Your Global Automation Partner

Q130 WD
Special Sensor for Can Detection

Detects Gaps in Can Supply

The inductive factor 1 sensor Q130WD complements Turck's wash-down sensor series with a new design for can detection. With its special materials, extended operating temperature range and resistance to high-pressure cleaning and detergents, the WD series has been specially designed for the food industry.

The Q130WD design is ideally suited for the production of cans, e.g. for beverages or canned food. The sensor monitors the continuous can feed on the conveyor line and thus prevents production errors.

The housing of the Q130WD consists of FDA-approved plastics, is specified to IP68/IP69K and is resistant to any typically used alkaline and acid cleaning agents. The switching signal and operating voltage monitoring are designed as corner LEDs to ensure the best possible visibility from every angle.

Thanks to the uprox® technology, the sensor is ideally suited for the detection of aluminium and tin cans. Due to the long overtravel range, all commercially available beverage cans and tins are reliably detected. With a height of 44 mm, the sensor can be installed very well between aluminium rails, even partially flush installation is possible. The high switching frequency of 250 Hz enables the detection of up to 900,000 cans per hour. In addition, the sensor can be used universally thanks to its complementary output.

Your Benefits

- Reliable detection of tinplate and aluminium cans thanks to uprox® Factor 1 technology
- Detects up to 900,000 cans per hour
- Maximum installation freedom
- Suitable for high-pressure cleaning due to protection class IP68/IP69K
- Protection against commercially available cleaning agents
- FDA-approved plastics

Q130WD – Special Sensor for Can Detection

- PPS-GF30 plastic
- Factor 1 for all metals
- Magnetic field resistant
- Complementary contact, PNP output
- Permanently legible type plate by laser engraving
- Extended temperature range
- M12 × 1 connector
- Continuous output signal for cans with a diameter of up to Ø156 mm

Type	**NI30U-Q130WD-VP6X2-H1141**
Ident-No.	100001786
Rated switching distance	**30 mm**
Installation condition	Non-flush, partially flush installation possible
Secured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % v. E.
Temperature drift	≤ ± 10 %, ≤ ± 20 % ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Ambient temperature	-30…+85 °C
Operating voltage	**10…30 VDC**
Residual ripple	≤ 10 % Uss
DC Rated operating current	≤ 200 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Insulation test voltage	≤ 0.5 kV
Short-circuit protection	Yes/cyclic
Voltage drop	≤ 1.8 V
Wire break protection/ Reverse polarity protection	Yes/fully protected
Output function	4-wire, complementary, PNP
Switching frequency	0.25 kHz

Design	**Rectangular, Q130**
Dimensions	130 × 57 × 40 mm
Housing material	Plastic, PPS-GF30, black
Material	Active face plastic PPS-GF30, black
Plug adapter	Metal, V4A (1.4404)
Tightening torque	Fixing screw 4 Nm
Electrical connection	M12 × 1 connector
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68/IP69K
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage display	**LED, green**
Switching status display	LED, yellow