

Series

Ax58 • Ax58S • AxC58 EasyCAN

- Compact CAN single and multi turn encoders
- High resolution, 18 bits or 30 bits
- CANopen and CANlift protocols
- Point-to-point connection
- Velocity output & roundloop function
- Resistant against magnetic fields



AS58 EasyCAN

ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------------|---|
| Shock: | 100 g, 6 ms |
| Vibrations: | 10 g, 5-2000Hz |
| Protection: | IP67, IP65 shaft side |
| Operating temperature range: | -25°C +85°C (-13°F +185°F) |
| Storage temperature range: | -40°C +100°C (-40°F +212°F) (98% R.H.without condensation) |

MECHANICAL SPECIFICATIONS

| | |
|--|--|
| Dimensions: | see drawing |
| Shaft diameter: | ∅ 6, 8, 9.52, 10, 12 mm |
| Hollow shaft diameter: | ∅ 14, 15 |
| Reducing sleeves BR1-xx from ∅ 15 mm to: | ∅ 6, 8, 9.52, 10, 11, 12 mm |
| Shaft loading (axial, radial): | 40 N max. |
| Shaft rotational speed: | 6000 rpm max. |
| Starting torque (at 20°C): | < 1 Ncm (typical) |
| Bearings life: | 400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with shaft loading of 20 N max.) |
| Electrical connections: | M12 plug or cable output 2 m (6,56 ft) |
| Weight: | ~ 250 g (8,8 oz) |
| Option: | • additional cable |

ELECTRICAL SPECIFICATIONS

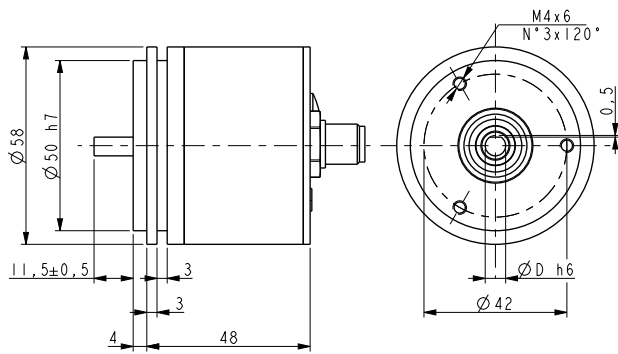
| | |
|--------------------------|--|
| Resolution: | single turn = 8192, 65536, 262144 cpr multi turn = 65536 cpr x 16384 turns |
| Accuracy: | ± 0,007° |
| Counting frequency: | 220 kHz max. |
| Power supply: | +10V +30V |
| Power consumption: | AS = 1.2 W, AM = 3 W |
| Interface: | CANopen DS301, DS406, Class 2 (RS485) CANlift DS301, DSP417, Class 2 (RS485) |
| Programmable parameters: | <ul style="list-style-type: none"> • Baudrate • Device address (Node ID) • Scaling function • Counting direction • Preset value • Two software limit switches • Transmission mode: Cyclic, Sync • Velocity output • Round loop function |
| Bus termination: | programmable by Dip-switches |
| Protection: | against inversion of polarity and short-circuit |
| EMC: | electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4 |
| Optoelectronic life: | 100.000 h min. |

MATERIALS

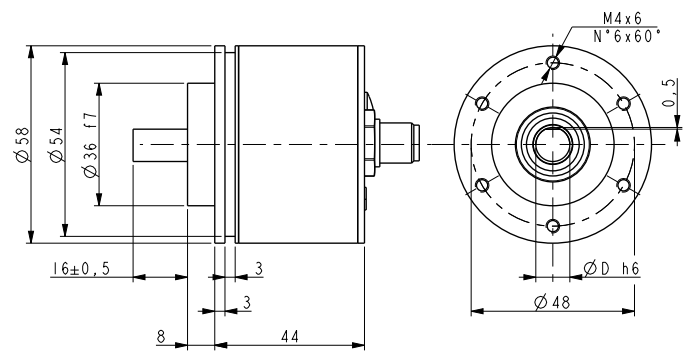
| | |
|-----------|--|
| Housing: | anticorodal, UNI EN AW-6082 |
| Flange: | anticorodal, UNI EN AW-6082 |
| Bearings: | ABEC 5 |
| Shaft: | stainless steel, non-magnetic, UNI EN 4305 |

