

# Panel Meters (Indicator)



## M5W Series CATALOG

**For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.**

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- Max. display value: 19999
- Linear display based on input specification
- Display output values (0 - 10 VDC $\rightleftharpoons$ ) from power converters (options available for DC 4 - 20 mA, 1 - 5 VDC $\rightleftharpoons$ )
- RMS or AVG value selection (AC voltage)
- 7-segment LED display
- DIN standard size models

### Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

**M 5 W - ① - ②**

**① Input type**

DV: DC voltage  
DA: DC current  
W: Power  
T: Rotation  
S: Speed  
DI: Scaling (DC 4 - 20 mA)

**② Measurement input**

Refer to measurement input specifications.

### Measurement Input Specifications

| Measurement input | Input type                       |                |                  |  |  |        |
|-------------------|----------------------------------|----------------|------------------|--|--|--------|
|                   | DV                               | DA             | W <sup>01)</sup> | T <sup>02)</sup>                             | S <sup>02)</sup>                                 | DI     |
| No mark           | -                                | -              | -                | -  | -  | 19999  |
| 1                 | 199.99 mVDC $\rightleftharpoons$ | 199.99 $\mu$ A | 199.99 W         | 19999 rpm<br>0 - 10 VDC $\rightleftharpoons$ | 19999 m / min<br>0 - 10 VDC $\rightleftharpoons$ | -      |
| 2                 | 1.9999 VDC $\rightleftharpoons$  | 1.9999 mA      | 1.9999 kW        | -  | -  | -      |
| 3                 | 19.999 VDC $\rightleftharpoons$  | 19.999 mA      | 19.999 kW        | -  | -  | -      |
| 4                 | 199.99 VDC $\rightleftharpoons$  | 199.99 mA      | 199.99 kW        | -  | -  | -      |
| 5                 | 300.0 VDC $\rightleftharpoons$   | 1.9999 A       | 1999.9 kW        | -  | -  | -      |
| 6                 | -                                | 19.999 A       | -                | -  | -  | -      |
| 7                 | -                                | 199.99 A       | -                | -  | -  | -      |
| 8                 | -                                | 1999.9 A       | -                | -  | -  | -      |
| DX                | -                                | -              | -                | DC input Option                              |  | -      |
| XX                | Option                           | Option         | Option           | -  | -  | Option |

01) This specification is based on the transducer with 0 - 10 VDC $\rightleftharpoons$  output.  
When the output of transducer is DC 4 - 20 mA or 1 - 5 VDC $\rightleftharpoons$ , use the scaling meter.  
02) This specification is based on the tacho generator with 0 - 10 VDC $\rightleftharpoons$  or 0 - 10 VAC $\sim$  output.

### Product Components

- Product (+bracket)
- Instruction manual

## Specifications

| Input type                  | DC voltage  | DC current                    | Power                         | Rotation, speed               | Scaling      |
|-----------------------------|---|-------------------------------|-------------------------------|-------------------------------|--------------|
| Max. allowable input        | $\leq 300 \text{ VDC} \approx$<br>$\approx 150 \% \text{ F.S. for each measured input range}$             | $\leq \text{DC } 2 \text{ A}$ | $\leq 10 \text{ WDC} \approx$ | $\leq 10 \text{ VDC} \approx$ | DC 4 - 20 mA |
| Display method              | 7-segment (red) LED (character height: 14 mm)   |                               |                               |                               |              |
| Display accuracy            | $\pm 0.2 \% \text{ F.S. rdg} \pm 1\text{-digit}$  |                               |                               |                               |              |
| Display scale               | 19999   |                               |                               |                               |              |
| Sampling time               | 2.5 times / sec   |                               |                               |                               |              |
| Response speed              | $\approx 2 \text{ sec (0 to 19999)}$  |                               |                               |                               |              |
| Sampling cycle              | 300 ms  |                               |                               |                               |              |
| Operation method            | Dual integral method  |                               |                               |                               |              |
| Unit weight                 | $\approx 172 \text{ g}$   |                               |                               |                               |              |
| Approval                    | ERC   |                               |                               |                               |              |
| Power supply <sup>01)</sup> | 100 - 240 VAC $\sim \pm 10 \% 50 / 60 \text{ Hz}$   |                               |                               |                               |              |
| Power consumption           | 2 W   |                               |                               |                               |              |
| Insulation resistance       | $\geq 100 \text{ M}\Omega (500 \text{ VDC} \approx \text{megger})$  |                               |                               |                               |              |
| Dielectric strength         | 2,000 VAC $\sim 50 / 60 \text{ Hz}$ for 1 min   |                               |                               |                               |              |
| Noise immunity              | $\pm 1$ the square wave noise (pulse width: 1 $\mu\text{s}$ ) by the noise simulator                      |                               |                               |                               |              |
| Vibration                   | 0.75 mm double amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 1 hours |                               |                               |                               |              |
| Vibration (malfunction)     | 0.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 10 min   |                               |                               |                               |              |
| Shock                       | 300 $\text{m/s}^2 (\approx 30 \text{ G})$ in each X, Y, Z direction for 3 times                           |                               |                               |                               |              |
| Shock (malfunction)         | 100 $\text{m/s}^2 (\approx 10 \text{ G})$ in each X, Y, Z direction for 3 times                           |                               |                               |                               |              |
| Ambient temperature         | 0 to 50 °C, storage: -25 to 65 °C (no freezing or condensation)   |                               |                               |                               |              |
| Ambient humidity            | 35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)   |                               |                               |                               |              |

01) Power supply 24 - 70 VDC  $\approx$  option is also available to order.

## Dimensions

• Unit: mm, For the detailed drawings, follow the Autonics website.

