

- Compact design, through hollow shaft
- Industrial & feedback applications
- Single turn version up to 20 bits
- Multi turn version, 16 x 12 bits
- Incremental resolution up to 8192 PPR or 2048 sin/cos



HSCT • HMCT

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:	-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
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):	40 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	1 Ncm (typ.)
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical connections:	M12, M23 plug or cable output 1 m (3.3 ft)
Weight:	~ 200 g (7 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

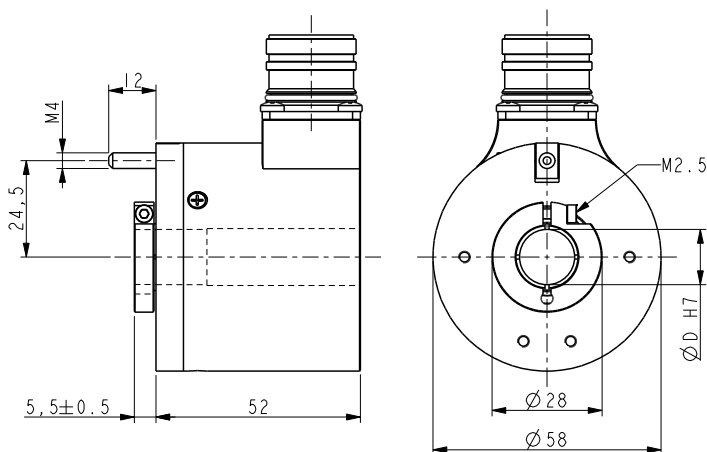
Resolution:	SSI, BiSS: HSCT 20 bit max., HMCT 16 x 12 bit sin/cos: 2048 PPR AB /AB: 2048, 4096, 8192 PPR
Accuracy:	± 0,01°
Output circuits:	SSI, SSI + 1Vpp sin/cos, SSI + Line Driver 5Vdc, SSI + Push-Pull 10-30Vdc, BiSS + 1Vpp sin/cos
Output code:	Gray, Binary
Counting frequency:	220 kHz max.
Power supply:	+5Vdc ±5%, +10V +30V
Power consumption:	1 W
Protection:	against inversion of polarity
EMC:	electro-magnetic immunity, according to: EN-61000-4-2 EN-61000-4-4
Functions:	• Counting direction (input) • Electronic zero setting (input)

MATERIALS

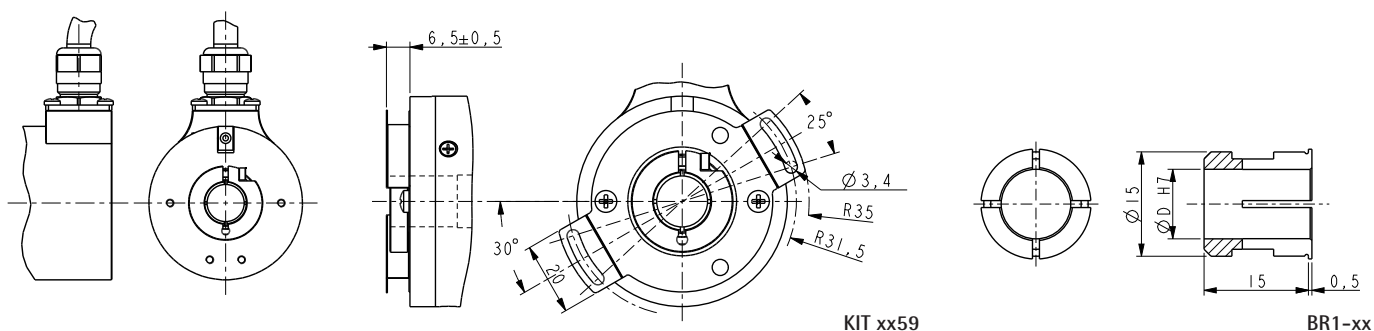
Flange:	anticorrosive, UNI EN AW-6082
Housing:	anticorrosive, UNI EN AW-6082 or zamac die cast
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305
Light source:	GaAl diodes

ACCESSORIES

EPFL121H:	M23 12 pin connector
EM12F8:	M12 8 pin mating connector
EM12F12:	M12 12 pin mating connector
BR1:	reducing sleeves
EC-CR12F-S28-T12-xxx:	cordset xx m, M23 connector
EC-M12F8-LK-M8-xxx:	cordset xx m, M12 8 pin connector
EC-M12F12-LK-T12-xxx:	cordset xx m, M12 12 pin conn.
KIT xx59:	fixing plate



HSCT • HMCT



KIT xx59

BR1-xx

Order code - Single turn and multiturn

HSCT	XX-XX	-	XXX	-	XX	-	X	X	-	X	X	/Sxxx
HMCT	Ⓐ		Ⓑ		Ⓒ		Ⓓ	Ⓔ		Ⓕ	Ⓖ	Ⓗ

Ⓐ RESOLUTION HSCT (BIT SINGLETURN - BIT MULTITURN)

- 16-00 = 16 bit (65536 cpr x 1 turn)
- 18-00 = 18 bit (262144 cpr x 1 turn)
- 19-00 = 19 bit (524288 cpr x 1 turn)
- 20-00 = 20 bit (1048576 cpr x 1 turn)

Ⓐ RESOLUTION HMCT (BIT SINGLETURN - BIT MULTITURN)

- 13-12 = 13x12 bit (8192 cpr x 4096 turns)
- 16-12 = 16x12 bit (65536 cpr x 4096 turns)

Ⓑ INTERFACE / POWER SUPPLY

- GV2 = SSI, LSB aligned, Gray code + 2048 PPR sin/cos, +10V +30V
- BV2 = SSI, LSB aligned, Binary code + 2048 PPR sin/cos, +10V +30V
- GA2 = SSI, LSB aligned, Gray code, +10V +30V
- BA2 = SSI, LSB aligned, Binary code, +10V +30V
- GG2 = SSI, MSB aligned, Gray code, +10V +30V
- BG2 = SSI, MSB aligned, Binary code, +10V +30V
- SC1 = BiSS C-mode + 2048 PPR sin/cos (5Vdc)
- SC2 = BiSS C-mode + 2048 PPR sin/cos, +10V +30V
- G12 = SSI, Gray code + 2048 PPR Line Driver AB, /AB Line Driver, +10+30Vdc
- B12 = SSI, LSB aligned, Binary code + 2048 PPR Line Driver AB, /AB, +10+30Vdc
- G62 = SSI, Gray code + 2048 PPR Push-Pull, AB /AB Push-Pull, +10+30Vdc
- B62 = SSI, LSB aligned, Binary code + 2048 PPR Push-Pull AB, /AB, +10+30Vdc

Ⓒ SHAFT DIAMETER

- 14 = 14 mm
- 15 = 15 mm

Ⓓ PROTECTION

- P = IP65 shaft side

Ⓒ OPERATING TEMPERATURE RANGE

- T = -25°C +85°C (-13°F +185°F)

Ⓕ CONNECTION POSITION

- R = radial

Ⓖ CONNECTION TYPE & CABLE LENGTH

- L010 = cable output 1 m (standard)
- L020 = cable output 2 m
- Lxx0 = cable out. x m (max. length 10m)
- M2 = M23 connector
- M8 = M12 8 pin plug
- M1 = M12 12 pin plug (except for GA2, BA2, GG2, BG2)

Ⓗ CUSTOM VERSION

Document release	Date	Description
1.0	9.02.2024	New order code