

Type SCA24AV



- Absolute Shaft Encoder - Ø 24 mm
- Voltage Output 0 – 5V or 0 – 10V
- Full Range Output over one Revolution or one half Revolution
- Enclosure Rating IP 64

Electrical Specifications

Encoder Type:	Absolute Magnetic Singleturn
Resolution:	2 ¹⁰ (1024) points per revolution
Supply Voltage:	15 Vdc min. to 30 Vdc max.
Typical Current Consumption:	25 mA
Output Voltage:	0 – 5 V or 0 – 10 V
Accuracy:	+/- 0,3% of full scale *)
Output Format:	Full range output over one revolution (360°) or over one half revolution (180°)
Output Update Rate:	2610 updates/sec. ~ 383µsec. per update
Electrical Protection:	Reverse polarity and output short circuit protected
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: Brass Cap: Electroplated Steel Shaft: Brass
Weight:	Encoder: ~ 50 gr (1,76 oz) Cable: 50 gr / meter (1,76 oz / meter)
Bearing Life:	> 1,9 x 10 ¹⁰ revolutions at rated load
Shaft Speed:	12.000 rpm (max.)
Starting Torque:	< 0,005 Nm (0,708 oz-in) at 25° C
Mass Moment of Inertia:	1,46 gcm ² (2,07 x 10 ⁻⁵ oz-in-sec ²)
Shaft Loads:	Axial: 20 N (4,5 lbs) max. Radial: 20 N (4,5 lbs) max.

Environmental Specifications

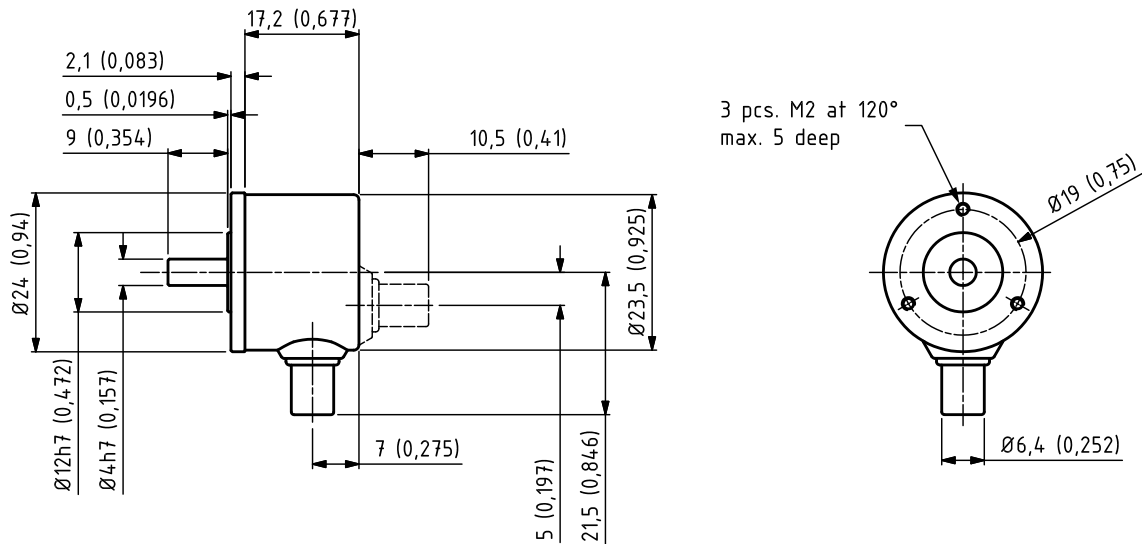
Operating Temp.:	-40° to +85° C
Storage Temp.:	-40° to +85° C
Shock:	100 G / 11 ms
Vibration:	10-2000 Hz / 10 G
Bump:	10 G / 16 ms (1000 x 3 axis)
Humidity:	98 % RH without condensation
Enclosure Rating:	IP 64 / Nema 4 (approx.)

Connection Options

Cable:	4 leads (0,14 mm ² , 26 AWG) - Standard twisted pairs; shielded
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*) Load impedance should be 75 kΩ or higher for best accuracy.

