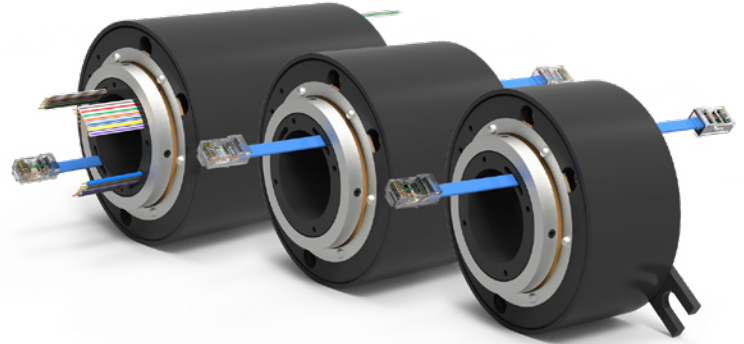


## ESET Series: Overview

- + 100Base-T / 1000Base-T Ethernet Cables Available
- + Splash Seals for Dust and Moisture
- + T568B Wiring Terminated With RJ45 Connectors
- + 1.5" Inch Thru-bore for Shaft Mounting
- + Fully Compliant With IEEE 802.3 Formats
- + Unique Fiber Brush Contact Technology
- + Low Contact Force per Fiber
- + Compatible With a Range of Data Bus Protocols



The ESET Series Ethernet thru-bore slip ring is a rotating assembly used to transfer power, control circuits, or data (analog / digital) from stationary inlets to rotating outlets.

ESET Series slip rings feature a 1.5 inch thru-bore for shaft mounting and provide 100Base-T or 1000Base-T Ethernet connections terminated with RJ45 connectors. The ESET Series incorporates low-wear, fiber brush contacts that do not require lubrication. Standard models are available in 4, 8, 14, 20 and 22 circuits.

SPECIFICATIONS	
Operating Speed (max.)	250 RPM Continuous
Data Speed (max.)	100 Mbps, 1 Gbps
Standard Circuit Options	4, 8, 14, 20, 22
Voltage [AC/DC] (max.)*	240, 600
Amps	2, 10
Lead Gauge (AWG)	24, 16
Wire Material	Copper, Tin-Plated Copper
Electrical Noise (max.)	100 Milliohms
Contact Material	Silver
Temperature Range	-40 °F to 176 °F (-40 °C to +80 °C)

\*600V max on 16 AWG power circuits. 240V max on Ethernet cable.



### PRODUCT DOWNLOADS

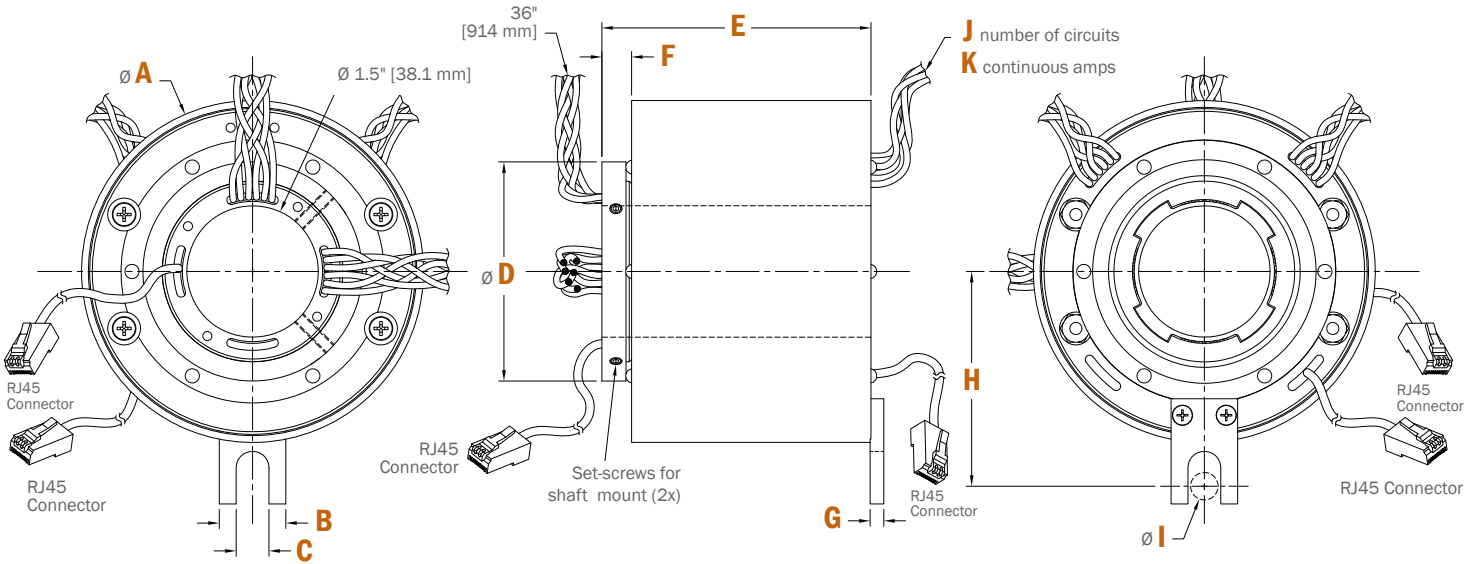
For Catalogs, Brochures, Models and Drawings visit [www.dsti.com/downloads](http://www.dsti.com/downloads)



