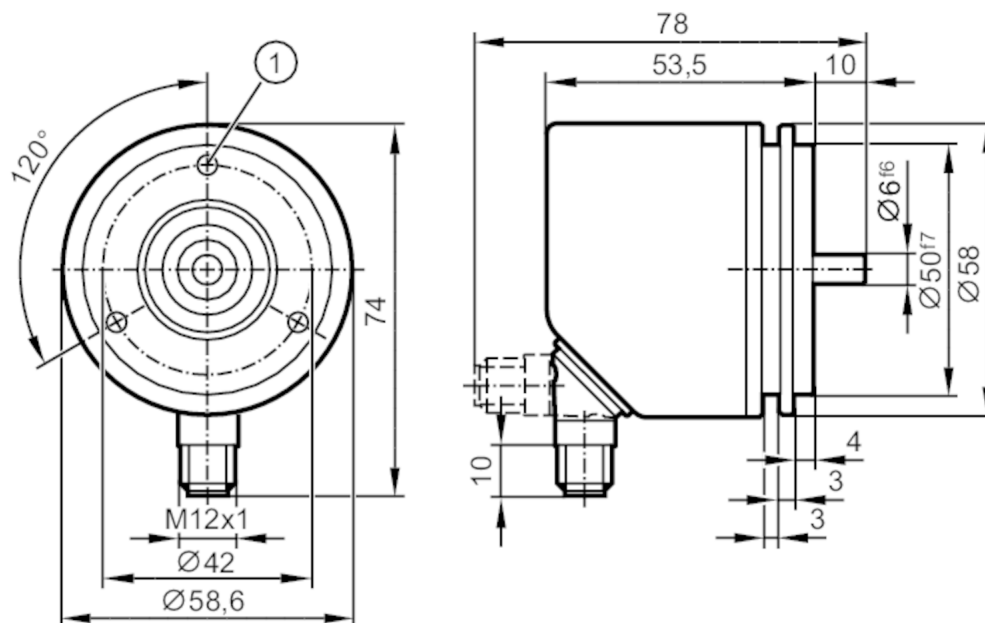


# RMU400



## Absolute multiturn encoder as 24 bit version

RMU06SVU81212bSSI



1 M4 x 0.7 Depth 6 mm

### Product characteristics

|                         |                              |
|-------------------------|------------------------------|
| Resolution              | 4096 steps; 4096 revolutions |
| Communication interface | SSI data interface           |
| Shaft design            | solid shaft                  |
| Shaft diameter [mm]     | 6                            |

### Application

|                    |          |
|--------------------|----------|
| Function principle | absolute |
| Detection system   | magnetic |

### Electrical data

|                                    |             |
|------------------------------------|-------------|
| Operating voltage [V]              | 4.5...30 DC |
| Protection class                   | III         |
| Reverse polarity protection        | yes         |
| Max. power-on delay time [ms]      | 500         |
| Settling time [ms]                 | 32          |
| Max. revolution electrical [U/min] | 12000       |

### Outputs

|                          |                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short-circuit protection | yes                                                                                                                                                             |
| Code                     | Gray code; (increasing code values when turned clockwise (seen on the shaft))                                                                                   |
| Code signal              | Clock input; TTL-compatible signals; clock and clock (inv.) from drivers to RS 422; data output; synchronous serial; TTL-compatible signal data and data (inv.) |

### Measuring/setting range

|            |                              |
|------------|------------------------------|
| Resolution | 4096 steps; 4096 revolutions |
|------------|------------------------------|

### Accuracy / deviations

|          |          |
|----------|----------|
| Accuracy | ±0.1 INL |
|----------|----------|



## Absolute multiturn encoder as 24 bit version

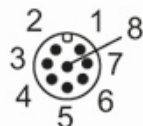
RMU06SVU81212bSSI

| Software / programming                        |      |                                                           |
|-----------------------------------------------|------|-----------------------------------------------------------|
| Parameter setting options                     |      | Zero point; Direction of rotation                         |
| Interfaces                                    |      |                                                           |
| Communication interface                       |      | SSI data interface                                        |
| Operating conditions                          |      |                                                           |
| Ambient temperature                           | [°C] | -40...85                                                  |
| Storage temperature                           | [°C] | -40...85                                                  |
| Max. relative air humidity                    | [%]  | 95; (Condensation not permissible)                        |
| Protection                                    |      | IP 65; (on the housing: IP67)                             |
| Tests / approvals                             |      |                                                           |
| Shock resistance                              |      | EN 60068-2-27100 g half-sine / 6 ms                       |
| Vibration resistance                          |      | EN 60068-2-2910 g half-sine / 16 ms                       |
| MTTF [years]                                  |      | 350                                                       |
| Mechanical data                               |      |                                                           |
| Weight [g]                                    |      | 348.1                                                     |
| Dimensions [mm]                               |      | Ø 58 / L = 63.5                                           |
| Material                                      |      | flange: aluminum; housing: stainless steel (1.4521 / 444) |
| Max. revolution, mechanical [U/min]           |      | 12000                                                     |
| 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] |      | 60                                                        |
| Fixing flange                                 |      | Synchro-flange                                            |



## RMU06SVU81212bSSI

Connector: 1 x M12, radial, can also be used axially; coding: A; Moulded body: stainless steel (1.4401 / 316); Maximum cable length: 100 m



|   |                                   |
|---|-----------------------------------|
| 1 | L+                                |
| 2 | clock                             |
| 3 | L-                                |
| 4 | clock (inv.)                      |
| 5 | data                              |
| 6 | data (inv.)                       |
| 7 | reset to zero                     |
| 8 | reversal of direction of rotation |
|   | screen plug                       |

### Pulse diagram

