

CR1 2X series cylindrical capacitive sensor



Feature description

- One-piece housing with high-brightness LED indicator
- IP67 protection class which is effectively moisture-proof and dust-proof
- Enhance detection distance. Sensitivity adjustment adopts multi-turn potentiometer so as to reach higher adjustment accuracy
- High reliability, excellent EMC design with protection against short circuit, overloaded and reverse polarity
- Widely used in both metal and non-metal (plastic, powder, liquid, etc.) material testing



Model specification

NPN NO	CR12XCN08DNOY-E2	PNP NO	CR12XCN08DPOY-E2
NPN NC	CR12XCN08DNKY-E2	PNP NC	CR12XCN08DPCY-E2

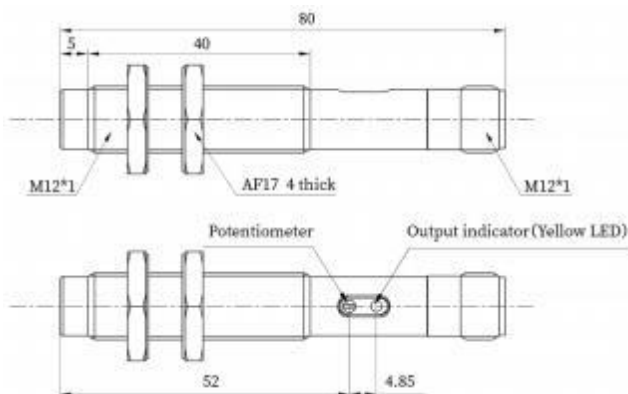
Specifications

Installation type	Non-flush	Indicator	Output indication: Yellow LED
Rated distance S_n	8mm ^①	Switching frequency	25Hz
Ensure distance S_a	≤5.76mm	Ambient temperature	When working: -25...70°C (No icing, No condensation) When storing: -30...80°C (No icing, No condensation)
Adjust the distance	3...12mm	Environment humidity	35...95%RH (No icing, No condensation)
Adjustment method	Single-turn potentiometer	Vibration resistant	10...55Hz, Dual amplitude 1mm (2 hours each in X, Y, and Z directions)
Standard test object	Fe 24*24*1t (Grounded) ^②	Impulse withstand	30g/11ms, 3 times each for X, Y, Z direction
Supply voltage	10...30VDC	High pressure resistant	1000V/AC 50/60Hz 60s
Load current	≤200mA	Insulation resistance	≥50MΩ (500VDC)
Residual voltage	≤2V	Shape specification	M12*1*80mm
Consumption current	≤20mA	Protection degree	IP67
Switch point offset [%/Sn]	±10%	Housing material	Nickel copper alloy
Temperature drift [%/Sr]	±20%	Connection type	M12 Connector
Hysteresis range [%/Sr]	3...20%	Accessories	M12 nuts × 2, Slotted screwdriver, Operation manual
Repetitive error [R]	≤5%		
Circuit protection	Short circuit protection, Overload protection, Reverse polarity protection		

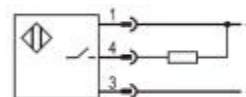
Note: ① the factory default sensing distance is $S_n \pm 10\%$

② unit: mm

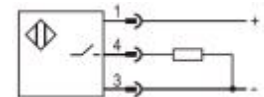
Dimensions



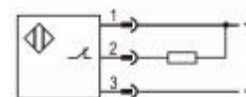
Wiring diagram



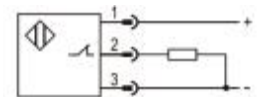
NPN NO



PNP NO



NPN NC



PNP NC