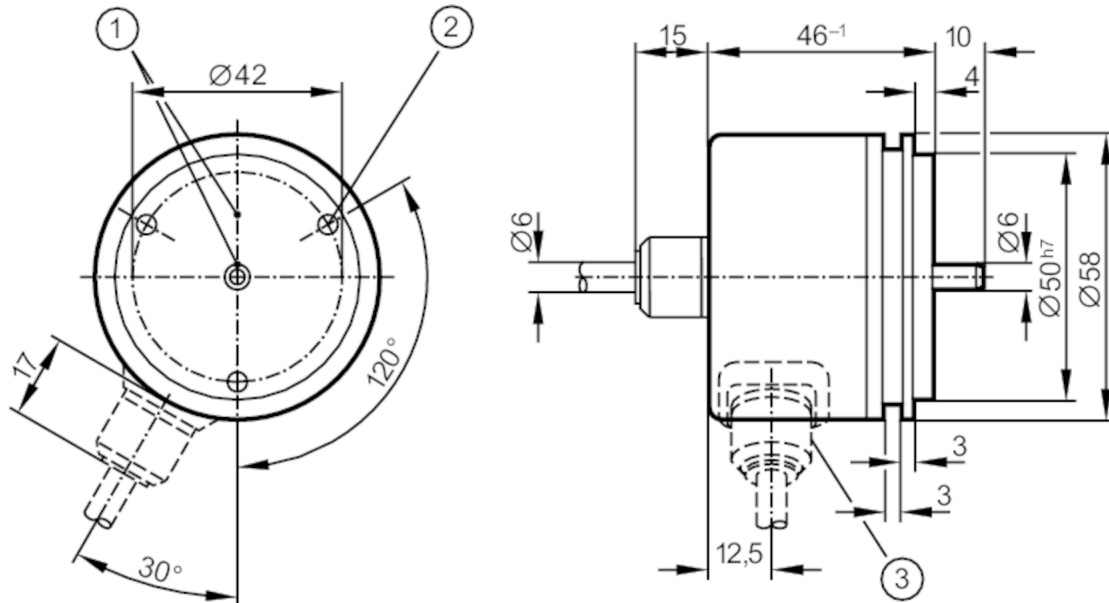


## Incremental encoder with solid shaft

RU-1500-I05/P1

Article no longer available - archive entry



- |   |                |
|---|----------------|
| 1 | reference mark |
| 2 | M4 Depth 5 mm  |



## Product characteristics

|                     |                 |
|---------------------|-----------------|
| Resolution          | 1500 resolution |
| Shaft design        | solid shaft     |
| Shaft diameter [mm] | 6               |

## 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 | 1500 resolution |
|------------|-----------------|
|------------|-----------------|

## Operating conditions

|                            |      |           |
|----------------------------|------|-----------|
| Ambient temperature        | [°C] | -20...100 |
| Storage temperature        | [°C] | -30...100 |
| Max. relative air humidity | [%]  | 98        |
| Protection                 |      | IP 64     |



Incremental encoder with solid shaft

RU-1500-I05/P1

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]                           | 6              |
| 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             |
| Fixing flange                                 | Synchro-flange |

Electrical connection

Cable: 1 m, PUR; axial

Connector: 1 x M23 (ifm 1001.1)



|                  |                  |
|------------------|------------------|
| pink (1)         | B inverted       |
| blue (2)         | +5V sensor       |
| red (3)          | 0 index          |
| black (4)        | 0 index inverted |
| brown (5)        | A                |
| green (6)        | A inverted       |
| lilac (7)        | error inverted   |
| grey (8)         | B                |
| Pin 9            | n.c.             |
| white/green (10) | 0V (Un)          |
| white (11)       | 0V sensor        |
| brown/green (12) | +5V (Up)         |
| screen           | housing          |

Diagrams and graphs

Pulse diagram

Direction of rotation clockwise (looking at the shaft)