Model 335 Brushless Slip Ring

Conductors: Three Conductor
Amps: 3@30
Volts: 1500

The Mercotac® model 335 brushless slip rings are a great match for higher power applications such as electrical heating systems where electrical power is needed to transmit from a stationary power source to the rotating heating parts such as coils that are mounted to a shaft.

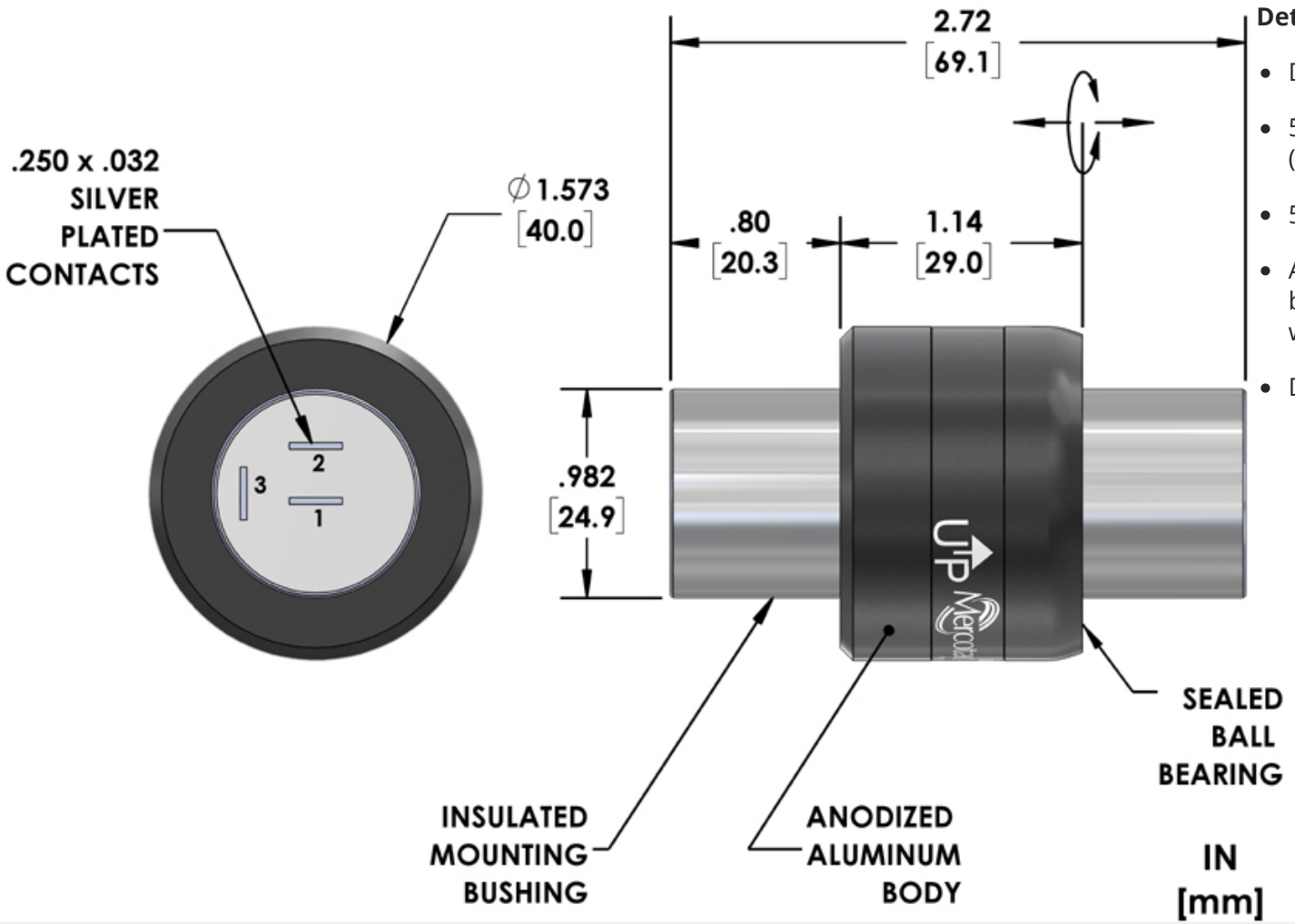
Advantages:

