

IY Series Cylindrical Proximity Switch

Milbbo



Features

- Innovative products. Identifying operating or standby state easily.
- Applications in precision and space limited equipment
- 3 state indicator: Green-standby, Red-operating, Flash-fault
- NO/NC output model distinguished by different color.
- Prevent wiring error
- Anti-interference design suitable for side-by-side installation and electric-magnetic environment
- Oil-resistance cable suitable for application in oily environment.
- Flexible cable sleeve reduce the risk of disconnection in application with moving parts
- Standard cable length 2M, other length cable available.

IY	12	-	02	NA	F	V
Series IY Series	Size 08:M08 12:M12 18:M18 30:M30		Sensing Distance 01:1mm 02:2mm	Output Mode NA:NPN NO NB:NPN NC PA:PNP NO PB:PNP NC	Shielding F:Shielded N:Unshielded	Plug-in connection

Model (IY Series 3 state high performance cylindrical proximity switch)

NPN NO	IY08-01NAF	IY08-02NAN	IY12-02NAF	IY12-04NAN	IY18-05NAF	IY18-08NAN	IY30-10NAF	IY30-15NAN
NPN NC	IY08-01NBF	IY08-02NBN	IY12-02NBF	IY12-04NBN	IY18-05NBF	IY18-08NBN	IY30-10NBF	IY30-15NBN
PNP NO	IY08-01PAF	IY08-02PAN	IY12-02PAF	IY12-04PAN	IY18-05PAF	IY18-08PAN	IY30-10PAF	IY30-15PAN
PNP NC	IY08-01PBF	IY08-02PBN	IY12-02PBF	IY12-04PBN	IY18-05PBF	IY18-08PBN	IY30-10PBF	IY30-15PBN

Model (IY Series 3 state QD cylindrical proximity switch)

Body (excluding connectors)	NPN NO	IY08-01NAF-V	IY08-02NAN-V	IY12-02NAF-V	IY12-04NAN-V	IY18-05NAF-V	IY18-08NAN-V	IY30-10NAF-V	IY30-15NAN-V
	NPN NC	IY08-01NBF-V	IY08-02NBN-V	IY12-02NBF-V	IY12-04NBN-V	IY18-05NBF-V	IY18-08NBN-V	IY30-10NBF-V	IY30-15NBN-V
	PNP NO	IY08-01PAF-V	IY08-02PAN-V	IY12-02PAF-V	IY12-04PAN-V	IY18-05PAF-V	IY18-08PAN-V	IY30-10PAF-V	IY30-15PAN-V
	PNP NC	IY08-01PBF-V	IY08-02PBN-V	IY12-02PBF-V	IY12-04PBN-V	IY18-05PBF-V	IY18-08PBN-V	IY30-10PBF-V	IY30-15PBN-V

Cable with QD12 connector: P02-F083A2/P02-F083S2(choosable)

P02-F124A2/P02-F124S2(choosable)

Model (IY Series anti-interference cylindrical proximity switch)

NPN NO	IY08-01NAF	IY08-02NAN	IY12-02NAF	IY12-04NAN	IY18-05NAF	IY18-08NAN
NPN NC	IY08-01NBF	IY08-02NBN	IY12-02NBF	IY12-04NBN	IY18-05NBF	IY18-08NBN
PNP NO	IY08-01PAF	IY08-02PAN	IY12-02PAF	IY12-04PAN	IY18-05PAF	IY18-08PAN
PNP NC	IY08-01PBF	IY08-02PBN	IY12-02PBF	IY12-04PBN	IY18-05PBF	IY18-08PBN

Specification

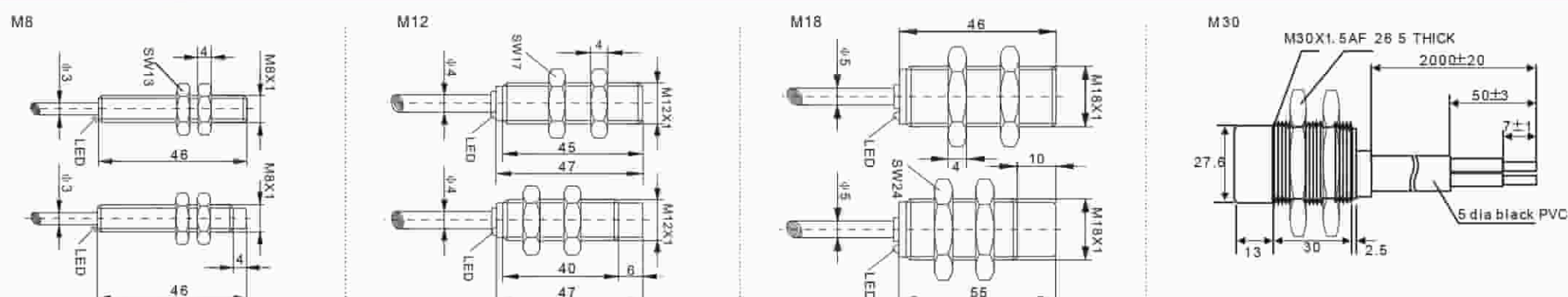
Size	M8		M12		M18		M30	
Shielding	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded
Sensing Distance ①	1.5mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm
Set Distance	0~1.2mm	0~1.6mm	0~1.6mm	0~3.2mm	0~4.0mm	0~6.4mm	0~8.0mm	0.1~12mm
Differential Travel	10% Max. of sensing distance							
Detectable Object	Ferrous Metal (The sensing distance decreases with non-ferrous metal. Refer to Data sheet)							
Response Frequency ②	1000Hz							
Power Supply Voltage (Operating Voltage Range)	12-24VDC, Ripple(p-p) 10% Max. (10-30DC full wave rectifier power supply)							
Current Consumption	Max.5mA@NPN; Max.7mA@PNP							
Load Current	Max.100mA							
Residual Voltage	Max.1.5V							
Indicators	Green-standby, Red-operating, Flash-fault							
Operation Mode	A-Model: NPN NO; NB-Model: NPN NC; PA-Model: PNP NO; PB-Model: PNP NC;							
Short Circuit Protection	Overload / load short circuit protection. Indicator flashing in protection state.							
Protection Circuit	Polarity protection, Surge suppressor							
Ambient Temperature Range	Operating / storage: -30~+70°C (with no icing or condensation)							
Ambient Humidity Range	Operating / storage: 35~95% (with no condensation)							
Temperature Influence	±10% Max. of sensing distance @+25°C in the temperature range							
Voltage Influence	±1% Max. of sensing distance @rated voltage in the rated voltage ±10% range							
Anti-interference	IYK Series Strong anti-magnetic interference							
Insulation Resistance	50MΩ Min. (at 500VDC) between current carrying parts and case							
Dielectric Strength	1000VAC 50/60Hz for 1 minute between current carrying parts and case							
Vibration Resistance	10-55Hz 1.5mm double amplitude for 2 hours each in X,Y,Z directions							
Shock Resistance	500m/S ² 10 times each in X, Y and Z directions							
Degree of Protection	IEC standards IP67, in-house standards: oil-resistance							
Connection Method	Pre-wired 2m							
Materials of Case	Nickel-plated brass							
Accessories	Clamping nuts, Mounting bracket available(optional)							
Certificate	CE							

① Sensing distance, range ±10%. ② Response frequency is an average value. Measure condition is as follow: standard sensing object, a setting distance of half the sensing distance.

③ Recommended app&cation within the setting distance as to reach the best detect effect. ④ SFA-QD12A-02 cable needs to purchase separately.

Dimension Diagram

Unit: mm



Wiring Diagram

