



High Volume, Corrosion Resistant Rotary Unions

# HVH Series

FLOW PASSAGE OPTIONS













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### **About DSTI**

Dynamic Sealing Technologies, Inc. (DSTI) serves a wide range of global industries as a leader in engineered fluid sealing and transfer solutions for rotating applications.

DSTI core business segments are fluid rotary unions, electrical slip rings, and value-added products and services—providing customers with a single-source solution from design and manufacturing through to testing and qualification—all under one roof. Located in North America and Europe with a team of distribution partners and technical support specialists worldwide.



#### **DID YOU KNOW?**

**DSTI Exports Products to** Over 60 Countries.

### **HVH** Series



### What is a Rotary Union?

A rotary union (or swivel joint) is a mechanism used to transfer fluid (under pressure or vacuum) from a stationary inlet to a rotating outlet, preserving and isolating the fluid connection.

Rotary unions are engineered to endure a wide range of temperatures and pressures for a variety of conditions and environments. In addition, rotary unions may integrate multiple passages and handle different types of fluid simultaneously.

See examples at www.dsti.com/industries

#### HOW DO I CHOOSE THE BEST ROTARY UNION FOR MY APPLICATION?

Tell us about your requirements so we can make a recommendation:

- 1) Type of media(s) / fluid(s) to be transferred
- 2) Number of independent flow channels (passages)
- 3) Operating pressure
- 4) Operating temperature
- 5) Operating speed
- 6) Shaft & housing connection type
- 7) Flow channel (passage) size
- 8) Torque & load requirements
- 9) Duty cycle\*

\*Does the temperature, speed or pressure fluctuate or change during operation? If so, please provide the detailed ranges for each parameter and time durations of each condition.





### Overview

- Suitable For Vacuum & Bidirectional Pressures
  Up To 5000 PSI
- Large Flow Passages & Increased Flow Volume
- Protected Ball Bearing Design Suitable For Harsh Environments (not designed for any external loads)
- Heavy-Duty Alloy Steel Construction
- Corrosion Resistant Nitride Surface Treatment
- + Electrical Slip Ring Options Available
- ★ Aluminum Slip Ring Cover Option To Protect Slip Ring In Harsh Environments

The HVH Series multiple passage rotary unions are available in 3, 4, 6 and 8 passage models. Designed for applications requiring high flow volume, the HVH Series have larger diameter flow passages suitable for vacuum & bidirectional pressures up to 5000 PSI [345 BAR].



A heavy-duty alloy steel construction with corrosion-resistant QBQ nitride surface treatment and protected ball bearings makes the HVH Series an ideal solution for tough, outdoor environments.

All models come standard with female tapped connections on the face of the shaft and the side of the housing.

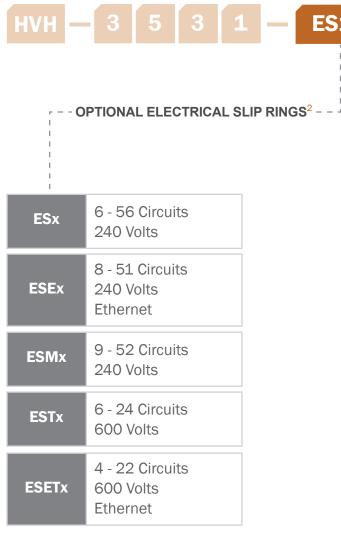


### How to Order: Create your Part Number





### How to Order: Choose your Options



<sup>1</sup> Pin connector and cord set options also available. Please contact DSTI for more information.



