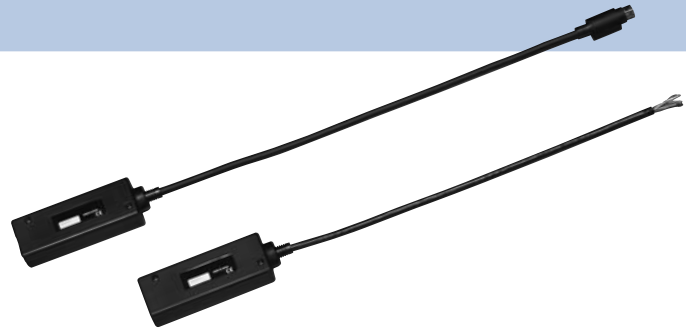
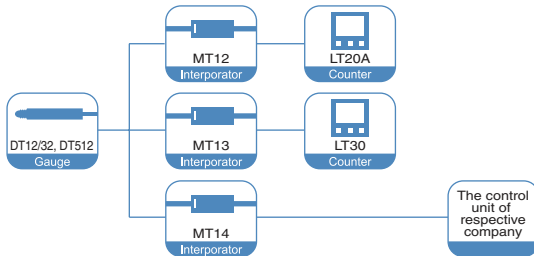


- MT12/13: For connection to counter
- MT14: Unterminated cable
A/B-quadrature output by line driver [EIA-422 compliance]
- Power supply + 5 V DC

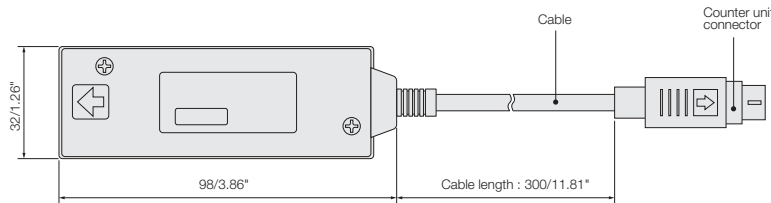
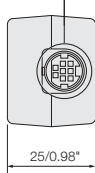


Interpolator

Dimensions

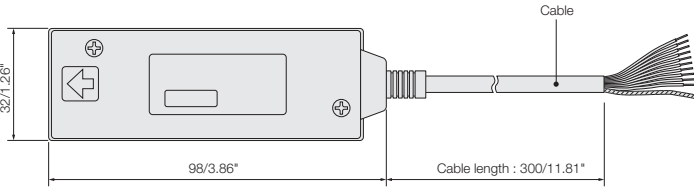
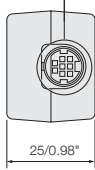
MT12 / MT13

Measuring unit connector



MT14

Measuring unit connector



Unit : mm/inch

Phase difference for A/B phase output

Changes as follows according to the traveling velocity of the measuring unit.

Model	MT□□-01	MT□□-05	MT□□-10	Output phase difference (μs)
Velocity (m/min)	0 to 2.5	0 to 12.5	0 to 25	20
	to 6.25	to 31.25	to 62.5	8
	to 12	to 60	to (100)*	5
	to 24	to (100)*	-	2.5
	to 60	-	-	1
	to (100) *	-	-	0.5

* An alarm is output at a traveling velocity of 100 to 115 m/min. The sampling frequency of the output signal is 120 μs.

Cable color MT12		
Pin no.	Description	Cable color
1	+5 V	Red
2	-	-
3	0 V	Black
4	A	Yellow
5	B	Blue
6	-	-
7	-	-
8	ALARM	Gray
9	0 V	Purple
10	0 V	Orange
Case	FG	Shield

Cable color MT13		
Pin no.	Description	Cable color
1	+4.5 V	Purple
2	0 V	Black
3	A	Blue
4	A	Yellow
5	B	Orange
6	B	Gray
7	-	-
8	-	-
Case	FG	Shield

Connector used: Hosiden TCP8938 or equivalent product
0V and the shield (FG) are connected with a capacitor.
Nothing should be connected to cables with colors not found in this table.

Cable color MT14	
Description	Cable color
+5 V	Red
0 V	White
0 V	Brown
0 V	Black
A	Yellow
A	Blue
B	Gray
B	Orange
ALARM	Purple
ALARM	Green
FG	Shield

0V and the shield (FG) are connected with a capacitor.

Connector used: Hosiden TCP8938 or equivalent product
0V and the shield (FG) are connected with a capacitor.
Nothing should be connected to cables with colors not found in this table.

Specifications

Model	MT12-05/10	MT13-01/05/10	MT14-01/05/10
Compatible measuring units		DT12/32, DT512	
Maximum response speed		100 m/min	
Resolution	5μm(-05), 10μm(-10)	1μm(-01), 5μm(-05), 10μm(-10)	
Power voltage		DC5 V ±4 %	
Power consumption	0.9 W	1.2 W (when output load of 120Ω is connected)	
Output format	NPN open collector	Voltage differential line driver	
Operating temperature and humidity range		0 to +50 °C (no condensation)	
Storage temperature and humidity range		-10 to +60 °C (20 to 90 %RH)	
Dimensions		See the Dimensional Diagram.	
Mass		About 90 g	