

- Absolute multi-turn magnetic encoder
- Very compact and robust housing
- Outer diameter 36mm
- Resolution up to 8192 counts/rev and up to 65536 rev, SSI interface
- Zero setting and counting direction function
- Axial cable output
- MM36: solid shaft version
- MMC36: blind hollow shaft version, Ø 6mm



MMC36 • MM36

### ENVIRONMENTAL SPECIFICATIONS

|                              |   |
|------------------------------|---|
| Shock:                       | 250 g, 6 ms acc. to CEI EN 60068-2-27                         |
| Vibrations:                  | 10 g, 5-2000 Hz acc. to CEI EN 60068-2-6                      |
| Protection:                  | IP65  |
| Operating temperature range: | -25°C +85°C (-13°F +185°F)                                    |
| Storage temperature range:   | -25°C +85°C (-13°F +185°F)<br>(98% R.H. without condensation) |
| Option:                      | • protection IP67   |

### MECHANICAL SPECIFICATIONS

|                                |  |
|--------------------------------|--|
| Dimensions:                    | see drawing  |
| Shaft diameter:                | Ø 6 mm   |
| Shaft loading (axial, radial): | 20 N max.  |
| Shaft rotational speed:        | 12000 rpm max.                                     |
| Starting torque (at 20°C):     | 0,1 Ncm  |
| Electrical connections:        | M12 8 pin inline plug or cable output 1 m (3.3 ft) |
| Weight:                        | ~ 100 g (3,5 oz)                                   |
| Option:                        | • additional cable                                 |

### ELECTRICAL SPECIFICATIONS

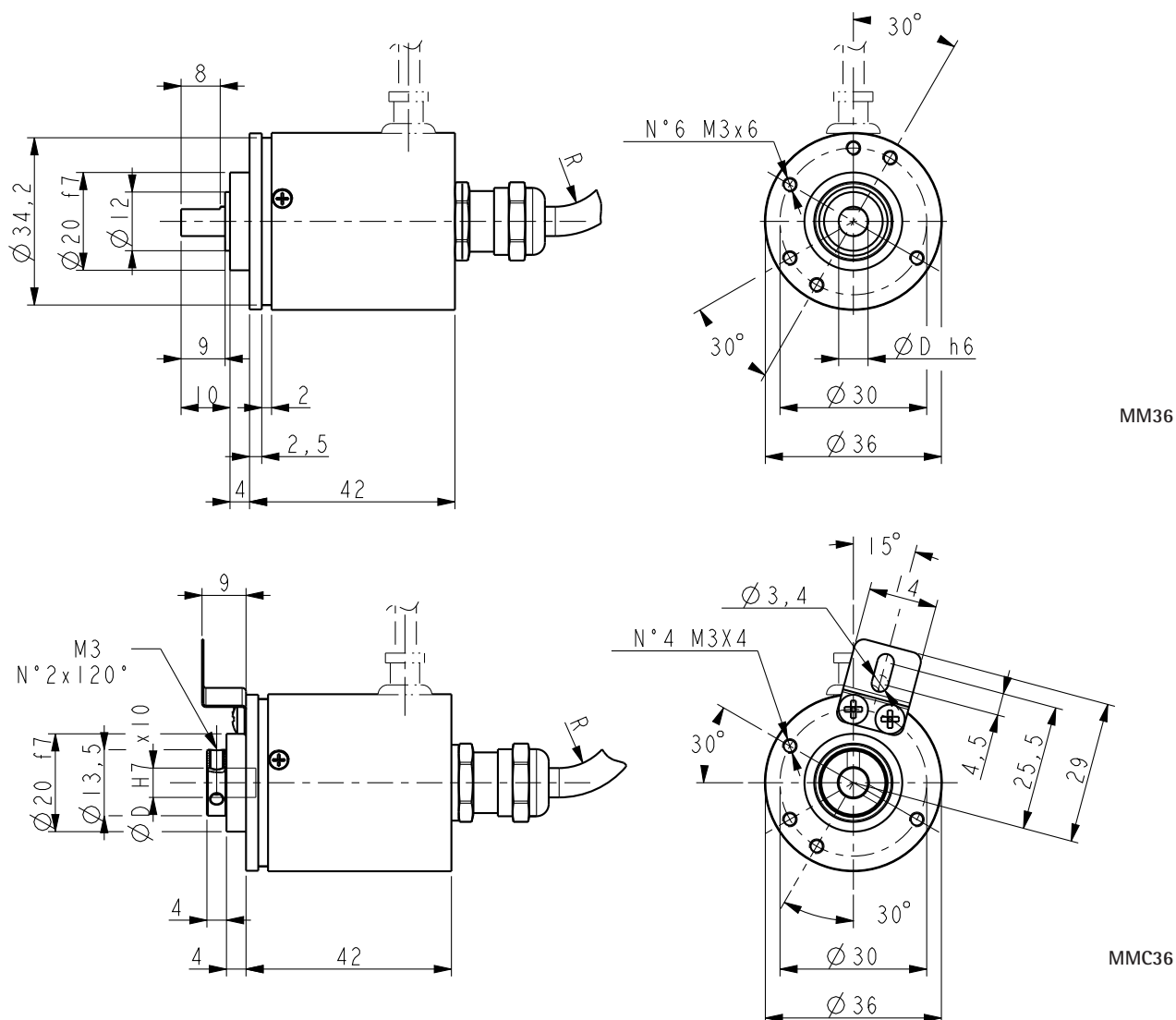
|                     |   |
|---------------------|---|
| Resolution:         | 1024 counts/rev. x 32768 rev.<br>2048 cpr x 16384 rev.<br>4096 cpr x 8192 rev.<br>8192 cpr x 65536 rev. |
| Accuracy:           | ± 1°  |
| Output circuit:     | SSI (clock 3 MHz max., Tp=12 µsec.)   |
| Output codes:       | Gray, Binary  |
| Counting frequency: | 10 kHz max.   |
| Start-up time:      | ~ 200 msec.   |
| Power supply:       | +10Vdc +30Vdc   |
| Power consumption:  | 25 mA max.  |
| Protection:         | protected against inversion of polarity   |
| EMC:                | electro-magnetic immunity, according to: EN 61000-4-2<br>EN 61000-4-4                                   |
| Battery life:       | 10 years min.   |
| Functions:          | • Counting direction (input)<br>• Electronic zero setting (input)                                       |

