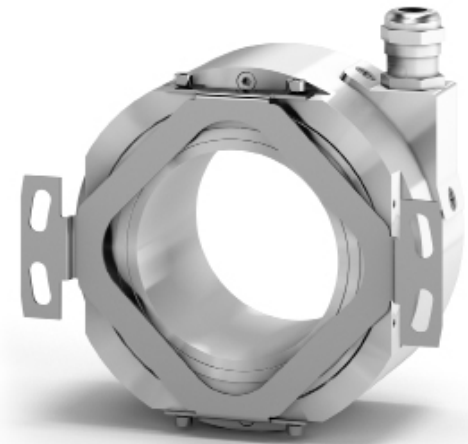


- High accuracy optical sensing
- 25 bit resolution
- Through hollow shaft diameter Ø50mm
- For precision motor feedback & radar systems
- Robust housing in stainless steel



ASC85

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

MECHANICAL SPECIFICATIONS

| | |
|--------------------------------|--|
| Dimensions: | see drawing |
| Hollow shaft diameter: | Ø 50 mm |
| Shaft loading (axial, radial): | 40 N max. |
| Shaft rotational speed: | 2000 rpm continuous operation |
| Starting torque (at 20°C): | 0,25 Nm (typ.) |
| Bearings life: | 400 x10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.) |
| Electrical connections: | cable output 2 m (6.56 ft) or M12 12 pin, M23 12 pin inline connector |
| Weight: | ~ 880 g (31 oz) |
| Option: | • additional cable |

ELECTRICAL SPECIFICATIONS

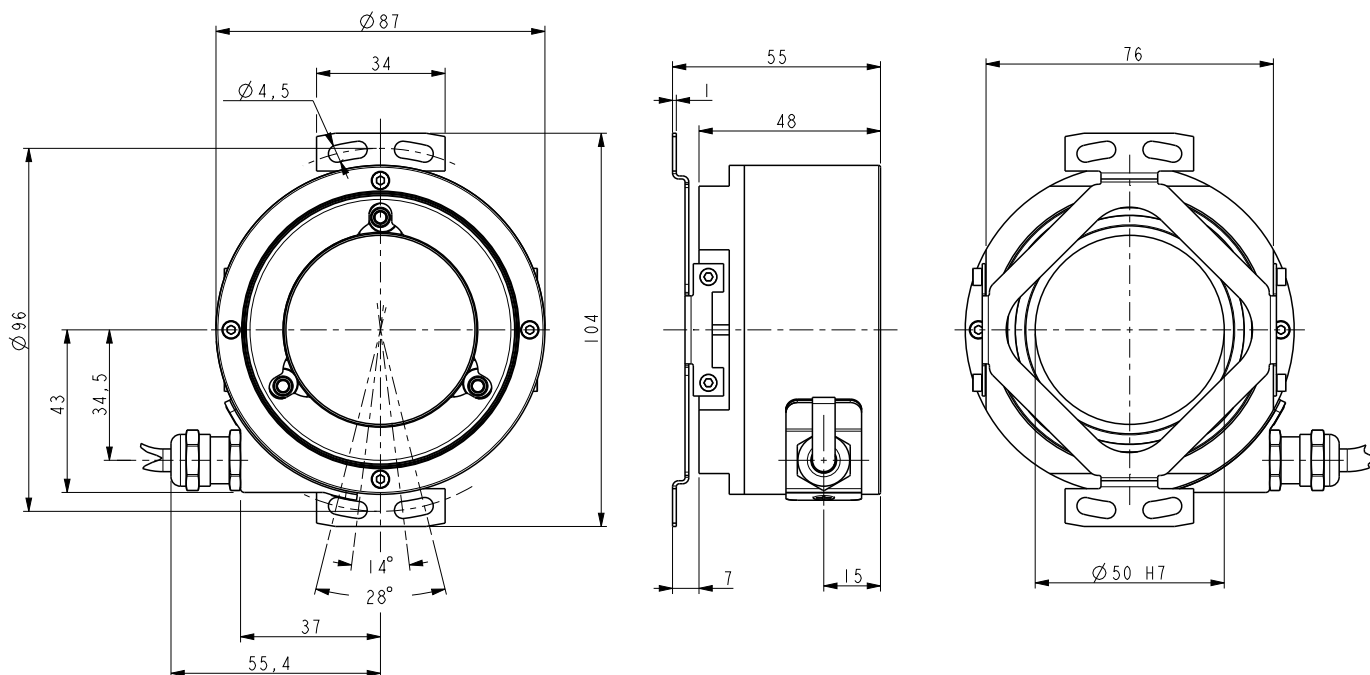
| | |
|---------------------------|---|
| Resolution: | 25 bit max. |
| Accuracy: | ± 0,005° |
| Output circuits: | absolute: SSI, BiSS C-mode incremental: 4096 PPR, 1Vpp, AB /AB |
| Output code: | Gray |
| Position refresh: | 8µs max. |
| Power supply: | +5Vdc ±5%, +10Vdc +30Vdc |
| Power consumption: | 0,9 W |
| Protection: | against inversion of polarity, short-circuit |
| EMC: | electro-magnetic immunity, according to: EN-61000-4-2 EN-61000-4-4 |
| Optoelectronic life: | 100.000 h min. |
| Functions (only for SSI): | • Counting direction (input) • Zero setting/Preset (input) |

