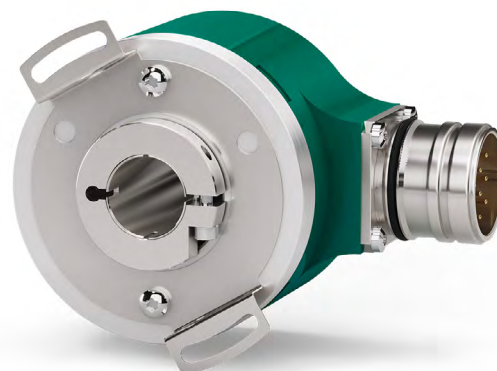


- Absolute multiturn encoder with BiSS-C & SSI interface
- Optical singleturn sensing up to 25 bit (33554432 cpr)
- Multiturn with Energy Harvesting technology
- Additional incremental track 1024 PPR
- Cable output, M12 or M23 connections



EHCT59

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:	IP65
Operating temperature range:	-40°C +100°C (-40°F +212°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F) (98% R.H.without condensation)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
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):	20 N max.
Shaft rotational speed:	6000 rpm
Starting torque (at 20°C):	1 Ncm
Electrical connections:	M12, M23 plug or cable output 1 m (3.3 ft)
Weight:	~ 210 g (7,4 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

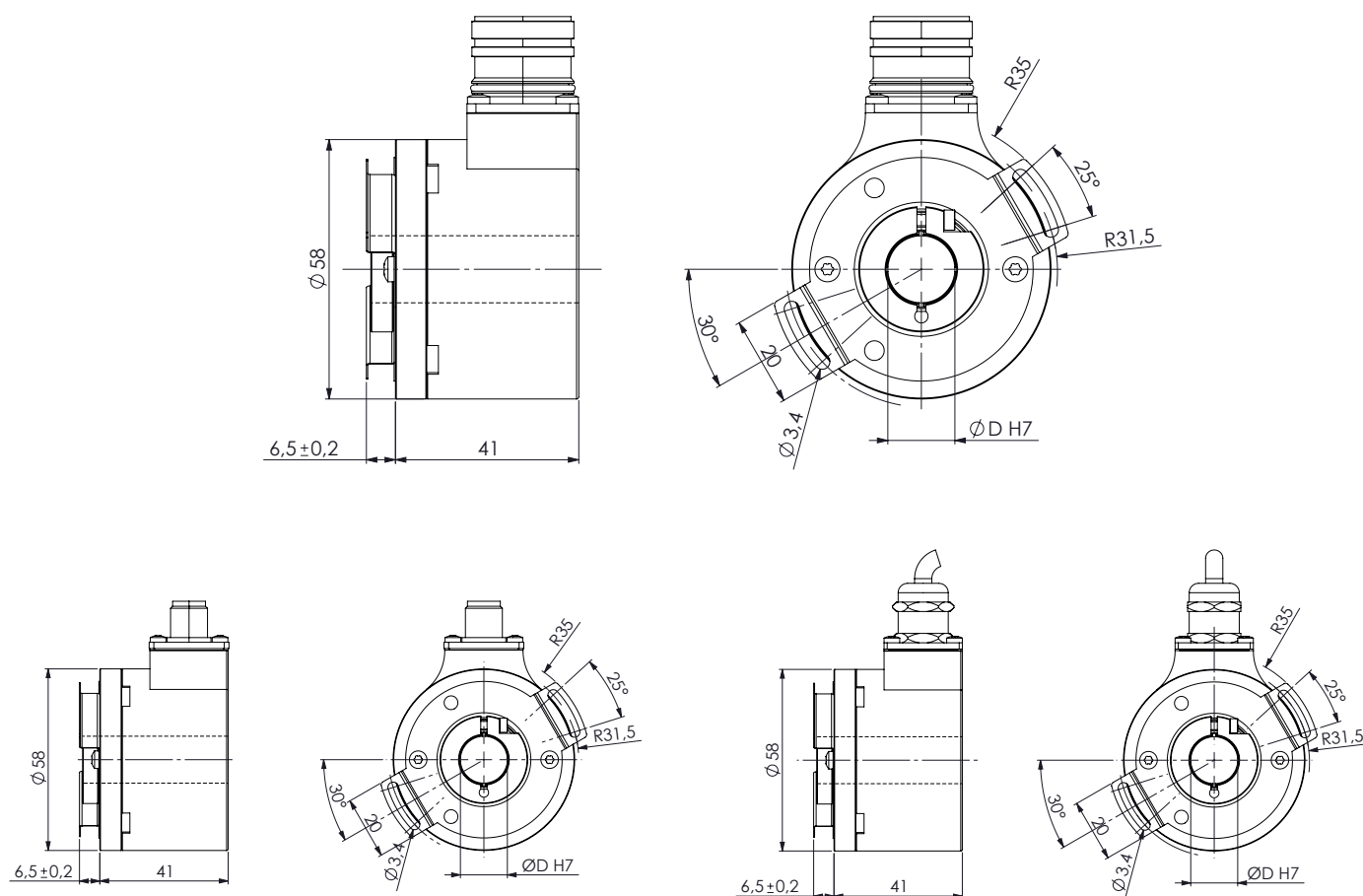
Resolution:	singleturn up to 25 bit (33554432 cpr) multiturn up to 15 bit (32768 turns)
Accuracy:	± 0,01°
Output circuits:	SSI +1Vpp sin/cos SSI (RS422), clock rate < 4 MHz - Data refresh rate 8 µec. BiSS-C, clock rate < 10 MHz - Costant processing time (t _{busy} = 8 µec.) AB Push-Pull/Line Driver 1024 PPR
Output code:	Gray, Binary
Power supply:	+5Vdc +30Vdc
Power consumption:	0,5 W
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to EN 61000-4-2 EN 61000-4-4
Functions:	• Counting direction (input) • Zero setting/Preset (input)