### DID YOU KNOW?

DSTI slip rings can be purchased online at [store.dsti.com](http://store.dsti.com)

## ESET Series: Dimensions



	ESET4	ESET8	ESET68	ESET128	ESET184
<b>A</b>	3.90" [99.06mm]	3.90" [99.06mm]	3.90" [99.06mm]	3.90" [99.06mm]	3.90" [99.06mm]
<b>B</b>	.76" [19.30 mm]	.76" [19.30 mm]	.76" [19.30 mm]	.76" [19.30 mm]	.76" [19.30 mm]
<b>C</b>	.375" [9.53mm]	.375" [9.53mm]	.375" [9.53mm]	.375" [9.53mm]	.375" [9.53mm]
<b>D</b>	2.5" [63.50mm]	2.5" [63.50mm]	2.5" [63.50mm]	2.5" [63.50mm]	2.5" [63.50mm]
<b>E</b>	2.13" [54.10mm]	3.07" [77.98mm]	4.01" [101.85mm]	4.94" [125.48mm]	4.94" [125.48mm]
<b>F</b>	.34" [8.64mm]	.34" [8.64mm]	.34" [8.64mm]	.34" [8.64mm]	.34" [8.64mm]
<b>G</b>	.15" [3.81mm]	.15" [3.81mm]	.15" [3.81mm]	.15" [3.81mm]	.15" [3.81mm]
<b>H</b>	2.45" [62.23mm]	2.45" [62.23mm]	2.45" [62.23mm]	2.45" [62.23mm]	2.45" [62.23mm]
<b>I</b>	.313" [7.95mm]	.313" [7.95mm]	.313" [7.95mm]	.313" [7.95mm]	.313" [7.95mm]
<b>J</b>	4 Circuits	8 Circuits	14 Circuits	20 Circuits	22 Circuits
<b>K</b>	(1x) 100Base-T*	(1x) 1000Base-T*	(6x) 10 Amps (1x) 1000Base-T*	(12x) 10 Amps (1x) 1000Base-T*	(18x) 10 Amps (1x) 1000Base-T*

\*100BaseT & 1000BaseT (24 gauge / twisted pair) Ethernet circuits can also be used for other data/signal types

