

# RU1125



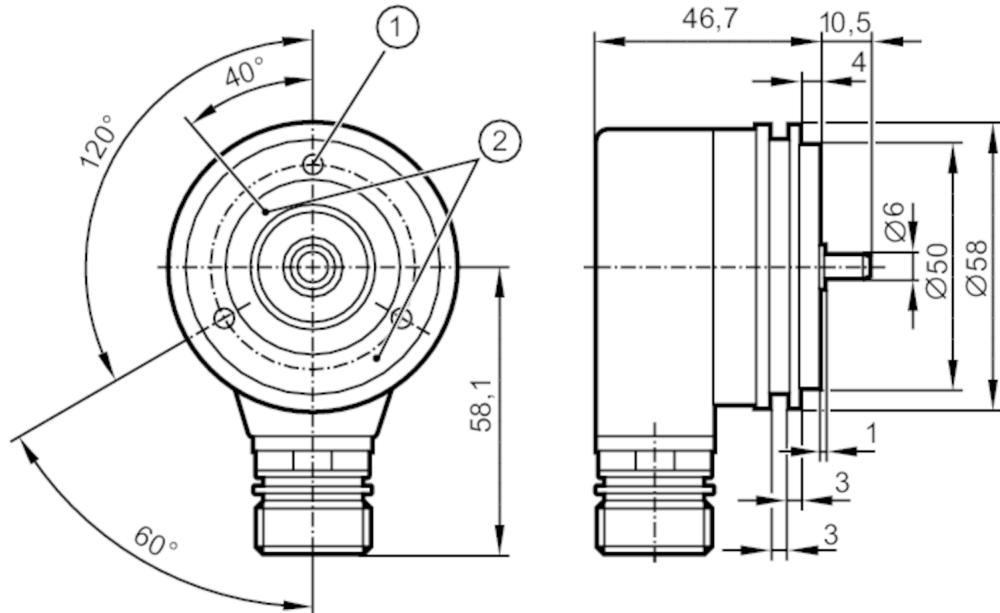
## Incremental encoder with solid shaft

RU10000-I05/K

Article no longer available - archive entry

Alternative articles: RUP500

When selecting an alternative article and accessories please note that technical data may differ!



- 1 reference mark  
2 M4 Depth 6 mm



### Product characteristics

|                     |                  |
|---------------------|------------------|
| Resolution          | 10000 resolution |
| Shaft design        | solid shaft      |
| Shaft diameter [mm] | 6                |

### Application

|                    |             |
|--------------------|-------------|
| Function principle | incremental |
|--------------------|-------------|

### 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 and B [°]      | 90  |

### Measuring/setting range

|            |                  |
|------------|------------------|
| Resolution | 10000 resolution |
|------------|------------------|

### Operating conditions

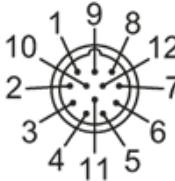
|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -30...100 |
|--------------------------|-----------|

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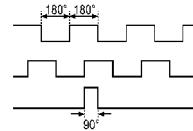
|   |         |                     |
|---|---------|---------------------|
| Storage temperature   | [°C]    | -30...100           |
| Protection  |         | IP 64               |
| <b>Tests / approvals</b>  |         |                     |
| Shock resistance  |         | 100 g (6 ms)        |
| Vibration resistance  |         | 15 g (55...2000 Hz) |
| <b>Mechanical data</b>  |         |                     |
| Weight  | [g]     | 417.8               |
| Dimensions  | [mm]    | Ø 58 / L = 46.7     |
| Materials   |         | aluminium           |
| 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      |
| <b>Electrical connection</b>  |         |                     |
| Connector: 1 x M23 (ifm 1001.4), radial   |         |                     |
|  |         |                     |
| pink (1)  |         | housing B inverted  |
| blue (2)  |         | L+ sensor           |
| red (3)   |         | 0 index             |
| black (4)   |         | 0 index inverted    |
| brown (5)   |         | A                   |
| green (6)   |         | A inverted          |
| lilac (7)   |         | failure inverted    |
| grey (8)  |         | B                   |
| pin 9   |         | n.c.                |
| white/green (10)  |         | 0V                  |
| white (11)  |         | 0V sensor           |
| brown/green (12)  |         | L+                  |
| screen  |         | housing             |

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### Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)