



# IM12 Proximity Sensor

Features of metal cylindrical proximity sensor:

- Reverse polarity protection;
- Short-circuit protection (IM8、IM12、IM18、IM30 DC type);

## Description

IM12 Series inductive sensor

Features of metal cylindrical proximity sensor:

- Reverse polarity protection;
- Short-circuit protection (IM8、IM12、IM18、IM30 DC type);
- Long-life & high reliability;
- Yellow Led indicates working status of sensor;
- Economical and easy to operate;
- Alternatives for mini switch and limit switch;
- Delay at power-up,guard against false pulse;

Proximity sensor

Model	IM12B-02-DO	IM12N-04-DO	IM12B-02-NO	IM12N-02-PO	IM12B-04-NO	IM12N-04-PO
	IM12B-02-DC	IM12N-04-DC	IM12B-02-NC	IM12N-02-PC	IM12B-04-NC	IM12N-04-PC
	IM12B-02-DO-H3	IM12N-04-DO-H3	IM12B-02-NO-H3	IM12N-02-PO-H3	IM12B-04-NO-H3	IM12N-04-PO-H3
	IM12B-02-DC-H3	IM12B-04-DC-H3	IM12B-02-NC-H3	IM12N-02-PC-H3	IM12B-04-NC-H3	IM12N-04-PC-H3
General parameters:						
Installation method	Flush style	Non-flush	Flush style	Non-flush	Flush style	Non-flush
Detection distance	2mm±10%	4mm±10%	2mm±10%	4mm±10%	2mm±10%	4mm±10%
Return difference	≤15%					
Set distance	0~1.6 mm	0~3.2 mm	0~1.6 mm	0~3.2 mm	0~1.6 mm	0~3.2 mm
Mechanical/Electronic Parameters:						
Operating voltage	10-30VDC					
No-load current	Max.5mA					
Voltage drop	Max.2.5V		Max.1.4V			
Operating frequency	800Hz	400Hz	500Hz			
Indicator light	Operation indicator yellow					
Function	Short circuit protection,over voltage protection,reverse polarity protection					

Action mode	Normally Closed (DC)/Normally Open (DO) depending on the specific model	Normally closed (NC)/Normally open (NO) depending on the specific model			
Control output	Transistor	NPN	PNP	NPN	PNP
Wiring	Direct outlet,DC 2 wire,φ5,2*0.3 mm <sup>2</sup> ,standard wire length: 2m; H3 model is connector type	Direct outlet,DC3 wire,φ4,3*0.2 mm <sup>2</sup> ,standard wire length: 2m; H3 model is connector type			
Protection rating	IP67				
Working environment	-25°C~70°C    35~95% RH				
Dimensions	Please check the dimension drawing	Please check the dimension drawing			

Proximity sensor				
Model	IM12B-04-NO	IM12B-04-PO	IM12N-08-NO	IM12N-08-PO
	IM12B-04-NO-H3	IM12B-04-PO-H3	IM12N-08-NO-H3	IM12N-08-PO-H3
General parameters:				
Installation method	Flush style		Non-flush	
Detection distance	4 mm±10%		8 mm±10%	
Return difference	≤15%			
Set distance	0~3.2 mm		0~6.4 mm	
Mechanical/Electronic Parameters:				
Operating voltage	10-30VDC			
No-load current	Max.5mA			
Voltage drop	Max.1.4V			

Operating frequency	400Hz	100Hz		
Indicator light	Operation indicator yellow			
Function	Short circuit protection,over voltage protection,reverse polarity protection			
Action mode	Normally closed (NC)/Normally open (NO) depending on the specific model			
Control output	NPN	PNP	NPN	PNP
Wiring	Direct outlet,DC3 wire, $\phi 4,3 \times 0.2$ mm <sup>2</sup> ,standard wire length: 2m; H3 model is connector type			
Protection rating	IP67			
Working environment	-25°C~70°C    35~95% RH			
Dimensions	Please check the dimension drawing		Please check the dimension drawing	