

# C5 SERIES

## PRODUCT FEATURES

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- Ergonomic design, fingertip-operated
- Different paddle colors
- Compact design, easy to mount on the top of panel
- Side-by-side mount available, saving space
- Non-contacting hall effect technology, long lifetime
- Design for severe environment, IP67(electronics)

## MARKET FOCUS

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- Industrial remote controller
- Control panel
- Armrest box



Paddle joystick





## TECHNICAL SPECIFICATIONS



### Mechanical data

- Travel angle:  $\pm 30^\circ$
- Operating force: 1.6~4.6N (customizable)
- Maximum allowable force: 30N
- Mechanical life: 5 million cycles (Without lock function)  
2 million cycles (With lock function)
- Product weight: 40g

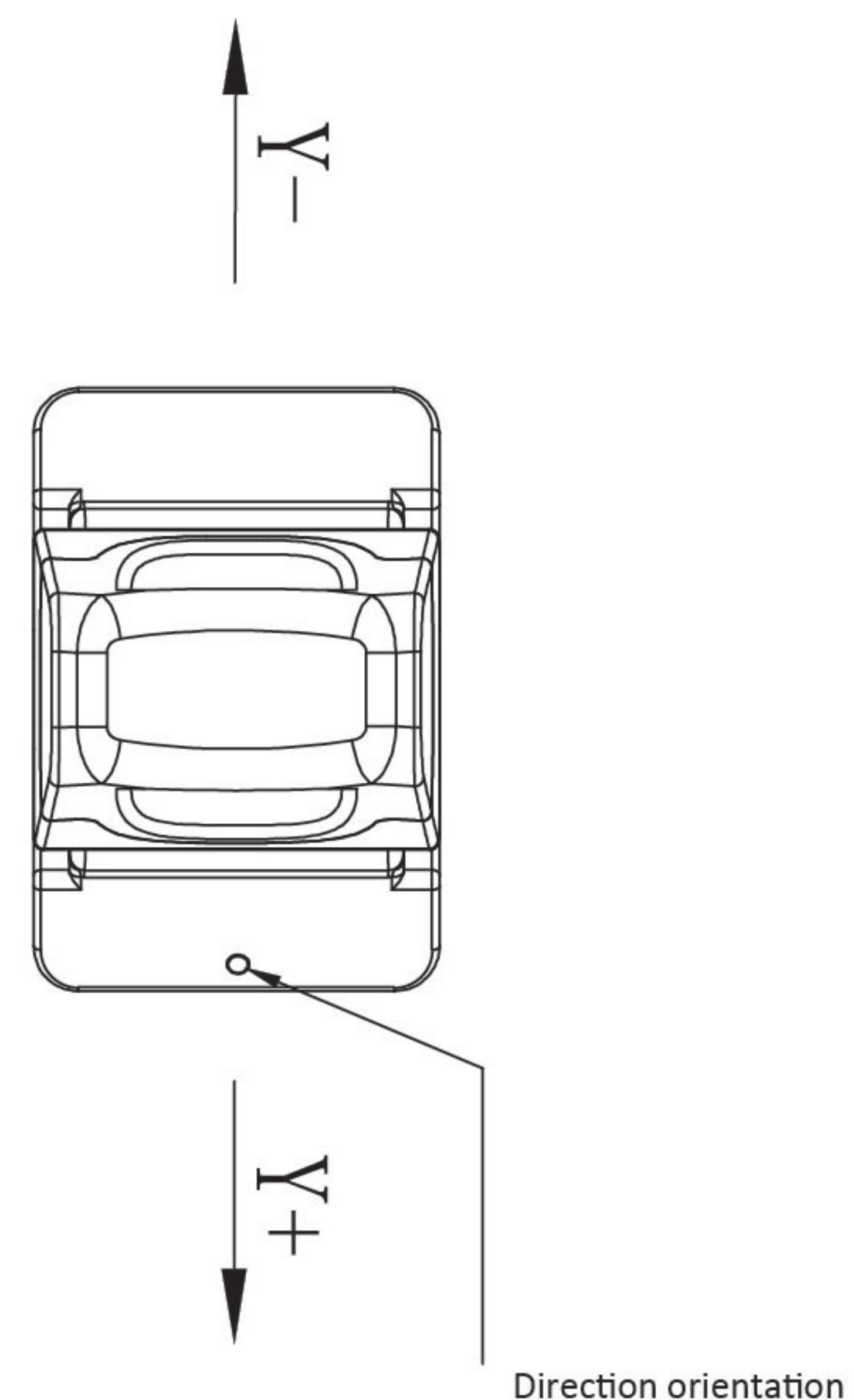
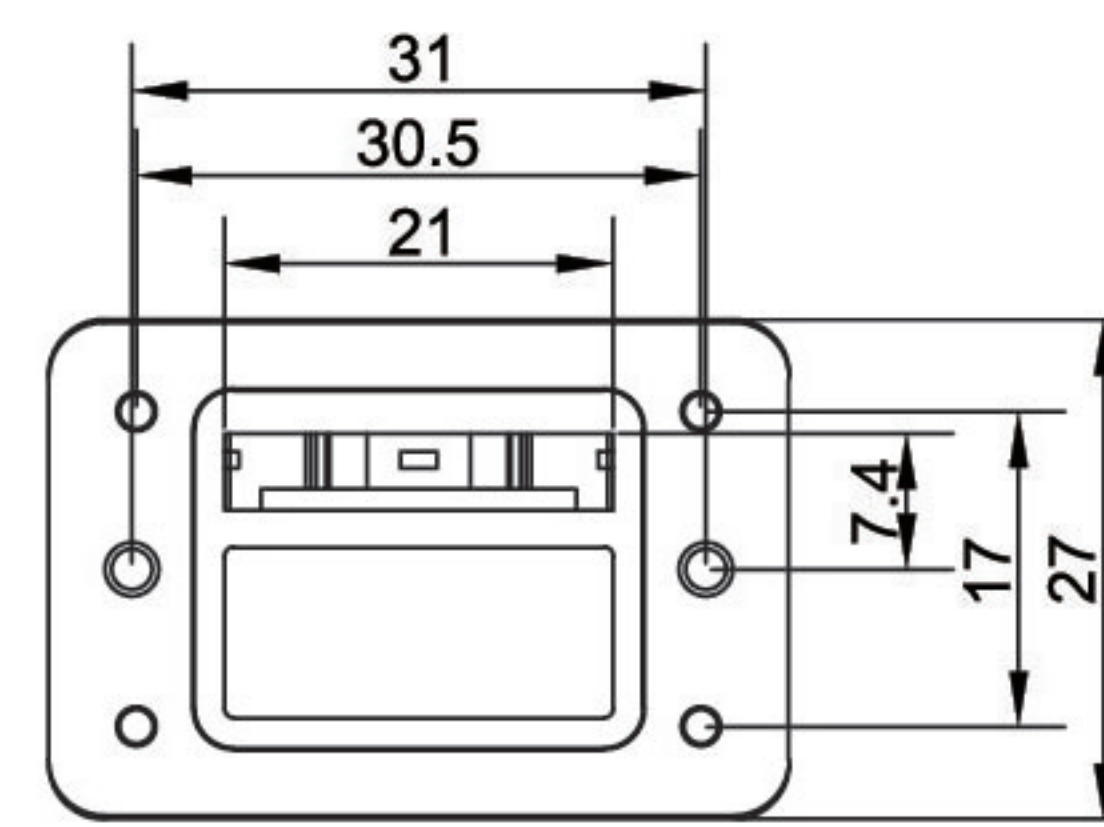
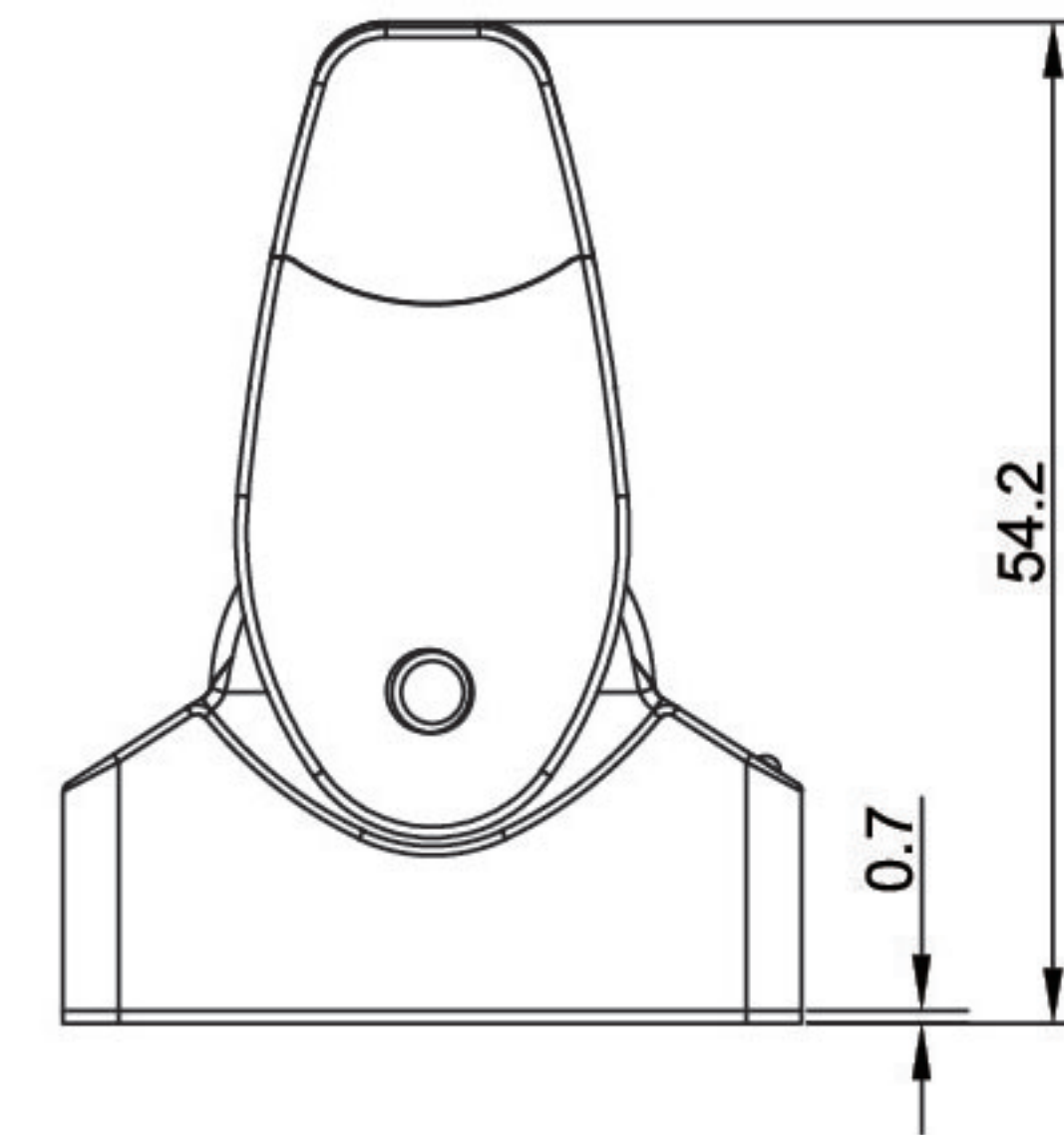
### Electrical data

