**Miniature 303 Shaft encoder, Incremental**

- 30mm diameter
- 6 short-circuit protected outputs
- IP 67 at housing
- Shock and vibration protected
- Status output for warning indication

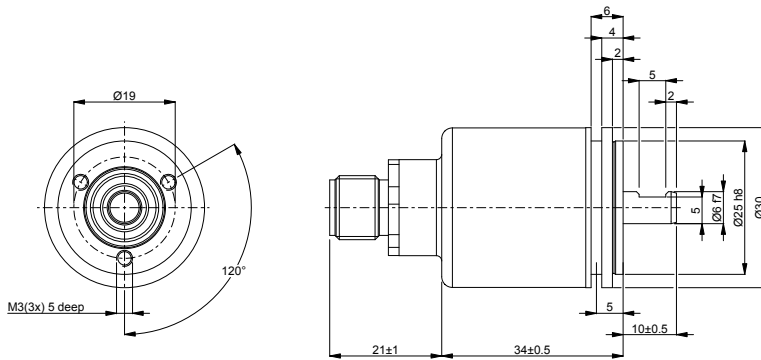
**Technical data**

| | |
|--------------------------------------|------------------------------|
| Operating temperature | -40 °C .. +70 °C |
| Ingress protection class [IEC 60529] | IP67 |
| Vibration [IEC 60068-2-6] | ≤ 200 m/s ² |
| Shock [IEC 60068-2-27] | ≤ 3000 m/s ² |
| Cover material | Aluminium (anodized) |
| Weight | 70 g |
| Shaft load (axial/radial) | 10 N / 10 N |
| Rotational speed max | 6000 rpm |
| Shaft material | Stainless steel |
| Short circuit protected | Yes |
| Polarity protected | Yes |
| Current consumption | 10 mA at 24 Vdc (Max. 70 mA) |
| Output load | ±20 mA |
| Output frequency max | 200 kHz |
| Cable length max | 50 m at 50 kHz |
| Channel separation | 90° el ± 25° el |
| Dividing error | ±50° el |

Encoder configuration

| | |
|----------------------|-------------------------|
| Type | MSI |
| Model | 303 Standard |
| Shaft type | Ø6 mm with partial flat |
| Flange type | 31-flange |
| Resolution | 1024 |
| Power supply | 9-36 Vdc |
| Output signal | HTL |
| Connection type | M12 connector 8-pin |
| Connecting direction | Axial |

Dimensions



Output signals



Pin configuration

| Function | Pin |
|---------------|---------|
| S90 inverted | 1 |
| Sref | 2 |
| S90 | 3 |
| S00 | 4 |
| S00 inverted | 5 |
| Sref inverted | 6 |
| 0V | 7 |
| +EV | 8 |
| Shield | Chassis |

Ordering information

Part number

630426-02