- 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

SPEC SHEET CAD DOWNLOAD

Model 335 Product Specifications

Dimensions



Details:

- Disconnects are included
- 55250 Large Straight Disconnect (Qty. 3)
- 55251 Large Flag Disconnect (Qty. 3)
- Available with stainless steel ball bearing (335-SS) (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)
335	3	Anodized Aluminum	Chrome Steel	700	500	30	500	**Min** -20 (-29) **Max** 140 (60)	100	<1	>50
335-SS			Stainless Steel								

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

Accessories

Description: Boot Kit Parts
Item #: 57335

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

Description: Boot Kit Shown Assembled
Item #: 57335

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

Description: Large Flag Disconnect, Insulated
Item #: 55251

- 16 AWG - 14 AWG
- Qty. 3 included
- Maximum recommended Amps: 15

Description: Large Straight Disconnect, Insulated
Item #: 55250

- 16 AWG - 14 AWG
- Qty. 3 included
- Maximum recommended Amps: 15

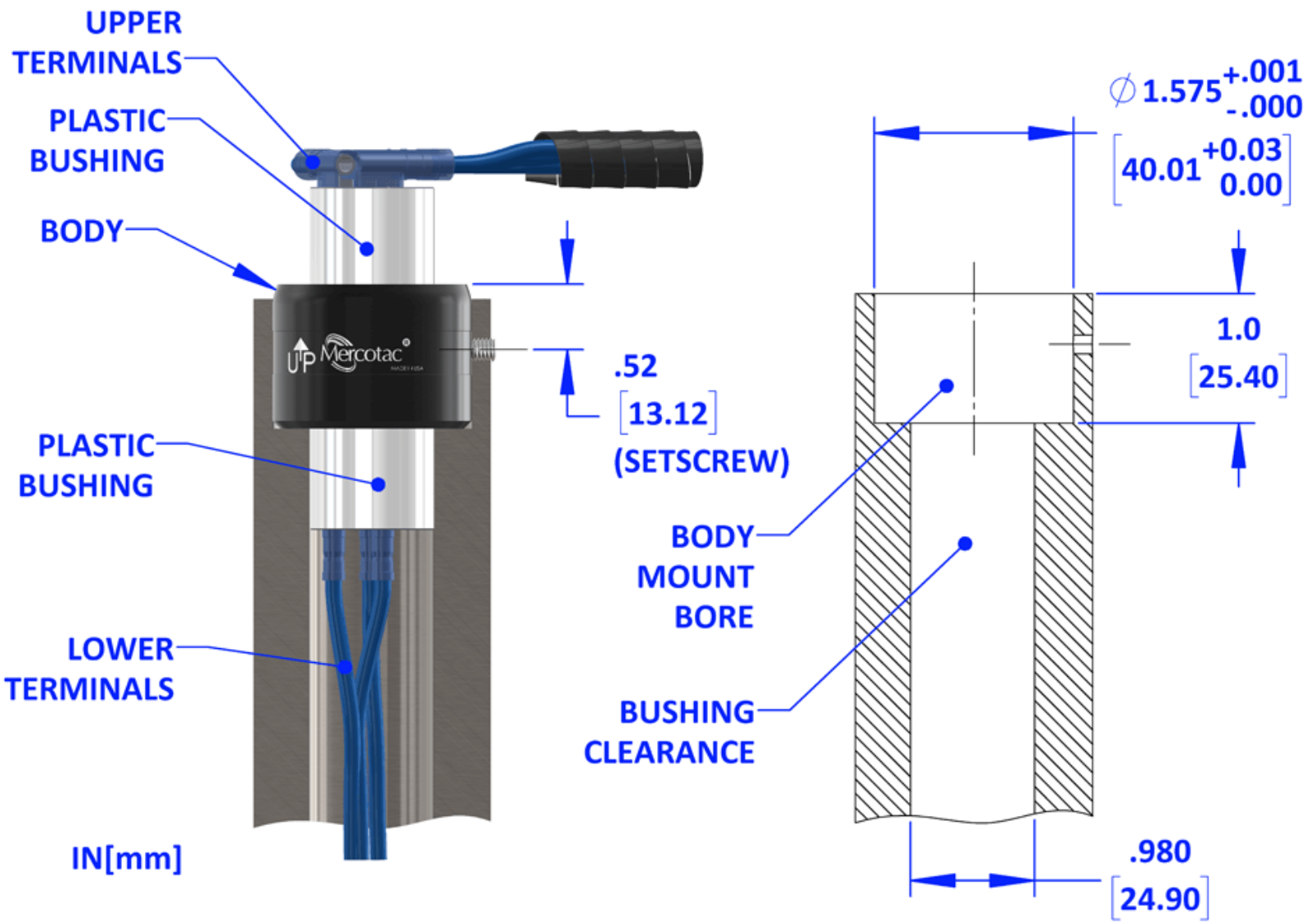
Description: Other Disconnects

- Disconnects for other wire gauges are available and can be substituted for the standard disconnects(22-18 AWG and 12-10 AWG). See Ampacity Table

