

RE7557 SERIE



for Hybrids, Motors and Nuclear application

- ➔ Compact and small
- ➔ max. speed 30'000 RPM
- ➔ max. temperature up to 200°C
- ➔ Brushless Resolver
- ➔ Available in different models

Product description

The MICRONOR RE7557 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.

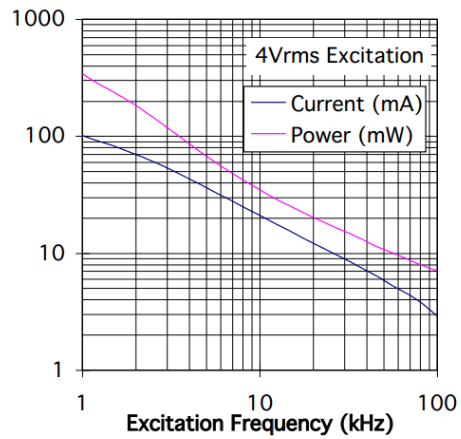
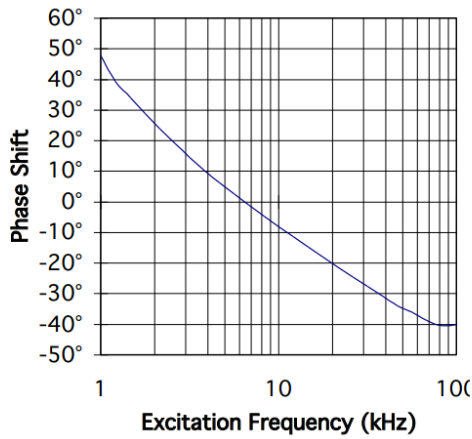
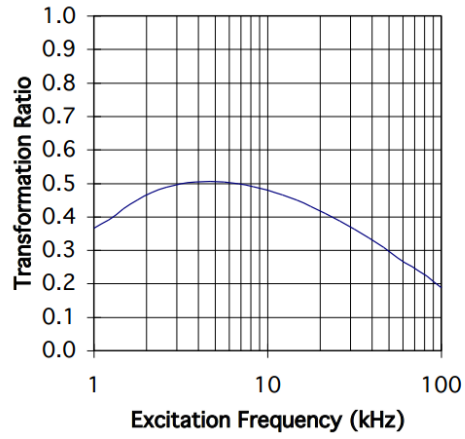
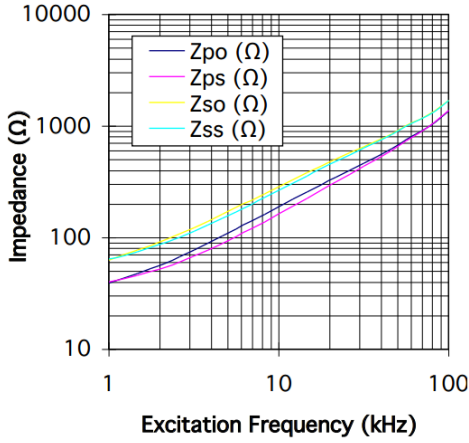
Technical specifications

| | | |
|---|------------------------|--|
| <p>Max. dimension Accuracy Bore diameter Cable outlet Lead wire size</p> | | <p>ø 75 mm +/- 60 arc minutes ø 46 H7 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 30 Ohm (+/- 10%) 80 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 1.8 gxc² 300 g 20G 10....50Hz, 10G over 0.5 Std.</p> |

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Electrical Outline drawing (only for info not absolute value)

