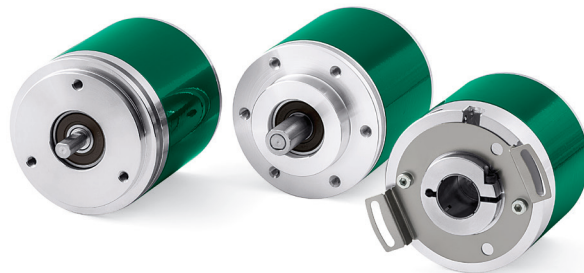


Series

EM58 • EM58S • EMC58



- Compact multiturn encoder
- Bit parallel interface
- Geared multiturn (no backup battery)
- Resolution up to 8192 cpr and 16384 turns
- High degree of protection, IP67
- Robust industrial grade housing



EM58 • EM58S • EMC59

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:	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)
Option:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

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
Starting torque at 20°C:	EM58: 0,15 Ncm (typ.) EM58S, EMCxx: 0,4 Ncm (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), MIL 32 pin inline plug
Weight:	~ 250 g (8.8 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

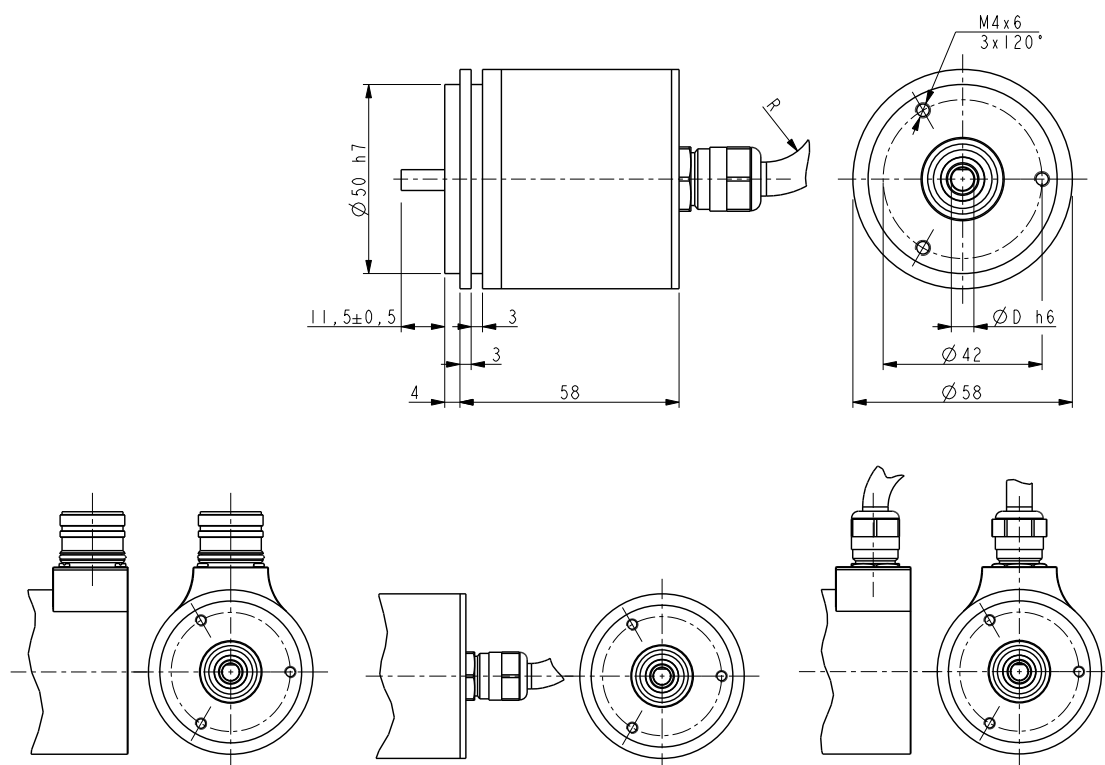
Resolution:	singleturn = 1024, 4096, 8192 cpr multiturn = 4096, 16384 turns
Accuracy:	± 0,02°
Counting frequency:	30 kHz
Output circuits:	Push-Pull, NPN
Output code:	Gray, Binary
Power supply:	+10Vdc +30Vdc
Consumption:	1,7 W
Protection:	against inversion of polarity, short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Functions:	• counting direction (input) • Zero setting (input)

