

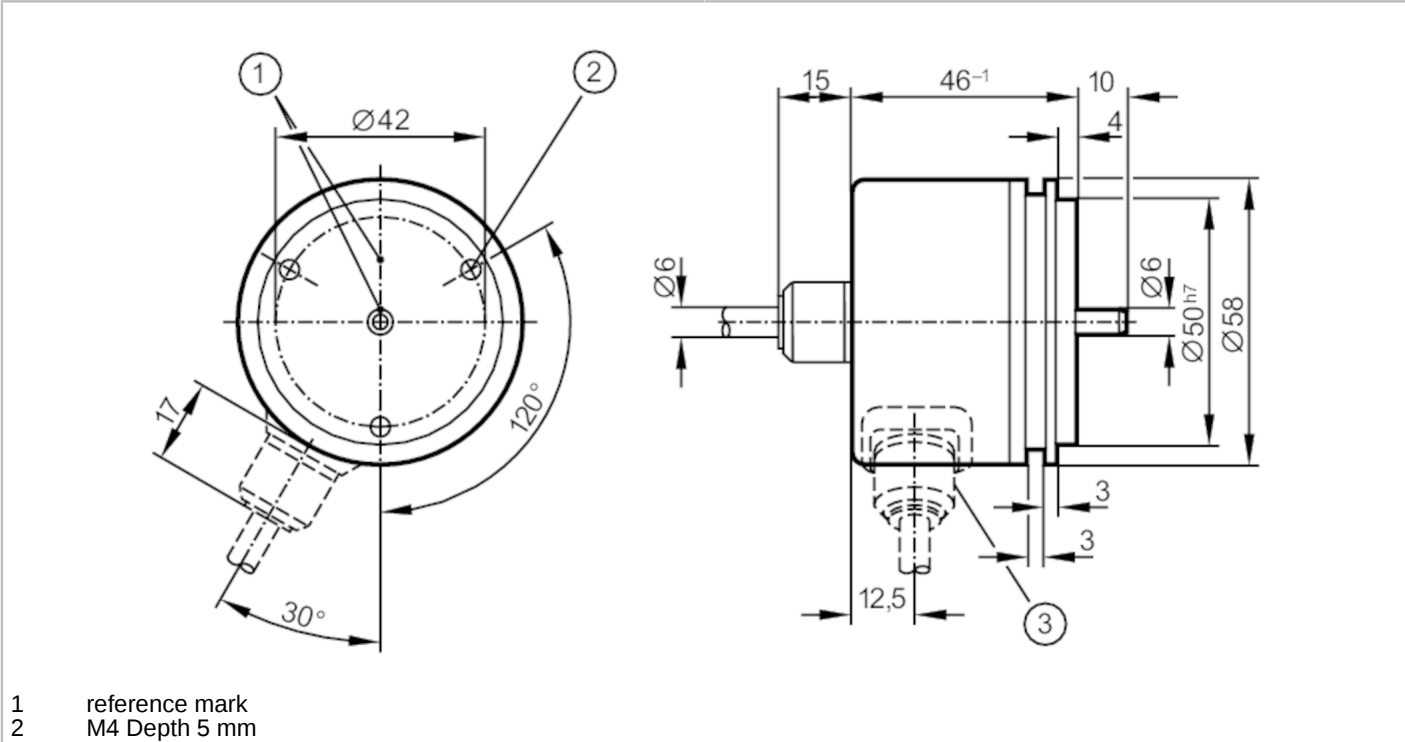
# RU1146



## Incremental encoder with solid shaft

RU10000-I05/L5

Article no longer available - archive entry



- 1 reference mark
- 2 M4 Depth 5 mm



| Product characteristics      |       |                  |
|------------------------------|-------|------------------|
| Resolution                   |       | 10000 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                   |       | 10000 resolution |
| Operating conditions         |       |                  |
| Ambient temperature          | [°C]  | -20...100        |
| Storage temperature          | [°C]  | -30...100        |
| Max. relative air humidity   | [%]   | 98               |
| Protection                   |       | IP 64            |

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RU10000-I05/L5

### Tests / approvals

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

### Mechanical data

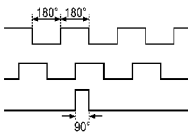
|                                               |                |
|-----------------------------------------------|----------------|
| Dimensions [mm]                               | Ø 58 / L = 46  |
| Material                                      | aluminum       |
| Max. revolution, mechanical [U/min]           | 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: 5 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 |  <p>Direction of rotation clockwise (looking at the shaft)</p> |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------|