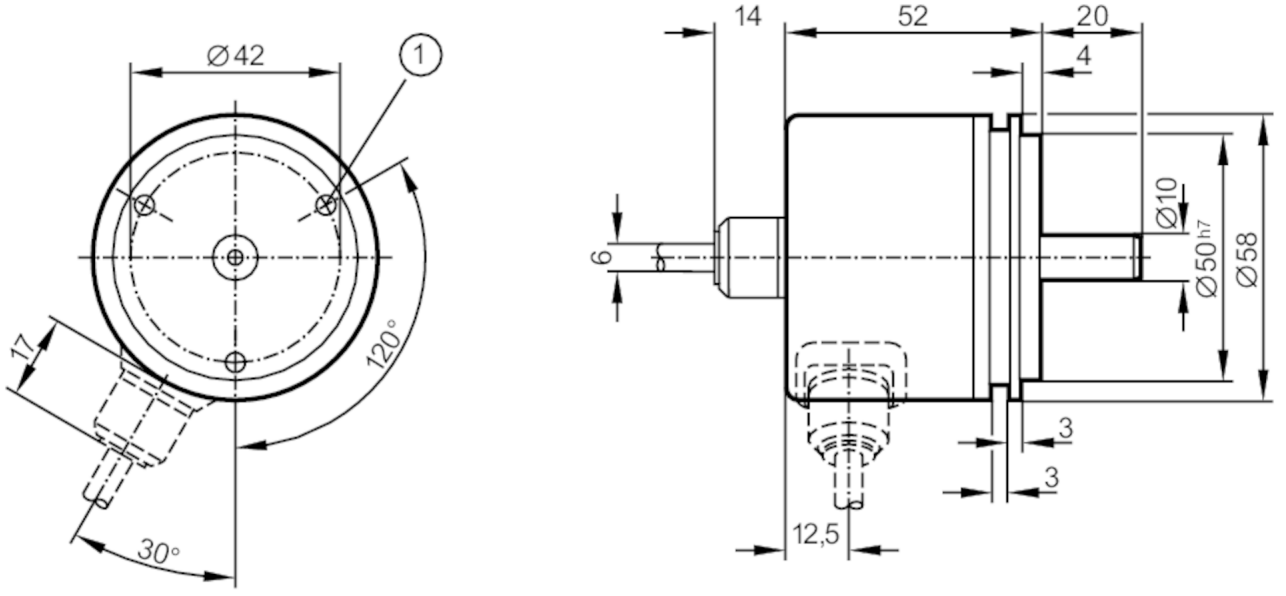
# RN6009

## Absolute singleturn encoder with solid shaft

RN-0256-G24/L1B

Article no longer available - archive entry

Alternative articles: RN6024
When selecting an alternative article and accessories please note that technical data may differ!




1 M4 Depth 5 mm

| | | |
|---|---|---|
| **Product characteristics** | | |
| Resolution | | 256 resolution; 256 steps; 8 bit |
| Communication interface | | parallel |
| Shaft design | | solid shaft |
| Shaft diameter | [mm] | 10 |
| **Electrical data** | | |
| Operating voltage | [V] | 10...30 DC |
| Current consumption | [mA] | < 150 |
| Max. revolution electrical | [U/min] | 6000 |
| **Outputs** | | |
| Electrical design | | HTL |
| Max. current load per output | [mA] | 20 |
| Type of short-circuit protection | | < 60 s |
| Code | | Gray code; (increasing code values when turned clockwise (seen on the shaft)) |
| **Measuring/setting range** | | |
| Resolution | | 256 resolution; 256 steps; 8 bit |
| **Interfaces** | | |
| Communication interface | | parallel |

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| Operating conditions | | |
|---|---|---|
| Ambient temperature | [°C] | -20...85 |
| Storage temperature | [°C] | -30...100 |
| Max. relative air humidity | [%] | 98 |
| Protection | | IP 64 |

| Tests / approvals | |
|---|---|
| Shock resistance | 100 g (6 ms) |
| Vibration resistance | 10 g (55...2000 Hz) |

| Mechanical data | | |
|---|---|---|
| Dimensions | [mm] | Ø 58 / L = 52 |
| Materials | | aluminium |
| Max. revolution, mechanical | [U/min] | 10000 |
| 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: 1 m, PUR; Maximum cable length: 100 m; axial

| | |
|---|---|
| brown | 10...30V |
| yellow/brown | 10...30V sensor |
| white | 0V |
| white/yellow | 0V sensor |
| green | release A inverted 5...30V |
| yellow | release B inverted 5...30V |
| white/grey | bit 8 (MSB) inverted |
| brown/green | bit 8 (MSB) |
| white/green | bit 7 |
| red/blue | bit 6 |
| grey/pink | bit 5 |
| lilac | bit 4 |
| black | bit 3 |
| red | bit 2 |
| blue | bit 1 |
| Screen | housing |

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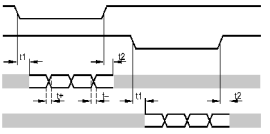
## Diagrams and graphs

Pulse diagram



release A inverted

release B inverted

tracks 3...10

tracks 1...2