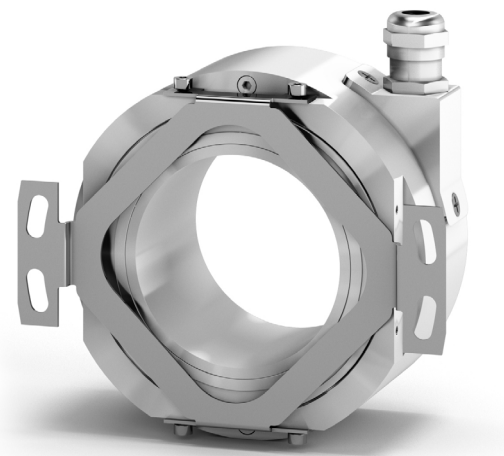




- High resolution encoder
- Precise optical sensing
- Motor feedback & positioning applications
- Hollow shaft Ø50 mm
- Shaft clamping with eccentric screws



C85

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) (98% R.H. without condensation) |
| Option: | • Operating temperature range: -40°C +100°C (-40°F +212°F) |

MECHANICAL SPECIFICATIONS

| | |
|--------------------------|---|
| Dimensions: | see drawing |
| Shaft hollow: | Ø 50 mm |
| Shaft rotational speed: | 2000 rpm (continuous operation) |
| Starting torque at 20°C: | 4 ÷ 12 Ncm (typical) |
| Bearings life: | 400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.) |
| Electrical connections: | cable output 1 m (3.3 ft) or M23 12 pin connector |
| Weight: | ~ 880 g (31 oz) |
| Option: | • additional cable |

ELECTRICAL SPECIFICATIONS

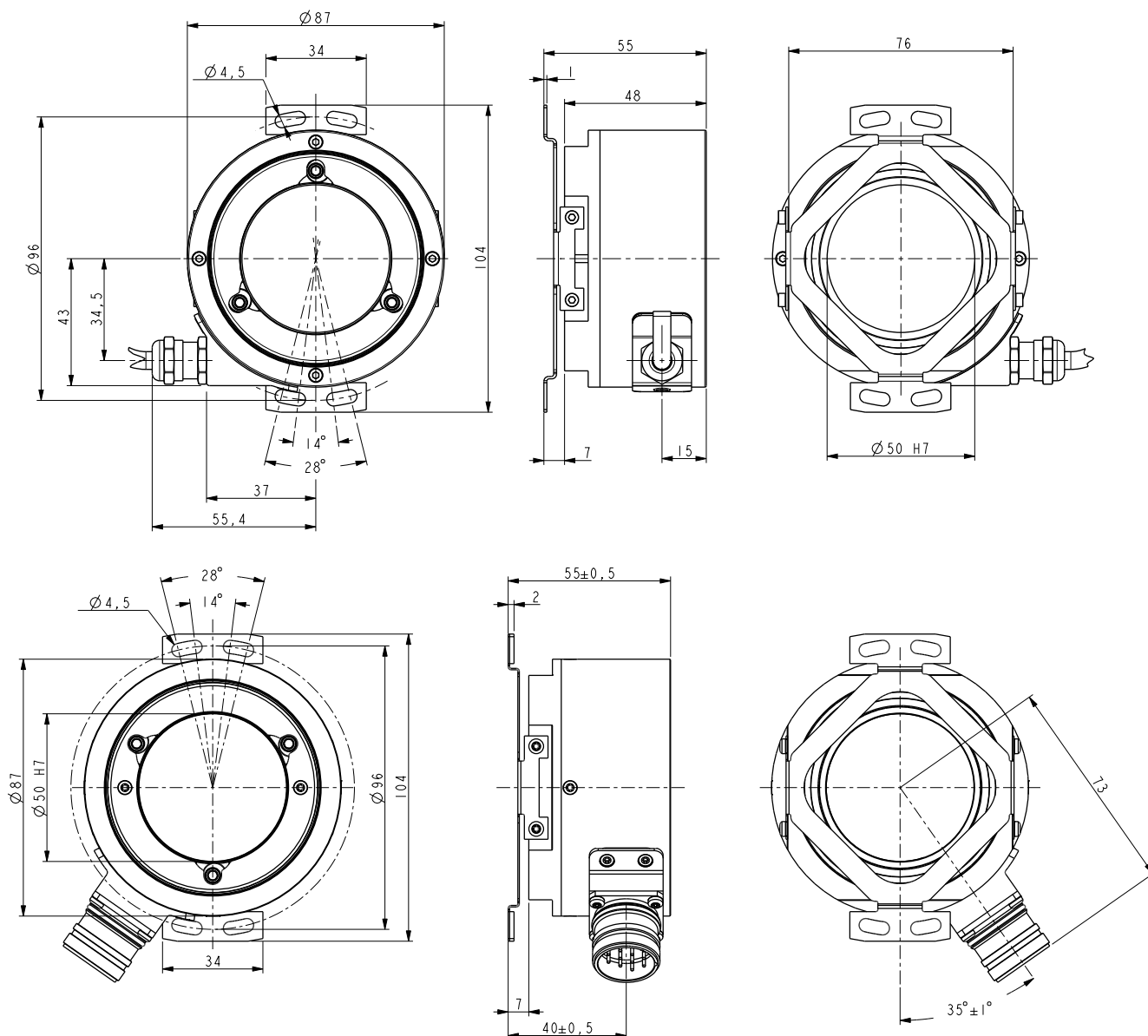
| | |
|--|---|
| Resolution (PPR): | 4096-5000-10000 |
| Resolution (PPR): (only output circuit V) | 5000 |
| Accuracy: | typ. ± 0,005° |
| Counting frequency: | 300 kHz max. |
| Output circuits: | Line Driver, Universal circuit, Sine/cosine |
| Power supply: | +5V ±5%, +10V +30V, +5V +30V |
| Consumption: | 70 mA (typical) |
| Output current (each channel): | 40 mA max. |
| Protection: | against inversion of polarity and short-circuit |
| EMC: | electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4 |

