

Type 2REXI-A

- EX-Proof Shaft Encoder - \varnothing 68 mm
- Shaft : \varnothing 8 mm to \varnothing 16 mm
- Resolution up to 10,000 ppr
- IP 66 (IP 67 option)
- Ex Certificates

Electrical Specifications

Code:	Incremental
Resolution:	1 to 10,000 ppr (pulses per revolution)
Supply Voltage:	4.5 Vdc min. to 30 Vdc max. (45 mA max. - no load) **
Output Voltage:	Low: 500 mV max. at 10 mA High: ($V_{in} - 0.6$) at -10 mA ($V_{in} - 1.3$) at -25 mA
Output Current:	30 mA max. load per output channel **
Frequency Response:	300 kHz max. **
Output Format:	Two channel (A, B) quadrature with rotation detector puls (Reed contact)
Phase Sense:	A leads B clockwise (CW) from the mounting end of the encoder
Index:	rotation detector puls (Reed contact)
Accuracy:	+/- 0.8 arc-min.
Outputs:	ASIC Push-pull and Differential OL7272 Differential Line Driver 26C31 Differential Line Driver 5V output (with 5V input)
Electrical Protection:	Output short circuit protected Reverse polarity protected (ASIC only)
Noise Immunity:	Tested to EN61000-6-2 : 2005 (industrial environments) Electromagnetic compatibility (EMC) and EN 61000-6-3 : 2007 (residential, commercial, and light-industrial environments) for Electromagnetic compatibility (EMC)

Mechanical Specifications

Material:	Housing: Aluminum Cap: Aluminum Shaft: AISI 303
Weight:	Encoder: Approx. 1325 gr (47.44 oz) Cable: 50 gr / meter (1.76 oz / meter)
Bearing Life:	> 1.9×10^{10} revolutions at rated load
Shaft Speed:	3,000 rpm continuous (max.) IP 66
Starting Torque:	< 0.1 Nm (14.16 oz-in) at 25° C IP 67
Mass Moment of Inertia:	30 gcm ² (4.25×10^{-4} oz-in-sec ²)
Shaft Loads:	Axial 50 N (11.25 lbs) max. Radial 100 N (22.50 lbs) max.

Environmental Specifications

Operating Temp.:	-40° to +70° C
Storage Temp.:	-40° to +85° C
Shock:	100 G / 11 ms
Vibration:	10-2000 Hz / 10 G
Bump:	10 G / 16 ms (1000 x 3 axis)
Humidity:	98 % RH without condensation
Enclosure Rating:	IP 66 / Nema 6 (approx.) IP 67 / Nema 6 (approx.) option

Connection Options

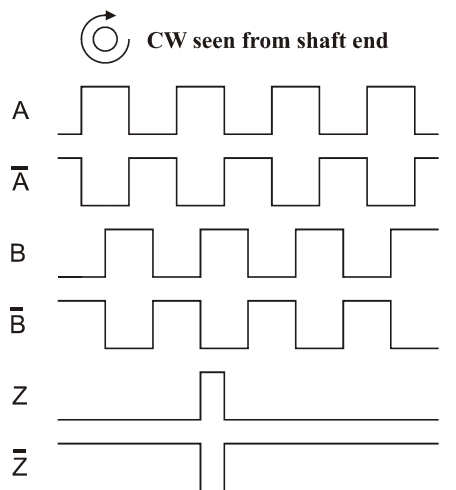
Cable:	8 leads (0.14 mm ² , 26 AWG) twisted pairs; shielded; halogen free
Cable Glands:	6-position terminal block (inside cap) 1/1 NPT ANSI B1.20.1

**= It is recommended user not to combine max. Value for all 3 parameters

Certifications

ATEX:	Certificate No.: TÜV 10 ATEX 556306X II 2 GD Ex db IIB T5 Gb and Ex tb IIIB T100 °C Dn IP 6x -40C ≤ Tamb ≤ +70C
IECEX:	Certificate No.: IECEX TUN 10.0011X Ex db IIB T5 Ex tb IIIB T100 °C Db, IP65 -40C ≤ Tamb ≤ +70C
EAC Ex:	Certificate No.: RU No. 0249626 НАННО «ІСВЭ» No.TC RU C-DK.ГБ05.В.00974 1Ex d IIB T5 Gb X Ex tb IIIB T100°C Db X -40°C<T.amb<+70°C

Output waveform



Channel tolerance $180^\circ \pm 36^\circ$
 Phase difference tolerance $90^\circ \pm 18^\circ$
 Z channel tolerance $90^\circ \pm 18^\circ$

Disk Resolutions (pluses per revolution)

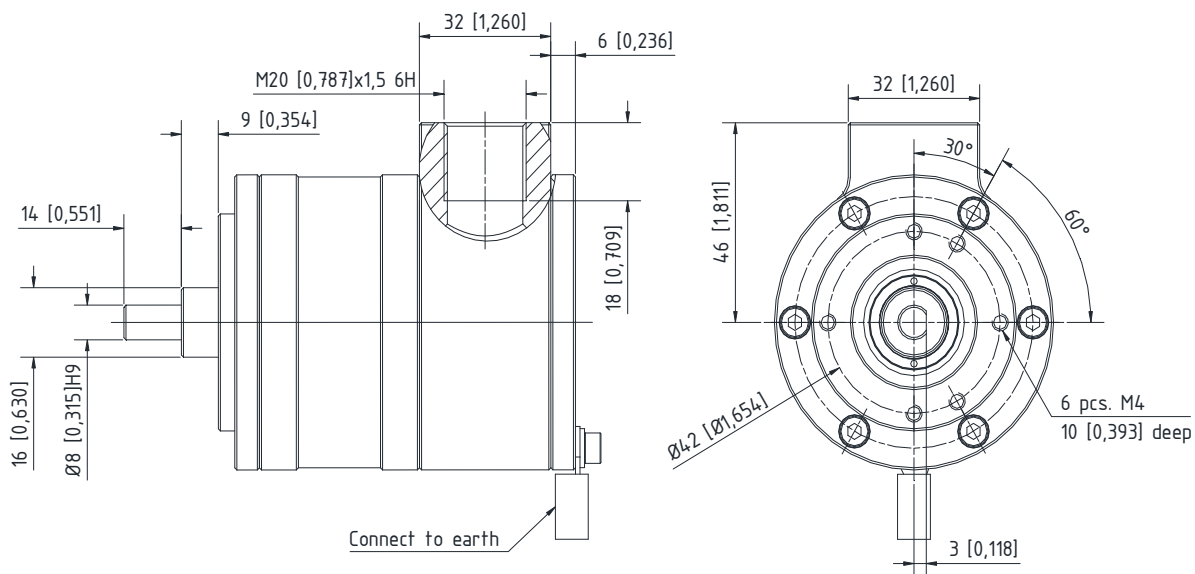
1	32	125	720	3000
2	36	150	800	3072
5	40	180	1000	3600
6	45	200	1000	4000
7	47	250	1024	4096
8	50	256	1131	5000
10	60	300	1200	8192
12	64	360	1250	9000*
15	70	400	1270	10000*
16	75	455	1500	
18	80	500	2000	
20	90	512	2048	
25	100	600	2400	
30	120	635	2500	

Other options on request

Pulses per revolution,
 min. 1 – max. 10.000







* Operating temperature: -20°C to 50°C

Mechanical Dimensions



Output Terminations

Connection clamps on PCB

	1 VDD
	2 Channel A
	3 Channel B
	4 GND
	5 REED 1
	6 REED 2

