

# ROTACOD

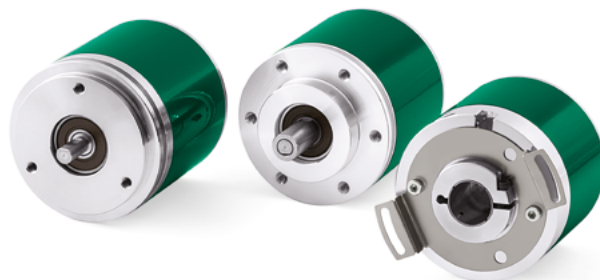
Absolute multi turn encoders

Series

EM58 PA • EM58S PA • EMC58 PA



- Programmable analogue output
- 0-5V, 0-10V, -5/+5V, -10/+10V, 4-20mA, 0-20mA, 0-24mA
- Multiturn up to 16384 rev.
- Teach-in function
- Programmable overrun mode
- RS232 service interface
- Programmable via USB cable with IF92 interface



EM58 PA • EM58S PA • EMC58 PA

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
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:	Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft diameter:	Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø 15 mm to:	Ø 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial, radial):	100 N max.
Shaft rotational speed:	12000 rpm, 9000 rpm continuous operation
Bearing life:	400 x10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	M12, M23 plug or cable output 2 m (6.56 ft)
Weight:	~ 300 g (10,6 oz)
Option:	• additional cable

## ELECTRICAL SPECIFICATIONS

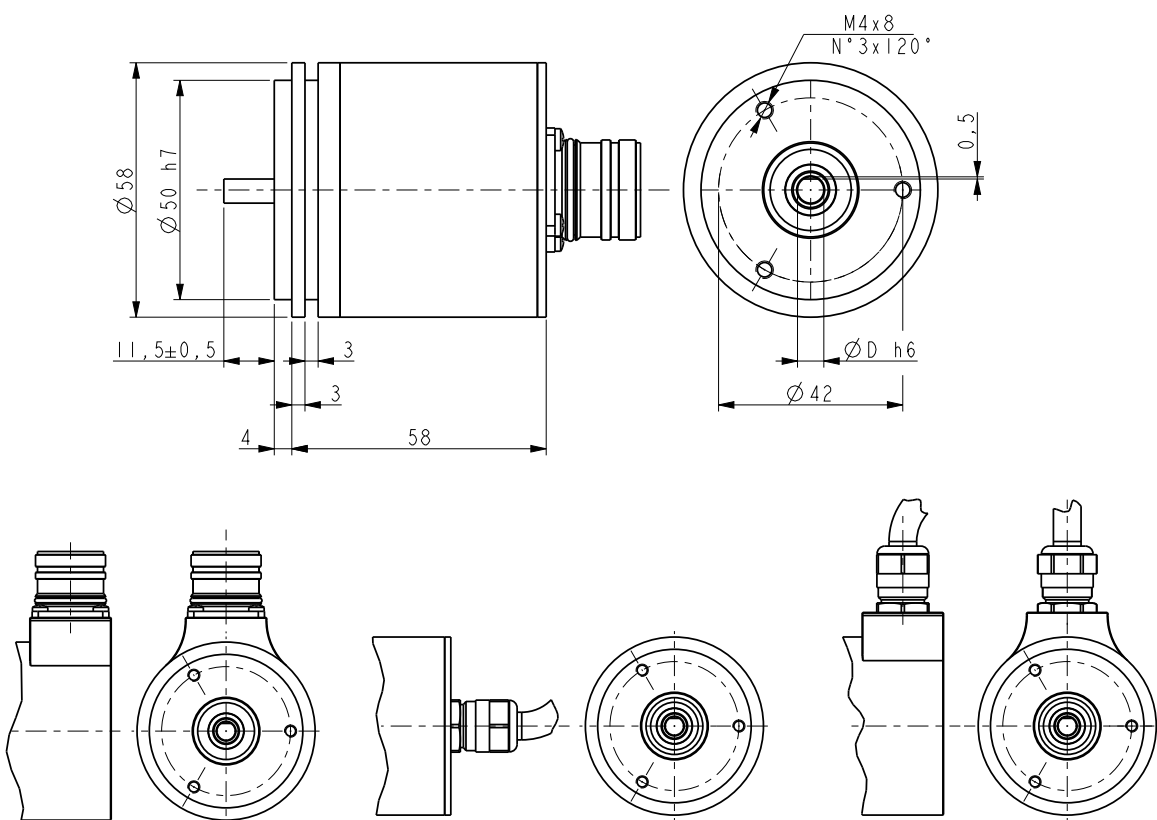
Resolution:	4096 cpr x 16384 turns
Accuracy:	± 0,04°
Output circuits:	programmable 0-5V, 0-10V, -5/+5V, -10/+10V, 4-20mA, 0-20mA, 0-24mA
Counting frequency:	> 150 kHz
Power supply:	+13Vdc ÷ 30Vdc
Power consumption:	1,3 W max.
Start-up time:	~ 40 ms
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	> 100.000 h
Functions:	<ul style="list-style-type: none"> <li>• Programmable resolution</li> <li>• Teach-in of resolution</li> <li>• Counting direction (programmable + input)</li> <li>• Zero setting (programmable + input)</li> <li>• Programmable overrun</li> </ul>

