



# Selection Guide of CP-1HX



## select output and shaft types for suitable applications

| Subject               |                                                | Specification                                                  |                         |
|-----------------------|------------------------------------------------|----------------------------------------------------------------|-------------------------|
| Basic Characteristics | Dimension/Mass                                 | W14mm×D18mm×H4.4mm / 5g approx.                                |                         |
|                       | Effective Elect. Travel*                       | ±180°                                                          |                         |
|                       | Absolute Linearity                             | ±2%FS                                                          |                         |
|                       | Input Voltage                                  | DC5±0.5V                                                       |                         |
|                       | Output type                                    | Voltage Ratio / PWM (Single or Dual output)                    |                         |
| Electrical            | Output Range                                   | Ratio 10~90%Vin                                                | PWM 10~90%Duty          |
|                       | Resolution                                     | 12bit(0~100%Vin)                                               |                         |
|                       | Current Consumption                            | 10mA max. (Single output)                                      | 20mA max. (Dual output) |
|                       | Temp. Characteristics<br>-40~+85°C (25°C std.) | ±1°                                                            |                         |
| Environmental         | Life time                                      | 7M Cycle (Room Temp., No Load)                                 |                         |
|                       | Category Temp. Range                           | -40~85°C                                                       |                         |
|                       | Vibration                                      | 200m/s <sup>2</sup> , 5~500Hz 10min, 3axis 2hours (Room Temp.) |                         |
|                       | Shock                                          | 500m/s <sup>2</sup> , 11ms, 3axis 3 times (Room Temp.)         |                         |
|                       | EMS                                            | 100V/m, 1MHz~1 GHz (ISO 11452-2, -3)                           |                         |
|                       | ESD                                            | ±15kV (IEC 61000-4-2)                                          |                         |
|                       | IP Rating                                      | IP67 (Circuit part only)                                       |                         |

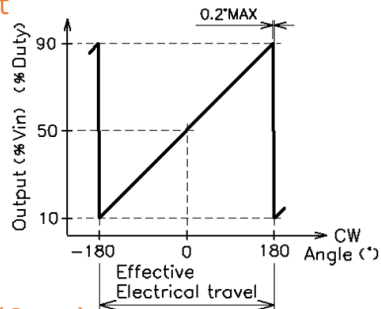
\* Other Electrical travel range is available on request.

## Model Number Designation

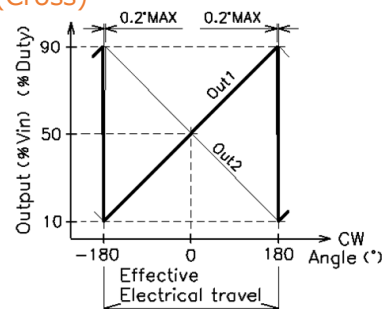
|                                                                                             |          |                   |   |             |            |   |           |
|---------------------------------------------------------------------------------------------|----------|-------------------|---|-------------|------------|---|-----------|
| <b>CP-1HX</b>                                                                               | <b>C</b> | <b>360</b>        | - | <b>R</b>    | <b>1</b>   | - | <b>XX</b> |
| Series Number                                                                               | Output   | Electrical Travel |   | Output Type | Shaft Type |   | Custom    |
| None : Single Output<br>C : Dual Output (Cross Output)<br>P : Dual Output (Parallel Output) |          |                   |   |             |            |   |           |
| R : Ratio<br>P : PWM                                                                        |          |                   |   |             |            |   |           |
| 1 : Double Side Flat shaft<br>2 : D-Cut<br>0 : Touchless                                    |          |                   |   |             |            |   |           |
| ±180° : 360 (Ex.) 090=90°<br>± 90° : 180<br>± 45° : 090                                     |          |                   |   |             |            |   |           |

## ■ Output Characteristics

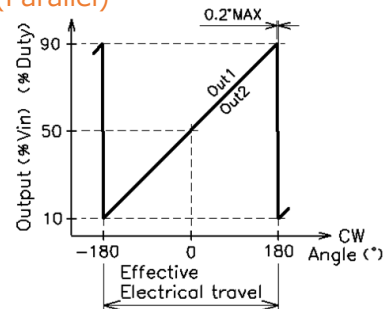
### Single Output



### Dual Output (Cross)

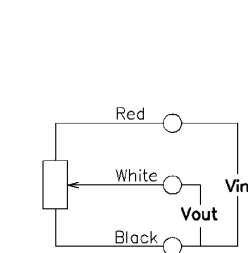


### Dual Output (Parallel)



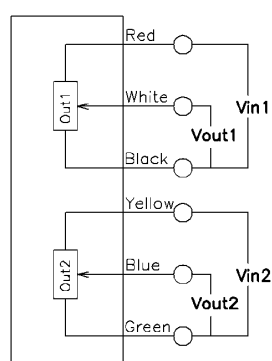
## ■ Schematic

### Single Output



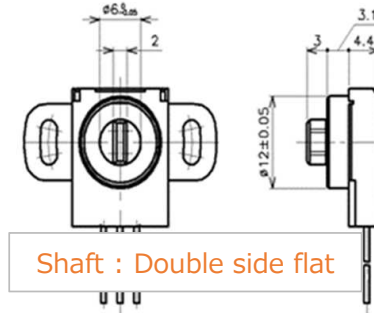
• Red, White, Black indicate harness colors.

### Dual Output

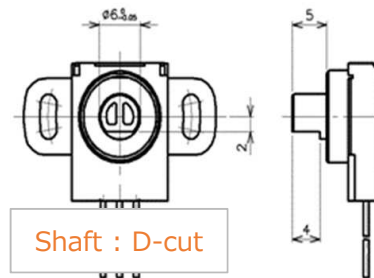


• Red, White, Black, Yellow, Blue, Green indicate harness colors.

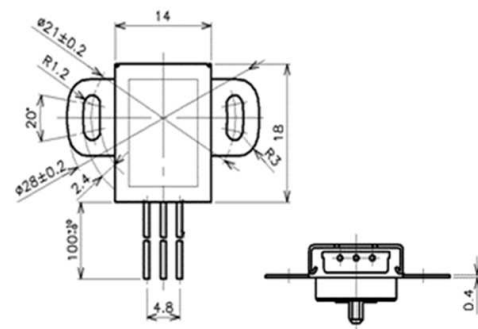
## ■ Dimension



Shaft : Double side flat



Shaft : D-cut



## We are here for you. Addresses and Contacts.

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### Headquarter Switzerland:

Angst+Pfister Sensors and Power AG  
Thurgauerstrasse 66  
CH-8050 Zurich  
Phone +41 44 877 35 00  
[sensorsandpower@angst-pfister.com](mailto:sensorsandpower@angst-pfister.com)

### Office Germany:

Angst+Pfister Sensors and Power Deutschland GmbH  
Edisonstraße 16  
D-85716 Unterschleißheim  
Phone +49 89 374 288 87 00  
[sensorsandpower.de@angst-pfister.com](mailto:sensorsandpower.de@angst-pfister.com)

### Office North America:

Angst+Pfister North America Inc.  
10391 Brecksville Rd.  
US-Brecksville, OH 44141  
Phone +1 440 375-5212  
[info.apus@angst-pfister.com](mailto:info.apus@angst-pfister.com)

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