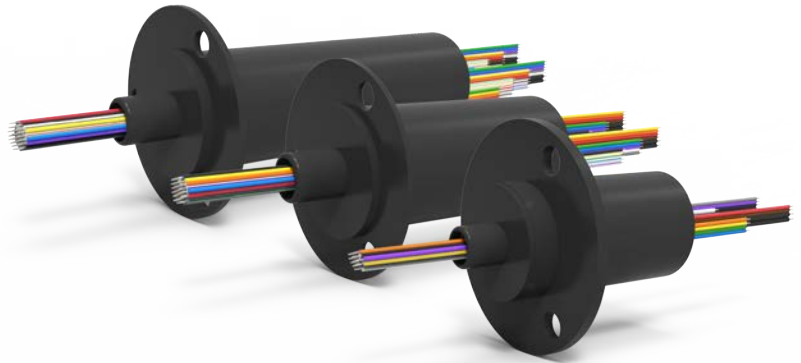


## ESM Series: Overview

- + High-Quality Gold on Gold Contacts
- + Splash Seals for Dust and Moisture
- + Transfers Analog and Digital Signals
- + Low Electrical Noise
- + Precision Ball Bearings
- + Data Speeds Under 50 Megabits / Sec\*
- + Compatible With a Range of Data Bus Protocols



The ESM Series electrical slip ring is a rotating assembly used to transfer power, control circuits or data (analog / digital) from stationary inlets to rotating outlets.


ESM Series slip rings include flexible, color-coded lead wires suitable for transferring analog and digital signals. Utilizing high performance gold-on-gold contacts, the ESM Series features low electrical noise and supports data speeds up to 50 megabits / second. Standard models are available from 9 to 52 circuits.



**PROTECTIVE ENCLOSURE**  
Enhanced protection for your slip ring against water, dust & damage.  
[Learn More On Page 5](#)


SPECIFICATIONS	
Operating Speed (max.)	250 RPM Continuous
Data Speed (max.)	Under 50 Mbps (non-Ethernet)*
Standard Circuit Options	9, 15, 24, 32, 44, 52
Voltage [AC/DC] (max.)	240
Amps	2, 5, 10
Lead Gauge (AWG)	26, 20, 16
Wire Material	Silver-Plated Copper
Electrical Noise (max.)	60 Milliohms
Contact Material	Gold
Temperature Range	-40 °F to 176 °F (-40 °C to +80 °C)

\* In order to successfully transfer digital data signals, a variety of conditions must be met. Please consult with DSTI for approval. For the most reliable transfer of digital data signals, see our Ethernet slip ring options.



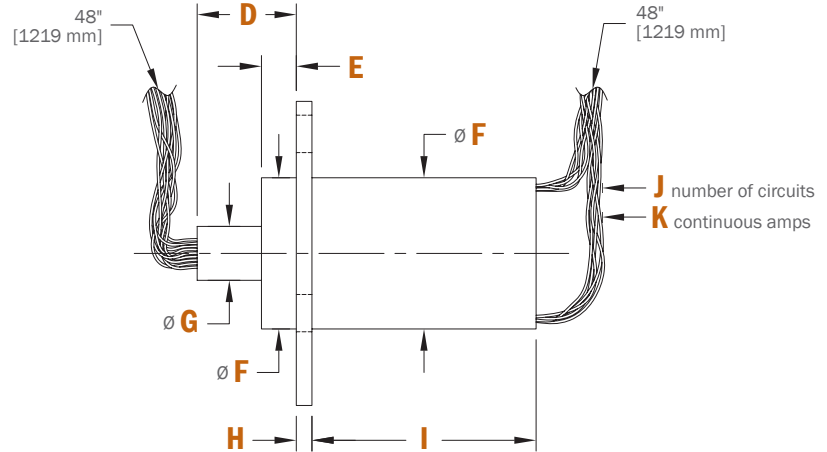
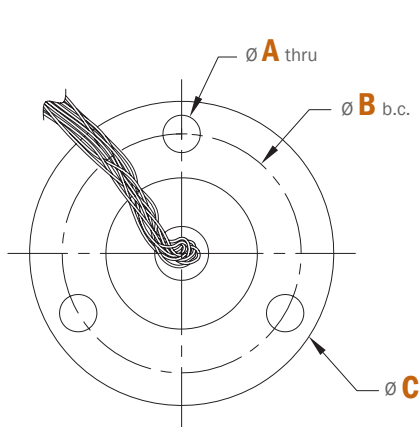
**PRODUCT DOWNLOADS**  
For Catalogs, Brochures, Models and Drawings visit [www.dsti.com/downloads](http://www.dsti.com/downloads)

