



Appearance

Feature Can execute detection in Fe, perfect for molds and fixtures

Sensing distance* MR-M10L: 4mm; MR-M9K: 8mm

Smallest size in same type of products

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°C~+85°C, 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**S-pole detection: **MR-P13-S**Side surface detection: **MR-P10-X** 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°C~+85°C, 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

Guidance

Magnetic

Magnetic sensors

High precision cylinder

Combined cylinder

Near iron sensor

Door sensors

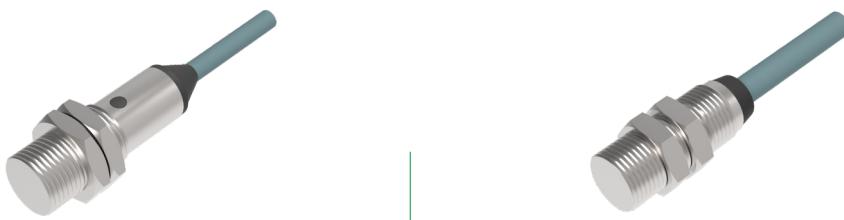
Linear sensors

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

 $< 16 \mu\text{s}$ $5 \mu\text{s}$

Fiber Optic

Active frequency

40Hz

Slot Sensors

Output type

NPN (N.O) (When approaching, ON)

Photoelectric

Output current

 $\leq 12 \text{ mA}$

Laser

Current consumption

On: $\leq 30 \text{ mA}$ (off: $\leq 10 \text{ mA}$) $\leq 4 \text{ mA}$

Proximity

Voltage withstand ability

AC1000V 1min

Displacement

Insulation resistance

250V DC $\geq 20 \text{ M}\Omega$

Magnetic

Ambient temperature

-20°C~+85°C, No freezing

Contact

Ambient humidity

20%~95% RH, No condensation

Area

Material

SUS303

Ultrasonic

Degree of protection

IP67

Vibration

Mounting

M6 screws, tightening torque $2 \text{ N} \cdot \text{m}$

Temperature

Indicator

Red

Cables

Connection

1M 3core cable

Tester

Model NO.

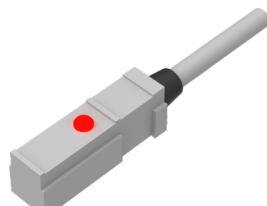
MR-P26

Wiring diagram

See figure 5 on page G-07

See figure 6 on page G-07

*: Different magnets have different sensing distances



Guidance

Magnetic

Magnetic sensors

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°C~+85°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

Wiring diagram

N-pole detection:MR-P12-N

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 μ s
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°C~+85°C, No freezing
Ambient humidity	20%~95%RH, No condensation
Material	GF strengthened PBT: black
Mounting	M3 screws, 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

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

*: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 μ s	
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°C~+85°C, 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

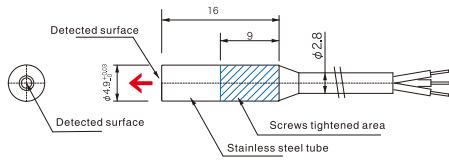
- Magnetic**
- Magnetic sensors
- High precision cylinder
- Combined cylinder
- Near iron sensor
- Door sensors
- Linear sensors
- Ordinary magnets
- High precision composite magnets
- Mounting accessories

*:Different magnets have different sensing distances

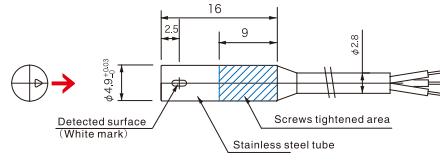
Magnetic Sensors

Dimensions(Unit:mm)

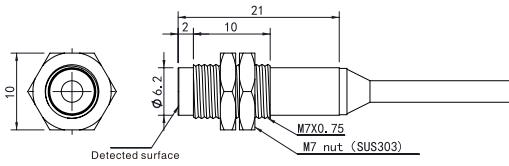
MR-P10-H



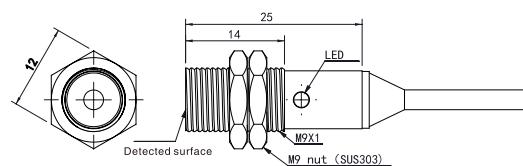
MR-P10-X



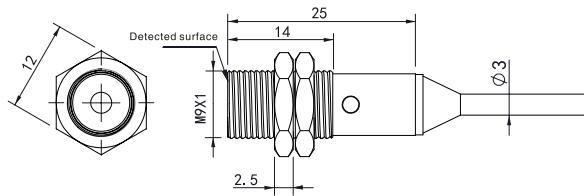
MR-P13-S(N)



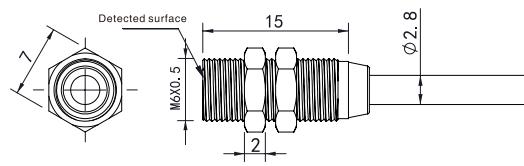
MR-P24-S(N)



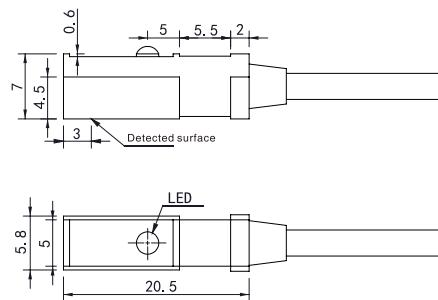
MR-P25



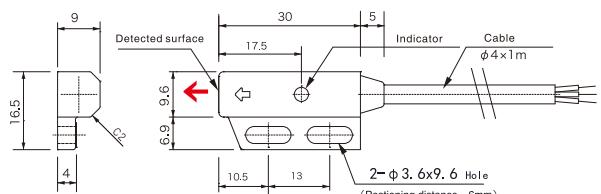
MR-P26



MR-P12-S(N)

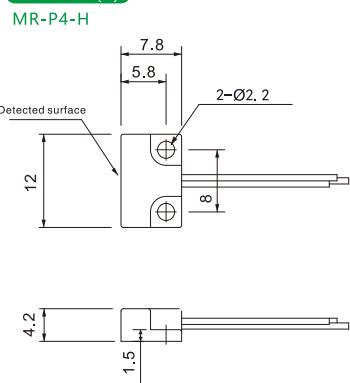


MR-PH5-S(N)

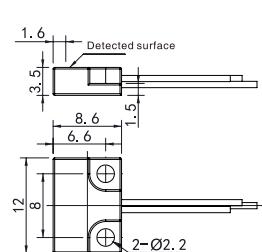


Mounting accessories: HP12-0/HP12-3/HP12-6.2/HP12-t

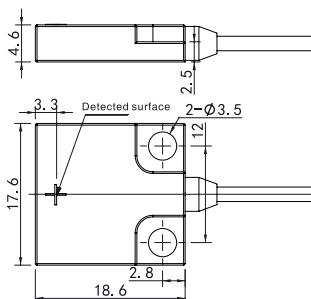
MR-P4-H(X)



MR-P4-X



MR-P9-S(N)



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