

Serie ENA 24



Locked Bearing



High rotational speed



Temperature



Shock/vibration resistant



Short-circuit proof



Reverse polarity protection

Rugged

- Ensures long service life and reliability of the application, no wear
Non-contact measuring system
- Can be used for a wide temperature range without additional expense.
Wide temperature range (-20 ... +85 °C)
- Robust cable outlet
High strain-relief thanks to multiple clamping



Compact

- Can be used where space is tight
Overall diameter of only 36 mm
Shaft diameter min. 4 mm

Versatile

- High resolution 12 Bit
4096 different positions at 360 °
- Wide power supply range
5 V DC or 8 ... 30 V DC
- Flexible connection of power supply
Radial or axial cable connection

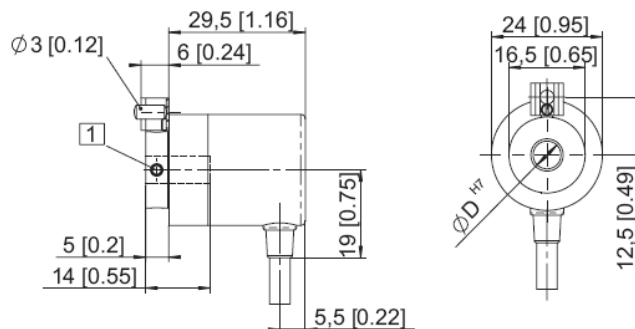
Mechanical characteristics:

Speed:	max. 12000 min ⁻¹
Rotor moment of inertia:	approx. 0,1 x 10 ⁻⁶ kgm ²
Starting torque:	< 0.001 Nm
Weight:	approx. 0.06 kg
Protection acc. to EN 60 529:	IP 64 housing side
Working temperature:	-20° C ... +85 °C ²⁾
Operating temperature:	-20° C ... +90 °C ²⁾
Shaft:	stainless steel
Shock resistance acc. to DIN-IEC 68-2-27:	1000 m/s ² , 6 ms
Vibration resistance acc. to DIN-IEC 68-2-6:	100 m/s ² , 55 ... 2000 Hz

²⁾ Non-condensing

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Dimensions



1 4 x M3 DIN 915 - SW15

Mounting advice:

The brackets and shafts of the encoder and drive should not both be rigidly coupled together at the same time! We recommend the use of suitable couplings (see Accessories section).

Electrical characteristics SSI Interface:

Sensor:

Supply voltage:	5 ($\pm 0,4$) V DC or 8 ... 30 V DC ¹⁾
Current consumption (w/o output load):	< 40 mA
Reverse polarity protection at power supply (Ub):	Yes
Measuring range:	360°
Resolution/Code:	12 Bit/Grey
Data refresh rate:	typ 100 μ s

SSI interface

Clock speed:	100 kHz ... 750 kHz
Output driver:	RS 485
Monoflop time typ./max.:	16 μ s/20 μ s
Short circuit proof outputs:	Yes ²⁾
Permissible load/channel	typ. 120 Ohm (corresponding RS 485)

1) The supply voltage at the encoder input must not be less than 4.75 V (5 V - 5%)

2) Short circuit to 0V or to output, only one channel at a time, supply voltage correctly applied

General characteristics:

Conforms to CE requirements acc. to EN 61000-6-1, EN 61000-6-4, EN 61000-6-3 and EN 61000-4-8 (behaviour under magnetic influence).

Terminal assignment:

Sig.:	0V	+Ub	0 V Sens	+Ub Sens	+T	-T	+D	-D
Col.:	WH	BN	BU	RD	GN	YE	GY	PK

Order code:

ENA24.1XXX.G121^{*)}

Range

Bracket

1 = $\varnothing$ 24 mm

Blind hollow shaft (in depth max. 14 mm)

1 = $\varnothing$ 4 mm

2 = $\varnothing$ 6 mm

^{*)} The product will be available as of the 1st quarter 2008

Gray Code 12 Bit resolution

Type of connection

- 1 = cable axial (2 m PVC cable $\varnothing$ 4,5 mm)
- 2 = cable radial (2 m PVC- cable $\varnothing$ 4,5 mm)

Output circuit / Power supply

- 1 = SSI/5 V DC
- 2 = SSI/8 ... 30 V DC