



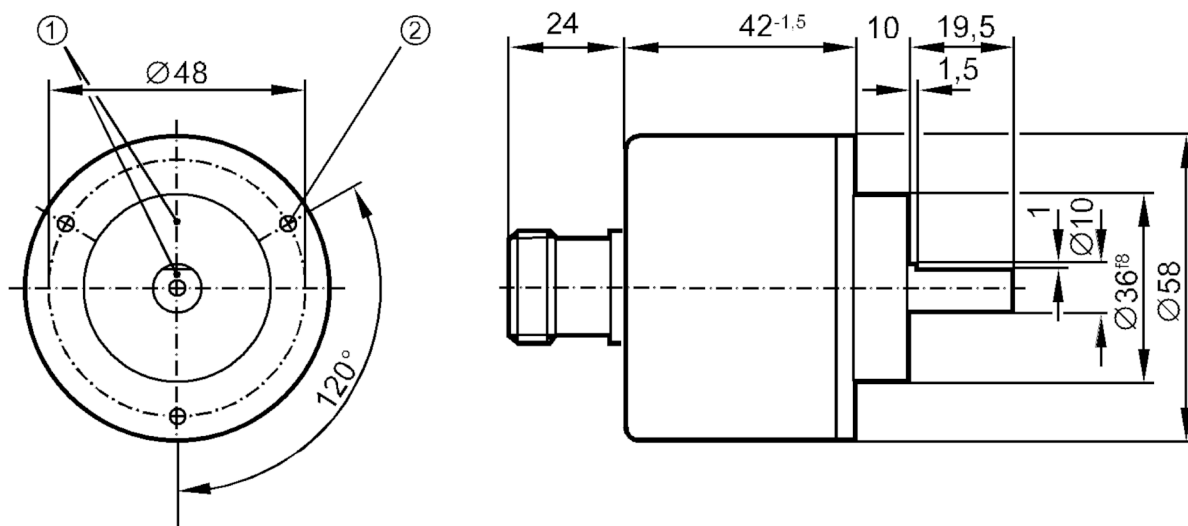
## Incremental encoder with solid shaft

RV-0512-105/J

Article no longer available - archive entry

Alternative articles: RV1017 + E60141

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



- 1 reference mark  
2 M3 Depth 5 mm



## Product characteristics

|                     |                |
|---------------------|----------------|
| Resolution          | 512 resolution |
| Shaft design        | solid shaft    |
| Shaft diameter [mm] | 10             |

## 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 | 512 resolution |
|------------|----------------|

## Operating conditions

|                             |                               |
|-----------------------------|-------------------------------|
| Ambient temperature [°C]    | -30...100                     |
| Note on ambient temperature | for firmly laid cable: -30 °C |

# RV1056



## Incremental encoder with solid shaft

RV-0512-105/J

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

### Tests / approvals

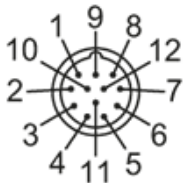
|                      |  |                     |
|----------------------|--|---------------------|
| Shock resistance     |  | 100 g (6 ms)        |
| Vibration resistance |  | 15 g (55...2000 Hz) |

### Mechanical data

|                                           |         |                 |
|-------------------------------------------|---------|-----------------|
| Dimensions                                | [mm]    | Ø 58 / L = 95.5 |
| 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]    | 10              |
| 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              |

### Electrical connection

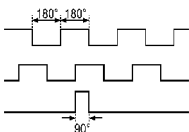
Connector: 1 x M23 (ifm 1001.4), axial



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



direction of rotation clockwise (looking at the shaft)