

# MULTIPIN

Multipin is the description for electrical feedthroughs which have two or more conductor paths, and include connectors for one or both sides. This series is typically used for transmission of low power or electrical signals. Multipin feedthroughs are ideal for instrumentation applications such as microscopy, mass spectrometry, surface analysis, and semiconductor process control.

MPF offers several mounting options for multipin feedthroughs: Weldable, Quick Flange (QF), and Conflat Flange (CF). Most designs are also configured for Baseplate and NPT style adapters. Custom adapters, plates and flange configurations are available by request.

## **High Density Connectors**

Subminiature and MS Circular Connectors are very compact and allow for designs with extremely high pin density. All types utilize a straight through pin-to-pin design with gold plated pins that are hermetically sealed and electrically isolated using the latest glass-ceramic bonding technology.

Type C subminiatures are a compact design based on a circular 9 pin arrangement, and can be mounted on 1.33 inch CF flanges or ISO-NW16 quick flanges.

Type D subminiatures are constructed with pin arrangements to meet MIL-C-24308 specifications, and are available in 9, 15, 25, and 50 pin designs. Micro-D also available.

MS Circular Series are double-ended connectors designed to meet MIL-C-26482 pin arrangements in 10, 19, 32, and 41 pin versions.

## **Multipin and MS Multipin**

Traditional multipin designs are provided with threaded circular connectors which allow moderate pin density. These feedthroughs are offered in 3, 5 and 7 pin versions, and are rated to 500 volts and 3.5 amps per pin.

MS multipin is provided with industry standard threaded connectors which meet MIL-C-5015 specification, and are designed to meet similar applications. These feedthroughs are offered in 4 to 35 pin versions, and are rated for 700 volts and 10 amps per pin. Single-ended versions offer a connector for the air side. Double-ended versions offer both air and vacuum side connectors.

## **MS High Current and High Voltage**

These multipin designs provide higher electrical performance combined with the convenience of MS threaded circular connectors. High current multipin feedthroughs are offered in 2 to 8 pin versions, and are rated up to 40 amps per pin. High voltage multipin feedthroughs provide an extremely compact design offered in 2, 4 and 7 pin versions, and are rated to 12,000 volts pin-to-pin and pin-to-shell. These designs are available in double-ended versions upon request.



# Multipin

## Section 2: Contents

Section	Type	Electrical Rating	Thermal Rating	Pages
2.1	<b>Subminiature Type C &amp; D</b> 9, 15, 25 and 50 pins <i>See Custom Examples, p. 25</i>	Voltage: 500 Volts DC Current: 5 Amps per pin	Feedthrough: -200 to 250°C Air-side Connector: -55 to 80°C Vacuum Connector: -200 to 250°C	22-23
2.2	<b>MS Circular</b> 10, 19, 32, and 41 pins Double-ended <i>See Custom Examples, p. 25</i>	Voltage: 1000 Volts DC Current: 5 Amps per pin	Feedthrough: -269 to 450°C Air-side Connector: -55 to 200°C Vacuum Connector: -269 to 250°C	24
2.3	<b>Multipin</b> 3, 5 and 7 pins	Voltage: 500 Volts DC Current: 3.5 Amps per pin	Feedthrough: -50 to 450°C Air-side Connector: -55 to 65°C	26-27
2.4	<b>MS Multipin</b> 4, 6, 10, 20 and 35 pins Single and Double-ended	Voltage: 700 Volts DC Current: 10 Amps per pin	Feedthrough: -100 to 450°C Air-side Connector: -55 to 124°C Vacuum Connector: -100 to 350°C	28-33
2.5	<b>Multipin Baseplate</b> 8 pins	Voltage: 1000 Volts DC Current: 5 Amps per pin	Feedthrough: -25 to 200°C Air-side Connector: -25 to 200°C Vacuum Connector: -25 to 200°C	34
2.6	<b>MS High Current</b> 2, 3, 4, 5, 7 and 8 pins	Voltage: 700 Volts DC Current: 15 to 40 Amps per pin	Feedthrough: -100 to 450°C Air-side Connector: -55 to 125°C	35-40
2.7	<b>MS High Voltage</b> 2, 4 and 7 pins	Voltage: 12,000 Volts DC Current: 7.5 Amps per pin	Feedthrough: -100 to 450°C Air-side Connector: -55 to 125°C	41-43

### Operating Conditions

The electrical and thermal ratings specified are safe operating limits determined by various factors including material properties, mechanical design, and the intended operating environment. All electrical ratings are based on operation with one side in dry atmosphere and the other side in vacuum of  $1 \times 10^{-4}$  Torr maximum pressure. Temperature ratings for various mounting options may reduce the operating range of an assembly. All assemblies have a maximum thermal gradient of 25°C per minute and may be damaged if this limit is exceeded.

## Subminiature C-type – 500 Volts / 5 Amps

### MATERIALS

Shell: 304 Stainless Steel  
 Pins: NiFe Alloy, Gold-plated  
 Insulation: Glass-Ceramic

### TEMPERATURE RANGE (25°C / MIN)

Feedthrough: -200 to 250°C  
 Connector (Air): -55 to 80°C  
 Connector (Vacuum): -200 to 250°C



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Each kit is supplied with both an air and vacuum-side cable assembly including connectors. Subminiature-C air and vacuum-side connectors are fitted with captured stainless steel socket head screws which provide a means of securely locking them to their mating feedthroughs.

### Kit Includes:

- 9 pin feedthrough CF or QF
- 96" female air-side cable assembly
- 19" female UHV cable assembly

PINS / QTY	FIG	FLANGE	PART #
One 9-pin	1	1.33 / CF16	A2140-1-CF
One 9-pin KIT	<i>not shown</i>	1.33 / CF16	A2139-1-KIT
One 9-pin	<i>not shown</i>	2.75 / CF40	A3046-1-CF
Two 9-pin .750 BC	2	2.75 / CF40	A2141-1-CF
One 9-pin	3	1.18 / QF16	A2143-1-QF
One 9-pin KIT	4	1.18 / QF16	A2142-1-KIT



**Contacts**  
**FEMALE PINS**

QTY	PART #
Pack of 10	A2386-1-CN



**Vacuum-side**  
**Connector**  
**FEMALE PINS**

*\*Does not include contacts*

PINS	PART #
9	A3030-1-CN



**Air-side**  
**Connector**  
**FEMALE PINS**

*\*Does not include contacts*

PINS	PART #
9	A3034-1-CN

See Section 7 for connectors, wiring, and other accessories.

