

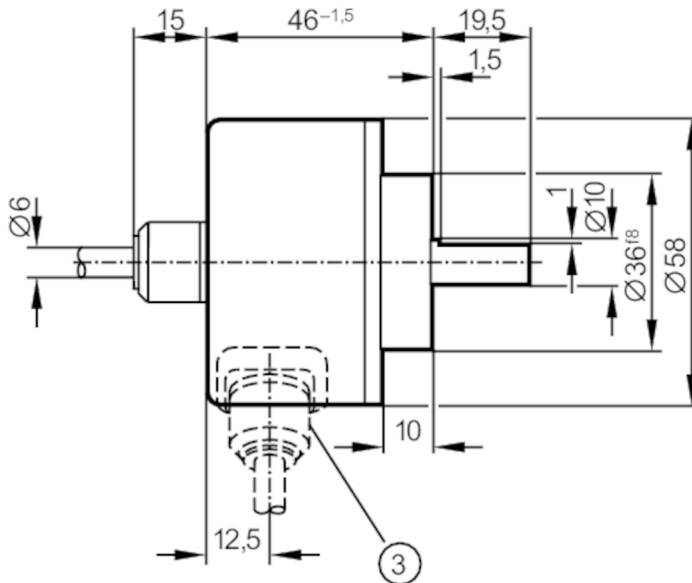
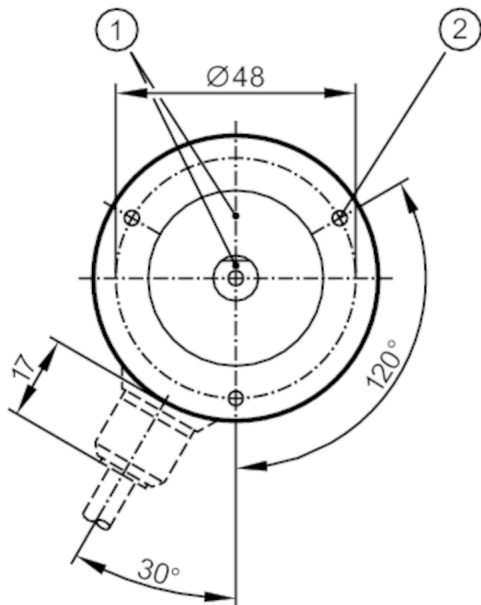
# RV1017



## Incremental encoder with solid shaft

RV-0512-I05/L2

Article no longer available - archive entry



- |   |                |
|---|----------------|
| 1 | reference mark |
| 2 | M3 Depth 5 mm  |



## Product characteristics

|                     |                |
|---------------------|----------------|
| Resolution          | 512 resolution |
| Shaft design        | solid shaft    |
| Shaft diameter [mm] | 10             |

## Electrical data

|                             |      |      |
|-----------------------------|------|------|
| Operating voltage tolerance | [%]  | 10   |
| Operating voltage           | [V]  | 5 DC |
| Current consumption         | [mA] | 150  |

## Outputs

|                                   |     |
|-----------------------------------|-----|
| Electrical design                 | TTL |
| Max. current load per output [mA] | 20  |
| Switching frequency [kHz]         | 300 |
| Phase difference A und B [°]      | 90  |

### Measuring/setting range

|            |                |
|------------|----------------|
| Resolution | 512 resolution |
|------------|----------------|

## Operating conditions

|                             |      |                           |
|-----------------------------|------|---------------------------|
| Ambient temperature         | [°C] | -30...100                 |
| Note on ambient temperature |      | firmly laid cable: -30 °C |
| Storage temperature         | [°C] | -30...100                 |
| Max. relative air humidity  | [%]  | 98                        |
| Protection                  |      | IP 64                     |



## Incremental encoder with solid shaft

RV-0512-105/L2

## Tests / approvals

|                      |                     |
|----------------------|---------------------|
| Shock resistance     | 100 g (6 ms)        |
| Vibration resistance | 10 g (55...2000 Hz) |

## Mechanical data

|                                               |                |
|-----------------------------------------------|----------------|
| Dimensions [mm]                               | Ø 58 / L = 46  |
| Material                                      | aluminum       |
| Max. revolution, mechanical [U/min]           | 12000          |
| Max. starting torque [Nm]                     | 1              |
| Reference temperature torque [°C]             | 20             |
| Shaft design                                  | solid shaft    |
| Shaft diameter [mm]                           | 10             |
| Shaft material                                | steel (1.4104) |
| Max. shaft load axial (at the shaft end) [N]  | 10             |
| Max. shaft load radial (at the shaft end) [N] | 20             |

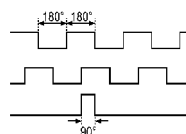
## Electrical connection

Cable: 2 m, PUR; axial

|             |                  |
|-------------|------------------|
| brown       | A                |
| green       | A inverted       |
| grey        | B                |
| pink        | B inverted       |
| red         | 0 index          |
| black       | 0 index inverted |
| blue        | L+ sensor        |
| white       | 0V sensor        |
| brown/green | L+ (Up)          |
| white/green | 0V (Un)          |
| lilac       | error inverted   |
| screen      | housing          |

## Diagrams and graphs

Pulse diagram



Direction of rotation clockwise (looking at the shaft)