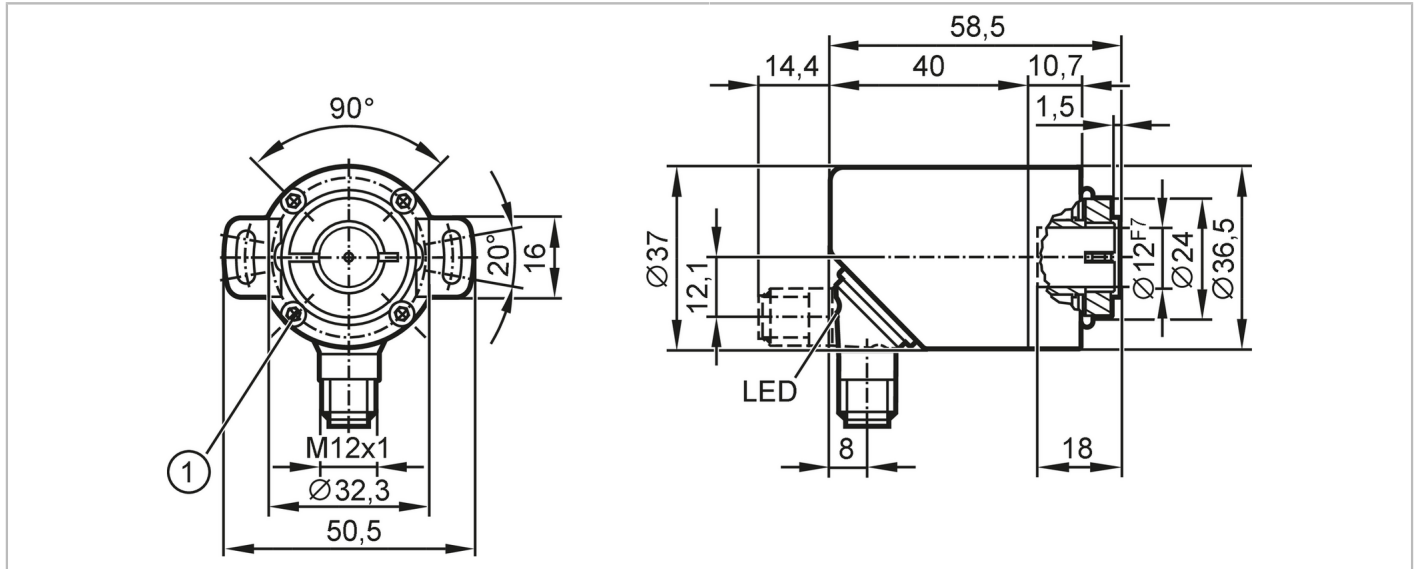


RMA300



Absolute multiturn encoder with hollow shaft

MULTITURN ENCODER STANDARD LINE



| Product characteristics | |
|------------------------------------|---|
| Resolution | 65536 steps; 32768 revolutions; 31 bit |
| Communication interface | IO-Link |
| Shaft design | hollow shaft open to one side |
| Shaft diameter [mm] | 12 |
| Application | |
| Function principle | absolute |
| Revolution type | multiturn |
| Electrical data | |
| Operating voltage [V] | 18...30 DC; (; to PELV) |
| Rated insulation voltage [V] | 30 |
| Current consumption [mA] | < 75 |
| Protection class | III |
| Reverse polarity protection | yes |
| Max. power-on delay time [ms] | 1000 |
| Max. revolution electrical [U/min] | 12000 |
| Outputs | |
| Short-circuit protection | yes |
| Measuring/setting range | |
| Resolution | 65536 steps; 32768 revolutions; 31 bit |
| Accuracy / deviations | |
| Accuracy [°] | 0.1 |
| Software / programming | |
| Parameter setting options | preset; Zero point; Direction of rotation; rotational speed |
| Interfaces | |
| Communication interface | IO-Link |
| Transmission type | COM3 (230,4 kBaud) |

RMA300



Absolute multiturn encoder with hollow shaft

MULTITURN ENCODER STANDARD LINE

| | | |
|---------------------------------|---|-----------------------------------|
| IO-Link revision | 1.1 | |
| SDCI standard | IEC 61131-9 CDV | |
| Profiles | Common - I&D | Identification and Diagnosis |
| | Function | Multiple switching signal |
| | Function | Measurement data, high resolution |
| SIO mode | no | |
| Required master port class | A | |
| Min. process cycle time [ms] | 2.3 | |
| IO-Link process data (cyclical) | Function | bit length |
| | process value | 96 |
| | device status | 4 |
| | binary switching information | 5 |
| IO-Link functions (acyclical) | application specific tag; operating hours counter; internal temperature; switching cycles counter | |
| Supported DeviceIDs | Type of operation | DeviceID |
| | default | 1064 |
| Note | For further information please see the IODD PDF file at "Downloads" | |

Operating conditions

| | | |
|--------------------------------|---|--|
| Ambient temperature [°C] | -40...85 | |
| Storage temperature [°C] | -40...85 | |
| Max. relative air humidity [%] | 98; (Condensation not permissible) | |
| Protection | IP 65; (on the housing: IP 67; on the shaft: IP 64) | |

Tests / approvals

| | | |
|-----------------------------|-------------------------------|-------------------------------|
| EMC | DIN EN 61000-4-2 ESD | 4 kV CD |
| | DIN EN 61000-4-3 HF radiated | 10 V/m |
| | DIN EN 61000-4-4 Burst | 2 kV |
| | DIN EN 61000-4-6 HF conducted | 10 V |
| Vibration resistance | DIN EN 60068-2-6 | 10 g / 10...1000 Hz half-sine |
| Shock resistance | DIN EN 60068-2-27 | 100 g 6 ms |
| Continuous shock resistance | DIN EN 60068-2-29 | 10 g / 16 ms half-sine |
| Vibration resistance | | 30 g (10...1000 Hz) |
| MTTF [years] | 283 | |
| UL approval | voltage supply | Class 2 |

Mechanical data

| | | |
|--|---|--|
| Weight [g] | 244.9 | |
| Housing | tubular | |
| Dimensions [mm] | Ø 36 / L = 54.2 | |
| Material | flange: aluminum; housing: stainless steel (1.4521 / 444) | |
| Max. starting torque [Nm] | 0.01 | |
| Reference temperature torque [°C] | 20 | |
| Shaft design | hollow shaft open to one side | |
| Shaft diameter [mm] | 12 | |
| Shaft material | stainless steel | |
| Max. shaft load axial (at the shaft end) [N] | 40 | |

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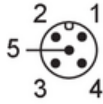
| | |
|---|-----------------|
| Max. shaft load radial (at the shaft end) [N] | 110 |
| Installation depth/shaft [mm] | 18 |
| Max. axial shaft misalignment [mm] | 0,5 |
| Fixing flange | Clamping flange |

Remarks

| | |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

Electrical connection - plug

Connector: 1 x M12; coding: A; Moulded body: stainless steel (1.4401 / 316)



| | |
|---|-------------|
| 1 | UB |
| 2 | SSC1.2 / IN |
| 3 | GND |
| 4 | IO-Link |
| 5 | n. c. |