

- 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:	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

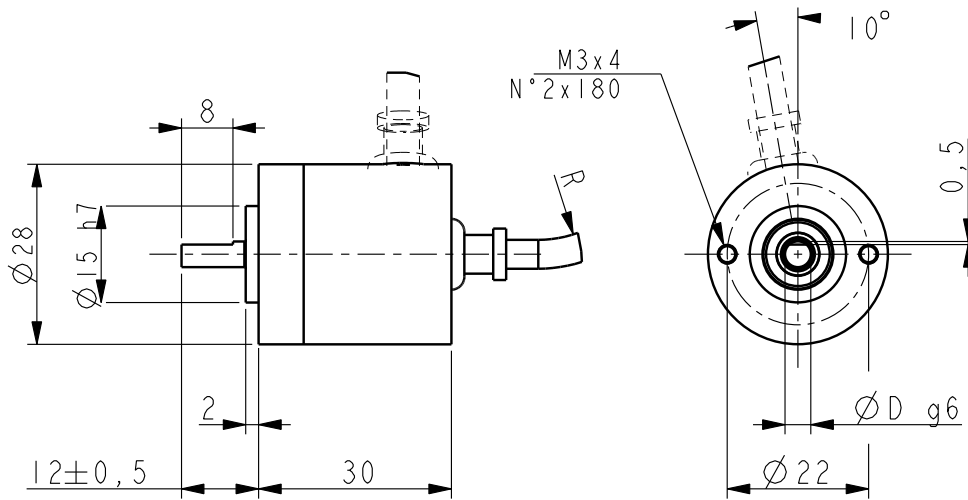
Dimensions:	see drawing
Shaft diameter:	Ø 4, 5 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	3000 rpm max.
Starting torque (at 20°C):	0,1 Ncm (typical)
Bearings life:	10 <sup>9</sup> rev. min.
Electrical connections:	cable output 1 m (3.3 ft)
Weight:	~ 50 g (1,7 oz)
Option:	<ul style="list-style-type: none"> <li>• additional cable</li> <li>• M12 plug</li> </ul>

#### ELECTRICAL SPECIFICATIONS

Resolution (PPR):	250-256-360-500-512-720-1000-1024-1440-2000-2048
Counting frequency:	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
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



128

I28	-	XX	-	XXXXX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
		(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)

<p><b>(a) OUTPUT CIRCUITS / POWER SUPPLY</b>                  Y2 = Push Pull, +10V ÷ +30V                  L1 = Line Driver (RS422), +5V ± 5%                  H4 = PP/LD Universal circuit, +5V ÷ +30V                  L2 = Line Driver (RS422), +10Vdc +30Vdc</p>	<p><b>(c) OUTPUT SIGNALS</b>                  BNF = AB                  BCU = AB, /AB                  ZNF = AB0                  ZCU = AB0, /AB0</p>	<p><b>(e) PROTECTION</b>                  V = IP54</p>	<p><b>(h) CABLE TYPE &amp; LENGTH</b>                  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</p>
<p><b>(b) RESOLUTION (PPR)</b>                  See electrical specifications</p>	<p><b>(d) SHAFT DIAMETER</b>                  04 = 4 mm                  05 = 5 mm</p>	<p><b>(f) OPERATING TEMPERATURE</b>                  T = -25°C +85°C (-13°F +185°F)</p>	<p><b>(g) CONNECTION POSITION</b>                  A = axial (standard)                  R = radial</p>
			<p><b>(i) CUSTOM VERSION</b></p>

Document release	Date	Description
1.0	October 2023	New order code