



Model 1500 Brushless Slip Ring

Conductors: One Conductor
Amps: 500

The Mercotac® model 1500 series brushless slip rings are specifically designed to meet the demands of high-power applications, making them the ideal choice for plating electrodes and welding cable reels. These slip rings feature a durable stainless steel housing as a standard feature, providing enhanced protection and durability in demanding environments.

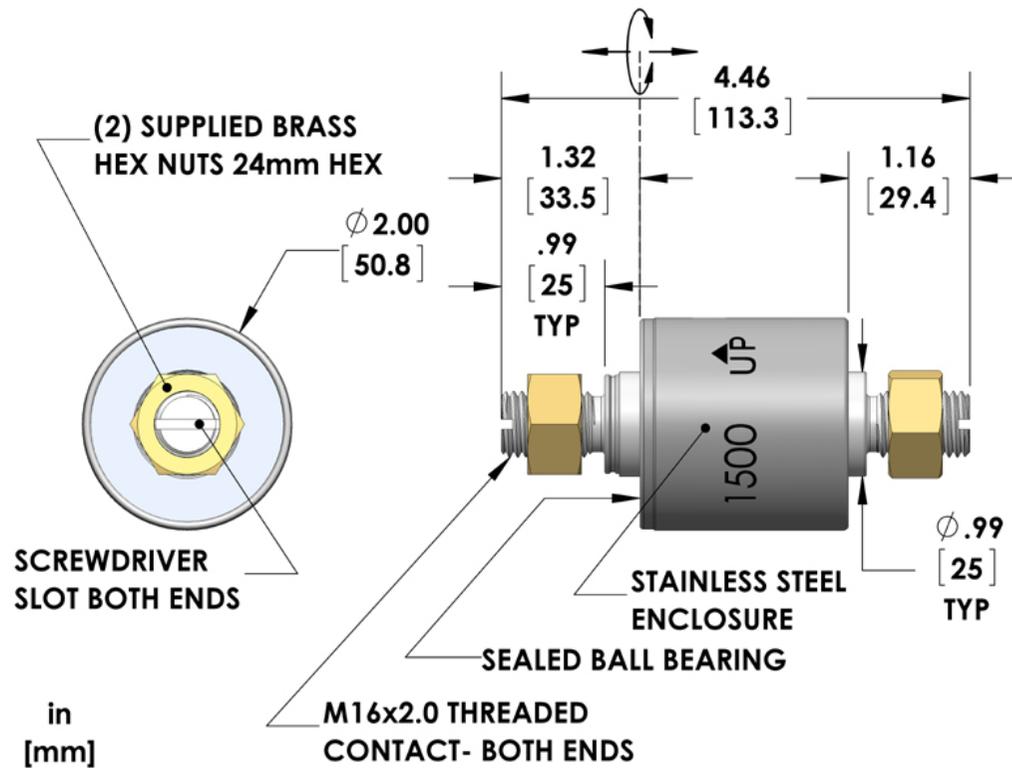
Advantages:

- Durable, compact, and low cost
- Dependable electrical connection
- Easy to install and replace
- IP 51 protection rating with boot kit
- Lightweight with robust metal construction
- Long-lasting, energy efficient, and no maintenance
- Made in the USA

[SPEC SHEET](#)[CAD DOWNLOAD](#)

