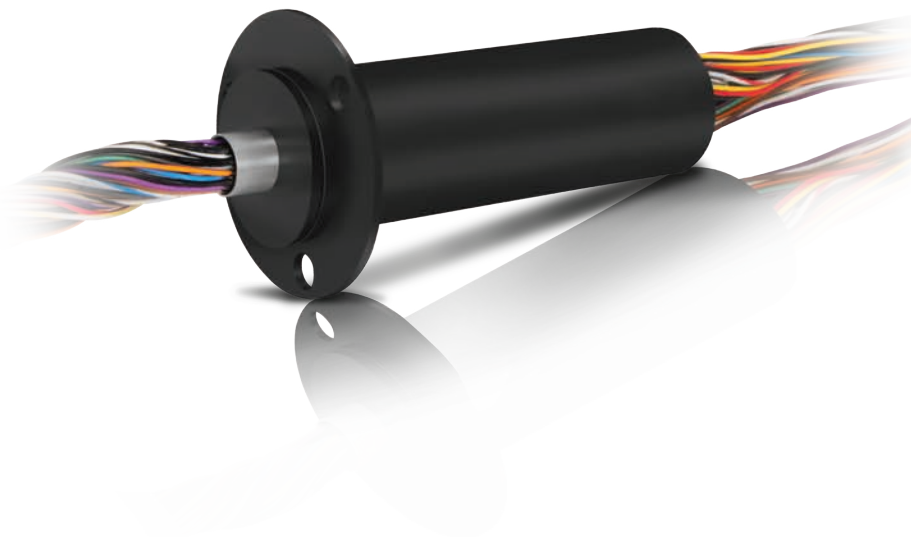


ESM SERIES

Series Overview

- + High Quality Gold on Gold Contacts
- + Transfers Analog and Digital Signals
- + Low Electrical Noise
- + Precision Ball Bearings
- + Data Speeds up to 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 in 9, 15, 24, 32, 44, and 52 circuits.

Specifications

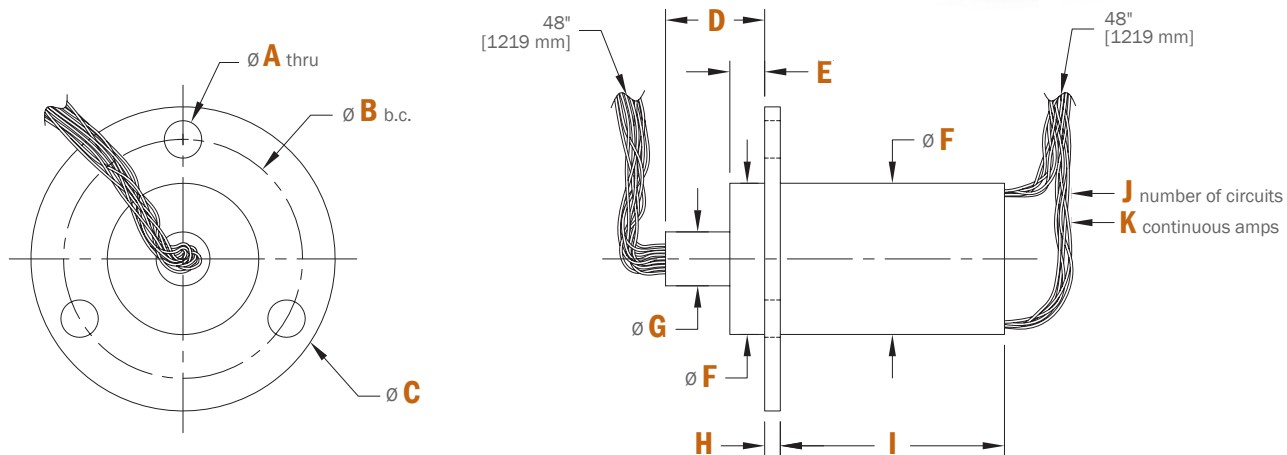
Max. Operating Speed	250 RPM Continuous
Standard Circuit Options	9, 15, 24, 32, 44, 52
Voltage	240
Amps / Circuit	2/5/10
Lead / Size Type	26/20/16 gauge silver/tin plated copper, Teflon®
Contact Material	Gold
Temperature Range	-40 °F to 176 °F (-40 °C to +80 °C)

* For higher data speeds see our ESE & ESET Series slip rings

ESM SERIES



Dimensions



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

	ESM440	ESM448
A	.220" [5.60mm]	.220" [5.60mm]
B	1.410" [35.80mm]	1.410" [35.80mm]
C	1.75" [44.45mm]	1.75" [44.45mm]
D	.48" [12.19mm]	.48" [12.19mm]
E	.20" [5.08mm]	.20" [5.08mm]
F	1.00" [25.40mm]	1.00" [25.40mm]
G	.38" [9.53mm]	.38" [9.53mm]
H	.06" [1.50mm]	.06" [1.50mm]
I	2.96" [75.30mm]	2.96" [75.30mm]
J	44 Circuits	52 Circuits
K	(4x) 10 Amps (40x) 2 Amps	(4x) 5 Amps (48x) 2 Amps

ESM SERIES

Wire Color Codes

ESM36			ESM312			ESM428			ESM428				
Tag #	Color	Description/Awg	Tag #	Color	Description/Awg	Tag #	Color	Description/Awg	Tag #	Color	Description/Awg		
1	BLK	10A/16	1	BLK	5A/20	1	BLK	2A/26	1	BLK	2A/26		
2	BLK		2	BLK		2	BRN		2	BRN			
3	BLK		3	BLK		3	RED		3	RED			
4	BLK	2A/26	4	BLK	2A/26	4	ORN		4	ORN		4	ORN
5	BRN		5	BRN		5	YEL		5	YEL		5	YEL
6	RED		6	RED		6	GRN		6	GRN		6	GRN
7	ORN		7	ORN		7	BLU		7	BLU		7	BLU
8	YEL		8	YEL		8	VIO		8	VIO		8	VIO
9	GRN		9	GRN		9	GRY		9	GRY		9	GRY
				10		BLU	10		WHT	10		WHT	10
			11	VIO		11	WHT-BLK		11	WHT-BLK		11	WHT-BLK
			12	GRY		12	WHT-BRN		12	WHT-BRN		12	WHT-BRN
			13	WHT		13	WHT-RED		13	WHT-RED		13	WHT-RED
			14	WHT-BLK		14	WHT-ORN		14	WHT-ORN		14	WHT-ORN
			15	WHT-BRN		15	WHT-YEL		15	WHT-YEL		15	WHT-YEL
						16	WHT-GRN		16	WHT-GRN		16	WHT-GRN
						17	WHT-BLU		17	WHT-BLU		17	WHT-BLU
						18	WHT-VIO		18	WHT-VIO		18	WHT-VIO
					19	BLK	19		BLK	19		BLK	
					20	BRN	20		BRN	20		BRN	
					21	RED	21		BLK	21	BLK		
					22	ORN	22		BLK	22	BLK		
					23	YEL	23		BLK	23	BLK		
					24	GRN	24		BLK	24	BLK		
					25	BLU							
					26	VIO							
					27	GRY							
					28	WHT							
					29	BLK	5A/20						
					30	BLK							
					31	BLK							
					32	BLK							
									22	BLK	10A/16		
									23	BLK			
									24	BLK			

ESM SERIES

Wire Color Codes

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	
48	WHT-BRN	
49	BLK	5A/20
50	BLK	
51	BLK	
52	BLK	