## MATERIALS

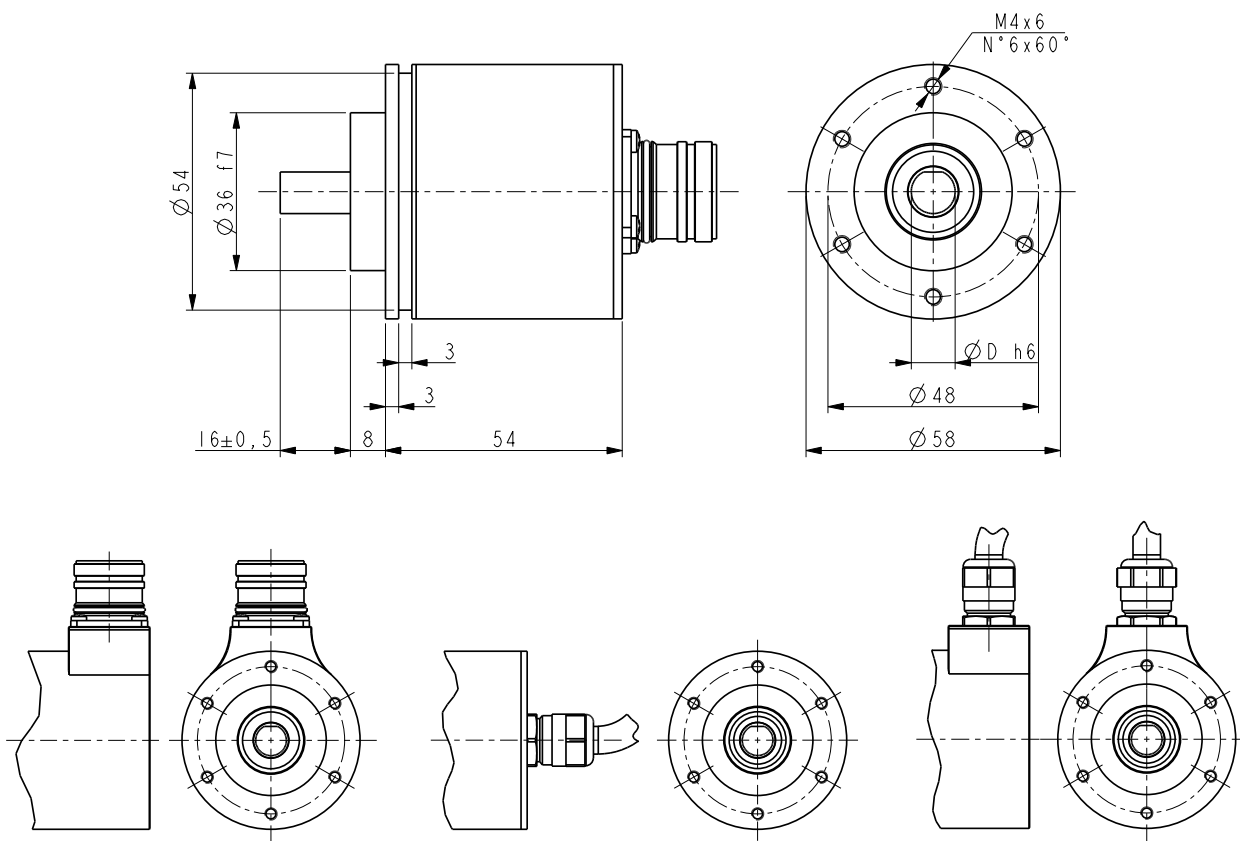
Flange:	anticorrosive, UNI EN AW-6082
Housing:	anticorrosive, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305