Optional Cover For ES, ESE and

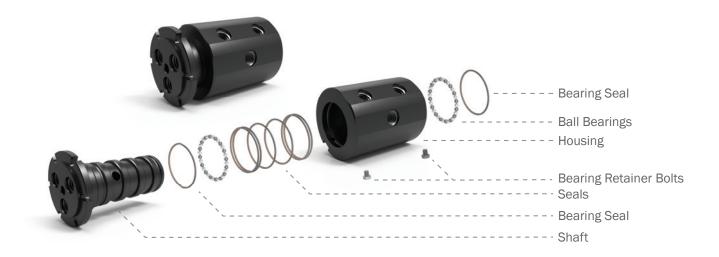
ESM Series Slip Rings



<sup>&</sup>lt;sup>2</sup> See Electrical Slip Ring Options on page 14 for full specs



# Specifications & Operating Information



Flow Passage Options	3	4	6	8	
Media Types		Air/Gas, Coolant <sup>3</sup> , Oil/H	ydraulic <sup>3</sup> , Water/Glycol <sup>3</sup>		
Passage Sizes	0.750" (19.0	5mm) , 0.875" (22.225mm	n), 1.250" (31.75mm) , 1.50	00" (38.1mm)	
Connection Types		SAE-ORE	B, [BSPP]		
Max. Operating Pressure		5,000 PSI	(345 BAR) <sup>1</sup>		
Max. Vacuum		30 HG			
Max. Rotational Speed	50 RPM¹				
Operating Temperature	0° F to 220° F (-18° C to 105° C) <sup>2</sup>				
Body Material Type	Alloy Steel				
Platings and Coatings	QPQ Nitride				
Slip Ring Options	Full line of Electrical Slip Rings and Custom options available. See page 14				
Mounting Options	Tapped ho	les on the end of the hou	sing & bolt slots on the sh	naft flange.	

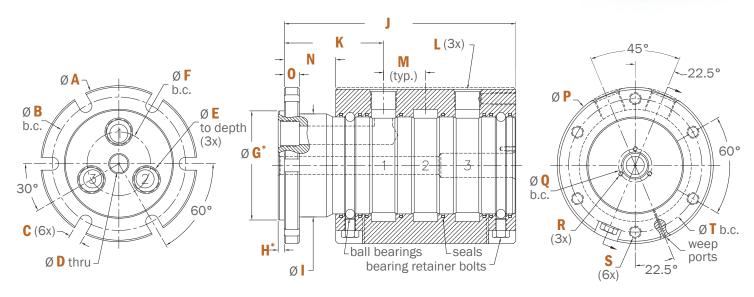
<sup>1</sup> Values are dependent on a combination of all application parameters. Please consult with DSTI.

<sup>&</sup>lt;sup>2</sup> High temperature applications may require alternative seal materials. Please consult with DSTI.

<sup>3</sup> Suitable Water/Glycol or Coolant media must have rust inhibitors present. Oil/Hydraulic media must be petroleum-based.





