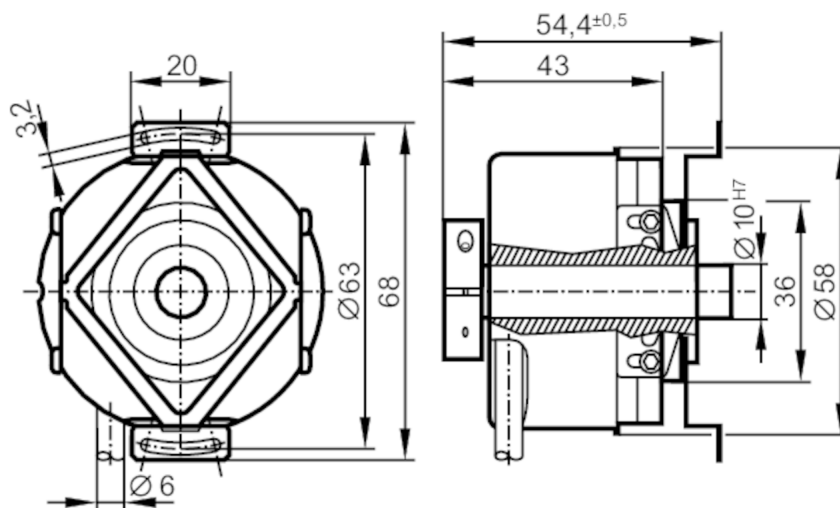


## Incremental encoder with hollow shaft

RO-2048-I24/N11

Article no longer available - archive entry



## Product characteristics

|                     |                         |
|---------------------|-------------------------|
| Resolution          | 2048 resolution         |
| Shaft design        | continuous hollow shaft |
| Shaft diameter [mm] | 10                      |

## Electrical data

|                          |            |
|--------------------------|------------|
| Operating voltage [V]    | 10...30 DC |
| Current consumption [mA] | < 150      |

## Outputs

|                                   |        |
|-----------------------------------|--------|
| Electrical design                 | HTL    |
| Max. current load per output [mA] | 50     |
| Switching frequency [kHz]         | 300    |
| Type of short-circuit protection  | < 60 s |
| Phase difference A and B [°]      | 90     |

## Measuring/setting range

|            |                 |
|------------|-----------------|
| Resolution | 2048 resolution |
|------------|-----------------|

## Operating conditions

|                                |   |
|--------------------------------|---|
| Ambient temperature [°C]       | -30...85  |
| Note on ambient temperature    | for firmly laid cable: -30 °C                       |
| Max. relative air humidity [%] | 98  |
| Protection                     | IP 64; (on the housing: IP 66; on the shaft: IP 64) |

## Tests / approvals

|                      |       |
|----------------------|-------|
| Shock resistance     | 200 g |
| Vibration resistance | 30 g  |

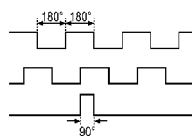


## Incremental encoder with hollow shaft

RO-2048-I24/N11

| Mechanical data               |         |   |
|-------------------------------|---------|---|
| Dimensions                    | [mm]    | Ø 58 / L = 54.4                               |
| Materials                     |         | aluminium                                     |
| Max. revolution, mechanical   | [U/min] | 12000; (when using both shaft clamping rings) |
| Max. starting torque          | [Nm]    | 2.5   |
| Reference temperature torque  | [°C]    | 20  |
| Shaft design                  |         | continuous hollow shaft                       |
| Shaft diameter                | [mm]    | 10  |
| 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                             |                  |  |
|---|------------------|--|
| Cable: 1 m, PUR; radial, can also be used axially |                  |  |
| 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)          |  |
| screen  | housing          |  |
| lilac   | failure inverted |  |

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