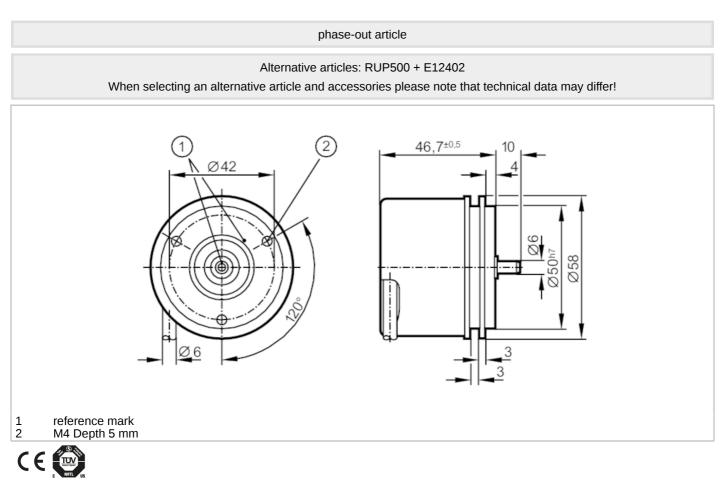
## RU1045

## Incremental encoder with solid shaft

RU-5000-105/L2





| Product characteristics      |       |                 |
|------------------------------|-------|-----------------|
| Resolution                   |       | 5000 resolution |
| Shaft design                 |       | solid shaft     |
| Shaft diameter               | [mm]  | 6               |
| Application                  |       |                 |
| Function principle           |       | incremental     |
| 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                   |       | 5000 resolution |
| Operating conditions         |       |                 |
| Ambient temperature          | [°C]  | -40100          |
| Ambient temperature          | [°C]  | -40100          |

## RU1045

## Incremental encoder with solid shaft



RU-5000-105/L2

|  | [%]        | 98  |
|--|------------|---|
| Protection   |            | IP 64; (on the housing: IP 67; on the shaft: IP 64) |
| Tests / approvals  |            |   |
| Shock resistance   |            | 200 g   |
| Vibration resistance   |            | 30 g  |
| MTTF [ye   | ars]       | 190   |
| Mechanical data  |            |   |
| Weight   | [g]        | 493.6   |
| Dimensions [r  | mm]        | Ø 58 / L = 46.7                                     |
| Materials  |            | aluminium   |
| Max. revolution, mechanical [U/r   | min]       | 16000   |
| Max. starting torque [I  | Nm]        | 1   |
| Reference temperature torque   | [°C]       | 20  |
| Shaft design   |            | solid shaft   |
| Shaft diameter [r  | mm]        | 6   |
| 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  |
| Fixing flange  |            | synchro-flange                                      |
|  |            |   |
| Electrical connection  |            |   |
|  | le length: | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cabl  | le length: | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cabl<br>brown A<br>green A inverted   | le length: | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyB   | le length: | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cabl<br>brown A<br>green A inverted   | le length: | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB inverted   |            | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index inverblueL+ sensor  |            | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhite0V sensor   |            | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)   |            | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index inverblueL+ sensorwhite0V sensorbrown/greenL+ (Up)white/green0V (Un)                                      | ted        | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index inverblueL+ sensorwhite0V sensorbrown/greenL+ (Up)white/green0V (Un)lilacfailure inverted                 | ted        | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhiteOV sensorbrown/greenL+ (Up)white/greenOV (Un)lilacfailure invertedscreenhousing | ted        | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhiteOV sensorbrown/greenL+ (Up)white/greenOV (Un)lilacfailure invertedscreenhousing | ted        | 100 m; radial, can also be used axially             |
| Cable: 2 m, PUR; Maximum cablebrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhiteOV sensorbrown/greenL+ (Up)white/greenOV (Un)lilacfailure invertedscreenhousing | ted        | 100 m; radial, can also be used axially             |