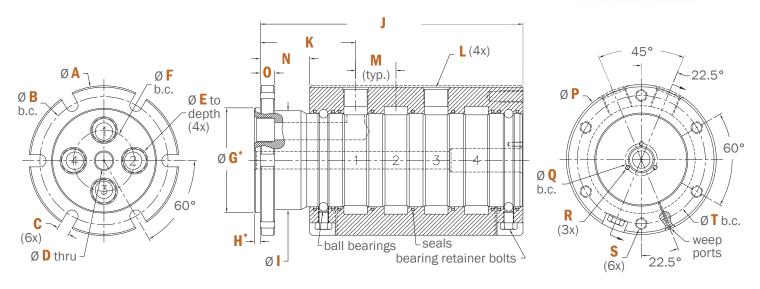


	HVH-3531 [HVHM-3531]	HVH-3631 [HVHM-3631]	HVH-3731 [HVHM-3731]	HVH-3831 [HVHM-3831]
Α	6.438" [163.53mm]	6.438" [163.53mm]	7.438" [188.93mm]	8.938" [227.03mm]
В	5.500" [139.70mm]	5.500" [139.70mm]	6.500" [165.10mm]	7.875" [200.03mm]
C	0.531" [13.49mm]	0.531" [13.49mm]	0.531" [13.49mm]	0.531" [13.49mm]
D	0.75" [19.1mm]	0.75" [19.1mm]	0.75" [19.1mm]	0.75" [19.1mm]
Ε	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
F	2.625" [66.68mm]	2.750" [69.85mm]	3.125" [79.38mm]	3.500" [88.90mm]
G	4.500" [114.30mm]	4.750" [120.65mm]	5.500" [139.70mm]	6.500" [165.10mm]
Н	0.250" [6.35mm]	0.250" [6.35mm]	0.375" [9.53mm]	0.375" [9.53mm]
1	4.25" [108.0mm]	4.38" [111.1mm]	5.25" [133.4mm]	6.25" [158.8mm]
J	9.55" [242.6mm]	10.30" [261.7mm]	11.37" [288.8mm]	12.32" [313.0mm]
K	4.10" [104.1mm]	4.22" [107.3mm]	4.51" [114.4mm]	4.68" [118.8mm]
L	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
M	1.730" [43.94mm]	1.980" [50.29mm]	2.294" [58.27mm]	2.585" [65.66mm]
N	2.13" [54.0mm]	2.13" [54.0mm]	2.25" [57.2mm]	2.25" [57.2mm]
0	0.625" [15.88mm]	0.625" [15.88mm]	0.750" [19.05mm]	0.750" [19.05mm]
P	6.438" [163.53mm]	6.438" [163.53mm]	7.438" [188.93mm]	8.938" [227.03mm]
Q	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]
R	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]
S	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]
T	5.500" [139.70mm]	5.500" [139.70mm]	6.500" [165.10mm]	8.000" [203.20mm]

<sup>\*</sup> Critical tolerances listed in the Customer Interface Section. See page 16





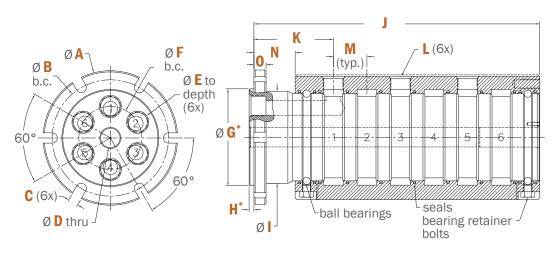


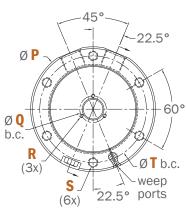
	HVH-3541 [HVHM-3541]	HVH-3641 [HVHM-3641]	HVH-3741 [HVHM-3741]	HVH-3841 [HVHM-3841]
Α	6.438" [163.53mm]	6.438" [163.53mm]	7.438" [188.93mm]	8.938" [227.03mm]
В	5.500" [139.70mm]	5.500" [139.70mm]	6.500" [165.10mm]	7.875" [200.03mm]
C	0.531" [13.49mm]	0.531" [13.49mm]	0.531" [13.49mm]	0.531" [13.49mm]
D	0.75" [19.1mm]	0.75" [19.1mm]	0.75" [19.1mm]	0.75" [19.1mm]
E	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
F	2.625" [66.68mm]	2.750" [69.85mm]	3.125" [79.38mm]	3.500" [88.90mm]
G	4.500" [114.30mm]	4.750" [120.65mm]	5.500" [139.70mm]	6.500" [165.10mm]
Н	0.250" [6.35mm]	0.250" [6.35mm]	0.375" [9.53mm]	0.375" [9.53mm]
1	4.25" [108.0mm]	4.38" [111.1mm]	5.25" [133.4mm]	6.25" [158.8mm]
J	11.28" [286.6mm]	12.28" [312.0mm]	13.66" [347.1mm]	14.88" [377.9mm]
K	4.10" [104.1mm]	4.22" [107.3mm]	4.51" [114.4mm]	4.68" [118.8mm]
L	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
M	1.730" [43.94mm]	1.980" [50.29mm]	2.294" [58.27mm]	2.585" [65.66mm]
N	2.13" [54.0mm]	2.13" [54.0mm]	2.25" [57.2mm]	2.25" [57.2mm]
0	0.625" [15.88mm]	0.625" [15.88mm]	0.750" [19.05mm]	0.750" [19.05mm]
P	6.438" [163.53mm]	6.438" [163.53mm]	7.438" [188.93mm]	8.938" [227.03mm]
Q	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]
R	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]
S	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]
T	5.500" [139.70mm]	5.500" [139.70mm]	6.500" [165.10mm]	8.000" [203.20mm]

