

ROTAPULS

Incremental encoder

Series

I28



- Miniature incremental encoder, Ø 28mm
- Robust metal housing
- Resolution up to 2048 pulses/rev.
- For office equipment, electromedical and light industrial applications



I28

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:	-25°C +85°C (-13°F +185°F) (98% R.H. without condensation)

MECHANICAL SPECIFICATIONS

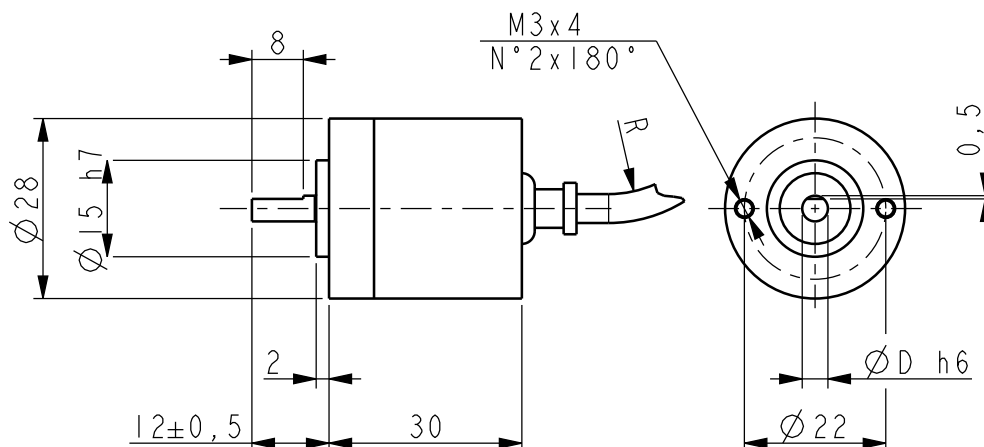
Dimensions:	see drawing
Shaft diameter:	Ø 4, 5 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	3000 rpm max.
Starting torque (at 20°C):	0,1 Ncm (typical)
Bearings life:	10 ⁹ rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 50 g (1,7 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	100-200-360-500-512-720-1000-1024-1440-2000-2048
Counting frequency:	30 ÷ 100 kHz max.
Output circuits:	Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V,+5V +30V
Consumption:	50 mA max.
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.

MATERIALS

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



128

Order code

128	-	X (a)	-	XXXX (b)	XXX (c)	X (d)	X (e)	XX (f)	/Sxxx (g)
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(a) OUTPUT CIRCUITS

Y = Push Pull
L = Line Driver (RS422)
H = PP/LD Universal circuit

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS

BNF = AB
BCU = AB, /AB
ZNF = ABO
ZCU = ABO, /ABO

(d) SUPPLY VOLTAGE

1 = +5V±5% (L output circuit)
2 = +10V÷ +30V (Y output circuit)
4 = +5V÷+30V (H output circuit)

(e) SHAFT DIAMETER

4 = 4 mm
5 = 5 mm

(f) CABLE LENGTH

- = cable output 1 m (standard)
L2 = cable output 2 m
Lx = cable output x m

(g) CUSTOM VERSION