## Wiring Color Codes: ESET Series

\*24 AWG 100\_T = 2 amps max signal; CAT 6 Cable

ESET4			ESET184		
Tag #	Color	Description/Awg	Tag #	Color	Description/Awg
1	ORN	100_T/24/ Twisted Pair	1	ORN	100_T/24/ Twisted Pair
2	WHT-ORN		2	WHT-ORN	
3	GRN	100_T/24/ Twisted Pair	3	GRN	100_T/24/ Twisted Pair
4	WHT-GRN		4	WHT-GRN	
			5	BLU	10A/16
			6	VIO	
			7	GRY	
			8	WHT	
			9	WHT-BLK	
			10	WHT-BRN	
			11	WHT-RED	
			12	WHT-ORG	
			13	WHT-YEL	
			14	WHT-GRN	
			15	WHT-BLU	
			16	WHT-VIO	
			17	WHT-GRY	
			18	WHT-BLK- BRN	
			19	WHT-BLK- RED	
			20	WHT-BLK- ORG	
			21	WHT-BLK- YEL	
			22	WHT-BLK- GRN	

## Wiring Color Codes: ESET Series

\*24 AWG 1000\_T = 2 amps max signal; CAT 6 Cable

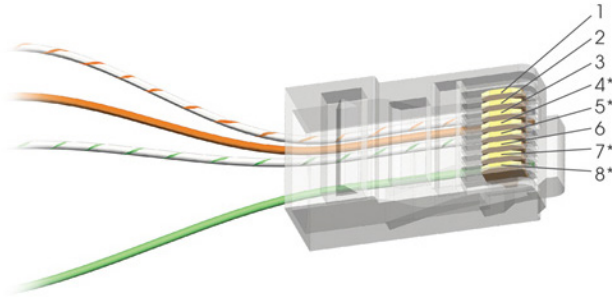
ESET8		
Tag #	Color	Description/Awg
1	ORN	1000_T/24/ Twisted Pair
2	WHT-ORN	1000_T/24/ Twisted Pair
3	GRN	1000_T/24/ Twisted Pair
4	WHT-GRN	1000_T/24/ Twisted Pair
5	BLU	1000_T/24/ Twisted Pair
6	WHT-BLU	1000_T/24/ Twisted Pair
7	BRN	1000_T/24/ Twisted Pair
8	WHT-BRN	1000_T/24/ Twisted Pair

ESET68		
Tag #	Color	Description/Awg
1	ORN	1000_T/24/ Twisted Pair
2	WHT-ORN	1000_T/24/ Twisted Pair
3	GRN	1000_T/24/ Twisted Pair
4	WHT-GRN	1000_T/24/ Twisted Pair
5	BLU	1000_T/24/ Twisted Pair
6	WHT-BLU	1000_T/24/ Twisted Pair
7	BRN	1000_T/24/ Twisted Pair
8	WHT-BRN	1000_T/24/ Twisted Pair
9	WHT-RED	10A/16
10	WHT-ORN	
11	WHT-YEL	
12	WHT-GRN	
13	WHT-BLU	
14	WHT-VIO	

ESET128		
Tag #	Color	Description/Awg
1	ORN	1000_T/24/ Twisted Pair
2	WHT-ORN	1000_T/24/ Twisted Pair
3	GRN	1000_T/24/ Twisted Pair
4	WHT-GRN	1000_T/24/ Twisted Pair
5	BLU	1000_T/24/ Twisted Pair
6	WHT-BLU	1000_T/24/ Twisted Pair
7	BRN	1000_T/24/ Twisted Pair
8	WHT-BRN	1000_T/24/ Twisted Pair
9	WHT-RED	10A/16
10	WHT-ORN	
11	WHT-YEL	
12	WHT-GRN	
13	WHT-BLU	
14	WHT-VIO	
15	WHT-GRY	
16	WHT-BLK- BRN	
17	WHT-BLK- RED	
18	WHT-BLK- ORG	
19	WHT-BLK- YEL	
20	WHT-BLK- GRN	