ACCESSORIES

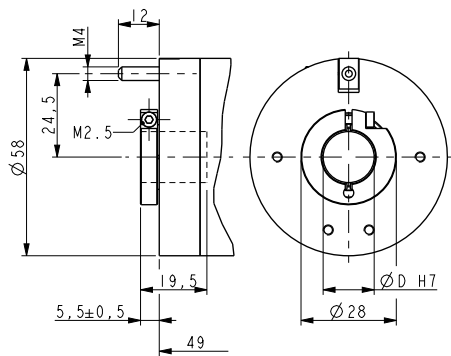
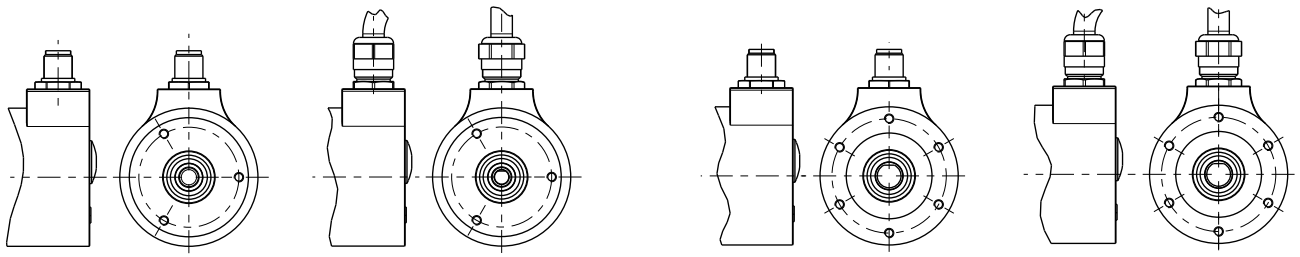
| | |
|----------|----------------------------|
| EM12FC: | M12 5 pin mating connector |
| PAN/PGF: | flexible couplings |
| BR1: | reducing sleeves |
| LKM-386: | fixing clamps |



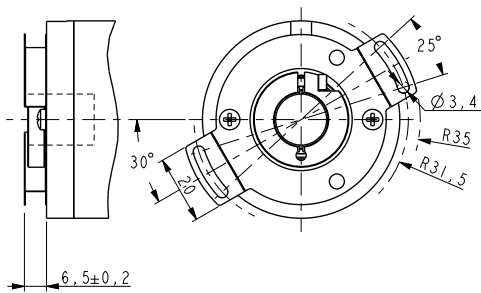
AS58



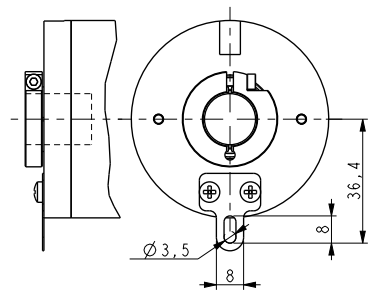
AS58S



ASC58



ASC59



ASC60

Order code - Single turn

| | | | | | | | | | |
|-------|----|---|----|---|----|---|---|----|-------|
| AS58 | XX | / | XX | - | XX | - | X | XX | /Sxxx |
| AS58S | Ⓐ | | Ⓑ | | Ⓒ | | Ⓓ | Ⓔ | Ⓕ |
| ASC58 | | | | | | | | | |
| ASC59 | | | | | | | | | |
| ASC60 | | | | | | | | | |

Ⓐ RESOLUTION

13 = 8192 cpr
16 = 65536 cpr
18 = 262144 cpr

Ⓑ INTERFACE

CB = CANopen (DS301, DS406)
I6 = CANlift (DS301, DSP417)

Ⓒ SHAFT DIAMETER

6 = 6 mm
8 = 8 mm
P9 = 9.52 mm, 3/8"
10 = 10 mm
12 = 12 mm
14 = 14 mm (only ASCxx)
15 = 15 mm (only ASCxx)

