

RE3620 SERIE



for Hybrids, Motors and Nuclear application

- ➡ Compact and small
- ➡ max. speed 95'000 RPM
- ➡ max. temperature up to 200°C
- ➡ Brushless Resolver
- ➡ Available in different models

Product description

The MICRONOR RE3620 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 specifications

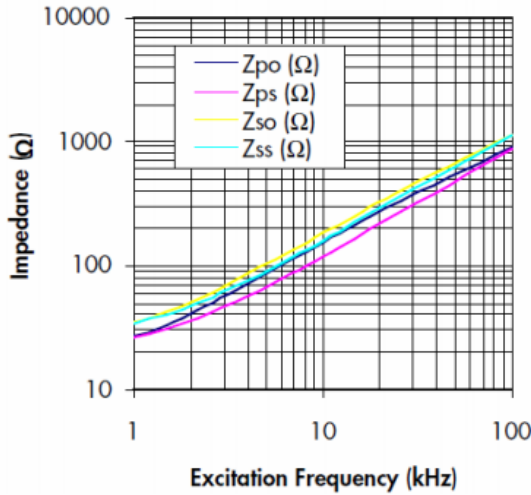
<p>Max. dimension Accuracy Bore diameter Cable outlet Lead wire size</p>	<p>ø 36 mm +/- 60 arc minutes ø 10-H7 axial 300 mm 26 AWG</p>
Electrical data	
<p>Excitation frequency Excitation amplitude Primary DC resistance Secondary DC resistance Transformation ratio Insulation Resistance Dielectric Strength winding to winding winding to housing</p>	<p>8 kHz typical 5 Vrms typical 13 Ohm (+/- 10%) 20 Ohm (+/- 10%) 0,5 (+/- 10%) 100 Mega Ohm minimum (Hipot) 300 Vac 500 Vac</p>
Mechanical data	
<p>Operating temperature</p>	<p>(see order code)</p>
<p>Maximum speed Radial air gap Rotor inertia Weight Shock resistance Vibration</p>	<p>(see order code) 0,3 mm nominal 40 gxc² 30 g 20G 10....50Hz, 10G over 0.5 Std.</p>

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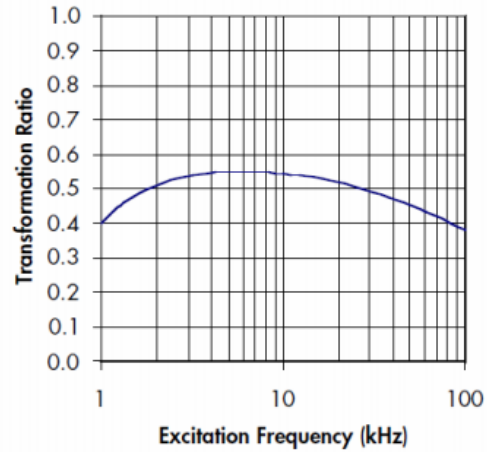


Electrical Outline drawing (only for info not absolute value)

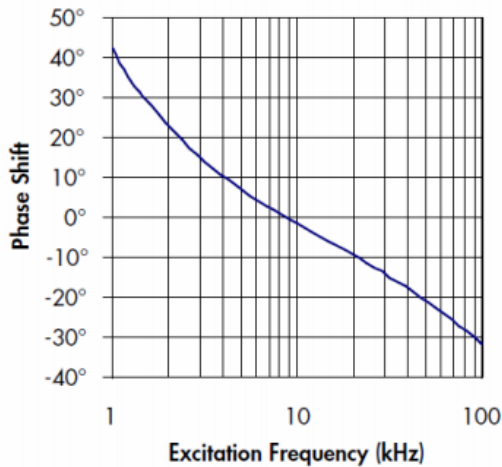
IMPEDANCES



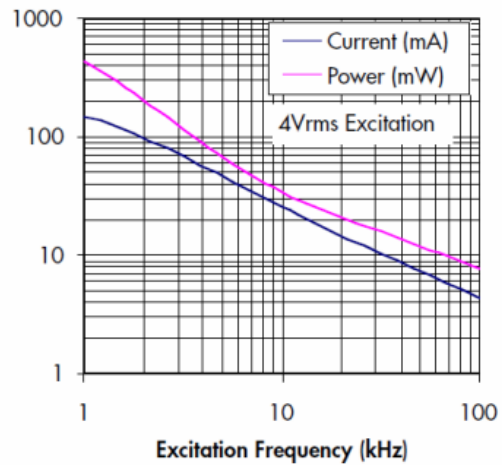
TRANSFORMATION RATIO



PHASE SHIFT

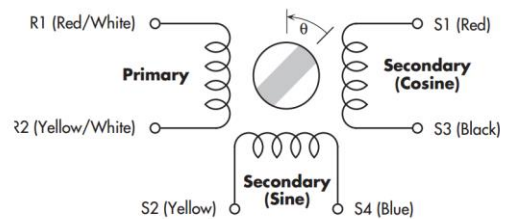


INPUT CURRENT AND Power



Electrical Connection

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



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

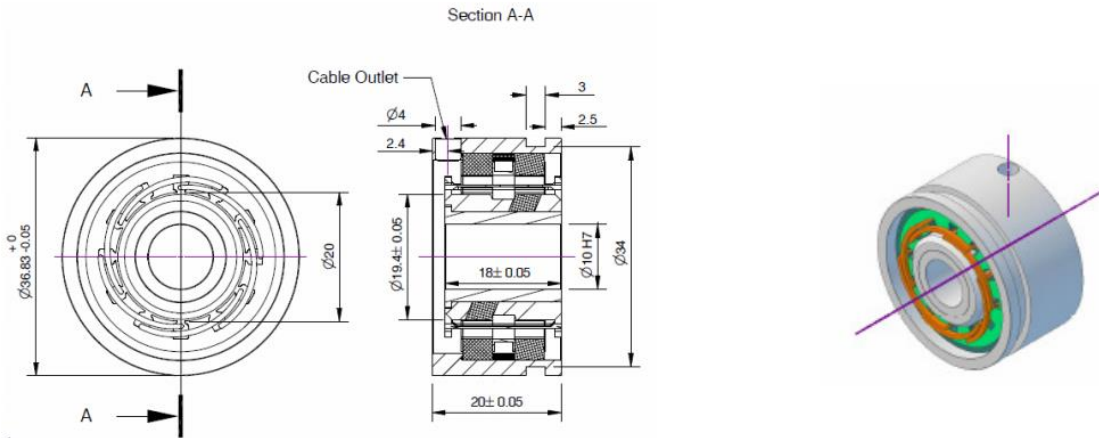
$$V_{(S2-S4)} = V_{(R1-R2)} \times TR \times \sin(\theta)$$

θ increases for CCW rotation when viewed from lead exit end

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Dimension in mm



Order Code

8000.00.560	Standard solution	
	Size	36 x 20mm
	bore	10mm
	Leads length	300mm
	Max. RPM	80'000 RPM
	Temperature range	- 40°C ... +135°C
8000.00.183	RAD solution	
	Size	36 x 20mm
	Bore	10mm
	Leads length	300mm
	Max. RPM	95'000 RPM
	Temperature range	-70°C...200°C
8000.00.177	High speed solution	
	Size	36 x 20mm
	Bore	10mm
	Leads length	300mm
	Max. RPM	95'000 RPM
	Temperature range	- 40°C ... +135°C
8000.00.570	high temperature solution	
	Size	36 x 20mm
	Bore	10mm
	Leads length	300mm
	Max. RPM	95'000 RPM
	Temperature range	-70°C...200°C



Questions ?

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