- Supply voltage:  $5.0 \pm 0.5$ Vdc
- Power current consumption:  $< 11$ mA (per channel)
- Center voltage:  $2.5 \pm 0.1$ vdc
- Maximum linearity tolerance:  $\pm 3\%$
- Maximum overload voltage: 20Vdc
- Maximum reserve voltage: -10Vdc
- Load resistance:  $> 10$ K $\Omega$
- Insulation resistance:  $> 1000$ M $\Omega$

### Environmental data

- Operating temperature:  $-40^\circ\text{C} \sim +85^\circ\text{C}$
- Storage temperature:  $-40^\circ\text{C} \sim +85^\circ\text{C}$
- Protection class: IP67 (only for electronics)
- EMC: EN6100-6-3-2007 , 30MHz-1GHz  
EN6100-6-1-2007 , 80MHz-2.7GHz
- Impact: IEC60068-2-27, 50g, 11ms, 3 times/direction impact,  
in total 6 directions
- Vibration: IEC60068-2-64, random vibration, 0.13gn, 100Hz-200Hz,  
each axis lasts for one hour

## SHAPE DIMENSIONS



C5P\_shape



## ORDERING CODES

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C5 - ① - ② - ③ - ④ - ⑤

### ① Actuation type

- S Spring return
- F Spring return, feel point at  $\pm 23^\circ$
- L Spring return, latch point at  $\pm 23^\circ$

### ② 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
- L11 Supply voltage 3.3V, 10% ~ 50% ~ 90%Vs output
- W11 Supply voltage 9~32Vdc, 0.5~2.5~4.5V ratiometer output
- W13 Supply voltage 9~32Vdc, 1~2.5~4V ratiometer output
- W14 Supply voltage 9~32Vdc, 1.25~2.5~3.75V ratiometer output
- W21 Supply voltage 9~32Vdc, 0.5~2.5~4.5V and 4.5~2.5~0.5V redundant ratiometer output
- W23 Supply voltage 9~32Vdc, 1~2.5~4V and 4~2.5~1V redundant ratiometer output
- W24 Supply voltage 9~32Vdc, 1.25~2.5~3.75V and 3.75~2.5~0.5V redundant ratiometer output

