

- ATEX II 2G Ex d IIC T6 Gb, II 2D Ex tb IIIC T85°C Db certification
- Suitable for ATEX zones 1, 2, 21 and 22
- Compact & robust construction with axial/radial cable outlet
- Ø 14 mm hollow shaft
- Resolution up to 10000 PPR



XC77

ENVIRONMENTAL SPECIFICATIONS

Certification:	II 2G Ex d IIC T6 Gb, II 2D Ex tb IIIC T85°C Db
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
Environmental temperature max.:	40°C max
Operating temperature range:	-20°C +40°C (-4°F +104°F)
Storage temperature range:	-20°C +85°C (-4°F +185°F) (98% R.H. without condensation)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 14 mm
Shaft loading (axial, radial):	60 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	≤ 5 Ncm
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical connections:	cable output 3 m (9.8 ft)
Weight:	~ 750 g (26,4 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

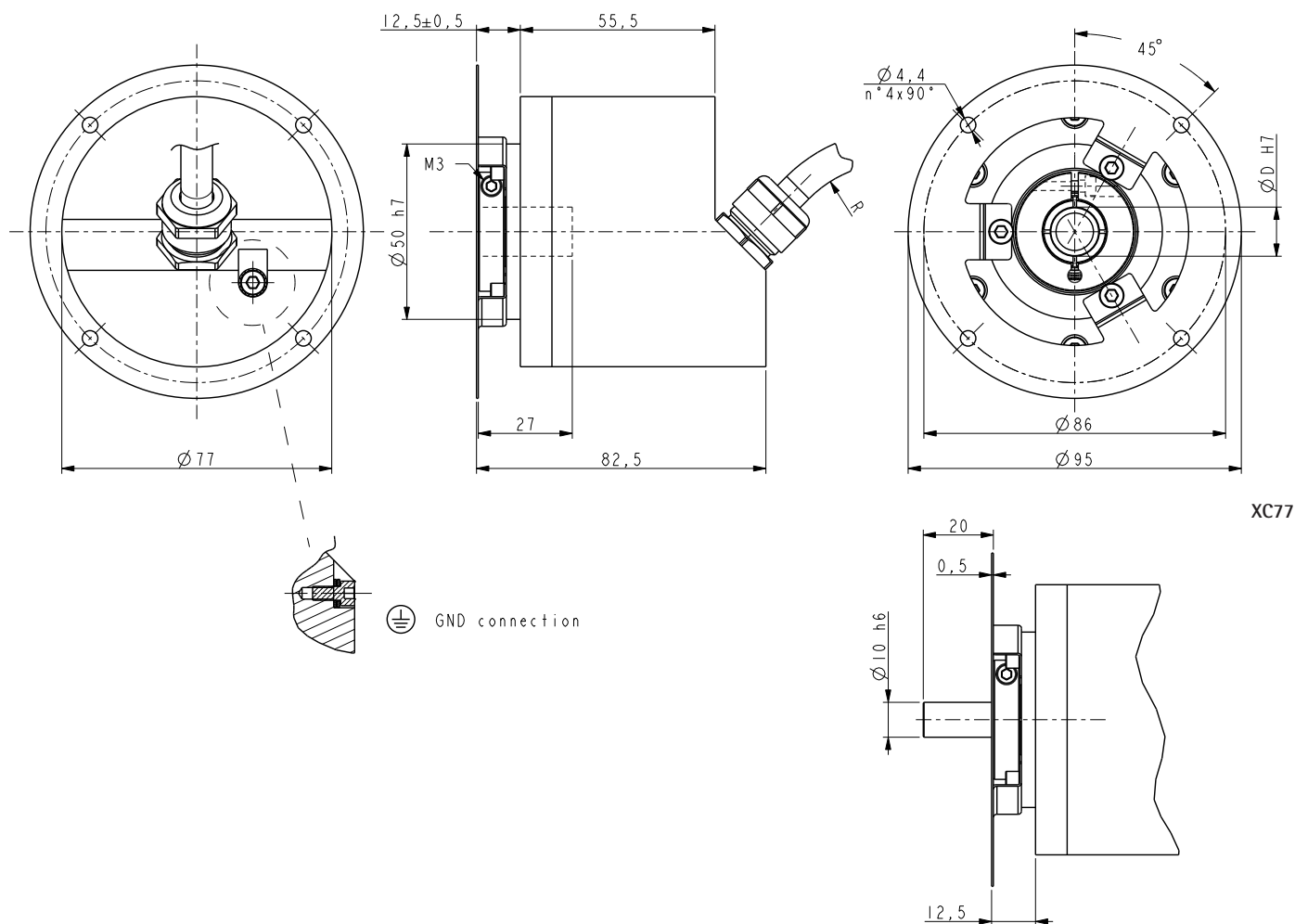
Standard resolution with magnetic sensing (PPR):	2-4-5-6-8-10-12-15-16-20-24-25-30-35-36-40-50-60-64-70
(output circuits N, P, Y, L, H)	80-90-100-120-125-127-142-150-160-180-200-216-230-236 240-250-254-256-267-270-314-375-400-410-435-471-635-800 1068-1270-1400-2250 (other on request)
Standard resolution with unbreakable disk (PPR):	300-360-500-512-600-720-750-900-1000-1024
(output circuits N, P, Y, L, H)	1200-1250-1440-1500-1800-2000-2048-2500-3000 3600-4000-4096-5000
High accuracy glass disk (PPR):	5K=5000, 9K=9000, 10K=10000
(output circuits N, P, Y, L, H)	4KB=4096, 8KB=8192
Counting frequency:	300 kHz max.
Output circuits:	NPN, Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V, +5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Option:	• Line Driver 24/5V

MATERIALS

Flange:	anticorodal, UNI EN AW-6082 (UNI EN 573)
Housing:	anticorodal, UNI EN AW-6082 (UNI EN 573)
Bearings:	ABEC 5
Shaft and clamping ring:	1.4305 (UNI EN 10088-1)

ACCESSORIES

LKM-1758:	Ø 10 mm shaft extension
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XC77 with LKM-1758 shaft extension

Order code

XC77	-	XX	-	XXXXX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
		(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)

(a) OUTPUT CIRCUITS / POWER SUPPLY

N2 = NPN o.c., +10Vdc ÷ +30Vdc

Y2 = Push Pull, +10Vdc ÷ +30Vdc

L1 = Line Driver (RS422), +5Vdc ± 5%

H4 = PP/LD universal circuit, +5Vdc ÷ +30Vdc

L2 = Line Driver (RS422), +10V ÷ +30V

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS / CONNECTION

ZCU = ABO /ABO, cable output

(d) SHAFT DIAMETER

14 = 14 mm

(e) PROTECTION

P = IP65

(f) OPERATING TEMPERATURE

X = -20°C +40°C (-4°F +104°F)

(g) CONNECTION POSITION

A = axial

(h) CABLE LENGTH

L030 = cable output 3 m

L050 = cable output 5 m

L070 = cable output 7 m

L100 = cable output 10 m

L150 = cable output 15 m

L200 = cable output 20 m

L250 = cable output 25 m

L300 = cable output 30 m (max. length)

(i) CUSTOM VERSION

Document release	Date	Description
1.4	17.04.2026	Resolution update (100-200-250 PPR with magnetic sensing)
1.3	28.01.2026	Order code (cable length update)
1.2	22.01.2026	Resolution update (deleted 6K)
1.1	19.05.2025	Resolution update (256-360-400 PPR)
1.0	November 2023	New order code