



## GM33/34 CO Transmitter Wall / Duct Type



### Application

#### 〈 Feature 〉

- Electrochemical Sensor with a long life, good long term stability and high accuracy.
- It has lower sensitivity to interferant gases.
- High repeatability.

#### 〈 Application 〉

- Monitoring for HAVC / Air conditioning system
- Instrument testing equipment.
- Environmental control and monitoring system.
- Ventilation system control for indoor parking garages and building.

※ Application for environmental monitoring only. Not for CO industrial environmental and life support system.

## Specification

### Input

sensor type	Electrochemistry CO Sensor
measuring range	on request
working range	0 ... 500 PPM

### Output

output	0~1V / 0~5V / 0~10V / 1~5V / 0~20mA / 4~20mA ; RS-485 ; RS-485 & analogue
signal connection	3-wire
linear accuracy ( at 25 ± 2 °C, 40 ± 10 % RH )	± 3 % of F.S. ( best zero-point )
sensitivity	< ± 10 ppm of measured value
load resistance	≤ 500 Ω for 4~20mA ; ≥ 10 K Ω for 0~10V
output calibration	factory software calibration
response time ( t90 )	< 60 s

### Environment

media measured	non-aggressive gas( HAVC system)
media temperature	0 ... 50 °C
working temperature	0 ... 50 °C
working humidity	5 ... 95 RH % ( non-cond. )
storage temperature	-10 ... +60 °C
tolerance of zero-point	< ± 10 ppm

### Electrical

power supply	12 ... 30 VAC / 8 ... 35 VDC
current consumption	DC24V:60mA;DC12V:180mA AC24V:140mA;AC12V:230mA
electrical connection	M12 ( 4P or 5P ) metal connector with 2 m cable or terminal ( cable gland )

### Installation

installation	wall-mounting / duct-mounting flange
fixed	screw on base

### Protection

protect degree	body : IP65 ; Sensor : IP20
electric protection	ⓄPolarity protection Ⓞover-voltage Ⓞshort-circuit

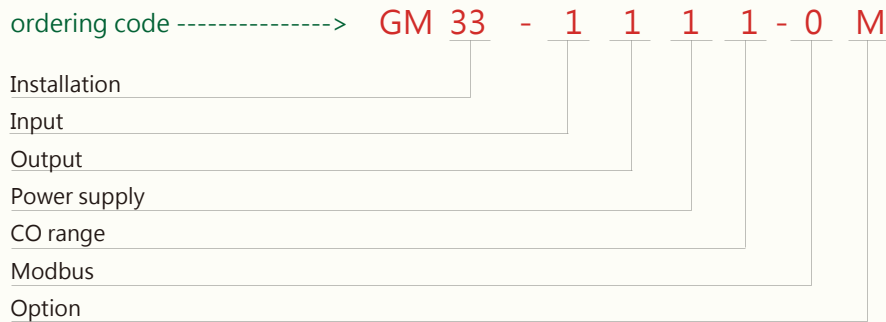
### Certification

certification	CE
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### Material

case	PC fire-proof class (PC-110) ( UL94V-2 )
weight	GM33 : 162g GM34 : 205g

## Ordering Guide



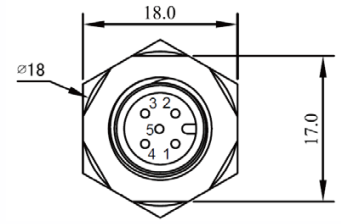
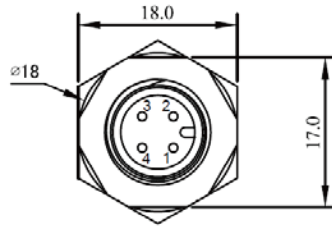
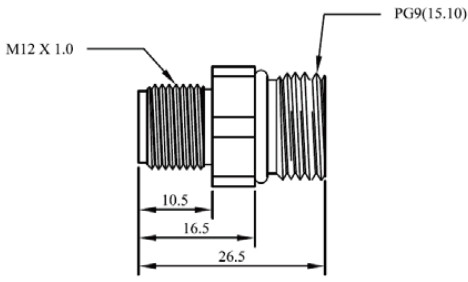
### 【Ordering item】

Installation	code	Input	code	Output	code	Power supply	code	CO range	code
wall	33	CO	1	4~20 mA	1	12~30 VAC or 8~35 VDC	1	100 PPM	1
duct	34			0~20 mA	2			300 PPM	3
				1~5 V	5			500 PPM	5
				0~10 V	6			RS-485	N
				0~5 V	7				
				0~1 V	8				
				RS-485	N				

Modbus	code	Option	code
analogue	0	cable gland	N
RS-485	1	M12 ( 4P or 5P )	M
RS-485 & analogue	2	metal connector ( with 2 m cable )	
※ M type - M12 ( 5P ) metal connector or N type - M16 cable gland			

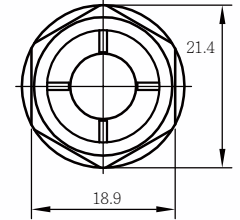
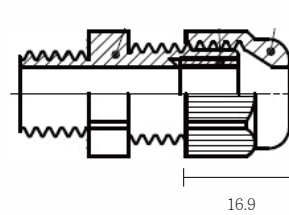
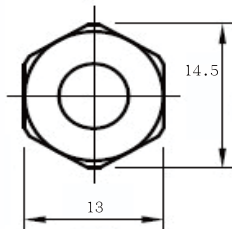
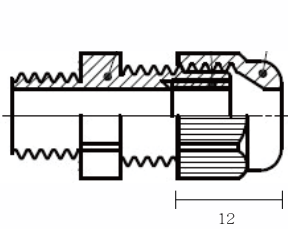
Electric Connector

