



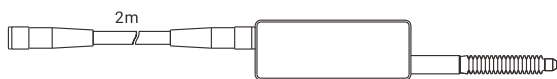
Appearance									
Type	Cassette type								
Detection principle	COMS grating measurement (no tracking error)								
Display mode	Non-digital display type								
Drive mode	Rebound type								
Range	0~12.7mm				0~25.4mm				
Full range accuracy	≤1.4μm	≤2μm	±2μm	≤10μm	≤1.8μm	≤3μm	±3μm	≤10μm	
Resolution power	0.2μm	0.5μm	1μm	5μm	0.2μm	0.5μm	1μm	5μm	
Operating force	1.1-1.2N				1.6-1.8N				
Response time	50ms								
Working current	< 50mA								
Operating voltage	5V DC								
Operating temperature	-10~50°C (no freezing)								
Storage temperature	-20~+70°C (no freezing)								
Relative humidity	35~80% RH (non-condensation)								
Degree of protection	IP65								
Communication protocol	Modbus RTU								
Material	Main body: aluminum alloy; Dust cover: fluorine rubber; sensor head: carbide								
Weight	About 71.7g				About 91.5g				
Model	Aviation plug type* ¹	MRC-H12R04S	MRC-H12R02S	MRC-H12R12S	MRC-H12R10S	MRC-H25R08S	MRC-H25R03S	MRC-H25R13S	MRC-H25R10S
	Lead Type* ²	MRC-H12R04W	MRC-H12R02W	MRC-H12R12W	MRC-H12R10W	MRC-H25R08W	MRC-H25R03W	MRC-H25R13W	MRC-H25R10W

*1: Standard CA08FF-S4F2C M8 double female connection cable, which needs to be used with a digital display control module;

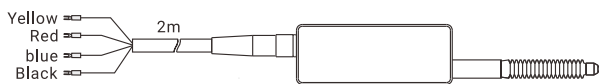
One sensor head needs to be equipped with one CA08FF-S4F2C, and one digital display control module can be connected to 4 sensor heads;

*2: Standard M8 four-core cable is not used with the digital display control module. If it needs to be used with the digital display control module, please choose the aviation plug type.

Specification



(0~12.7mm)Aviation plug type



(0~12.7mm)Lead Type



(0~25.4mm)Aviation plug type



(0~25.4mm)Lead Type

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement**
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers
- Vibration
- Temperature
- Accessories

Guidance

- Displacement
- Triangulation
- Linear measurement
- Magnetic displacement**
- LIDAR Scanner
- Color confocal



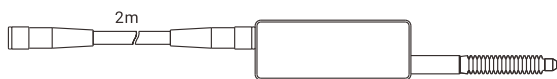
Appearance									
Type	Cassette type								
Detection principle	COMS grating measurement (no tracking error)								
Display mode	Digital display type				Non-digital display type				
Drive mode	Rebound type				Pneumatic type				
Range	0~12.7mm				0~12.7mm				
Full range accuracy	≤1.4μm	≤2μm	±2μm	≤10μm	≤1.4μm	≤2μm	±2μm	≤10μm	
Resolution power	0.2μm	0.5μm	1μm	5μm	0.2μm	0.5μm	1μm	5μm	
Operating force	1.1-1.2N				2.4-3.4N				
Response time	50ms								
Working current	< 50mA								
Operating voltage	5V DC								
Operating temperature	-10~50°C (no freezing)								
Storage temperature	-20~+70°C (no freezing)								
Relative humidity	35~80% RH (non-condensation)								
Degree of protection	IP65								
Communication protocol	Modbus RTU								
Material	Main body: aluminum alloy; Dust cover: fluorine rubber; sensor head: carbide								
Weight	About 90.5g				About 99.2g				
Model	Aviation plug type* ¹	MRC-H12R04DS	MRC-H12R02DS	MRC-H12R12DS	MRC-H12R10DS	MRC-H12Q04S	MRC-H12Q02S	MRC-H12Q12S	MRC-H12Q10S
	Lead Type* ²	MRC-H12R04DW	MRC-H12R02DW	MRC-H12R12DW	MRC-H12R10DW	MRC-H12Q04W	MRC-H12Q02W	MRC-H12Q12W	MRC-H12Q10W

