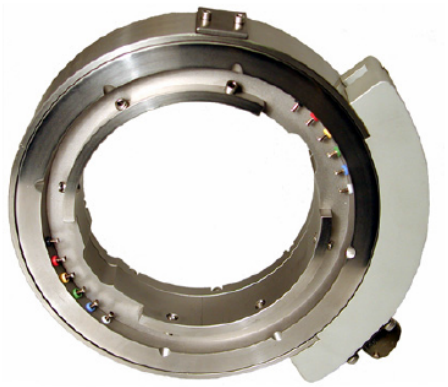
Tubular Slip Ring Assembly

Models B4-3.2, B6-3.2

- 4 and 6 circuit slip rings
- Compact design
- Mounts on shafts up to 3.2” in diameter
- Permanently lubricated bearings
- Rugged stainless steel construction
- Instrumentation quality rings and brushes
- Color coded terminals in tandem provide redundant connections
- Optional light-weight aluminum construction



Description

Michigan Scientific’s *B Series Slip Ring Assemblies* are ideal for applications that require the slip ring to be mounted directly on a rotating shaft. Typically used for automotive drive shaft measurement applications, these slip rings are designed to fit on shafts up to 3.2” in diameter, and to make electrical connection to strain gages, thermocouples, or other sensors that have been installed on rotating equipment. The slip ring brushes and rings are made of precious metals which minimize noise and enable the assemblies to be used for low level instrumentation signals.

This *B Series* model is available in 4 or 6 circuit slip ring assemblies. The *B6-3.2* is particularly useful for drive shaft applications where both torque and axial measurements are needed. In addition, the *B6-3.2* provides enough circuit connections for use with spinning amplifiers. Locating precision amplifiers on the rotating side of the slip ring greatly improves signal quality because the amplifier is located closer to the sensor. This reduces errors due to long lead wires, connector resistance variations, electro-magnetic interference, and temperature gradients across slip ring contacts.

Connections are made through color coded solder terminals located on the slip ring rotor and a connector on the slip ring stator. Redundant terminals are included to provide back-up connections. The compact width design of these slip rings make them ideal for applications where limited space is available.

Specifications

	B4-3.2	B6-3.2
Circuits	4	6
Current Capacity	1A	
Temperature Range	-40°F to 250°F (-40°C to 121°C)	
RPM Rating	4500 RPM continuous; 6000 RPM bursts	
Maximum Peak Noise*	0.1Ω	
Width	1.06 in (26.9 mm)	
Weight of Stainless Steel Unit	2.3 lbs (1.04 kg)	
Output Connector	Bendix PT02E-10-6P	
Mating Connector	Bendix PT06E-10-6S (SR)	
* Resistance variation across slip ring contact.		

European representative :

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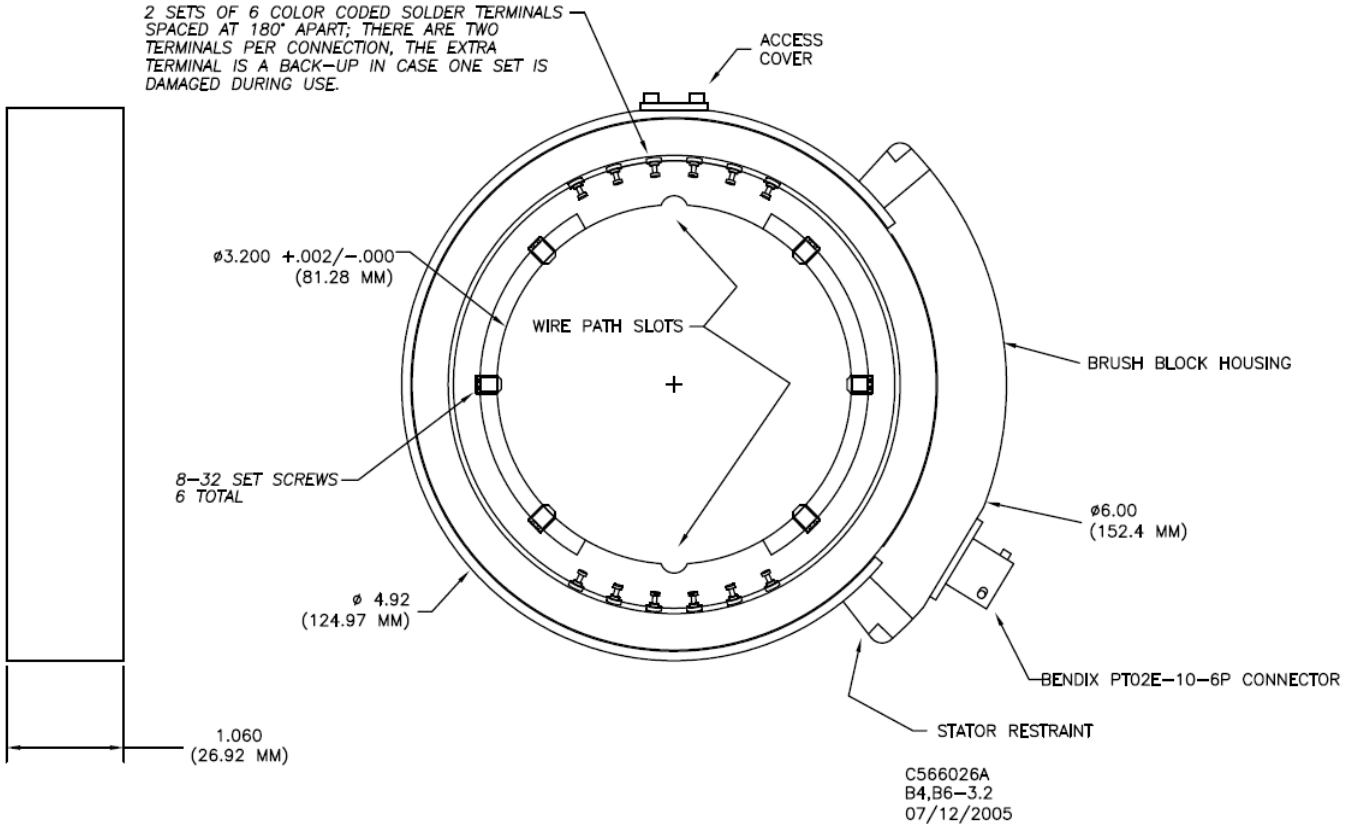
Tubular Slip Ring Assembly

B4-3.2, B6-3.2 Configuration



Mounting

The *B Series Slip Ring Assemblies* can be easily mounted on a shaft. An additional bushing is required when using the slip rings on shafts smaller than 3.2" in diameter. The slip ring rotor is configured with six #8-32 set screws used for mounting. Proper alignment requires the slip ring to be positioned square and concentric to the shaft rotation axis, particularly for high speed applications. Signal wires from the sensors can be routed along the outside diameter of the shaft. Wire path slots machined into the slip ring rotor enable wires to be mounted under the slip ring and to the color coded solder terminals.

Ordering Options

Special units are available for high speed applications that continuously exceed 7000 RPM. Contact Michigan Scientific for further information.

Mating Bendix connector included. For information regarding slip ring accessories, refer to the "Price List and Accessories" section.

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