

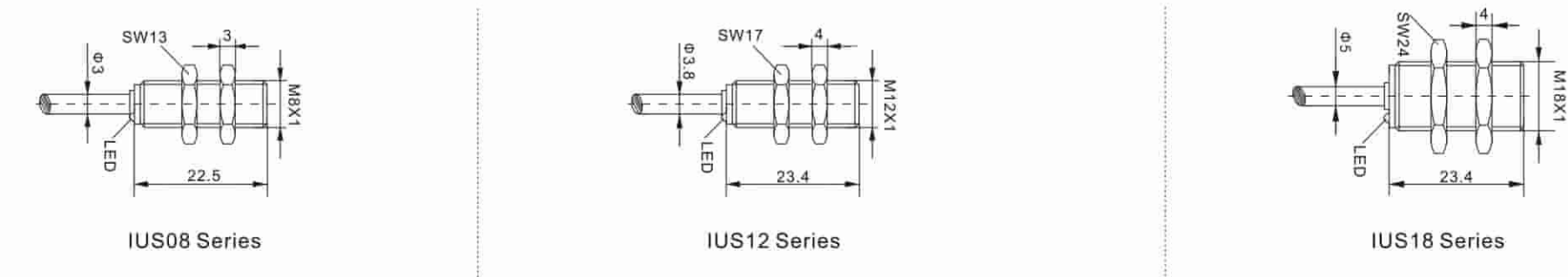
- Features
- The shortest cylindrical sensor(24mm length)
 - Application in precision and space limited equipment
 - Intelligently identifying NPN/PNP load
 - 3 state indicator: Green-standby, Red-operating, Flash-fault
 - NO/NC output model distinguished by different color. Prevent wiring error
 - Anti-interference design suitable for side-by-side installation and electric-magnetic environment
 - Oil-resistance cable suitable for application in oily environment.
 - Standard cable length 2M, other length cable available.

IUS	12	-	02	A	F	02
Series IUS Series	Size 08:M08 12:M12 18:M18		Sensing Distance 02:2mm 04:4mm 08:8mm	Output Mode A:NO B:NC	Shielding F:Shielded N:Unshielded	Connection Method Non:2M 01:1M 2R5:2.5M 03:3M

Model			
NO	IUS08-01AF	IUS12-02AF	IUS18-05AF
NC	IUS08-01BF	IUS12-02BF	IUS18-05BF
Specification			
Size	M8	M12	M18
Shielding	Shielded	Shielded	Shielded
Sensing Distance ①	1.5mm	2mm	5mm
Set Distance	0~1.2mm	0~1.6mm	0~4.0mm
Differential Travel	10% Max. of sensing distance		
Detectable Object	Ferrous Metal (The sensing distance decreases with non-ferrous metal. Refer to Data sheet)		
Response Frequency②	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+PNP NO; B-Model: NPN+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	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.

Dimension Diagram Unit: mm



Wiring Diagram