Model 1500 Product Specifications

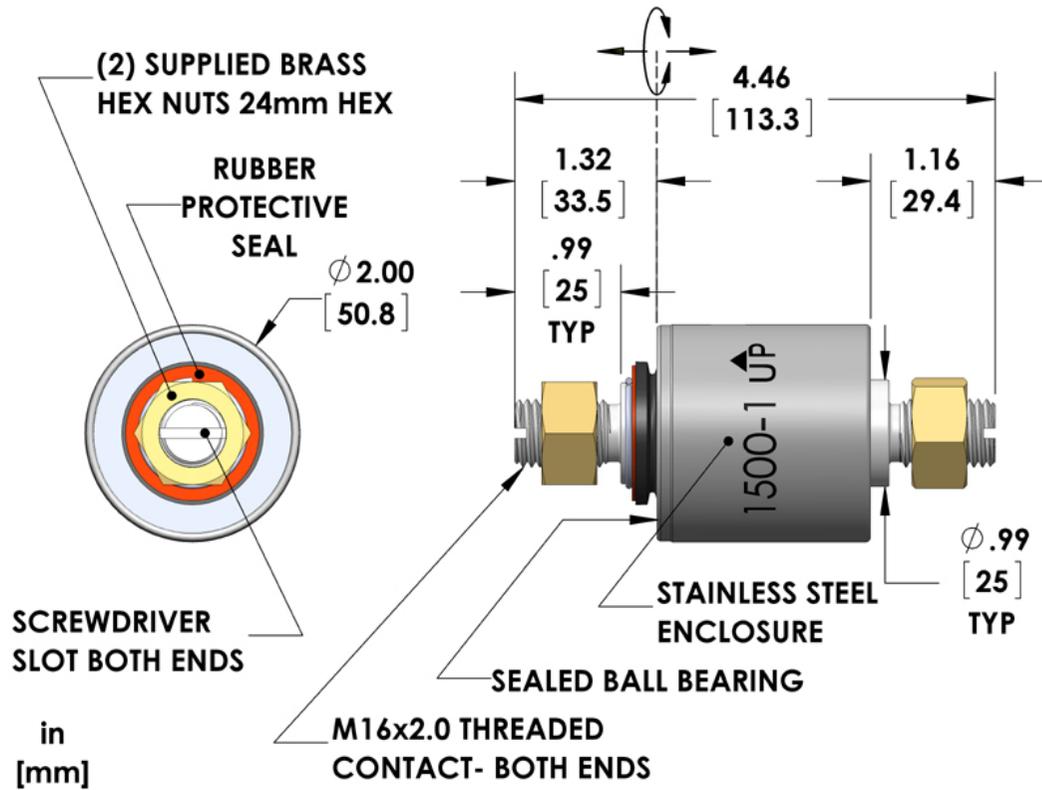
Dimensions

**Details:**

- Hex nuts are included.
- Available with stainless steel ball bearing (1500-SS)
- External dust seal available (Model 1500-1 or 1500-1-SS) (recommended for wet or corrosive environments).

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- Hex nuts are included
- Available with stainless steel ball bearing (1500-1-SS)
- External dust seal for IP51 protection (recommended for wet or corrosive environments).



Specifications

Model No.	Terminals	Body Material	Bearing Type	Max. Rotational Torque (gf-cm)	Max. Voltage Rating (AC/DC)	Max. Current Rating (Amps)	Max. Rotational Speed (RPM)	Operating Temp. Min °F (°C) Max °F (°C)	Max. Frequency (MHz)	Contact Resistance (mΩ)	Circuit Separation (MΩ)
1500	1	Stainless Steel	Chrome Steel	750	N/A	500	300	Min -20 (-29) Max 140 (60)	200	<1	N/A
1500-SS			Stainless Steel								
1500-1			Chrome Steel								
1500-1-SS			Stainless Steel								

- "SS" designator indicates stainless steel ball bearing (recommended for wet or corrosive environments)
- "-1" designator indicates an external dust seal
- Note: The 1500 series Mercotac™ Connector comes standard with a stainless steel body, which is electrically "hot" to the internal conductor at higher voltages

Accessories

There are no accessories currently for this model, however, if an external dust seal with an IP51 protection rating is needed, select the Model 1500-1.

Model 1500-1 or 1500-1-SS Brushless Slip Ring

Description: Model with Dust Seal
Item #: 1500-1 or 1500-1-SS

- Includes an external dust seal
- IP 51 protection rating
- All other features are the same as for the standard 1500 Model.

Safety Note: The stainless steel housing of the 1500 series Mercotac connector at higher voltages is electrically "hot" to the internal conductor.