MATERIALS

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

ACCESSORIES

| | |
|-------------------|------------------------------|
| EPFL121: | M23 12 pin mating connector |
| EC-C12F-LK-I8-5: | cordset 5 m. with M23 conn. |
| EC-C12F-LK-I8-10: | cordset 10 m. with M23 conn. |



C85

Order code

| | | | | | | | | | | |
|-----|---|---|---|-------|-----|---|----|---|-----|-------|
| C85 | - | X | - | XXXXX | XXX | X | XX | X | XXX | /Sxxx |
| | | Ⓐ | | Ⓑ | Ⓒ | Ⓓ | Ⓔ | Ⓕ | Ⓖ | Ⓗ |

| | | |
|---|--|---|
| <p>Ⓐ OUTPUT CIRCUITS L = Line Driver (RS422) H = PP/LD universal circuit V = 1 Vpp (sine/cosine)</p> <p>Ⓑ RESOLUTION (PPR) See electrical specifications</p> <p>Ⓒ OUTPUT SIGNALS / CONNECTIONS ZCU = ABO /ABO, cable output ZCX = ABO /ABO, M23 connector output</p> | <p>Ⓓ SUPPLY VOLTAGE 1 = +5V±5% (L, V output circuit) 2 = +10V÷ +30V (L output 24/5) 4 = +5V÷ +30V (H output circuit)</p> <p>Ⓔ SHAFT DIAMETER 50 = 50 mm</p> <p>Ⓕ OPERATING TEMPERATURE - = -25°C +85°C (-13°F +185°F) K = -40°C +100°C (-40°F +212°F)</p> | <p>Ⓖ CABLE LENGTH (only with ZCU) L1 = cable output 1 m L2 = cable output 2 m L7 = cable output 7 m Lx = cable output x m (max. 10 m)</p> <p>Ⓗ CUSTOM VERSION</p> |
|---|--|---|

| Document release | Date | Description |
|------------------|------------|-------------|
| 1 | 05.02.2021 | First issue |