

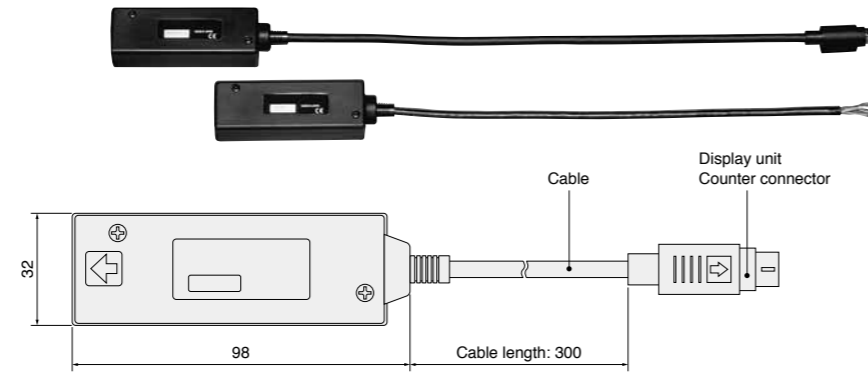
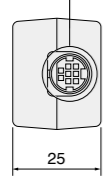
MT MT12/13/14

U U Series

Output A/B phase

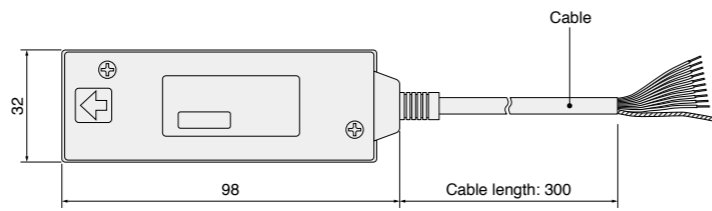
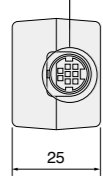
MT12/13

Measuring unit connector



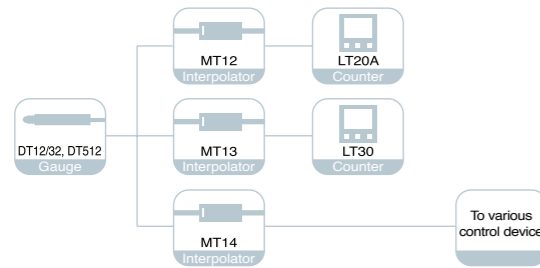
MT14

Counter connector



Unit: mm

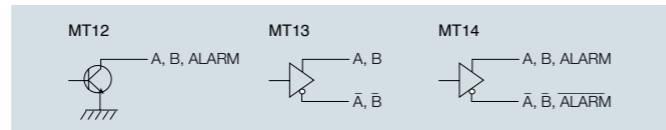
* Connection of the DT Series enables A/B phase output.



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

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	Ā	Yellow
5	B	Orange
6	B̄	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)

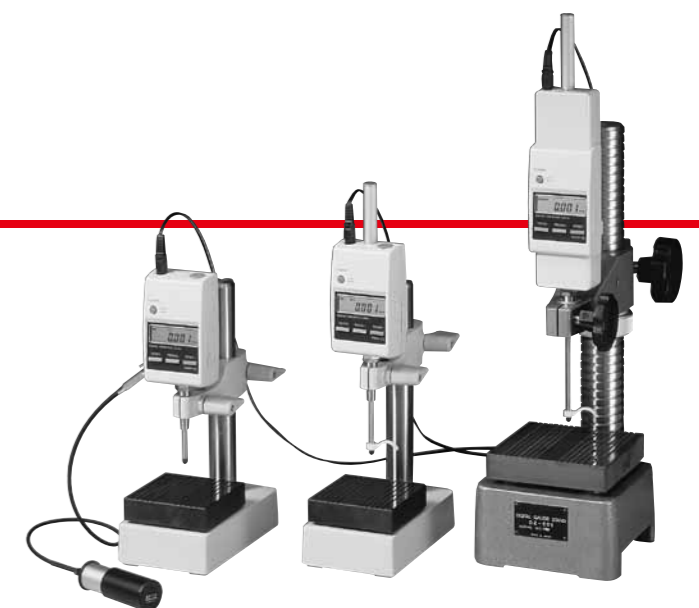
Description	Cable color
+5 V	Red
0 V	White
0 V	Brown
0 V	Black
A	Yellow
Ā	Blue
B	Gray
B̄	Orange
ALARM	Purple
ALARM	Green
FG	Shield

