

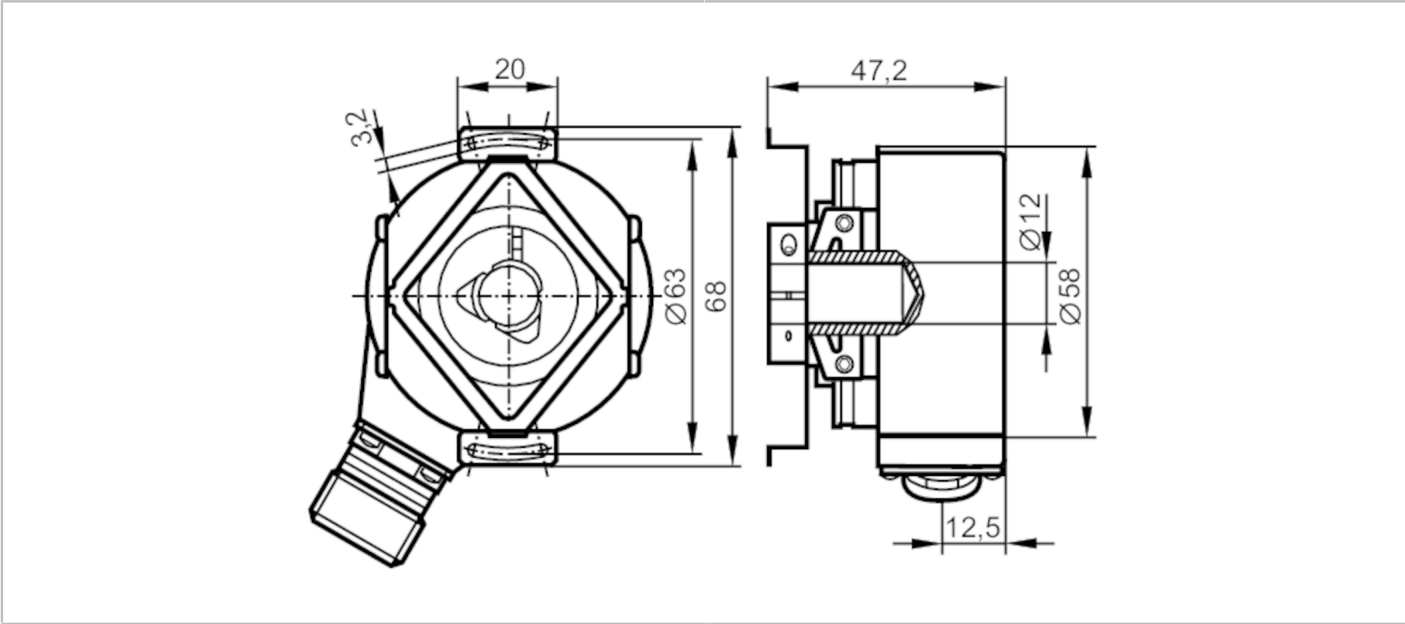
# RO1373



## Incremental encoder with hollow shaft

RO-1024-I05/T U

Article no longer available - archive entry



| Product characteristics      |       |                               |
|------------------------------|-------|-------------------------------|
| Resolution                   |       | 1024 resolution               |
| Shaft design                 |       | hollow shaft open to one side |
| Shaft diameter               | [mm]  | 12                            |
| 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 und B     | [°]   | 90                            |
| Measuring/setting range      |       |                               |
| Resolution                   |       | 1024 resolution               |
| Operating conditions         |       |                               |
| Ambient temperature          | [°C]  | -30...100                     |
| Note on ambient temperature  |       | firmly laid cable: -30 °C     |
| Max. relative air humidity   | [%]   | 98                            |
| Protection                   |       | IP 64                         |
| Tests / approvals            |       |                               |
| Shock resistance             |       | 100 g (6 ms)                  |

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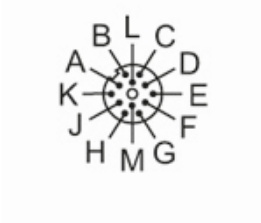
|                      |                     |
|----------------------|---------------------|
| Vibration resistance | 10 g (55...2000 Hz) |
|----------------------|---------------------|

Mechanical data

|                               |         |                                             |
|-------------------------------|---------|---------------------------------------------|
| Weight                        | [g]     | 349.2                                       |
| Dimensions                    | [mm]    | Ø 58 / L = 47.2                             |
| Material                      |         | aluminum                                    |
| Max. revolution, mechanical   | [U/min] | 12000                                       |
| Max. starting torque          | [Nm]    | 1                                           |
| Reference temperature torque  | [°C]    | 20                                          |
| Shaft design                  |         | hollow shaft open to one side               |
| Shaft diameter                | [mm]    | 12                                          |
| Shaft fit                     |         | H7                                          |
| Shaft material                |         | stainless steel                             |
| Installation depth/shaft      | [mm]    | 10                                          |
| Max. axial shaft misalignment | [mm]    | 1; (max. radial shaft alignment: ± 0,05 mm) |

Electrical connection

Connector: 1 x M18 (ifm 1001.20), radial



|        |                  |
|--------|------------------|
| A      | B inverted       |
| B      | Ub sensor        |
| C      | 0 index          |
| D      | 0 index inverted |
| E      | A                |
| F      | A inverted       |
| G      | error inverted   |
| H      | B                |
| K      | 0V Un            |
| L      | 0V sensor        |
| M      | L+ Up            |
| screen | housing          |

Diagrams and graphs

Pulse diagram

Direction of rotation clockwise (looking at the shaft)