MATERIALS

| | |
|-----------|---------------------------|
| Flange: | stainless steel, AISI 303 |
| Housing: | stainless steel, AISI 303 |
| Bearings: | ABEC 5 |
| Shaft: | stainless steel, AISI 303 |

ACCESSORIES

| | |
|-----------------------|------------------------------------|
| EPFL121H: | M23 12 pin connector |
| EM12F12: | M12 12 pin mating connector |
| EC-CR12F-S28-T12-xxx: | cordset xx m, M23 connector |
| EC-M12F12-LK-T12-xxx: | cordset xx m, M12 12 pin connector |



ASC85

Order code

| | | | | | | | | | | | | | |
|-------|---|-------|---|-----|---|-----|---|-----|-----|---|-----|------|-------|
| ASC85 | - | XX-XX | - | XXX | - | XX | - | X | X | - | X | XXXX | /Sxxx |
| | | (a) | | (b) | | (c) | | (d) | (e) | | (f) | (g) | (h) |

| | | |
|--|--|---|
| <p>(a) RESOLUTION (BIT SINGLETURN-BIT MULTITURN) 25-00 = 25 bit (33554432 cpr x 1 turn)</p> <p>(b) INTERFACE / POWER SUPPLY SC1 = BiSS C-mode + 4096 PPR sin/cos +5Vdc ±5% SC2 = BiSS C-mode + 4096 PPR sin/cos +10V +30V GG1 = SSI, MSB aligned, Gray + 4096 PPR sin/cos +5Vdc ±5% GG2 = SSI, MSB aligned, Gray + 4096 PPR sin/cos +10V +30V BG1 = SSI, MSB aligned, Binary + 4096 PPR sin/cos +5Vdc ±5% BG2 = SSI, MSB aligned, Binary + 4096 PPR sin/cos +10V +30V</p> | <p>(c) SHAFT DIAMETER 50 = 50 mm</p> <p>(d) PROTECTION P = IP65</p> <p>(e) OPER. TEMP. RANGE K = -40°C +100°C (-40°F +212°F)</p> <p>(f) CONNECTION POSITION R = radial</p> | <p>(g) CONNECTION TYPE & CABLE LENGTH L020 = cable output 2 m Lxx0 = cable out. x m (max. length 10m) F005 = 0,5 m cable + M12 12 pin inline plug F020 = 2 m cable + M12 12 pin inline plug N005 = 0,5 m cable + M23 12 pin inline plug N020 = 2 m cable + M23 12 pin inline plug</p> <p>(h) CUSTOM VERSION</p> |
|--|--|---|

| Document release | Date | Description |
|------------------|-----------|----------------|
| 1.0 | July 2023 | New order code |