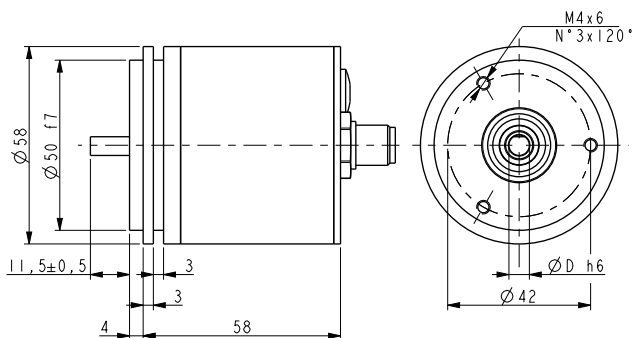
Ⓓ CONNECTION POSITION

- = axial
R = radial

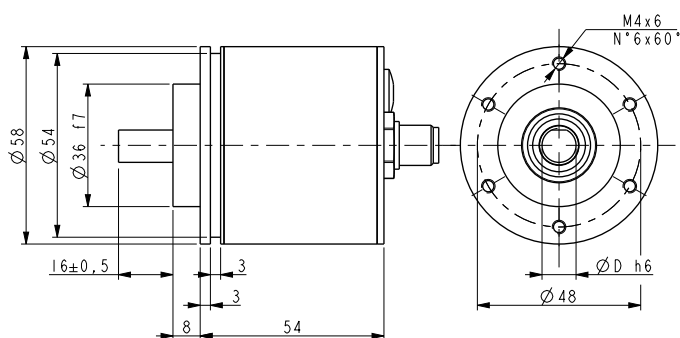
Ⓔ CONNECTIONS

L2 = cable output 2 m (standard)
L5 = cable output 5 m
M = M12 5 pin plug

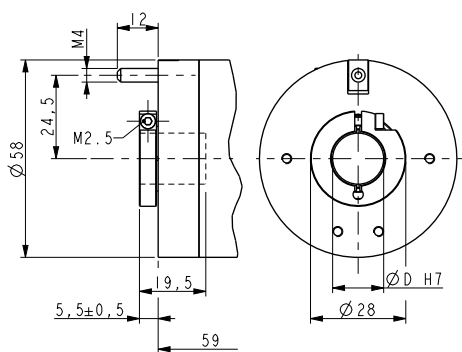
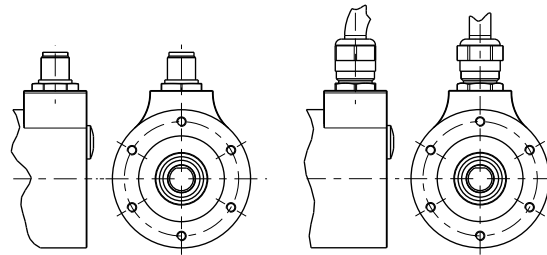
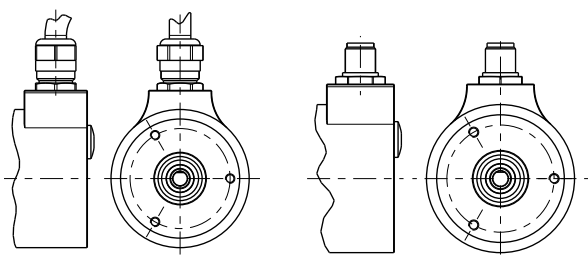
Ⓕ CUSTOM VERSION



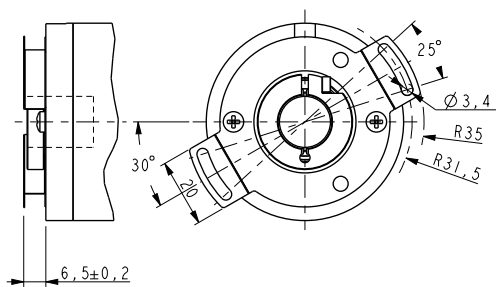
AM58



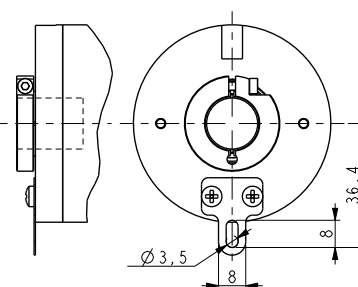
AM58S



AMC58



AMC59



AMC60

Order code - Multi turn

| | | | | | | | | |
|-------|----------|----|---|----|---|---|----|-------|
| AM58 | XX/XXXXX | XX | - | XX | - | X | XX | /Sxxx |
| AM58S | Ⓐ | Ⓑ | | Ⓒ | | Ⓓ | Ⓔ | Ⓕ |
| AMC58 | | | | | | | | |
| AMC59 | | | | | | | | |
| AMC60 | | | | | | | | |

| | | | | | |
|---|---|---|---|---|-------------------------|
| <p>Ⓐ RESOLUTION</p> <p>12/4096 = 4096 cpr x 4096 turns</p> <p>13/16384 = 8192 cpr x 16384 turns</p> <p>16/16384 = 65536 cpr x 16384 turns</p> | <p>Ⓑ INTERFACE</p> <p>CB = CANopen (DS301, DS406)</p> <p>I6 = CANlift (DS301, DSP417)</p> | <p>Ⓒ SHAFT DIAMETER</p> <p>6 = 6 mm</p> <p>8 = 8 mm</p> <p>P9 = 9.52 mm, 3/8"</p> <p>10 = 10 mm</p> <p>12 = 12 mm</p> <p>14 = 14 mm (only AMCxx)</p> <p>15 = 15 mm (only AMCxx)</p> | <p>Ⓓ CONNECTION POSITION</p> <p>- = axial</p> <p>R = radial</p> | <p>Ⓔ CONNECTIONS</p> <p>L2 = cable output 2 m (standard)</p> <p>L5 = cable output 5 m</p> <p>M = M12 5 pin plug</p> | <p>Ⓕ CUSTOM VERSION</p> |
|---|---|---|---|---|-------------------------|