

CR18X series cylindrical capacitive sensor



Feature description

- Integrated housing matches double highlighted LED indicator
- IP67 protection class which is effectively moisture-proof and dust-proof
- The maximum operating voltage can be 40VDS which can effectively prevent the influence from power ripple
- 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	CR18XCN12DNOY	PNP NO	CR18XCN12DPOY
NPN NC	CR18XCN12DNCY	PNP NC	CR18XCN12DPCY
NPN NO+NC	CR18XCN12DNRY	PNP NO+NC	CR18XCN12DPRY

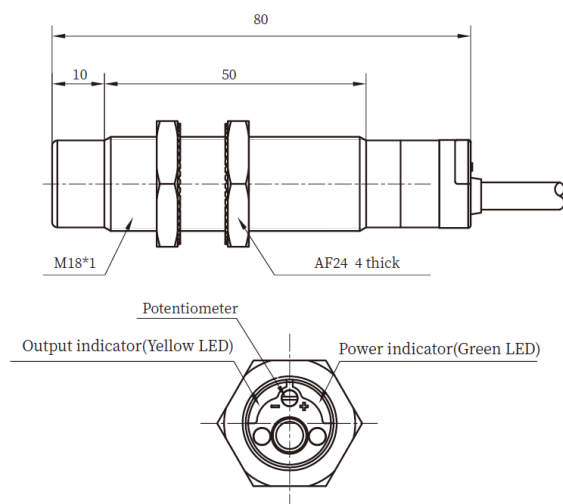
Specifications

Installation type	Non-flush	Indicator	Output indication:Yellow LED;Power indicator:Green LED
Rated distance S_n	12mm ^①		Overload or short circuit indication:Yellow LED flashes
Ensure distance S_a	≤ 8.64 mm	Switching frequency	35Hz
Adjust the distance	3...15mm	Ambient temperature	When working:-25...70°C(No icing, No condensation)
Adjustment method	Multi-turn potentiometer (Electrical adjustment > 10)	Environment humidity	When storing:-30...80°C(No icing, No condensation)
Standard test object	Fe 36*36*1t(Grounded) ^②	Vibration resistant	10...55Hz,Dual amplitude 1mm(2 hours each in X, Y, and Z directions)
Supply voltage	10...30VDC	Impulse withsand	30g/11ms,3 times each for X,Y,Z direction
Load current	≤ 200 mA	High pressure resistant	1000V/AC 50/60Hz 60s
Residual voltage	≤ 2 V	Insulation resistance	≥ 50 M Ω (500VDC)
Consumption current	≤ 20 mA	Shape specification	M18*1*80mm
Switch point offset [%/ S_n]	$\leq \pm 10\%$	Protection degree	IP67
Temperature drift [%/Sr]	$\leq \pm 20\%$	Housing material	Nickel copper alloy
Hysteresis range [%/Sr]	3...20%	Connection type	2m PVC Cable
Repetitive error [R]	$\leq 5\%$	Accessories	M18 nuts×2, Slotted screwdriver, Operation manual
Circuit protection	Short circuit protection, Overload protection, Reverse polarity protection		

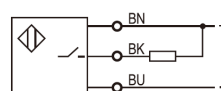
Note: ①the factory default sensing distance is $S_n \pm 10\%$

②unit:mm

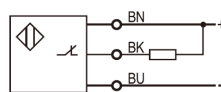
Dimensions



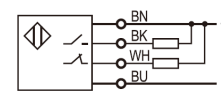
Wiring diagram



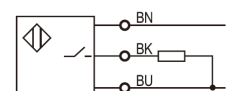
NPN NO



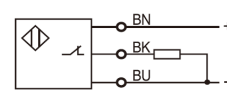
NPN NC



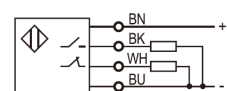
NPN NO+NC



PNP NO



PNP NC



PNP NO+NC