<sup>\*</sup> Critical tolerances listed in the Customer Interface Section. See page 16







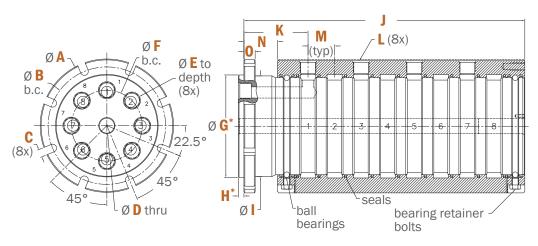


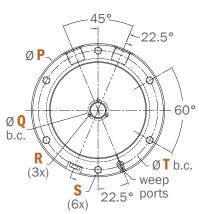
	HVH-3561 [HVHM-3561]	HVH-3661 [HVHM-3661]	HVH-3761 [HVHM-3761]	HVH-3861 [HVHM-3861]
Α	6.938" [176.23mm]	7.438" [188.93mm]	8.938" [227.03mm]	10.938" [277.83mm]
В	6.000" [152.40mm]	6.500" [165.10mm]	7.875" [200.03mm]	9.500" [241.30mm]
C	0.531" [13.49mm]	0.531" [13.49mm]	0.531" [13.49mm]	0.688" [17.48mm]
D	1.00" [25.4mm]	1.00" [25.4mm]	1.00" [25.4mm]	1.00" [25.4mm]
E	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
F	3.250" [82.55mm]	3.750" [95.25mm]	4.500" [114.30mm]	5.250" [133.35mm]
G	5.000" [127.00mm]	5.750" [146.05mm]	6.875" [174.63mm]	8.000" [203.20mm]
Н	0.250" [6.35mm]	0.250" [6.35mm]	0.375" [9.53mm]	0.375" [9.53mm]
1	4.75" [120.7mm]	5.38" [136.5mm]	6.75" [171.5mm]	7.75" [196.9mm]
J	14.74" [374.5mm]	16.24" [412.6mm]	18.65" [473.8mm]	20.10" [510.6mm]
K	4.10" [104.1mm]	4.22" [107.3mm]	4.58" [116.3mm]	4.70" [119.4mm]
L	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
M	1.730" [43.94mm]	1.980" [50.29mm]	2.344" [59.54mm]	2.586" [65.68mm]
N	2.13" [54.0mm]	2.13" [54.0mm]	2.25" [57.2mm]	2.25" [57.2mm]
0	0.625" [15.88mm]	0.625" [15.88mm]	0.750" [19.05mm]	0.750" [19.05mm]
P	6.438" [163.53mm]	7.438" [188.93mm]	8.938" [227.03mm]	10.938" [277.83mm]
Q	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]
R	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]
S	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	5/8"-11 [M16x1.5]
T	5.500" [139.70mm]	6.500" [165.10mm]	8.000" [203.20mm]	9.750" [247.65mm]

<sup>\*</sup> Critical tolerances listed in the Customer Interface Section. See page 16









