

**RE3620 SERIES**



**For hybrids, engines and nuclear applications**

- ➡ **Compact and small**
- ➡ **Brushless resolver**
- ➡ **Max. speed 110'000 rpm**
- ➡ **Max. temperature range up to 200°C**
- ➡ **High temperature models are also radiation resistant**
- ➡ **Custom models available**

**Product description**

The MICRONOR RE3620 resolver, with its wrap-around free rotor, provides high availability and a reliable measurement and Feedback signal where traditional resolvers fail. Perfect for aerospace, submarine or other very harsh applications. The solid rotor has no winding and the stator has only half the windings of a traditional brushless resolver, significantly increasing reliability is significantly increased. The solid rotor allows operation in hydraulic oil or other fluids.

**Application**

Applications include tachometers, high speed spindle, motor feedbacks, AC or DC servo motors, angle measurements, hydraulic pumps, boring bars etc.

**Technical Data**

Housing size	ø 36 mm
Accuracy	+/- 60 arc minutes
Bore diameter (mm)	ø 10-H7
Cable exit	axial 300 mm
Strand type	26 AWG

**Electrical data**

Excitation frequency	8 kHz typical
Amplitude	5 Vrms typical
Input resistance	13 Ohm (+/- 10%)
Output resistance	20 Ohm (+/- 10%)
Transformation ratio	0.5 (+/- 10%)
Insulation resistance	100 Mega Ohm minimum
Dielectric values	(Hipot)
Winding to winding	300 Vac
Winding to case	500 Vac

**Mechanical Data**

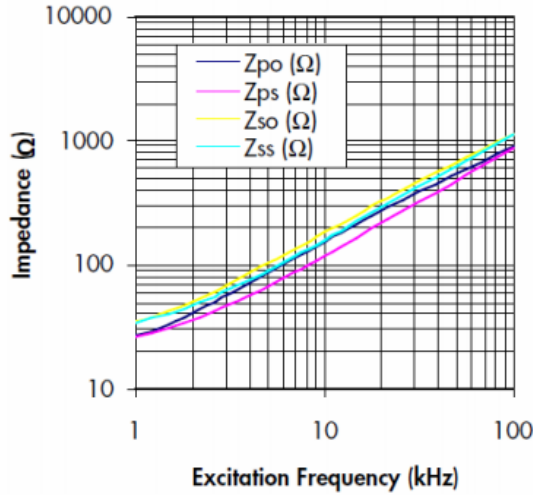
Working temperature	(See order code)
Max. Speed	(See ordering code)
Air gap	0.3 mm nominal
Rotor inertia	40 gxc <sup>2</sup>
Shock	20G
Vibration	10....50Hz, 10G over 0.5 hr.

