

**neyco**

VACUUM & MATERIALS



# COAXIAL CONNECTORS



## Description

CeramTec coaxial connectors consist of two concentric conductors: a central conductor surrounded by and insulated from a second tubular conductor. The outside conductor is usually at ground potential but in some product variations may be floated off ground by employing an additional insulating ring. The outer conducting surface can prevent radio frequency noise from passing to or from the central conductor. CeramTec's Ceramaseal® product line includes a complete line of industry-standard coaxial connectors ranging from Microdot through SHV. These coaxial connectors are manufactured for high and ultra-high vacuum service.

**Microdot** connectors are the smallest standard threaded interface connectors we offer for use in Ultra-High Vacuum (UHV). CeramTec's standard Microdot connectors are available as single ended or double ended units.

**SMA (Subminiature Type-A)** connectors offer a threaded interface in a subminiature size. Matched impedance designs are also available and are ideally suited for high frequency signal transmission above 10 GHz. CeramTec's standard SMA connectors are available as single ended or double ended units.

**SMB (Subminiature Type-B)** connectors are designed for quick connecting and disconnecting. This is made possible by the SMB's spring retention connector. CeramTec's standard SMB connectors are single ended and available with a grounded shield or a floating shield configuration.

**BNC** connectors are the most popular miniature-sized connector and can accommodate up to 500 V DC. The BNC is characterized by its quick connect/disconnect bayonet coupling. Matched impedance designs are also available and are ideally suited for high frequency



signal transmission. CeramTec's standard BNC connectors are available as single or double ended units with a grounded shield or a floating shield.

**MHV (Miniature High Voltage)** connectors are designed for high-voltage applications of BNC connectors (DC voltage between 500 V and 5 kV). MHV connectors are sometimes referred to as "high-voltage BNCs." CeramTec's standard MHV connectors are available as single ended or double ended units with a floating shield or a grounded shield.

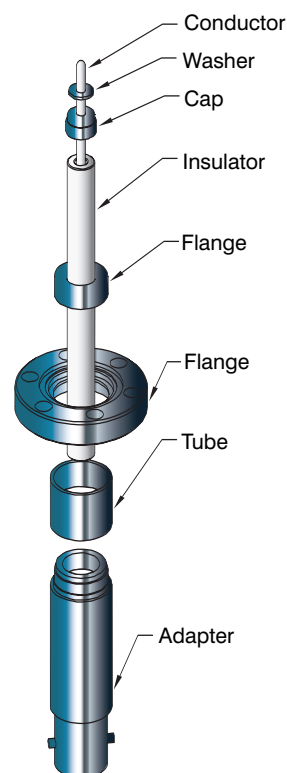
**Type N** series connectors are the most popular medium-sized connectors, accommodating voltages up to 1.5 kV. The threaded coupling provides low noise and increases resistance to shock and vibration. Matched impedance designs are also available and are ideally suited for high frequency signal transmission above 6 GHz. CeramTec's standard Type N connectors are available as single or double ended units.

**HN** series connectors are Type N series connectors that have been designed to take higher voltages (up to 7 kV). These matched impedance designs are ideally suited for high frequency signal transmission or fast rise time pulses for data transmission.

## Standard Specifications

- Grounded and floating shield versions
- High frequency 50 ohm impedance matched connectors
- Connectors sold with or without air side plugs

## Typical Coaxial Construction



### SHV (Safe High Voltage)

connectors feature an improved interface over the MHV. The SHV outer contact ground connection is maintained through the center contact mating cycle. The center contact is recessed to prevent shock hazard when disengaged. Four designs are included in this Product Guide covering DC voltages from 5 kV to as high as 20 kV. The BSHV version is a bakeable SHV connector that exhibits the safety level of the SHV. CeramTec's standard SHV connectors are single ended and available with a grounded shield or a floating shield (SHV 5 kV) configuration.

### Extreme / Custom Design

- Multiple coaxial and multipin connectors in a flange
- Double ended 50 ohm coaxial connector with floating shield for a cryogenic application
- Coaxial connectors using a glass-ceramic seal for cryogenic and corrosive environments
- LC connector, TNC connector and other military style coaxial connectors

### Installation

Standard installation mountings include:

- Weld (Pulse-TIG, TIG, Laser, E-Beam)
- ISO KF flange
- ConFlat flange
- NPT fitting (see Pressure section)

### Applications

A few of the many applications in which these coaxial connectors are commonly used are:

- Telecommunications
- Semiconductor processing equipment
- Aerospace equipment
- Medical equipment

STANDARD SPECIFICATIONS					
Category	Classification	DC Voltage	Coupling	Current (amps)	Cable
Subminiature	Microdot®	1000V	Threaded	2	.08 dia. 50-ohm
	SMB (Subminiature-B)	375V	Push-on	1.4	RG-174/U
	SMA (Subminiature-A)	500V	Threaded	0.8 - 1.8	RG-58/U
Miniature	BNC	500V	Bayonet	3.6 - 4.4	RG-58/U
	MHV (Min. High-Voltage)	5000V	Bayonet	3.6	RG-59/U
	SHV-5KV (Safe High-Voltage)	5000V	Bayonet	10	RG-59/U
	SHV-10KV (Safe High-Voltage)	10,000V	Bayonet	2.2 - 10	RG-58/U
	SHV-20KV (Safe High-Voltage)	20,000V	Bayonet	16.5	RG-213/U
	BSHV (Bakeable Safe High-Voltage)	7500V	Threaded	8	RG-59/U
Medium-Sized	N	1500V	Threaded	0.8 - 5	RG-8/U RG-9/U RG-10/U
	HN	7000V	Threaded	7	RG-8/U RG-9/U RG-87/U RG-213/U RG-214/U RG-225/U