### ③ Paddle Color

- 1 Black
- 2 Blue
- 3 Yellow
- 4 Green
- 5 Grey

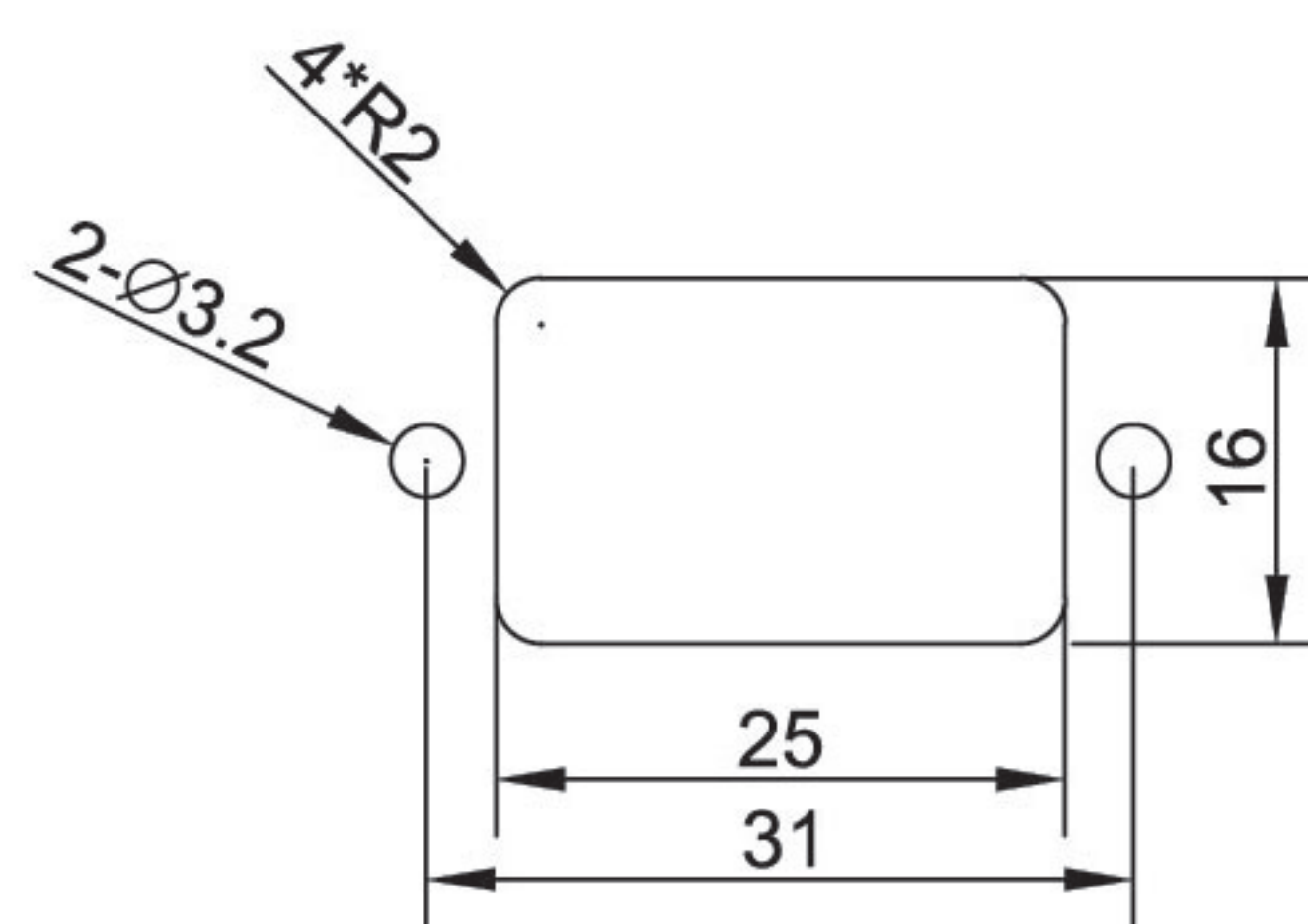
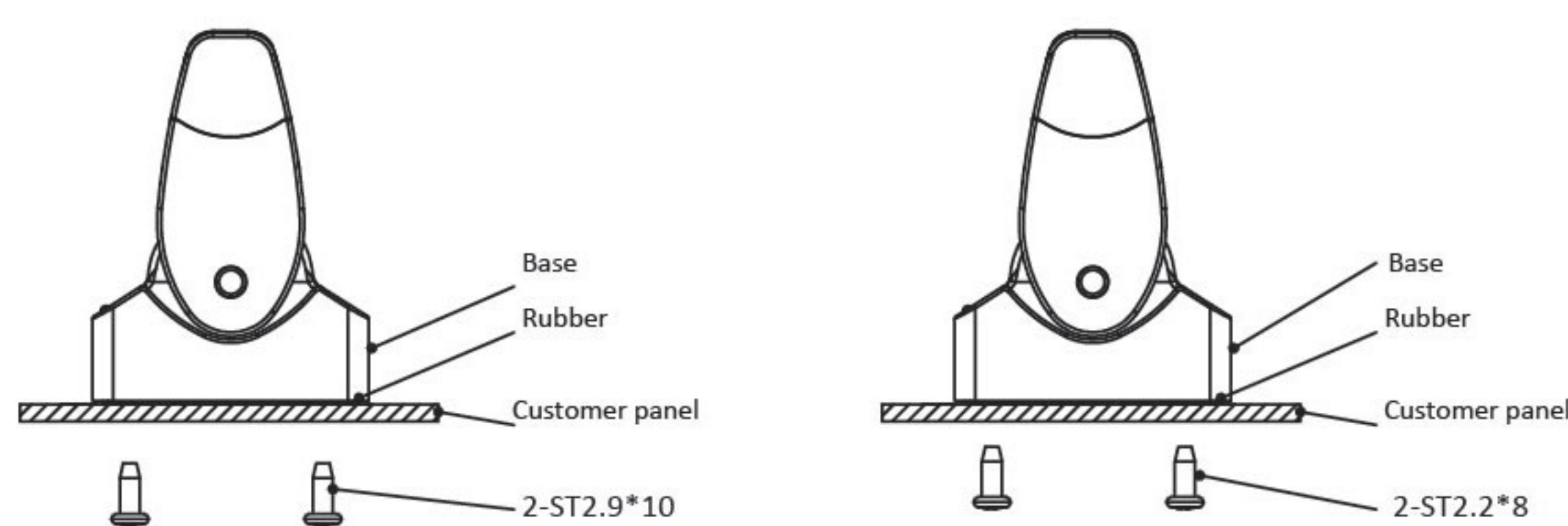
### ④ Mount

- M1 Self-tapping screw st2.9, 2 holes mounting
- M2 Self-tapping screw st2.9, 4 holes mounting