MATERIALS

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

ACCESSORIES

BR1:	reducing sleeves
E-M12F8:	M12 8 pin mating connector
EC-M12F8-LK-M8-L050	M12 8 pin cordset, 5 m cable
EC-M12F8-LK-M8-L100:	M12 8 pin cordset, 10 m cable
EC-M12F8-LK-M8-L150:	M12 8 pin cordset, 15 m cable
EC-M12F8-LK-M8-L200:	M12 8 pin cordset, 20 m cable
E-M12F12:	M12 12 pin mating connector
EC-M12F12-LK-T12-L050:	M12 12 pin cordset, 5 m cable
EC-M12F12-LK-T12-L100:	M12 12 pin cordset, 10 m cable
EC-M12F12-LK-T12-L200:	M12 12 pin cordset, 20 m cable
EPFL121H:	M23 12 pin mating connector
EC-CR12F-S28-T12-L100:	M23 12 pin cordset, 10 m cable
EC-CR12F-S28-T12-L200:	M23 12 pin cordset, 20 m cable



EHCT59

Order code

EHCT59	-	XX-XX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
		(a)		(b)		(c)		(d)	(e)		(f)	(g)	(h)

(a) RESOLUTION (BIT SINGLETURN-BIT MULTITURN)

16-00 = 65536 counts/rev. (singleturn)
 18-00 = 262144 counts/rev. (singleturn)
 19-00 = 524288 counts/rev. (singleturn)
 20-00 = 1048576 counts/rev. (singleturn)
 25-00 = 33554432 counts/rev. (singleturn)
 13-12 = 8192 counts/rev. x 4096 rev.
 16-12 = 65536 counts/rev. x 4096 rev.
 17-15 = 131072 counts/rev. x 32768 rev.
 18-14 = 262144 counts/rev. x 16384 rev.
 20-12 = 1048576 counts/rev. x 4096 rev.

(b) INTERFACE / POWER SUPPLY

BW4 = SSI, MSB aligned, Binary code + 1024 PPR sin/cos, +5+30Vdc
 GW4 = SSI, MSB aligned, Gray code + 1024 PPR sin/cos, +5+30Vdc
 BG4 = SSI, Binary MSB aligned, +5Vdc+30Vdc
 B04 = SSI, Binary MSB aligned, 1024 PPR Line Driver, +5+30Vdc
 B54 = SSI, Binary MSB aligned, 1024 PPR Push-Pull, +5+30Vdc
 GG4 = SSI, Gray MSB aligned, +5Vdc+30Vdc
 SC4 = BiSS-C, +5Vdc+30Vdc
 G04 = SSI, Gray MSB aligned, 1024 PPR Line Driver, 5+30Vdc
 G54 = SSI, Gray MSB aligned, 1024 PPR Push-Pull, 5+30Vdc

(c) SHAFT DIAMETER

14 = 14 mm
 15 = 15 mm

(d) PROTECTION

P = IP65

(e) OPERATING TEMPERATURE RANGE

K = -40°C +100°C (-40°F +212°F)

(f) CONNECTION POSITION

R = radial

(g) CONNECTION TYPE & CABLE LENGTH

L010 = cable output 1 m (standard)
 Lxx0 = cable output x m (max. length 10 m)
 L100 = cable output 10 m
 M2 = M23 12 pin plug
 M8 = M12 8 pin plug (except for B04, B54, G04 and G54)
 M1 = M12 12 pin plug

(h) CUSTOM VERSION

Document release	Date	Description
1.5	23.01.2026	Order code update (operating temperature)
1.4	11.07.2025	Order code update (BW4, GW4)
1.3	17.04.2025	Interface/Power supply (BW4, GW4)
1.2	16.01.2025	Resolution, interface/power supply and operating temperature update
1.1	15.10.2024	Accessories update
1.0	September 2024	First issue