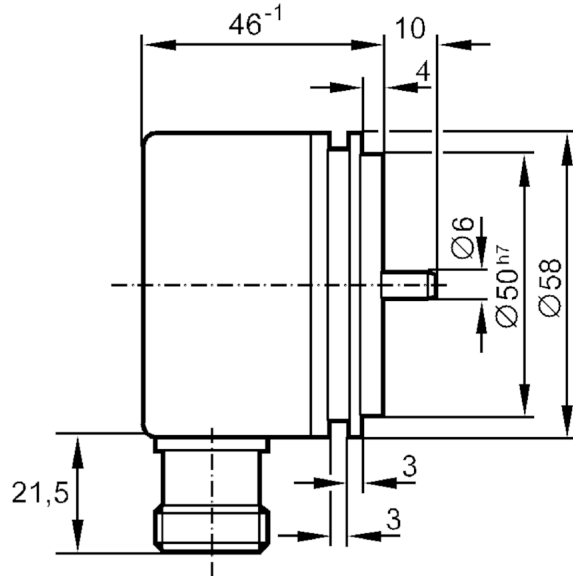


## RU-0250-I05/K

Technical drawing of a circular part. The main view is a top view showing a circle with a diameter of  $\varnothing 42$ . There are four small circles (holes) arranged in a square pattern, with one circle at the center. A 30° angle is indicated for a feature on the left. A 120° angle is indicated for a feature on the right. A detail view (1) is shown at the bottom left, and a detail view (2) is shown at the top right.



- CE

|                     |                |
|---------------------|----------------|
| Resolution          | 250 resolution |
| Shaft design        | solid shaft    |
| Shaft diameter [mm] | 6              |

|                             |      |      |
|-----------------------------|------|------|
| Operating voltage tolerance | [%]  | 10   |
| Operating voltage           | [V]  | 5 DC |
| Current consumption         | [mA] | 150  |

|                                   |     |
|-----------------------------------|-----|
| Electrical design                 | TTL |
| Max. current load per output [mA] | 20  |
| Switching frequency [kHz]         | 300 |
| Phase difference A und B [°]      | 90  |

|            |                |
|------------|----------------|
| Resolution | 250 resolution |
|------------|----------------|

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

RU1169



Incremental encoder with solid shaft

RU-0250-I05/K

Tests / approvals

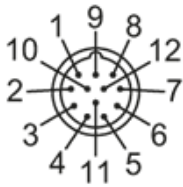
|                      |                     |
|----------------------|---------------------|
| Shock resistance     | 100 g (6 ms)        |
| Vibration resistance | 15 g (55...2000 Hz) |

Mechanical data

|                                               |                |
|-----------------------------------------------|----------------|
| Dimensions [mm]                               | Ø 58 / L = 56  |
| 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

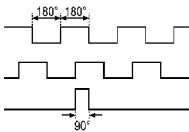
Connector: 1 x M23 (ifm 1001.4), radial



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



Direction of rotation clockwise (looking at the shaft)