# **BS SERIES**Compact Capsule Slip Rings

BS series slip rings are small and compact with OD 22mm, with capsule style.

# **Features**

- Special designed for CCTV or small rotating system, OD 22mm and special fit for middle/small rotating system of transmitting low controlling signal.
- Standard, off-the-shelf,no through bore
- Circuits combination is available (sucn as video, control, sensor, power, Ethernet and so on)
- Lower torque low contact wear rates
- Support video, control, sensor, power, Ethernet signals



# **BS Series Models**

Model#	Length(mm)	OD(mm)	Circuits (rings)	Current	Voltage(VDC/VAC)
BS190	19	22	1~6	Signal(2A)	220
BS260	26	22	1~12	Signal(2A)	220
BS330	33	22	1~18	Signal(2A)	220
BS400	43.6	22	1~24	Signal(2A)	220
BS573	57.3	22	1~36	Signal(2A)	220
BS857	85.7	25	1~56	Signal(2A)	220
BS1650	165	38	1~84	Signal(2A)	240
BS1940	194	38	1~102	Signal(2A)	240
BS2230	223	38	1~120	Signal(2A)	240

60% of orbinexus' s sales are customized solutions, please contact customer service for special requirements.

# **BS190 CAPSULE SLIP RINGS**

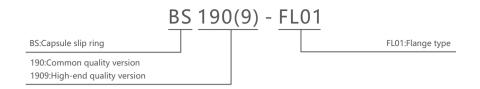
BS190 slip rings are small and compact with OD 22mm \* L 19mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.BS1909 is the high-end version corresponding to BS190, It has higher performace and longer working life, higher speed rotating speed, low noise.

# **Product images**

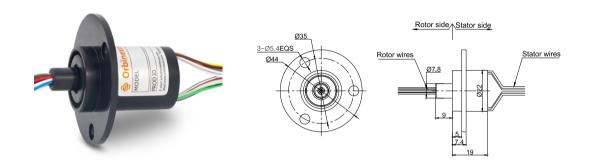


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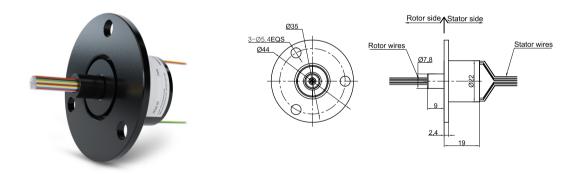


Standard Model BS190

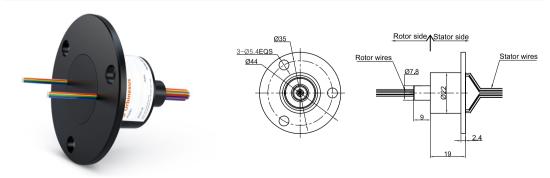


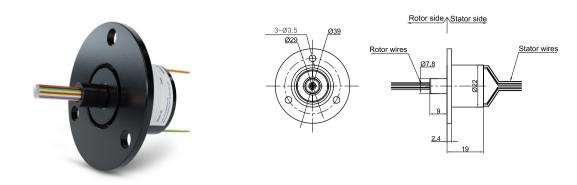
# **Optional Flange Model**

BS190-FL01

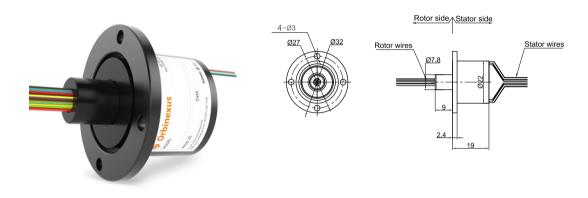


BS190-FL02

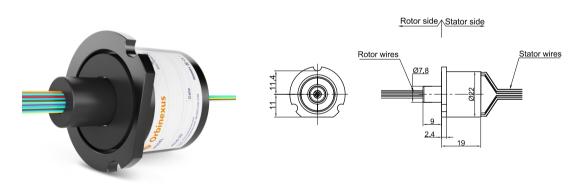




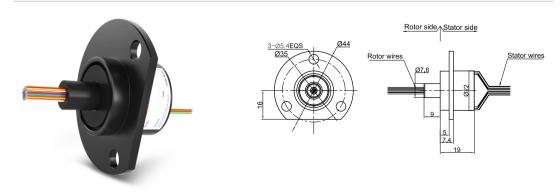
BS190-FL04

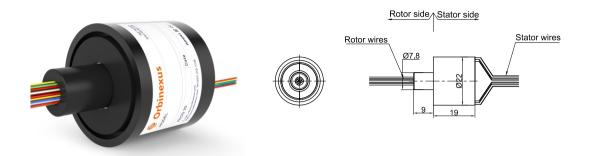


BS190-FL05



BS190-FL06





#### BS190 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	Total Wires
BS190	6	0	0	0	6
BS190-P0204-S02	2	2	0	0	4
BS190-P0304	0	3	0	0	3
BS190-P0108-S02	2	0	1	0	3

