



PROXIMITY SENSORS

CPX SERIES

OVERVIEW

Capacitive proximity sensors for detecting metal and nonmetal (glass, wood, water, oil, etc.)

IP-Rating : IP67



CLASSIFICATION

CPX - D 18 - 08 E1 □

	①	②	③	④	⑤
① Type			D		DC 3-wire model
② Diameter			18		Ø18mm
			30		Ø30mm
③ Sensing distance			08		8mm
			15		15mm
④ Control output			E1		NPN NO
			E2		NPN NC
⑤ Shield			N		Unshielded

How to set sensing distance

- ① Using setting volume knob, set sensing distance
- ② Initial setting is 70% of maximum sensing distance
- ③ Clockwise: sensing distance increases

Control output	Timing chart	Wiring Diagram
NPN NO		
NPN NC		



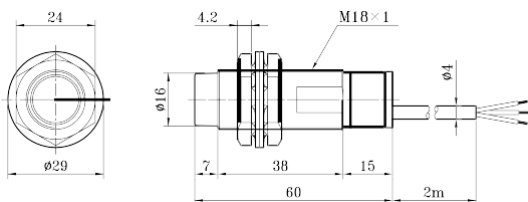
PROXIMITY SENSORS

Specification

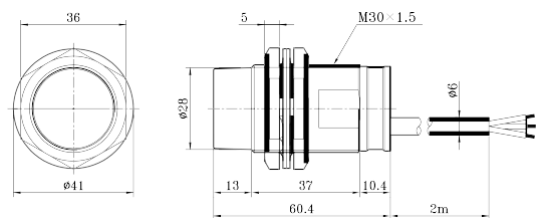
Diameter		Ø18	Ø30
Operating mode	NPN NO	CPX-D18-08E1N	CPX-D30-15E1N
	NPN NC	CPX-D18-08E2N	CPX-D30-15E2N
Sensing distance		8.0mm	15.0mm
Set distance		0~5.6mm	0~10.5mm
Differential travel		max. ±20% of sensing distance	
Detectable object		conductor/dielectric substance	
Standard sensing object		Iron 50X50X1mm	
Response frequency		100Hz	
Rated operating voltage		12~24VDC	
Power supply voltage		10~30VDC	
Control output	Load current	max. 200mA	
Indicator		none	
Ambient temperature	operating	-25°C ~+70°C	
	storage	-30°C ~+80°C	
Ambient humidity		35~95%RH	
Insulation resistance		min. 50MΩ (500VDC)	
Dielectric strength		1,500VAC (50/60Hz) for 1min	
Vibration resistance		10~55Hz double amplitude 1.5mm (at X, Y and Z axis) for 2hrs	
Shock resistance		50G	
Degree of protection		IP67	
Connection method		Pre-wired (2M)	
Materials	Case	Nylon glass	Brass
	Sensing surface	nylon glass	PBT

Dimension

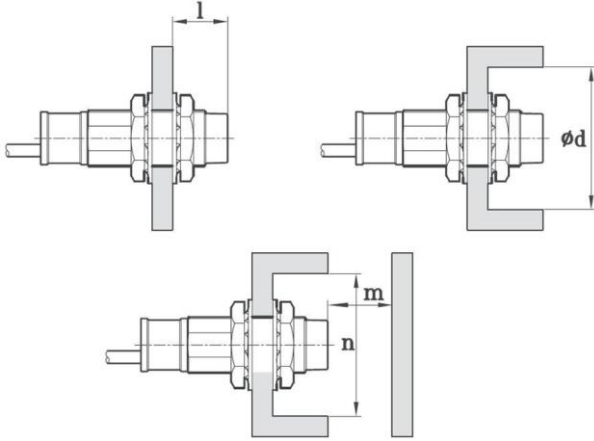
CPX-D18-08 E1N
CPX-D18-08 E2N



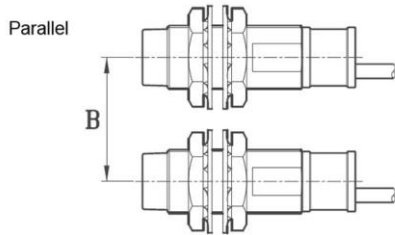
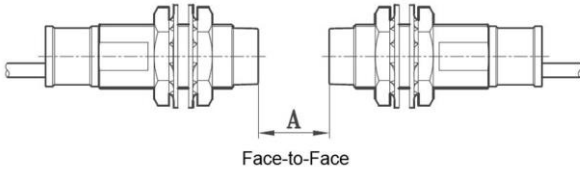
CPX-D30-15 E1N
CPX-D30-15 E2N



Influence of Surroundings and mutual interference



Item	CPX-D18	CPX-D30
l	10	20
Ød	54	90
m	24	45
n	54	90



Item	CPX-D18	CPX-D30
A	54	90
B	48	90