

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

CANopen



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 <sup>6</sup> rev. min. (10 <sup>9</sup> 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

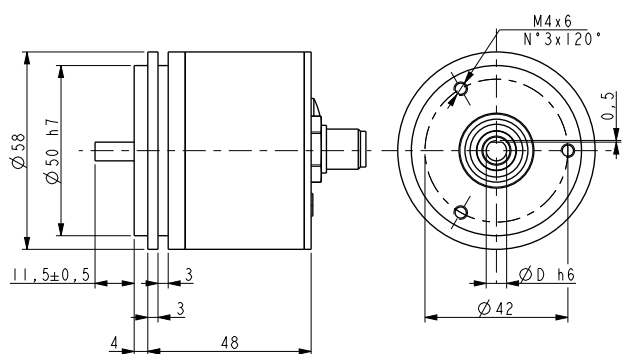
Resolution:	single turn = 8192, 65536, 262144 cpr multi turn = 65536 cpr x 16384 turns
Accuracy:	± 0,007°
Counting frequency:	220 kHz max.
Power supply:	+10V +30V
Power consumption:	AS = 1.2 W, AM = 3 W
Interface:	CANopen DS301, DS406, Class 2 (RS485) CANlift DS301, DSP417, Class 2 (RS485)
Programmable parameters:	<ul style="list-style-type: none"> <li>• Baudrate</li> <li>• Device address (Node ID)</li> <li>• Scaling function</li> <li>• Counting direction</li> <li>• Preset value</li> <li>• Two software limit switches</li> <li>• Transmission mode: Cyclic, Sync</li> <li>• Velocity output</li> <li>• Round loop function</li> </ul>
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

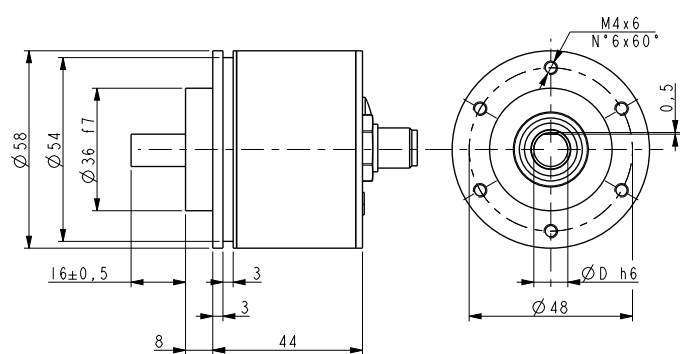
Housing:	anticorrosive, UNI EN AW-6082
Flange:	anticorrosive, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305

### ACCESSORIES

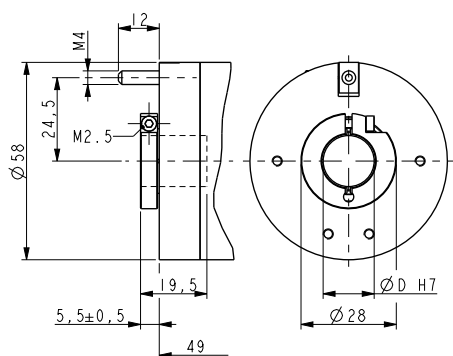
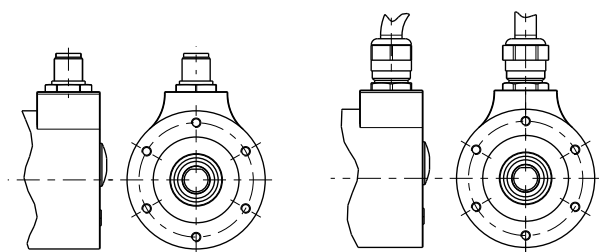
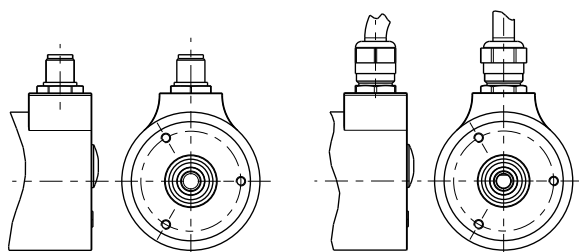
EM12FC:	M12 5 pin mating connector
PAN/PFG:	flexible couplings
BR1:	reducing sleeves
LKM-386:	fixing clamps



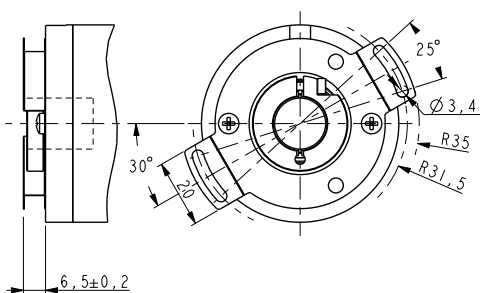
AS58



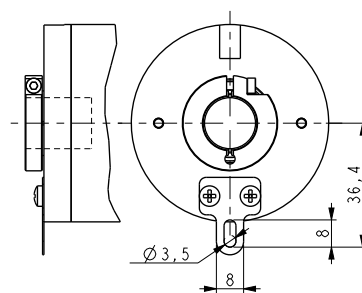
AS58S



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)