---



**DID YOU KNOW?**  
DSTI slip rings can be purchased online at [store.dsti.com](http://store.dsti.com)

## ESM Series: Dimensions



	ESM36	ESM312	ESM420	ESM428	ESM440	ESM448
<b>A</b>	.215" [5.50mm]	.215" [5.50mm]	.220" [5.60mm]	.220" [5.60mm]	.220" [5.60mm]	.220" [5.60mm]
<b>B</b>	1.375" [34.93mm]	1.375" [34.93mm]	1.410" [35.80mm]	1.410" [35.80mm]	1.410" [35.80mm]	1.410" [35.80mm]
<b>C</b>	1.75" [44.45mm]	1.75" [44.45mm]	1.75" [44.45mm]	1.75" [44.45mm]	1.75" [44.45mm]	1.75" [44.45mm]
<b>D</b>	.57" [14.48mm]	.57" [14.48mm]	.48" [12.19mm]	.48" [12.19mm]	.48" [12.19mm]	.48" [12.19mm]
<b>E</b>	.20" [5.08mm]	.20" [5.08mm]	.20" [5.08mm]	.20" [5.08mm]	.20" [5.08mm]	.20" [5.08mm]
<b>F</b>	.87" [22.10mm]	.87" [22.10mm]	1.00" [25.40mm]	1.00" [25.40mm]	1.00" [25.40mm]	1.00" [25.40mm]
<b>G</b>	.31" [7.87mm]	.31" [7.87mm]	.38" [9.53mm]	.38" [9.53mm]	.38" [9.53mm]	.38" [9.53mm]
<b>H</b>	.09" [2.36mm]	.09" [2.36mm]	.06" [1.50mm]	.06" [1.50mm]	.06" [1.50mm]	.06" [1.50mm]
<b>I</b>	1.28" [32.56mm]	1.28" [32.56mm]	2.06" [52.40mm]	2.06" [52.40mm]	2.96" [75.30mm]	2.96" [75.30mm]
<b>J</b>	9 Circuits	15 Circuits	24 Circuits	32 Circuits	44 Circuits	52 Circuits
<b>K</b>	(3x) 10 Amps (6x) 2 Amps	(3x) 5 Amps (12x) 2 Amps	(4x) 10 Amps (20x) 2 Amps	(4x) 5 Amps (28x) 2 Amps	(4x) 10 Amps (40x) 2 Amps	(4x) 5 Amps (48x) 2 Amps

## Wiring Color Codes: ESM Series

ESM36		
Tag #	Color	Description/Awg
1	BLK	10A/16
2	BLK	
3	BLK	
4	BLK	2A/26
5	BRN	
6	RED	
7	ORN	
8	YEL	
9	GRN	

ESM312		
Tag #	Color	Description/Awg
1	BLK	5A/20
2	BLK	
3	BLK	
4	BLK	2A/26
5	BRN	
6	RED	
7	ORN	
8	YEL	
9	GRN	
10	BLU	
11	VIO	
12	GRY	
13	WHT	
14	WHT-BLK	
15	WHT-BRN	

ESM420		
Tag #	Color	Description/Awg
1	BLK	2A/26
2	BRN	
3	RED	
4	ORN	
5	YEL	
6	GRN	
7	BLU	
8	VIO	
9	GRY	
10	WHT	
11	WHT-BLK	
12	WHT-BRN	
13	WHT-RED	
14	WHT-ORN	
15	WHT-YEL	
16	WHT-GRN	
17	WHT-BLU	
18	WHT-VIO	
19	BLK	
20	BRN	
21	BLK	
22	BLK	
23	BLK	
24	BLK	

ESM428			
Tag #	Color	Description/Awg	
1	BLK	2A/26	
2	BRN		
3	RED		
4	ORN		
5	YEL		
6	GRN		
7	BLU		
8	VIO		
9	GRY		
10	WHT		
11	WHT-BLK		
12	WHT-BRN		
13	WHT-RED		
14	WHT-ORN		
15	WHT-YEL		
16	WHT-GRN		
17	WHT-BLU		
18	WHT-VIO		
19	BLK		5A/20
20	BRN		
21	RED		
22	ORN		
23	YEL		
24	GRN		
25	BLU		
26	VIO		
27	GRY		
28	WHT		
29	BLK		
30	BLK		
31	BLK		
32	BLK		

