



Model 215-2K Brushless Slip Ring

Conductors: Two Conductor

Amps: 2@15

Volts: 2000

The Mercotac® model 215-2K brushless slip rings are an ideal choice for oil well wirelines due to their clean and consistent signal transmission and extended lifespan. They can also be used anywhere a two-channel device with very high voltage rating is needed, such as in ultrasonic applications. Their compact size also makes them ideal replacements for brush-type slip rings.

Advantages:

Durable, compact, and low cost

Use for signal and/or power connections

Easy to install and replace

IP 51 protection rating with boot kit

Lightweight with robust metal construction

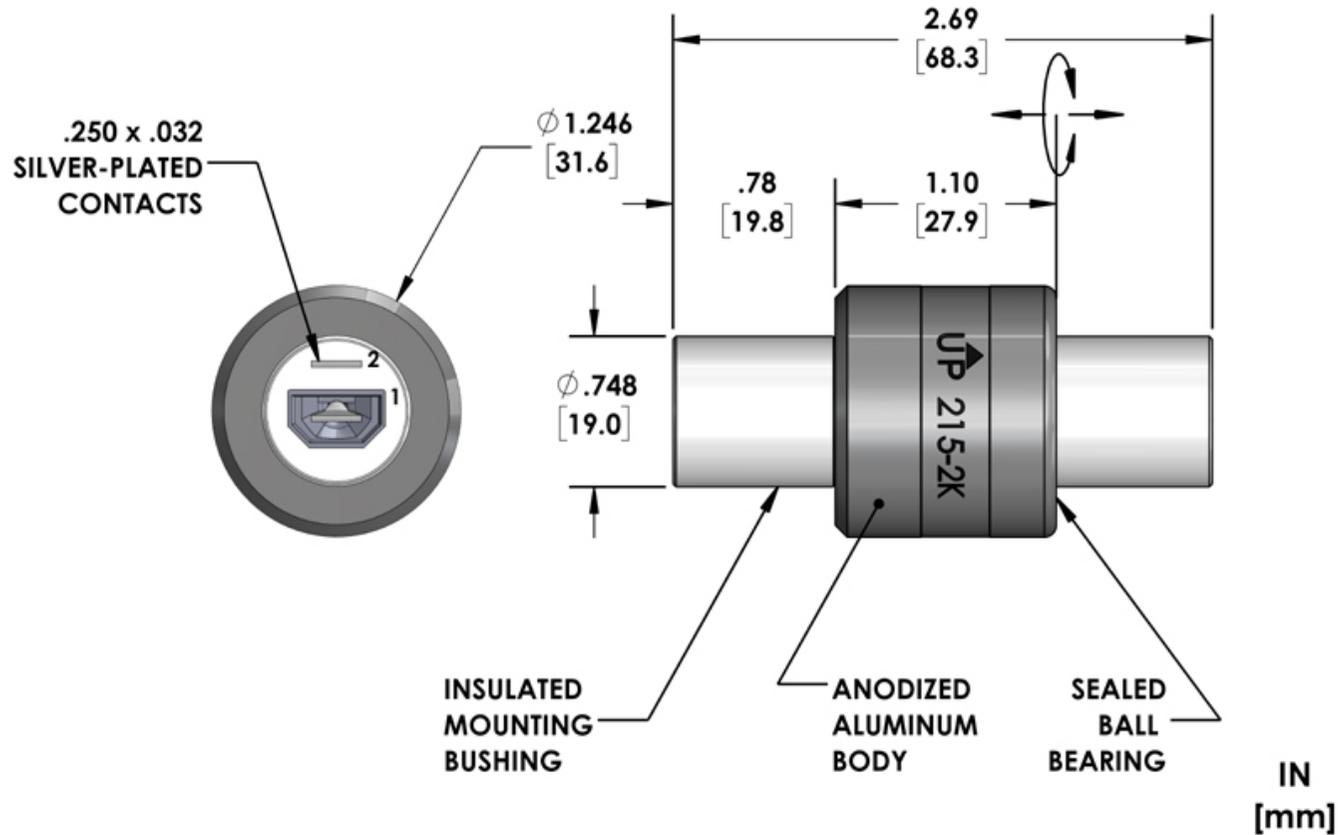
Long-lasting, energy efficient, and no maintenance

Made in the USA



Model 215-2K Product Specifications

Dimensions



Details:

- Disconnects are included
- 552KA Large Straight Disconnect (Qty. 4)
- 55253 Shrink Tube (Qty. 4)
- Available with stainless steel ball bearing (215-2KSS) (recommended for wet or corrosive environments).
- Dust/Splash [Boot Kit](#) available.