【 M type (M12-4PIN metal connector) RS-485 or analogue    【 M type (M12-5PIN metal connector) RS-485+analogue



【 N type (M12 cable gland) RS-485 or analogue

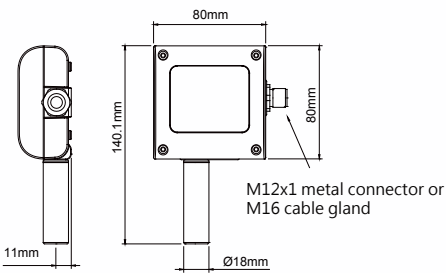
【 N type (M16 cable gland) RS-485+analogue



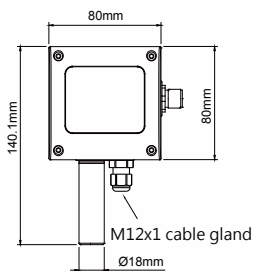
unit : mm

Dimension

【 GM33(indoor) 】

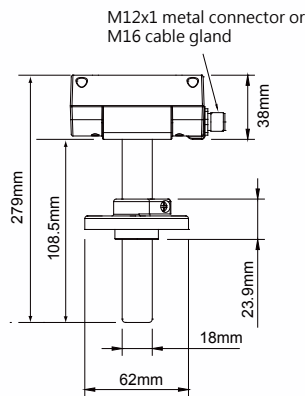


M type (4P) : RS-485 or analogue  
M type (5P) or N type : RS-485 + analogue

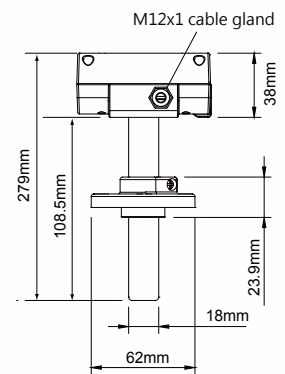


N type : RS-485 or analogue

【 GM34(duct) 】

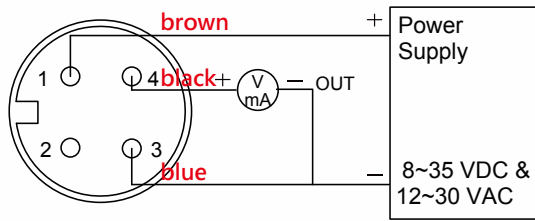


M type (4P) : RS-485 or analogue  
M type (5P) or N type : RS-485+analogue



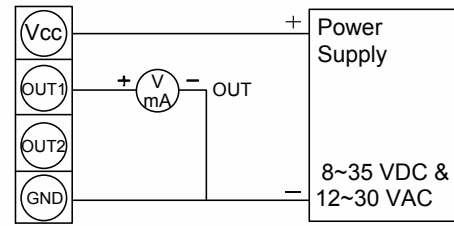
N type : RS-485 or analogue

Analogue Diagram



M12 connector

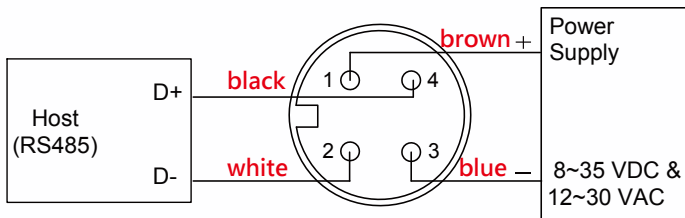
M type (4P)



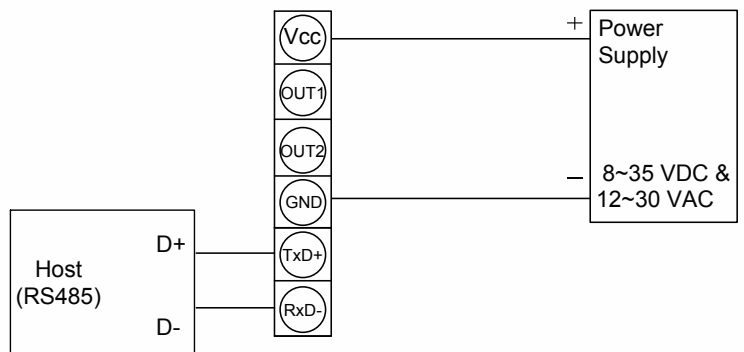
4P terminal

N型

RS-485 Diagram

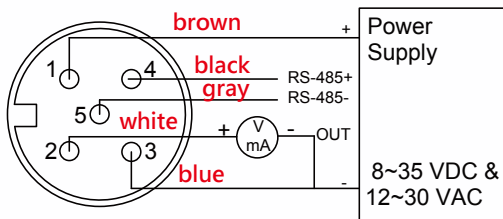


M type (4P)

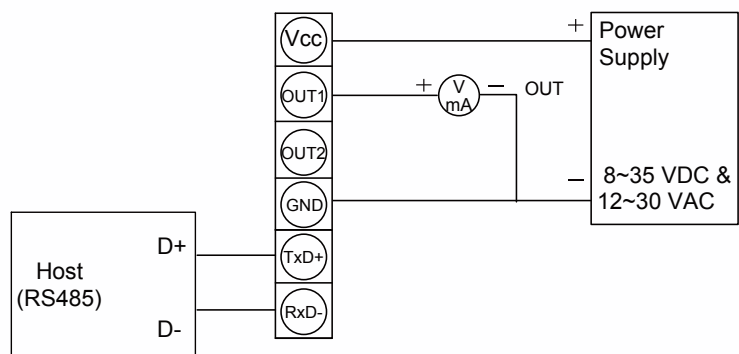


N type

Analogue + RS-485 Diagram



M type (M12, 5P) connector



N type (M16)