



GENERAL FEATURES

- 20°, 45°, 150°, 180°, 270°, 354° electrical angle
- Hollow shaft options from 6mm to 8mm
- 31 mm body diameter
- Potentiometric, 0-10V, 4-20 mA or 0-20mA output
- High linearity up to $\pm 0.5\%$
- Long life up to 10 million movements
- Dust and moisture resistant, IP63 protection class
- No mechanical rotation limitation

APPLICATION FIELDS

- Textile machinery
- Automatic door control systems
- Automotive
- All kinds of control and measurement applications

TECHNICAL FEATURES

Electrical Data

| | | |
|---------------------------|---|--------------------------------|
| Independent Linearity | $\pm 0.5\%$ | |
| Repeatability | 0.1° max. | |
| Output Type | Potentiometric | 0-10V, 4-20 mA, 0-20 mA |
| Electrical Angle | 20°, 45°, 150°, 180°, 270°, 354° | |
| Supply Voltage | 42V max. | 12...30 VDC |
| Resistance Values | 1K, 2K, 5K, 10K | - |
| Resistance Tolerance | $\pm 20\%$ | - |
| Resistance Element | Conductive Plastic | - |
| Resolution | Infinite | 12 bit |
| Recommended Wiper Current | 100 μ A max. | - |
| Power Rating | 0.5W / 40°C max. | - |
| Minimum Life (electrical) | 10 million movements | |
| Electrical Connection | 3x0,102 mm ² soft PVC cable (standard 1m, optional others) | |

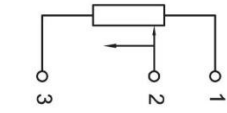
Mechanical Data

| | |
|-----------------------|---------------------------------|
| Dimensions | See mechanical dimensions table |
| Mechanical Angle | 360°, continuous |
| Torque | 0.5 Ncm max. |
| Operating Temperature | -25°C ... +75°C |
| Storage Temperature | -25°C ... +105°C |
| Housing Material | Aluminum |
| Protection Class | IP63 |

ELECTRICAL CONNECTIONS

Potentiometer Connection

| SIGNAL | CABLE COLOR |
|-----------------------|-------------|
| +V | Green (1) |
| Potentiometric output | Red (2) |
| -V | Yellow (3) |



Potentiometer connection
(voltage divider)

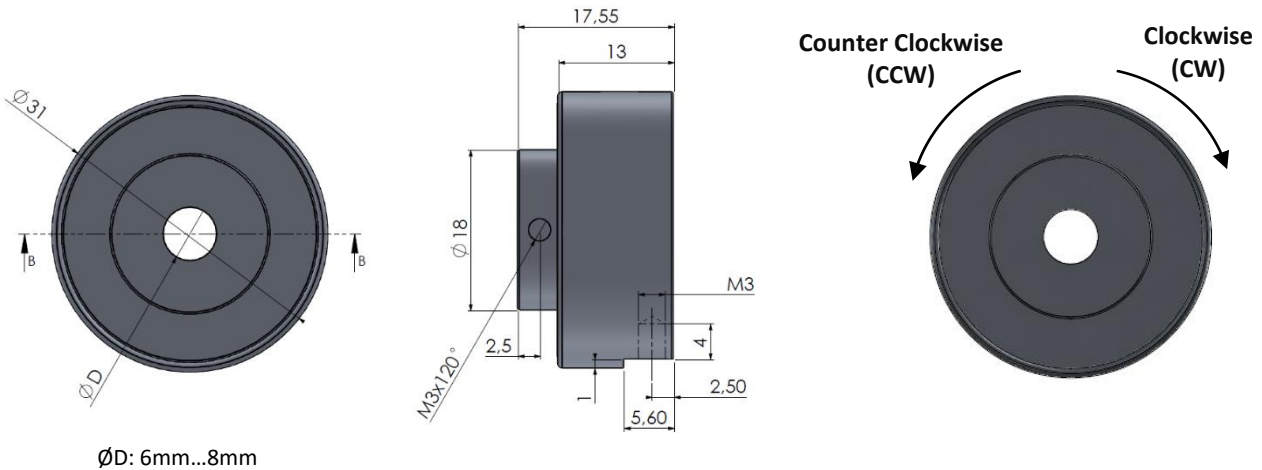
0-10V Connection

| SIGNAL | CABLE COLOR |
|---------------|-------------|
| +VDC | Green |
| Analog Output | Red |
| -VDC | Yellow |

4-20mA or 0-20 mA Connection (2-wire)

| SIGNAL | CABLE COLOR |
|---------------|-----------------|
| +VDC | Red |
| Analog Output | Green Yellow |

MECHANICAL DIMENSIONS (mm)



ORDER CODE

| Model | | | | | Angle | Hollow Diameter | Output Type | | | | | |
|---|---|-----|------------------------|-----|------------------------|-----------------|-------------------------|-----|---|----|---|---|
| RHP | - | XXX | - | XXX | - | XX | - | XXX | - | XX | - | X |
| Body Diameter | | | | | 20 : 20° | Selectable from | No Code: Potentiometric | | | | | |
| 030: 31 mm | | | | | 45 : 45° | 6mm to 8mm | A0: 0-20 mA (CW) | | | | | |
| | | | | | 150 : 150° | | NA0: 0-20 mA (CCW) | | | | | |
| | | | | | 180 : 180° | | A: 4-20 mA (CW) | | | | | |
| | | | | | 270 : 270° | | NA: 4-20 mA (CCW) | | | | | |
| | | | | | 354 : 354° | | V: 0-10 V (CW) | | | | | |
| | | | | | | | NV: 0-10 V (CCW) | | | | | |
| | | | | | | | *CW: Clockwise | | | | | |
| | | | | | | | CCW: Counter Clockwise | | | | | |
| Resistance Value | | | Cable Length | | Cable Output Direction | | | | | | | |
| 1K: 1K | | | 1M: 1 meter (standard) | | No Code: | | | | | | | |
| 2K: 2K | | | *Optional others | | Backside | | | | | | | |
| 5K: 5K | | | | | Y: Side | | | | | | | |
| 10K: 10K | | | | | | | | | | | | |
| *Resistance value selection is only available in potentiometric output model. | | | | | | | | | | | | |

Sample Order Code:

For potentiometric output: RHP 030-45-5K-6-1M-Y

For analog output: RHP 030-45-6-1M-A-Y