

# ROTAPULS

Incremental encoders

series

128



128

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
Operating temperature range:	-20°C +70°C (-4°F +158°F)
Storage temperature range:	-20°C +80°C (-4°F +176°F) (98% R.H.without condensation)
Protection:	IP54

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft:	Ø 4, 5 mm
Shaft loading (axial and radial):	20 N max.
Shaft rotational speed:	3000 rpm max.
Starting torque at 20°C:	≤ 0,3 Ncm (typical)
Moment of inertia:	~10 gcm <sup>2</sup>
Bearings life:	10 <sup>9</sup> rev. min.
Weight:	~ 0,1 kg (3,5 oz)

## ELECTRICAL SPECIFICATIONS

STD pulse rate (other PPR upon request):	100-200-250-360-500-1024
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	30 kHz max.
Input current:	50 mA max.
Protection:	against inversion of polarity (except +5V version)
Optoelectronic life:	100.000 hrs min.
Option:	• Output frequency up to 100 kHz max.

## MATERIALS

Flange:	non corroding
Housing:	non corroding
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic
Light source:	GaAl diodes

## ELECTRICAL CONNECTIONS

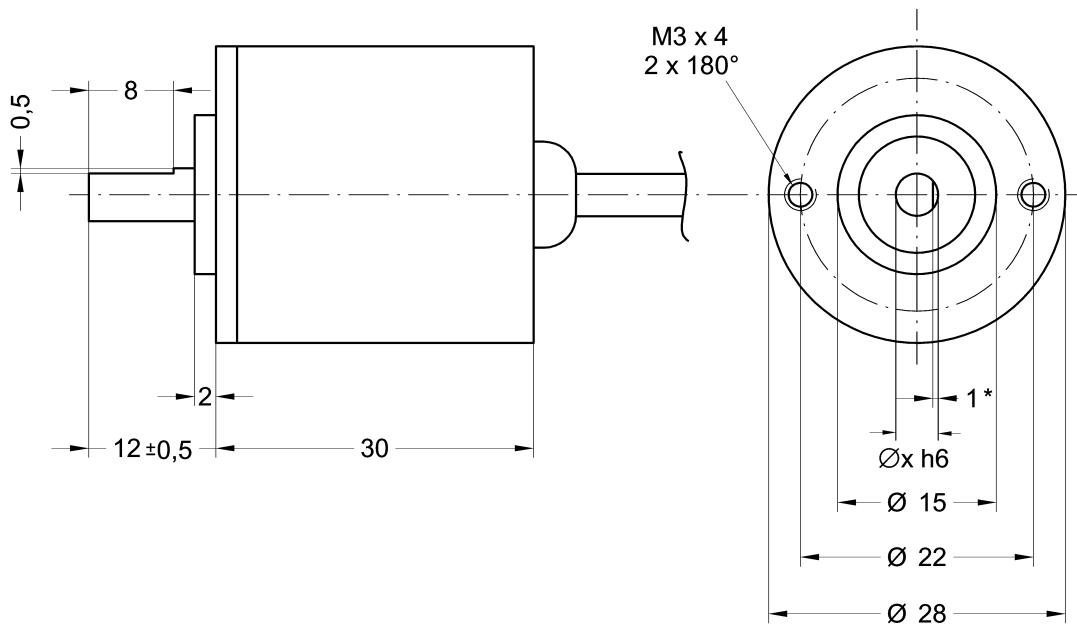
### 8 wires cable

red-black	A
blue	/A
green	B
orange	/B
white	0
white-black	/0
red	+Vdc
black	0 Vdc

## ACCESSORIES

PAN/PGF:	flexible couplings
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Specifications subject to changes without prior notice



128

ORDERING CODE

ADDITIONAL CODE (indicate only if necessary)

XXXX - X - XXXX		X	X	X	X	X	X	X	
SERIES		OUTPUT CIRCUITS	ELECTRICAL CONNECTIONS				SHAFT DIAMETER		ADDITIONAL CODE
128			N Normal output	F 5 wires cable, 1m (3.3 ft)	4 4 mm	5 5 mm	Cable length on request Lx Ex.: L4 = 4 meters (13.2 ft) L7 = 7 meters (23.0 ft)		
OUTPUT CIRCUITS		C Complementary outputs	U 8 wires cable, 1m (3.3 ft)						
PULSE RATE (PPR)		SUPPLY VOLTAGE VS OUTPUT CIRCUIT							
See electrical specifications		B Bidirectional	+5V±5% (L output circuit)	1					
		Z Bidirectional with index pulse	+10V± +30V (Y output circuit)	2					
			+5V±+30V (PP/LD universal circuit)	4				V Output frequency up to 100 kHz	