

Pepperl+Fuchs Inductive Sensor Model NRN10-12GM40-E2-C-V1

Technical Specifications:

Device Type	Inductive sensor, non-flush (unshielded)
Sensing Distance	10 mm
Output Type	PNP, Normally Open (NO), 3-wire
Operating Voltage	10 to 30 V DC
Switching Frequency	Up to 1000 Hz
Operating Current	Max. 200 mA
Off-state Leakage Current	Approx. 0.1 µA
Voltage Drop	Max. 2 V
Response Time	< 15 ms
Housing / Material	Threaded M12, PTFE body
Operating Temperature	-25 °C to +70 °C
Status Indication	Yellow multi-hole LED
Environmental Protection	IP67
Protective Features	Reverse polarity protection, short-circuit protection, weld-immune, magnetic field re
Standards	EN/IEC 60947-5-2 and international approvals

SEO Content:

The Pepperl+Fuchs inductive sensor NRN10-12GM40-E2-C-V1 is a highly reliable and robust solution for metal detection in industrial environments. With a sensing distance of 10 mm, PNP Normally Open output, and strong resistance to magnetic fields and welding conditions, it is well-suited for use in production lines, robotics, and demanding industrial applications. Its M12 threaded PTFE housing, IP67 protection rating, and LED status indicator make this sensor a dependable choice for automation systems.

Key Features:

- 10 mm sensing distance with non-flush mounting
- PNP 3-wire output, Normally Open operation
- Switching frequency up to 1000 Hz
- Durable PTFE housing with M12 threaded design
- Yellow LED for quick status indication
- Weld-immune and magnetic field resistant
- IP67 environmental protection rating
- Stable operation between -25 °C and +70 °C

Applications:

- Metal detection in assembly and production lines
- Suitable for welding environments or strong magnetic fields
- High-speed switching for robotic applications

- Integration into industrial control cabinets and machinery
- Ideal for automotive, packaging, and process industries