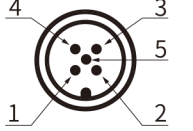


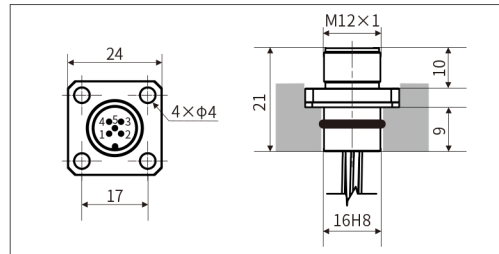
# MI CANopen Output Displacement Sensor

## Electrical connections

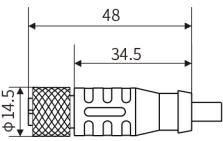
### • CAN (connector)

M12-5Pin Definition	No.	PC
	1	Do not connect
	2	Power supply
	3	Ground
	4	CAN High
	5	CAN Low

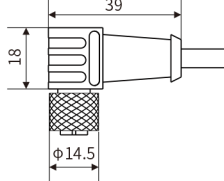
### • M12-5 pin socket




### • CAN (Cable color definition of female connector)

M12-5pin female connector	Cable color	
	Definition	PC
	Power supply	Brown
	Ground	White
	CAN High	Yellow
	CAN Low	Green

### • CAN (Cable color definition of right angle female connector)

M12-5pin right angle female connector	Cable color	
	Definition	PC
	Power supply	Brown
	Ground	White
	CAN High	Yellow
	CAN Low	Green

### • CAN (cable outlet)

Cable code: 511816	Definition	Cable color
	Power supply	Brown
	Ground	White
	CAN High	Yellow
	CAN Low	Green



## ▶ Product parameters-CANopen Output

Input	
Measurement data	Position (Vernier magnet)
Stroke length	50~2500 mm

Output	
Interface	CAN bus ISO DIS 11898, CANopen complies with CIA DS-301V3.0, Sensor Specification DS-406V3.1
Transmission speed	maximum 1Mbit/s
Resolution	±0.1mm
Nonlinearity	±0.1mm (≤250mm) or 0.04%F.S (>250mm)
Repetition accuracy	±0.1mm
Update time	2ms

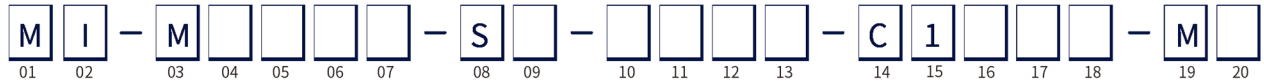
Operating conditions	
Magnet velocity	Arbitrary
Protection level	IP67
Operating temperature	-40℃ ~ +105℃
Humidity/dew point	Humidity 90%, no condensation
Temperature drift coefficient	<30ppm/℃
Shock index	GB/T2423.5 100g (11ms)
Vibration index	GB/T2423.10 15g/10~2000Hz
EMC test	GB/T17626.2 Electrostatic Discharge Anti-interference Degree, Grade 3, Class A
	GB/T17626.3 Radio Frequency Electromagnetic Field Radiation Anti-interference Degree, Grade 3, Class A
	GB/T17626.6 Radio Frequency Field Induced Conducted Disturbance Anti-interference Degree, Grade 3, Class A
	GB/T17626.8 Power Frequency Magnetic Field Anti-interference Degree, Grade 4, Class A

Electrical connections	
Input voltage	8~ 32Vdc
Power consumption	<1W
Polarity protection	maximum -30Vdc
Overvoltage protection	maximum 36Vdc
Insulation resistance	> 10MΩ
Insulation strength	500V
Outgoing mode	Cable outlet or connector

Construction and materials	
Electronic compartment	304L stainless steel
Measuring rod	304L stainless steel
Operating pressure grade	Rated pressure Pn: 30MPa maximum pressure Pmax: 40MPa for stell rod with diameter of 7mm
Assembly	Any direction
Position magnet	Various ring magnets

# MI CANopen Output Displacement Sensor

## Selection Guide-CANopen Output



**01 - 02** Sensor shell form

M	I	Flange shell $\phi$ 28mm
---	---	--------------------------

**03 - 07** Measuring range

0050~2500 mm, step length 1mm
-------------------------------

**08 - 09** Mounting thread form

S	F	Pressure-resistant rod, diameter 7mm
---	---	--------------------------------------

**10 - 13** Connection form

P	C			4 wiring harness, M12 IP69K, 5 pins (2-3-4-5)
---	---	--	--	---

P	C	0	6	60mm, minimum length of wiring harness
---	---	---	---	--

P	C	2	5	250mm, maximum length of wiring harness
---	---	---	---	---

T	M			CAN special cable outlet
---	---	--	--	--------------------------

T	M	0	1	1m cable
---	---	---	---	----------

T	M	R	1	0.1m cable, ordering method within 1 m
---	---	---	---	--

**15 - 19** Signal output mode

**15 - 16** Output form

C	1	CANopen
---	---	---------

**17** Baud

1	1000Kbit/s	2	800Kbit/s	3	500Kbit/s
4	250Kbit/s	5	125Kbit/s	6	100Kbit/s
7	50Kbit/s	8	20Kbit/s		

**18** Resolution

1	0.1mm
---	-------

**19** Number of magnet rings

1	Single magnet ring
---	--------------------

**17- 18** Non-usable area at head and end, customizable

M	6	22mm+36.5mm
---	---	-------------

M	7	22mm+63.5mm
---	---	-------------

### ● Selection example

For example: MI-M0300-SF-TM05-C1411-M6

Indicates: MI flange diameter 28mm, stroke length 300mm, pressure-resistant rod with diameter 7mm, cable outlet form, CANopen output, baud 250kbit/s, resolution 0.1 mm, single magnet ring, non-usable area at head and end 22mm +36.5mm.