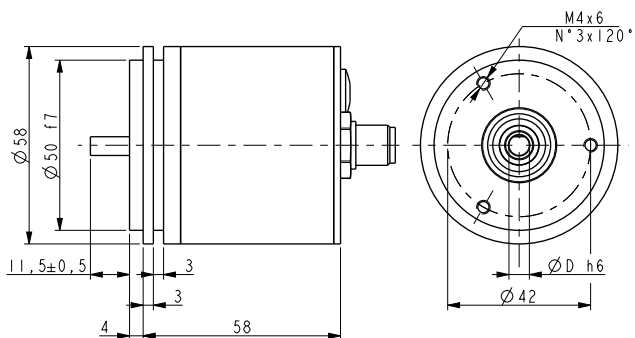
Ⓓ CONNECTION POSITION

- = axial  
R = radial

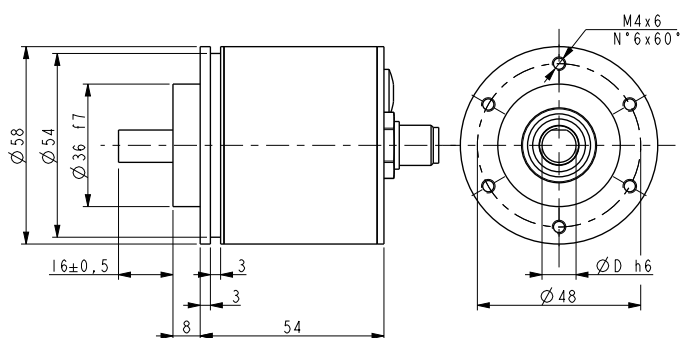
Ⓔ CONNECTIONS

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

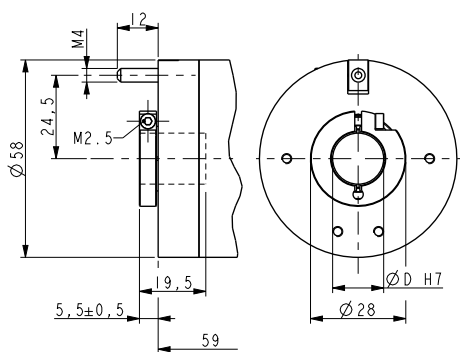
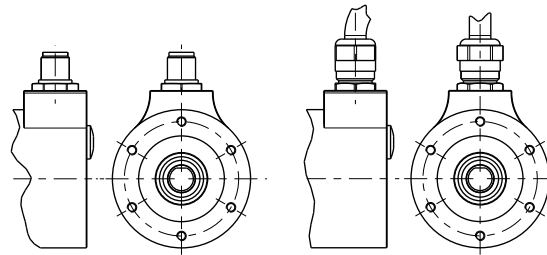
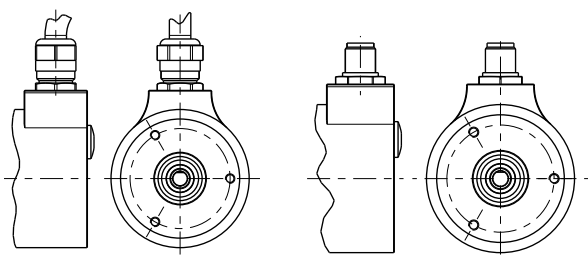
Ⓕ CUSTOM VERSION



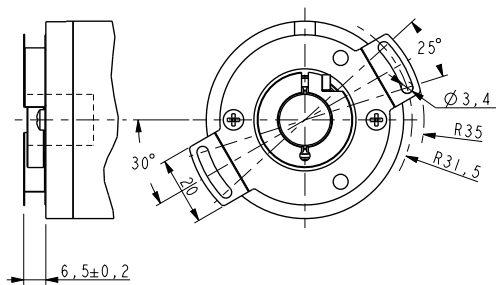
AM58



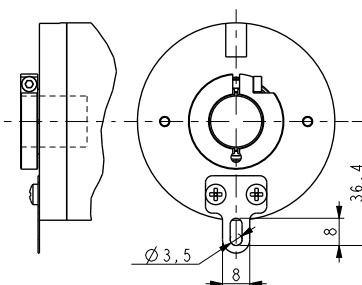
AM58S



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>Ⓓ 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>Ⓔ CONNECTION POSITION</p> <p>- = axial</p> <p>R = radial</p>	<p>Ⓕ CUSTOM VERSION</p>
---	---	---	---	---	-------------------------