	HVH-3581 [HVHM-3581]	HVH-3681 [HVHM-3681]	HVH-3781 [HVHM-3781]	HVH-3881 [HVHM-3881]
Α	8.938" [227.03mm]	8.938" [227.03mm]	12.375" [314.33mm]	12.375" [314.33mm]
В	7.875" [200.03mm]	7.875" [200.03mm]	10.750" [273.05mm]	10.750" [273.05mm]
C	0.531" [13.49mm]	0.531" [13.49mm]	0.688" [17.48mm]	0.688" [17.48mm]
D	1.00" [25.4mm]	1.00" [25.4mm]	1.00" [25.4mm]	1.00" [25.4mm]
Ε	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
F	4.750" [120.65mm]	5.000" [127.00mm]	6.500" [165.10mm]	6.500" [165.10mm]
G	6.875" [174.63mm]	7.000" [177.80mm]	9.250" [234.95mm]	9.250" [234.95mm]
Н	0.375" [9.53mm]	0.375" [9.53mm]	0.375" [9.53mm]	0.375" [9.53mm]
1	6.75" [171.5mm]	6.75" [171.5mm]	9.00" [228.6mm]	9.00" [228.6mm]
J	18.83" [478.2mm]	20.86" [529.8mm]	23.34" [529.8mm]	25.28" [642.0mm]
K	4.30" [109.2mm]	4.42" [112.3mm]	4.58" [116.3mm]	4.70" [119.4mm]
L	#12 SAE-ORB [G3/4"-14 BSPP]	#16 SAE-ORB [G1"-11 BSPP]	#20 SAE-ORB [G1-1/4"-11 BSPP]	#24 SAE-ORB [G1-1/2"-11 BSPP]
M	1.780" [45.21mm]	2.030" [51.56mm]	2.344" [59.54mm]	2.586" [65.68mm]
N	2.25" [57.2mm]	2.25" [57.2mm]	2.25" [57.2mm]	2.25" [57.2mm]
0	0.750" [19.05mm]	0.750" [19.05mm]	0.750" [19.05mm]	0.750" [19.05mm]
P	8.938" [227.03mm]	8.938" [227.03mm]	12.375" [314.33mm]	12.375" [314.33mm]
Q	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]	1.374" [34.90mm]
R	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]	#10-24 [M5x0.8]
S	1/2"-13 [M12x1.75]	1/2"-13 [M12x1.75]	5/8"-11 [M16x1.5]	5/8"-11 [M16x1.5]
T	8.000" [203.20mm]	8.000" [203.20mm]	11.000" [279.40mm]	11.000" [279.40mm]

<sup>\*</sup> Critical tolerances listed in the Customer Interface Section. See page 16



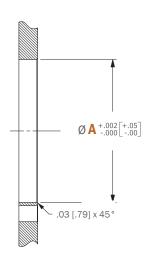
# Shaft Mounted Customer Interface

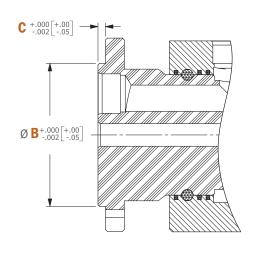
# **CUSTOMER INTERFACE EXAMPLE**



#### **HVH SERIES ROTARY UNION**







Model	А	В	С
HVH-3531 [HVHM-3531]	4.502" [114.35mm]	4.500" [114.30mm]	.250" [6.35mm]
HVH-3631 [HVHM-3631]	4.752" [120.70mm]	4.750" [120.65mm]	.250" [6.35mm]
HVH-3731 [HVHM-3731]	5.502" [139.70mm]	5.500" [139.70mm]	.375" [9.53mm]
HVH-3831 [HVHM-3831]	6.502" [165.15mm]	6.500" [165.10mm]	.375" [9.53mm]
HVH-3541 [HVHM-3541]	4.502" [114.35mm]	4.500" [114.30mm]	.250" [6.35mm]
HVH-3641 [HVHM-3641]	4.752" [120.70mm]	4.750" [120.65mm]	.250" [6.35mm]
HVH-3741 [HVHM-3741]	5.502" [139.70mm]	5.500" [139.70mm]	.375" [9.53mm]
HVH-3841 [HVHM-3841]	6.502" [165.15mm]	6.500" [165.10mm]	.375" [9.53mm]
HVH-3561 [HVHM-3561]	5.002" [127.70mm]	5.000" [127.00mm]	.250" [6.35mm]
HVH-3661 [HVHM-3661]	5.752" [146.10mm]	5.750" [146.05mm]	.250" [6.35mm]
HVH-3761 [HVHM-3761]	6.877" [174.68mm]	6.875" [174.63mm]	.375" [9.53mm]
HVH-3861 [HVHM-3861]	8.002" [203.25mm]	8.000" [203.20mm]	.375" [9.53mm]
HVH-3581 [HVHM-3581]	6.877" [174.68mm]	6.875" [174.63mm]	.375" [9.53mm]
HVH-3681 [HVHM-3681]	7.002" [177.85mm]	7.000" [177.80mm]	.375" [9.53mm]
HVH-3781 [HVHM-3781]	9.252" [235.00mm]	9.250" [234.95mm]	.375" [9.53mm]
HVH-3881 [HVHM-3881]	9.252" [235.00mm]	9.250" [234.95mm]	.375" [9.53mm]