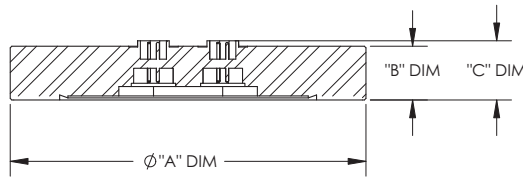


**Subminiature D-type – 500 Volts / 5 Amps\***  
*Air-side Connector Included*

<b>MATERIALS</b>	<b>TEMPERATURE RANGE (25°C / MIN)</b>
Shell: 304 Stainless Steel	Feedthrough: -200 to 250°C
Pins: NiFe Alloy, Gold-plated	Connector (Air): -55 to 80°C
Insulation: Glass-Ceramic	Connector (Vacuum): -200 to 250°C

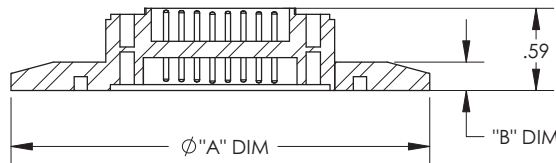
\* Micro-D also available. Please contact us for details (864-876-9853)

**CONFLAT FLANGE**



PINS / QTY	Ø "A" DIM	"B" DIM	"C" DIM	PART #
9	2.75 CF	.50	.57	A1557-1-CF
15	4.50 CF	.68	.75	A1557-2-CF
25	4.50 CF	.68	.75	A1557-3-CF
50	6.00 CF	.78	.85	A1557-4-CF
Two 25-pin	4.50 CF	.68	.75	A2565-1-CF

**QUICK FLANGE**



PINS / QTY	Ø "A" DIM	"B" DIM	PART #
9	2.16 QF	.20	A1529-1-QF
15	2.95 QF	.20	A1529-2-QF
25	3.74 ISO	.47	A1529-3-QF
50	5.12 ISO	.47	A1529-4-QF
Two 50-pin	5.12 ISO	.47	A1529-5-QF

See Section 7 for connectors, wiring, and other accessories.



## MS Circular Connector – 1000 Volts / 5 Amps / Double-ended *Air and Vacuum-side Connectors Included*

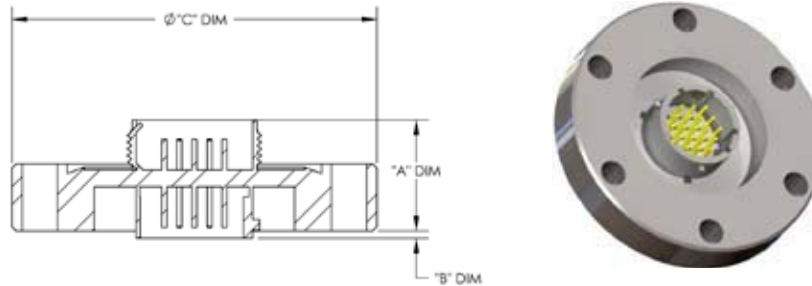
### MATERIALS

Shell: 304 Stainless Steel  
 Pins: 300 Series SS, Gold-plated  
 Insulation: Glass-Ceramic

### TEMPERATURE RANGE (25°C / MIN)

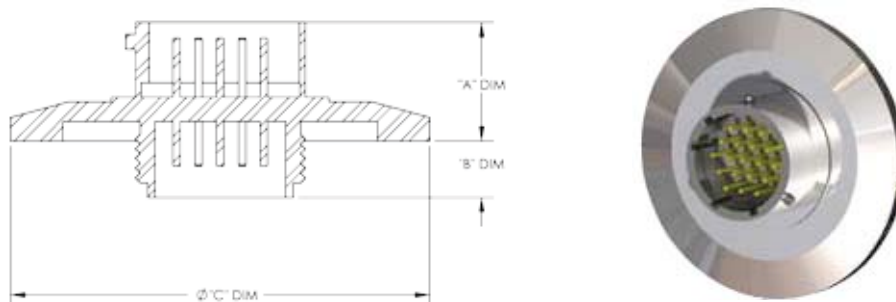
Feedthrough: -269 to 450°C  
 Connector (Air): -55 to 200°C  
 Connector (Vacuum): -269 to 250°C

### CONFLAT FLANGE



PINS / QTY	Ø "A" DIM	"B" DIM	Ø "C" DIM	PART #
10	.83	.06	2.75 CF	A8232-3-CF
19	.83	.06	2.75 CF	A8232-4-CF
32	.83	.06	2.75 CF	A8232-5-CF
41	1.02	OMIT	3.38 CF	A8232-6-CF

### QUICK FLANGE



PINS / QTY	Ø "A" DIM	"B" DIM	Ø "C" DIM	PART #
10	.61	.28	2.16 QF	A8233-3-CF
19	.61	.28	2.16 QF	A8233-4-CF
32	.61	.28	2.16 QF	A8233-5-CF
41	.67	.28	2.95 QF	A8233-6-CF

See Section 7 for connectors, wiring, and other accessories.

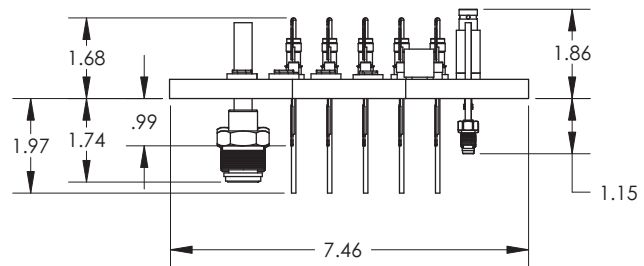


## Custom Examples

MPF designs and builds custom flange assemblies specific to customer requirements. Subminiature C & D, Micro-D, and Circular MS Connectors are commonly supplied as integrated components of larger assemblies. MPF provides these assemblies turn-key and ready for use.

