

# RV6054



## Incremental encoder with solid shaft

RV-0050-I24/K

Article no longer available - archive entry



- 1 reference mark
- 2 M3 Depth 5 mm



### Product characteristics

|                     |               |
|---------------------|---------------|
| Resolution          | 50 resolution |
| Shaft design        | solid shaft   |
| Shaft diameter [mm] | 10            |

### 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]         | 160    |
| Type of short-circuit protection  | < 60 s |
| Phase difference A and B [°]      | 90     |

### Measuring/setting range

|            |               |
|------------|---------------|
| Resolution | 50 resolution |
|------------|---------------|

### Operating conditions

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

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### Tests / approvals

|                      |                     |
|----------------------|---------------------|
| Shock resistance     | 100 g (6 ms)        |
| Vibration resistance | 15 g (55...2000 Hz) |

### Mechanical data

|                                               |                 |
|-----------------------------------------------|-----------------|
| Dimensions [mm]                               | Ø 58 / L = 75.5 |
| 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

Connector: 1 x M23 (ifm 1001.4), radial



|    |                  |
|----|------------------|
| 1  | B inverted       |
| 2  | L+ sensor        |
| 3  | 0 index          |
| 4  | 0 index inverted |
| 5  | A                |
| 6  | A inverted       |
| 7  | failure inverted |
| 8  | B                |
| 9  | n.c.             |
| 10 | 0V               |
| 11 | 0V sensor        |
| 12 | L+               |

### Diagrams and graphs

|               |                                                               |
|---------------|---------------------------------------------------------------|
| Pulse diagram | <p>direction of rotation clockwise (looking at the shaft)</p> |
|---------------|---------------------------------------------------------------|