Mechanical Dimensions



Standard Cable Gland
 Side (S) or Back (B)

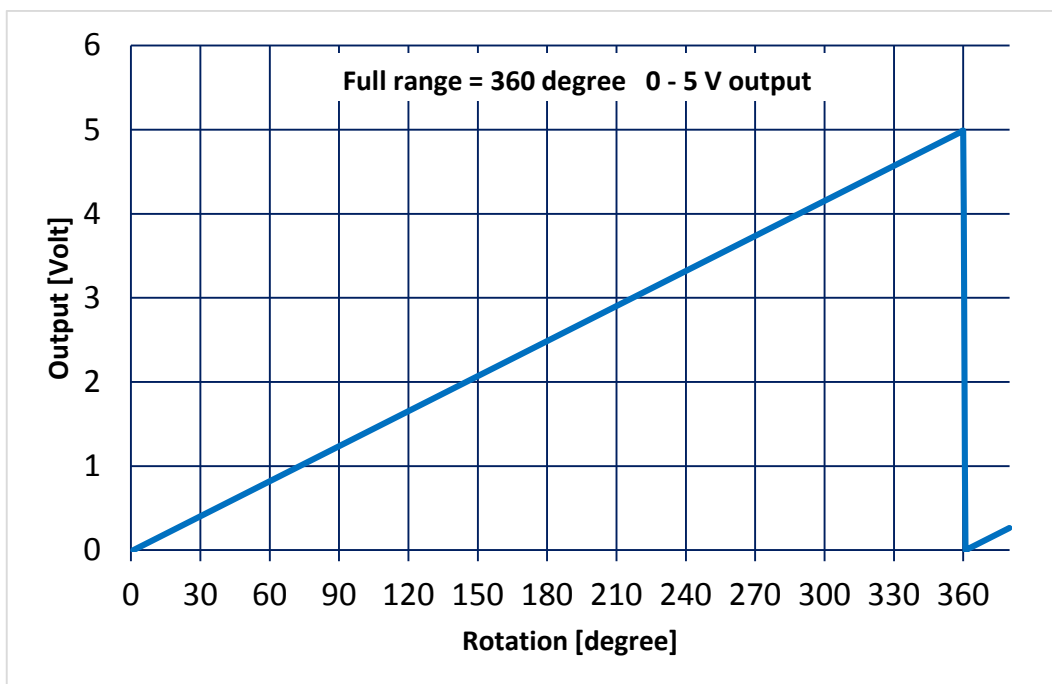
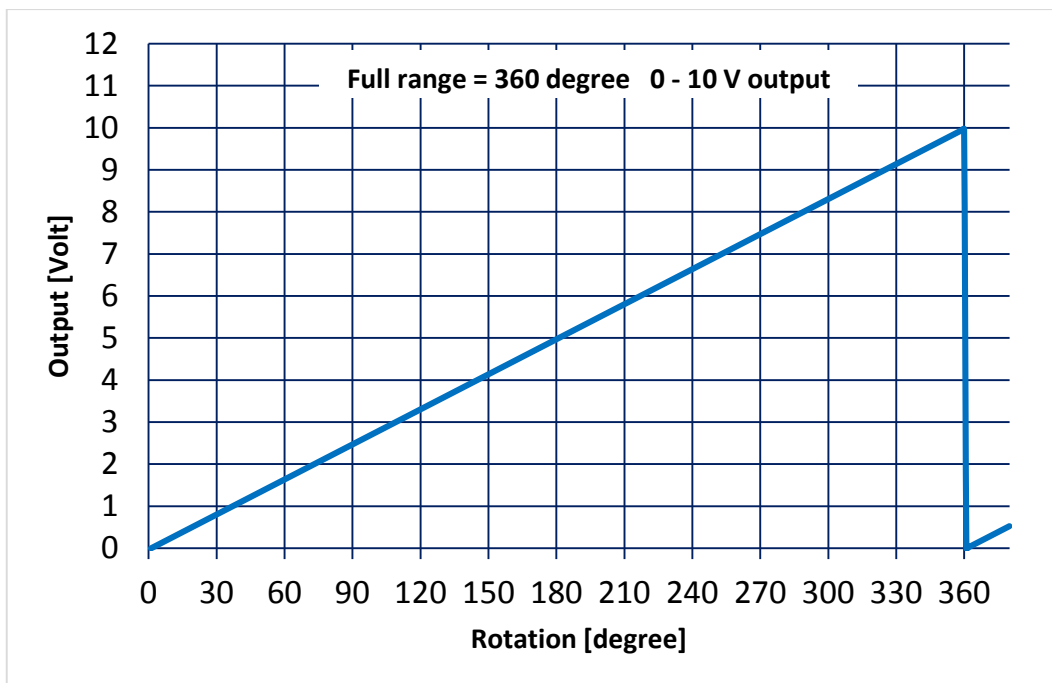
mm (inches)