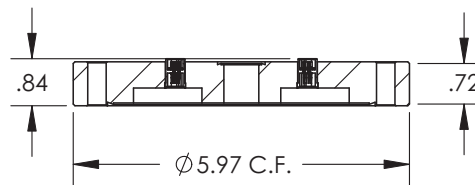
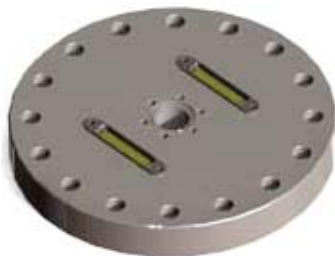
### Subminiature D-type

3 x 9-pin and 1 x 15-pin Sub D Feedthroughs mounted with HV and Coax Feedthroughs, Custom Flange.



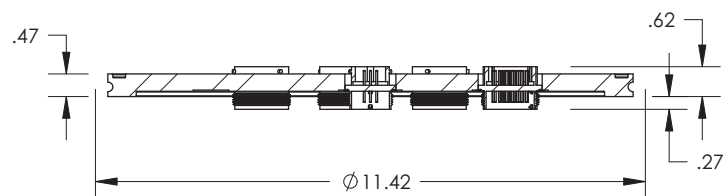
### Micro D-type

2 x 100-pin Micro-D Feedthroughs, Custom 6.0 CF Flange w/ Zero-length 1.33CF Adapter



### MS Circular Connector

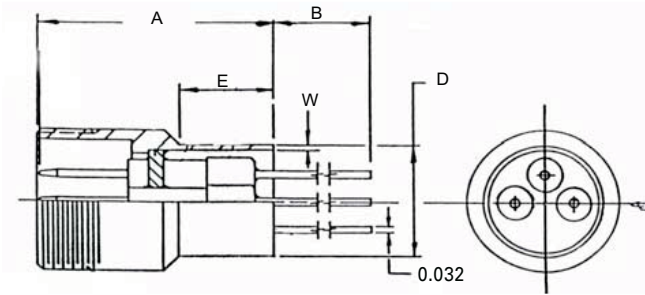
4 x 19-pin and 11 x 32-pin MS Circular Connectors, ISO 250 Flange



## 500 Volts / 3.5 Amps / 3, 5, & 7 Pin

*Air-side Connector Included*

**WELDABLE**

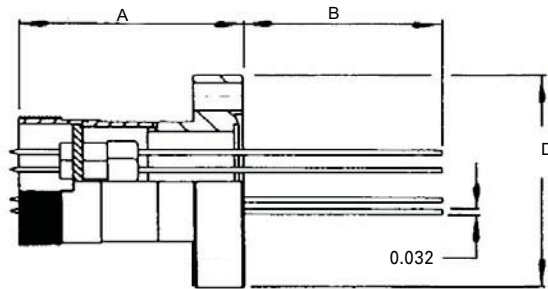


PINS	A	B	D	E	W	PART #
3	.97	2.01	.497	.37	.020	A1607-1-W
5	.84	2.08	.747	.35	.035	A1424-1-W
7	.84	2.08	.747	.35	.035	A1488-1-W

## 500 Volts / 3.5 Amps / 3, 5, & 7 Pin

*Air-side Connector Included*

**CONFLAT FLANGE**



PINS	A	B	D	FLANGE	PART #
3	1.02	1.96	1.33	CF16	A1621-1-CF
5	1.34	1.58	1.33	CF16	A1620-1-CF
5	.89	2.03	2.75	CF40	A1620-2-CF
7	1.34	1.58	1.33	CF16	A1620-3-CF
7	.89	2.03	2.75	CF40	A1620-4-CF

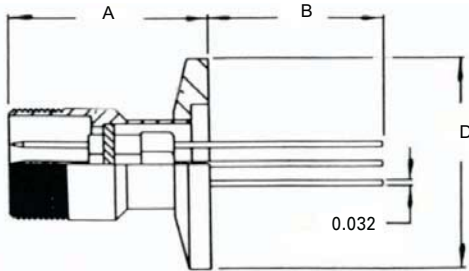
See Section 7 for connectors, wiring, and other accessories.



**500 Volts / 3.5 Amps / 3, 5, & 7 Pin**

*Air-side Connector Included*

**QUICK FLANGE**

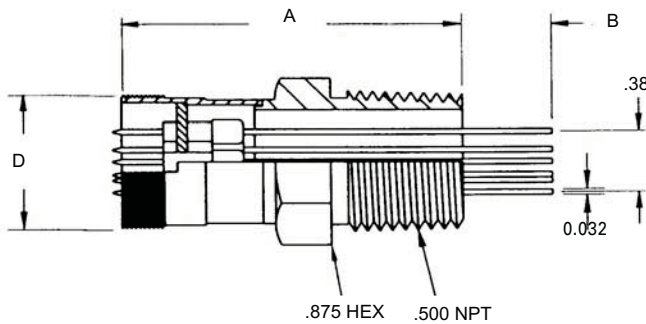


PINS	A	B	D	PART #
3	1.07	1.91	1.18 / QF16	A1622-1-QF
3	.97	2.01	2.16 / QF40	A1622-2-QF
5	1.34	1.58	1.18 / QF16	A1623-1-QF
5	.84	2.08	2.16 / QF40	A1623-2-QF
5	.84	2.08	2.95 / QF50	A1623-3-QF
7	1.34	1.58	1.18 / QF16	A1623-4-QF
7	.84	2.08	2.16 / QF40	A1623-5-QF
7	.89	2.08	2.95 / QF50	A1623-6-QF

**500 Volts / 3.5 Amps / 5, & 7 Pin**

*Air-side Connector Included*

**NPT PIPE THREAD**



PINS	A	B	D	PART #
5	1.99	.93	.81	A1624-1-NPT
7	1.99	.93	.81	A1624-2-NPT

See Section 7 for connectors, wiring, and other accessories.



