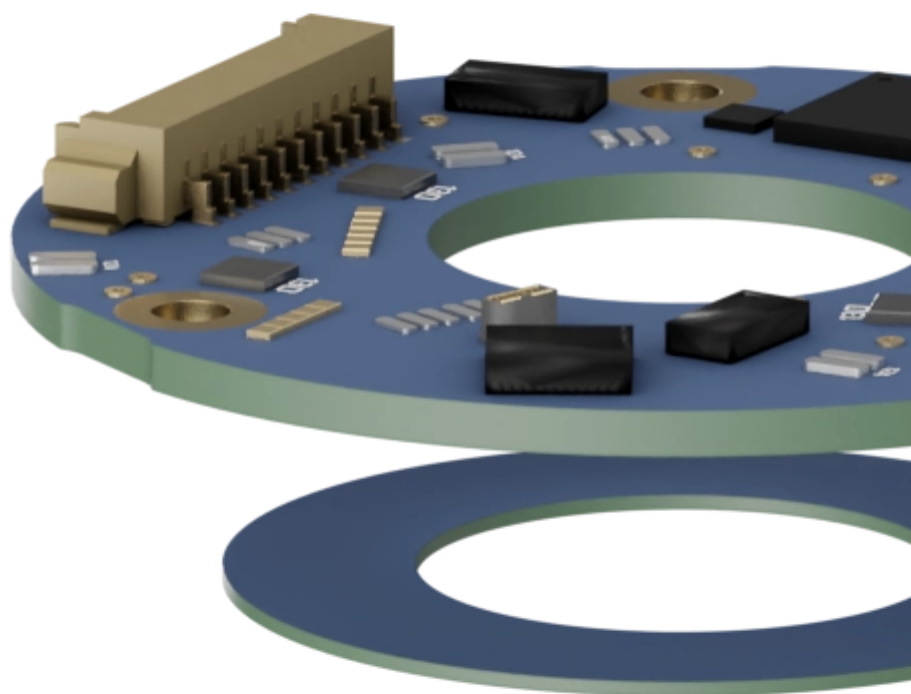


variables/V-color

**Encoder | INDUCTIVE Rotary | IND-ROT-
045-A21-FR**





System Data

IND-ROT-045-A21-FR

Type	Axial, frameless, true absolute INDUCTIVE encoder
Standard Resolution	19 bits, 131'072ppr 524'288cpr
ENOB in entire mounting tolerance range	18 bits
High Accuracy	$\pm 0.025^\circ$, $\pm 450\mu\text{rad}$
Standard Accuracy	$\pm 0.040^\circ$, $\pm 700\mu\text{rad}$
Thickness	7.80
Hysteresis	none
Repeatability	1 resolution count
Position update rate and signal latency	Real-time
Power-up Time	max. 0.8 sec



Electrical Data

Supply voltage OptionAV:min.4.35Vdc.max.36Vdc

Reverse polarity protection	yes
Current Consumption	max.100mA@ 5Vdc, max. 30mA@24Vdc



Mechanical Data

Stator Base Material FR4 (PCB)

Stator Weight 5.50 g

Rotor Base Material Carrier : anodized aluminum Bonded scale: FR4

Rotor Weight 5.50 g

Vibration EN 60068-2-6, 20 g, 55 .. 2000 Hz

Shock EN 60068-2-27, 200 g, 6 ms



Mounting Tolerances

Nominal Axial (air-gap) 0.50 mm

Axial Tolerance 0.30 mm (0.20 mm to 0.80 mm)

Radial Tolerances 0.30 mm



Environmental Data

Temperature Range - Standard Operating -20°C .. +85°C

Temperature Range - Standard Storage -20°C .. +85°C

Temperature Range - Extended Operating -40°C .. +105°C

Temperature Range - Extended Storage -55°C .. +125°C

Ingress Protection

IP00

EMC Immunity

complies with EN IEC 61000-6-2

EMC Emission

complies with EN IEC 61000-6-4



Advantages



Benefits

- Plug-n-play
- No field calibration required
- Wide mounting tolerances
- High accuracy
- Low installation cost
- Low integration effort
- Easy installation



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