

RE5032 SERIE



For Hybrids, Motors and Nuclear application

- ➔ Compact and small
- ➔ max. speed 65'000 RPM
- ➔ max. temperature up to 200°C
- ➔ Brushless Resolver
- ➔ Available in different model

Product description

The MICRONOR RE5032 frameless Resolver provides high performance in measurement and feedback applications where traditional resolver fail. Perfect for Aerospace, Space, Submarine or other severe applications. The solid rotor has no coils and the stator has only half the number of windings of a traditional brushless resolver, reliability is significantly increased. Solid rotor allows operation with the rotor oil or other liquids.

Application

Applications are Industrial tachometer, High-speed spindles, Motor feedback, for AC and DC Servo Motors, Angle measurement, Flight control systems, Hydraulic pumps, Down hole.

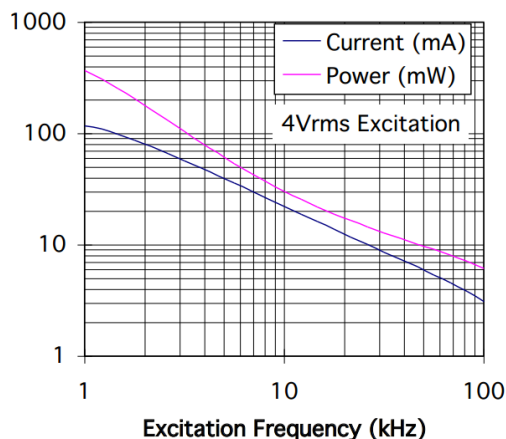
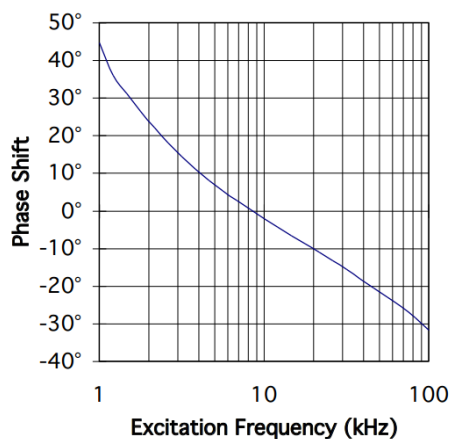
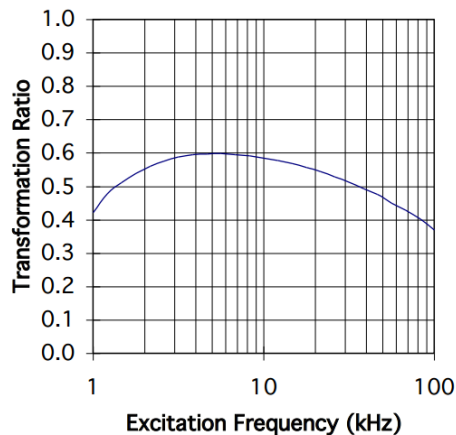
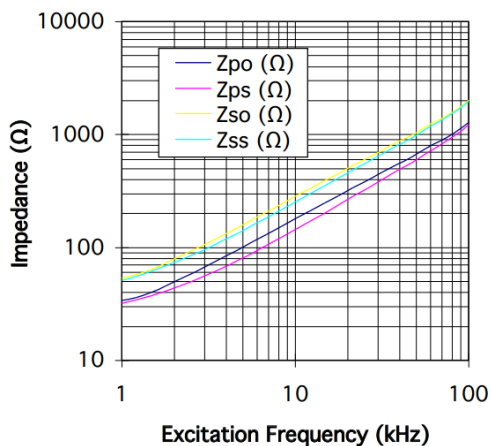
Technical Data

Max. dimension		ø 50 mm
Accuracy		+/- 60 arc minutes
Bore diameter (mm)		ø 20-H7
Cable outlet		axial 300 mm
Lead wire size		26 AWG
	Electrical data	
Excitation frequency		8 kHz typical
Excitation amplitude		5 Vrms typical
Primary DC resistance		20 Ohm (+/- 10%)
Secondary DC resistance		27 Ohm (+/- 10%)
Transformation ratio		0,45 (+/- 10%)
Insulation resistance		100 Mega Ohm minimum
Dielectric strength		(Hipot)
winding to winding		300 Vac
winding to housing		500 Vac
	Mechanical data	
Operating temperature		(see order code)
Maximum speed		(see order code)
Radial air gap		0,3 mm nominal
Rotor inertia		200 gxcm ²
Shock resistance		20G
Vibration		10....50Hz, 10G over 0.5 Std.

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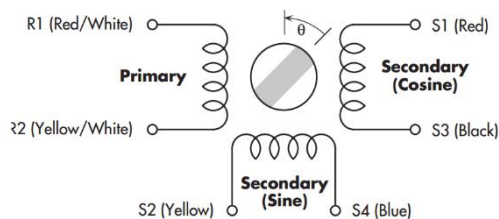


Electrical Outline drawing (only for info not absolute value)



Electrical connection

Ref+	red/white	R1
Ref-	yel/white	R2
Cos+	red	S1
Cos-	black	S3
Sin+	yellow	S2
Sin-	blue	S4



$$V_{(S1-S3)} = V_{(R1-R2)} \times TR \times \cos(\theta)$$

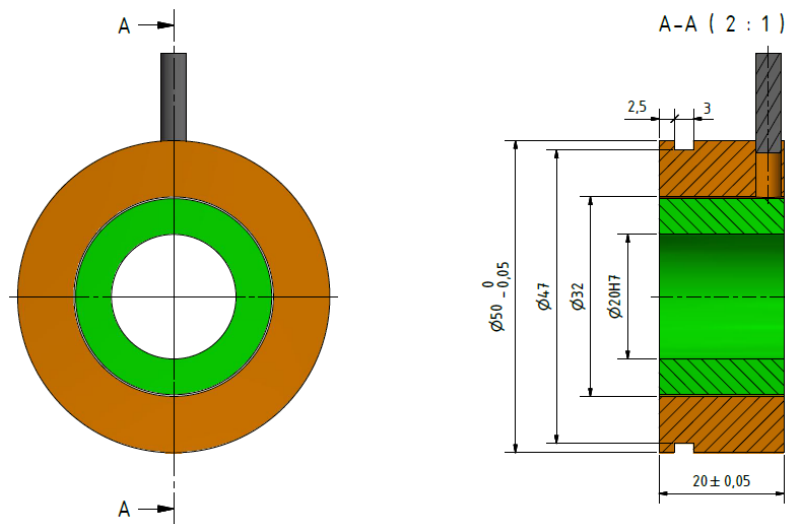
$$V_{(S2-S4)} = V_{(R1-R2)} \times TR \times \sin(\theta)$$

θ increases for CCW rotation when viewed from lead exit end

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Reference drawing in mm



Order Code

Order Key

8 2 0 0 . 0 2 . 2 0 0
a b

Configuration

a	Temperature	
	1 Standard	-40°C bis +135°C
	2 High temperature	-70°C bis +200°C
b	Speed	
	1 Standard	60'000 U/min
	2 High Speed	65'000 U/min