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

Specifications

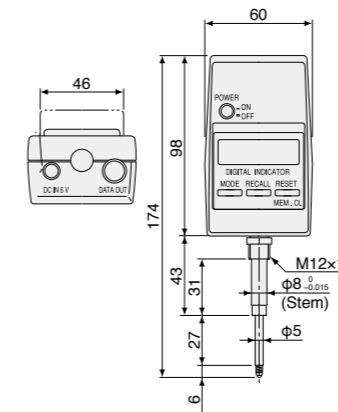
Model	MT12-05	MT12-10	MT13-01	MT13-05	MT13-10	MT14-01	MT14-05	MT14-10
Compatible measuring units	DT512, DT12/DT32							
Maximum response speed	100 m/min							
Resolution	5 μm	10 μm	1 μm	5 μm	10 μm	1 μm	5 μm	10 μm
Power voltage	5 VDC±5 %							
Power consumption	0.9 W		1.2 W (when output load of 120Ω 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							

Resolution 1μm Stem φ8 Stroke 12mm Stroke 30mm Stroke 60mm Output RS-232C

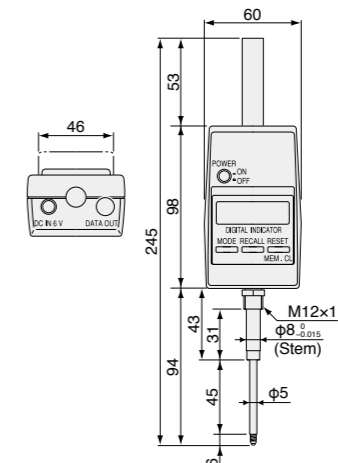


* Set bushing DZ-811 (optional) is required to use U60B with gauging stand DZ-501.
* The air release and the gauging stand are optional accessories.

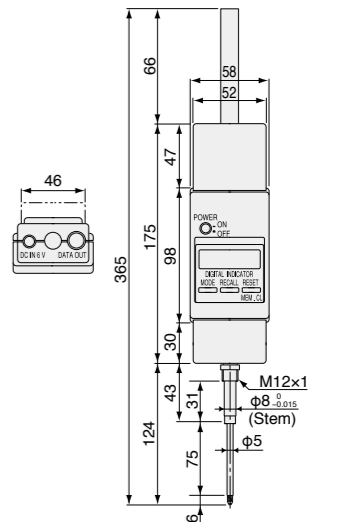
U12B



U30B



U60B



Unit: mm

Specifications

Model	U12B	U30B	U60B
Measuring range	12 mm	30 mm	60 mm
Maximum resolution	1 μm		
Accuracy (at 20°C/68°F)	2 μm		
Measuring force (at 20°C/68°F)	1.3 N or less	1.5 N or less	2.2 N or less
Travel length of the release	Full stroke		
Display	LCD display element (6 digits, minus display)		
Maximum response speed	0.4 m/s (24 m/min)		
Operating temperature	0 to 40°C (no condensation)		
Storage temperature	-10 to 50°C (no condensation)		
Power supply	6 VDC±10 % (With DC IN jack) 6 to 9 VDC±10 % (With data connector used)		
Power consumption	1 W		
Mass	Approx. 190 g	Approx. 230 g	Approx. 300 g
Feeler	Carbide ball tip, Mounting screw M2.5		
Accessories	Instruction Manual, AC adapter available (We DO NOT provide an AC adaptor with these.), lift lever, and dedicated spanner		

DKS

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DT(MT)

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DT(MT)

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