

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.
- Programmable overrun mode
- RS232 for parameter set-up



EMC58 PA • EM58 PA • EM58S PA

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
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)
Protection:	IP67, IP65 shaft side

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Solid shaft:	Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft:	Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø15mm:	to 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial and radial):	100 N max.
Shaft rotational speed:	12000 rpm, 9000 rpm continuous operation
Bearing life:	400x10 ⁶ rev. min. (10 ⁹ rev. min. with shaft loading of 20 N max.)
Weight:	~ 0,3 kg (10,6 oz)
Electrical connections:	M12, M23 connector or cable 2 m
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

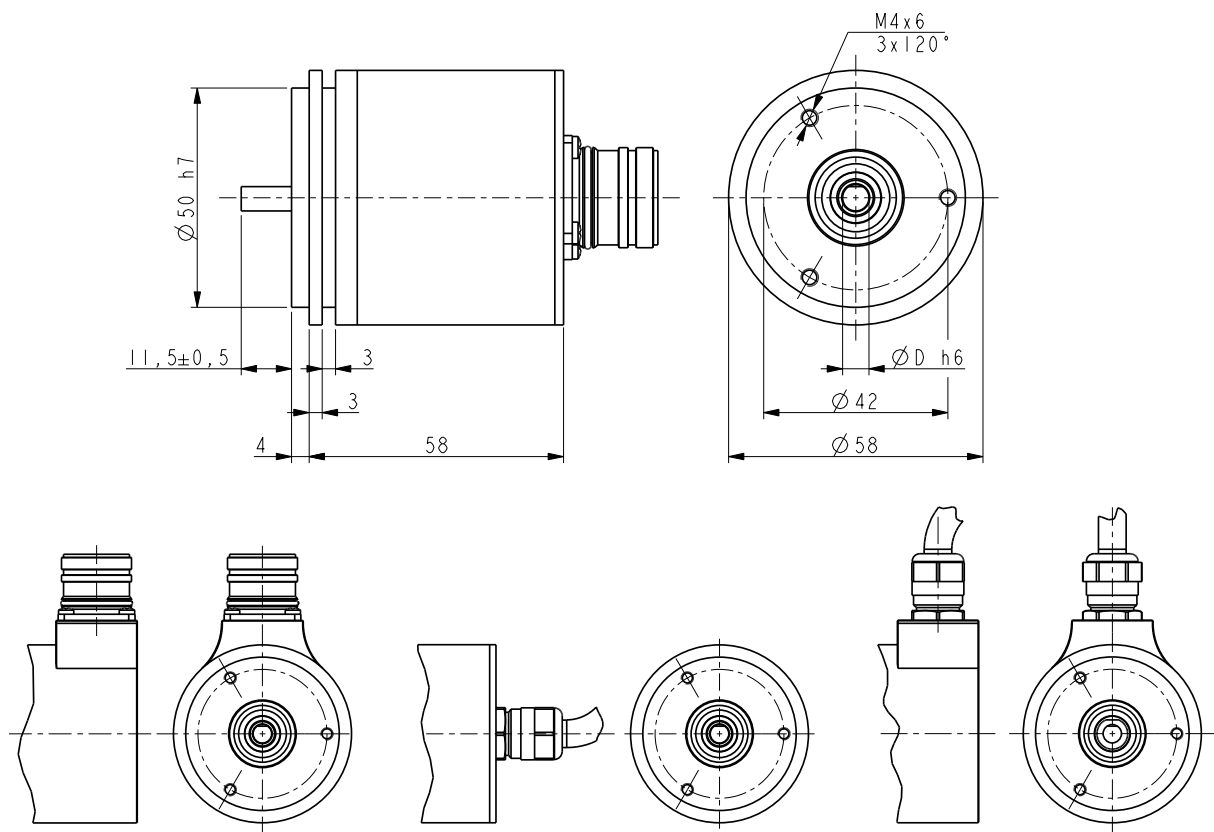
Resolution:	4096 cpr x 16384 turns
Output:	programmable 0-5V, 0-10V, -5/+5V, -10/+10V, 4-20mA, 0-20mA, 0-24mA
Power supply:	+13Vdc ÷ 30Vdc
Power consumption:	1, 3 W max.
Start-up time:	~ 40 ms
Counting frequency:	> 150 kHz
Accuracy:	± 0,02°
Protection:	against inversion of polarity, short-circuit
EMC:	according to: EN-61000-4-2/A1 EN-61000-4-4
Optoelectronic life:	> 100.000 h
Functions:	• Programmable resolution • Teach-in of resolution • Counting direction (programmable + input) • Zero setting (programmable + input) • Programmable overrun

