

CR18XS series cylindrical capacitive sensor

Feature description



- Integrated housing matches double highlighted LED indicator
- IP68 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	CR18XSCF08DNOY	PNP NO	CR18XSCF08DPOY
NPN NC	CR18XSCF08DNKY	PNP NC	CR18XSCF08DPKY
NPN NO+NC	CR18XSCF08DNRY	PNP NO+NC	CR18XSCF08DPRY

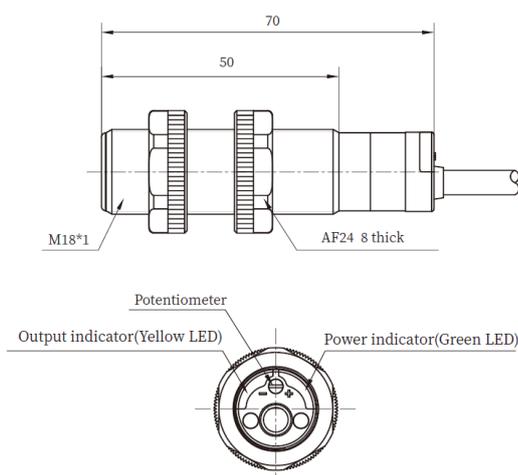
Specifications

Installation type	Flush	Indicator	Output indication:Yellow LED;Power indicator:Green LED
Rated distance S_n	8mm ^①		Overload or short circuit indication:Yellow LED flashes
Ensure distance S_a	≤ 5.76 mm	Switching frequency	20Hz
Adjust the distance	3...12mm	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 24*24*1t(Grounded) ^②	Vibration resistant	35...95%RH(No icing, No condensation)
Supply voltage	10...30VDC		10...55Hz,Dual amplitude 1mm(2 hours each in X, Y, and Z directions)
Load current	≤ 200 mA	Impulse withsand	30g/11ms,3 times each for X,Y,Z direction
Residual voltage	≤ 2 V	High pressure resistant	1000V/AC 50/60Hz 60s
Consumption current	≤ 20 mA	Insulation resistance	≥ 50 M Ω (500VDC)
Switch point offset [%/Sn]	$\leq \pm 10$ %	Shape specification	M18*1*70mm
Temperature drift [%/Sr]	$\leq \pm 20$ %	Protection degree	IP68
Hysteresis range [%/Sr]	3...20%	Housing material	PBT
Repetitive error [R]	≤ 5 %	Connection type	2m PVC Cable
Circuit protection	Short circuit protection, Overload protection, Reverse polarity protection	Accessories	M18 nuts*2, Slotted screwdriver, Operation manual

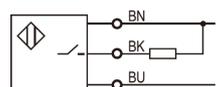
Note: ①the factory default sensing distance is $S_n \pm 10\%$

②unit:mm

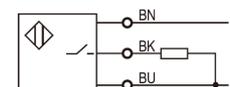
Dimensions



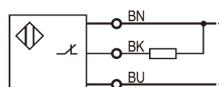
Wiring diagram



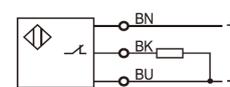
NPN NO



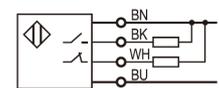
PNP NO



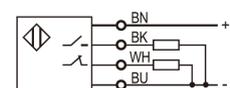
NPN NC



PNP NC



NPN NO+NC



PNP NO+NC