

ROTAPULS

Incremental heavy-duty encoder

Series

C101



- Heavy industry & wind generator applications
- Redundant version with 2 galvanically separated outputs
- Electrical shaft insulation (10 kV) for bearing protection
- Power output for long distance transmission
- M23 connectors or terminal blocks
- Corrosion resistant housing
- High shaft load



C101

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP54
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 hollow:	Ø 16 mm
Shaft loading:	axial: 140 N radial: 350 N
Shaft rotational speed:	6000 rpm max. (short periods)
Electrical shaft insulation:	10 kV max.
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical connections:	2 x M23 plug terminal blocks (max. cable Ø 9,5 mm)
Weight:	~ 1 kg (35 oz)

ELECTRICAL SPECIFICATIONS

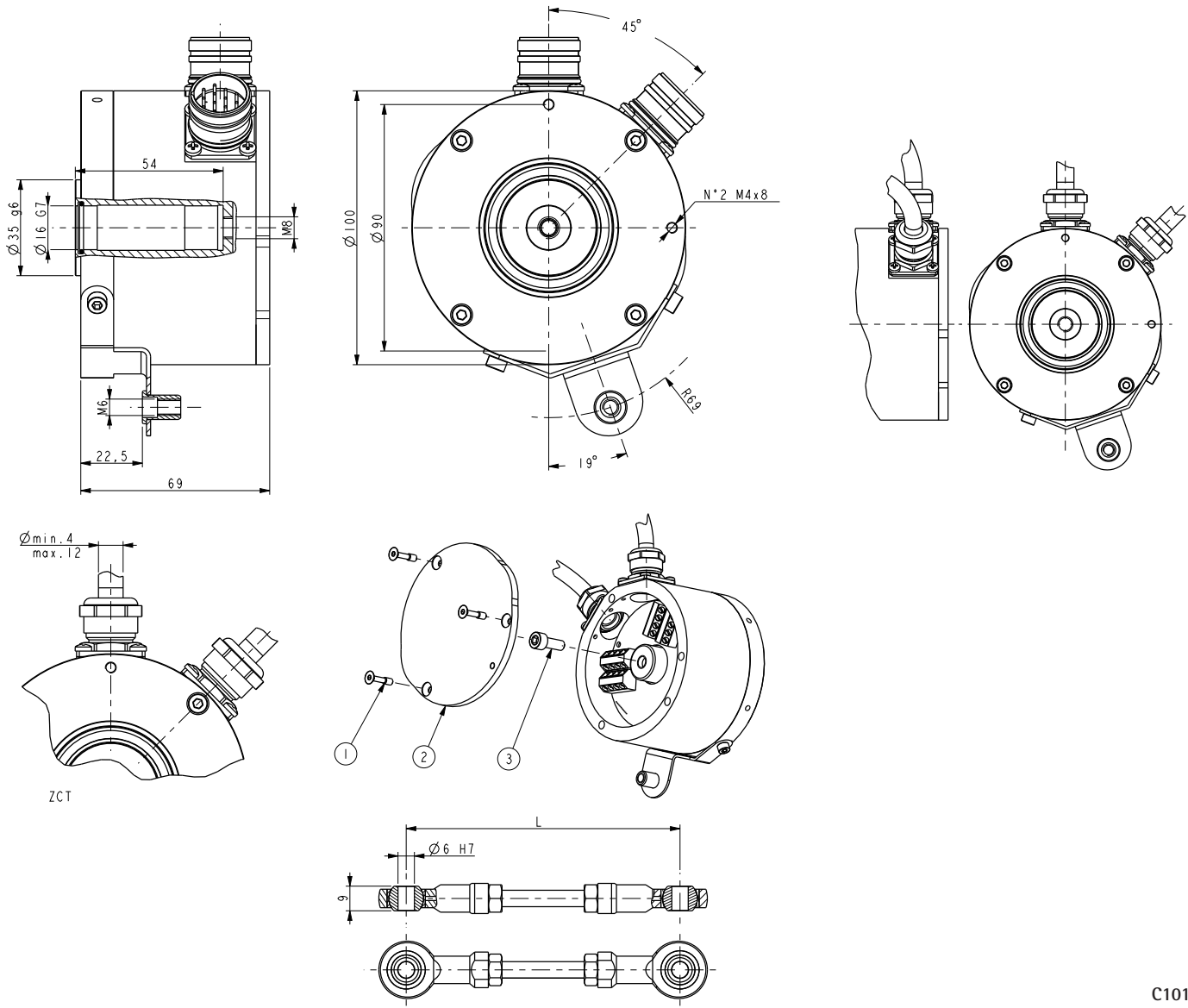
Resolution (PPR):	1024-2048
Counting frequency:	100 kHz max.
Output circuits:	Power Push-Pull, Power Line Driver
Power supply:	+5V ±5%, +10V +30V
Consumption:	70 mA (typical)
Output current (per channel):	100 mA max.
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.

MATERIALS

Flange:	anticorodal, UNI EN AW-6082, anodized
Housing:	anticorodal, UNI EN AW-6082, anodized
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305
Light source:	GaAl diodes

ACCESSORIES

EPFL121:	12 pin M23 mating connector
EC-C12F-S19-M8-xx:	cordset x m with M23 connector
PF4284/xx:	torque arm



C101

Order code

C101	-	X	-	XXXXX	XXX	X	XX	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)

(a) OUTPUT CIRCUITS K = Power Line Driver T = Power Push Pull (b) RESOLUTION (PPR) 1024, 2048	(c) OUTPUT SIGNALS / CONNECTIONS ZCZ = AB0 /AB0, M23 12 pin plug ZCT = AB0 /AB0, screw terminals ZCU = AB0 /AB0, cable output (d) SUPPLY VOLTAGE 1 = +5V±5% (T output circuit) 2 = +10V÷ +30V (K output circuit)	(e) SHAFT DIAMETER 16 = 16 mm (f) CUSTOM VERSION
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