

## Incremental encoder with hollow shaft

RO-1024-I05/N1U

Article no longer available - archive entry

Alternative articles: ROP521 + E12402

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



## Product characteristics

|                     |                               |
|---------------------|-------------------------------|
| Resolution          | 1024 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]        | < 120 |

## 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 | 1024 resolution |
|------------|-----------------|

## Operating conditions

|                                |                                                     |
|--------------------------------|-----------------------------------------------------|
| Ambient temperature [°C]       | -30...100                                           |
| Max. relative air humidity [%] | 98                                                  |
| Protection                     | IP 64; (on the housing: IP 67; on the shaft: IP 64) |

## Tests / approvals

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



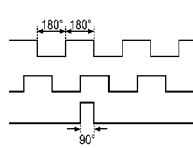
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| Mechanical data               |         |                                             |
|-------------------------------|---------|---------------------------------------------|
| Weight                        | [g]     | 445.6                                       |
| Dimensions                    | [mm]    | Ø 58 / L = 35.5                             |
| Materials                     |         | aluminium                                   |
| 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 of shaft   | [mm]    | 10                                          |
| Max. axial shaft misalignment | [mm]    | 1; (max. radial shaft alignment: ± 0,05 mm) |

| Electrical connection                                                          |  |
|--------------------------------------------------------------------------------|--|
| Cable: 1 m, PUR; Maximum cable length: 100 m; 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)          |
| lilac       | failure inverted |
| screen      | housing          |

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