- Microwave
- In-vacuum coating
- Particle accelerators

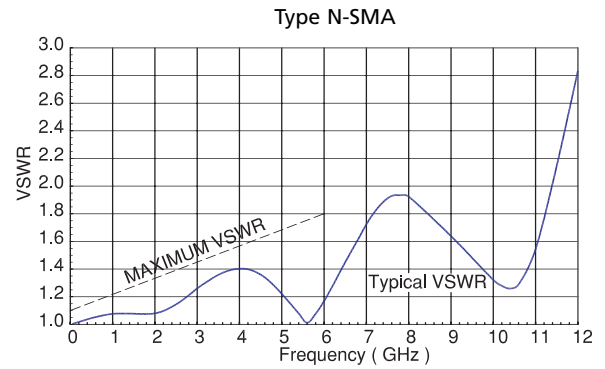
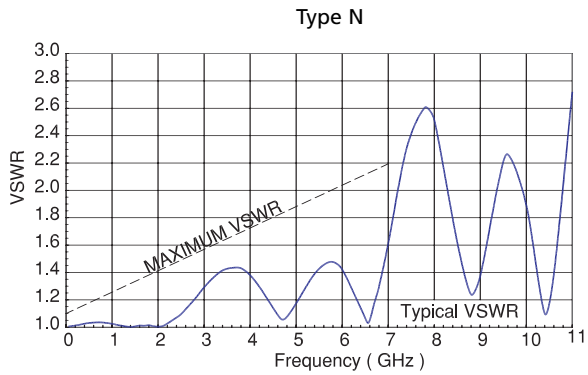
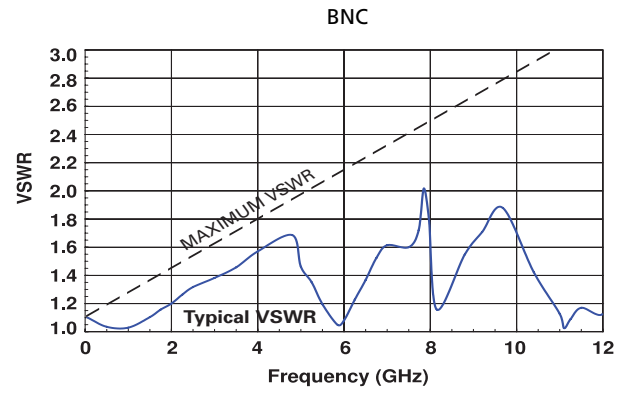
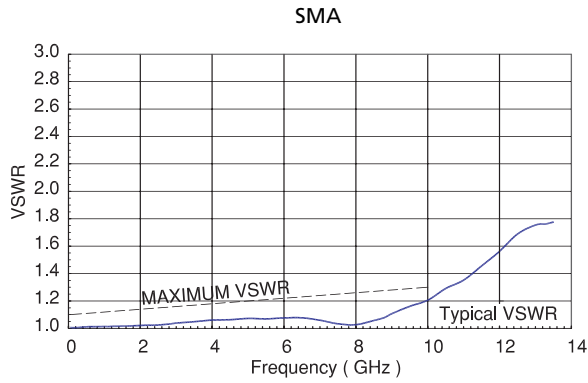
### New Products













- Floating SMA connector
- BNC to Microdot connector
- New 50 Ohm BNC connector design

### High Frequency 50 Ohm Designs

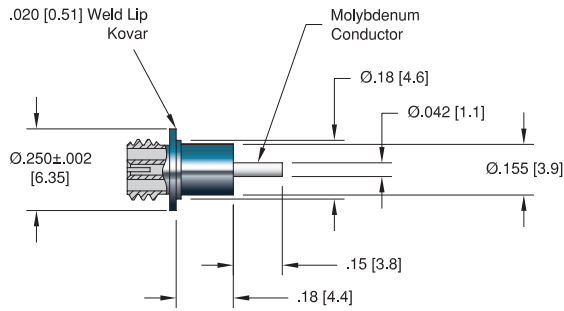
- SMA
- BNC
- Type N
- HN

### VSWR vs. Frequency Charts

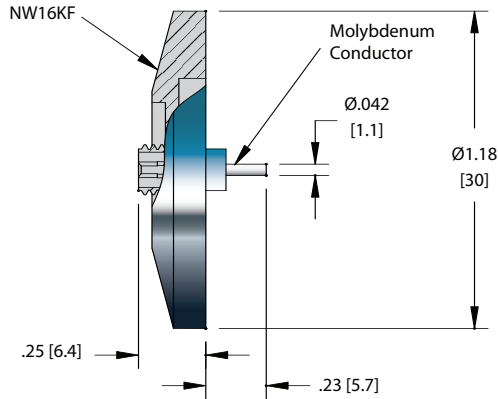


Type	Voltage DC	Current	Impedance Rating	Sub-section	Section Pages
	1 kV	2 Amps	Non-Constant	Microdot	C.1 80-83
	375 V	1.4 Amps	Non-Constant	SMB	C.2 84-87
	500 V	to 1.8 Amps	50 Ohm & Non-Constant	SMA	C.3 88-95
	500 V	to 3.6 Amps	50 Ohm & Non-Constant	BNC	C.4 96-105
	5 kV	3.6 Amps	Non-Constant	MHV	C.5 106-113
	1.5 kV	to 5 Amps	50 Ohm & Non-Constant	Type N	C.6 114-117
	7 kV	7 Amps	50 Ohm	HN	C.7 118-119
	5 kV	10 Amps	Non-Constant	SHV 5 KV	C.8 120-125
	7.5 kV	8 Amps	Non-Constant	BSHV 7.5 KV	C.9 126-127
	10 kV	to 10 Amps	Non-Constant	SHV 10 KV	C.10 128-131
	20 kV	16.5 Amps	Non-Constant	SHV 20 KV	C.11 132-133
	1.5 kV	0.8 Amps	50 Ohm & Non-Constant	Between Series	C.12 134-137