### Electrical Slip Ring Integration Options

Ethernet Slip Rings Available

100 BaseT & 1000 BaseT Ethernet Connections

High-Quality, Gold-on-Gold Contacts

Capsule & Thru-bore Options

Low Electrical Noise

Analog/Digital Transfer

Cord Sets & Pin Connector Options

Compatible With a Range of Data Bus Protocols



#### AVAILABLE SLIP RINGS<sup>1</sup>

PART #	# OF CIRCUITS	MAX AMPS/ CIRCUIT	MAX VOLTS	MAX DATA SPEED
ES6A 4	6	2	120	Under 50 Mbps
ES6 4	6	2	240	Under 50 Mbps
ES12A 4	12	2	120	Under 50 Mbps
ES12 4	12	2	240	Under 50 Mbps
ES18 <sup>4</sup>	18	2	240	Under 50 Mbps
ES24 4	24	2	240	Under 50 Mbps
ES36 4	36	2	240	Under 50 Mbps
ES56 4	56	2	240	Under 50 Mbps
ESE64 <sup>2</sup>	10	(6x) 2A	240	100 Mbps
ESE264 <sup>2</sup>	12	(2x) 5A, (6x) 2A	240	100 Mbps
ESE224 <sup>2</sup>	8	(2x) 10A, (2x) 2A	240	100 Mbps
ESE2124 <sup>2</sup>	18	(2x) 5A, (12x) 2A	240	100 Mbps
ESE284 <sup>2</sup>	14	(2x) 10A, (8x) 2A	240	100 Mbps
ESE4383	51	(43x) 2A	240	1 Gbps
ESE4358 <sup>3</sup>	47	(4x) 5A, (35x) 2A	240	1 Gbps
ESE2358 <sup>3</sup>	45	(2x) 10A, (35x) 2A	240	1 Gbps
ESE8278 3	43	(8x) 5A, (27x) 2A	240	1 Gbps
ESE24278 <sup>3</sup>	41	(2x) 10A, (4x) 5A, (27x) 2A	240	1 Gbps

PART #	# OF CIRCUITS	MAX AMPS/ CIRCUIT	MAX VOLTS	MAX DATA SPEED
ESM36 4	9	(3x) 10A, (6x) 2A	240	Under 50 Mbps
ESM312 4	15	(3x) 5A, (12x) 2A	240	Under 50 Mbps
ESM420 4	24	(4x) 10A, (20x) 2A	240	Under 50 Mbps
ESM428 4	32	(4x) 5A, (28x) 2A	240	Under 50 Mbps
ESM440 4	44	(4x) 10A, (40x) 2A	240	Under 50 Mbps
ESM448 4	52	(4x) 5A, (48x) 2A	240	Under 50 Mbps
EST6 <sup>4</sup>	6	10	600	Under 50 Mbps
EST12 4	12	10	600	Under 50 Mbps
EST18 4	18	10	600	Under 50 Mbps
EST24 4	24	10	600	Under 50 Mbps
ESET4 <sup>2</sup>	4	Ethernet Only	600	100 Mbps
ESET8 <sup>3</sup>	8	Ethernet Only	600	1 Gbps
ESET68 <sup>3</sup>	14	(6x) 10A	600	1 Gbps
ESET128 <sup>3</sup>	20	(12x) 10A	600	1 Gbps
ESET184 <sup>2</sup>	22	(18x) 10A	600	100 Mbps

