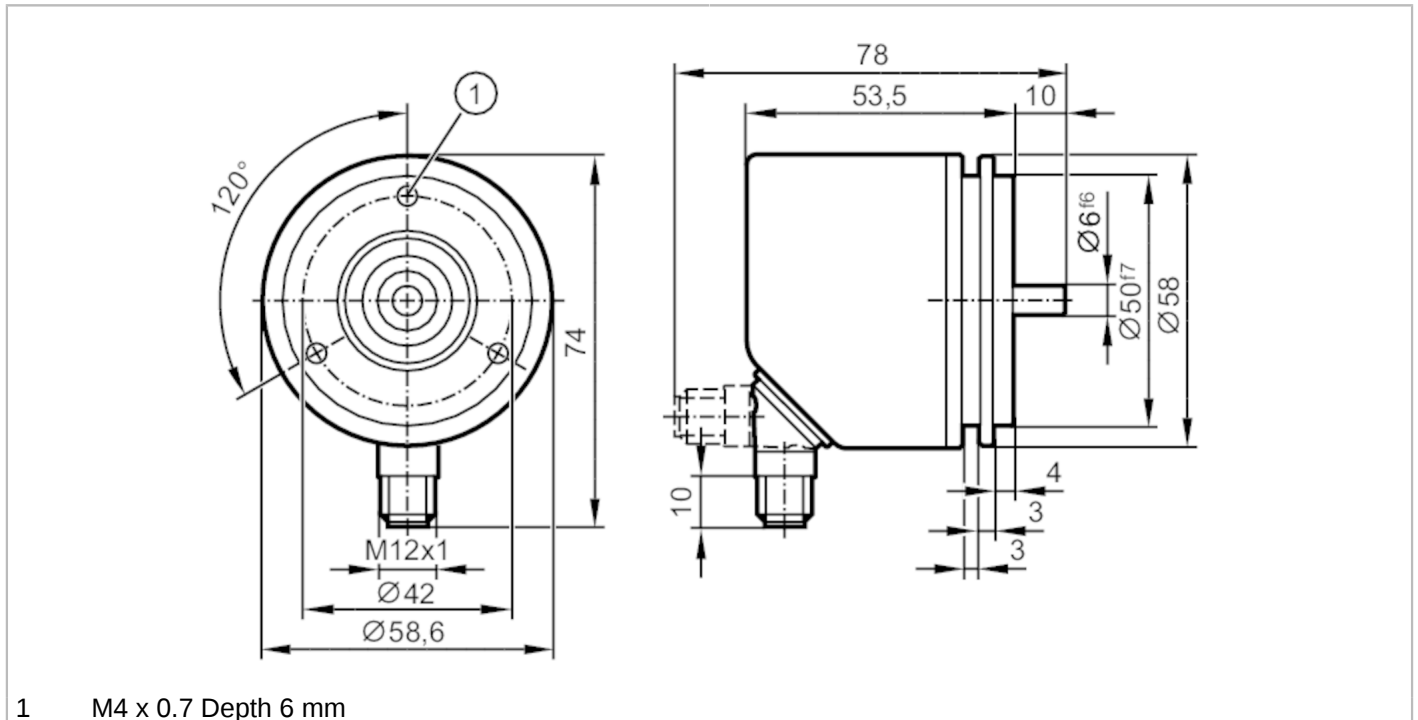


# RMU300



## Absolute multiturn encoder with solid shaft

MULTITURN ENCODER STANDARD LINE



CE EAC IO-Link

| Product characteristics            |  |
|------------------------------------|--|
| Resolution                         | 65536 steps; 32768 revolutions; 31 bit |
| Communication interface            | IO-Link                                |
| Shaft design                       | solid shaft                            |
| Shaft diameter [mm]                | 6                                      |
| 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                                    |



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| Software / programming          |  |                               |
|---------------------------------|--|-------------------------------|
| Parameter setting options       | preset; Zero point; Direction of rotation; rotational speed  |                               |
| Interfaces                      |  |                               |
| Communication interface         | IO-Link  |                               |
| Transmission type               | COM3 (230,4 kBaud)   |                               |
| IO-Link revision                | 1.1  |                               |
| SDCI standard                   | IEC 61131-9 CDV  |                               |
| Profiles                        | Identification and Diagnosis; Switching Signal Channel; Measurement Data Channel (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 65)  |                               |
| 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  |                               |

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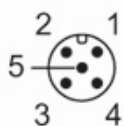
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| Mechanical data                           |      |   |
|---|------|---|
| Weight                                    | [g]  | 362.9   |
| Dimensions                                | [mm] | Ø 58 / L = 79   |
| Material                                  |      | flange: aluminum; housing: stainless steel (1.4521 / 444) |
| Max. starting torque                      | [Nm] | 1   |
| Reference temperature torque              | [°C] | 20  |
| Shaft design                              |      | solid shaft   |
| Shaft diameter                            | [mm] | 6   |
| Shaft material                            |      | stainless steel   |
| Max. shaft load axial (at the shaft end)  | [N]  | 40  |
| Max. shaft load radial (at the shaft end) | [N]  | 110   |
| Fixing flange                             |      | servo flange  |

### Electrical connection - plug

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



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