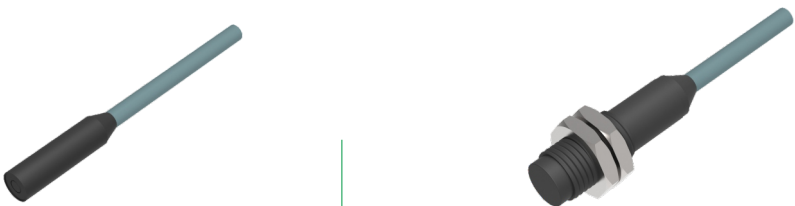
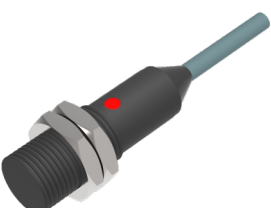


Appearance		
Feature	Can execute detection in Fe, perfect for molds and fixtures	Smallest size in same type of products
Sensing distance*	MR-M10L: 4mm; MR-M9K: 8mm	MR-M10L: 8mm; MR-M9K: 10mm
Operating voltage	5~24V DC	
Detected magnetic poles	S-pole	N-pole, S-pole optional
Magnetic sensitivity	5~7mT	2.5~3.5mT
Response time	5 μs	
Active frequency	30Hz	
Output type	NPN (N.O) (When approaching, ON)	
Output current	≤15mA	
Current consumption	≤15mA	
Voltage withstand ability	AC1000V 1min	
Insulation resistance	250V DC≥20MΩ	
Ambient temperature	-20℃~+85℃, No freezing	
Ambient humidity	20%~95%RH, No condensation	
Material	SUS303	GF strengthened PBT: grey;MR-P13-S cable: grey;MR-P13-N cable: black
Mounting	M3 screws, tightening torque ≤0.2N · m	M7 nuts, tightening torque 0.3N · m
Degree of protection	IP65	IP65
Connection	3 core cable(Length:1m)	
Model NO.	Top surface detection: MR-P10-H Side surface detection: MR-P10-X 	S-pole detection: MR-P13-S N-pole detection: MR-P13-N
Wiring diagram	See figure 1 and figure 2 on page G-07	

*:Different magnets have different sensing distances

Appearance		
Feature	Built-in indicator (high sensitivity)	
Sensing distance*	MR-M10L: 8mm; MR-M9K: 11mm	
Operating voltage	5~24V DC	
Detected magnetic poles	N-pole, S-pole optional	
Magnetic sensitivity	MR-P24-S: 2.5~3.5mT, MR-P24-N: 0.9±0.2mT	
Active frequency	30Hz	
Response time	5 μs	
Output type	NPN (N.O) (When approaching, ON)	
Output current	≤12mA	
Current consumption	≤12mA	
Voltage withstand ability	AC1000V 1min	
Insulation resistance	250V DC≥20MΩ	
Ambient temperature	-20℃~+85℃, No freezing	
Ambient humidity	20%~95%RH, No condensation	
Material	GF strengthened PBT: black;MR-P24-S cable: grey;MR-P24-N cable: black	
Mounting	M9 screws, tightening torque ≤0.5N · m (with screws)	
Indicator	Red	
Degree of protection	IP67	
Connection	1M 3 core cable	
Model NO.	S-pole detection: MR-P24-S N-pole detection: MR-P24-N	
Wiring diagram	See figure 4 on page G-07	

*:Different magnets have different sensing distances

Fiber Optic
Slot Sensors
Photoelectric
Laser
Proximity
Displacement
Magnetic
Contact
Area
Ultrasonic
Vibration
Temperature
Cables
Tester

Guidance

Magnetic

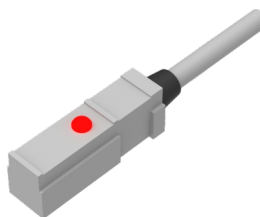
Magnetic sensors
High precision cylinder
Combined cylinder
Near iron sensor
Door sensors
Linear sensors
Ordinary magnets
High precision composite magnets
Mounting accessories