MATERIALS

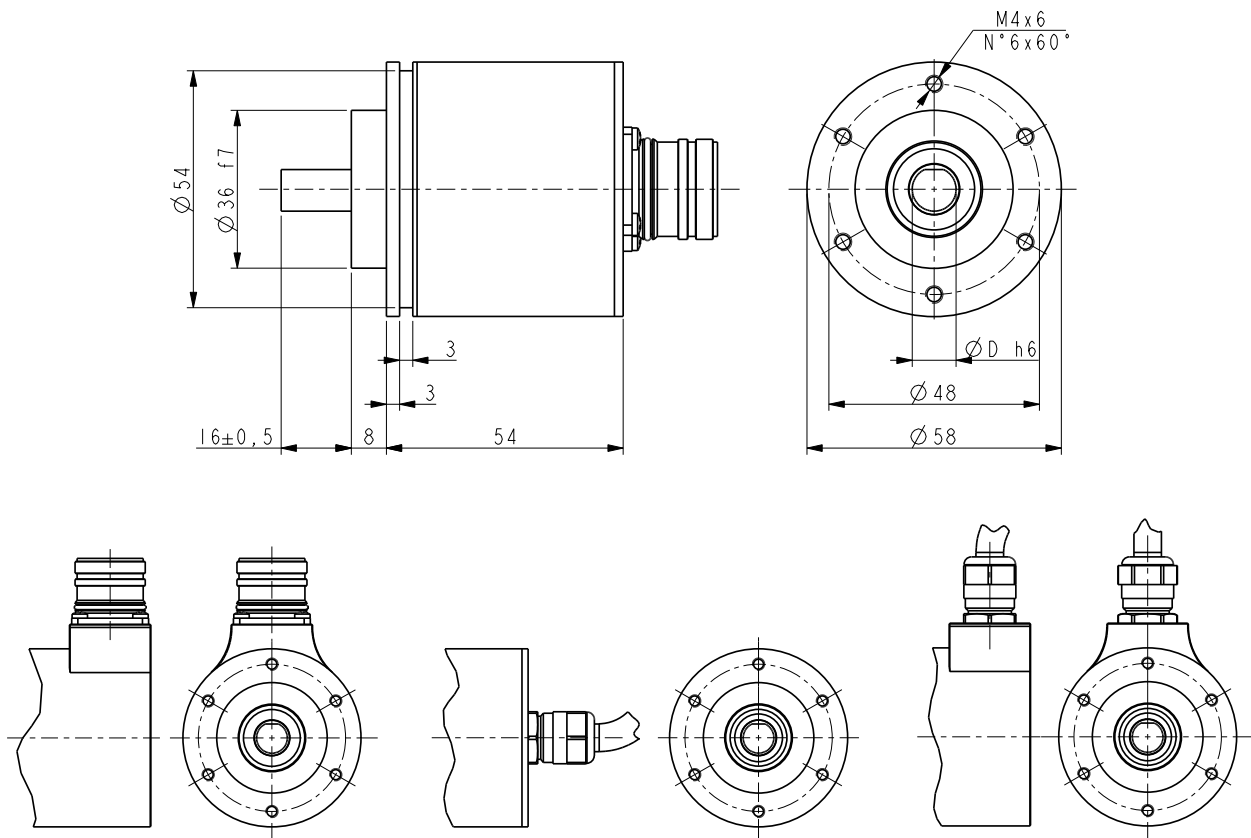
Flange:	non corroding, UNI EN AW-6082
Housing:	non corroding, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305

