



2REX-A-AN with cable

- Shaft Encoder - Ø 68 mm
- Shaft: Ø 10 mm
- Current Output 0 – 20mA or 4 – 20mA
- Singelturn
- Non-removable end cap – delivered with cable
- ATEX, IECEX, EAC Ex certified

Electrical Specifications

Encoder Type:	Absolute Magnetic
Resolution:	2 ¹⁰ (1024) points per revolution
Supply Voltage:	12 Vdc min. to 18 Vdc max. or 20 Vdc min. to 28 Vdc max.
Typical Current Consumption:	40 mA @ 20mA output current
Output Current:	0 – 20 mA or 4 – 20 mA
Accuracy:	+/- 0,2% of full scale
Output Format:	Full range output over one revolution (360°) or over one half revolution (180°)
Current Sense Resistor:	Max. 400Ω – recommended 250Ω
Output Update Rate:	2610 updates/sec. ~ 383μsec. per update
Electrical Protection:	Reverse polarity and output short circuit protected
Noise Immunity:	EN61000-6-2: 2005 (industrial environments) Electromagnetic compatibility (EMC) EN 61000-6-3: 2007 (residential, commercial, and light-industrial environments) for Electromagnetic compatibility (EMC)

Mechanical Specifications

Material:	Housing: Aluminum Cap: Aluminum Shaft: Stainless Steel (AISI 303 or 316)
Weight:	Encoder: Approx. 540 gr (19 oz) Cable: 50 gr / meter (1.76 oz / meter)
Bearing Life:	> 1.9 x 10 ¹⁰ revolutions at rated load
Shaft Speed:	3,000 rpm continuous (max.) IP 67 T4
Starting Torque:	< 0.1 Nm (14.16 oz-in) at 25° C IP 67
Mass Moment of Inertia:	50 gcm ² (7.08 x 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 64 / Nema 6 (approx.) option IP 65 / Nema 4 (approx.) option IP 66 / Nema 6 (approx.) IP 67 / Nema 6 (approx.) option