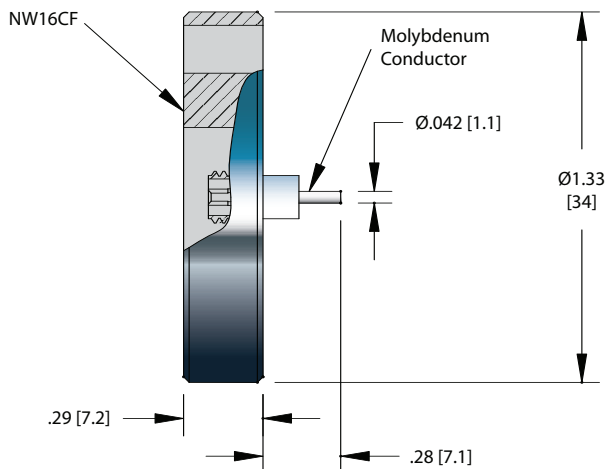
Weldable



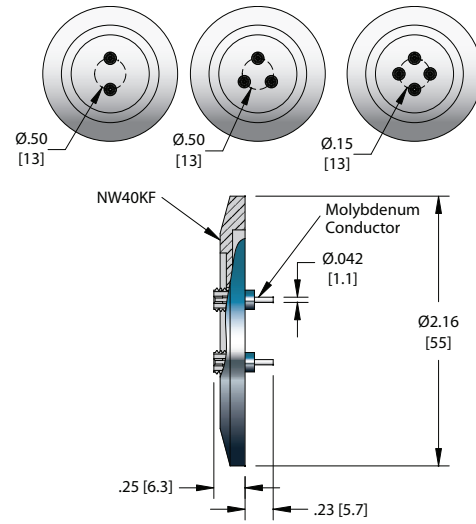
ISO KF - NW16KF



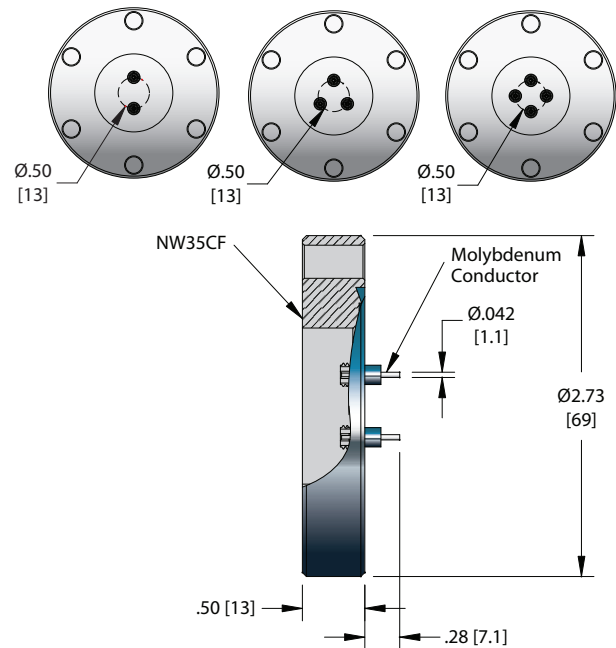
ConFlat - NW16CF



ISO KF - NW40KF



ConFlat - NW35CF



Specifications

Materials

- Housing: Kovar
- Pin: Molybdenum
- Insulation: Alumina ceramic
- Magnetic Materials: Yes

Voltage Rating 1 kV DC

Current Rating 2 Amps

Temperature Range -55°C to 450°C, ISO KF -25°C to 205°C

Pressure @ 20°C See table



**Weldable**

NO. PINS	INSTALLATION	PRESSURE @ 20°C		PART NUMBER
		PSIG	BAR	
1	Weld	1600	110	17614-01-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	-	-	21507-01-KF
2	NW40KF	-	-	21525-01-KF
3	NW40KF	-	-	21526-01-KF
4	NW40KF	-	-	21527-01-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	1600	110	21505-01-CF
2	2 3/4" (NW35CF)	1500	103	21522-01-CF
3	2 3/4" (NW35CF)	1500	103	21523-01-CF
4	2 3/4" (NW35CF)	1500	103	21524-01-CF

**Air Side Cable Assembly**

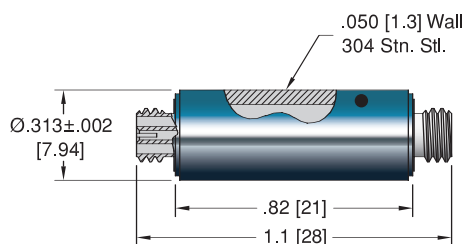
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
Microdot – Single Ended	10'	1 kV	2	-65°C	125°C	14544-01-A

**Contacts**

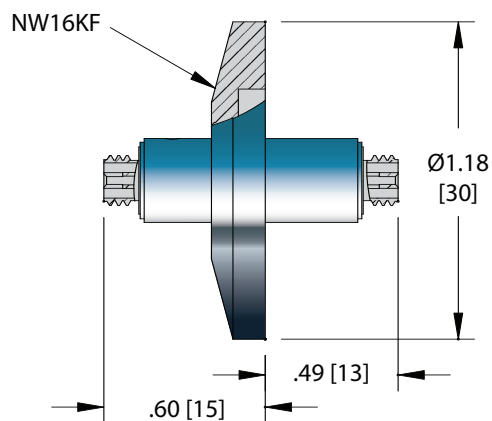
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.042 Crimp Contacts	Gold Plated 300 Series Stn. Stl.	Accepts wire up to 0.030 [0.76]	14461-04-A
Crimp Tool		For 0.025" – 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 5. See the Accessories section for more information on all accessories.

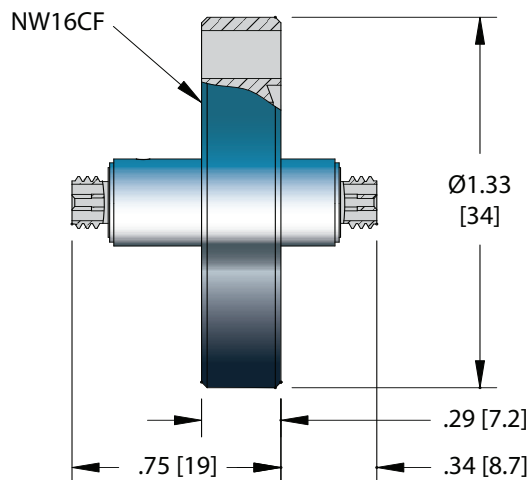
## Weldable



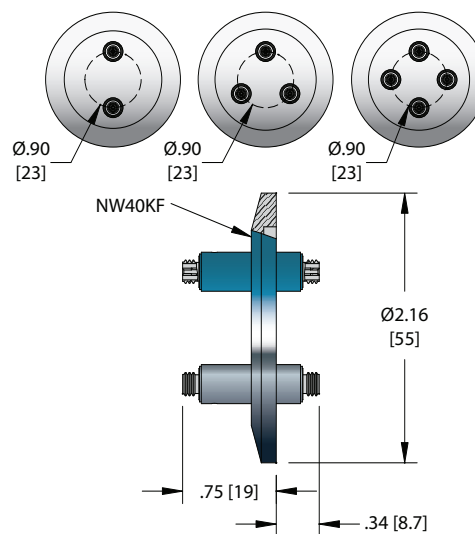
## ISO KF - NW16KF



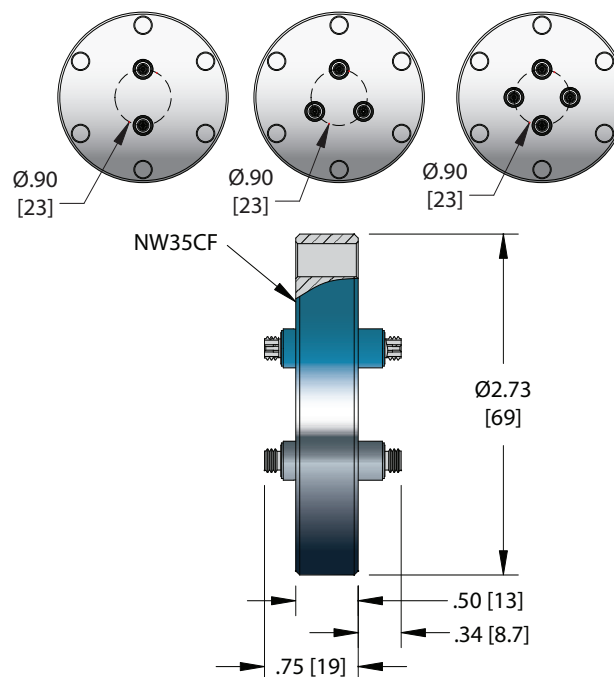
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
 Contact: 304 Stainless steel  
 Insulation: Alumina ceramic  
 Magnetic Materials: Yes

