

SENSIDO_ELECTRONICS

Inductive Proximity Sensor Cylindrical Type



- Reliable detection of metal targets with high precision
- Robust design for harsh industrial environments
- Maintenance-free operation with long service life
- Suitable for diverse industrial and automation applications

Model Number Legend

CIP	04	-	12	L	F	DP	1	-	V1			
										Connection method	Blank	Pre-Wired
											V1	M12 metal connector
											V3	M8 metal connector
										Form of output switching element	1	Normally Open (NO)
											2	Normally Closed (NC)
											3	NO + NC
										Power supply and output specifications	DP	DC 3-wire PNP
											DN	DC 3-wire NPN
										Installation type	Blank	Non-flushed
											F	Flushed
										Size	Blank	Short
											L	Long
										Hosing size	Numeral	Diameter of housing (mm)
										Sensing distance	Numeral	Sensing distance (mm)
Model										Cylindrical Inductive Proximity sensor		

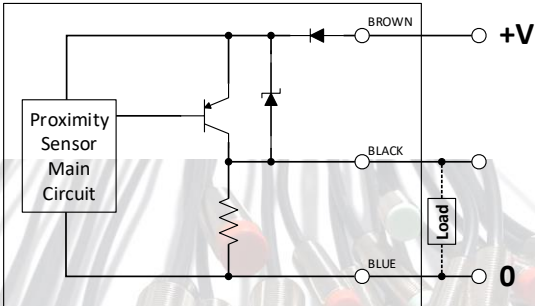








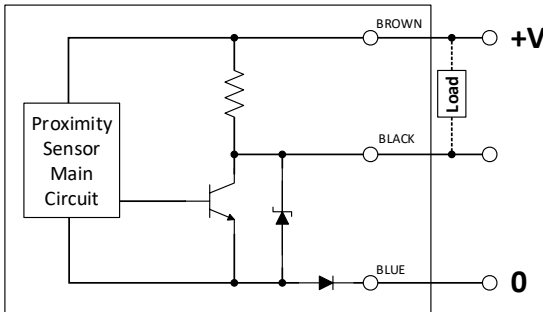








Specifications

DC-3Wire

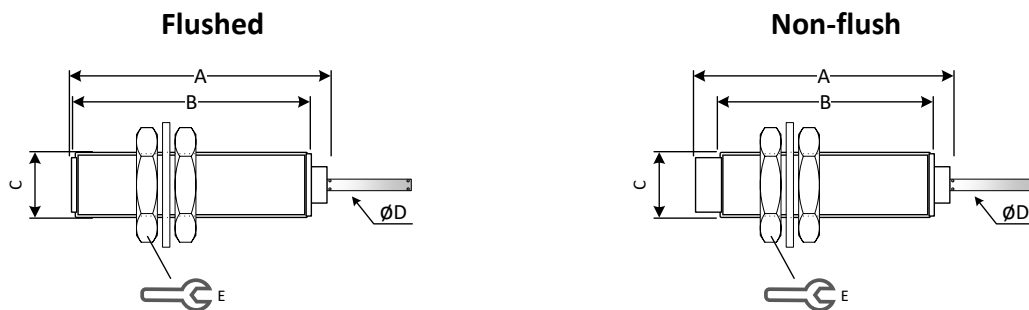
Item	Size	M12		M18	
	Model	CIP02-12FDP1 CIP02-12LFDP1 CIP02-12FDN1 CIP02-12LFDN1	CIP04-12DP1 CIP04-12LDP1 CIP04-12DN1 CIP04-12LDN1	CIP05-18FDP1 CIP05-18LFDP1 CIP05-18FDN1 CIP05-18LFDN1	CIP08-18DP1 CIP08-18LDP1 CIP08-18DN1 CIP08-18LDN1
Sensing distance		2mm±10%	4mm±10%	5mm±10%	8mm±10%
Setting distance		0 to 1.5mm	0 to 3.2mm	0 to 4mm	0 to 6.4mm
Standard sensing target		Iron 12×12×1mm			
Hysteresis		Max. 10% of sensing distance			
Power supply Voltage ^{*1} (Operating voltage)		12-24VDC = 10-30			
No load supply current		20mA			
Response Frequency ^{*2}		400Hz		320Hz	
Residual voltage		Max. 2V (at max. load)			
Output current		200mA			
Ambient temperature		-20 to 60℃			
Affection by Temp		±10% max. of sensing distance at 23℃ in the temperature range of -20 to 60℃			
Ambient humidity		35 to 85%RH			
Indicator		Red LED			
Protection circuit		Reverse polarity protection, short-circuit protection, over-voltage protection			
Protection		IP67			
Cable		3×0.25 mm ²			
Housing Material		Nickel plated Brass			
Weight	Standard	Approx. 71 g		Approx. 83 g	
	Long	Approx. 75g		Approx. 90g	
Accessories		Instruction manual, Clamping nuts, Toothed washer			

Circuit diagram

DC-3Wire

Output Specification	Operation Mode	مدار خروجی		
PNP	NO		Present Not Present	 Sensing target
			ON OFF	 Operation indicator (Red LED)
			Operation Return	 Load (Black-Blue)
			High Low	 Output voltage (Black-Blue)
	NC		Present Not Present	 Sensing target
			ON OFF	 Operation indicator (Red LED)
			Operation Return	 Load (Black-Blue)
			High Low	 Output voltage (Black-Blue)
NPN	NO		Present Not Present	 Sensing target
			ON OFF	 Operation indicator (Red LED)
			Operation Return	 Load (Brown-Black)
			High Low	 Output voltage (Black-Blue)
	NC		Present Not Present	 Sensing target
			ON OFF	 Operation indicator (Red LED)
			Operation Return	 Load (Brown-Black)
			High Low	 Output voltage (Black-Blue)

Dimensions



Type	C	size	A (mm)	B (mm)	D (mm)	E
Flush	M12×1	Standard	48	44	4.7	17
		Long	60	56	4.7	17
	M18×1	Standard	53	49	4.7	24
		Long	65	61	4.7	24
Non-Flush	M12×1	Standard	48	39	4.7	17
		Long	60	51	4.7	17
	M18×1	Standard	53	39	4.7	24
		Long	65	51	4.7	24

Cautions

- This product has been developed / produced for industrial use only.
- Operate the sensor only within its specified ratings and limits.
- Make sure the power supply is off while wiring or repairing.
- Be sure to wire the sensor and load correctly.
- Altering or opening the sensor is strictly prohibited.
- Do not use water or solvents to clean the sensor. Use a dry cloth only.
- Do not use in flammable, humid, or unstable conditions.
- Keep away from high-voltage to avoid surge or inductive noise.
- Do not operate the sensor within the first 0.8 sec after powering on.
- Do not install or operate in proximity to equipment that emits strong electromagnetic fields or high-frequency noise.
- When installing near noise-generating devices (e.g., motors, relays, inverters), connect the frame ground (F.G.) terminal of the device to an actual ground, and consider adding surge suppressors (diodes or varistors).