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS190	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS1909	1000RPM	20 million	0.005 N·m	Metal	4mΩ

#### **Lead Wires Color Code**

Ring	1	2	3	4	5	6
Color	BLK	RED	YEL	GRN	BLU	WHT

- 1. BS1909 is the high-end version corresponding to BS190.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS260 CAPSULE SLIP RINGS**

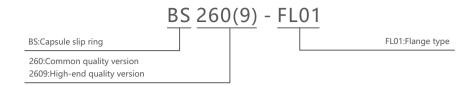
BS260 slip rings are small and compact with OD 22mm \* L 26mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring .Bs2609 is the high-end version corresponding to BS260, It has higher performace and longer working life, higher speed rotating speed, low noise.

# **Product images**

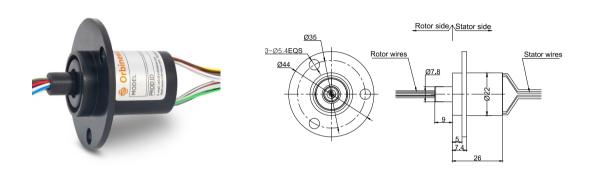


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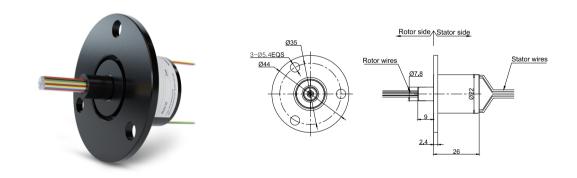


Standard Model BS26

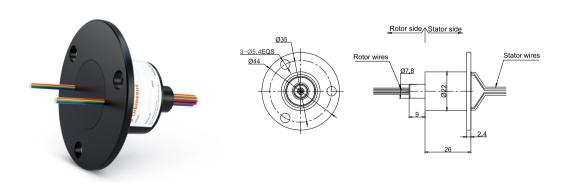


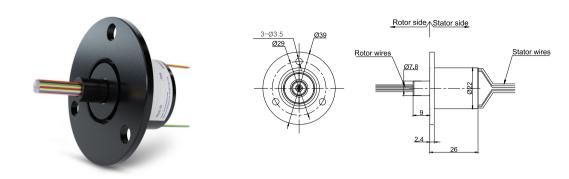
# **Optional Flange Model**

BS260-FL01

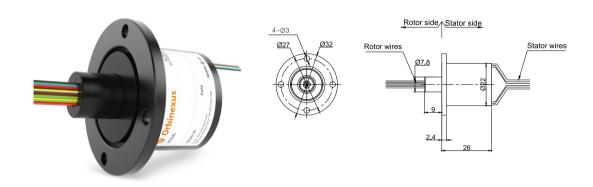


BS260-FL02

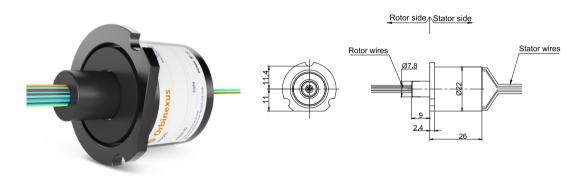




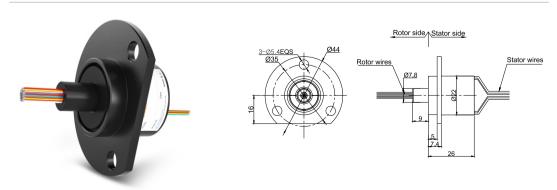
BS260-FL04

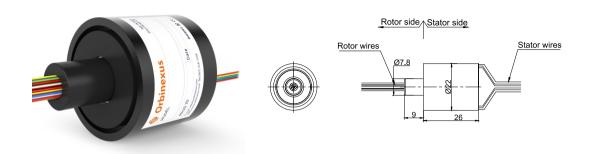


BS260-FL05



BS260-FL06





#### Bs260 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	Total Wires
MC260	12	0	0	0	12
MC260-P0304-S06	6	3	0	0	9
MC260-P0208-S02	2	0	2	0	4
MC260-P0308	0	0	3	0	3