## Ethernet Plug Wiring: 4-Wire \*

Color	Pin #
WHT-ORN	1
ORN	2
WHT-GRN	3
N/A	4
N/A	5
GRN	6
N/A	7
N/A	8



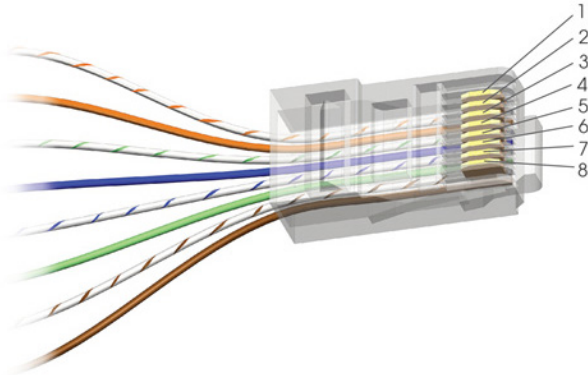
### ATTENTION

Ethernet Plug PIN Numbers shown on this page are different than Wire Tag Numbers.

\*RJ45 Plug

## Ethernet Plug Wiring: 8-Wire \*

Color	Pin #
WHT-ORN	1
ORN	2
WHT-GRN	3
BLU	4
WHT-BLU	5
GRN	6
WHT-BRN	7
BRN	8



## Installation & Mounting

### PREPARATION:

Remove the slip ring from the shipping container. Inspect the entire assembly, including wire leads to make sure there is no visual damage that occurred during transport.

### RECOMMENDED INSTALLATION PRACTICE:

Because of possible geometric mismatching between the customer's application and the slip ring, "hard mounting" of both ends of the slip ring (i.e., securing the rotor and stator such that there is NO floating during operation) is not recommended and may cause premature failure.

### THROUGH BORE SLIP RING, SHAFT MOUNT:

Position the slip ring in the desired location and tighten both set screws to the shaft. Maximum torque 25 lb-in. (DO NOT OVER TORQUE)

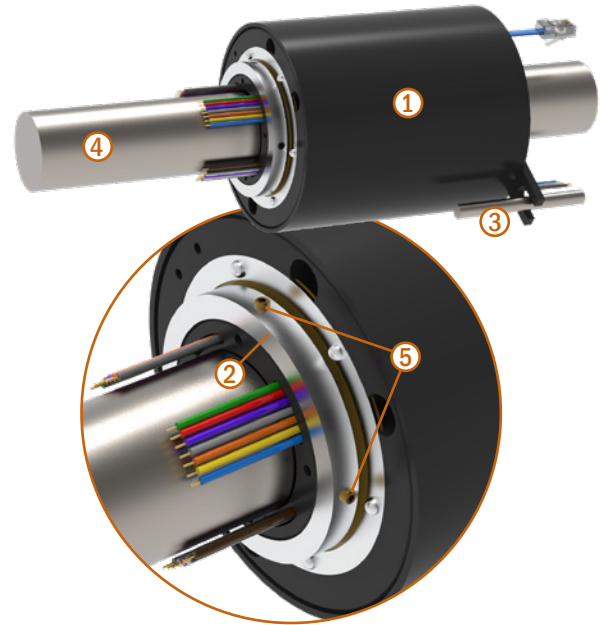
Route the wiring and make the necessary connections. Do not allow the wiring to restrict free rotation of the slip ring. Do not constrain wiring such that wire flexing (cold working) occurs. Doing so will ultimately cause failure (breakage of the wiring). Position a 5/16" (max. dia.) screw or dowel (NOT SUPPLIED) in the anti-rotation tab.

### INITIAL START-UP:

Begin rotation of the equipment and verify that while rotating at the maximum operating speed there is no visible movement of the slip ring assembly due to misalignment and no binding or rubbing of the wire leads.

THESE INSTRUCTIONS ARE INTENDED TO BE USED AS A GENERAL GUIDE, PLEASE CONSULT DSTI TO DISCUSS ANY SPECIFIC QUESTIONS RELATED TO YOUR INSTALLATION.

### MOUNTING EXAMPLE



- ① SLIP RING STATOR
- ② SLIP RING ROTOR
- ③ ANTI-ROTATE DEVICE EXAMPLE
- ④ CUSTOMER INTERFACE EXAMPLE
- ⑤ SET SCREWS FOR SHAFT MOUNTING