*1: Standard CA08FF-S4F2C M8 double female connection cable, which needs to be used with a digital display control module;

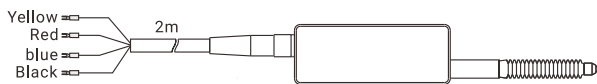
One sensor head needs to be equipped with one CA08FF-S4F2C, and one digital display control module can be connected to 4 sensor heads;

*2: Standard M8 four-core cable

Specification



(0~12.7mm) Aviation plug type



(0~12.7mm) Lead Type

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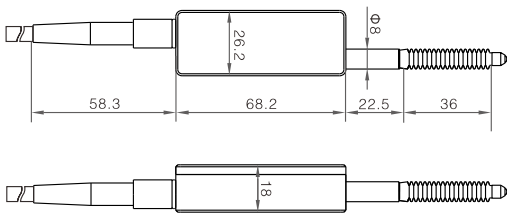
Guidance

- Displacement
- Triangulation
- Linear measurement
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- LIDAR Scanner
- Color confocal

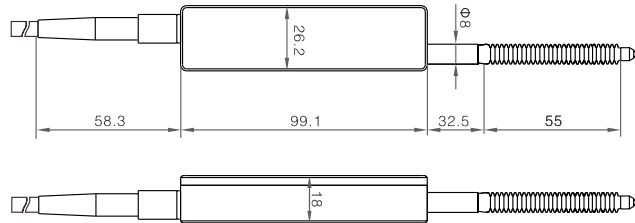
Dimensions

Unit:mm

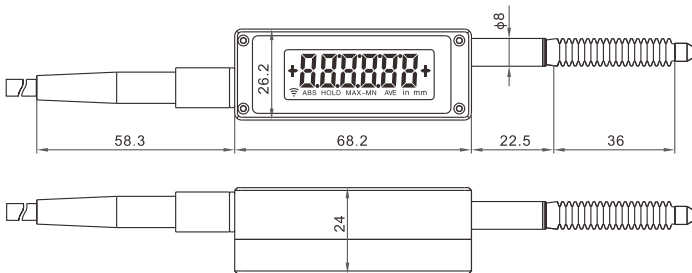
MRC-H12R



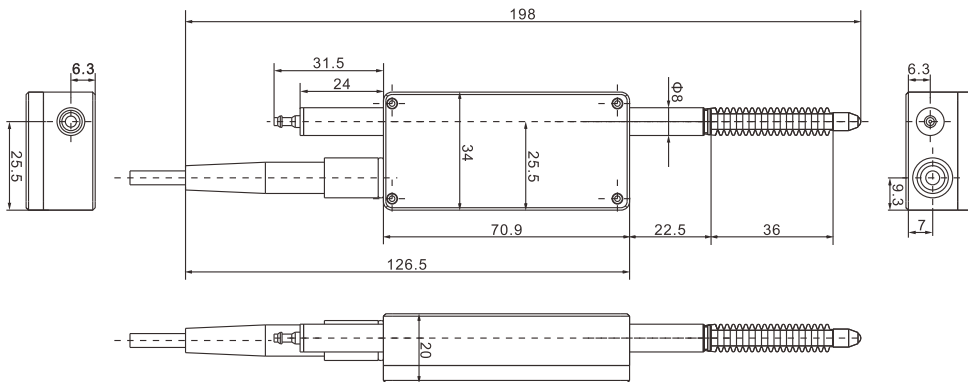
MRC-H25R



MRC-H12RD



MRC-H12Q



Circuit diagram



Aviation plug type	
Pin No.	Description
1	DC 5V (Power)
2	RXD
3	TXD
4	GND

RS232 Lead type	
Pin No.	Description
blue	RXD
Black	TXD
Yellow	DC 5V (Power)
Red	GND

