

ROTAPULS

ATEX incremental encoder

Series

XC77



- Encoder with ATEX II 2GD Ex d IIC T6 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

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP66
Environmental temperature at max. speed:	40°C max
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

Protection mode:	EEx d IIC T6
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 1 m (3.3 ft)
Weight:	~ 750 g (26,4 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

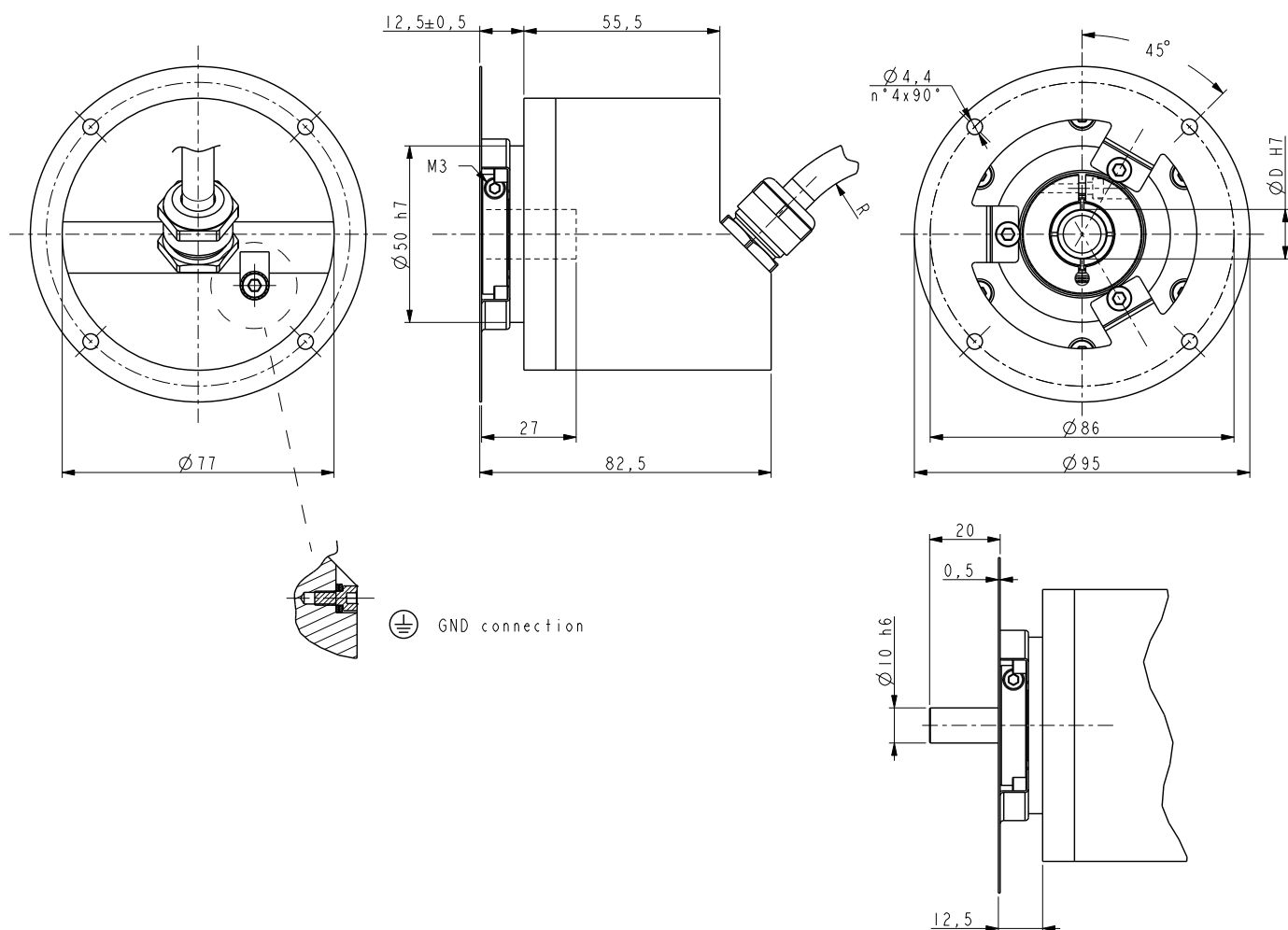
Resolution (PPR):	2-4-5-8-10-12-15-16-20-24-25-30-35-36-40-50-60-64-70-80 90-100-120-127-142-150-160-180-200-216-230-236-240-250 254-256-267-270-300-314-360-375-400-410-435-471-500-512 600-635-720-750-800-900-1000-1024-1068-1200-1250-1270 1400-1440-1500-1800-2000-2048-2250-2400-2500-3000-3600 4000-4096-5000-6000-8192-9000-10000
Counting frequency:	100 kHz max.
Output circuits:	NPN, Push-Pull, Line Driver, Universal circuit
Power supply:	+5Vdc ± 5%, +10Vdc +30Vdc, +5Vdc +30Vdc
Consumption:	70 mA (typical)
Output current (per channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.

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-1578:	Ø 10 mm shaft extension
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XC77

Order code

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

(a) OUTPUT CIRCUITS

N = NPN o.c.
 Y = Push Pull
 L = Line Driver (RS422)
 H = PP/LD universal circuit

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS / CONNECTION

ZCU = AB0 /AB0, cable output

(d) SUPPLY VOLTAGE

1 = +5Vdc $\pm 5\%$ (L output circuit)
 2 = +10Vdc $\div$ +30Vdc (N and Y output circuits)
 4 = +5Vdc $\div$ +30Vdc (H output circuit)

(e) SHAFT DIAMETER

14 = 14 mm

(f) CABLE LENGTH

- = cable output 1 m cable
 L2 = cable output 2 m
 L7 = cable output 7 m
 Lx = cable output x m

(g) CUSTOM VERSION