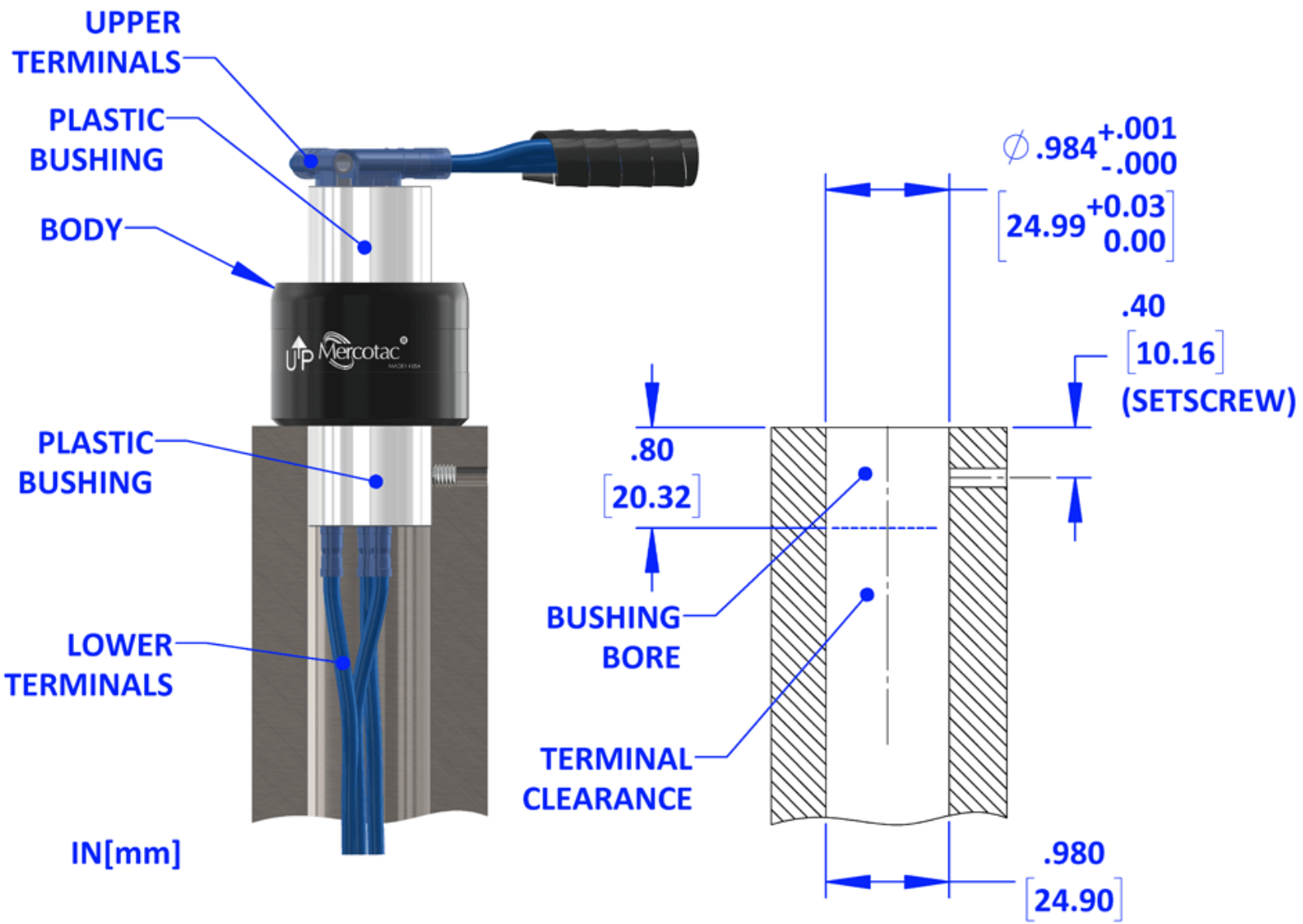
Mounting

Model 335 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

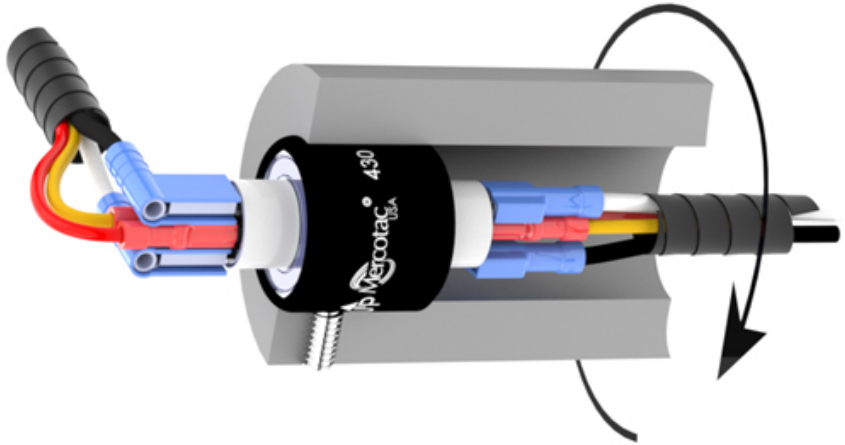
Body Mount


UPPER TERMINALS
PLASTIC BUSHING
BODY
PLASTIC BUSHING
LOWER TERMINALS
IN[mm]
.52
[13.12]
(SETSCREW)
BODY MOUNT BORE
BUSHING CLEARANCE