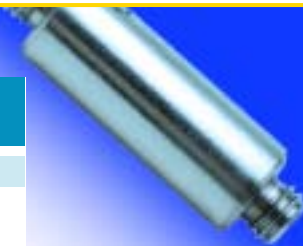
**Voltage Rating** 1 kV DC

**Current Rating** 2 Amps

**Temperature Range** -55°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table





Weldable

NO. PINS	INSTALLATION	PRESSURE @ 20°C		PART NUMBER
		PSIG	BAR	
1	Weld	1600	110	18044-02-W

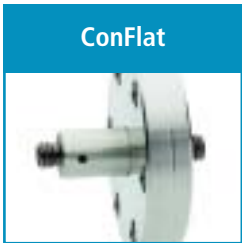
ISO FLANGE



ISO KF

1	NW16KF	-	-	21511-01-KF
2	NW40KF	-	-	21517-01-KF
3	NW40KF	-	-	21518-01-KF
4	NW40KF	-	-	21519-01-KF

CONFLAT FLANGE



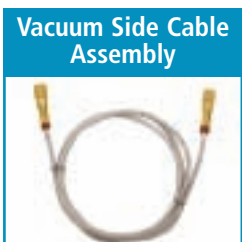
ConFlat

1	1 1/3" (NW16CF)	1600	110	21509-01-CF
2	2 3/4" (NW35CF)	1500	103	21514-01-CF
3	2 3/4" (NW35CF)	1500	103	21515-01-CF
4	2 3/4" (NW35CF)	1500	103	21516-01-CF



Air Side Cable Assembly

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
Microdot Air Side – Single Ended	10'	1 kV	2	-65°C	125°C	14544-01-A

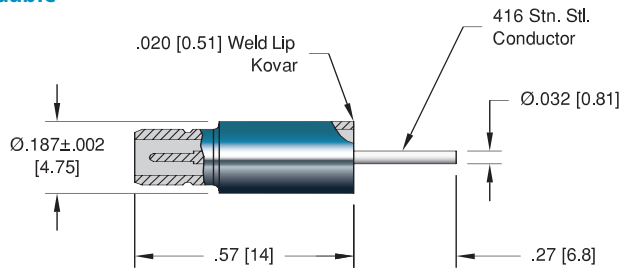


Vacuum Side Cable Assembly

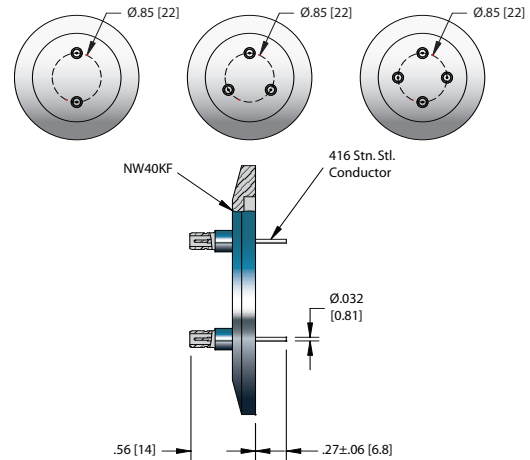
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
Microdot Vacuum Side – Double Ended	12"	500 V	2	-65°C	125°C	15767-12-A
Microdot Vacuum Side – Double Ended	24"	500 V	2	-65°C	125°C	15767-24-A
Microdot Vacuum Side – Double Ended	36"	500 V	2	-65°C	125°C	15767-36-A <sup>†</sup>

<sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

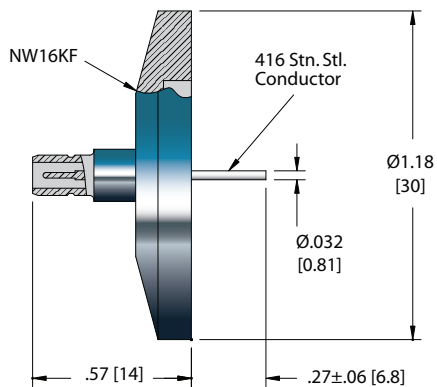
## Weldable



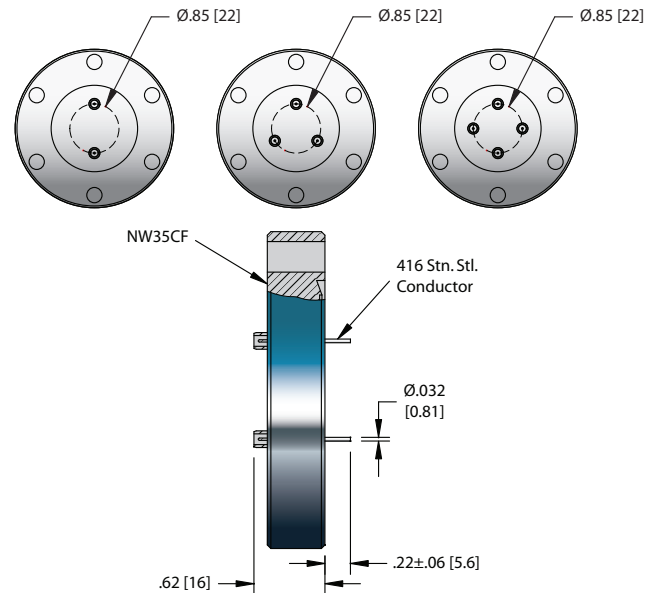
## ISO KF - NW40KF



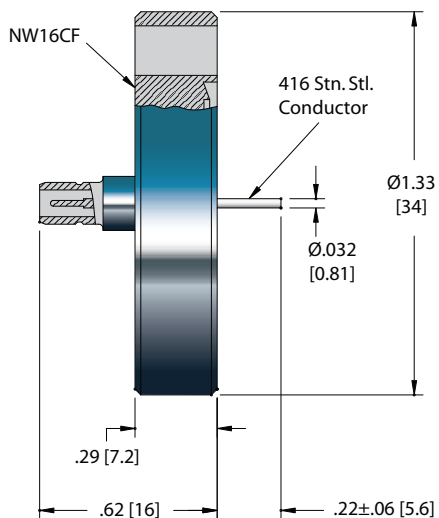
## ISO KF - NW16KF



## ConFlat - NW35CF



## ConFlat - NW16CF



## Specifications

## Materials

Housing: Kovar  
Pin: 416 Stainless steel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

**Voltage Rating** 500 V DC

**Current Rating** 1.4 Amps

**Temperature Range** -55°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table



**Weldable**

NO. PINS	INSTALLATION	PRESSURE @ 20°C		PART NUMBER
		PSIG	BAR	
1	Weld	3500	241	0713-02-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	-	-	21371-01-KF
2	NW40KF	-	-	21379-01-KF
3	NW40KF	-	-	21381-01-KF
4	NW40KF	-	-	21383-01-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	3000	207	21369-01-CF
2	2 3/4" (NW35CF)	1500	103	21373-01-CF
3	2 3/4" (NW35CF)	1500	103	21375-01-CF
4	2 3/4" (NW35CF)	1500	103	21377-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	375 V	5	0.25 [6.4]	0.71 [18]	SMB Plug	3095-12