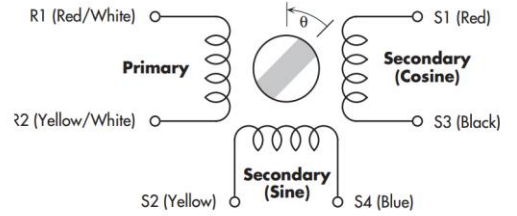


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Electrical Connection

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

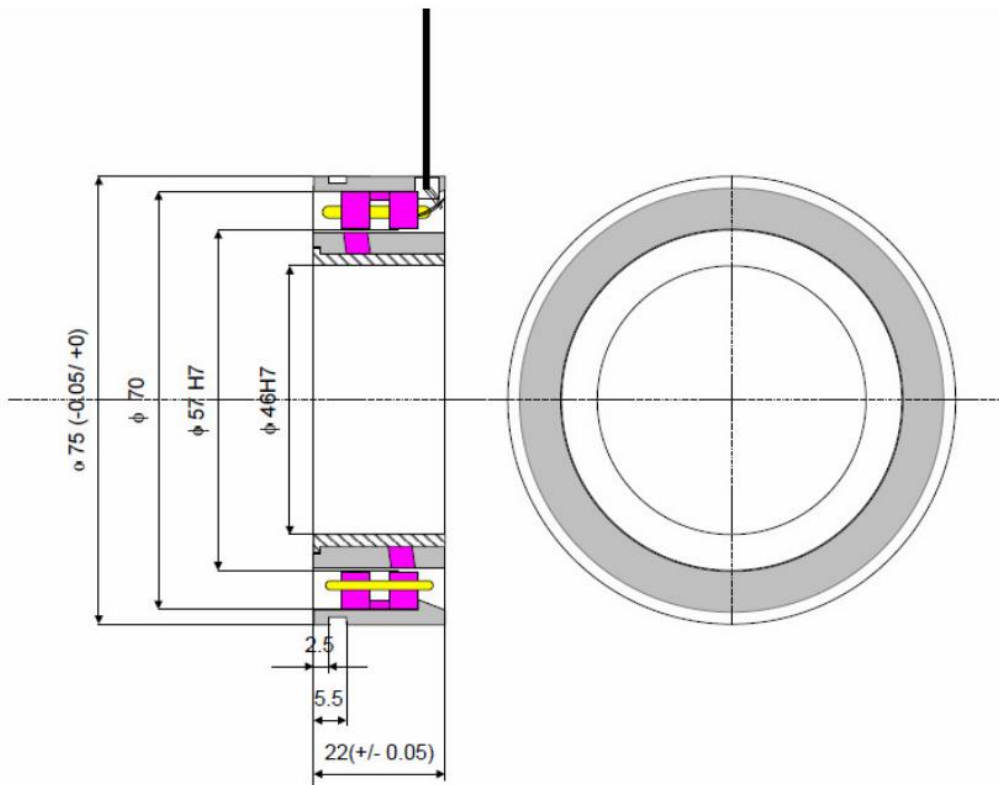


$$V_{(S1-S3)} = V_{(R1-R2)} \times TR \times \cos(\theta)$$

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

θ increases for CCW rotation when viewed from lead exit end

Dimension in mm



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Order Code

| | | |
|--------------------|--------------------------|-------------------|
| 8200.00.333 | Standard solution | |
| | Size | 75 x 22mm |
| | Bore | 46mm |
| | Leads length | 300mm |
| | Max. RPM | 27'000 |
| | Temperature range | - 40°C ... +130°C |

| | | |
|--------------------|---------------------|---------------|
| 8200.00.335 | RAD solution | |
| | Size | 75 x 22mm |
| | Bore | 46mm |
| | Leads length | 300mm |
| | Max. RPM | 30'000 |
| | Temperature range | -70°C...200°C |

| | | |
|--------------------|----------------------------|-------------------|
| 8200.00.340 | High speed solution | |
| | Size | 75 x 22mm |
| | Bore | 46mm |
| | Leads length | 300mm |
| | max. RPM | 30'000 |
| | Temperature range | - 40°C ... +130°C |

| | | |
|--------------------|----------------------------------|---------------|
| 8200.00.383 | high temperature solution | |
| | Size | 75 x 22mm |
| | Bore | 46mm |
| | Leads length | 300mm |
| | Max. RPM | 30'000 |
| | Temperature range | -60°C...200°C |



Questions ?

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