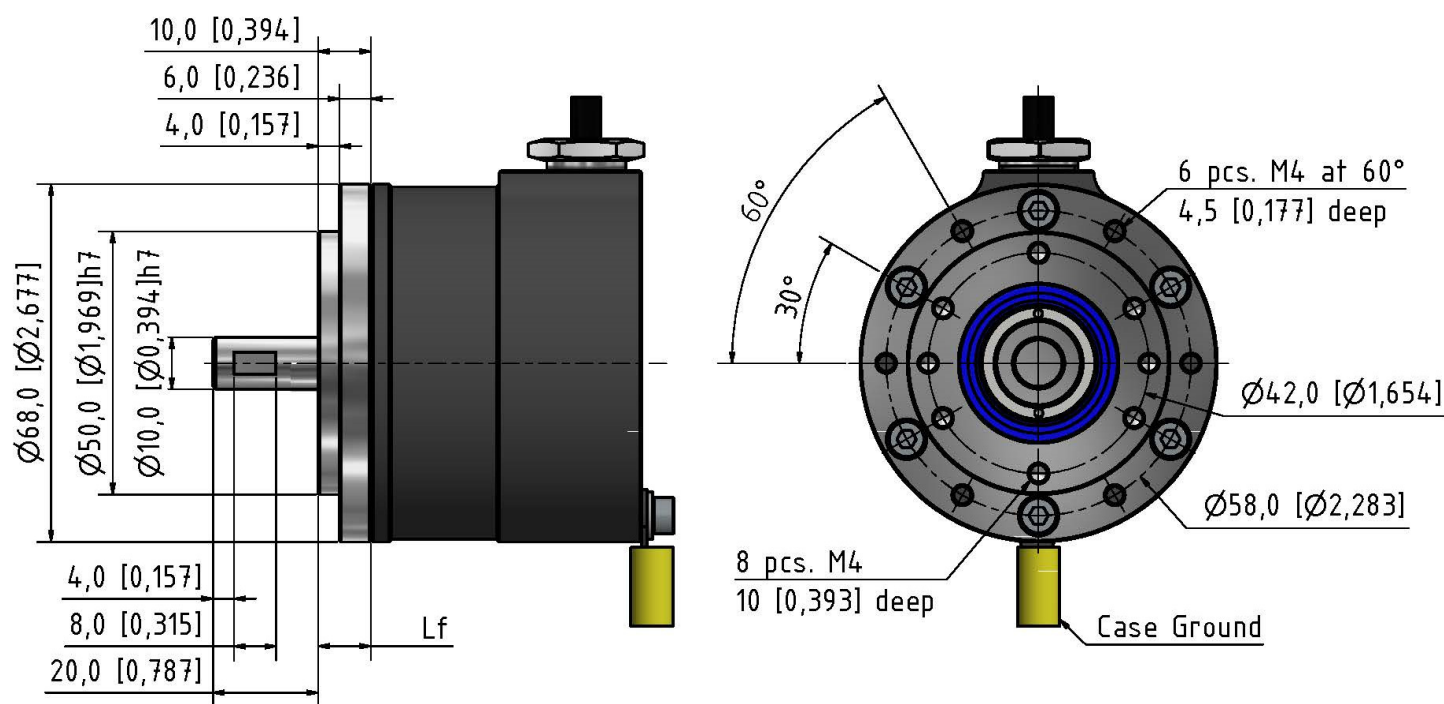
Connection Options

Cable:	MUD resistant (NEK 606) & halogen free, shielded 4x2x0,14 mm ² , 26 AWG, 4 twisted pairs; See Table 1
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Certifications

ATEX:	Certificate No.: ITS 09 ATEX 16847X II 2 G Ex db IIC T5 II 2 D Ex tb IIIC T100°C Db -40°C<Tamb<+70°C
IECEX:	Certificate No.: IECEX ITS 10.0015X Ex db IIC T5 Gb Ex tb IIIC T100°C Db -40°C < Tamb < +70°C
EAC Ex:	НАННО «ЦСВЭ» No. EAЭС RU C-DK.AA87.B.00266/19 1Ex db IIC T5 Gb X, Ex tb IIIC T100°C Db X, -40°C<T.amb<+70°C