MATERIALS

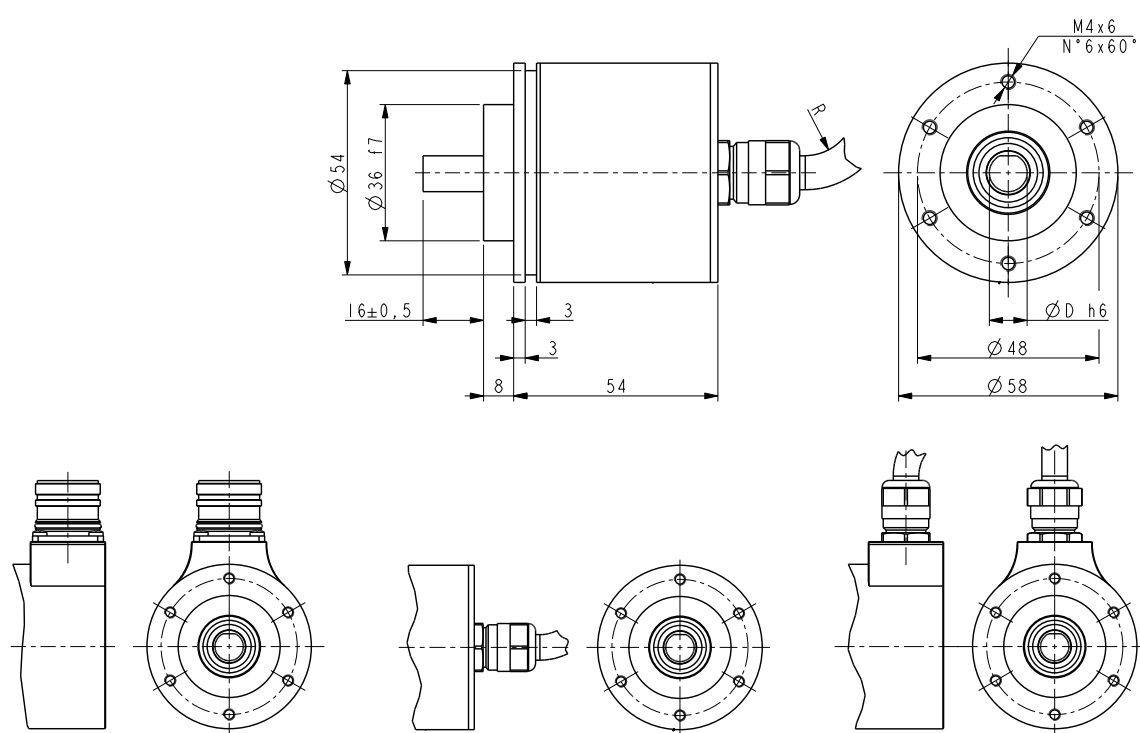
Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082 or zamac die cast
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305

