

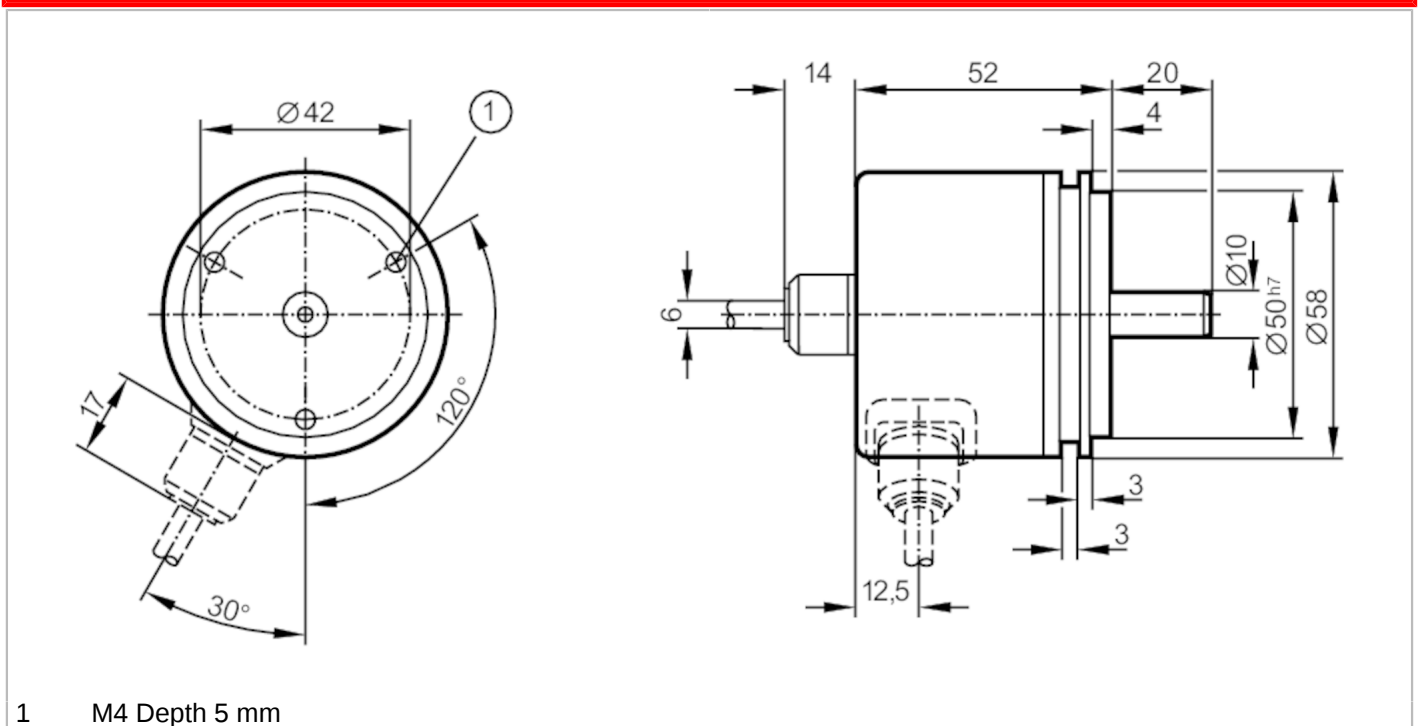
# RN6003



## Absolute singleturn encoder with solid shaft

RN-0512-G24/N1B

Article no longer available - archive entry



| 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                         | 512 resolution; 512 steps; 9 bit  |
| Interfaces                         |   |
| Communication interface            | parallel  |
| 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)   |

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| 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             |

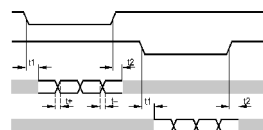
### Electrical connection

Cable: 1 m, PUR; Maximum cable length: 100 m; radial

|              |                            |
|--------------|----------------------------|
| 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 9 (MSB) inverted       |
| brown/green  | bit 9 (MSB)                |
| white/green  | bit 8                      |
| red/blue     | bit 7                      |
| grey/pink    | bit 6                      |
| lilac        | bit 5                      |
| black        | bit 4                      |
| red          | bit 3                      |
| blue         | bit 2                      |
| pink         | bit 1                      |
| Screen       | housing                    |

### Diagrams and graphs

Pulse diagram



release A inverted  
release B inverted  
tracks 3...10  
tracks 1...2

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