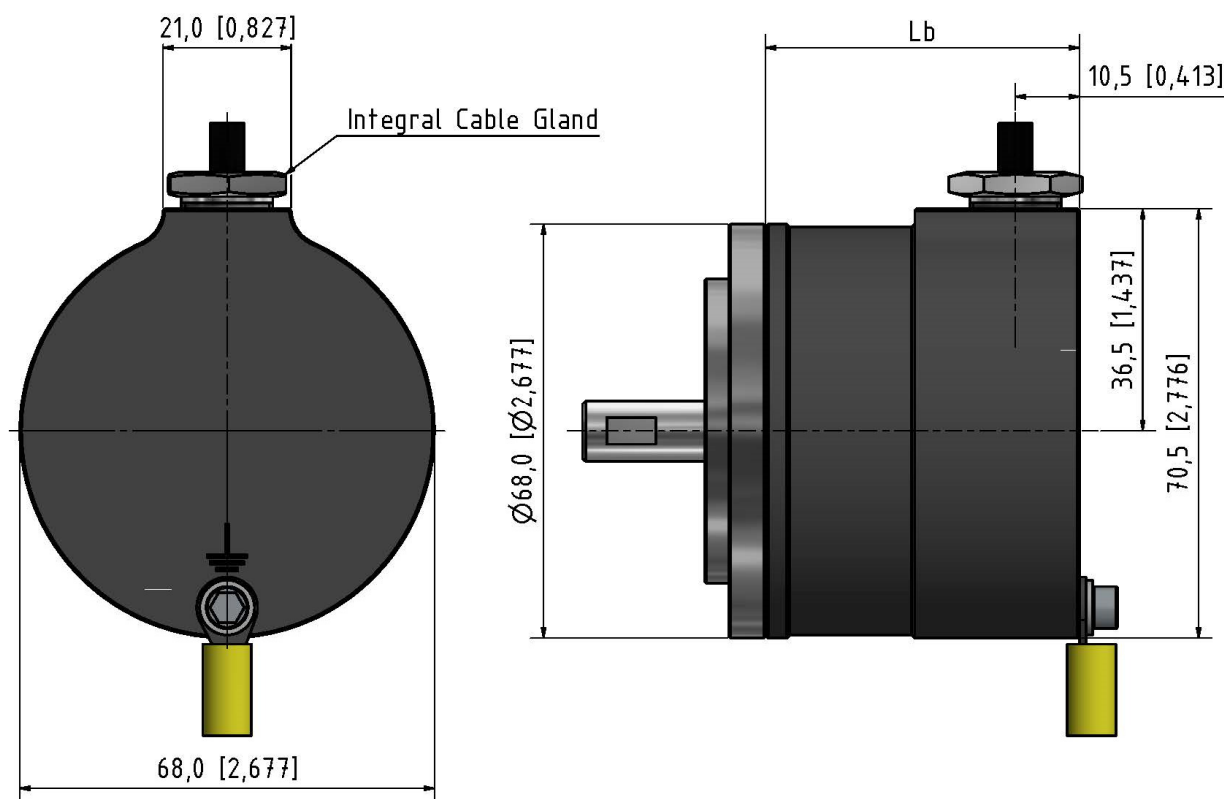
Face mount



Face Mount A

mm (inches)

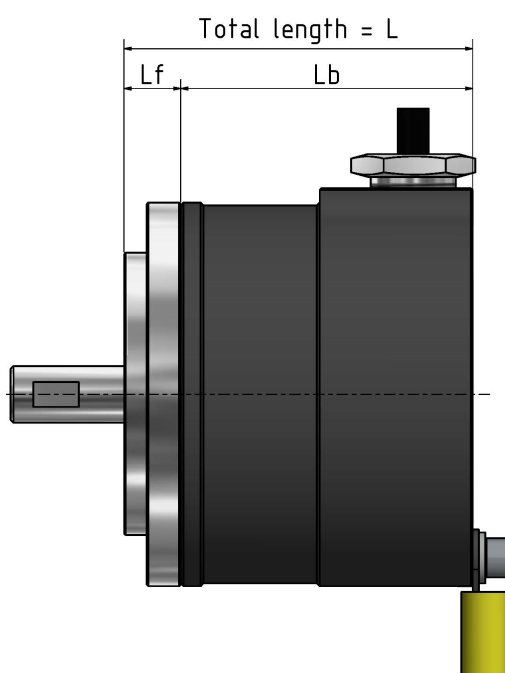
Cap with Cable



Side Standard Cable Gland Cap (SS)

mm (inches)

Encoder Length



$$\text{Total Encoder Length } L = L_b + L_f$$

Cap	Face mount A
SS	61,5 mm (2,42 in)

Cap + Face Mount = Total Encoder Length

Table 1. Cable Output

Cable Connections	
Wire Color	Signal
Pink	Iout
Gray	NC
Green	NC
Yellow	NC
White	NC
Brown	NC
Red	Vsup
Blue	GND

Note: Ends of Unused Cores (N/C) are insulated by heat-shrink tubing acc. to EN 60079-14:2014, Section 16.2.2.5.3