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)
215-2K	2	Anodized Aluminum	Chrome Steel	400	2000	15	1200	Min -20 (-29) Max 140 (60)	100	<1	>50
215-2K-SS			Stainless Steel								

"SS" designator indicates stainless steel ball bearing (recommended for wet or corrosive environments)

Accessories

Description: Boot Kit Parts
Item #: 57235

- Vinyl **Boot Kit** for dust and splash protection
- IP51 protection rating



Description: Boot Kit Assembled
Item #: 57235

- Vinyl **Boot Kit** for dust and splash protection
- IP51 protection rating



Description: Large Straight Disconnect, Insulated
Item #: 552KA

- 22 AWG - 18 AWG
- Qty. 4 included
- Maximum recommended Amps: 15



Description: Shrink Tube
Item #: 55253

- Qty. 6 included



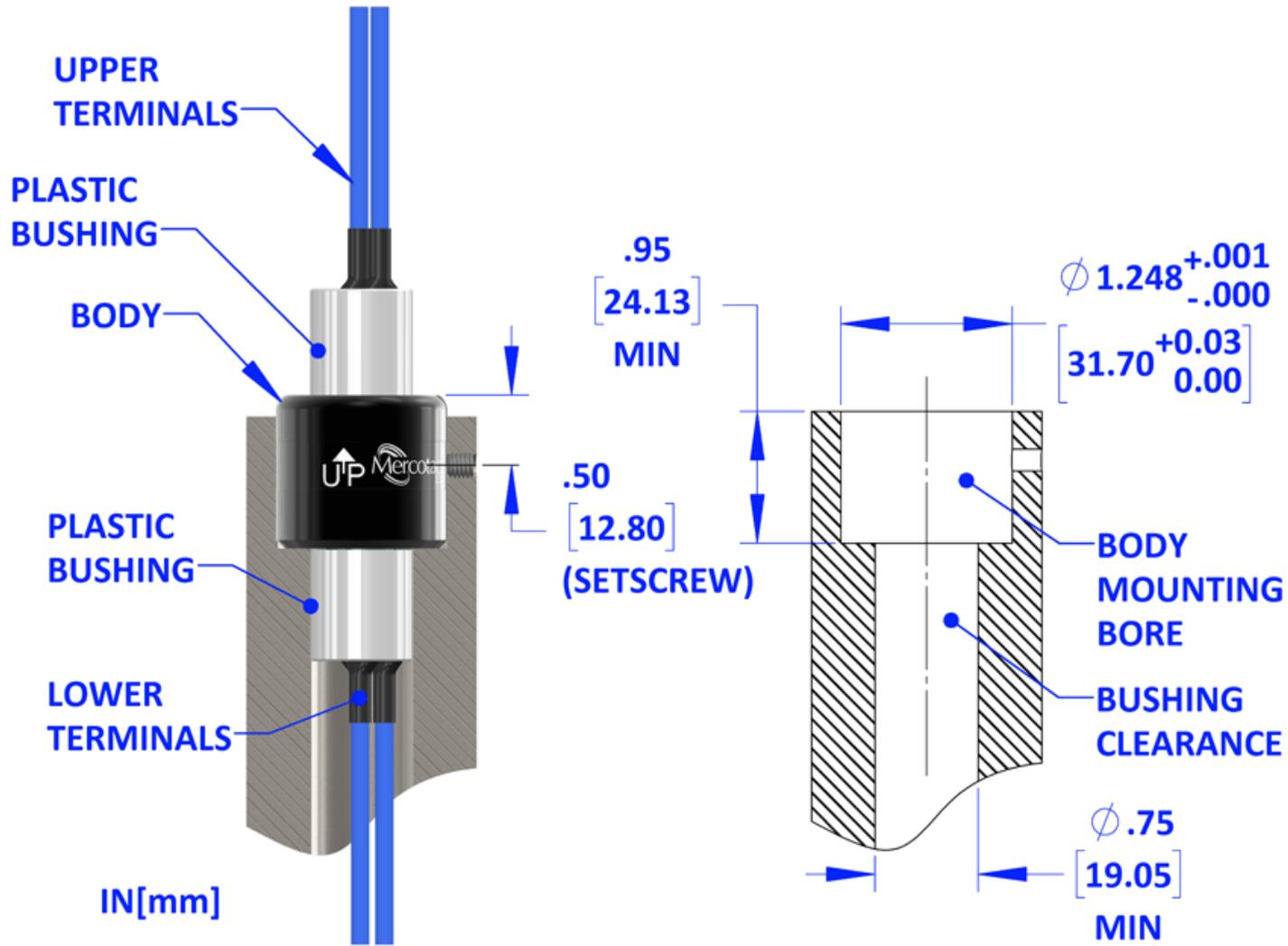
Description: Other Disconnects

- Item# 552KB Terminals available for 16-14 AWG wires

Mounting

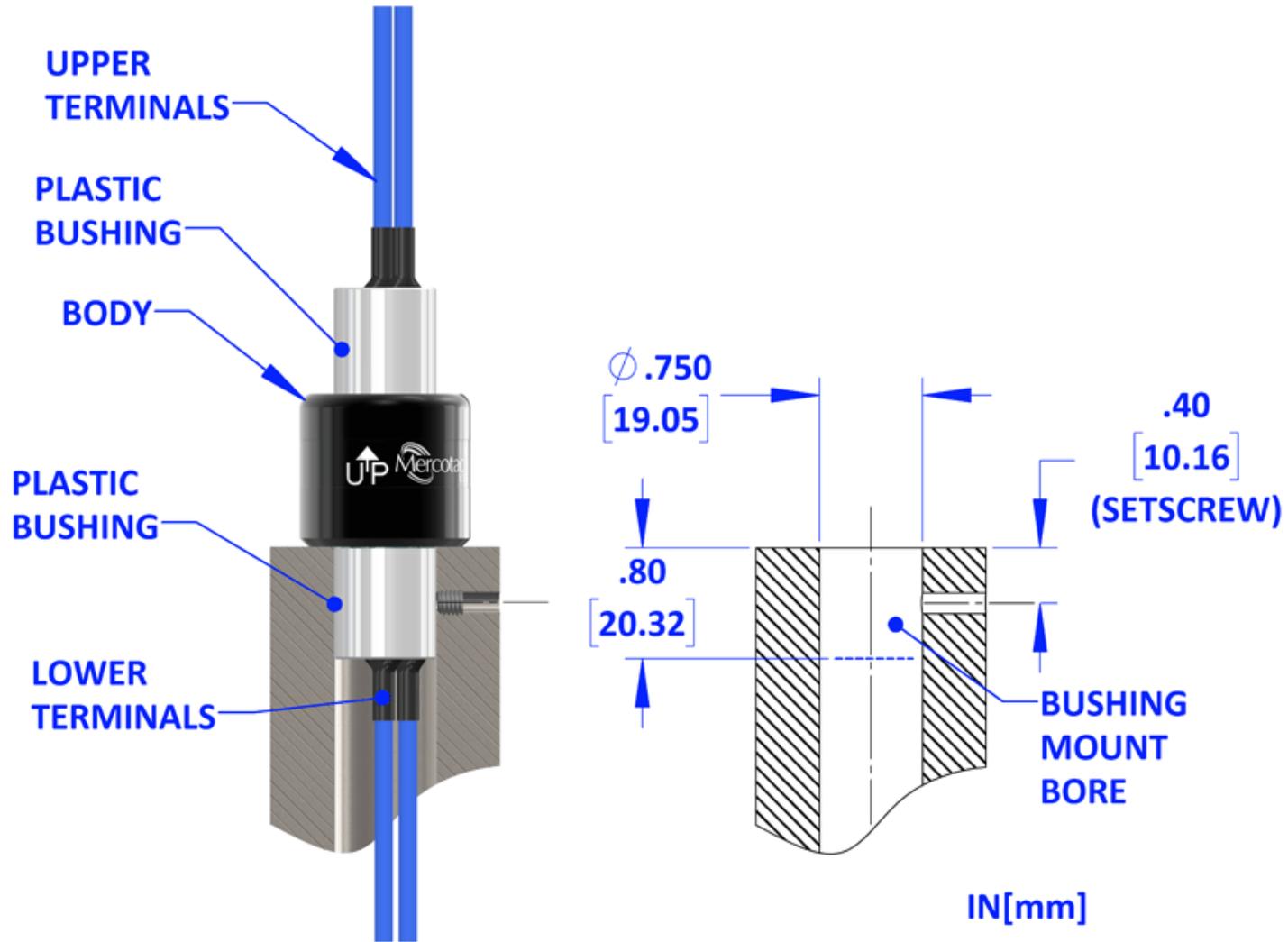
Model 215-2K is typically mounted by either the black body or the white plastic bushing on either end using a set screw or split clamp. When used horizontally, mount the Mercotac so the body of the connector rotates.