Magnetic Sensors



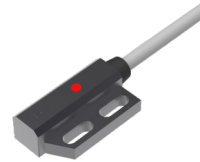
Appearance		
Feature	High sensitivity, realize N-pole and S-pole detection at the same time	IP67/ protection degree, stainless steel threaded housing
Sensing distance*	MR-M10L: 13mm; MR-M9K: 20mm	MR-M10L: 6mm; MR-M9K: 8mm
Operating voltage	12~24V DC	5~24V DC
Detected magnetic poles	N-pole & S-pole detection	S-pole
Magnetic sensitivity	S-pole: $0.5 \pm 0.1\text{mT}$ N-pole: $0.45 \pm 0.1\text{mT}$	3~4mT
Response time	$< 16\mu\text{s}$	$5\mu\text{s}$
Active frequency	40Hz	
Output type	NPN (N.O) (When approaching, ON)	
Output current	$\leq 12\text{mA}$	
Current consumption	On: $\leq 30\text{mA}$ (off $\leq 10\text{mA}$)	$\leq 4\text{mA}$
Voltage withstand ability	AC1000V 1min	
Insulation resistance	250V DC $\geq 20\text{M}\Omega$	
Ambient temperature	$-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$, No freezing	
Ambient humidity	20%~95%RH, No condensation	
Material	SUS303	
Degree of protection	IP65	IP67
Mounting	M9 screws, tightening torque $5\text{N} \cdot \text{m}$	M6 screws, tightening torque $2\text{N} \cdot \text{m}$
Indicator	S-pole: Red N-pole: Green	Red
Connection	1M 4core cable	1M 3core cable
Model NO.	MR-P25 HOT	MR-P26
Wiring diagram	See figure 5 on page G-07	See figure 6 on page G-07

*:Different magnets have different sensing distances



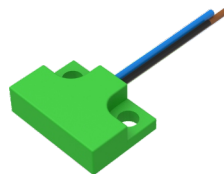
Appearance		
Feature	Built-in indicator, 2-wires output	
Sensing distance*	MR-M10L: 5mm; MR-M9K: 8mm	
Operating voltage	12~24V DC	
Detected magnetic poles	N-pole, S-pole optional	
Magnetic sensitivity	2.5~3.5mT	
Response time	$50\mu\text{s}$	
Active frequency	30Hz	
Output current	$\leq 50\text{mA}$	
Leakage current	OFF, $\leq 0.5\text{mA}$	
Voltage withstand ability	AC1000V 1min	
Insulation resistance	250V DC $\geq 20\text{M}\Omega$	
Ambient temperature	$-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$, No freezing	
Ambient humidity	20%~95%RH, No condensation	
Material	GF strengthened PBT	
Indicator	Red	
Degree of protection	IP67	
Connection	1M 2core cable	
Model NO.	S-pole detection: MR-P12-S N-pole detection: MR-P12-N	
Wiring diagram	See figure 7 on page G-07	

*:Different magnets have different sensing distances



Appearance	
Feature	High sensitivity (can be used outdoors)
Sensing distance*	MR-M10L: 8mm; MR-M9K: 11mm
Operating voltage	5~24V DC
Detected magnetic poles	N-pole, S-pole optional
Magnetic sensitivity	0.9±0.2mT
Response time	5 μs
Active frequency	30Hz
Output type	NPN (N.O) (When approaching, ON)
Output current	≤12mA
Current consumption	≤12mA
Voltage withstand ability	AC1000V 1min
Insulation resistance	250V DC≥20MΩ
Ambient temperature	-20℃~+85℃, No freezing
Ambient humidity	20%~95%RH, No condensation
Material	GF strengthened PBT: black
Mounting	M3screws, tightening torque 0.3N・m
Indicator	Red
Degree of protection	IP67
Connection	1M 3core cable
Model NO.	S-pole detection: MR-PH5-S N-pole detection: MR-PH5-N
Wiring diagram	See figure 8 on page G-07

*:Different magnets have different sensing distances



Appearance		
Feature	Small size, thickness 3.5mm only	Metal housing, water-proof and oil resistant
Sensing distance*	MR-M10L: 8mm; MR-M9K: 12mm	
Operating voltage	5~24V DC	12~24V DC
Detected magnetic poles	S-pole	N-pole, S-pole optional
Magnetic sensitivity	2.5~3.5mT	
Response time	5 μs	
Active frequency	30Hz	
Output type	NPN (N.O) (When approaching, ON)	
Output current	≤15mA	≤80mA
Current consumption	≤15mA	≤12mA
Voltage withstandability	AC1000V 1min	
Insulation resistance	250V DC≥20MΩ	
Ambient temperature	-20℃~+85℃, No freezing	
Ambient humidity	20%~95%RH, No condensation	
Material	GF strengthened PBT: Green	Die-casing Zinc alloy
Mounting	M2 screws, tightening torque 0.15N・m	M3 screws, tightening torque 1.5N・m
Degree of protection	IP65	IP67
Connection	3M 3core cable (Length:0.3m)	1M 3core cable
Model NO.	Top surface detection: MR-P4-H Size surface detection: MR-P4-X	S-pole detection: MR-P9-S N-pole detection: MR-P9-N
Wiring diagram	See figure 9 on page G-07	See figure 10 on page G-07

