

variables/V-color

Encoder | GMI® Angle | GMI-ANG-096

image of Encoder GMI-ANG-096

Hysteresis-free performance and accuracy in arcseconds for even the most demanding applications.



System Data

GMI-ANG-096

Type	Axial, frameless, true absolute Giant Magneto Impedance encoder GMITechnology-FLUX GmbH proprietary
Standard Resolution	23 bits
ENOB in entire mounting tolerance range	21 bits
High Accuracy	$\pm 8''$, 0.002° , $\pm 40\mu\text{rad}$
Standard Accuracy	$\pm 14''$, 0.004° , $\pm 70\mu\text{rad}$
Thickness	10.80
Hysteresis	none
Repeatability	1 resolution count
Position update rate and signal latency	Real-time
Power-up Time	max. 0.8 sec



Electrical Data

OptionAV:min.4.35Vdc.max.36Vdc

Supply voltage Option5V:min.4.35Vdc.max.6Vdc

Option24V:min.6Vdc.Max.30Vdc

Reverse polarity protection yes

Current Consumption max. 150 mA @ 25 Vdc, max. 140 mA @ 24 Vdc



Mechanical Data

Stator Base Material Stainless steel CTE ~ 10 ppm/°C

Stator Weight 220.00 g

Rotor Base Material 0

Rotor Weight 115.00 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) 0.30 mm

Axial Tolerance 0.25 mm

Radial Tolerances 0.20 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

IP67

EMC Immunity

complies with EN IEC 61000-6-2

EMC Emission

complies with EN IEC 61000-6-4



Advantages

- Plug-n-play
- No field calibration required
- Wide mounting tolerances
- High accuracy



Benefits

- Low installation cost
- Low integration effort
- Easy installation



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