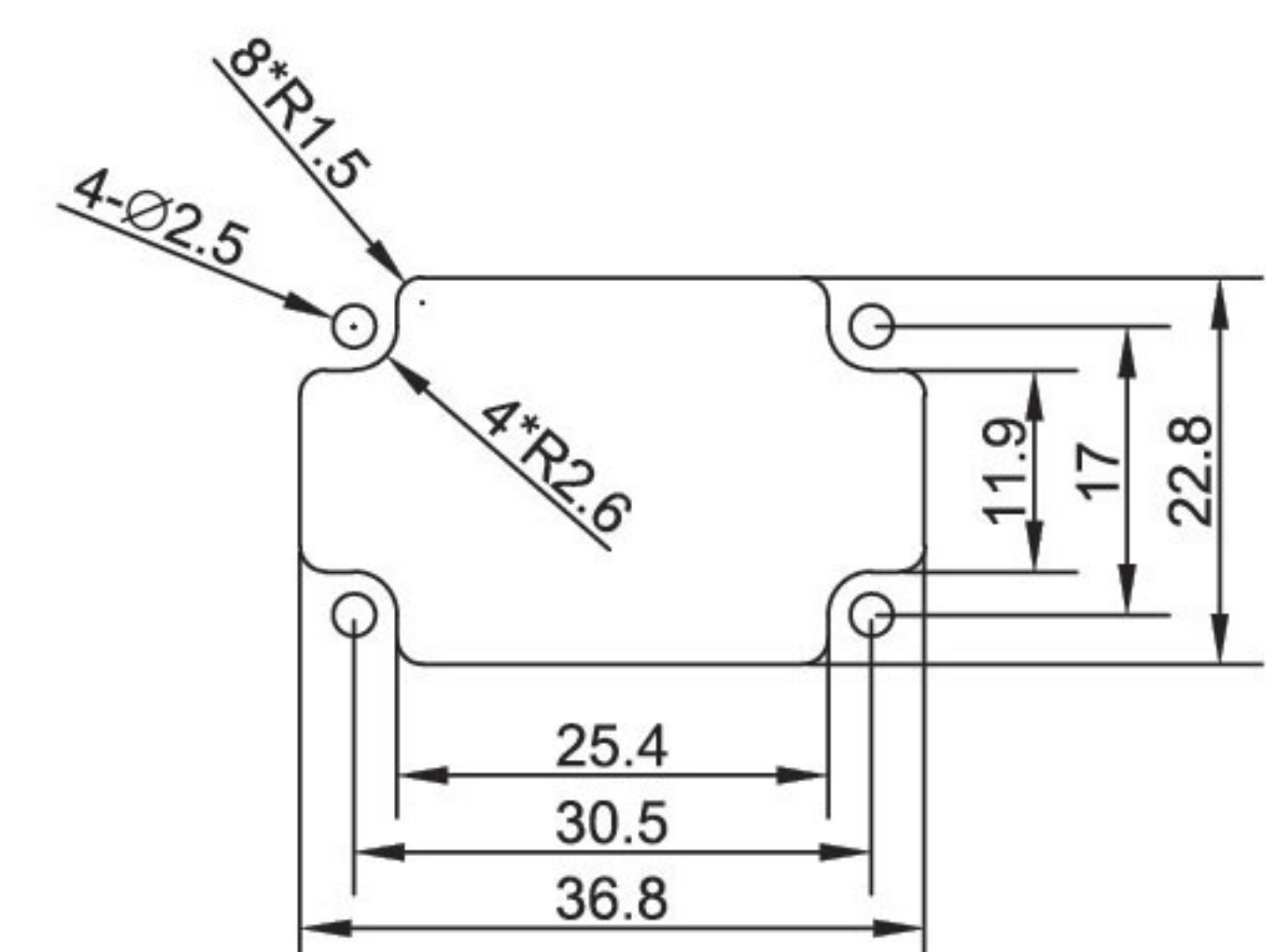
### ⑤ Wiring

- L Cable wiring (AF200, 28#, length 350mm)
- C Connector (AF200, 28#, length 110mm)

