

- Miniature encoder with magnetic sensing, Ø 28mm
- Robust metal housing
- Resolution up to 20000 PPR (factory programmable)
- For office equipment, electromedical and light industrial applications



IM28

ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
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

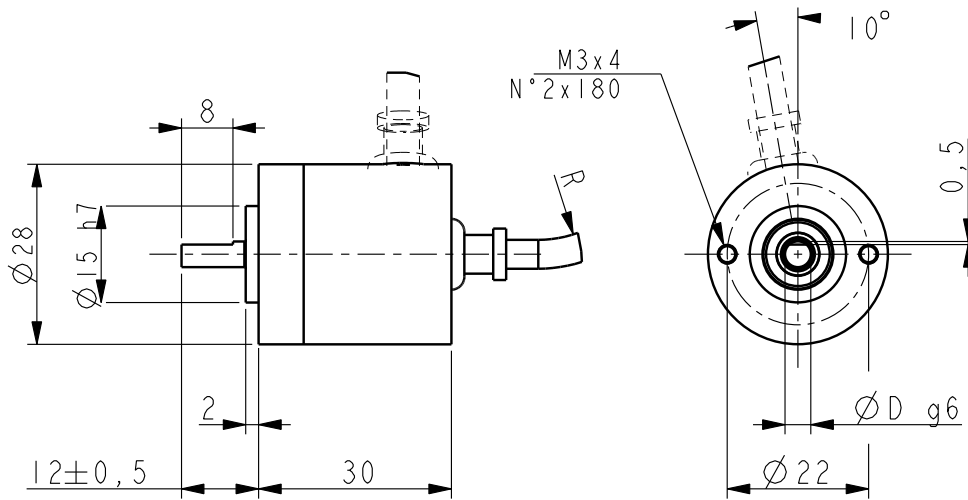
Dimensions:	see drawing
Shaft diameter:	Ø 4,5 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	3000 rpm max.
Starting torque (at 20°C):	0,1 Ncm (typical)
Bearings life:	10 ⁹ rev. min.
Electrical connections:	M12 8 pin inline plug or cable output 1 m (3.3 ft)
Weight:	~ 50 g (1,7 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	50-100-200-250-256-360-500-512-720-1000-1024-1440 2000-2048-2500-4096-5000-10000
Counting frequency:	800 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
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4

MATERIALS

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



IM28

IM28	-	XX (a)	-	XXXXX (b)	-	XXX (c)	-	XX (d)	-	X (e)	X (f)	-	X (g)	XXXX (h)	/Sxxx (i)
------	---	-----------	---	--------------	---	------------	---	-----------	---	----------	----------	---	----------	-------------	--------------

(a) OUTPUT CIRCUITS / POWER SUPPLY

Y2 = Push Pull, +10V ÷ +30V
 L1 = Line Driver (RS422), +5V ± 5%
 H4 = PP/LD Universal circuit, +5V ÷ +30V

(b) RESOLUTION (PPR)

See electrical specifications

(c) OUTPUT SIGNALS

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

(d) SHAFT DIAMETER

O4 = 4 mm
 O5 = 5 mm

(e) PROTECTION

V = IP54

(f) OPERATING TEMPERATURE

T = -25°C + 85°C (-13°F + 185°F)

(g) CONNECTION POSITION

A = axial
 R = radial

(h) CABLE TYPE & LENGTH

L010 = cable output 1 m (standard)
 L020 = cable output 2 m
 Lxx0 = cable output x m (max. length 10 m)
 M005 = 0,5 m cable + M12 8 pin inline plug
 M020 = 2 m cable + M12 8 pin inline plug

(i) CUSTOM VERSION

Document release	Date	Description
1.0	27.02.2025	First issue