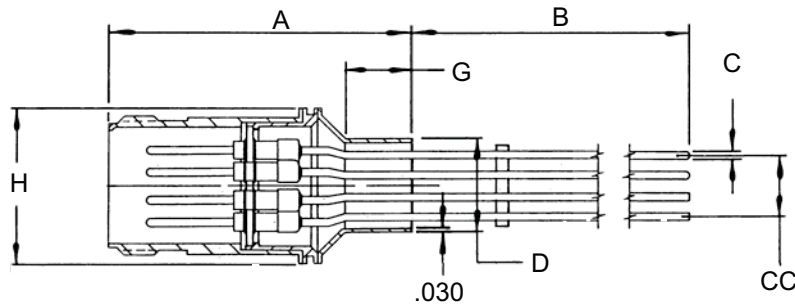


## 700 Volts / 10 Amps *per Pin* / 4 to 35 Pins

0.056 or 0.062 Alumel Conductors

*Air-side Connector Included*

**WELDABLE**



PINS	AMPS*	A	B	C	D	G	H	CC	PART #
4	28	2.43	3.12	.056	.747	.47	1.25	.38	A0429-4-W
6	36	2.43	3.12	.056	.747	.47	1.25	.44	A0429-8-W
10	50	2.43	3.12	.056	.747	.47	1.25	.51	A0429-12-W
20	75	2.53	3.47	.056	1.372	.75	1.75	1.03	A0204-4-W
35	100	3.98	2.10	.056	1.500	1.94	2.25	1.22	A0739-1-W
35	100	3.10	2.98	.056	1.745	1.33	2.25	1.47	A2248-1-W
4	28	2.43	3.12	.062	.747	.47	1.25	.38	A3525-1-W
6	36	2.43	3.12	.062	.747	.47	1.25	.44	A3526-1-W
10	50	2.43	3.12	.062	.747	.47	1.25	.51	A3527-1-W

\* Max amperage all pins loaded

See Section 7 for connectors, wiring, and other accessories.

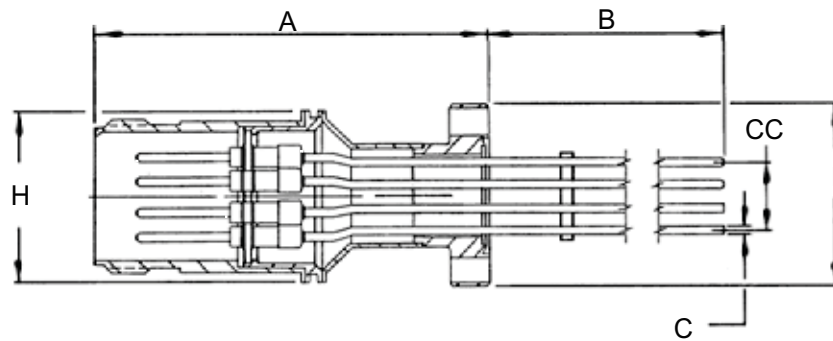


**700 Volts / 10 Amps per Pin / 4 to 35 Pins**

**0.056 or 0.062 Alumel Conductors**

*Air-side Connector Included*

**CONFLAT FLANGE**



PINS	AMPS*	A	B	C	F	H	CC	PART #
4	28	2.93	2.62	.056	1.33	1.25	.38	A0192-4-CF
4	28	2.48	3.07	.056	2.75	1.25	.38	A0193-4-CF
6	36	2.93	2.62	.056	1.33	1.25	.44	A0192-8-CF
6	36	2.48	3.07	.056	2.75	1.25	.44	A0193-8-CF
10	50	2.93	2.62	.056	1.33	1.25	.51	A0192-12-CF
10	50	2.48	3.07	.056	2.75	1.25	.51	A0193-12-CF
20	75	2.58	3.42	.056	2.75	1.75	1.03	A0206-4-CF
20	75	2.58	3.42	.056	4.50	1.75	1.03	A0208-4-CF
35	100	3.15	2.93	.056	3.38	2.25	1.47	A0743-1-CF
35	100	4.03	2.05	.056	2.75	2.25	1.22	A0741-1-CF
35	100	3.15	2.93	.056	4.50	2.25	1.47	A0743-2-CF
4	28	2.93	2.62	.062	1.33	1.25	.38	A3513-1-CF
6	36	2.93	2.62	.062	1.33	1.25	.44	A3514-1-CF
10	50	2.93	2.62	.062	1.33	1.25	.51	A3532-1-CF