**Air Side Cable Assembly**

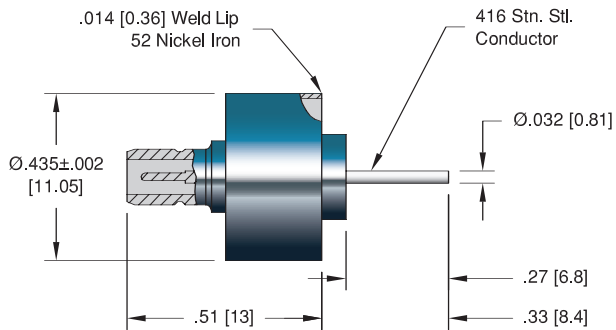
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
50 Ohm SMB – Double Ended	10'	500 V	2	-70	200	21618-01-A

**Contacts**

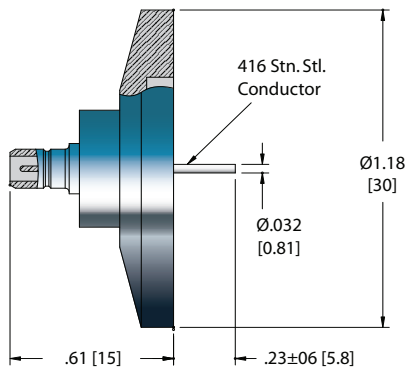
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.032 Crimp Contacts Crimp Tool	Beryllium Copper	Accepts wire up to 0.032 [0.81] For 0.025" – 0.075" Diameters	11288-02-X 2840-05

\*Contacts priced and sold in packages of 10. See the Accessories section for more information on all accessories.

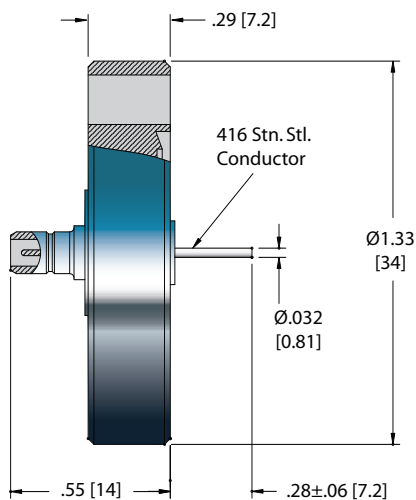
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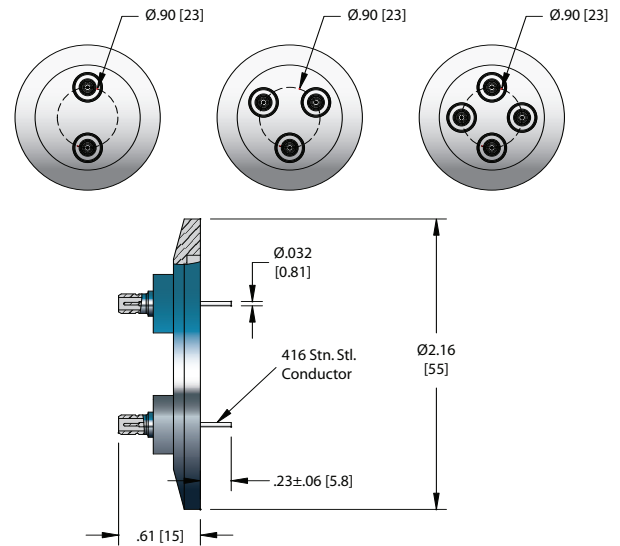
## ISO KF - NW16KF



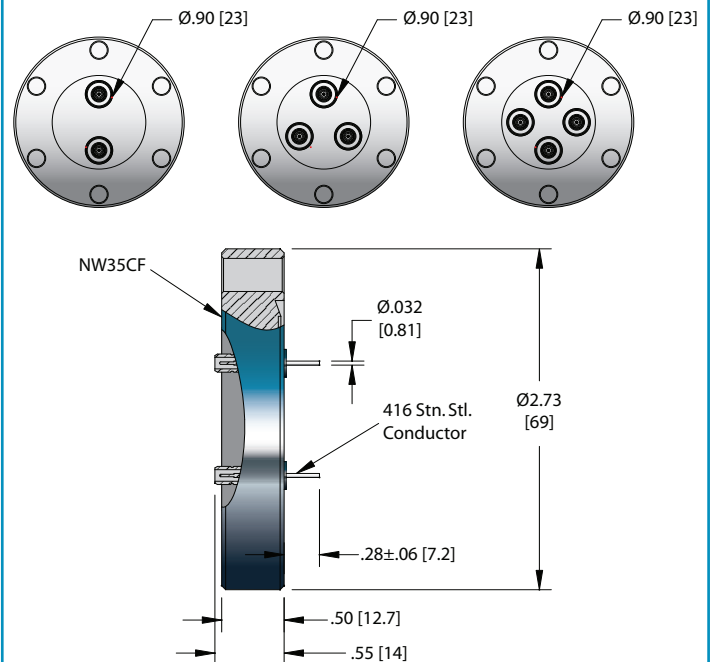
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

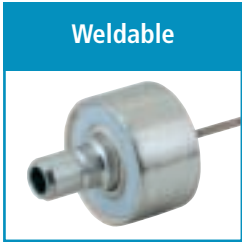
Housing: 52 Nickel Iron  
Pin: 416 Stainless steel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

**Voltage Rating** Pin/Shield: 500 V DC, Shield/Grd: 1 kV DC

**Current Rating** 1.4 Amps

**Temperature Range** -55°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 500 PSIG (35 Bar), ISO KF 0 PSIG



Weldable

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	0714-02-W



ISO KF

ISO FLANGE		
1	NW16KF	21396-01-KF
2	NW40KF	21403-01-KF
3	NW40KF	21405-01-KF
4	NW40KF	21407-01-KF



ConFlat

CONFLAT FLANGE		
1	1 1/3" (NW16CF)	21394-01-CF
2	2 3/4" (NW35CF)	21397-01-CF
3	2 3/4" (NW35CF)	21399-01-CF
4	2 3/4" (NW35CF)	21401-01-CF



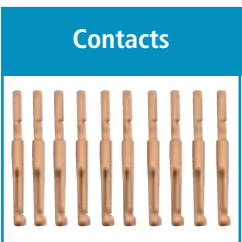
Air Side Plug

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	375 V	5	0.25 [6.4]	0.71 [18]	SMB Plug	3095-12



Air Side Cable Assembly

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
50 Ohm SMB – Double Ended	10'	500 V	2	-70	200	21618-01-A

