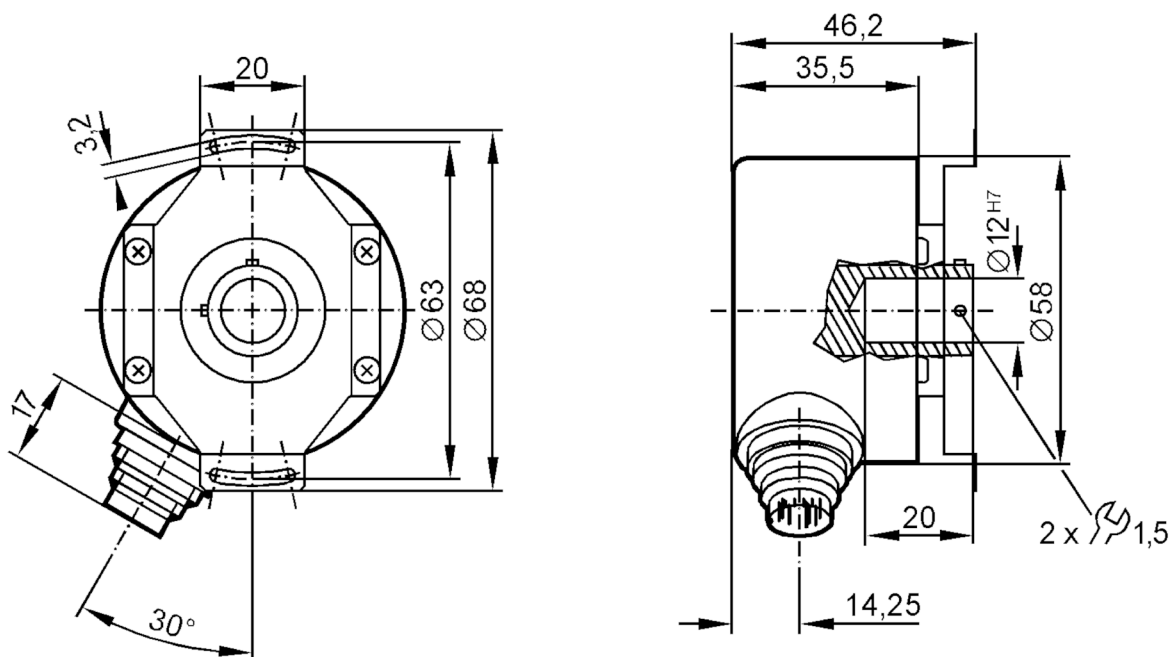


Incremental encoder with hollow shaft

RO-0500-I05/T U

Article no longer available - archive entry



Product characteristics

| | |
|---------------------|-------------------------------|
| Resolution | 500 resolution |
| Shaft design | hollow shaft open to one side |
| Shaft diameter [mm] | 12 |

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

Operating conditions

| | |
|--------------------------------|-------------------------|
| Ambient temperature [°C] | -30...96 |
| Note on ambient temperature | Up < 18 V: -30...100 °C |
| Storage temperature [°C] | -30...100 |
| Max. relative air humidity [%] | 98 |
| Protection | IP 64 |

RO1359



Incremental encoder with hollow shaft

RO-0500-I05/T U

Tests / approvals

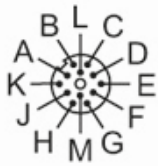
| | |
|----------------------|---------------------|
| Shock resistance | 100 g (6 ms) |
| Vibration resistance | 10 g (55...2000 Hz) |

Mechanical data

| | |
|-------------------------------------|---|
| Dimensions [mm] | Ø 58 / L = 46.2 |
| Materials | aluminium |
| Max. revolution, mechanical [U/min] | 12000 |
| Max. starting torque [Nm] | 2.5 |
| 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 of shaft [mm] | 10 |
| Max. axial shaft misalignment [mm] | 1; (max. radial shaft alignment: ± 0,05 mm) |

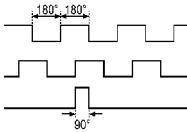
Electrical connection

Connector: 1 x M18, radial



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

Diagrams and graphs

| | |
|---------------|--|
| Pulse diagram |  <p>direction of rotation clockwise (looking at the shaft)</p> |
|---------------|--|