\* Max amperage all pins loaded

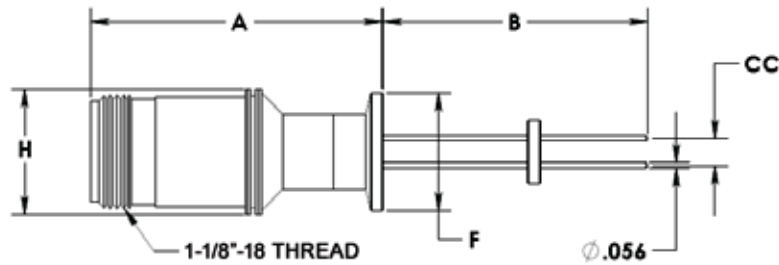


## 700 Volts / 10 Amps *per Pin* / 4 to 35 Pins

0.056 or 0.062 Alumel Conductors

*Air-side Connector Included*

### QUICK FLANGE



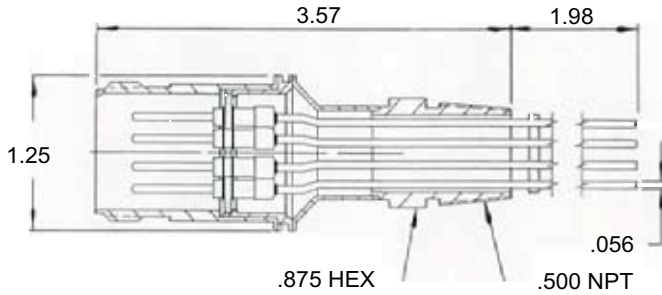
PINS	AMPS*	A	B	C	F	H	CC	PART #
4	28	2.93	2.62	.056	1.18	1.25	.38	A0197-4-QF
4	28	2.43	3.12	.056	2.16	1.25	.38	A0194-4-QF
6	36	2.93	2.62	.056	1.18	1.25	.44	A0197-8-QF
6	36	2.43	3.12	.056	2.16	1.25	.44	A0194-8-QF
10	50	2.93	2.62	.056	1.18	1.25	.51	A0197-12-QF
10	50	2.43	3.12	.056	2.16	1.25	.51	A0194-12-QF
20	75	2.53	3.47	.056	2.16	1.75	1.03	A0209-4-QF
20	75	2.53	3.47	.056	2.95	1.75	1.03	A0210-4-QF
35	100	4.08	2.00	.056	2.16	2.25	1.47	A0745-1-QF
35	100	3.10	2.93	.056	2.95	2.25	1.47	A0745-2-QF
4	28	2.93	2.62	.062	1.18	1.25	.38	A3511-1-QF
6	36	2.93	2.62	.062	1.18	1.25	.44	A3506-1-QF
10	50	2.93	2.62	.062	1.18	1.25	.51	A3512-1-QF

\* Max amperage all pins loaded

See Section 7 for connectors, wiring, and other accessories.



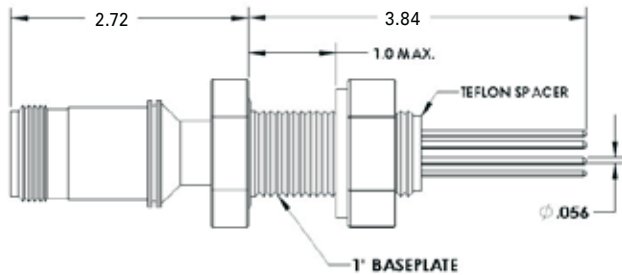
**700 Volts / 10 Amps *per Pin* / 4 to 10 Pins**  
**0.056 Alumel Conductors**  
*Air-side Connector Included*  
**NPT PIPE THREAD**



PINS / QTY	AMPS	PART #
4	28	A0198-4-NPT
6	36	A0198-8-NPT
10	50	A0198-12-NPT

\* Max amperage all pins loaded

**1" BASEPLATE**



PINS / QTY	AMPS	PART #
4	28	A2968-3-BP
6	36	A2968-2-BP
10	50	A2968-1-BP

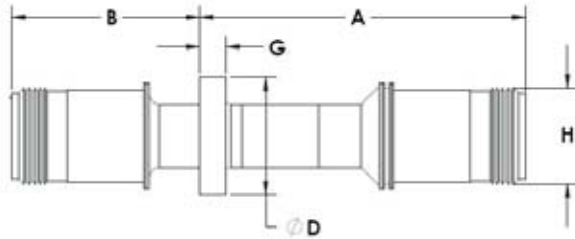
\* Max amperage all pins loaded

See Section 7 for connectors, wiring, and other accessories.



## 700 Volts / 10 Amps *per Pin* / 4 to 35 Pins / Double-ended Air and Vacuum-side Connectors Included

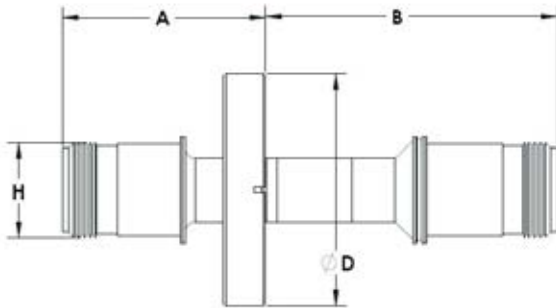
### WELDABLE



PINS	AMPS*	FIG	A	B	D	G	H	PART #
4	28	1	3.49	2.36	1.372	.31	1.25	A1086-1-W
6	36	1	3.49	2.36	1.372	.31	1.25	A1089-1-W
10	50	1	3.49	2.36	1.372	.31	1.25	A1069-1-W
20	75	1	3.50	2.78	2.495	.38	1.75	A1090-1-W
35	100	1	3.89	2.50	2.495	.38	2.25	A1091-1-W

\* Max amperage all pins loaded

### CONFLAT



PINS	AMPS*	FIG	A	B	D	H	PART #
4	28	2	2.41	3.44	2.75/CF40	1.25	A2208-1-CF
6	36	2	2.41	3.44	2.75/CF40	1.25	A1834-1-CF
10	50	2	2.41	3.44	2.75/CF40	1.25	A2576-1-CF
20	75	2	2.83	3.50	4.50/CF63	1.75	A2577-1-CF
35	100	2	2.55	3.84	4.50/CF63	2.25	A1379-1-CF
35	100	2	2.55	3.84	6.00/CF100	2.25	A1884-1-CF

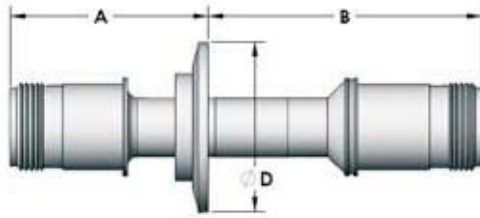
\* Max amperage all pins loaded

See Section 7 for connectors, wiring, and other accessories.



