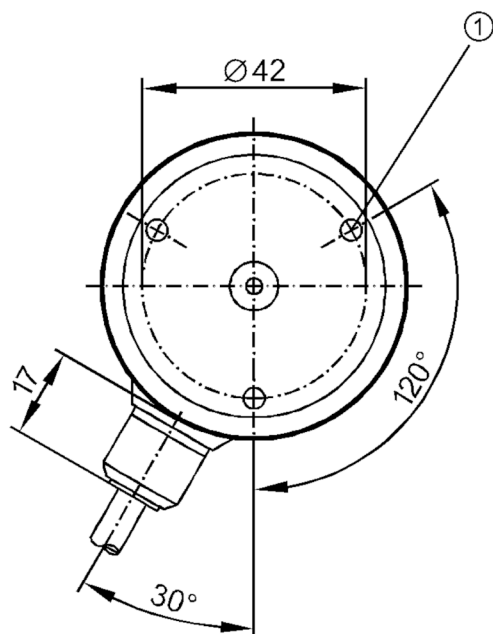




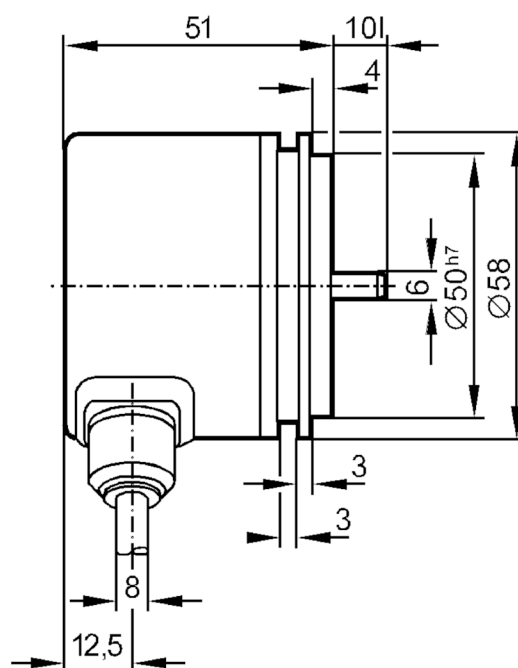
Absolute singleturn encoder with solid shaft

RN-1024-G24/N1A

Article no longer available - archive entry



1 M4 Depth 5 mm



Product characteristics

| | |
|-------------------------|-------------------------------------|
| Resolution | 1024 resolution; 1024 steps; 10 bit |
| Communication interface | parallel |
| Shaft design | solid shaft |
| Shaft diameter [mm] | 6 |

Electrical data

| | |
|------------------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | < 150 |
| Max. revolution electrical [U/min] | 6000 |

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 | 1024 resolution; 1024 steps; 10 bit |
|------------|-------------------------------------|

Interfaces

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

Operating conditions

| | |
|--------------------------|-----------|
| Ambient temperature [°C] | -20...85 |
| Storage temperature [°C] | -30...100 |



Absolute singleturn encoder with solid shaft

RN-1024-G24/N1A

| | |
|--------------------------------|-------|
| 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 = 61 |
| 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] | 6 |
| 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 |

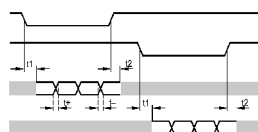
Electrical connection

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

| | |
|--------------|----------------------------|
| 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 10 (MSB) inverted |
| brown/green | bit 10 (MSB) |
| white/green | bit 9 |
| red/blue | bit 8 |
| grey/pink | bit 7 |
| lilac | bit 6 |
| black | bit 5 |
| red | bit 4 |
| blue | bit 3 |
| pink | bit 2 |
| grey | bit 1 |
| Screen | housing |

Diagrams and graphs

Pulse diagram



release A inverted
release B inverted
tracks 3...10
tracks 1...2