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Guidance

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Magnetic Displacement

MRC-H controllers and accessories



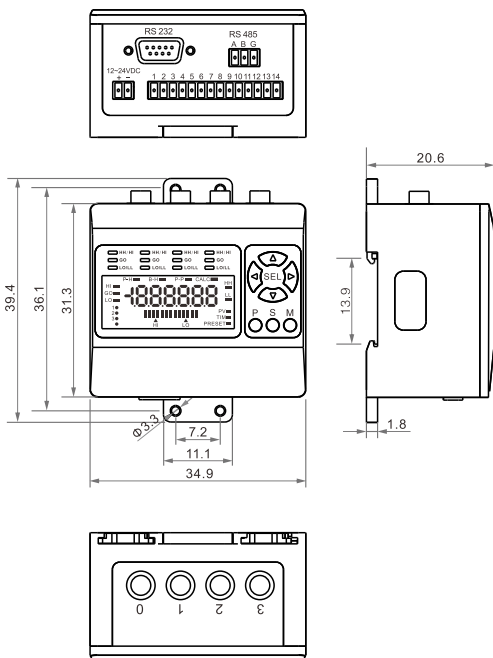
Appearance		
Installation	35mm Track installation	35mm Track installation
Communication interface	RS232/RS485	-
Communication protocol	Modbus RTU	-
Number of Extensions	1 main control module, up to 4 sub-control modules can be expanded	-
Number of connectable sensors	4	
Supply voltage	12~24V DC	
Display range	-199.9999~199.9999	
Display resolution	5μm/1μm/0.5μm/0.2μm (Displayed according to sensor head type)	
Power consumption	≤240mW (Sensor not connected, branch control module not connected)	≤100mW (no connect sensor)
Response time	50/100/500/1000ms (Change in function parameter settings)	
Control output (HH/HI/GO /LO/LL)	NPN output	Max output 20mA
Control input	Timing, preset, reset, channel input	No voltage input
Environmental resistance	Environmental temperature	-10~+60°C (no freezing)
	Relative humidity	35~80% RH (non-condensation)
Material	Body: ABS Button: ABS Panel: MMA Cable: PVC	
Weight	Main control module about 201.6g	Sub-control module about 168.3g
Model	CR-M01	CR-M01A

*The main controller can be matched with up to 4 sub-controllers and can be connected to up to 20 sensor heads.
Each sensor head needs to be equipped with 1 CA08FF-S4F2C.

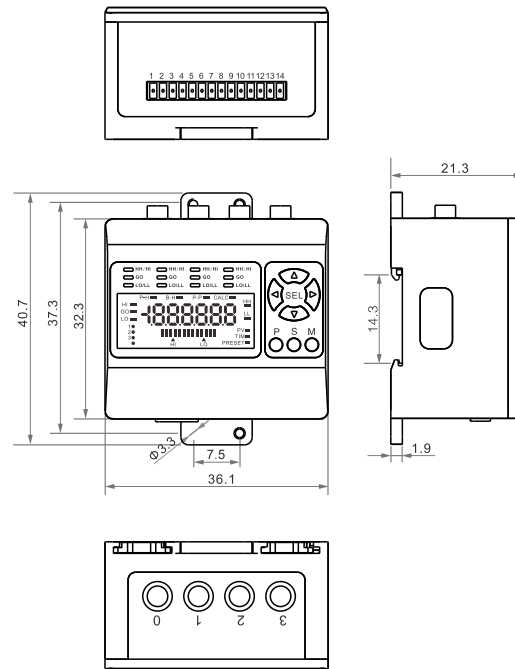
Dimensions

Unit:mm

Main control module CR-M01



Sub-control module CR-M01A



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