**700 Volts / 10 Amps *per Pin* / 4 to 10 Pins / Double-ended**  
*Air and Vacuum-side Connectors Included*

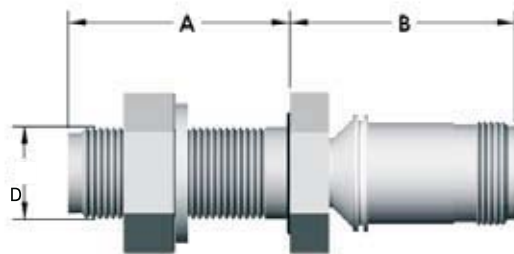
**QUICK FLANGE**



PINS	AMPS*	FIG	A	B	D	PART #
4	28	1	2.46	3.49	2.16/QF40	A2563-1-QF
4	28	1	2.36	3.49	2.95/QF50	A2563-2-QF
6	36	1	2.46	3.49	2.16/QF40	A2564-1-QF
6	36	1	2.36	3.49	2.95/QF50	A2564-2-QF
10	50	1	2.46	3.49	2.16/QF40	A1062-1-QF
10	50	1	2.36	3.49	2.95/QF50	A1062-2-QF

\* Max amperage all pins loaded

**1" BASEPLATE**



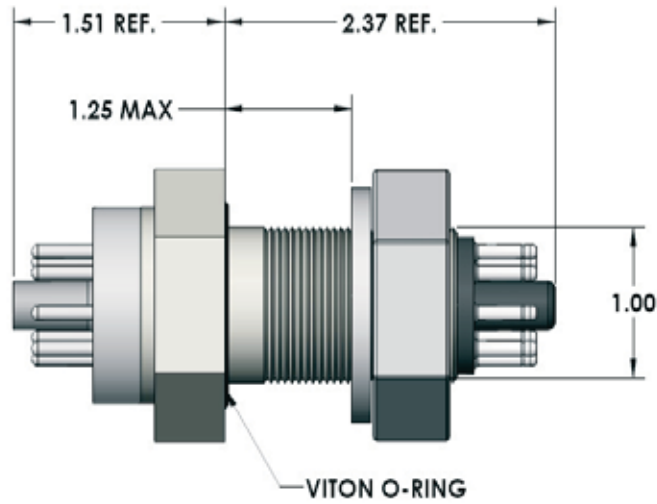
PINS	AMPS*	FIG	A	B	D	PART #
10	50	2	2.33	2.37	1.00	A3995-1-BP

\* Max amperage all pins loaded

See Section 7 for connectors, wiring, and other accessories.



**1000 Volts / 5 Amps *per Pin* / 8 Pins**  
*Air and Vacuum-side Connectors Included*  
**1" BASEPLATE**



PINS	AMPS*	PART #
8	5	A3533-1-BP

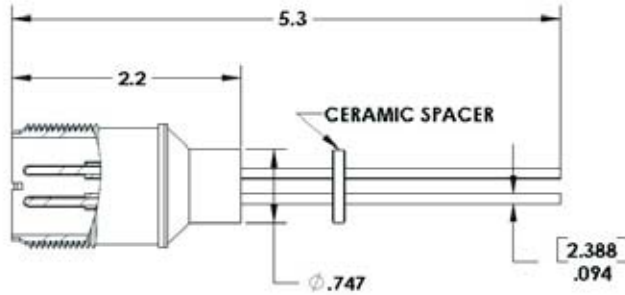
\* Max amperage all pins loaded



**700 Volts / 28 Amps per Pin / 2 & 4 Pins  
Nickel and Moly Conductors**

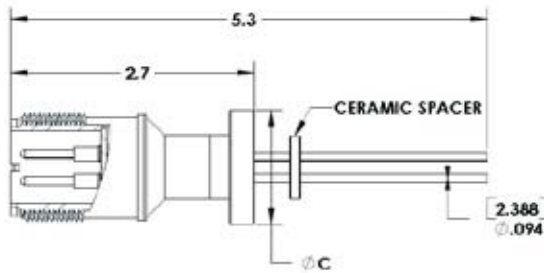
*Air-side Connector Included*

**WELDABLE**



PINS	AMPS Ni / Moly	PART #	
		NICKEL	MOLY
2	16 / 28	A2566-1-W	A2566-3-W
4	16 / 28	A2566-5-W	A2566-7-W

**CONFLAT FLANGE**



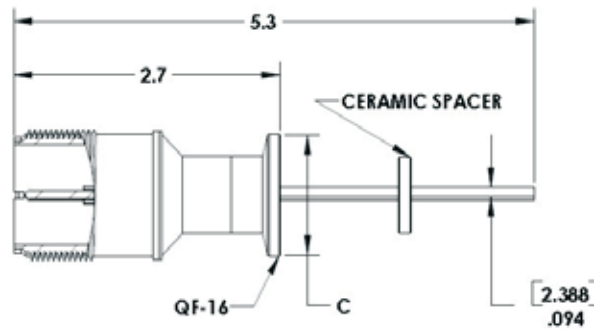
PINS	AMPS Ni / Moly	C	PART #	
			NICKEL	MOLY
2	16 / 28	1.33/CF16	A2568-1-CF	A2568-3-CF
4	16 / 28	1.33/CF16	A2568-5-CF	A2568-7-CF
2	16 / 28	2.75/CF40	A2569-1-CF	A2569-3-CF
4	16 / 28	2.75/CF40	A2569-5-CF	A2569-7-CF

See Section 7 for connectors, wiring, and other accessories.





**700 Volts / 28 Amps *per Pin* / 2 & 4 Pins**  
**Nickel and Moly Conductors**  
*Air-side Connector Included*  
**QUICK FLANGE**



PINS	AMPS Ni / Moly	C	PART #	
			NICKEL	MOLY
2	16 / 28	1.18/QF16	A2567-1-QF	A2567-3-QF
4	16 / 28	1.18/QF16	A2567-5-QF	A2567-7-QF
2	16 / 28	1.57/QF25	A3991-1-QF	A3991-3-QF
4	16 / 28	1.57/QF25	A3991-5-QF	A3991-7-QF
2	16 / 28	2.16/QF40	A3992-1-QF	A3992-3-QF
4	16 / 28	2.16/QF40	A3992-5-QF	A3992-7-QF