<sup>&</sup>lt;sup>1</sup> All slip ring lead wire lengths are 48" (1219mm) EST / ESET slip rings are 36" (914mm)

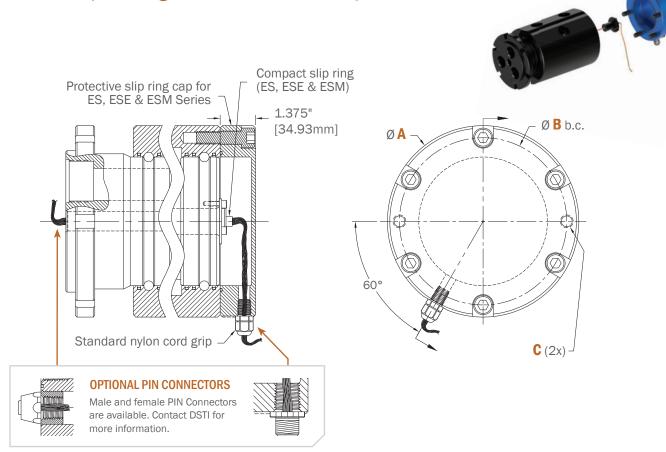
<sup>&</sup>lt;sup>2</sup> 100 BaseT Ethernet connections

<sup>3 1000</sup> BaseT Ethernet connections

<sup>&</sup>lt;sup>4</sup> In order to successfully transfer digital data signals, a variety of conditions must be met. Please consult with DSTI for approval.



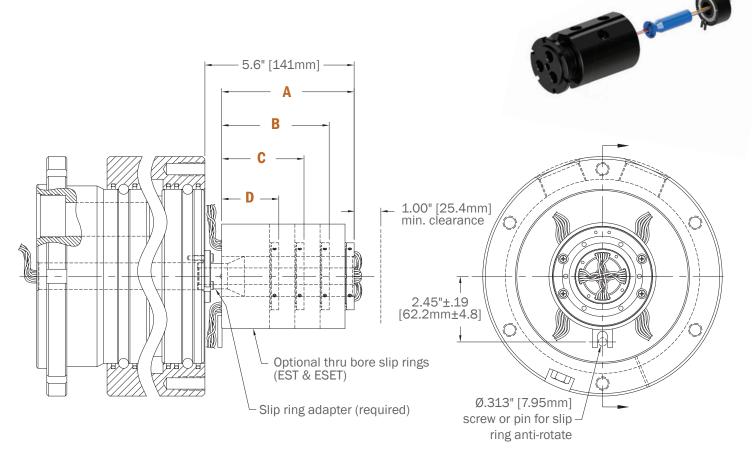
# Capsule Slip Ring Protective Cap: Dimensions



Model	А	В	С
HVH-3531 [HVHM-3531]	6.438" [163.53mm]	5.500" [139.70mm]	1/2"-13 [M12x1.75]
HVH-3631 [HVHM-3631]	6.438" [163.53mm]	5.500" [139.70mm]	1/2"-13 [M12x1.75]
HVH-3731 [HVHM-3731]	7.438" [188.93mm]	6.500" [165.10mm]	1/2"-13 [M12x1.75]
HVH-3831 [HVHM-3831]	8.938" [227.03mm]	8.000" [203.20mm]	1/2"-13 [M12x1.75]
HVH-3541 [HVHM-3541]	6.438" [163.53mm]	5.500" [139.70mm]	1/2"-13 [M12x1.75]
HVH-3641 [HVHM-3641]	6.438" [163.53mm]	5.500" [139.70mm]	1/2"-13 [M12x1.75]
HVH-3741 [HVHM-3741]	7.438" [188.93mm]	6.500" [165.10mm]	1/2"-13 [M12x1.75]
HVH-3841 [HVHM-3841]	8.938" [227.03mm]	8.000" [203.20mm]	1/2"-13 [M12x1.75]
HVH-3561 [HVHM-3561]	6.438" [163.53mm]	5.500" [139.70mm]	1/2"-13 [M12x1.75]
HVH-3661 [HVHM-3661]	7.438" [188.93mm]	6.500" [165.10mm]	1/2"-13 [M12x1.75]
HVH-3761 [HVHM-3761]	8.938" [227.03mm]	8.000" [203.20mm]	1/2"-13 [M12x1.75]
HVH-3861 [HVHM-3861]	10.938" [277.83mm]	9.750" [274.65mm]	1/2"-13 [M12x1.75]
HVH-3581 [HVHM-3581]	8.938" [227.03mm]	8.000" [203.20mm]	1/2"-13 [M12x1.75]
HVH-3681 [HVHM-3681]	8.938" [227.03mm]	8.000" [203.20mm]	1/2"-13 [M12x1.75]
HVH-3781 [HVHM-3781]	12.375" [314.33mm]	11.000" [279.40mm]	5/8"-11 [M16x1.5]
HVH-3881 [HVHM-3881]	12.375" [314.33mm]	11.000" [279.40mm]	5/8"-11 [M16x1.5]