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS260	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS2609	1000RPM	20 million	0.005 N·m	Metal	4mΩ

#### Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	RED	GRN	YEL	VLT	GRY	BLK	BLU	DB	BRN	ORG	WHT	КНА

- 1. BS2609 is the high-end version corresponding to BS260.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

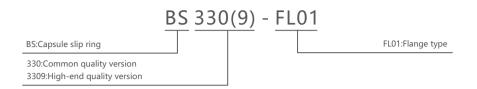
# **BS330 CAPSULE SLIP RINGS**

BS330 slip rings are small and compact with OD 22mm \* L 33mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring. Bs3309 is the high-end version corresponding to BS330, It has higher performace and longer working life, higher speed rotating speed,low noise.

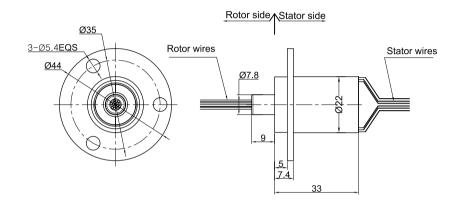
# **Product images**



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#### **Dimensions**



#### BS330 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	Total Wires
BS330	18	0	0	0	18
BS330-P0604-S06	6	6	0	0	12
BS330-P0308-S06	6	0	3	0	9
BS330-P0408-S02	2	0	4	0	6
BS330-P0215	0	0	0	2	2

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

#### **Mechanical Data**

Project	Numerical value		
Working Life	See Product Quality Level Table		
Rotating Speed	See Product Quality Level Table		
Working temperature	-30°C~80°C		
Operating Humidity	0~85% RH		
Contact Material	See Product Quality Level Table		
Housing Materia	See Product Quality Level Table		
Torque	0.05N.m; +0.01N.m/6rings		
Protection Grade	IP51		

#### **Electrical Data**

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise 1@10RPM
BS330	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS3309	1000RPM	20 million	0.005 N·m	Metal	4mΩ

#### **Lead Wires Color Code**

1	2	3	4	5	6	7	8	9	10
RED	GRN	YEL	VLT	GRY	BLK	BLU	DB	BRN	ORG
11	12	13	14	15	16	17	18		
	RED	RED GRN	RED GRN YEL	RED GRN YEL VLT	RED GRN YEL VLT GRY	RED GRN YEL VLT GRY BLK	RED GRN YEL VLT GRY BLK BLU	RED GRN YEL VLT GRY BLK BLU DB	RED GRN YEL VLT GRY BLK BLU DB BRN

- 1. BS3309 is the high-end version corresponding to BS330.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS400 CAPSULE SLIP RINGS**

BS400 slip rings are small and compact with OD 22mm \* L 43.6mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

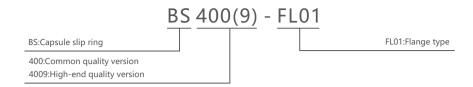
BS4009 is the high-end version corresponding to BS400, It has higher performace and longer working life, higher speed rotating speed,low noise.

# **Product images**

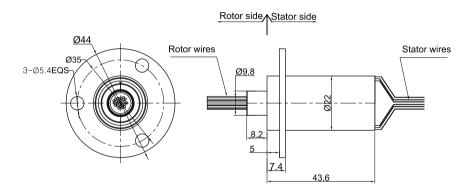


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#### **Dimensions**



#### BS400 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	Total Wires
BS400	24	0	0	0	24
BS400-P0304-S18	18	3	0	0	21
BS400-P0604-S12	12	6	0	0	18
BS400-P0804-S08	8	8	0	0	16
BS400-P0308-S08	8	0	3	2	11
BS400-P0408-S04	4	0	4	0	8
BS400-P0508	0	0	5	0	5
BS400-P0215-S06	6	0	0	2	8
BS400-P0315	0	0	0	3	3

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

## **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS400	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS4009	1000RPM	20 million	0.005 N·m	Metal	4mΩ

#### **Mechanical Data**

Project	Numerical value			
Working Life	See Product Quality Level Table			
Rotating Speed	See Product Quality Level Table			
Working temperature	-30℃~80℃			
Operating Humidity	0~85% RH			
Contact Material	See Product Quality Level Table			
Housing Materia	See Product Quality Level Table			
Torque	0.05N.m; +0.01N.m/6rings			
Protection Grade	IP51			