## MECHANICAL INSTALLATIONS » » » » » » » » » »



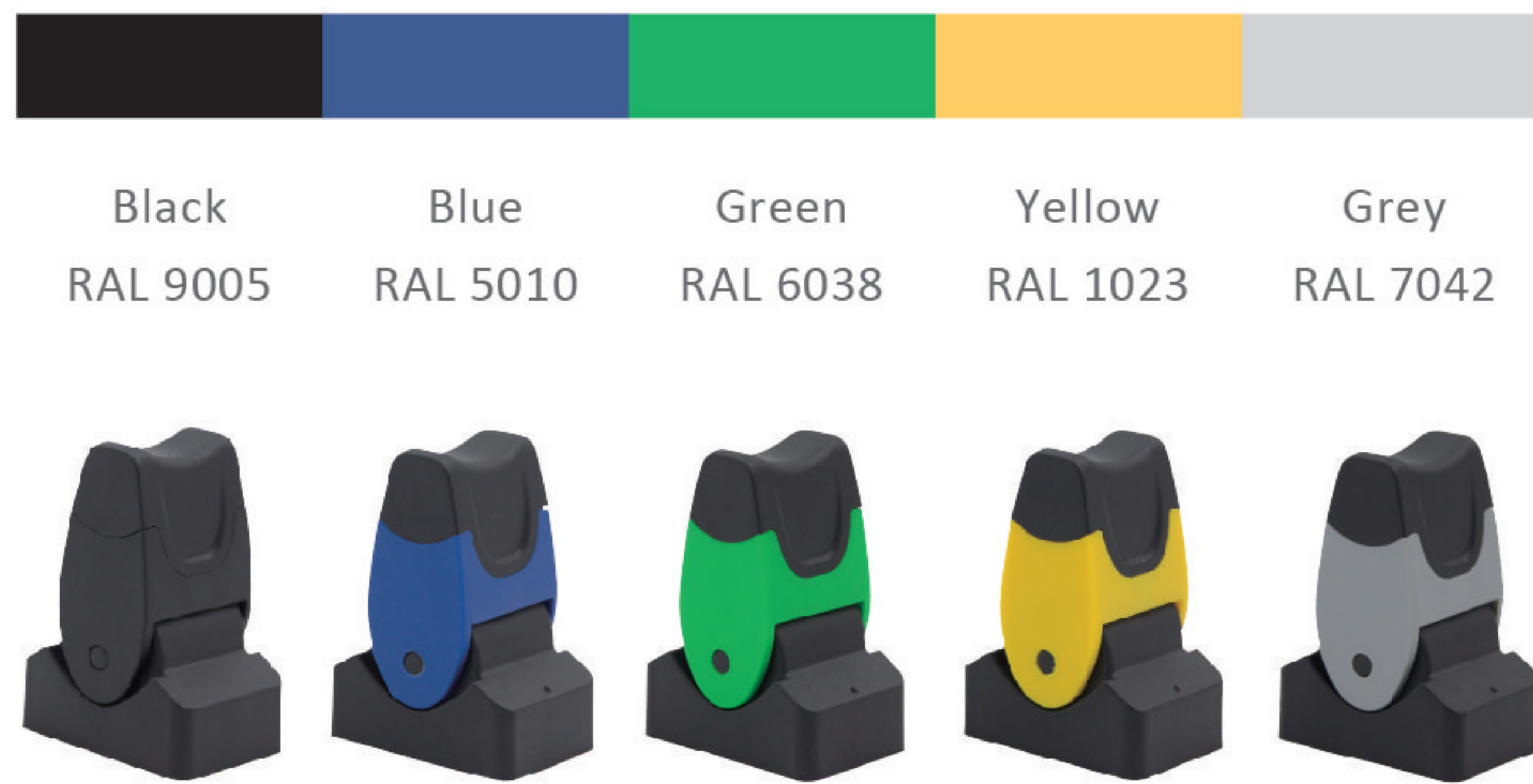
Panel cutout, 2 holes



Panel cutout, 4 holes



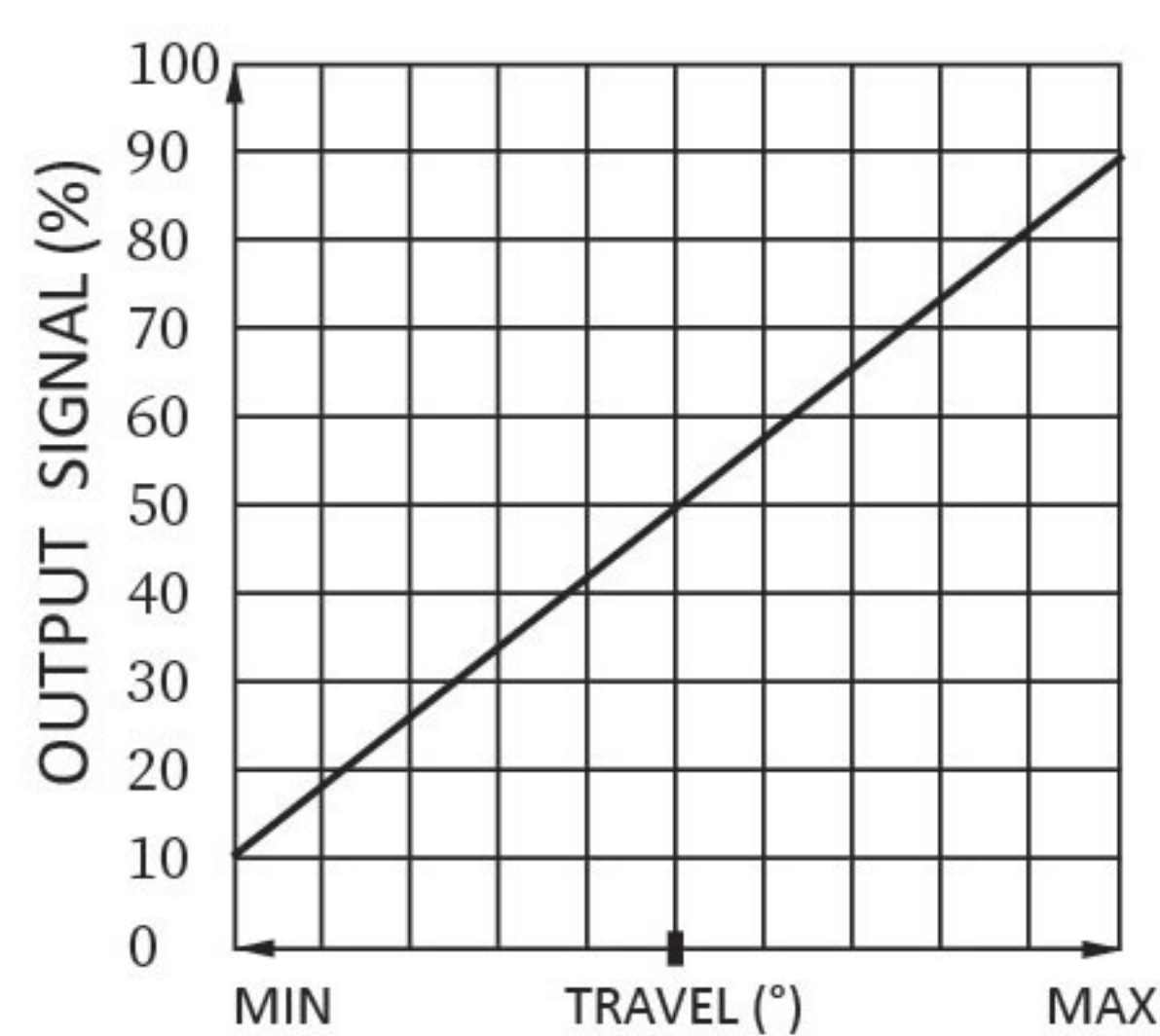
## PADDLE COLOR » » » » » » » » » »



