

- IP 67 encapsulation class
- Short-circuit protected electrical outputs
- Polarity protected power supply
- Shock and vibration protected
- 3 channel output and additional status output



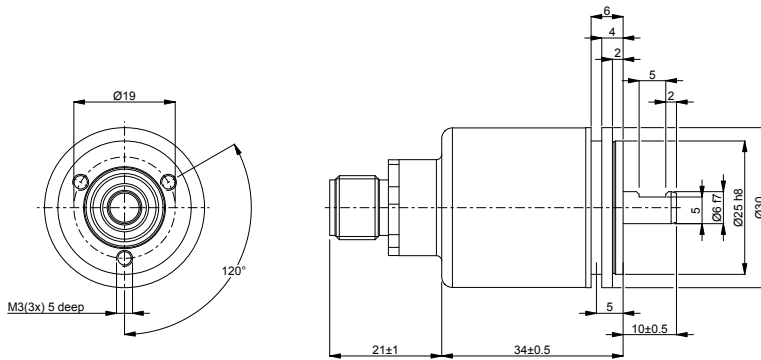
## Technical data

|                                      |                         |
|--------------------------------------|-------------------------|
| Operating temperature                | -40 °C .. +70 °C        |
| Ingress protection class [IEC 60529] | IP67                    |
| Vibration [IEC 60068-2-6]            | ≤ 300 m/s <sup>2</sup>  |
| Shock [IEC 60068-2-27]               | ≤ 5000 m/s <sup>2</sup> |
| 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                   | No                      |
| Current consumption                  | 30 mA (Max. 90 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                | 301 Extra robust        |
| Shaft type           | Ø6 mm with partial flat |
| Flange type          | 31-flange               |
| Resolution           | 1250                    |
| Power supply         | 5 Vdc                   |
| Output signal        | TTL                     |
| Connection type      | M12 connector 8-pin     |
| Connecting direction | Axial                   |

## Dimensions



## Output signals



## Pin configuration

| Function | Pin    |
|----------|--------|
| Not used | 1      |
| Sref     | 2      |
| S90      | 3      |
| S00      | 4      |
| Not used | 5      |
| Status   | 6      |
| 0V       | 7      |
| +EV      | 8      |
| Chassis  | Shield |

## Ordering information

Part number 748830-01