∅1.575 +.001 -.000
[40.01 +0.03 0.00]
1.0
[25.40]
.980
[24.90]

Bushing Mount

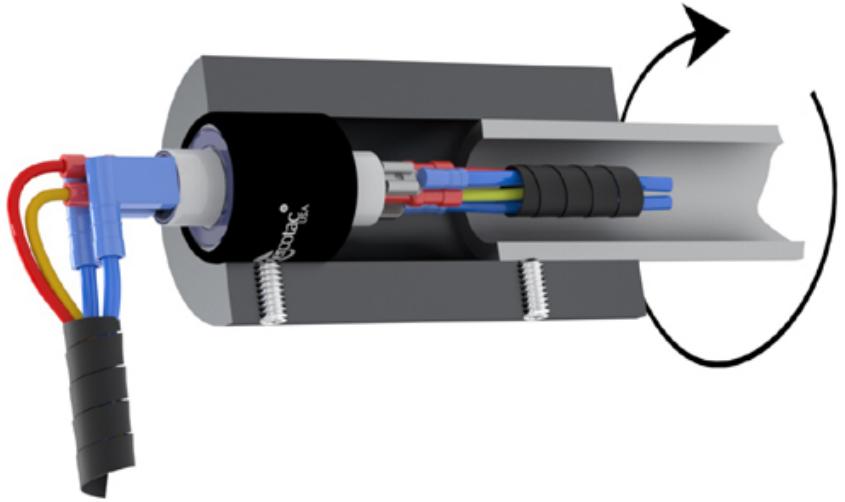

UPPER TERMINALS
PLASTIC BUSHING
BODY
PLASTIC BUSHING
LOWER TERMINALS
IN[mm]
∅ .984 +.001 -.000
[24.99 +0.03 0.00]
.40
[10.16]
(SETSCREW)
.80
[20.32]
BUSHING BORE
TERMINAL CLEARANCE
.980
[24.90]