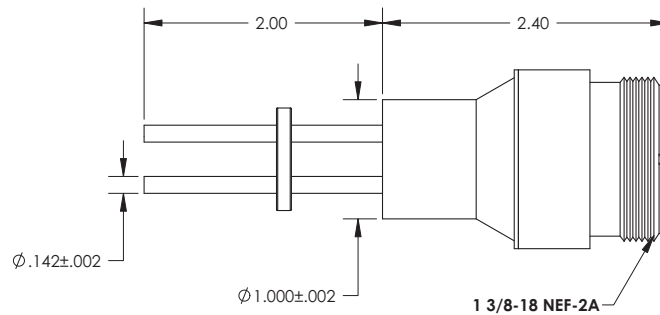
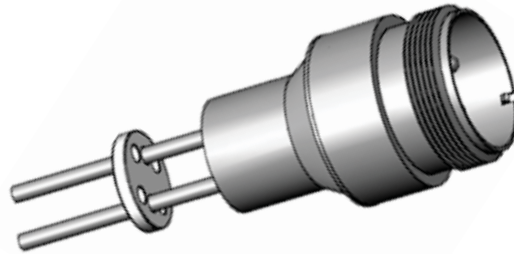
See Section 7 for connectors, wiring, and other accessories.



**700 Volts / 40 Amps *per Pin* / 2 & 4 Pins**  
**Nickel and Moly Conductors**

*Air-side Connector Included*

**WELDABLE**

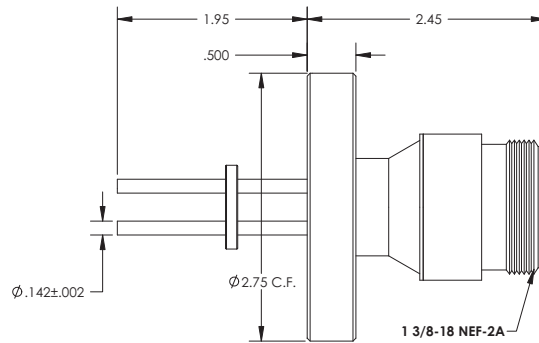
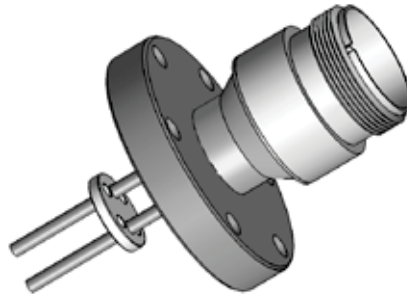


PINS	AMPS	CONDUCTOR	PART #
2	40	MOLY	A5076-1-W
2	25	NICKEL	A5076-3-W
4	40	MOLY	A4748-1-W
4	25	NICKEL	A4748-3-W

See Section 7 for connectors, wiring, and other accessories.



**700 Volts / 40 Amps *per Pin* / 2 & 4 Pins**  
**Nickel and Moly Conductors**  
*Air-side Connector Included*  
**CONFLAT FLANGE**



PINS	AMPS	CONDUCTOR	PART #
2	40	MOLY	A5077-1-CF
2	25	NICKEL	A5077-3-CF
4	40	MOLY	A4852-1-CF
4	25	NICKEL	A4852-3-CF

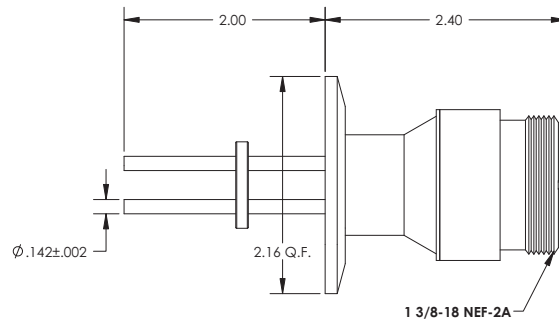


**700 Volts / 40 Amps per Pin / 2 & 4 Pins**

**Nickel and Moly Conductors**

*Air-side Connector Included*

**QUICK FLANGE**



PINS	AMPS	CONDUCTOR	PART #
2	40	MOLY	A5078-1-QF
2	25	NICKEL	A5078-3-QF
4	40	MOLY	A5079-1-QF
4	25	NICKEL	A5079-3-QF

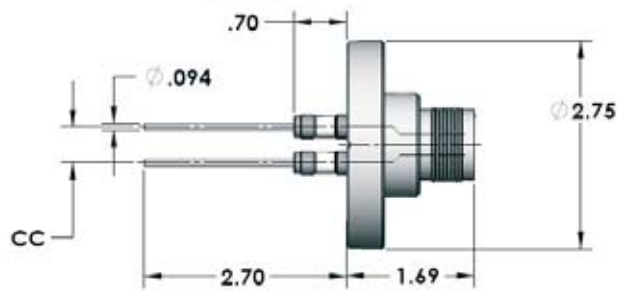
See Section 7 for connectors, wiring, and other accessories.



## 700 Volts / 23 Amps *per Pin* / 2 to 8 Pins

*Air-side Connector Included*

### CONFLAT FLANGE



PINS	AMPS	VOLTS	CONDUCTOR	CC	PART #
2	23	700	COPPER	.48	A0754-1-CF
2	15	700	NICKEL	.48	A0754-2-CF
3	23	1750	COPPER	.64	A0753-1-CF
3	15	1750	NICKEL	.65	A0753-2-CF
4	23	1250	COPPER	.65	A0756-1-CF
4	15	1250	NICKEL	.75	A0756-2-CF
5	23	700	COPPER	.75	A0755-1-CF
5	15	700	NICKEL	.75	A0755-2-CF
7	23	700	COPPER	.75	A0752-1-CF
7	15	700	NICKEL	.75	A0752-2-CF
8	23	700	COPPER	*	A0757-1-CF
8	15	700	NICKEL	*	A0757-2-CF

\*Not equally spaced

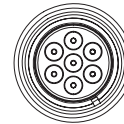
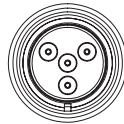
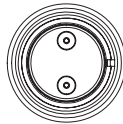
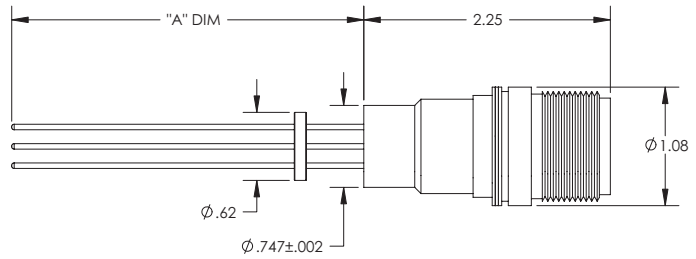
See Section 7 for connectors, wiring, and other accessories.



