



Incremental encoder with solid shaft

RV-2048-I24/L2

phase-out article

Alternative articles: RV3500

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



- 1 reference mark
2 M3 Depth 5 mm



Product characteristics

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

Application

| | |
|--------------------|-------------|
| Function principle | incremental |
|--------------------|-------------|

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



Incremental encoder with solid shaft

RV-2048-I24/L2

| | |
|--------------------------------|---|
| 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 |
| MTTF [years] | 190 |

Mechanical data

| | |
|---|-----------------|
| Weight [g] | 475.6 |
| Dimensions [mm] | Ø 58 / L = 46.7 |
| Materials | aluminium |
| Max. revolution, mechanical [U/min] | 12000 |
| Max. starting torque [Nm] | 1 |
| Reference temperature torque [°C] | 20 |
| Shaft design | solid shaft |
| Shaft diameter [mm] | 10 |
| 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 |

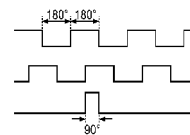
Electrical connection

Cable: 2 m, PUR; Maximum cable length: 300 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)