#### **Electrical Data**

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10
Color	RED	GRN	YEL	VLT	GRY	BLK	BLU	DB	BRN	ORG
Ring	11	12	13	14	15	16	17	18		
Color	WHT	KHA	WHT RED	WHT BLK	WHT BLU	WHT VLT	WHT BRN	WHT GRN		

- 1. BS4009 is the high-end version corresponding to BS400.
- 2. Optional flange mounting.
- ${\it 3. Specified connectors and Heat-shrink tube.}\\$
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS573 CAPSULE SLIP RINGS**

BS573 slip rings are small and compact with OD 22mm \* L 57.3mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

BS5739 is the high-end version corresponding to BS573, It has higher performace and longer working life, higher speed rotating speed,low noise.

# **Product images**

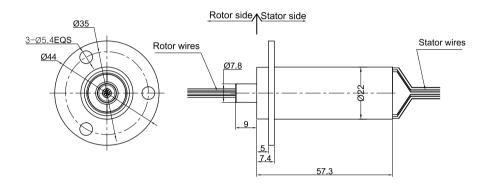


#### The pictures are for reference only

If there are changes in the appearance and size of the product, the actual product should prevail.



#### **Dimensions**



#### BS573 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	<b>Total Wires</b>
BS573	36	0	0	0	36

Note:N channels 2A rings parallel can be used as 1 channel N × 2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

## **Product Quality Level Table**

Part#	Max Speed	<b>Working Life</b>	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS400	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS4009	1000RPM	20 million	0.005 N·m	Metal	4mΩ

Project Numerical value		Signal		
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC		
Insulation Resistance	≥100MΩ/500VDC	≥100MΩ/500VDC		
Lead Wires	AWG28# teflon	AWG28# teflon		
Lead Length	Standard 300mm(adjustable)			
Electrical Noise	<0.01Ω	<0.01Ω		

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

## Lead Wires Color Code

Ring	1/2	3/4	5/6	7/8	9/10	11/12	13/14	15/16	17/18	19/20
Color	RED	GRN	YEL	VLT	GRY	BLK	BLU	DB	BRN	ORN
Ring	21/22	23/24	25/26	27/28	29/30	31/32	33/34	35/36		
Color	WHT	KHA	WHT RED	WHT BLK	WHT BLU	WHT VLT	WHT BRA	WHT GRN		

- 1. BS5739 is the high-end version corresponding to BS573.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS857 CAPSULE SLIP RINGS**

BS857 slip rings are small and compact with OD 25mm \* L 85.7mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

BS8579 is the high-end version corresponding to BS857, It has higher performace and longer working life, higher speed rotating speed,low noise.

# **Product images**

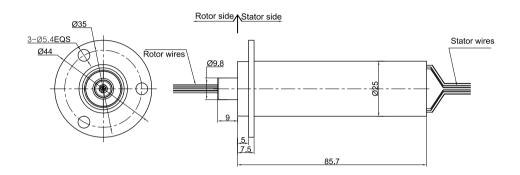


#### The pictures are for reference only

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#### **Dimensions**



#### BS857 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	<b>Total Wires</b>
BS857	56	0	0	0	56

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS857	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS8579	1000RPM	20 million	0.005 N·m	Metal	4mΩ

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥100MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30℃~80℃
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

#### **Lead Wires Color Code**

Ring	1/4	5/8	9/12	13/16	17/20	21/24	25/28	29/32	37/40	41/44
Color	RED	GRN	YEL	VLT	GRA	BLK	BLU	DB	BRN	WHT
Ring	45/48	49/52	53	/55						
Color	KHA	WHTRE	) WH	T BLK						

- 1. BS8579 is the high-end version corresponding to BS857.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS1650 CAPSULE SLIP RINGS**

BS1650 slip rings are small and compact with OD 25mm \* L 85.7mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

BS16509 is the high-end version corresponding to BS1650, Ultra thick gold plating treatment, fully imported bearings, rare metal alloy brush wires, mainly used in non civilian fields such as military and national defense.

# **Product images**

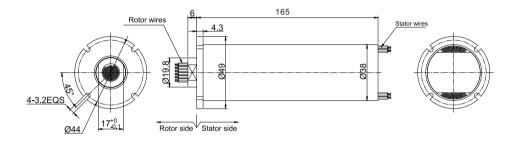


#### The pictures are for reference only

If there are changes in the appearance and size of the product, the actual product should prevail.