Iout = Current Output

Vsup= Positive Supply Voltage

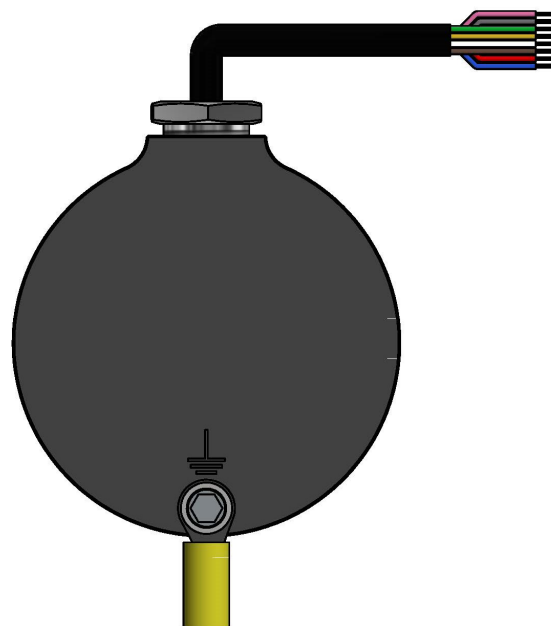
GND = Circuit Ground

Shield connected to Case Ground

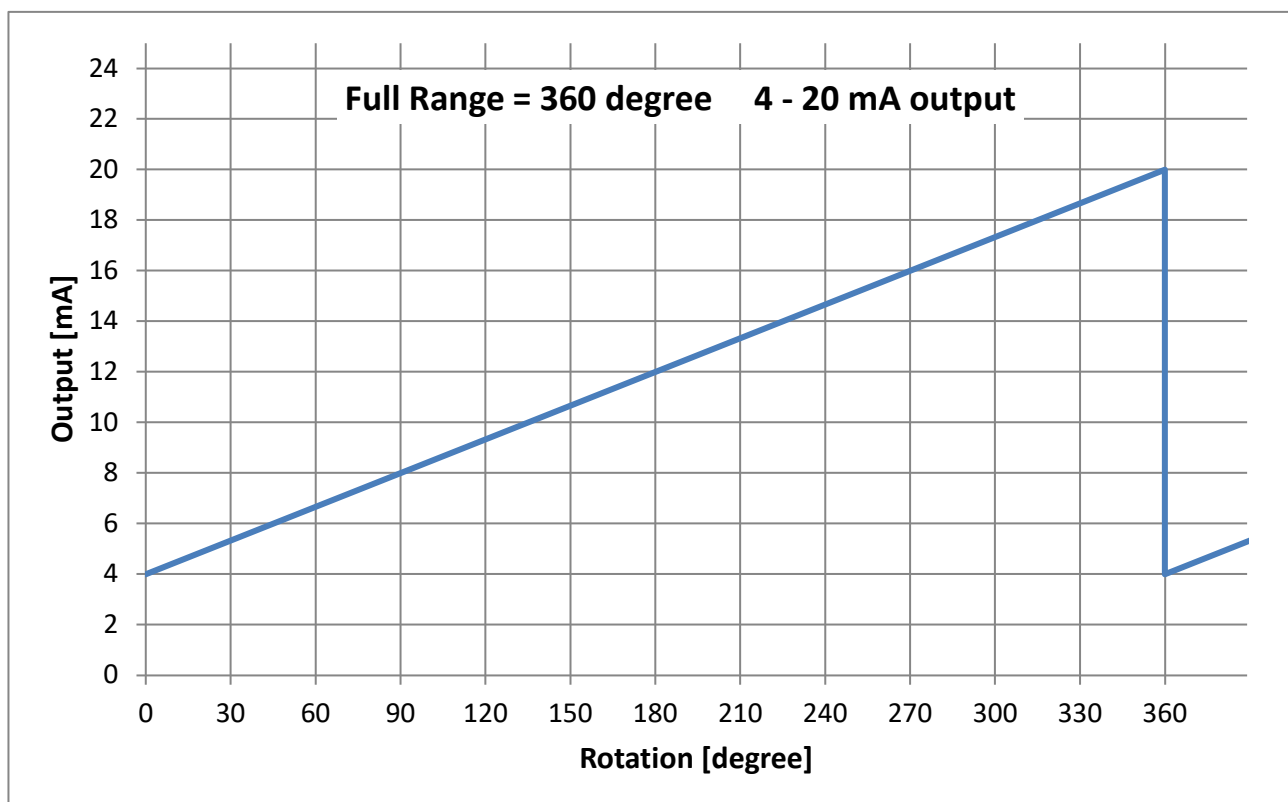
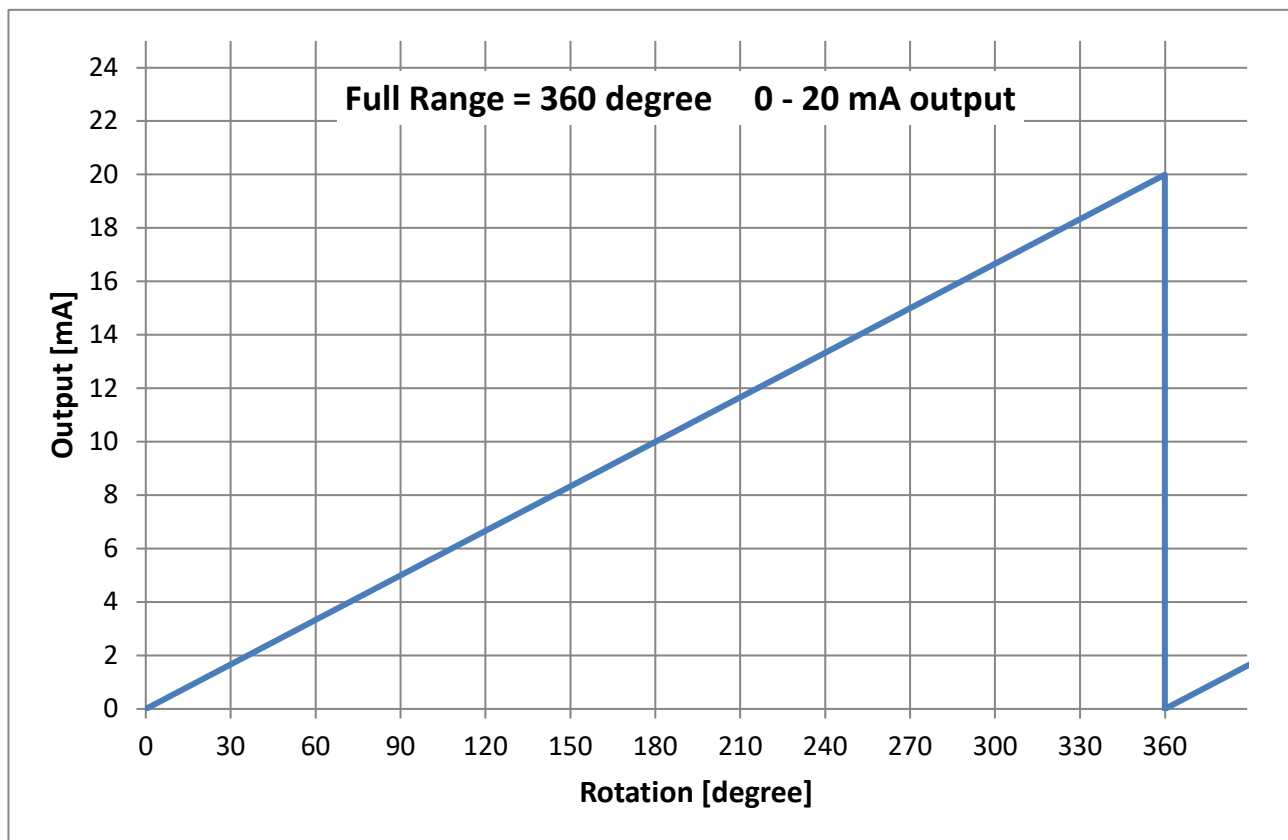
Cable: MUD resistant (NEK 606) & halogen free, shielded

4x2x0,14 mm², 26 AWG, 4 twisted pairs;