Body Mount



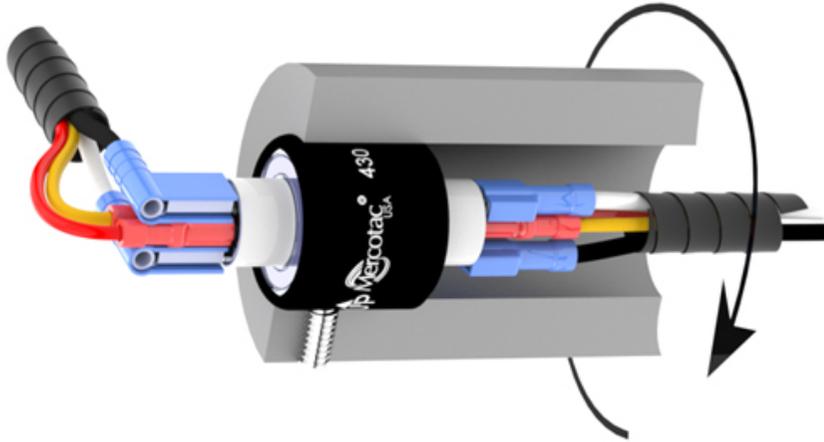
BLACKBOX AI

Bushing Mount



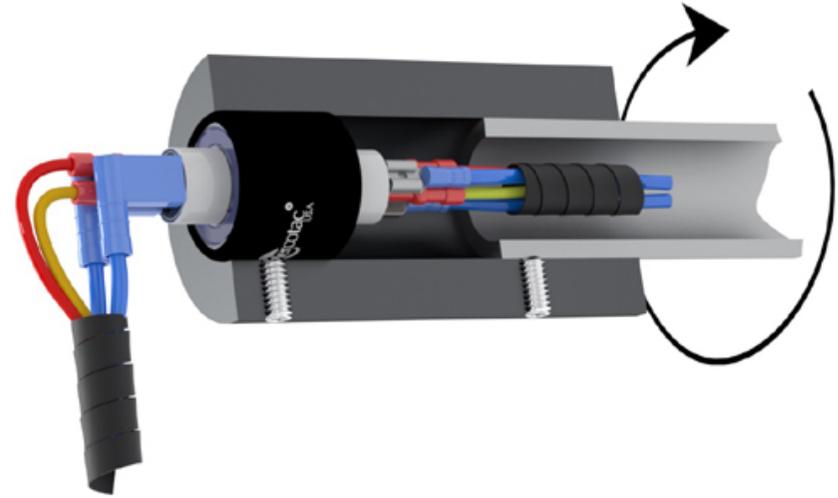
BLACKBOX AI

Horizontal Mount to Body



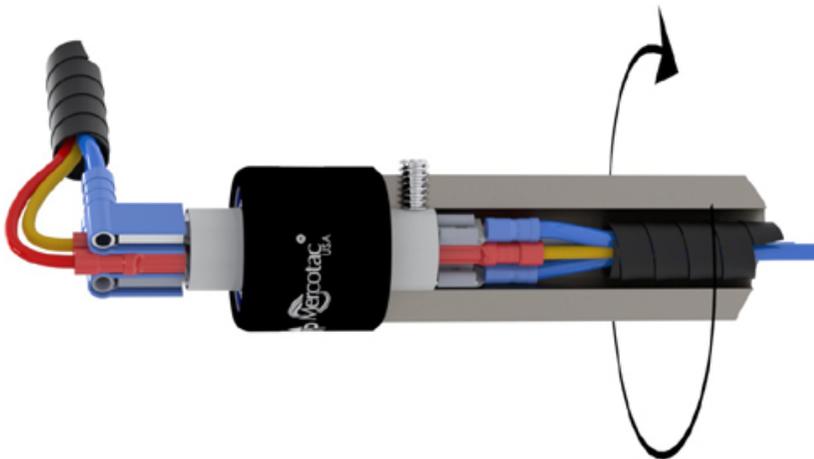
Good mounting method
(but vertical orientation is better)