## ACCESSORIES

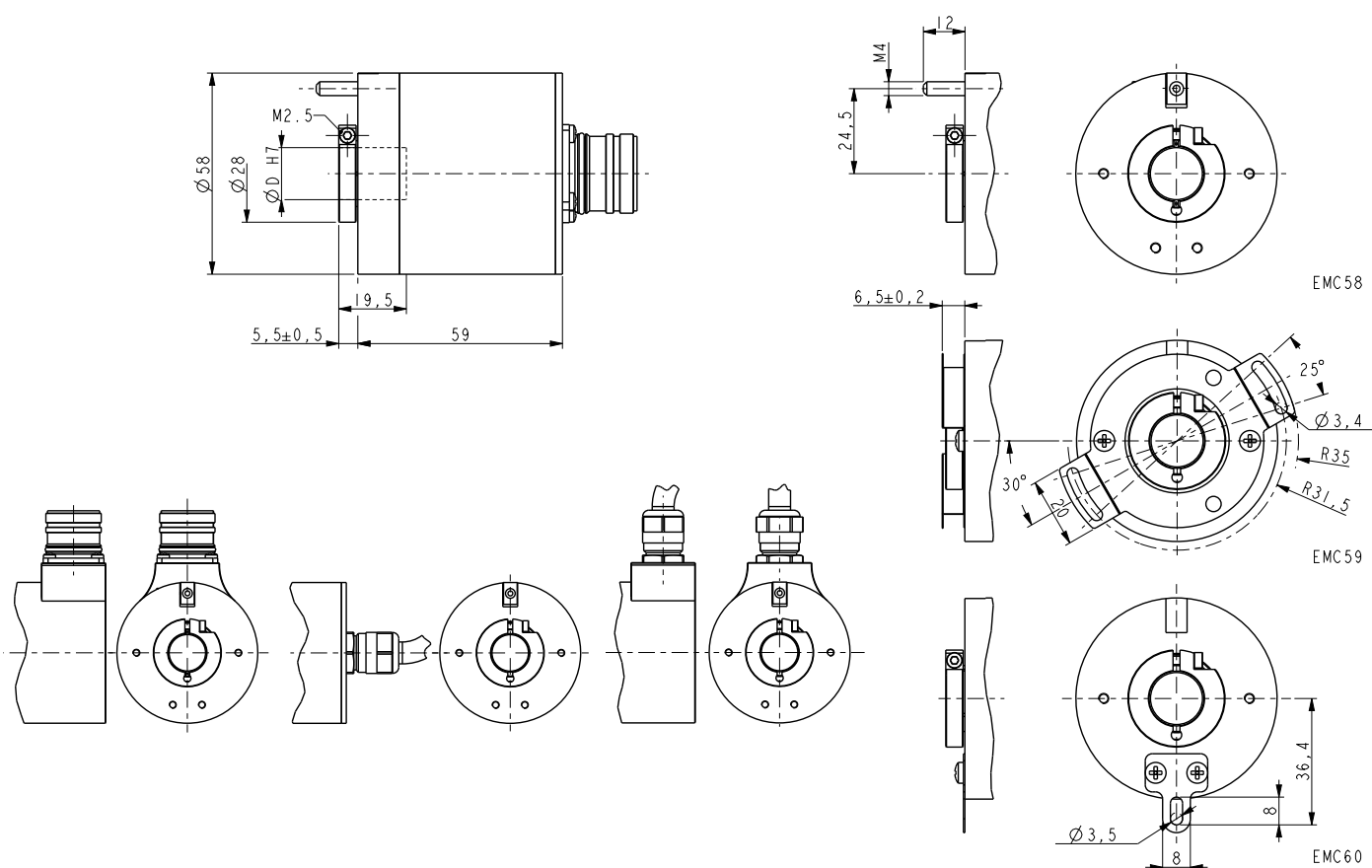
EPFL121H:	M23 12 pin connector
E-M12F12:	M12 12 pin connector
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
EC-M12F12-LK-T12-xx:	M12 cordset with xx m cable
EC-CR12F-S28-T12-xx:	M23 cordset with xx m cable
IF92:	Programming box with USB conn.
EC-M12F12-S69-I5-0,5:	M12 programming cable
EC-CR12F-S68-I5-0,5:	M23 programming cable
LKM-386:	fixing clamps



EM58 PA



EM58S PA



Order code

EM58	XX	/	XXXXX	XX	-	XX	-	X	XX	/Sxxx - /Pxxx
EM58S	Ⓐ		Ⓑ	Ⓒ		Ⓓ		Ⓔ	Ⓕ	Ⓖ
EMC58										
EMC59										
EMC60										

<p>Ⓐ RESOLUTION 12 = 4096 cpr</p> <p>Ⓑ REVOLUTIONS 16384 = 16384 turns</p> <p>Ⓒ OUTPUT PA = Programmable analogue</p>	<p>Ⓓ SHAFT DIAMETER 6 = 6 mm 8 = 8 mm P9 = 9.52mm / 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (EMCxx) 15 = 15 mm (EMCxx)</p>	<p>Ⓔ CONNECTION POSITION - = axial R = radial</p> <p>Ⓕ CONNECTIONS L2 = cable output 2 m (standard) L5 = cable output 5 m L10 = cable output 10 m M = M12, 12 pin plug M2 = M23, 12 pin plug</p>	<p>Ⓖ /Sxxx: Custom version /Pxxx: Factory programmed encoder on customer request</p>
---	--	--	--

Document release	Date	Description
1.1	19.03.2021	Accessories review