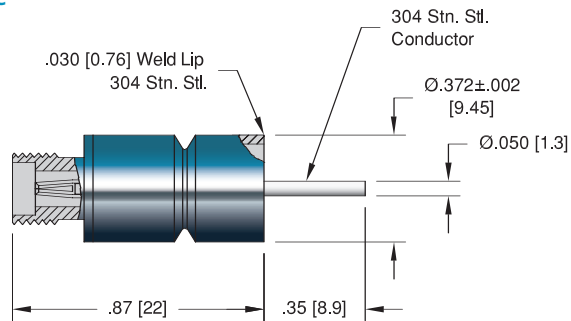


Contacts

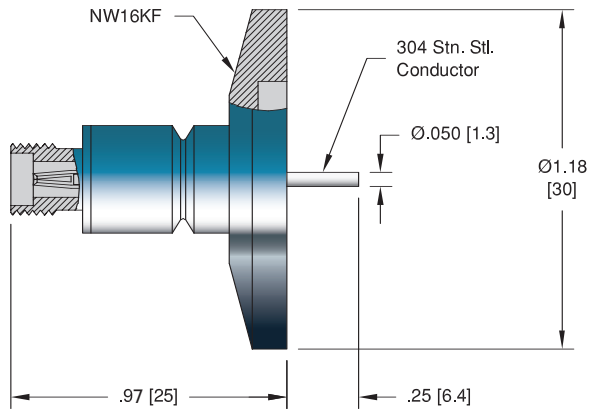
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.032 Crimp Contacts Crimp Tool	Beryllium Copper	Accepts wire up to 0.032 [0.81] For 0.025" – 0.075" Diameters	11288-02-X 2840-05

\*Contacts priced and sold in packages of 10. See the Accessories section for more information on all accessories.

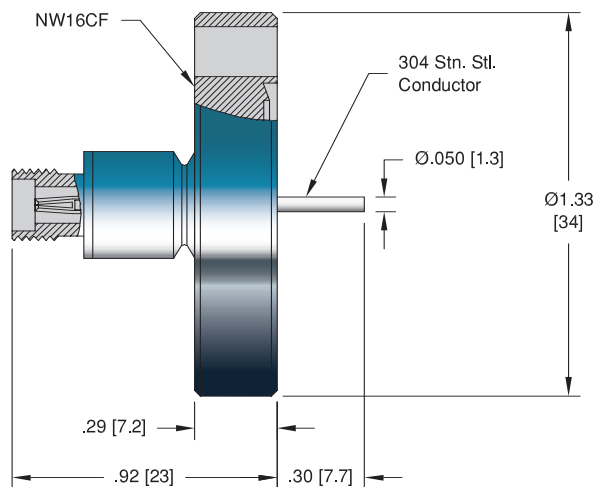
## Weldable



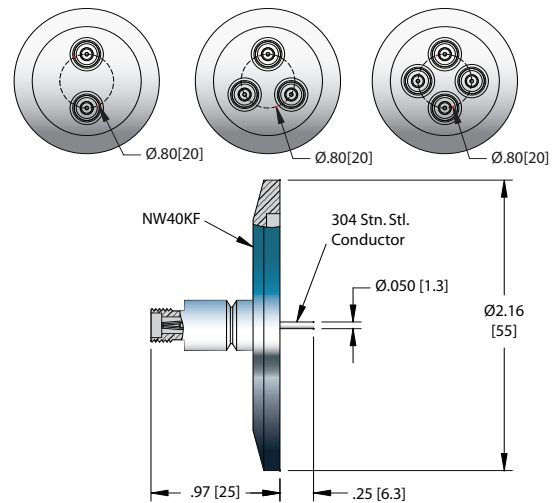
## ISO KF - NW16KF



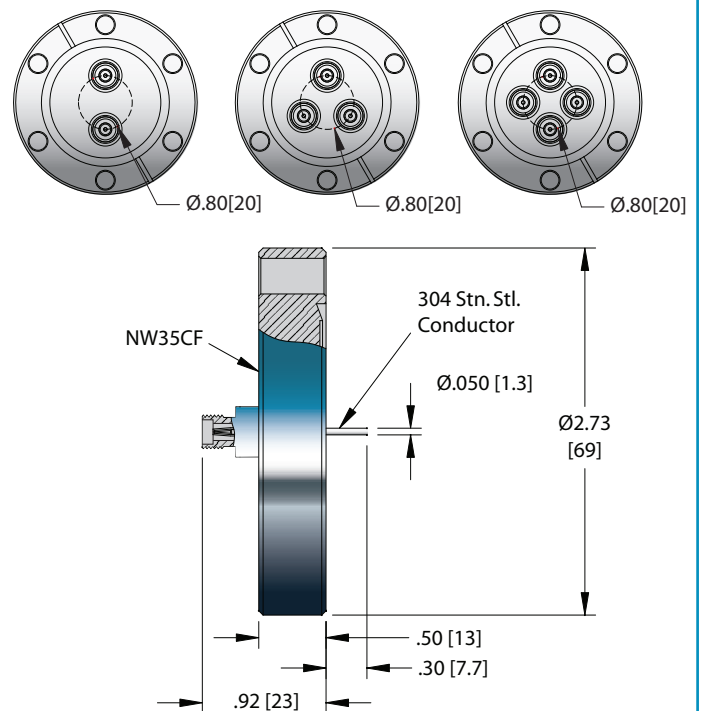
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
Pin: 304 Stainless steel  
Insulation: Alumina ceramic  
Magnetic Materials: No

**Voltage Rating** 500 V DC

**Current Rating** 1.8 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table



**Weldable**

NO. PINS	INSTALLATION	PRESSURE @ 20°C		PART NUMBER
		PSIG	BAR	
1	Weld	4000	276	8071-02-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	-	-	18045-02-KF
2	NW40KF	-	-	21498-01-KF
3	NW40KF	-	-	21499-01-KF
4	NW40KF	-	-	21500-01-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	3000	207	18046-02-CF
2	2 3/4" (NW35CF)	1500	103	21495-01-CF
3	2 3/4" (NW35CF)	1500	103	21496-01-CF
4	2 3/4" (NW35CF)	1500	103	21497-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	500 V	5	0.31 [7.9]	0.98 [25]	SMA Plug	6524-02

**Air Side Cable Assembly**

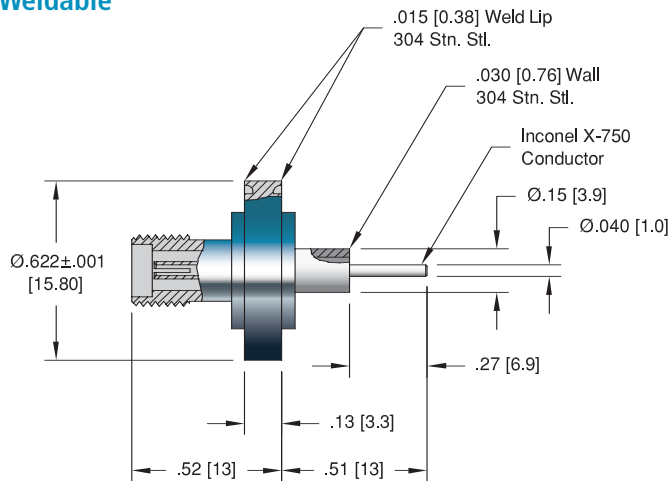
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
50 Ohm SMA – Double Ended	10'	500 V	5	-70	200	21617-01-A

