



CJM Series Capacitive Proximity Switch



Model Definition

CJM 18 M- 8 N 1
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 ① ② ③ ④ ⑤ ⑥

①	Capacitive proximity switch
②	Diameter : 18mm ; 24mm ; 30mm ; 34mm
③	Unshielded
④	Sensing distance : 8mm ; 10 : 10mm ; 15 : 15mm ; 25 : 5mm
⑤	N : NPN P : PNP A : AC 2-wire
⑥	1 : NO 2 : NC

Product features

- High Water Proof level, reach IP54, can be used in severe environment;
- Patented design, compact structure and nice out looking;
- With multi installation method, to match different space requirement;
- With high response frequency;
- Wide voltage range: AC: 90VAC ~ 250VAC, DC: 10VDC~30VDC;
- Confirm to GB/T 14048.10 and IEC60947-5-2

Product specification

Picture							
Model	CJM18M	CJM24M	CJM30M-S	CJM30M	CJM34M		
Installation Mode	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded		
DC Type	NPN	NO	CJM18M-8N1	CJM24M-10N1	CJM30M-15N1-S	CJM30M-15N1	CJM34M-25N1
		NC	CJM18M-8N2	CJM24M-10N2	CJM30M-15N2-S	CJM30M-15N2	CJM34M-25N2
	PNP	NO	CJM18M-8P1	CJM24M-10P1	CJM30M-15P1-S	CJM30M-15P1	CJM34M-25P1
		NC	CJM18M-8P2	CJM24M-10P2	CJM30M-15P2-S	CJM30M-15P2	CJM34M-25P2
AC Type	2-wire	NO	CJM18M-8A1	CJM24M-10A1	CJM30M-15P1-S	CJM30M-15A1	CJM34M-25A1
		NC	CJM18M-8A2	CJM24M-10A2	CJM30M-15A2-S	CJM30M-15A2	CJM34M-25A2
Sensing distance	8mm±10%	10mm±10%	15mm±10%	15mm±10%	25mm±10%		
F frequency DC/AC	0.2kHz/25Hz	0.2kHz/25Hz	0.2kHz/25Hz	0.2kHz/25Hz	0.2kHz/25Hz		

Application

CJM series capacitive proximity switch works in a non-contact method, when the object moves to the proximity switch, that is, the measuring head capacitor plate is close to the other plate (the object), the dielectric constant of the object and the proximity switch changes, making the state of the circuit connected to the measuring head also changes accordingly, thereby controlling the switch on and off.

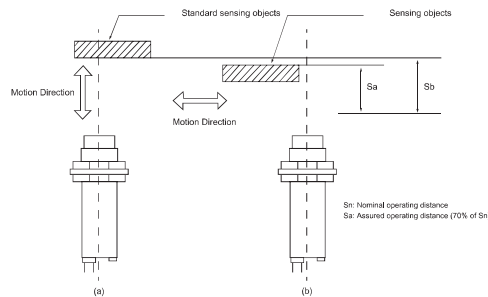
CJM series capacitive switches are used to detect metal, non-metal; such as: iron, steel, plastic, etc.



Technical Data

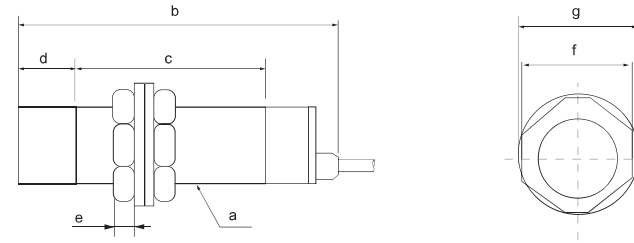
Item	Specification and data
Working voltage	DC(NPN,PNP,2-wire): Ripple wave (P-P)<10% (10-30VDC); AC Type: AC90V-250V 50/60Hz
Light element	Φ3 red light tube
Sensing distance	8mm ~ 25mm
Current consumption	DC Type (NPN, PNP, 2-wire): 8mA/12V,15mA/24V; AC Type:<5mA
Output	NPN Type; PNP Type; AC 2-wire Type; DC 2-wire Type
Max. load current	≤ 300mA
Sensing target	Any objects: metal, plastic, glass, wood, water, oil etc.
Residual voltage	DC Type (NPN, PNP): < 1V; AC Type(2-wire): <7V
Switch mode	Proximity switch
Repeat accuracy	The difference of each two measured value, should less than 10% of the effective operating distance, R ≤ 0.15r
Protection circuit	Polarity reversal protection, surge protection
Ambient temp.	Within the range of -25°C~ +70°C, usable operating distance is 90%~110% of the effective operating distance.
Connection method	Pre-wired connection(2-wire, 3-wire, 4-wire)
Voltage withstand	DC Type(NPN,PNP,2-wire): AC1000V 50/60Hz, one minute between current-carrying parts and case AC Type(2-wire): 2000V 50/60Hz, between current-carrying parts and case
Vibration resistance	Duration: 10 ~ 55Hz 1.5mm double amplitude, 2 hours in every X,Y,Z directions
Shock resistance	Duration: 500m/s(about 50G), 10 times in every X,Y,Z direction
Insulation resistance	At DC500V, 50MΩ min (between current-carrying parts and case)
EMC	Static test: air discharge 8KV, electrical fast transient pulse group
Degree of protection	Ip54
Material	CJM18M, CJM24M, CJM30M series: nickel plated brass; CJM20M, CJM30M-S, CJM34M series: heat resistance ABS; Sensing plate: heat resistance ABS

Sensing Position Features



Outline and mounting dimensions

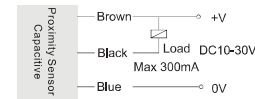
CJM18M, CJM24M, CJM30M, CJM34M (Mental / Plastic case)



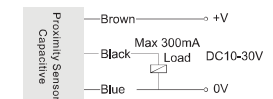
Case Material	Model	a	b	c	d	e	f	f
Mental/Plastic	CJM18M	M18x1	78±0.5	45	9	4	24	(30)
	CJM24M	M24X1.5	80±0.5	45	10	4.5	30	-
	CJM30M	M30X1.5	85±0.5	45	12.5	4.5	36.2	-
	CJM34M	Φ34	94±0.5	60	-	20	(55)	59

Wiring Drawing

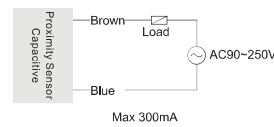
1. DC 3-wire NPN NO or NC



2. DC 3-wire PNP NO or NC



3. AC 2-wire NO or NC



Note: NO = Normal Open, NC = Normal Close

Notice

- Please do not use this product under ambient conditions that exceed the ratings;
- This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purpose
- Please specify the detail model number when ordering