Horizonal Mount to Body



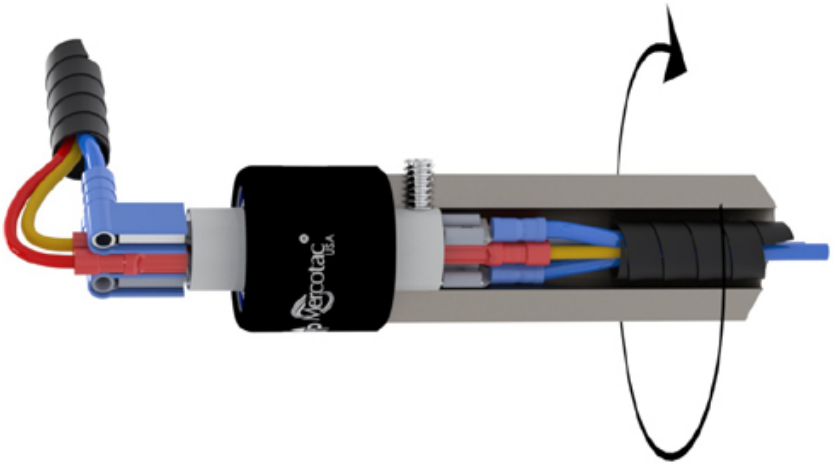
Good mounting method
(but vertical orientation is better)

Adaptor Mount to Body



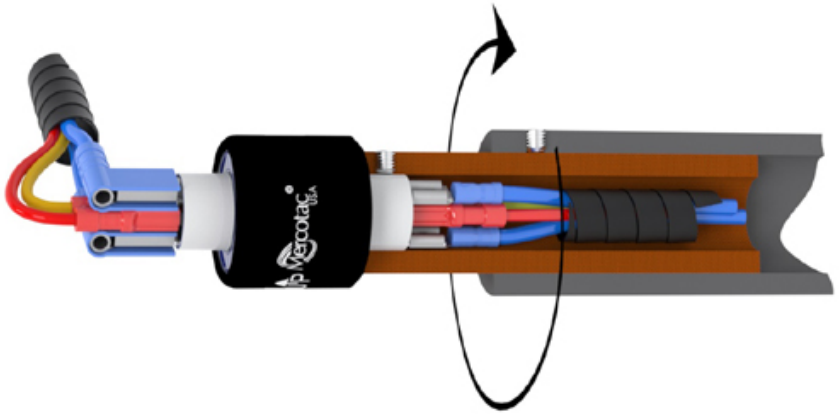
Use when the shaft diameter is smaller
than the body of the Mercotac.

