

# 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	CR18XSCN12DNOY	PNP NO	CR18XSCN12DPOY
NPN NC	CR18XSCN12DNCY	PNP NC	CR18XSCN12DPCY
NPN NO+NC	CR18XSCN12DNRY	PNP NO+NC	CR18XSCN12DPRY

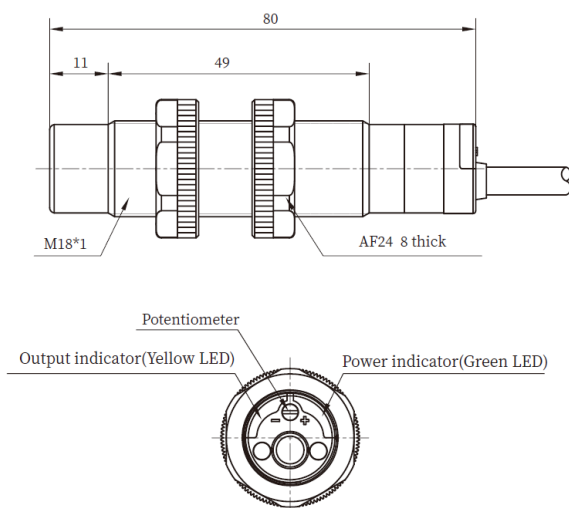
## Specifications

Installation type	Non-flush	Indicator	Output indication:Yellow LED;Power indicator:Green LED
Rated distance $S_n$	12mm <sup>①</sup>		Overload or short circuit indication:Yellow LED flashes
Ensure distance $S_a$	≤8.64mm	Switching frequency	25Hz
Adjust the distance	3...15mm	Ambient temperature	When working:-25...70°C(No icing, No condensation)
Adjustment method	Multi-turn potentiometer		When storing:-30...80°C(No icing, No condensation)
	(Electrical adjustment > 10)	Environment humidity	35...95%RH(No icing, No condensation)
Standard test object	Fe 36*36*1t(Grounded) <sup>②</sup>	Vibration resistant	10...55Hz,Dual amplitude 1mm(2 hours
Supply voltage	10...30VDC		each in X, Y, and Z directions)
Load current	≤200mA	Impulse withsand	30g/11ms,3 times each for X,Y,Z direction
Residual voltage	≤2V	High pressure resistant	1000V/AC 50/60Hz 60s
Consumption current	≤20mA	Insulation resistance	≥50MΩ(500VDC)
Switch point offset [%/ $S_n$ ]	±10%	Shape specification	M18*1*80mm
Temperature drift [%/Sr]	±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

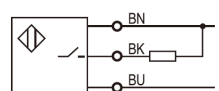
Note: ①the factory default sensing distance is  $S_n \pm 10\%$

②unit:mm

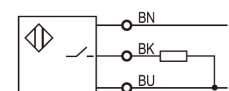
## Dimensions



## Wiring diagram



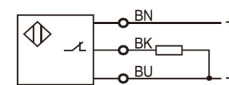
NPN NO



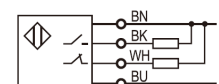
PNP NO



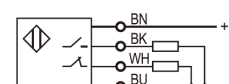
NPN NC



PNP NC



NPN NO+NC



PNP NO+NC