

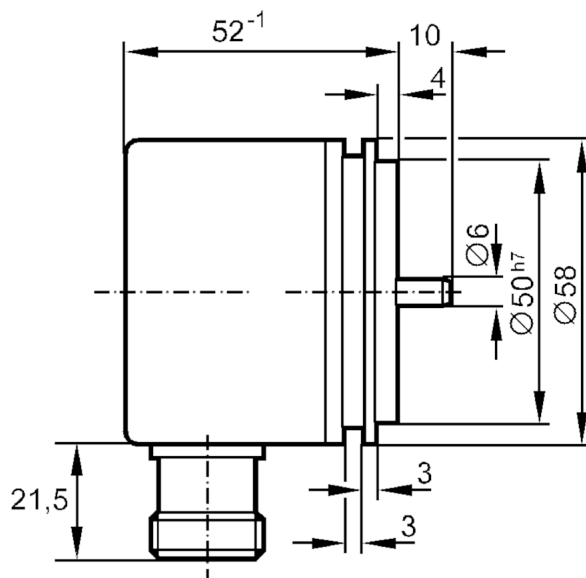
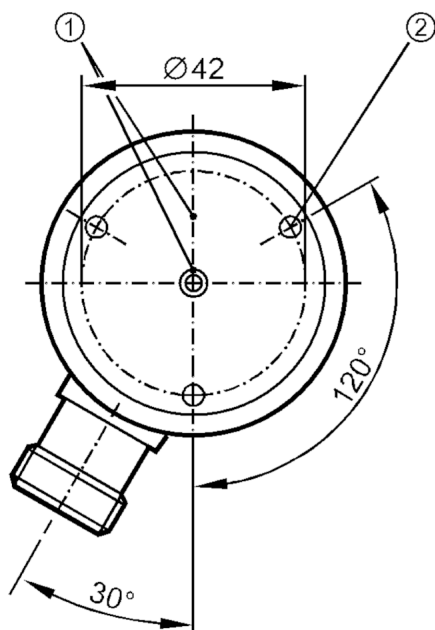
# RU6101



## Incremental encoder with solid shaft

RU-0500-I24/K

Article no longer available - archive entry



- 1 reference mark
- 2 M4 Depth 5 mm



### Product characteristics

|                     |                |
|---------------------|----------------|
| Resolution          | 500 resolution |
| Shaft design        | solid shaft    |
| Shaft diameter [mm] | 6              |

### Electrical data

|                          |            |
|--------------------------|------------|
| Operating voltage [V]    | 10...30 DC |
| Current consumption [mA] | 150        |

### Outputs

|                                   |        |
|-----------------------------------|--------|
| Electrical design                 | HTL    |
| Max. current load per output [mA] | 50     |
| Switching frequency [kHz]         | 160    |
| Type of short-circuit protection  | < 60 s |
| Phase difference A and B [°]      | 90     |

### Measuring/setting range

|            |                |
|------------|----------------|
| Resolution | 500 resolution |
|------------|----------------|

### Operating conditions

|                                |           |
|--------------------------------|-----------|
| Ambient temperature [°C]       | -20...85  |
| Storage temperature [°C]       | -30...100 |
| Max. relative air humidity [%] | 98        |
| Protection                     | IP 64     |



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Tests / approvals

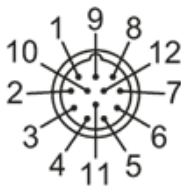
|                      |                     |
|----------------------|---------------------|
| Shock resistance     | 100 g (6 ms)        |
| Vibration resistance | 15 g (55...2000 Hz) |

Mechanical data

|                                               |                |
|-----------------------------------------------|----------------|
| 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 |

Electrical connection

Connector: 1 x M23 (ifm 1001.4), radial



|        |                  |
|--------|------------------|
| 1      | B inverted       |
| 2      | L+ sensor        |
| 3      | 0 index          |
| 4      | 0 index inverted |
| 5      | A                |
| 6      | A inverted       |
| screen | housing          |
| 7      | failure inverted |
| 8      | B                |
| 9      | n.c.             |
| 10     | 0V (Un)          |
| 11     | 0V sensor        |
| 12     | L+               |

Diagrams and graphs

|               |                                          |
|---------------|------------------------------------------|
| Pulse diagram | <p>Output A<br/>Output B<br/>0 index</p> |
|---------------|------------------------------------------|