Horizonal Mount to Bushing



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

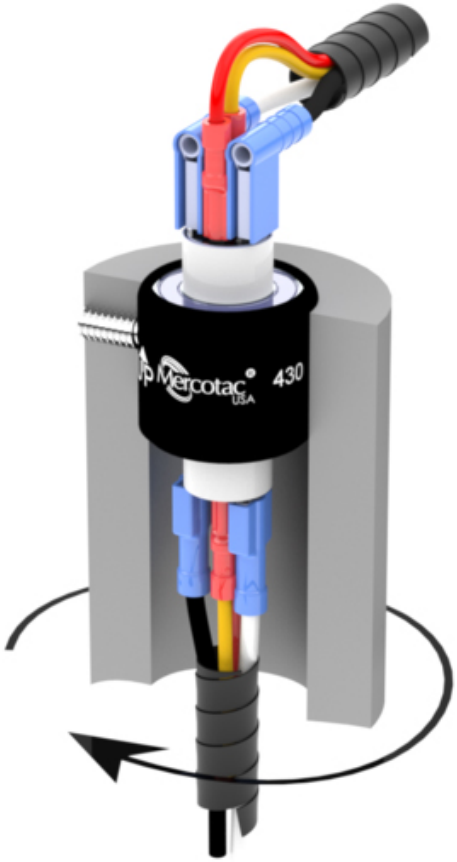
Thermal Insulated Mount to Bushing



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

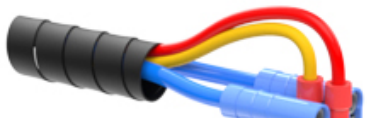
Top Mount to Body

Bottom Mount to Bushing

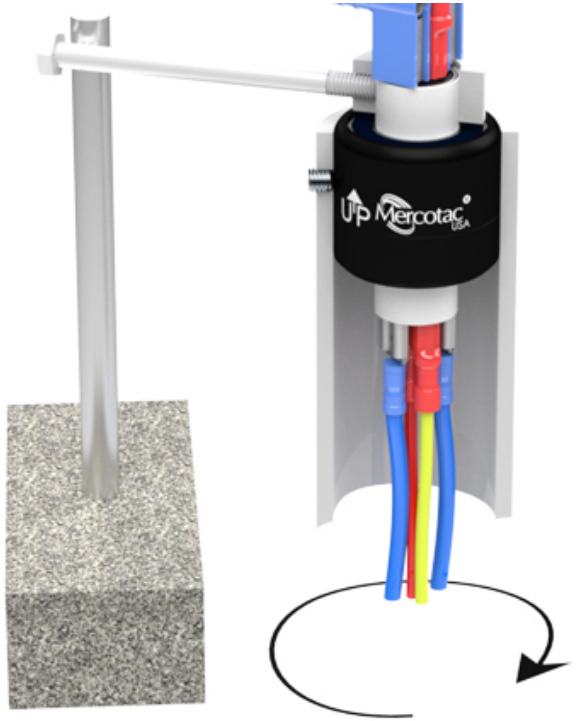


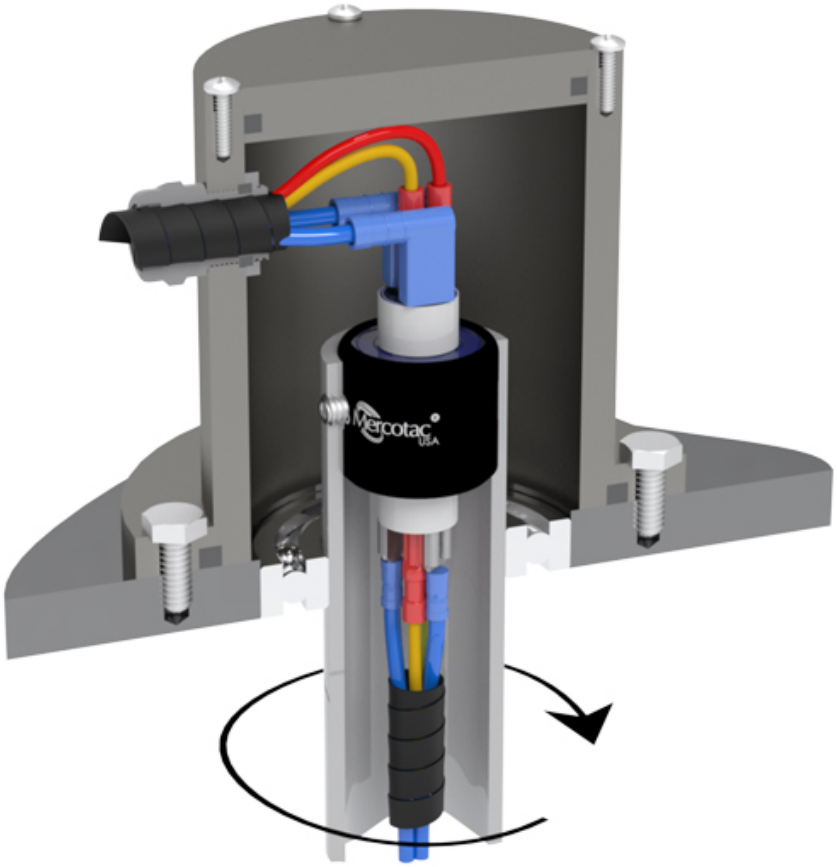
Best mounting method.

