

SA series

Displacement Meter Signal Conditioner

Best Suited to Use with Displacement Sensors (LVDT/RVDT)!

Enables you to build up measurement systems with various LVDT/RVDT sensors.

LVDT/RVDT sensors vary widely in specifications such as excitation frequency and sensitivity from model to model. Basic circuits of the SA-DM have been designed to absorb such differences among models. It can be used with various LVDT/RVDT sensors.

Assures stability of the whole measurement system and highly-accurate measurement.

Besides high level of basic performance such as stability and accuracy, the SA series supports isolated output so as to reduce noise due to ground loop or other measurement barriers.

Capable of multi-channel synchronization.

When using multiple channels, the OSC-EXT function enables multi-channel synchronization in order to avoid beat noise due to excitation frequency difference.

Wire break detection function can be included.

It can detect wire breaks in the LVDT/RVDT and measurement cables.



 Compliance with
EMC Directive

•Model Identification

SA-DM-□□□

└ Series

└ Registration (management)
number at our delivery

Specifications

•Sensor Excitation

Voltage	5Vrms
Frequency	1KHz~5KHz (And determined by a combination sensor)
Wave form	Sine wave
External Sync	OSC-EXT function enables multi-channel synchronization.

•Receiving from sensor

Circuit	Differential input (input impedance : approx. 10KΩ)
Sensor sensitivity	0.1Vrms/FS~10Vrms/FS
Rectifying method	Synchronous rectification (Compatible with 4-wire and 6-wire LVDT/RVDT)

•Response frequency

Response frequency	0~200Hz<-3db> (Regardless of the excitation frequency) Note (2)
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•Accuracy

Linearity	±0.01% and under
Temperature stability	±0.005%/°C (TYP) ±0.015%/°C (MAX)

Note (1) :Contact us for details.

Note (2) :Contact us about change of response frequency.

•Adjustment

Zero	15-turn trimmer (Range of adjustment is determined by the amount of measured displacement.)
Span	15-turn trimmer (Range of adjustment is ±20% of full scale.) SPAN-CAL function enables span to be restored to the factory-set level.

•Range of working temperature

Range of temperature	0~50°C
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•Power source

AC100V system	AC90V~AC138V 50/60Hz (power consumption MAX10VA)
AC200V system	AC180V~AC265V 50/60Hz (power consumption MAX10VA)
DC24V systemNote (3)	DC22V~DC28V (power consumptionMAX5W)

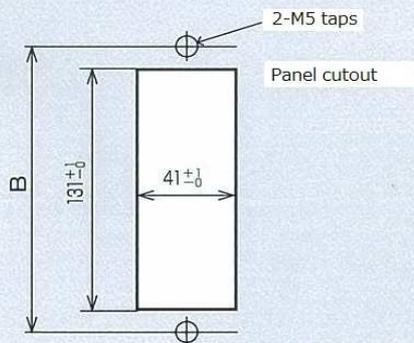
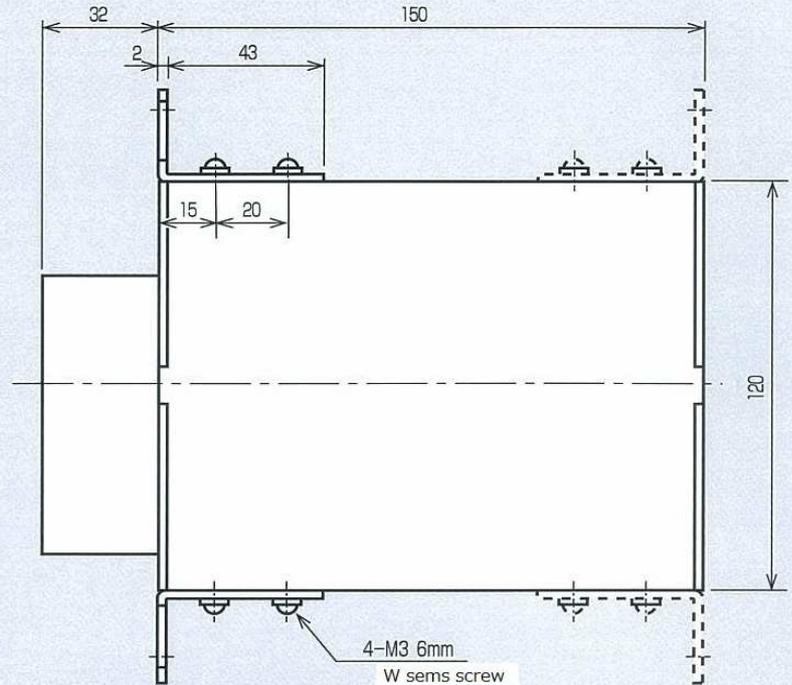
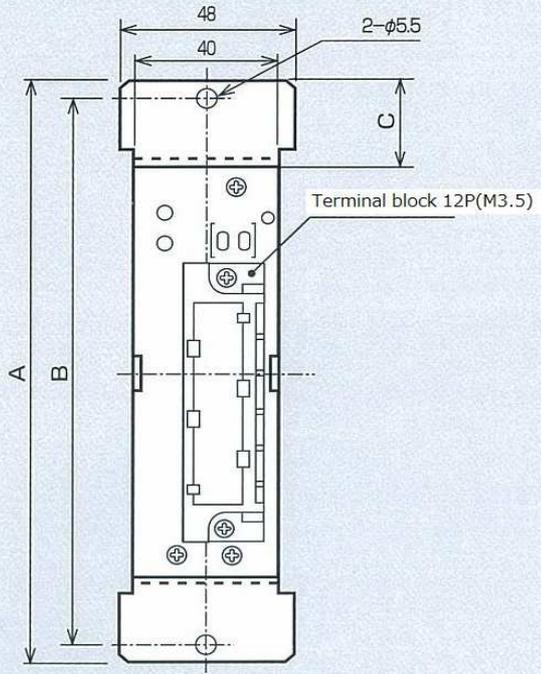
•Output

Voltage output Note (4)	A.Isolated 0~±5V or 0~+5V (I _o MAX=5mA) B.Non-isolated 0~±5V or 0~+5V (I _o MAX=5mA)
Current output	C.Isolated 4~20mA (250Ω built-in) RLMAX=550Ω D.Non-isolated 4~20mA (250Ω built-in) RLMAX=550Ω

Note (3) :Other DC voltages also supported.

Note (4) :Both isolated and non-isolated outputs support other voltage range. Maximum power voltage:±10VDC.

Appearance and Dimensions



Painting color: Munsell 5GY7/1.5

Mass: Approx 1kg Mounting adaptors type H-01 used

Type of Mounting adaptors	A	B	C
H-01	170	160±0.2	25
H-02	160	140±0.2	20

※Mounting adaptors can be attached at the back side of body case.

※Floor type(H-03) is also available. (please refer to the catalogue of GP series)

•Accessories

- Spare fuse 1 peace
 - Instruction manual 1 copy
 - Test record 1 copy
 - Mounting adaptor 2 set
- Please choose one from H-01,H-02,or H-03

•Related Product



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