +31 73-624-6999
ASIA
Australia: Tel +61 2-9840-8200
Hong Kong: Tel +852 2738-8731
Shanghai: Tel +86 21-3398-0000
Korea: Tel +82 2-3415-4500

SOUTH AMERICA
Tel +54 11-4733-2015
AFRICA
Tel +27 41-503-4500

TE AUTOMOTIVE /// PLCD25 PLATFORM POSITION SENSOR