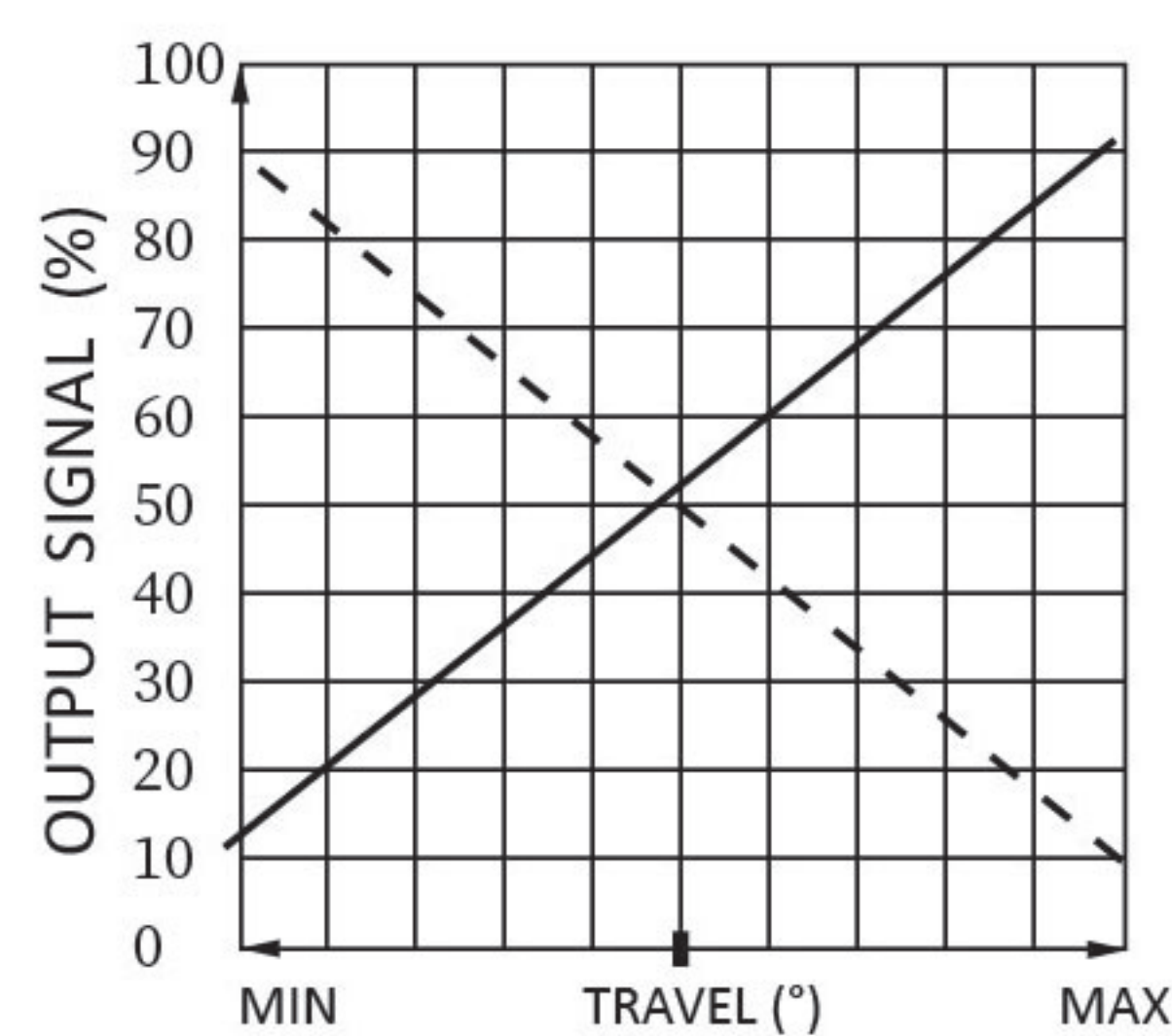
## ELECTRICAL CONNECTIONS » » » » » » » » » »

NO.	Color	Function	
		Voltage (5Vdc)	Voltage (9~32V)
1	Red	VCC	VCC
2	Orange	Retain	---
3	Black	GND	GND
4	Blue	A-out	A-out
5	Yellow	B-out	B-out

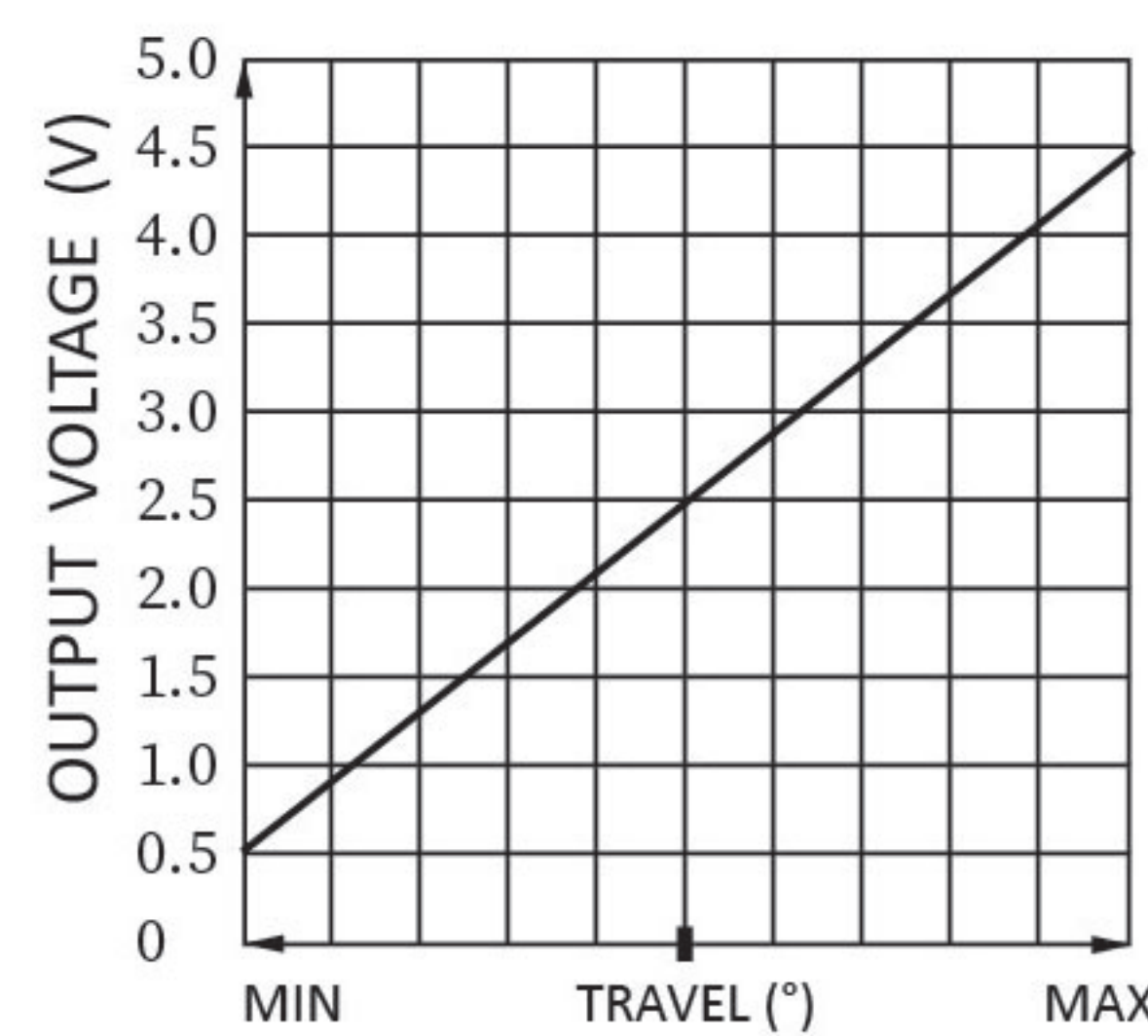
## OUTPUT SIGNAL CURVE » » » » » » » » » »