#### **Dimensions**



#### BS1650 Series Parts# List

Parts#	Signal/2A	4A	8A	15A	<b>Total Wires</b>
BS1650	84	0	0	0	84

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise①@10RPM
BS1650	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS16509	600RPM	20 million	0.005 N·m	Metal	5mΩ

Project Numerical value		Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥100MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30℃~80℃
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

- 1. BS16509 is the high-end version corresponding to BS1650.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS1940 CAPSULE SLIP RINGS**

BS1940 slip rings are small and compact with OD 25mm \* L 85.7mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

BS19409 is the high-end version corresponding to BS1940, Ultra thick gold plating treatment, fully imported by ags, rare metal alloy brush wires, mainly used in non civilian fields such as military and national defense.

# **Product images**

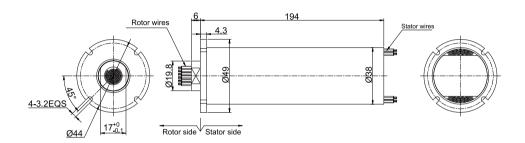


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If there are changes in the appearance and size of the product, the actual product should prevail.



#### **Dimensions**



#### BS1940 SERIES PARTS# LIST

Parts#	Signal/2A	4A	8A	15A	<b>Total Wires</b>
BS1940	102	0	0	0	102

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A please contact sales for special requirements

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	<b>Housing Material</b>	Electrical Noise @ 10RPM
BS1940	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS19409	600RPM	20 million	0.01 N·m	Metal	5mΩ

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥100MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

#### **Mechanical Data**

Project	Numerical value		
Working Life	See Product Quality Level Table		
Rotating Speed	See Product Quality Level Table		
Working temperature	-30°C~80°C		
Operating Humidity	0~85% RH		
Contact Material	See Product Quality Level Table		
Housing Materia	See Product Quality Level Table		
Torque	0.05N.m; +0.01N.m/6rings		
Protection Grade	IP51		

- 1. BS19409 is the high-end version corresponding to BS1940.
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.

# **BS2230 CAPSULE SLIP RINGS**

BS2230 slip rings are small and compact with OD 25mm \* L 85.7mm, with capsule style, standard, off-the-shelf.Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

BS22309 is the high-end version corresponding to BS2230, Ultra thick gold plating treatment, fully imported bearing rare metal alloy brush wires, mainly used in non civilian fields such as military and national defense.

# **Product images**

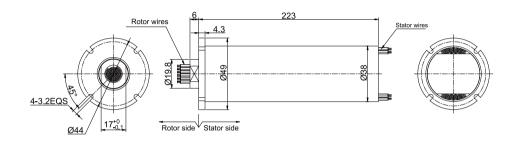


The picture are for reference only

If there are changes in the appearance and size of the product, the actual product should prevail.



#### **Dimensions**



#### BS2230 SERIES PARTS# LIST

Parts#	Signal/2A	4A	8A	15A	<b>Total Wires</b>
BS2230	120	0	0	0	120

Note:N channels 2A rings parallel can be used as 1 channel N  $\times$  2A current. For example: 2 rings 2A parallel could be used as 1 wires 4A ,please contact sales for special requirements

# **Product Quality Level Table**

Part#	Max Speed	Working Life	Tourque	Housing Material	Electrical Noise①@10RPM
BS2230	250RPM	10 million	0.02 N·m	Plastics	10mΩ
BS22309	600RPM	20 million	0.01 N·m	Metal	5mΩ

Project	Numerical value	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥100MΩ/500VDC	≥100MΩ/500VDC
Lead Wires	AWG28# teflon	AWG28# teflon
Lead Length	Standard 300mm(adjustable)	
Electrical Noise	<0.01Ω	

#### **Mechanical Data**

Project	Numerical value
Working Life	See Product Quality Level Table
Rotating Speed	See Product Quality Level Table
Working temperature	-30℃~80℃
Operating Humidity	0~85% RH
Contact Material	See Product Quality Level Table
Housing Materia	See Product Quality Level Table
Torque	0.05N.m; +0.01N.m/6rings
Protection Grade	IP51

- 1. BS22309 is the high-end version corresponding to BS2230..
- 2. Optional flange mounting.
- 3. Specified connectors and Heat-shrink tube.
- 4. Longer lead lengths available.
- 5. High temperature is optional.
- 6. Military Grade.