

Sounding system level meter
Sounding M's



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Sounding M's, the latest continuous level measurement instrument which integrates all functions corresponding to global standard, supports various application and performs as **the best level meter** guaranteed by MATSUSHIMA.

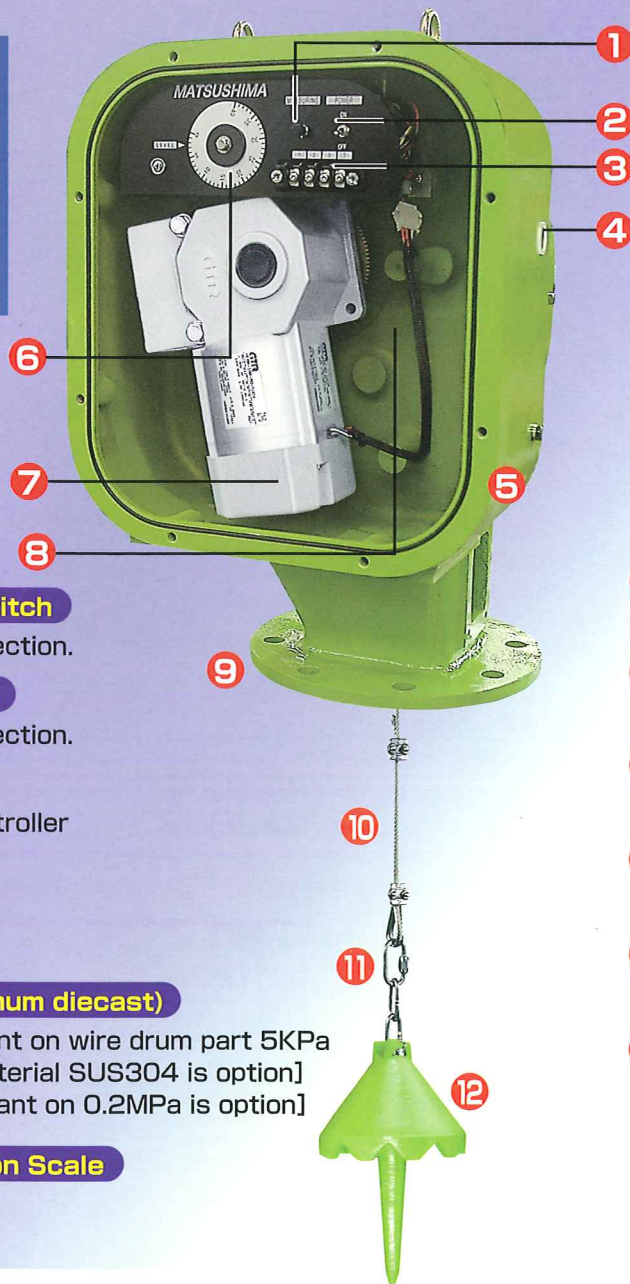
Features

- **Brand-new type level meter** having the unique control system (Patent No. H5-12648).
- **Considerably reduced wiring cost** because the wiring between Sensor and Controller requires only 4 core cable.
- **Maintenance is easy** because mechanical and electrical parts are drastically cut from the Sensor to be installed at silo/hopper.
- Controller is equipped with **all necessary functions for level measurement**.
- **Necessary adjustment is span setting only.**
Only inputting figure according to the display. That's all. No tiresome adjustment.
No need to call specialist/engineer.
- **Free to choose** Controller from the separated type and built-in type.
- **Span setting is adjustable** up to 40m.
- Because of the wire-rope system, **superior in durability** and replacement work is easy.
- Sensor is IP55 class besides, wire drum part and electrical part are separated.
Stable measuring is possible under severe conditions.
- **Explosion proof is available as standard line-up**, besides, high-temperature, corrosion-proof and high-pressure type are available as option.
- Appropriate **application and maintenance consultation** is provided by MATSUSHIMA with long time history and many supply experiences.

It is the *Sounding M's* that offers total level measuring engineering.