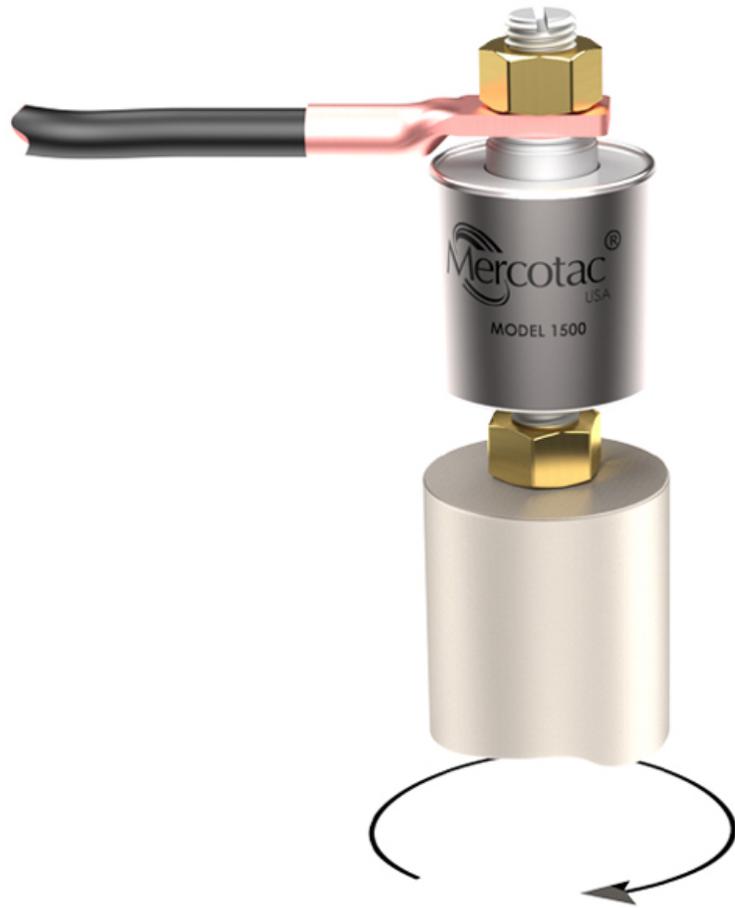


Mounting

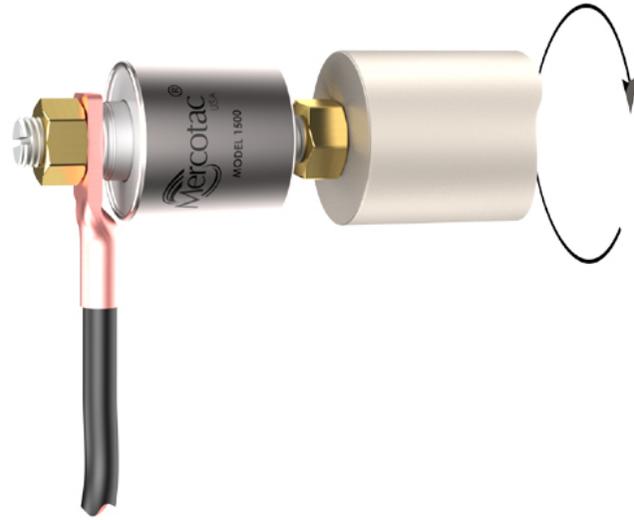
Model 1500 is typically mounted by the threaded stud on either end or by the steel body using a set screw. When mounting horizontally, mount the Mercotac so the body of the connector rotates

Top mount with conductive shaft

Bottom mount with conductive shaft



Horizontal Mount with conductive shaft



Installation Notes:

- The up arrow should not point below horizontal.
- Do not solder to or bend terminals.
- Avoid lateral forces and mechanical loads (overly stiff or tight wires).
- Do not rigid mount both ends of the Mercotac.
- Limit the mounting eccentricity (runout / wobble) to .005" (.13mm).
- Provide overload protection within the circuit.
- Avoid vibration and bumping motions.

Connections

Description: Standard Model
Item #: 1500

Stationary end
showing standard
wire connections.



Description: Model with Dust Seal
Item #: 1500-1

Stationary end
showing standard
wire connections.



Applications



The Mercotac model 1500 series brushless slip rings cater to high-power applications, making them ideal for plating electrodes and welding cable reels. Both plating and welding applications require high electrical currents, making the model 1500 an ideal solution. Featuring a robust stainless-steel housing, these slip rings provide exceptional protection and durability in challenging environments.

Mercotac brushless slip rings are widely used in industries such as wind turbines, industrial machinery, packaging machinery, and robotic systems. In wind turbines, they enable efficient power and signal transmission between rotating blades and stationary components. In industrial machinery, they ensure seamless power transmission and signal connectivity in automation and electronic controls. In packaging machinery, they facilitate reliable power and signal transfer between rotating and stationary parts. Moreover, their high-power capabilities make them suitable for robotic systems, enabling precise movements in automated manufacturing processes.

The Mercotac model 1500 series offers superior performance, reliability, and durability for high-power applications, making it a trusted solution across a variety of industries

Check out our [Applications](#) page for more examples of how Mercotac products are utilized.

Learning Center

Guidance for using Mercotac® Brushless Slip Rings in engineering designs.



Learn about our Mercotac®

Construction & Materials: Body Materials, Bearing Types, Conductors/Terminals, Thread Sizes, Mounting Options.

[Learn More](#)

Learn about Mercotac® Electrical

Characteristics: Voltage Rating, Current Rating, Contact Resistance, Circuit Separation, Operating Temperature, Frequency.

[Learn More](#)

Learn about Mercotac® Rotational

Characteristics: Rotational Speed, Rotational Torque.

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