**RE3620 SERIE**

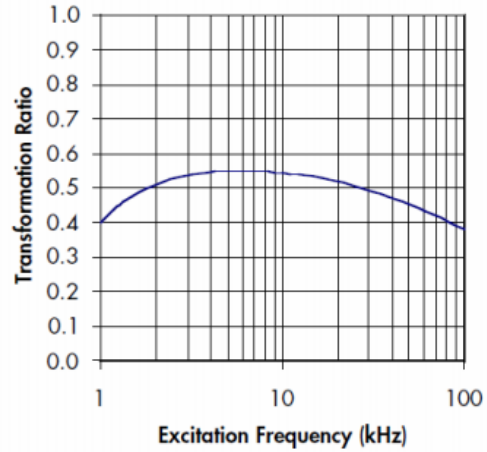


**Electrical ratios (only as an example not absolute values)**

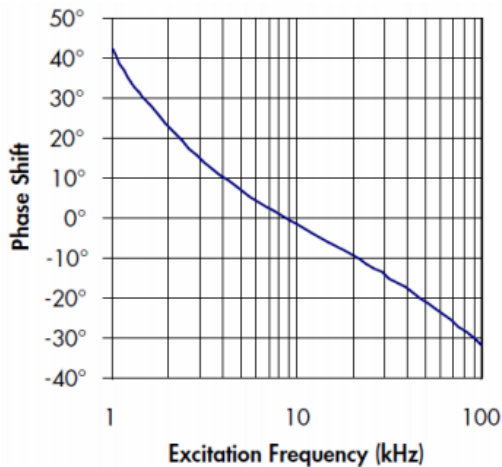
**IMPEDANCES**



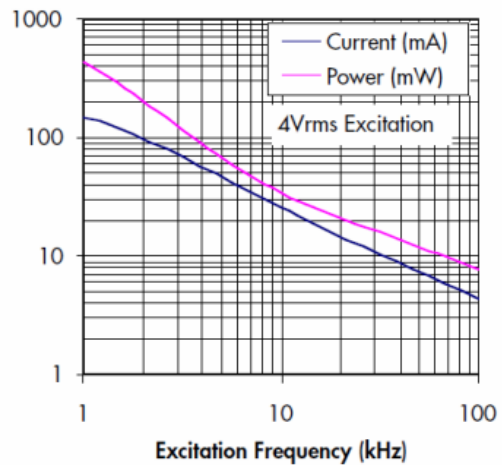
**TRANSFORMATION RATIO**



**PHASE SHIFT**

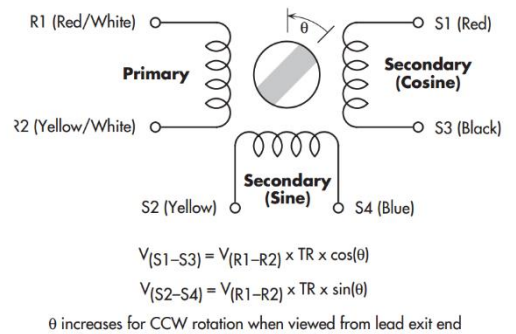


**INPUT CURRENT AND Power**



**Electrical connection**

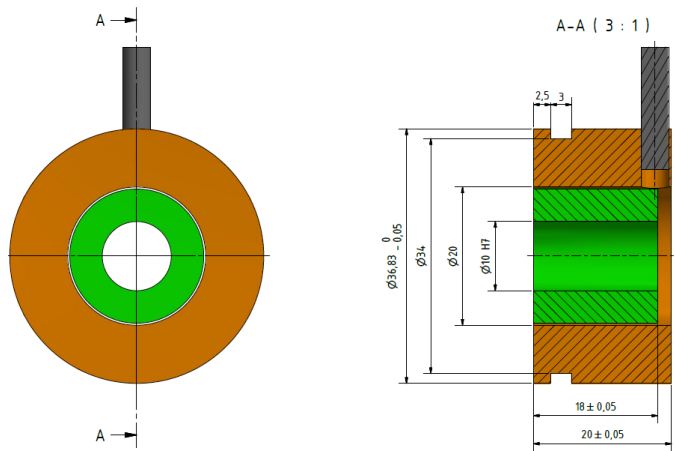
Ref+	red/white	R1
Ref-	yel/white	R2
Cos+	red	S1
Cos-	black	S3
Sin+	yellow	S2
Sin-	blue	S4



**RE3620 SERIE**



Reference drawing in mm



Order key

Order Key

**RE 3 6 2 0 - 1 - 1**  
a b

Configuration

**a**

Temperature

- 1 Standard -40°C bis +135°C
- 2 High temperature -70°C bis +200°C (also radiation resistant)

**b**

Speed

- 1 Standard 100'000 U/min
- 2 High Speed 110'000 U/min

Contact Micronor Sensors for special bore sizes, special 1mm gap, and higher speed models.



Do you have any questions ?

For sales and service in North America, contact Micronor Sensors:  
+1-805-389-6600 or sales@micronor.com

**micronor**  
sensors