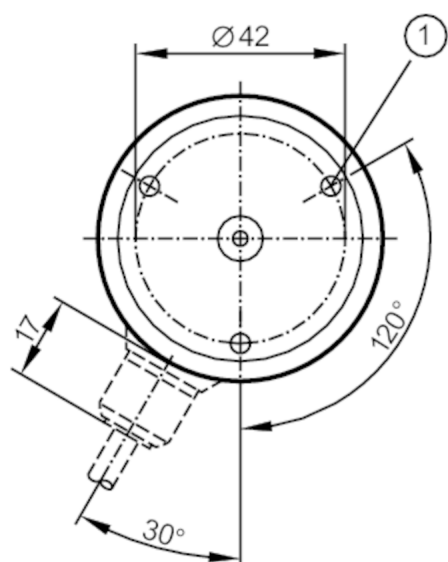




## Absolute singleturn encoder with solid shaft

RN-2048-G24/L1B

Article no longer available - archive entry



1 M4 Depth 5 mm



### Product characteristics

|                         |                 |
|-------------------------|-----------------|
| Resolution              | 2048 resolution |
| Communication interface | parallel        |
| Shaft design            | solid shaft     |
| Shaft diameter [mm]     | 10              |

### Electrical data

|                                    |            |
|------------------------------------|------------|
| Operating voltage [V]              | 10...30 DC |
| Current consumption [mA]           | < 250      |
| Max. revolution electrical [U/min] | 1500       |

### 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 | 2048 resolution |
|------------|-----------------|

### Interfaces

|                         |          |
|-------------------------|----------|
| Communication interface | parallel |
|-------------------------|----------|

### Operating conditions

|                          |           |
|--------------------------|-----------|
| Ambient temperature [°C] | -20...70  |
| Storage temperature [°C] | -30...100 |



## Absolute singleturn encoder with solid shaft

RN-2048-G24/L1B

|                                |       |
|--------------------------------|-------|
| Max. relative air humidity [%] | 98    |
| Protection                     | IP 65 |

### Tests / approvals

|                      |                     |
|----------------------|---------------------|
| Shock resistance     | 100 g (6 ms)        |
| Vibration resistance | 10 g (55...2000 Hz) |

### 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             |

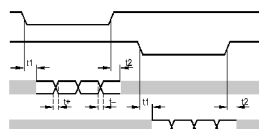
### Electrical connection

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

|              |                 |
|--------------|-----------------|
| brown        | 10...30V        |
| yellow/brown | 10...30V sensor |
| white        | 0V              |
| white/yellow | 0V sensor       |
| brown/green  | bit 12 (MSB)    |
| white/green  | bit 11          |
| red/blue     | bit 10          |
| grey/pink    | bit 9           |
| lilac        | bit 8           |
| black        | bit 7           |
| red          | bit 6           |
| blue         | bit 5           |
| pink         | bit 4           |
| grey         | bit 3           |
| grey/brown   | bit 2           |
| white/pink   | bit 1           |
| screen       | housing         |

### Diagrams and graphs

Pulse diagram



release A inverted  
release B inverted  
tracks 7...12  
tracks 1...6