

ROTAPULS

Incremental encoder

Series

I116



- Double encoder with single housing design
- Heavy-duty construction for harsh environments
- Rotatable connections with screw terminals
- High shaft load
- Power output circuit for long distance transmissions
- Corrosion and salt mist resistant housing
- Two different resolutions or output circuits on request



I116

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP66
Operating temperature range:	-40°C + 100°C (-40°F + 212°F)
Storage temperature range:	-40°C + 100°C (-40°F + 212°F) (98% R.H. without condensation)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 11 mm
Shaft loading:	axial: 250 N radial: 350 N
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 1 Ncm (typical)
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Weight:	1,6 kg (56,4 oz)

ELECTRICAL SPECIFICATIONS

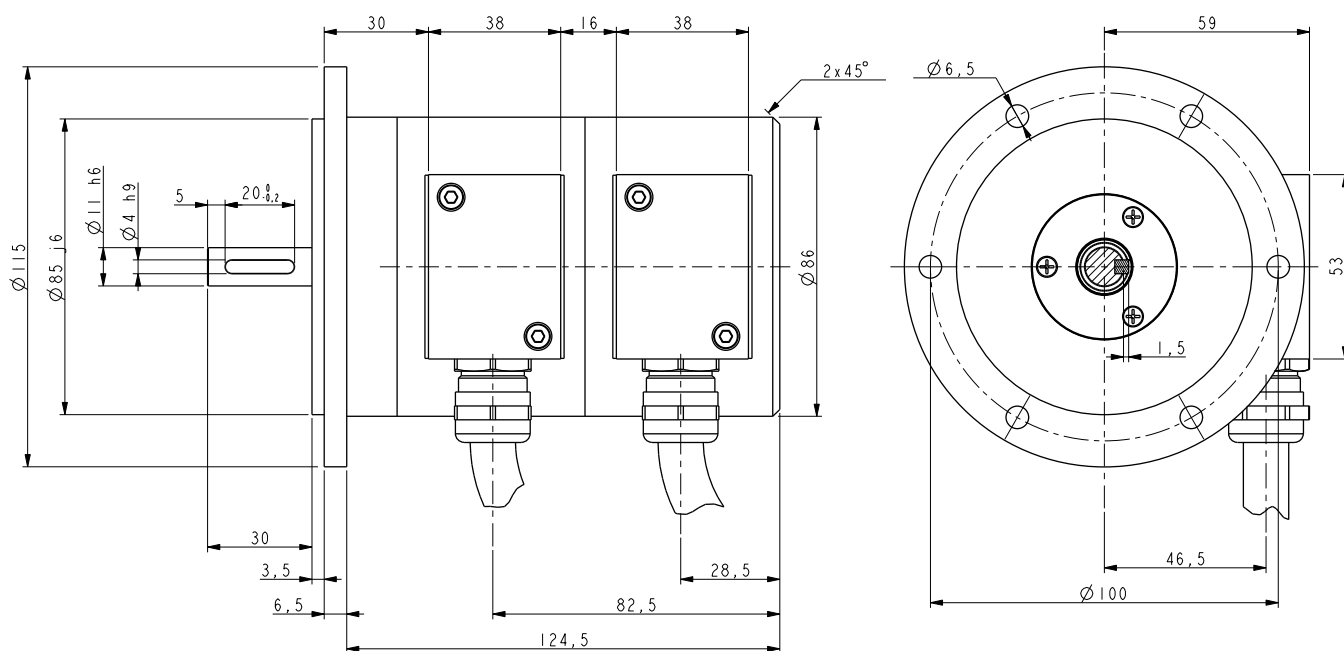
Resolution (PPR):	100-200-250-256-360-500-512-1000-1024-1250 1800-2000-2500
Counting frequency:	100 kHz max.
Output circuits:	NPN, Push-Pull, Line Driver, Universal circuit, Power Push-Pull
Power supply:	+5V ± 5%, +10V +30V, +5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, according to EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.
Connections:	via terminal box, cable Ø 4 ÷ 10 mm

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

MOL-32C-11K-11K:	flex. coupling with electric ins.
MST-32K-11-11:	stainless steel coupling
MDW-25C-11K-11K:	disk coupling



I116

Order code

I116	-	X a	-	XXXXX b	XXX c	X d	XX e	/Sxxx f
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a OUTPUT CIRCUITS

N = NPN o.c.

Y = Push-Pull

L = Line Driver (RS422)

H = PP/LD universal circuit

T = Power Push-Pull

b RESOLUTION (PPR)

See electrical specifications

c OUTPUT SIGNAL / CONNECTION

ZCT = AB0 /AB0, terminal blocks

d SUPPLY VOLTAGE

1 = +5V±5% (L output circuit)

2 = +10V÷ +30V (N, Y and T output circuits)

4 = +5V÷ +30V (H output circuit)

e SHAFT DIAMETER

11 = 11 mm

f CUSTOM VERSION