# Through Bore Slip Ring: Dimensions



PART #	А	В	С	D
EST6	-	-	-	2.13" [54.1mm]
EST12	-	-	3.07" [78.0mm]	-
EST18	-	4.010" [101.9mm]	-	-
EST24	4.94" [125.5mm]	-	-	-
ESET4	-	-		2.13" [54.1mm]
ESET8	-	-	3.07" [78.0mm]	-
ESET68	-	4.010" [101.9mm]	-	-
ESET128	4.94" [125.5mm]	-	-	-
ESET184	4.94" [125.5mm]	-	-	-



### Installation & Mounting

#### PREPARATION:

Remove the rotary union from the shipping container. Inspect the entire assembly, including all passage connections to make sure that they are clean and no visual damage occurred during transport. If the assembly is a rotary union/electrical slip ring, the electrical slip ring may be packaged separately to protect during shipping. If this is the case, mount the electrical slip ring to the rotating union assembly using the supplied hardware.

#### RECOMMENDED ROTARY UNION INSTALLATION PRACTICE:

DSTI does not recommend mounting the rotary union with both the shaft & housing components solidly bolted into place. One of the two components should be mounted in a manner that allows for some movement in the event of misalignment or run-out during rotation. Using only the supply lines or hoses to fix the stationary component in place is also not recommended. An anti-rotation arm that attaches to the stationary part of the rotary union assembly and rests against part of the equipment framework is recommended (see figure 1.1).

#### MOUNTING A ROTARY UNION WITH AN ELECTRICAL **SLIP RING:**

Make sure the electrical wiring is fixed in place and protected from contact with other components or equipment. Care should be taken to make sure the slip ring area remains clean and dry during use.

#### SHAFT MOUNTING, THREADED CONNECTIONS:

When mounting the shaft using threaded connections, make sure all fittings are properly tightened & pipe thread sealant is used as required. Equipment mounting surface needs to be concentric to the center line of the rotary union shaft to assure proper function. After all fittings are in place, bolt assembly into place using tapped holes or mounting flange on rotating union shaft.

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

#### **INITIAL START-UP:**

After rotary union is installed, a dry run is recommended to assure proper mounting of the rotating union assembly. Begin rotation of the equipment, and verify that while rotating at the maximum operating speed there is no visible movement of the rotary union assembly due to misalignment.



#### WARRANTY:

DSTI Warrants, for a period of 2 years from the date of original delivery, its products to be free from defects in material and workmanship. DSTI's obligation under this warranty is limited to repair or replacement at it's factory of any part or parts of said products which shall be returned to DSTI with transportation charges prepaid and which DSTI's examination shall disclose to it's satisfaction to have been defective. Under no circumstances shall DSTI be held liable for loss. damage, cost of repair of consequential damages of any kind in connection with the sale, use or repair of any product purchased from DSTI. Warranty is subject to change.

# **Engineered Fluid Solutions**

At DSTI, our product solutions are directly influenced by the industries we serve. If an existing product isn't a perfect fit for our customers' applications, we provide specialized design and manufacturing services to meet the needs of their specifications.