**Contacts**

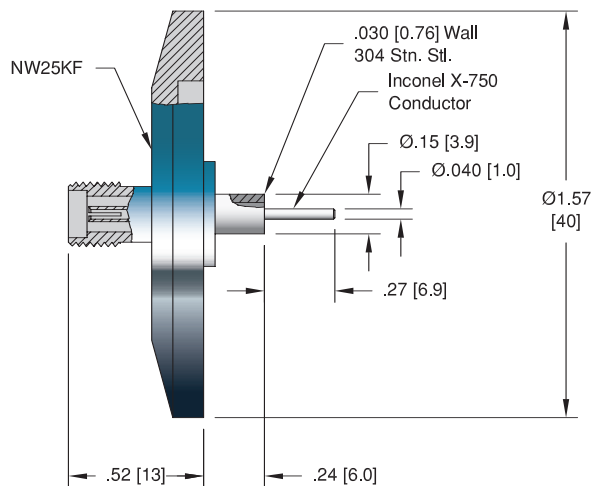
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.050 Crimp Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	11911-02-X†
0.050 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-02-A
0.050 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7332-02-A
Crimp Tool		For 0.025" – 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.

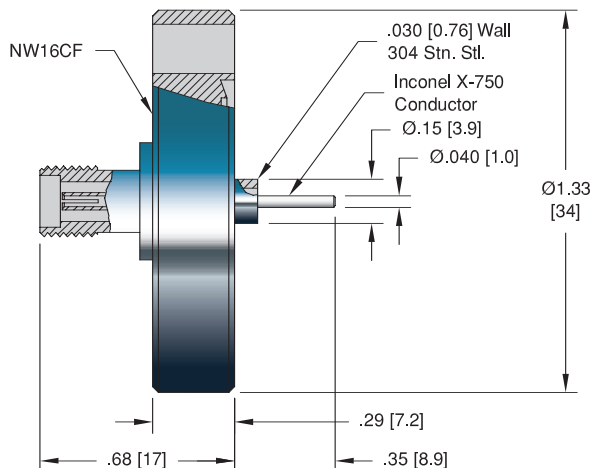
## Weldable



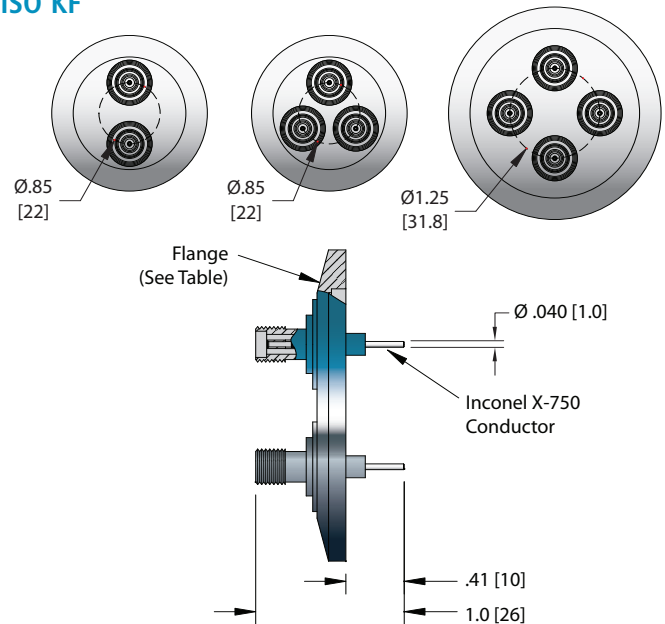
## ISO KF – NW25KF



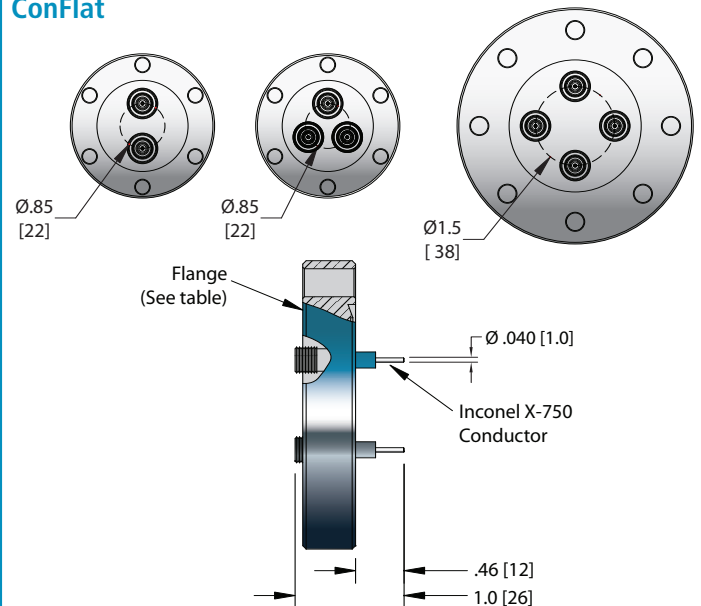
## ConFlat – NW16CF



## ISO KF



## ConFlat



## Specifications

## Materials

Housing: 304 Stainless steel

Insulation: Glass-ceramic

Pin: Inconel X-750

Magnetic Materials: No

Contacts: 300 Series Stn. Stl.

Voltage Rating 500 V DC

Current Rating 1 Amp

Temperature Range -269°C to 350°C, ISO KF -25°C to 205°C

Pressure @ 20°C 1400 PSIG (97 Bar), ISO KF 0 PSIG





**Single Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	15310-03-W

**Single Ended ISO KF**

**ISO FLANGE**

1	NW25KF	18053-02-KF
2	NW40KF	21356-01-KF
3	NW40KF	21357-01-KF
4	NW50KF	21361-01-KF

**Single Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	18054-02-CF
2	2 3/4" (NW35CF)	21353-01-CF
3	2 3/4" (NW35CF)	21358-01-CF
4	4 1/2" (NW63CF)	21360-01-CF

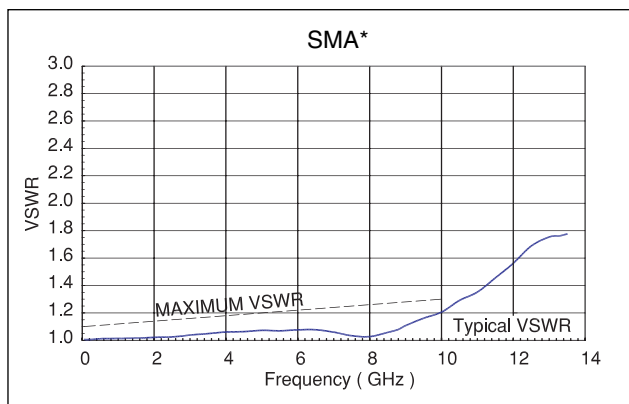
**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.31 [7.9]	0.98 [25]	SMA Plug	6524-02

