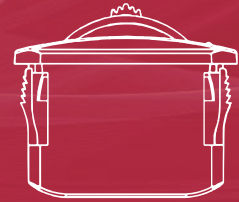


# MTW10 series

## Thumbwheel



### PRODUCT FEATURES

- Compact design, thumb-operated
- Single axis operation, spring return
- Non-contacting hall effect technology, high reliability, long lifetime
- IP68S (electronic part)

### MARKET FOCUS

- Industrial remote controller
- Control panel



### TECHNICAL SPECIFICATIONS

#### ① Mechanical data

- Travel angle:  $\pm 30^\circ$
- Operating force\*: 2~3N
- Service life: >3 million cycles
- Product weight: Appr.30g
- \* The measuring point is 15mm from the pivot center

#### ② Electrical data

- Supply voltage(Vs):  $5.0 \pm 0.5\text{Vdc}$  or 9~32Vdc
- Power current consumption: <11mA (per channel)
- Center voltage:  $2.5\text{V} \pm 4\%V_s$
- Output linearity tolerance:  $\pm 3\%$
- Maximum overload voltage: 20Vdc
- Maximum reverse voltage: -10Vdc
- Load resistance: 10K $\Omega$

#### ③ Environmental data

- Operating temperature: -30°C~+70°C
- Storage temperature: -40°C~+85°C
- Protection class: IP68S (electronic part)

## ORDERING CODES

MTW10 - ① - ②

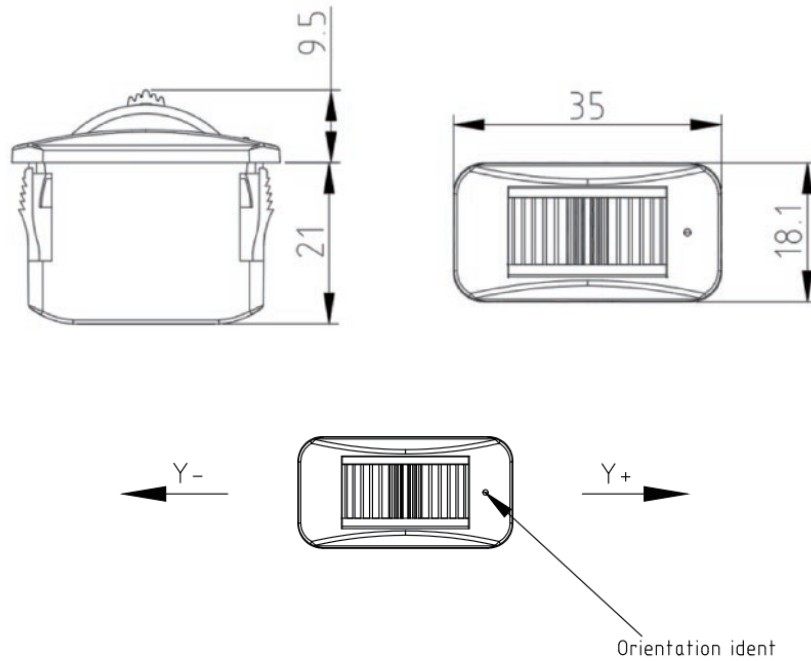
### ① Output signal

H11	Supply voltage 5Vdc, 10%~50%~90%Vs ratiometer output
H13	Supply voltage 5Vdc, 20%~50%~80%Vs ratiometer output
H14	Supply voltage 5Vdc, 25%~50%~75%Vs ratiometer output
H21	Supply voltage 5Vdc, 10%~50%~90%Vs and 90%~50%~10%Vs redundant ratiometer output
H23	Supply voltage 5Vdc, 20%~50%~80%Vs and 80%~50%~20%Vs redundant ratiometer output
H24	Supply voltage 5Vdc, 25%~50%~75%Vs and 75%~50%~25%Vs redundant ratiometer output
W11	Supply voltage 9~32Vdc, 0.5~2.5~4.5V output
W13	Supply voltage 9~32Vdc, 1~2.5~4V output
W14	Supply voltage 9~32Vdc, 1.25~2.5~3.75V output
W21	Supply voltage 9~32Vdc, 0.5~2.5~4.5V and 4.5~2.5~0.5V redundant output
W23	Supply voltage 9~32Vdc, 1~2.5~4V and 4~2.5~1V redundant output
W24	Supply voltage 9~32Vdc, 1.25~2.5~3.75V and 3.75~2.5~1.25V redundant output

### ② Wiring

L	Cable wiring (AF200, AWG28#, length 300mm)
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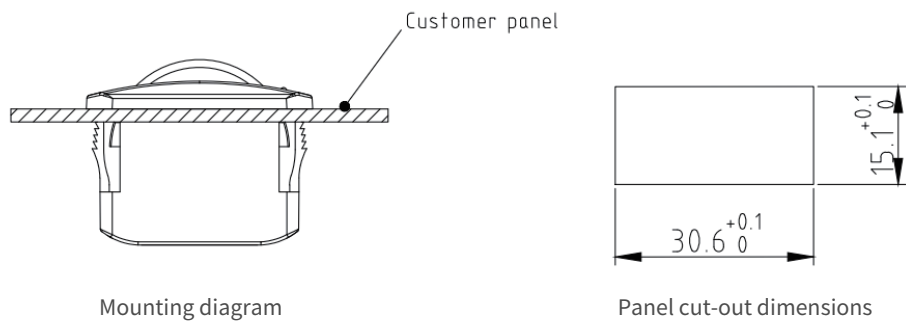
## SHAPE DIMENSIONS



## INSTALL

### ① MECHANICAL INSTALLATIONS

Note: The thickness of the panel  $\leq 3\text{mm}$



Mounting diagram

Panel cut-out dimensions

### ② ELECTRICAL CONNECTIONS

No.	Color	Hall Effect	Redundant hall effect
1	Red	5Vdc	9~32Vdc
2	White	-----	5Vdc
3	Black	0Vdc	0Vdc
4	Yellow	A-out	A-out
5	Green	-----	B-out