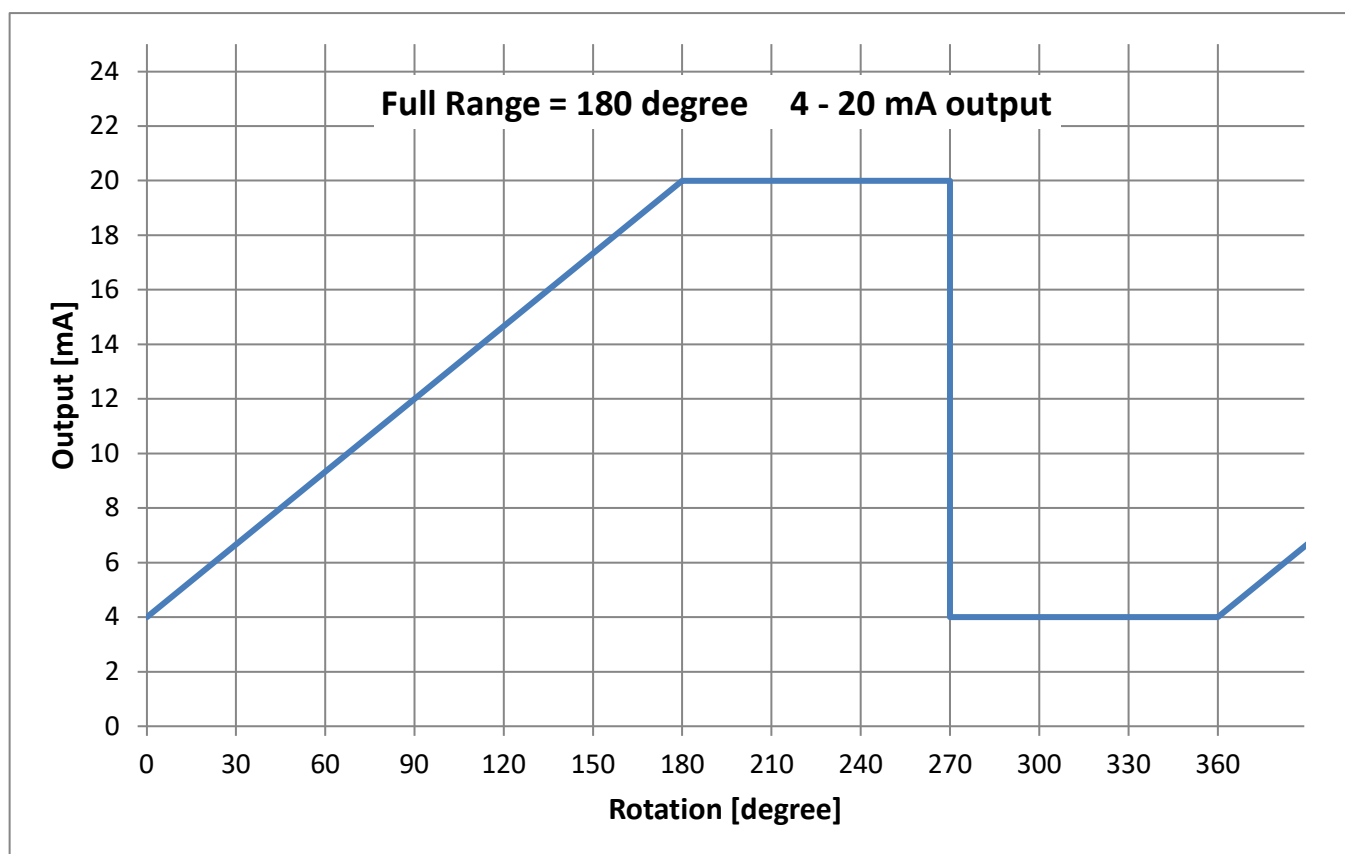
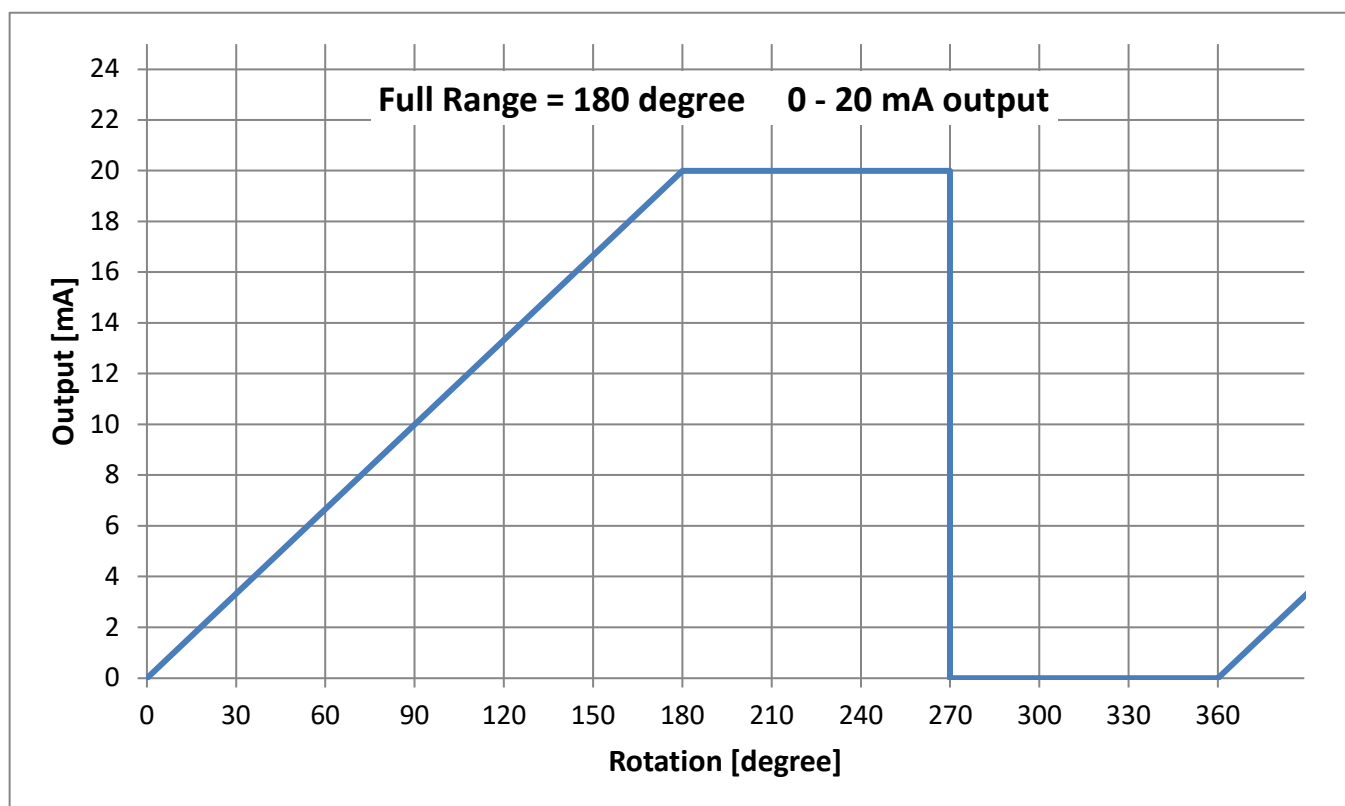
Yellow cable shoe: AWG 12-10



Output Wave forms



Output Wave forms



Ordering Code

Example: 2REX-A – AN180 – AL – C4 – 10 – 20 – 67 – 01 – SS – A – 00

2REX-A - - - - - - - - - - -

1 2 3 4 5 6 7 8 9 10

1. Pulse per revolution

Full range over 36..... **AN360**
 Full range over 180°..... **AN180**

2. Material

Aluminium..... **Al**

3. Output

Current 0 – 20mA..... **C0**
 Current 4 – 20mA..... **C4**

4 & 5. Shaft diameter

10 mm x 20 mm

4.

10

x

5.

20

6. IP Rating

IP 64..... **64**
 IP 65..... **65**
 IP 66..... **66**
 IP 67..... **67**

7. Cable Length

Standard cable is 1m..... **01**
 Specify length..... **XX**

8. Cable Takeout

Side (Standard)..... **SS**

9. Flange

Flange A **A**

10. Accessory

No accessory..... **00**