The latest level meter integrates reliable tec

Sounding M's (Main body)



4 core commun

1 Measuring Switch
Used under inspection.

2 Power Switch
Used under inspection.

3 Terminal
Connects to controller
by 4 core cable.

4 Lead outlet
G 1/2

5 Casing (aluminum diecast)
Pressure-resistant on wire drum part 5KPa
[Wetted part material SUS304 is option]
[Pressure-resistant on 0.2MPa is option]

6 Weight Position Scale

7 Operating Motor
90W, Equipped with E-class insulation bra

8 Space for built in controller
[Built in controller is option]

9 Flange (aluminum diecast)
[Wetted part material SUS304 is option]

10 Wire Rope
φ3mm SUS304

11 Link Chain
SUS304

12 Sensing Weight
Open drum type SS400 5kg
Enclosed drum type FC200 4kg
Object gravity more than 0.8^{*1}
[Float type and SUS304 are option]

^{*1} Standard Sensing Weight is applicable down to density 0.8.
Density below 0.8 is also applicable as option.

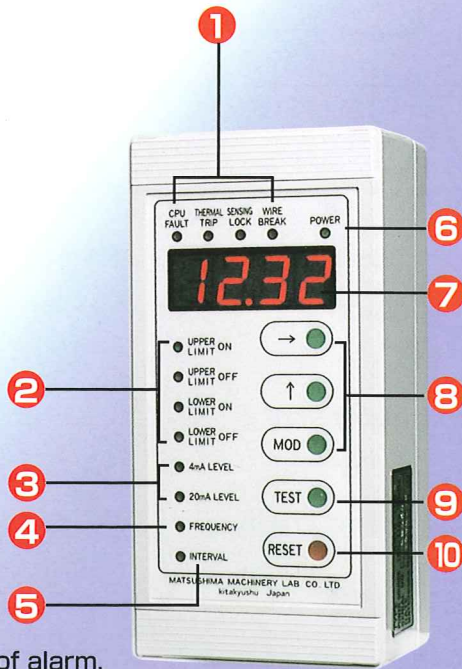
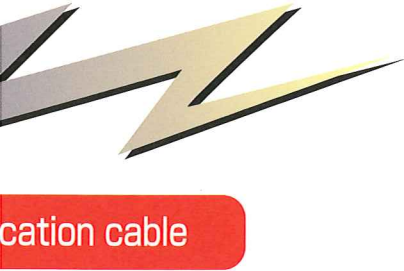
Standard specification

Type	Open drum type	Enclosed drum type	Open drum type	Enclosed drum type
	MDMC-2K	MDMC-2S	MDMC-4K	MDMC-4S
Measuring range	0~20m		0~40m	
Power	AC100V 50/60Hz, AC110V 60Hz ±10% (150VA)			
Ambience	temperature: -10-50°C protection structure IP55			
Output Signal	DC4-20mA (DC20-4mA measuring display is possible) Isolate output, load resistance 500Ω or less			
Measuring accuracy	1% (Resolution: 0.1%)			
Contact Output	Upper limit, lower limit, and measuring signal; each 1a Alarm (any of CPU fault, thermal trip, weight-buried, wire-broke); 1a (Normally Close) Contact capacity; AC 250V 2A (DC 60V 1A)			
Measuring Mode	Manual measurement with measuring contact ON. Auto measurement with outside contact by continuous ON. Interval: adjustable 1-9999 seconds.			
Measuring Frequency	Continuous measuring is available.			
Rope Speed	12.5/14.9m/min			

[Option] ●Wetted part material: SUS304 ●High temperature type: object temperature 200°C max ●Pressure-resistant case: 0.2MPa max
●Sensing Weight: For powder, fine powder, all sorts of weight ●Power: AC200V50/60Hz ●Built in controller

Technologies and global standard functions.

Sounding M's (Controller)



1 Fail-safe Lamp

This lamp displays the type of alarm.

2 Upper · lower limit signal Lamp

The lamp is turned on when the upper · lower limit signal is outputted.

Hysteresis can be set optionally set on upper/lower limit signal.

3 Output Signal Setting Lamp

The lamp is turned on while setting DC4mA or DC20mA level.

4 50/60Hz Switching Lamp

For switching the power frequency

5 Interval Lamp

Adjustable from 1 to 9999 seconds.

6 Power Lamp

The lamp is turned on when power is entered.

7 4 figures Digital Indicator

Displays measured value by "cm" or "%".
Displays parameter under setting.

8 Push-button Switch for Setting

Every parameter of measurement program can be set with the three push-button switches.

Set value is memorized even if the power is cut off.

