

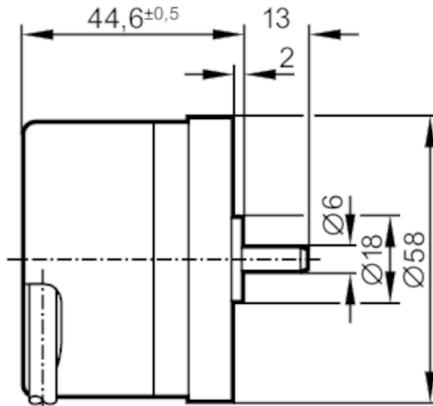
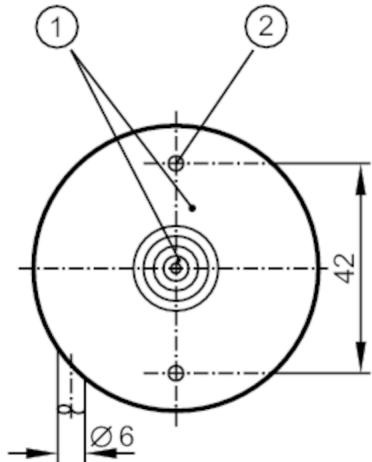
RC1014



Incremental encoder with solid shaft

RC-0500-I05/L2

phase-out article



- 1 reference mark
2 M3 Depth 5 mm



Product characteristics

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

Operating conditions

| | |
|--------------------------------|---|
| Ambient temperature [°C] | -40...100 |
| Note on ambient temperature | for firmly laid cable: -40 °C |
| 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 |

Incremental encoder with solid shaft

RC-0500-I05/L2

| | | |
|---|-------|-----------------------------|
| MTTF | [ANN] | 190 |
| Mechanical data | | |
| Weight | [g] | 472 |
| Dimensions | [mm] | $\varnothing 58 / L = 44.6$ |
| Materials | | aluminium |
| Max. revolution, mechanical [U/min] | | 16000 |
| Max. starting torque | [Nm] | 1 |
| Reference temperature torque | [°C] | 20 |
| Shaft design | | solid shaft |
| Shaft diameter | [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 |

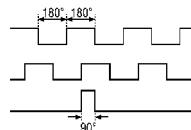
Electrical connection

Cable: 2 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



direction of rotation clockwise (looking at the shaft)