## Wiring Color Codes: ESM Series

ESM440		
Tag #	Color	Description/Awg
1	BLK	2A/26
2	BRN	
3	RED	
4	ORN	
5	YEL	
6	GRN	
7	BLU	
8	VIO	
9	GRY	
10	WHT	
11	WHT-BLK	
12	WHT-BRN	
13	WHT-RED	
14	WHT-ORN	
15	WHT-YEL	
16	WHT-GRN	
17	WHT-BLU	
18	WHT-VIO	
19	BLK	
20	BRN	
21	RED	
22	ORN	
23	YEL	
24	GRN	
25	BLU	
26	VIO	
27	GRY	
28	WHT	
29	WHT-BLK	
30	WHT-BRN	
31	WHT-RED	
32	WHT-ORN	
33	WHT-YEL	
34	WHT-GRN	
35	WHT-BLU	
36	WHT-VIO	

37	BLK	2A/26
38	BRN	
39	RED	
40	ORN	
41	BLK	10A/16
42	BLK	
43	BLK	
44	BLK	

ESM448		
Tag #	Color	Description/Awg
1	BLK	2A/26
2	BRN	
3	RED	
4	ORN	
5	YEL	
6	GRN	
7	BLU	
8	VIO	
9	GRY	
10	WHT	
11	WHT-BLK	
12	WHT-BRN	
13	WHT-RED	
14	WHT-ORN	
15	WHT-YEL	
16	WHT-GRN	
17	WHT-BLU	
18	WHT-VIO	
19	BLK	
20	BRN	
21	RED	
22	ORN	
23	YEL	
24	GRN	
25	BLU	
26	VIO	
27	GRY	
28	WHT	
29	WHT-BLK	
30	WHT-BRN	
31	WHT-RED	
32	WHT-ORN	
33	WHT-YEL	
34	WHT-GRN	
35	WHT-BLU	
36	WHT-VIO	

37	BLK	2A/26
38	BRN	
39	RED	
40	ORN	
41	YEL	
42	GRN	
43	BLU	
44	VIO	
45	GRY	
46	WHT	
47	WHT-BLK	5A/20
48	WHT-BRN	
49	BLK	
50	BLK	
51	BLK	
52	BLK	

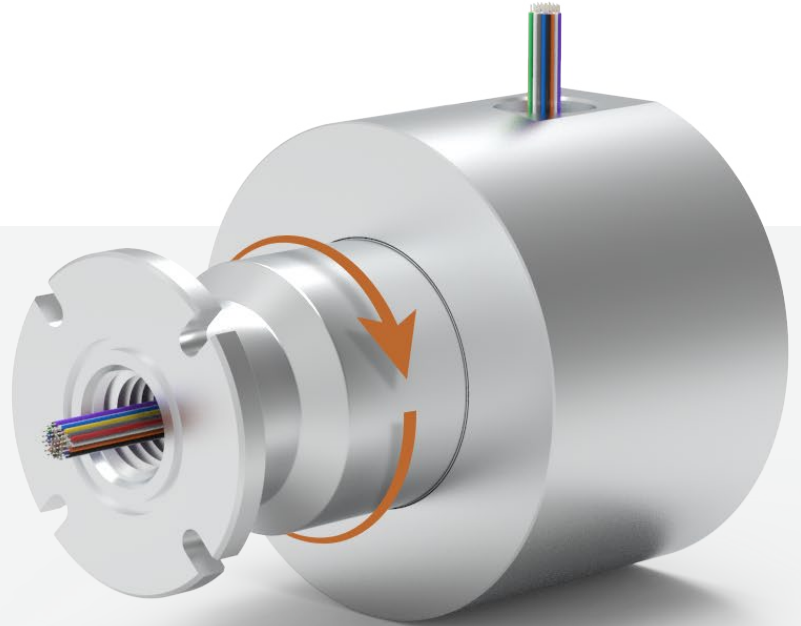
## Slip Ring Protective Enclosure (SRPE-100)

[LEARN MORE](#)

Enhance protection with a waterproof and dustproof sealed slip ring enclosure.

DSTI offers a wide range of slip rings for transferring electrical signals, power or data from a fixed structure to a rotating piece of equipment.

To mitigate slip ring damage when used in harsh environments, DSTI offers an all-aluminum enclosure for enhanced protection against water and dust ingress. The SRPE features a low-torque design, a flange located on the shaft for improved mounting capabilities and NPT connections for installing electrical conduit.



**SPRAY & SPLASH PROTECTION**



**DUST & DIRT PROTECTION**



**CONTINUOUS ROTATION UP TO 250 RPM**



**IN-STOCK & READY TO SHIP**

### SPECIFICATIONS

SLIP RING COMPATIBILITY*	ES, ESM, ESE
CONNECTION OPTIONS	NPT / Shaft Flange
CONNECTION SIZE	.50" / 1.250" O-Ring
DIAMETER	3.69"
LENGTH	4.99"
MINIMUM TORQUE	8 in-lbs.
MAXIMUM ROTATION	250 RPM
MATERIAL	Aluminum

\*Not compatible with ES6A or ES12A slip rings. Slip rings are sold separately.