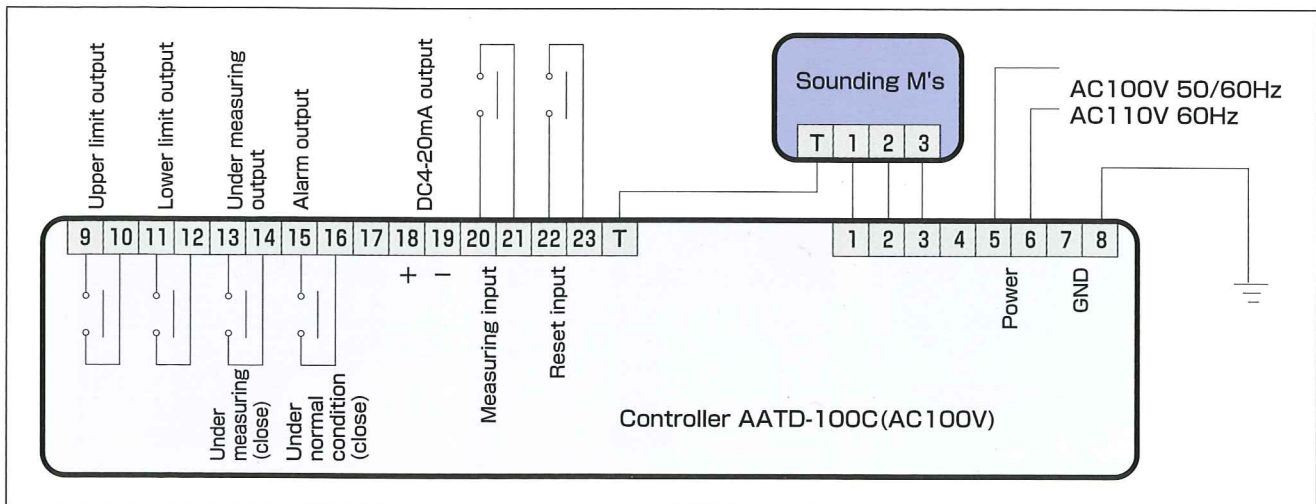
9 Push-button Switch for Testing

Used for manual measuring.

10 Push-button Switch for Resetting

Used for recovering fault.

Connection Diagram

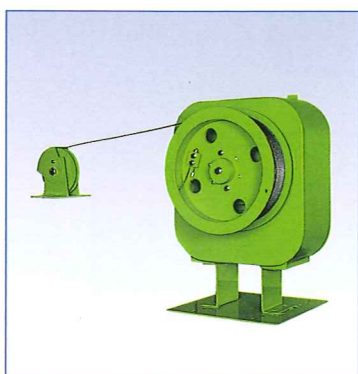


■Arrangement matters

Date

Address						
Company						
Section						
Name, Title						
TEL & FAX No.	TEL	-	-	FAX	-	-

- Plan : Quantity () Time ()
- Installation place : outdoor indoor
- Facilities name : ()
- Explosion-proof structure : necessary () unnecessary
- Object name : ()
- Specific gravity : Volume gravity () Appearance gravity ()
- Angle of repose : ()
- Moisture content : ()%
- Highest temperature : Object () Ambience ()
- Inside pressure : () Pa
- Silo, Hopper form : opening Air-tight height from the ground () m
: circle (ϕ) m square () m
- Object charging method : Conveyor () Bucket Compressed-air
: The others ()
- Measuring span : from installing position to 0% () m
: from installing position to 100% () m
- Operating Power : 100V 200V (option) 50Hz 60Hz
- Option : Current Indicator analogue (vertical wide angle) (display m %)
: digital (display m %)
- The others : ()