Floating Torque Arm Mount to Body



Protective Housing Mount to Body

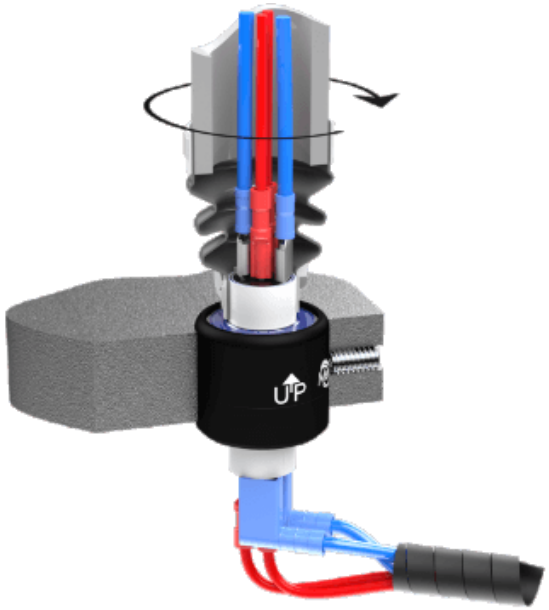




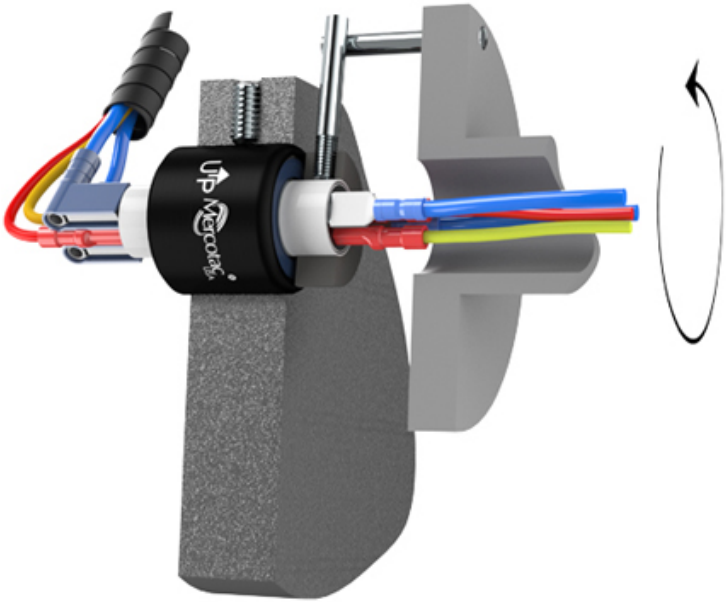
Recommended for wash-down or dirty environments.
Also recommended for food processing .

Vibration Isolation Mount to Body

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 335 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 335 Wire Connections with Optional Boot Kit

Wire connections, mounted inside rotating shaft.

Stationary end showing optional boot kit.

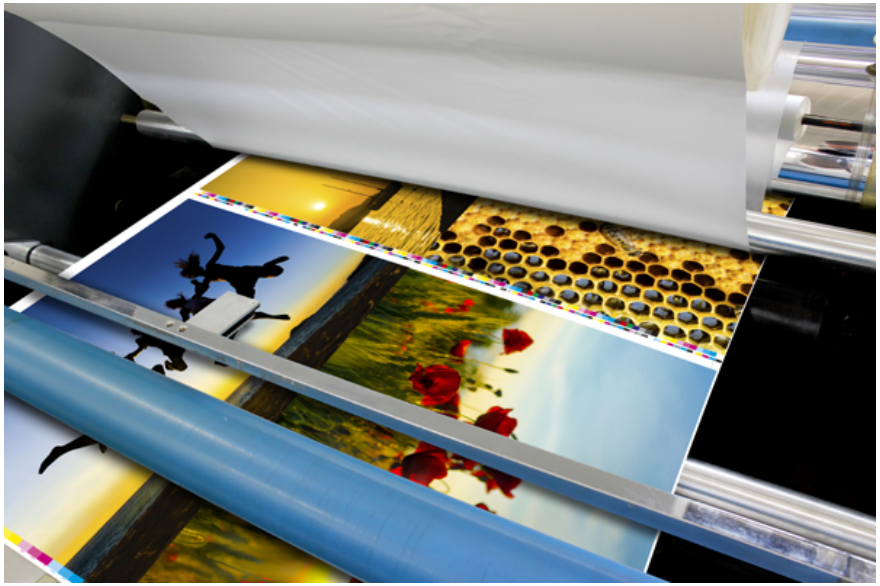
Cutaway view.

Wire connections, mounted inside rotating shaft.

Stationary end showing optional boot kit.

Applications

The Mercotac model 335 brushless slip rings are specifically designed for higher power applications like electrical heating systems, ensuring efficient and reliable power transmission to rotating heating parts. With their robust construction and advanced brushless design, these slip rings provide a dependable solution for precise temperature control and optimized heating performance. They find relevance in diverse industries, including manufacturing, automotive, and residential heating. Additionally, the model 335 slip rings are well-suited for laminating processes, the aerospace industry, and pressure sensing manufacturing.



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.
Learn More

Mounting Options.
Learn More

Frequency.
Learn More

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