

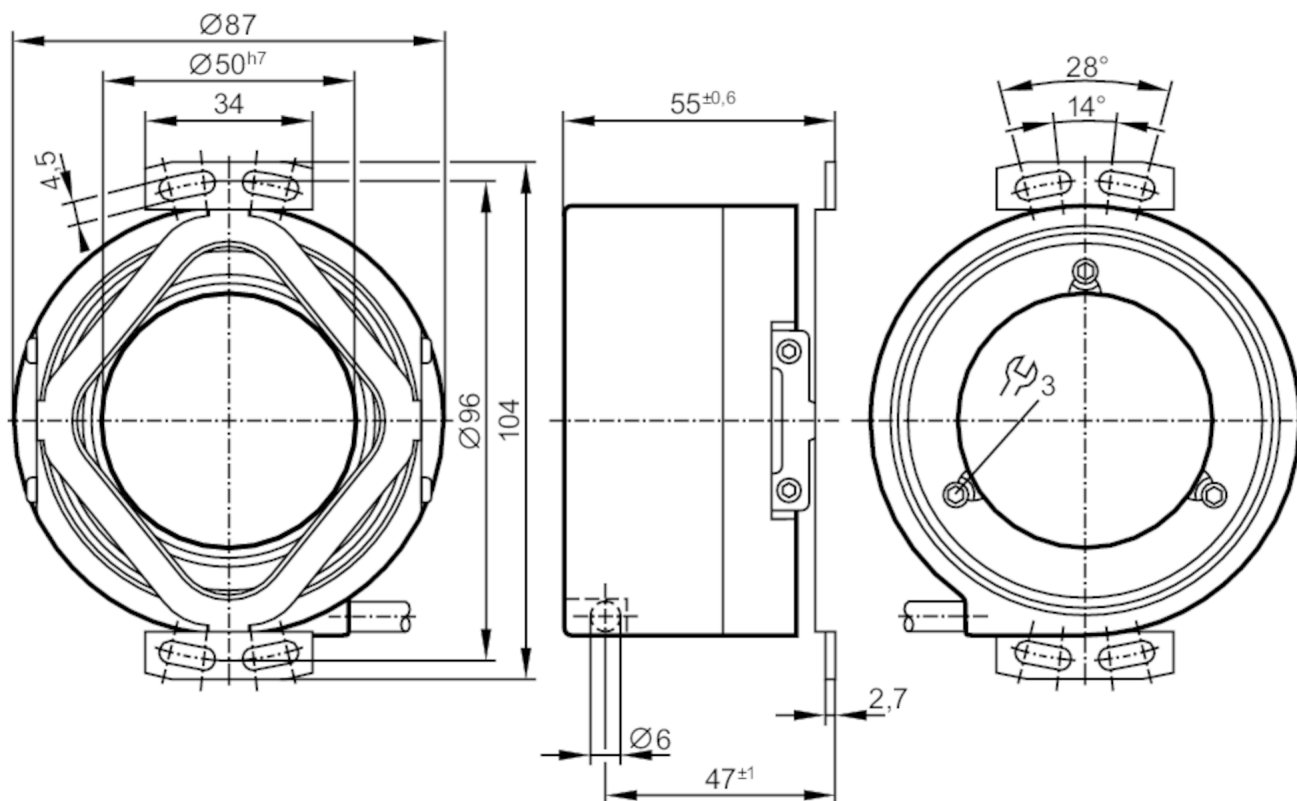
# RP6411



## Incremental encoder with hollow shaft

RP-2048-I24/N15

Article no longer available - archive entry



### Product characteristics

|                     |                         |
|---------------------|-------------------------|
| Resolution          | 2048 resolution         |
| Shaft design        | continuous hollow shaft |
| Shaft diameter [mm] | 50                      |

### 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]         | 300    |
| Short-circuit protection          | yes    |
| Type of short-circuit protection  | < 60 s |
| Phase difference A and B [°]      | 90     |



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| Measuring/setting range       |                  |                                                                                                            |
|-------------------------------|------------------|------------------------------------------------------------------------------------------------------------|
| Resolution                    |                  | 2048 resolution                                                                                            |
| Operating conditions          |                  |                                                                                                            |
| Ambient temperature           | [°C]             | -30...65                                                                                                   |
| Note on ambient temperature   |                  | higher temperature upon request<br>for the diagram see the installation instructions                       |
| Max. relative air humidity    | [%]              | 75; (briefly: 95 %; condensation not permissible)                                                          |
| Protection                    |                  | IP 64                                                                                                      |
| Tests / approvals             |                  |                                                                                                            |
| Shock resistance              |                  | 100 g (6 ms)                                                                                               |
| Vibration resistance          |                  | 10 g (55...2000 Hz)                                                                                        |
| Mechanical data               |                  |                                                                                                            |
| Weight                        | [g]              | 940                                                                                                        |
| Dimensions                    | [mm]             | Ø 87 / L = 55                                                                                              |
| Materials                     |                  | aluminium                                                                                                  |
| Max. revolution, mechanical   | [U/min]          | 4000                                                                                                       |
| Max. starting torque          | [Nm]             | 20                                                                                                         |
| Reference temperature torque  | [°C]             | 20                                                                                                         |
| Shaft design                  |                  | continuous hollow shaft                                                                                    |
| Shaft diameter                | [mm]             | 50                                                                                                         |
| Shaft fit                     |                  | H7                                                                                                         |
| Shaft material                |                  | steel (1.4104)                                                                                             |
| Max. axial shaft misalignment | [mm]             | 1,5; (Only to compensate for installation tolerances and thermal expansion.; No dynamic movement allowed.) |
| Electrical connection         |                  |                                                                                                            |
| Cable: 1 m, PUR; radial       |                  |                                                                                                            |
| brown                         | A                |                                                                                                            |
| green                         | A inverted       |                                                                                                            |
| grey                          | B                |                                                                                                            |
| pink                          | B inverted       |                                                                                                            |
| red                           | 0 index          |                                                                                                            |
| black                         | 0 index inverted |                                                                                                            |
| blue                          | 10...30V sensor  |                                                                                                            |
| white                         | 0V sensor        |                                                                                                            |
| brown/green                   | 10...30V (Up)    |                                                                                                            |
| white/green                   | 0V (Un)          |                                                                                                            |
| lilac                         | failure inverted |                                                                                                            |
| screen                        | housing          |                                                                                                            |

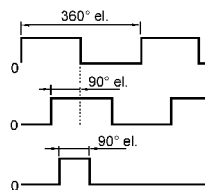


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### Diagrams and graphs

Pulse diagram



Output A

Output B

0 index