■Open drum type



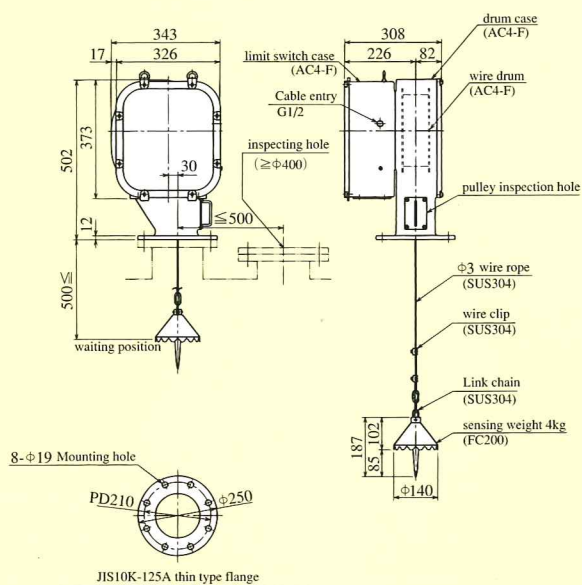
■For 40m



■Explosion-proof type

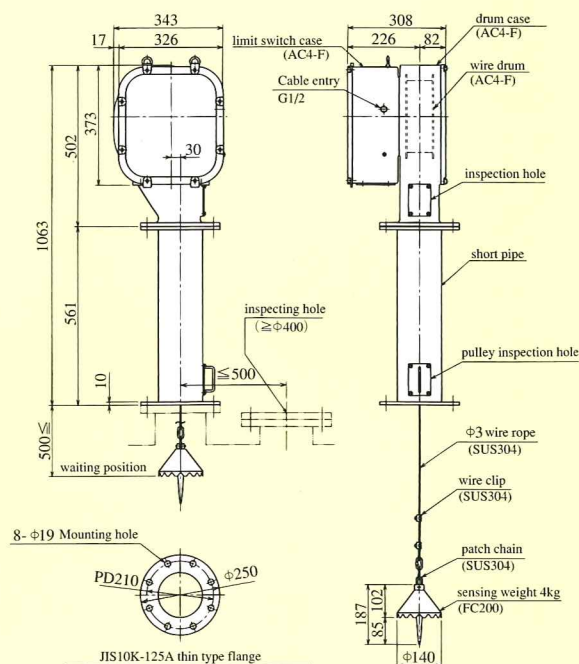
The external size Figure

MDMC-2S



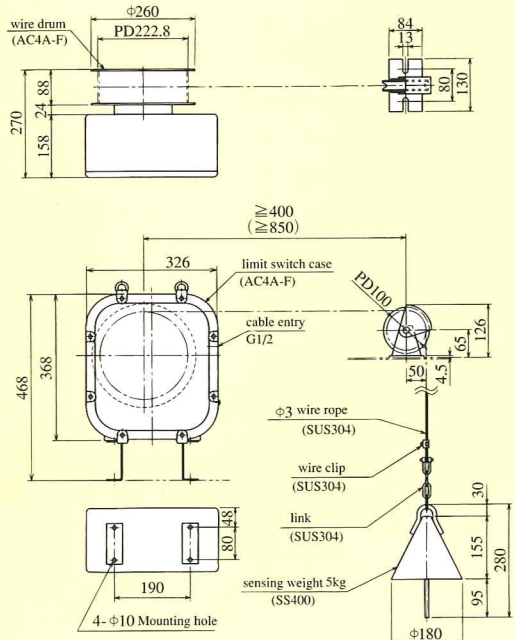
Approx Mass : 32kg

MDMC-4S



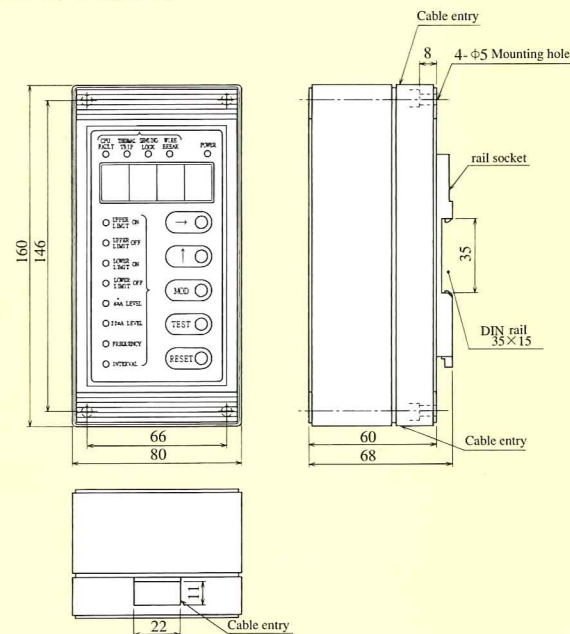
Approx Mass : 43kg

MDMC-2K
(MDMC-4K)



Approx Mass : 28kg

AATD-100C
AATD-200C



Approx Mass : 0.8kg

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