



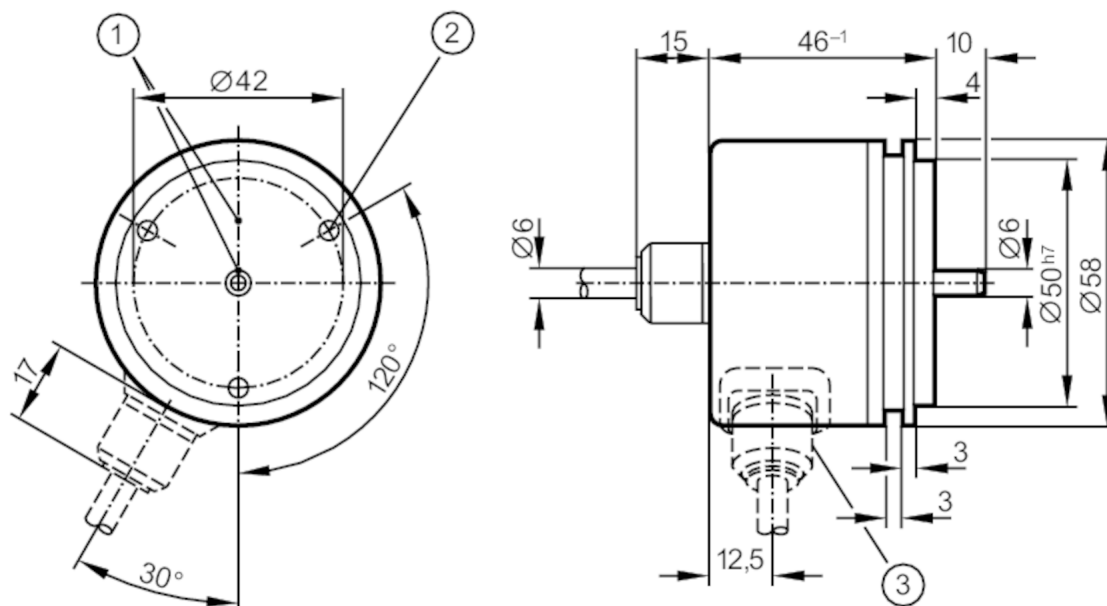
## Incremental encoder with solid shaft

RU-2500-I05/S2

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 5 mm



### Product characteristics

|                     |                 |
|---------------------|-----------------|
| Resolution          | 2500 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 | 2500 resolution |
|------------|-----------------|

### Operating conditions

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



## Incremental encoder with solid shaft

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|                                |                               |
|--------------------------------|-------------------------------|
| Note on ambient temperature    | for firmly laid cable: -30 °C |
| Storage temperature [°C]       | -30...100                     |
| Max. relative air humidity [%] | 98                            |
| Protection                     | IP 64                         |

### Tests / approvals

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

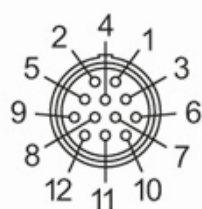
### Mechanical data

|                                               |                |
|-----------------------------------------------|----------------|
| Weight [g]                                    | 545.6          |
| Dimensions [mm]                               | Ø 58 / L = 46  |
| Materials                                     | aluminium      |
| Max. revolution, mechanical [U/min]           | 12000          |
| Max. starting torque [Nm]                     | 1              |
| Reference temperature [°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: 2 m, PUR; axial

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)          |

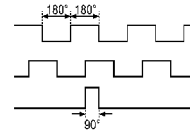


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### Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)