RC6003

Incremental encoder with solid shaft





phase-out article 44,6±0.5 1 reference mark 2 M3 Depth 5 mm



| Product characteristics | | |
|----------------------------------|-------|---|
| Resolution | | 100 resolution |
| Shaft design | | solid shaft |
| Shaft diameter | [mm] | 6 |
| Application | | |
| Function principle | | incremental |
| Electrical data | | |
| Operating voltage | [V] | 1030 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 | | 100 resolution |
| Operating conditions | | |
| Ambient temperature | [°C] | -40100 |
| 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 |

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RC-0100-I24/L2

| Vibration resistance | | 30 g | | |
|---|---------|--|--|--|
| MTTF | [years] | 190 | | |
| Mechanical data | | | | |
| Weight | [g] | 481.4 | | |
| Dimensions | [mm] | Ø 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 [N] shaft end) | | 10 | | |
| Max. shaft load radial (at the shaft end) | e [N] | 20 | | |
| Electrical connection | | | | |
| Cable: 2 m, PUR; Maximum cable length: 300 m; radial, can also be used axially | | | | |
| brown green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L+ sensor white 0V sensor brown/green white/green lilac failure inverted housing | | | | |
| Diagrams and graphs | | | | |
| Pulse diagram | | direction of rotation clockwise (looking at the shaft) | | |