ACCESSORIES

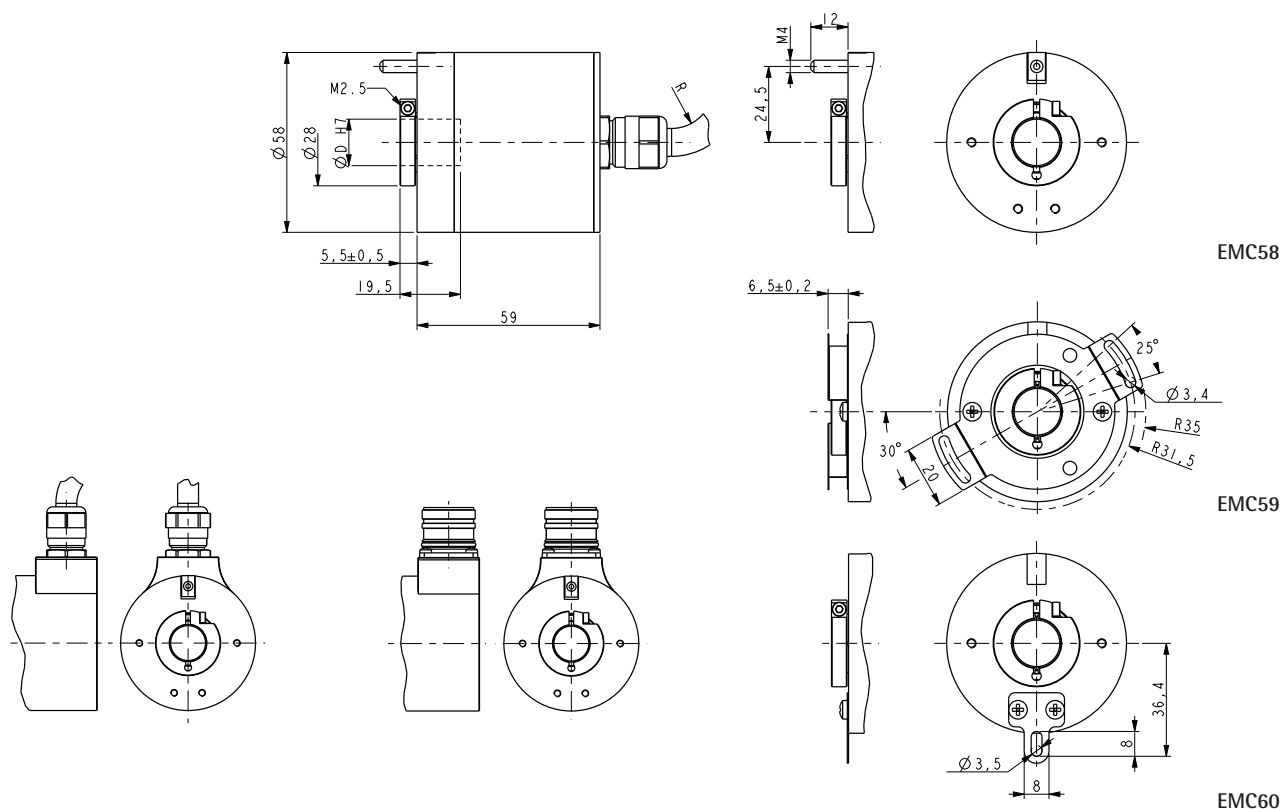
E32MLS:	32 pin MIL mating connector
EC-M32F-LK-A32-Lxxx:	cordset xx m, MIL 32 pin conn.
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
LKM386:	fixing clamps



EM58



EM58S



Order code - Bit parallel output

EM58	EMC58	XX	-	XX	-	XX	-	X	-	X	X	-	X	XXXX	/Sxxx
EM58S	EMC59	(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)
	EMC60														

(a) BIT SINGLETURN 10 = 1024 cpr 12 = 4096 cpr 13 = 8192 cpr (b) BIT MULTITURN 12 = 4096 turns 14 = 16384 turns	(c) INTERFACE / POWER SUPPLY BY2 = Binary, Push-Pull, +10Vdc +30Vdc GY2 = Gray, Push-Pull, +10Vdc +30Vdc BN2 = Binary, NPN, +10Vdc +30Vdc GN2 = Gray, NPN, +10Vdc +30Vdc (c) SHAFT DIAMETER 06 = 6 mm 08 = 8 mm P9 = 9.52mm / 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (EMCxx) 15 = 15 mm (EMCxx)	(c) PROTECTION P = IP67, IP65 shaft side (f) OPER. TEMP. RANGE T = -25°C +85°C (-13°F +185°F) K = -40°C +100°C (-40°F +212°F) (g) CONNECTION POSITION A = axial R = radial	(h) CONNECTION TYPE & CABLE LENGTH L020 = cable output 2 m (standard) Lxx0 = cable out. x m (max. length 10 m) L100 = cable output 10 m V010 = 1 m cable + MIL 32 pin inline plug (i) CUSTOM VERSION
---	--	--	---

Document release	Date	Description
1.2	6.05.2026	Obsolete / End of life for SSI version
1.1	4.12.2025	Phase Out
1.0	February 2024	New order code