Adaptor Mount to Body

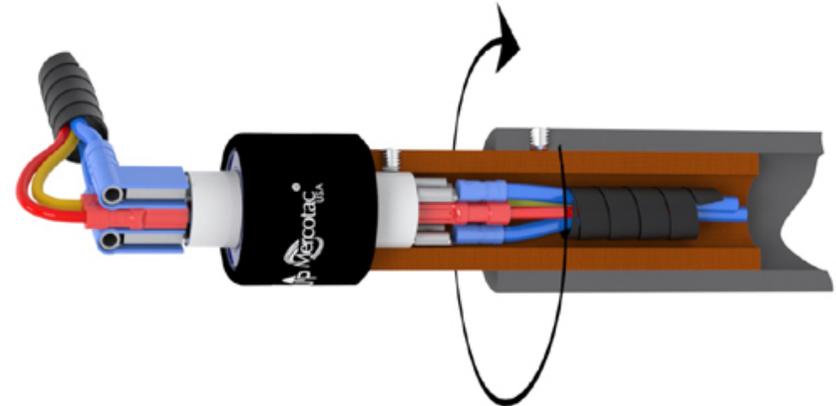


Use when the shaft diameter is smaller
than the body of the Mercotac.

Horizontal Mount to Bushing



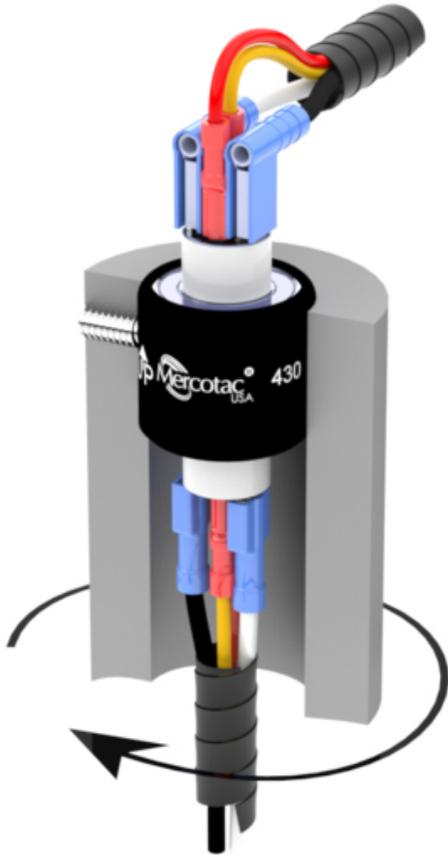
Thermal Insulated Mount to Bushing



Used if the shaft cannot be fitted to the body diameter.

May be needed if thermal insulation is necessary. Used if the shaft cannot be fitted to the body diameter.

Top Mount to Body



Best mounting method.

