

# CR12XS series cylindrical capacitive sensor



## Feature description

- One-piece housing with high-brightness LED indicator
- IP68 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	CR12XSCF04DNOY	PNP NO	CR12XSCF04DPOY
NPN NC	CR12XSCF04DNCY	PNP NC	CR12XSCF04DPCY

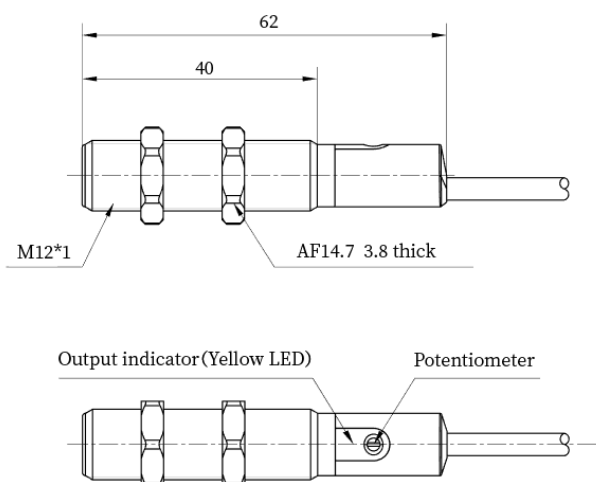
## Specifications

Installation type	Flush	Indicator	Output indication:Yellow LED
Rated distance $S_n$	4mm <sup>①</sup>	Switching frequency	20Hz
Ensure distance $S_a$	≤2.88mm	Ambient temperature	When working:-25...70°C(No icing, No condensation)
Adjust the distance	1...6 mm		When storing:-30...80°C(No icing, No condensation)
Adjustment method	Single-turn potentiometer	Environment humidity	35...95%RH(No icing, No condensation)
Standard test object	Fe 12*12*1t(Grounded) <sup>②</sup>	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	≤200mA	High pressure resistant	1000V/AC 50/60Hz 60s
Residual voltage	≤2V	Insulation resistance	≥50MΩ(500VDC)
Consumption current	≤20mA	Shape specification	M12*1*62mm
Switch point offset [%/ $S_n$ ]	≤±10%	Protection degree	IP68
Temperature drift [%/°C]	≤±20%	Housing material	PBT
Hysteresis range [%/°C]	3...20%	Connection type	2m PVC Cable
Repetitive error [R]	≤5%	Accessories	M12 nuts×2, Slotted screwdriver, Operation manual
Circuit protection	Short circuit protection, Overload protection, Reverse polarity protection		

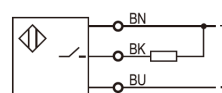
Note: ①the factory default sensing distance is  $S_n \pm 10\%$

②unit:mm

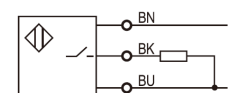
## Dimensions



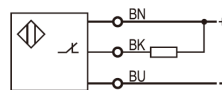
## Wiring diagram



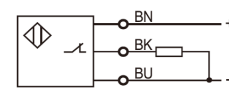
NPN NO



PNP NO



NPN NC



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