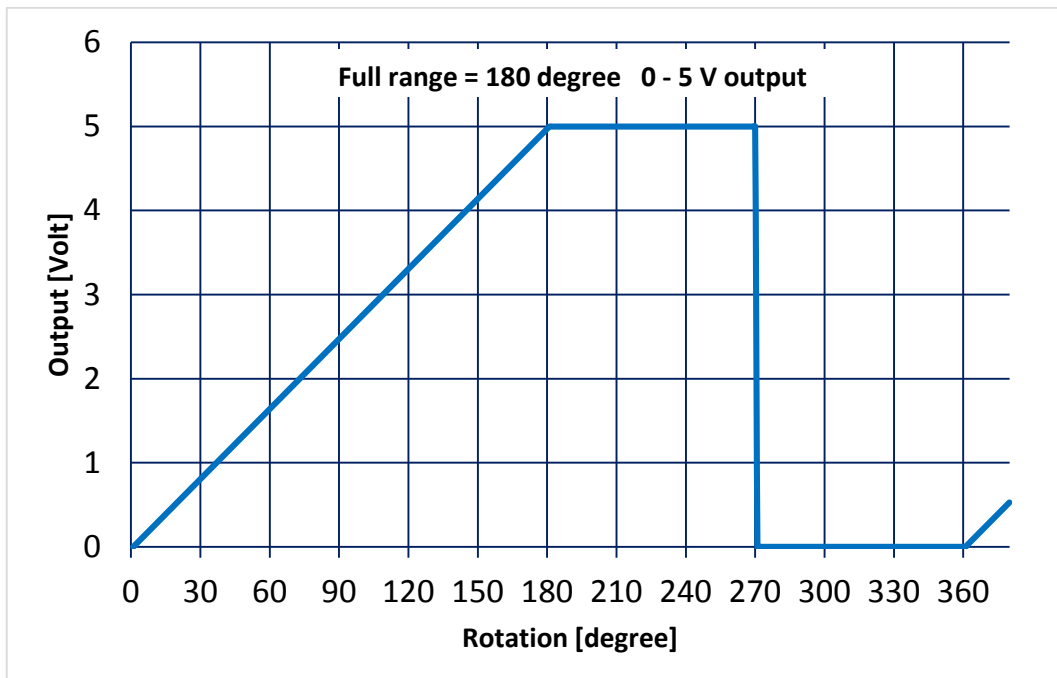
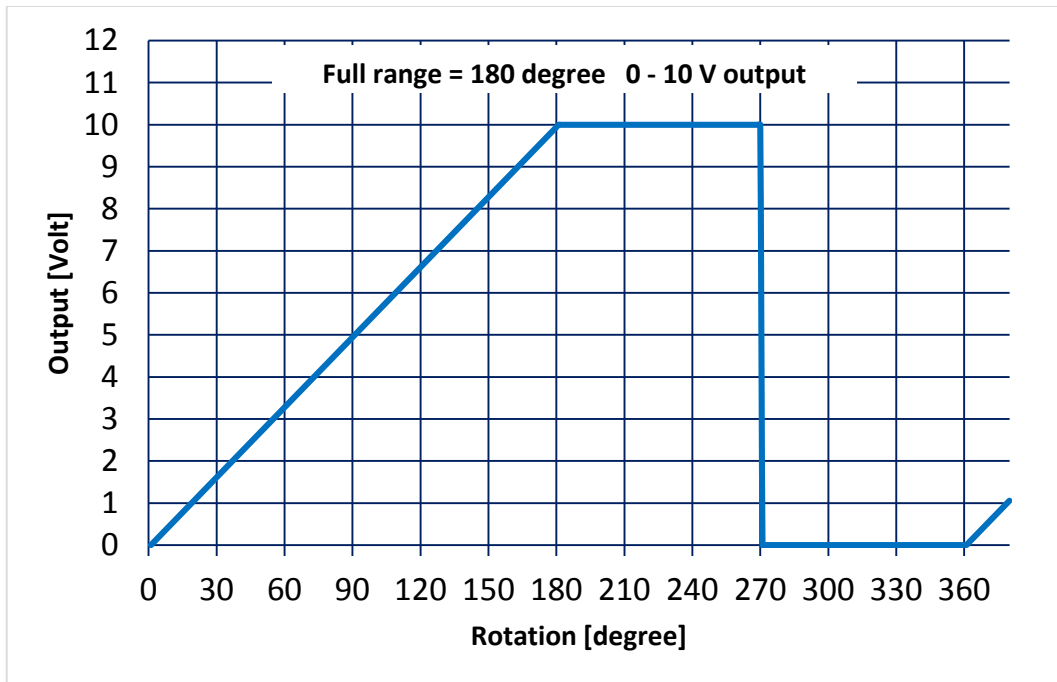
Output Terminations

Cable Connections		
Cable Colour	Name	Function
Red	Vsup	Positive Supply Voltage
Green	Vout	Voltage Output
Black	GND	Circuit Ground – Voltage Reference
White	Not Used *)	---

*) Can be left unconnected or cut off

Output Waveforms





Ordering Code

Example: SCA24AV – 360 – V05 – 04 – 09 – 64 – 01 – S

Type