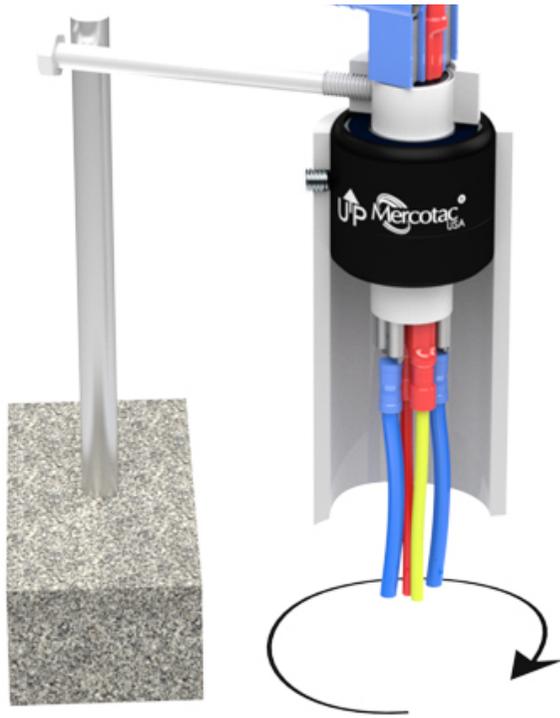
Bottom Mount to Bushing



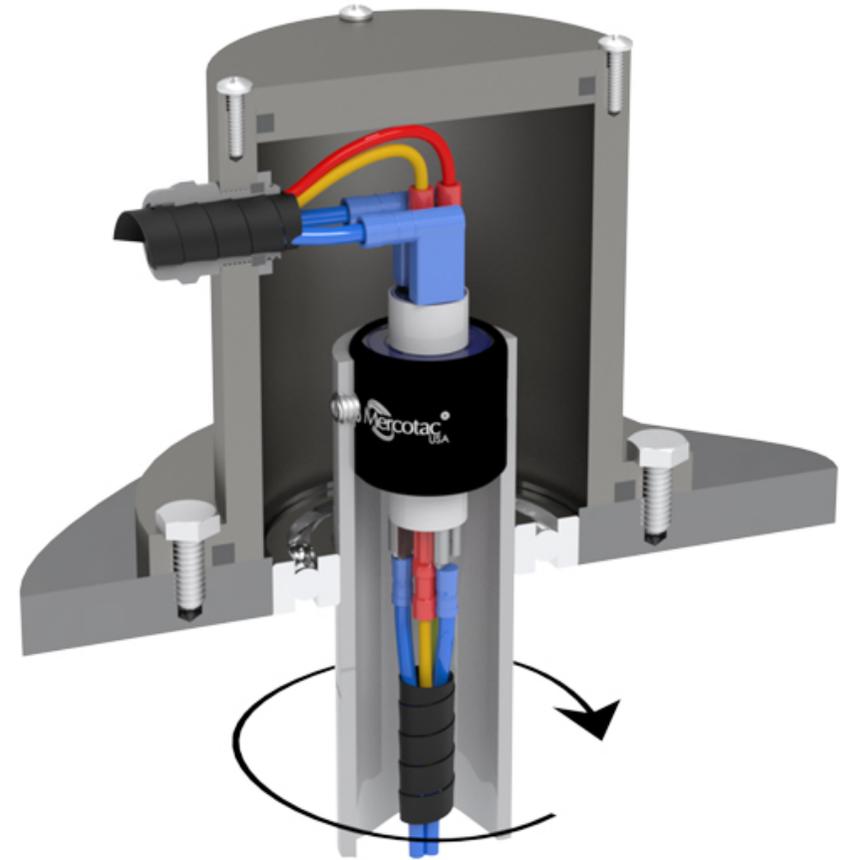
Floating Torque Arm Mount to Body



Protective Housing Mount to Body

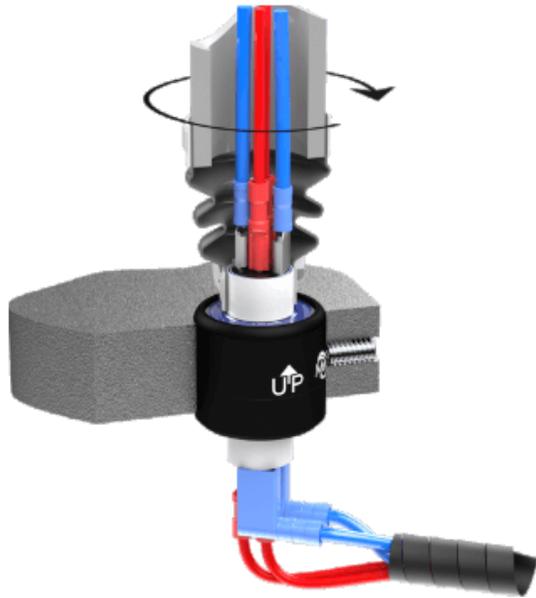


Vibration Isolation Mount to Body

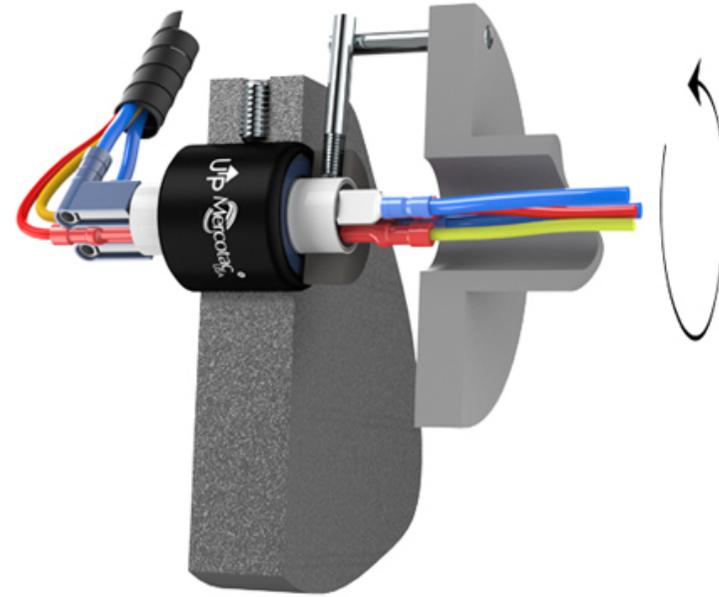


Recommended for wash-down or dirty environments.
Also recommended for food processing .

Vibration Isolating Mount to Body



With flexible bellows.



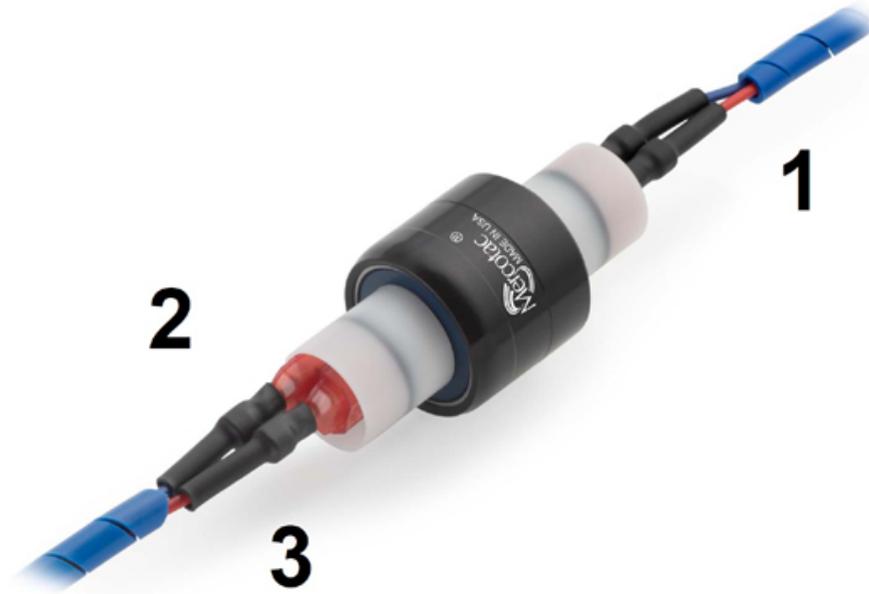
With floating drive coupling.

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

Model 215-2K Standard Wire Connections



1. Wire connections, mounted inside rotating shaft.
2. Stationary end showing standard wire connections.
3. Wires crimp to terminals.
(Suggested tool: Thomas & Betts #WT 112M)

Model 215-2K Wire Connections with Optional Boot Kit



Wire connections, mounted inside rotating shaft.

Stationary end showing optional boot kit.



Cutaway view.



Wire connections, mounted inside rotating shaft.

Stationary end showing optional boot kit.

Applications

Mercotac customers report that by using the brushless slip rings they were able to downsize the unit compared to the older brush style. The brush style becomes very noisy after many runs in and out of the oil wells.

The most important aspect of the brushless style of slip rings is the signal transfer. The signal transfer is very clean and doesn't degrade which is important with today's down hole components. Our Mercotac connection is constant and it is noted for a reliable signal. With the digital tools and down hole communication it is very critical that the signals remain clean; this is accomplished by using the Mercotac product. They are also suitable for ultrasonic applications due to the high voltage capability.

The bearings used in the Mercotac assembly create a smooth operation of the unit. It also gives it an extended life span.



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,



Learn about Mercotac® Electrical Characteristics: Voltage Rating, Current Rating, Contact Resistance, Circuit Separation, Operating Temperature,



Learn about Mercotac® Rotational Characteristics: Rotational Speed, Rotational Torque.
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Mounting Options.

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Frequency.

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