**12,000 Volts / 7.5 Amps per Pin / 2 to 7 Pins**

**MS Style MIL-C-5015**  
Air-side Connector Included

**WELDABLE**

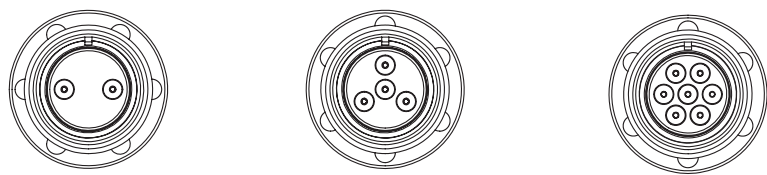
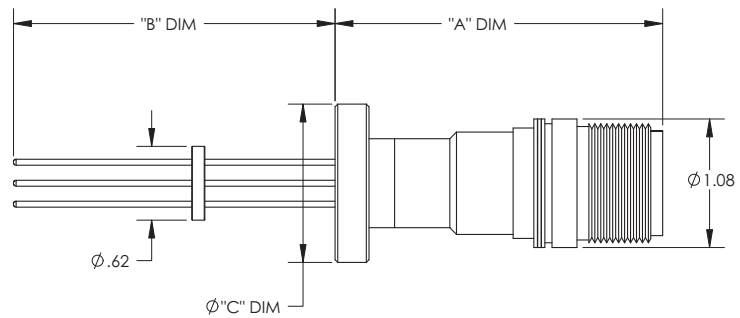
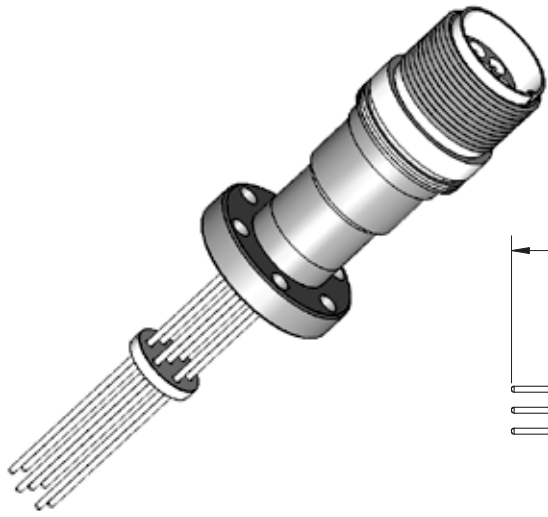


PINS	"A" DIM	CONNECTOR	PART #
2	3.20	YES	A4207-1-W
4	3.20	YES	A4208-1-W
7	3.20	YES	A3084-1-W

See Section 7 for connectors, wiring, and other accessories.



**12,000 Volts / 7.5 Amps per Pin / 2 to 7 Pins**  
**MS Style MIL-C-5015**  
*Air-side Connector Included*  
**CONFLAT FLANGE**



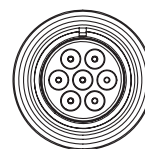
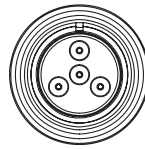
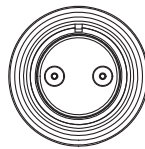
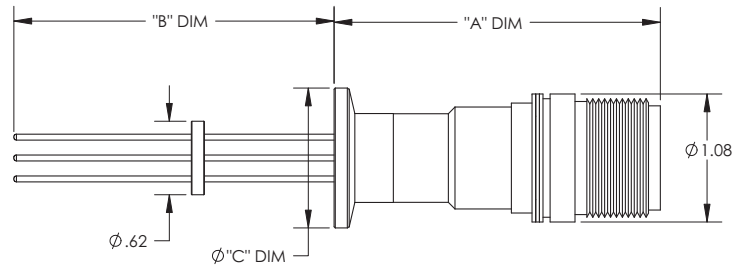
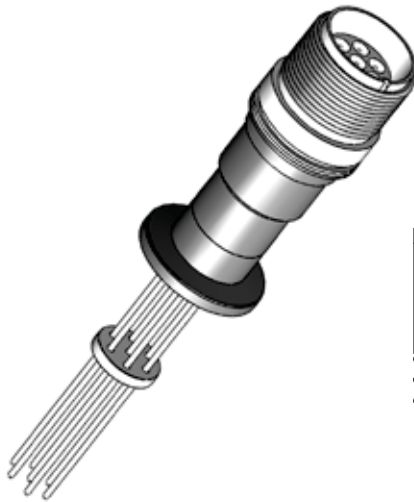
PINS	"A" DIM	"B" DIM	Ø "C" DIM	PART #
2	2.75	2.70	1.33	A3970-1-CF
2	2.33	3.12	2.75	A3972-1-CF
4	2.75	2.70	1.33	A3971-1-CF
4	2.33	3.12	2.75	A3976-1-CF
7	2.75	2.70	1.33	A3086-1-CF
7	2.33	3.12	2.75	A3977-1-CF



**12,000 Volts / 7.5 Amps per Pin / 2 to 7 Pins**

**MS Style MIL-C-5015**  
Air-side Connector Included

**QUICK FLANGE**



PINS	"A" DIM	"B" DIM	Ø "C" DIM	PART #
2	2.75	2.70	1.18	A6077-1-QF
2	2.35	3.10	2.16	A6078-1-QF
4	2.75	2.70	1.18	A6079-1-QF
4	2.35	3.10	2.16	A6080-1-QF
7	2.75	2.70	1.18	A6081-1-QF
7	2.35	3.10	2.16	A6082-1-QF

See Section 7 for connectors, wiring, and other accessories.