### MATERIALS

|           |  |
|-----------|--|
| Flange:   | anticorrosive, UNI EN AW-6082              |
| Housing:  | anticorrosive, UNI EN AW-6082              |
| Bearings: | ABEC 5                                     |
| Shaft:    | stainless steel, non magnetic, UNI EN 4305 |

### ACCESSORIES

|          |                    |
|----------|--------------------|
| PAN/PGF: | Flexible couplings |
|----------|--------------------|



Order code

|       |   |       |   |     |   |     |   |     |     |   |     |      |       |
|-------|---|-------|---|-----|---|-----|---|-----|-----|---|-----|------|-------|
| MM36  | - | XX-XX | - | XXX | - | XX  | - | X   | X   | - | X   | XXXX | /Sxxx |
| MMC36 |   | (a)   |   | (b) |   | (c) |   | (d) | (e) |   | (f) | (g)  | (h)   |

|   |   |   |
|---|---|---|
| <p><b>(a) RESOLUTION (BIT SINGLETURN-BIT MULTITURN)</b><br/>                 10-15 = 10 x 15 bit (1024 cpr x 32768 rev.)<br/>                 11-14 = 11 x 14 bit (2048 cpr x 16384 rev.)<br/>                 12-13 = 12 x 13 bit (4096 cpr x 8192 rev.)<br/>                 13-16 = 13 x 16 bit (8192 cpr x 65536 rev.)</p> <p><b>(b) INTERFACE / POWER SUPPLY</b><br/>                 BB2 = Binary, SSI (LSB aligned) +10Vdc +30Vdc (only 10-15, 11-14)<br/>                 GB2 = Gray, SSI (LSB aligned) +10Vdc +30Vdc (only 10-15, 11-14)<br/>                 BG2 = Binary, SSI (MSB aligned) +10Vdc +30Vdc (all resolutions)<br/>                 GG2 = Gray, SSI (MSB aligned) +10Vdc +30Vdc (all resolutions)</p> | <p><b>(c) SHAFT DIAMETER</b><br/>                 Ø6 = 6 mm</p> <p><b>(d) PROTECTION</b><br/>                 P = IP65 (standard)<br/>                 J = IP67 (with sealed circuit)</p> <p><b>(e) OPERATING TEMPERATURE</b><br/>                 T = -25°C +85°C (-13°F +185°F)</p> | <p><b>(f) CONNECTION POSITION</b><br/>                 A = axial<br/>                 R = radial</p> <p><b>(g) CONNECTION TYPE &amp; CABLE LENGTH</b><br/>                 L010 = cable output 1 m (standard)<br/>                 Lxx0 = cable output x m (max. length 10 m)<br/>                 L100 = cable output 10 m<br/>                 M005 = 0,5 m cable + M12 8 pin inline plug<br/>                 M020 = 2 m cable + M12 8 pin inline plug</p> |
| <b>(h) CUSTOM VERSION</b>   |   |   |

| Document release | Date       | Description                      |
|------------------|------------|----------------------------------|
| 1.1              | 30.08.2024 | Electrical specifications update |
| 1.0              | July 2023  | New order code                   |