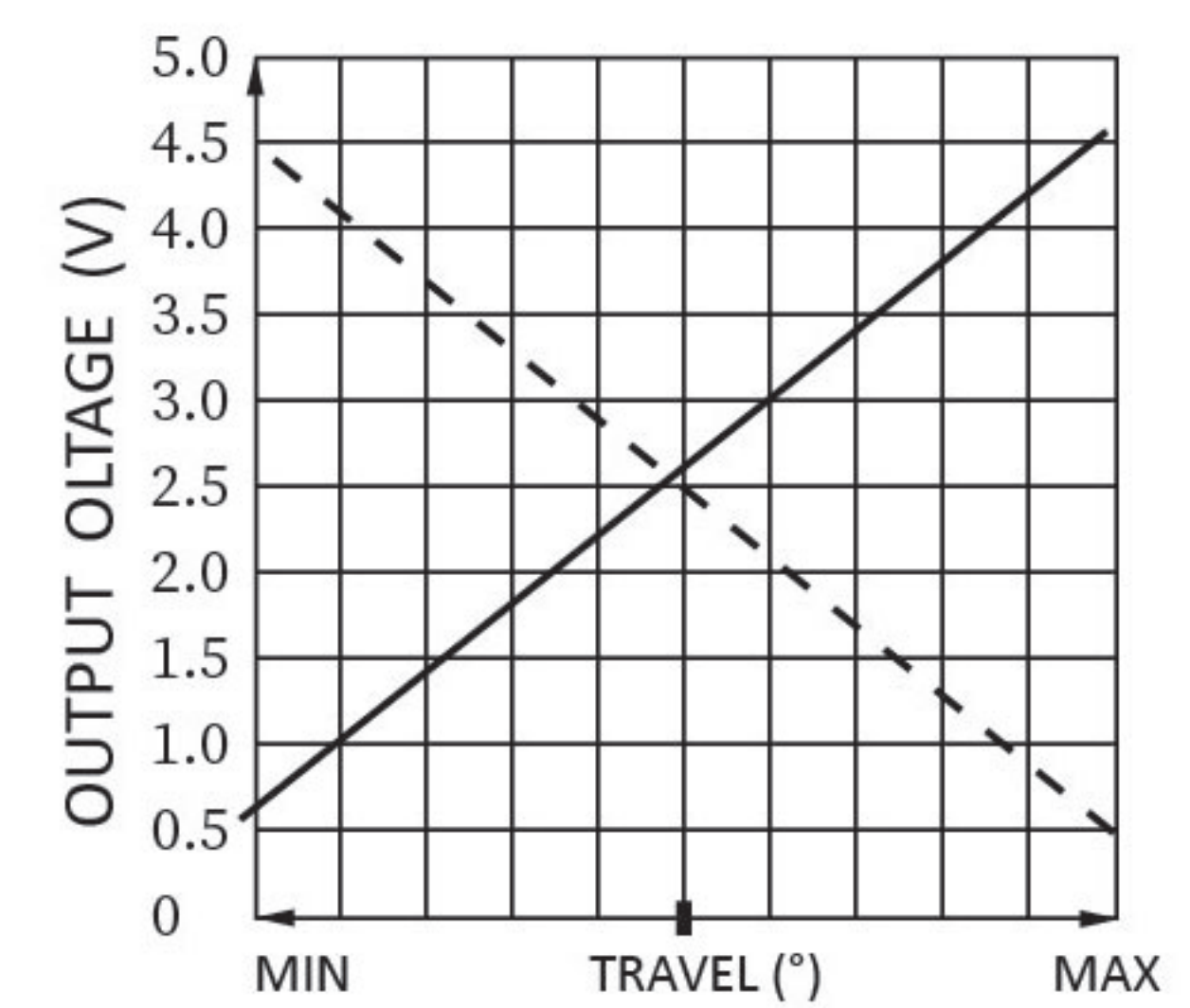
H11



H21



W11



W21