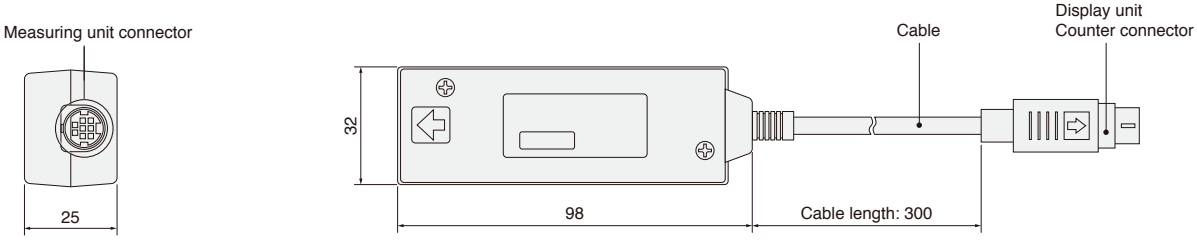
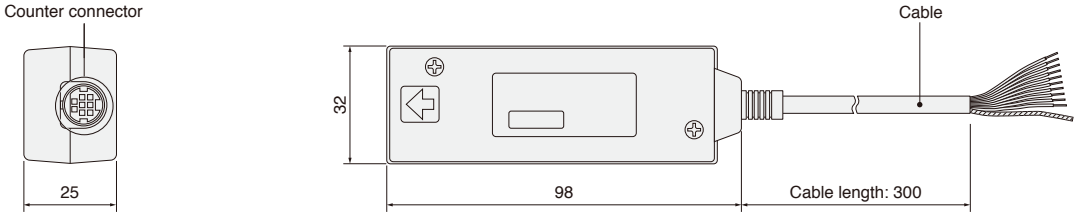
MT MT12/13/14

Output A/B phase

MT12 /13

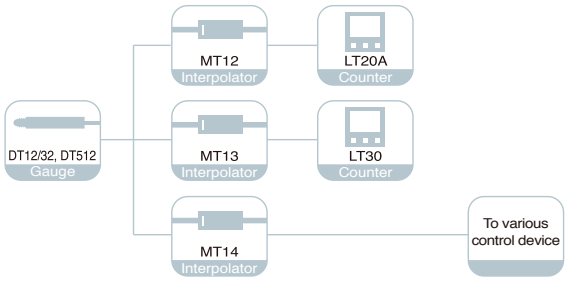


MT14



Unit: mm

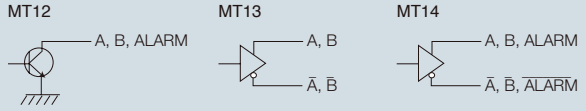
* Connection of the DT Series enables A/B phase output.



Phase difference for phase A/B output

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

Output signal: Phase A/B
Alarm output format: NPN open collector output (max. rated voltage: 31 V, max. rated current: 50 mA)

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

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

Cable color MT13

Output signal: Phase A/B (The output becomes High impedance during an alarm.)
Output format: Voltage-differential line driver output (compliant with EIA-422)

Pin no.	Description	Cable color
1	+5 V	Purple
2	0 V	Black
3	A	Blue
4	$\overline{A}$	Yellow
5	B	Orange
6	$\overline{B}$	Gray
7	—	—
8	—	—
Case	FG	Shield

* Connector used: Hosiden TCP6182 or equivalent product 0 V and the shield (FG) are connected via a capacitor. Nothing should be connected to cables with colors not found in this table.

Cable color MT14

Output signal: A/B phase, alarm (The output does not become High impedance during an alarm.)
Output format: Voltage-differential line driver output (compliant with EIA-422)

Description	Cable color
+5 V	Red
0 V	White
0 V	Brown
0 V	Black
A	Yellow
$\overline{A}$	Blue
B	Gray
$\overline{B}$	Orange
ALARM	Purple
$\overline{ALARM}$	Green
FG	Shield

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

Specifications

Model	MT12-05	MT12-10	MT13-01	MT13-05	MT13-10	MT14-01	MT14-05	MT14-10
Compatible measuring units	DT512, DT12/DT32							
Maximum response speed	100 m/min							
Resolution	5 μm	10 μm	1 μm	5 μm	10 μm	1 μm	5 μm	10 μm
Power voltage	5 VDC±5 %							
Power consumption	0.9 W		1.2 W (when output load of 120Ω is connected)					
Output format	Open collector		A/B 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)							
Mass	Approx. 90 g							