

# RV6087

## Incremental encoder with solid shaft

RV-2500-I24/K



Article no longer available - archive entry



- 1 reference mark
- 2 M3 Depth 5 mm



### Product characteristics

|                     |                 |
|---------------------|-----------------|
| Resolution          | 2500 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]         | 160    |
| Type of short-circuit protection  | < 60 s |
| Phase difference A and B [°]      | 90     |

### Measuring/setting range

|            |                 |
|------------|-----------------|
| Resolution | 2500 resolution |
|------------|-----------------|

### Operating conditions

|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -30...85 |
|--------------------------|----------|

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

### Tests / approvals

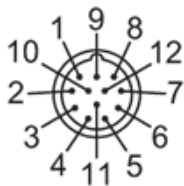
|                      |  |                     |
|----------------------|--|---------------------|
| Shock resistance     |  | 100 g (6 ms)        |
| Vibration resistance |  | 15 g (55...2000 Hz) |

### Mechanical data

|                                           |         |                 |
|-------------------------------------------|---------|-----------------|
| Weight                                    | [g]     | 400             |
| Dimensions                                | [mm]    | Ø 58 / L = 75.5 |
| Materials                                 |         | aluminium       |
| Max. revolution, mechanical               | [U/min] | 12000           |
| Max. starting torque                      | [Nm]    | 1               |
| Reference temperature                     | [°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

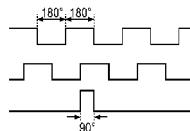
Connector: 1 x M23 (ifm 1001.4), radial



|    |                  |
|----|------------------|
| 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



direction of rotation clockwise (looking at the shaft)