# **RN6028**

# Absolute singleturn encoder with solid shaft

RN-0360-G24/L3B



# 



| Product characteristics     |         |   |
|-----------------------------|---------|---|
| Resolution                  |         | 360 steps; 9 bit  |
| Shaft design                |         | solid shaft   |
| Shaft diameter              | [mm]    | 10  |
| Electrical data             |         |   |
| Operating voltage           | [V]     | 1030 DC   |
| Current consumption         | [mA]    | < 250   |
| Max. revolution electrical  | [U/min] | 1500  |
| Outputs                     |         |   |
| Electrical design           |         | HTL   |
| Max. current load per outpu | it [mA] | 20  |
| Code                        |         | Gray code; (increasing code values when turned clockwise (seen on the shaft)) |
| Measuring/setting range     |         |   |
| Resolution                  |         | 360 steps; 9 bit  |
| Operating conditions        |         |   |
| Ambient temperature         | [°C]    | -2070   |
| Storage temperature         | [°C]    | -30100  |
| Max. relative air humidity  | [%]     | 98  |
| Protection                  |         | IP 65   |
| Tests / approvals           |         |   |
| Shock resistance            |         | 100 g (6 ms)  |
| Vibration resistance        |         | 10 g (552000 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: 3 m, PUR; Maximum cable length: 100 m; axial

brown 10...30V yellow/brown 10...30V sensor

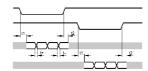
white 0V white/yellow 0V sensor

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

### Diagrams and graphs

Pulse diagram



release A inverted release B inverted tracks 7...12

tracks 1...6

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