

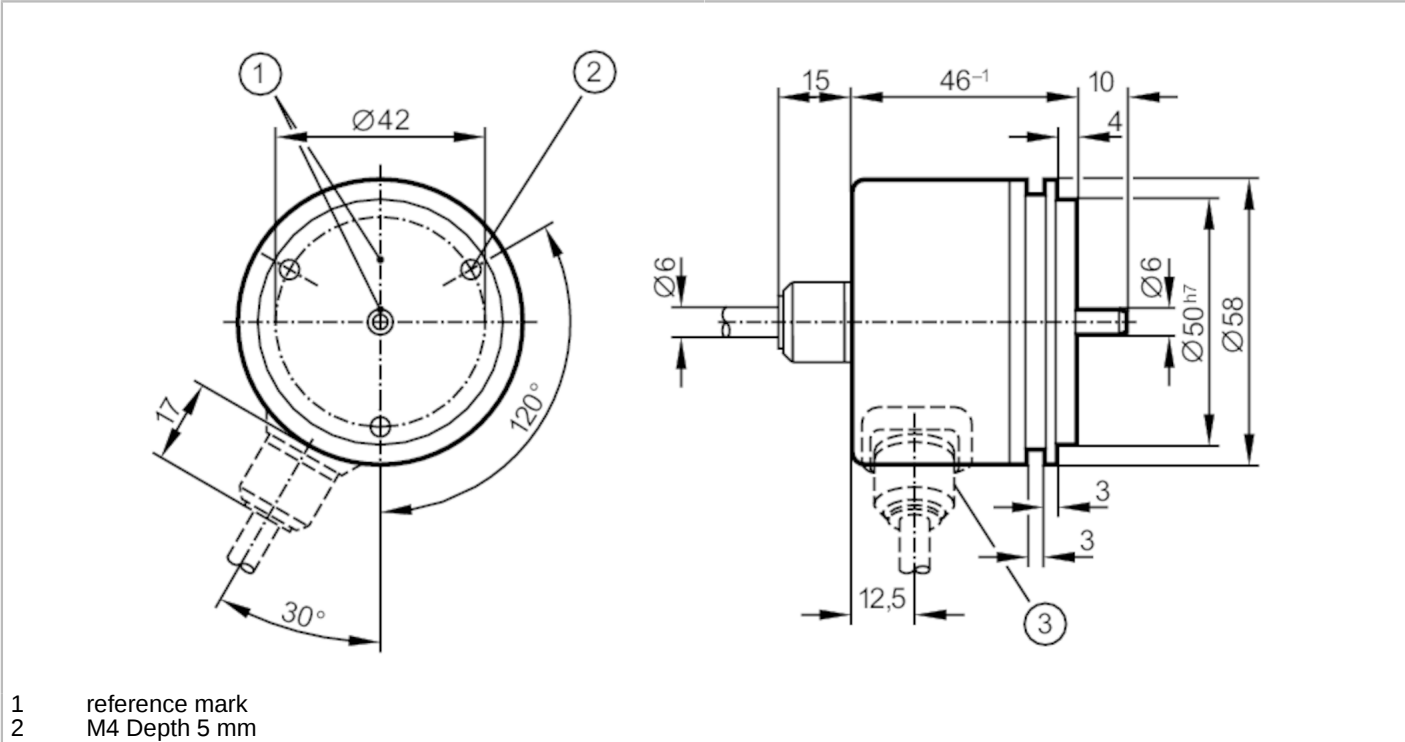
RU1144



Incremental encoder with solid shaft

RU-1024-I05/S1

Article no longer available - archive entry



| Product characteristics      |       |                 |
|------------------------------|-------|-----------------|
| Resolution                   |       | 1024 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                   |       | 1024 resolution |
| Operating conditions         |       |                 |
| Ambient temperature          | [°C]  | -30...100       |
| Storage temperature          | [°C]  | -30...100       |
| Max. relative air humidity   | [%]   | 98              |
| Protection                   |       | IP 64           |



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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; radial

Connector: 1 x Bajonett (ifm 1000.2)



|        |                  |
|--------|------------------|
| Pin 1  | A                |
| Pin 2  | A inverted       |
| Pin 3  | B                |
| Pin 4  | B inverted       |
| Pin 5  | L+ sensor        |
| Pin 6  | 0 index          |
| Pin 7  | 0 index inverted |
| Pin 9  | L+ (Up)          |
| Pin 10 | 0V sensor        |
| Pin 11 | housing          |
| Pin 12 | 0V (Un)          |

Diagrams and graphs

Pulse diagram

Direction of rotation clockwise (looking at the shaft)