*:Different magnets have different sensing distances

Fiber Optic
Slot Sensors
Photoelectric
Laser
Proximity
Displacement
Magnetic
Contact
Area
Ultrasonic
Vibration
Temperature
Cables
Tester

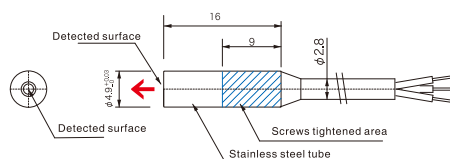
Guidance

Magnetic
Magnetic sensors
High precision cylinder
Combined cylinder
Near iron sensor
Door sensors
Linear sensors
Ordinary magnets
High precision composite magnets
Mounting accessories

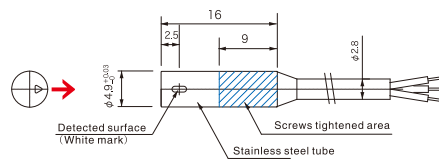
Magnetic Sensors

Dimensions(Unit:mm)

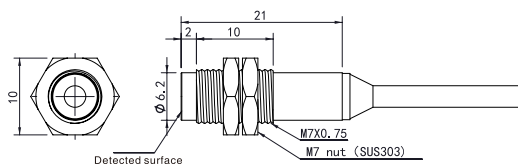
MR-P10-H



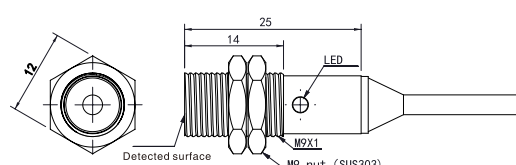
MR-P10-X



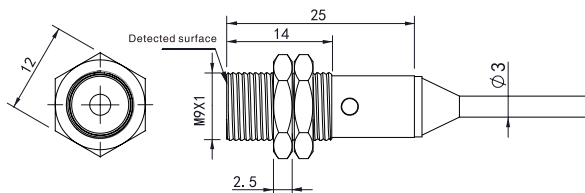
MR-P13-S(N)



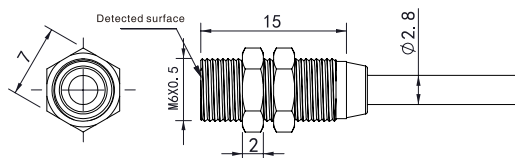
MR-P24-S(N)



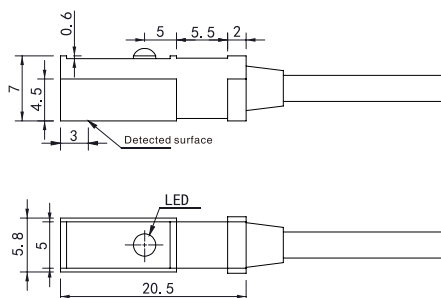
MR-P25



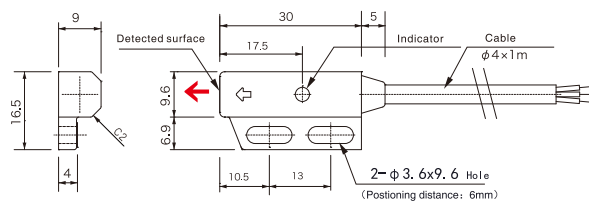
MR-P26



MR-P12-S(N)



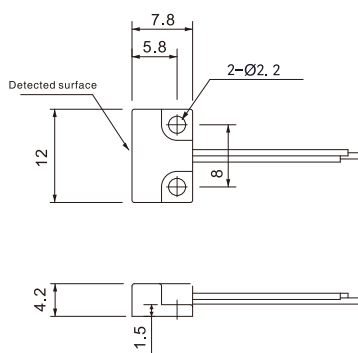
MR-PH5-S(N)



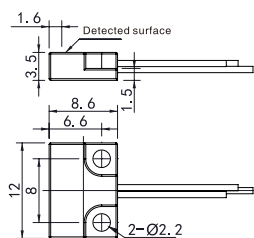
Mounting accessories: HP12-0/HP12-3/HP12-6.2/HP12-t

MR-P4-H(X)

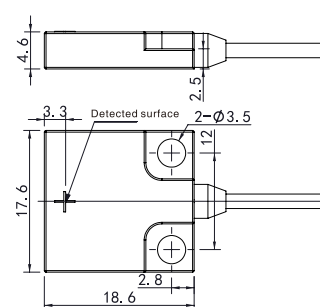
MR-P4-H



MR-P4-X



MR-P9-S(N)



Mounting accessories: -BT: cable protective tube/
-BD: belt shaped mounting accessories