



- Heavy-duty hollow shaft encoder
- Corrosion resistant, robust housing
- High shaft load and environmental protection
- Power outputs for long distance transmission
- M23 connector or screw terminals
- Electrical shaft insulation



C100

### ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
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)
Option:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

### MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 16 mm 17 mm tapered
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 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	M23 plug, screw terminals or cable output 1 m (3.3 ft)
Weight:	~ 1 kg (35 oz)
Option:	• additional cable

### ELECTRICAL SPECIFICATIONS

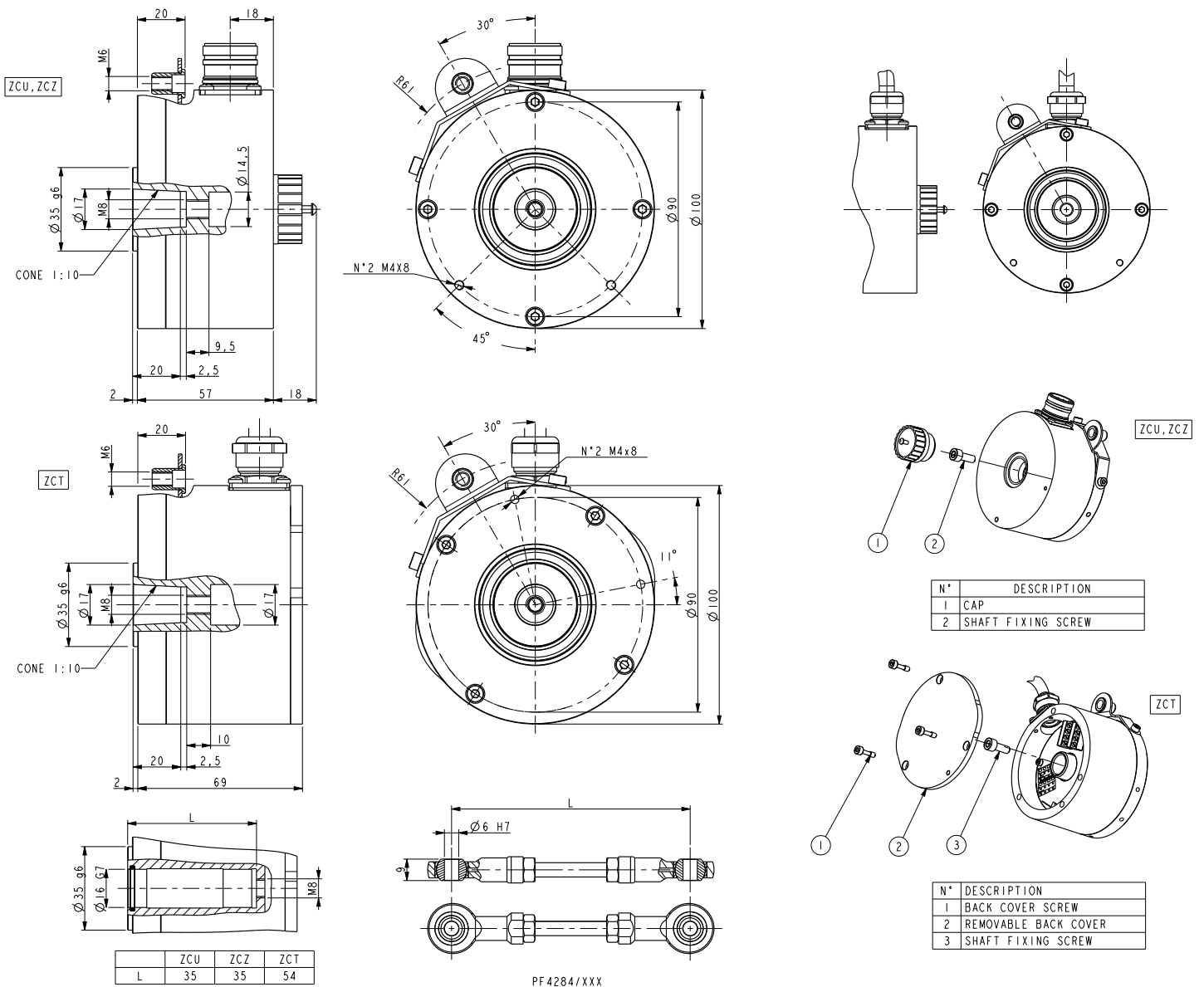
Resolution (PPR):	1024-2048-2500
Counting frequency:	100 kHz max.
Output circuits:	Power Push-Pull, Line Driver, Power Line Driver, Universal circuit
Power supply:	+5V ±5%, +10V +30V, +5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	100 mA max.
Protection:	against inversion of polarity 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, 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



C100

Order code

C100	-	X	-	XXXX	XXX	X	XXX	X	XX	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)

(a) OUTPUT CIRCUITS

L = Line Driver (RS422)  
 H = PP/LD universal circuit  
 K = Power Line Driver  
 T = Power Push Pull

(b) RESOLUTION (PPR)

1024, 2048, 2500

(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% (L, K output circuit)  
 2 = +10V÷ +30V (T output circuit)  
 4 = +5V÷ +30V (H output circuit)

(e) SHAFT DIAMETER

C17 = 17 mm tapered 1:10  
 16 = 16 mm

(f) OPERATING TEMPERATURE RANGE

- = -25°C +85°C (-13°F +185°F)  
 K = -40°C +100°C (-40°F +212°F)

(g) CABLE LENGTH (only with ZCU)

L1 = cable output 1 m  
 Lx = cable output x m

(h) CUSTOM VERSION