ACCESSORIES

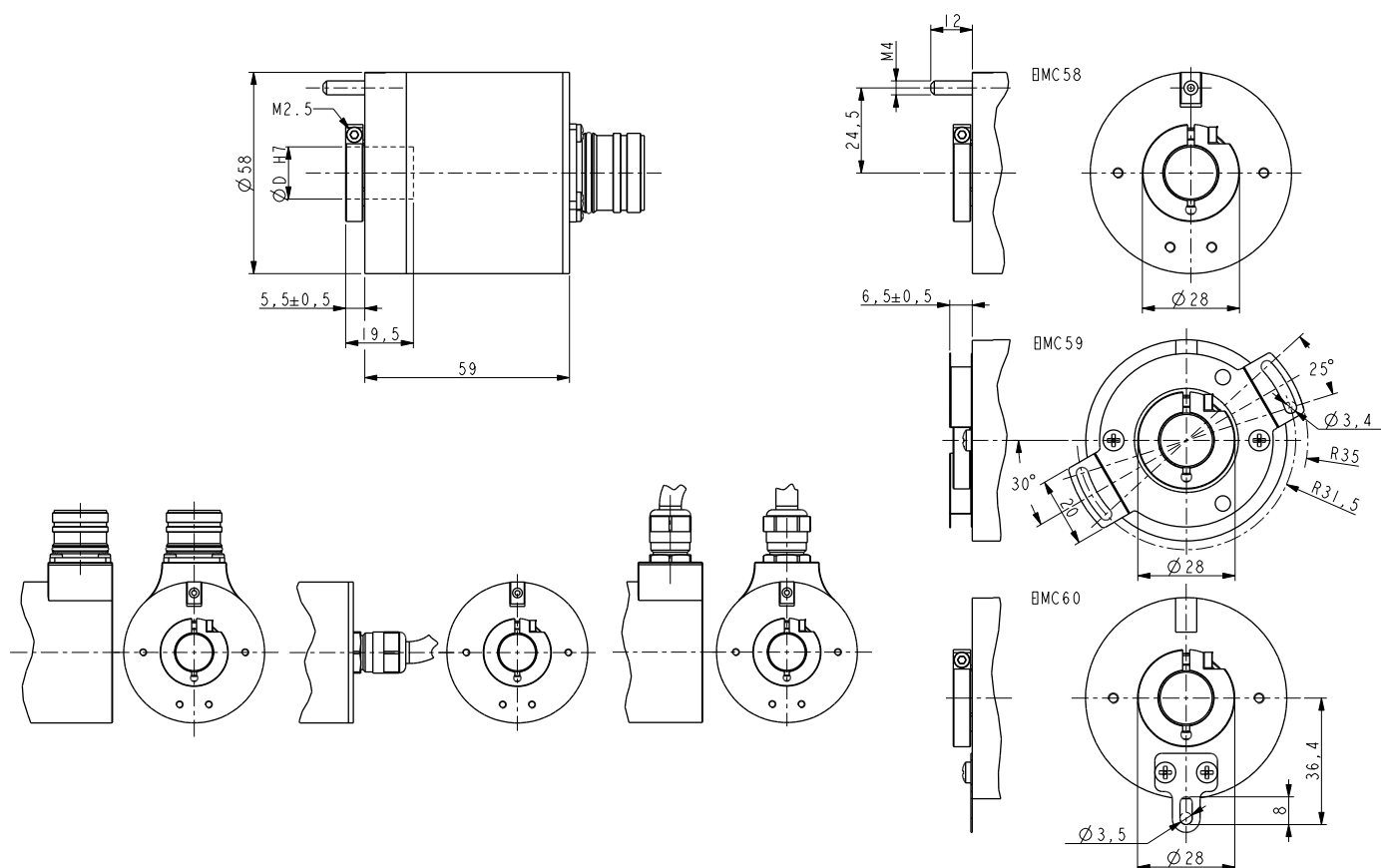
EPFL121H:	M23 12 pin connector
E-M12F12:	M12 12 pin connector
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
EC-M12F12-LK-T12-10:	cordset 10 m, M12 connector
EC-CR12F-S28-T12-10:	cordset 10 m, M23 connector
LKM-386:	fixing clamps



EM58 PA



EM58S PA



EMC58 PA - EMC59 PA - EMC60 PA

Order code

Additional code (optional)

EM58	XX	/	XXXXX	XX	-	XX	-	X	XX	/Sxxx
EM58S	(a)		(b)	(c)		(d)		(e)	(f)	/Pxxx
EMC58										(g)
EMC59										
EMC60										

(a) RESOLUTION

12 = 4096 cpr

(b) REVOLUTIONS

16384 = 16384 turns

(c) OUTPUT

PA = Programmable analogue

(d) 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)

(e) CONNECTION POSITION

- = axial

R = radial

(f) CONNECTIONS

L2 = cable output 2 m

L5 = cable output 5 m

L10 = cable output 10 m

M = M12, 12 pin connector

M2 = M23, 12 pin connector

(g)

/Sxxx: Custom version

/Pxxx: Factory programmed encoder on customers request