**Air Side Cable Assembly**

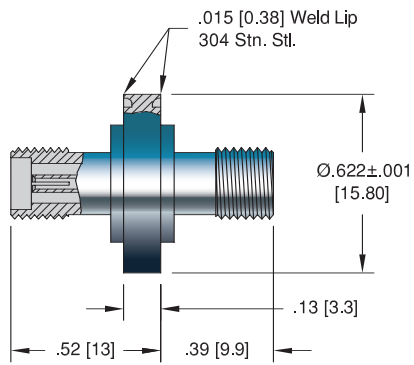
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN	TEMPERATURE MAX	PART NUMBER
50 Ohm SMA – Double Ended	10'	500 V	5	-70	200	21617-01-A

See the Accessories section for more information on all accessories.

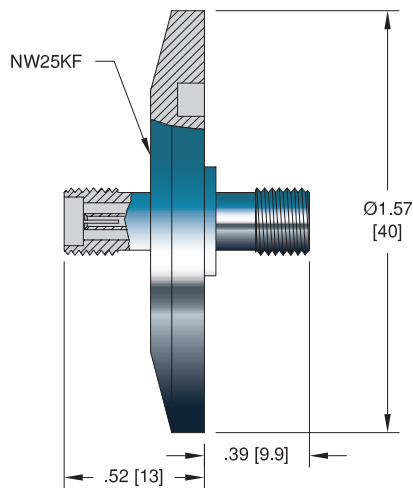


\*Applies when properly mated to a 50 Ohm load.

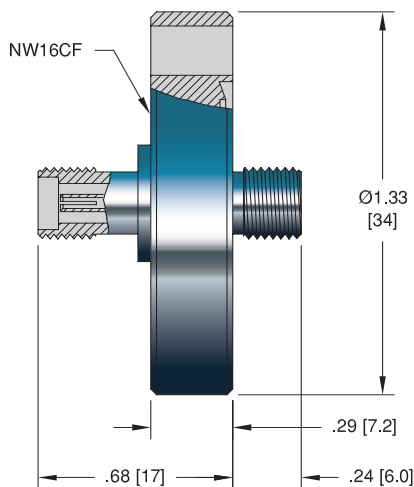
## Weldable



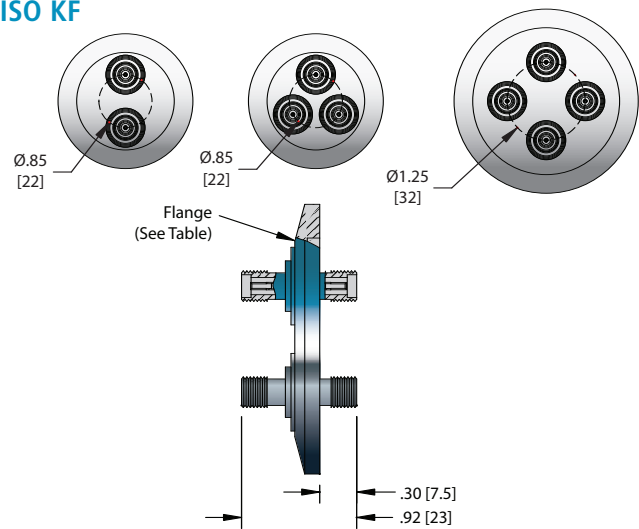
## ISO KF – NW25KF



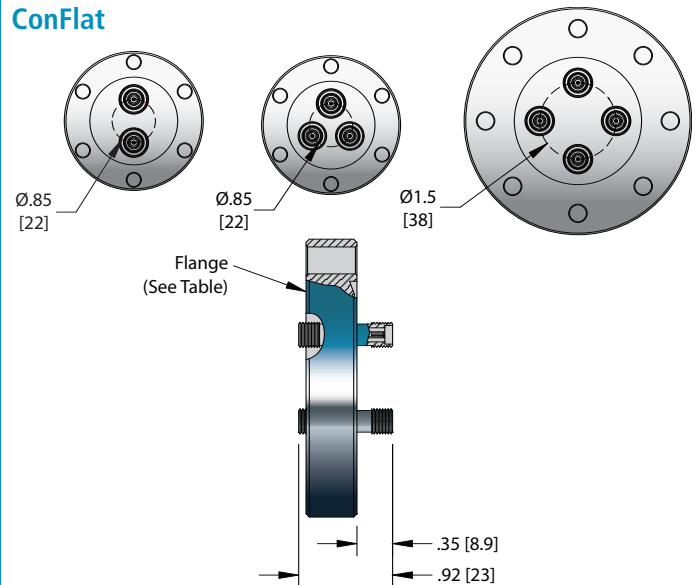
## ConFlat – NW16CF



## ISO KF



## ConFlat



## Specifications

## Materials

Housing: 304 Stainless steel    Insulation: Glass-ceramic  
 Pin: Inconel X-750                Magnetic Materials: No  
 Contacts: 300 Series Stn. Stl.

**Voltage Rating** 500 V DC

**Current Rating** 1 Amp

**Temperature Range** -269°C to 350°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG



**Double Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	15263-03-W

**Double Ended ISO KF**

**ISO FLANGE**

1	NW25KF	18055-02-KF
2	NW40KF	21365-01-KF
3	NW40KF	21366-01-KF
4	NW50KF	21367-01-KF

**Double Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	16545-01-CF
2	2 3/4" (NW35CF)	21362-01-CF
3	2 3/4" (NW35CF)	21363-01-CF
4	4 1/2" (NW63CF)	21364-01-CF

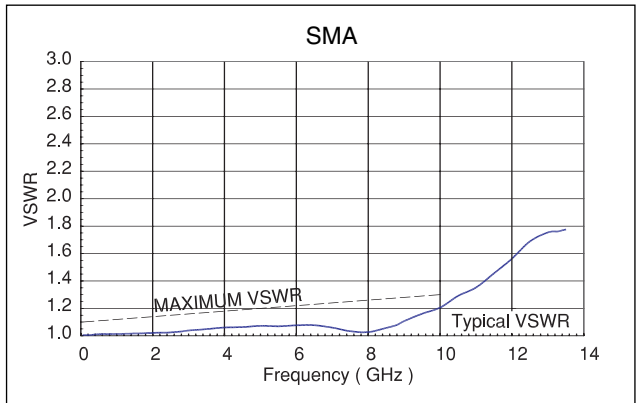
**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.31 [7.9]	0.98 [25]	SMA Plug	6524-02

**Air Side Cable Assembly**

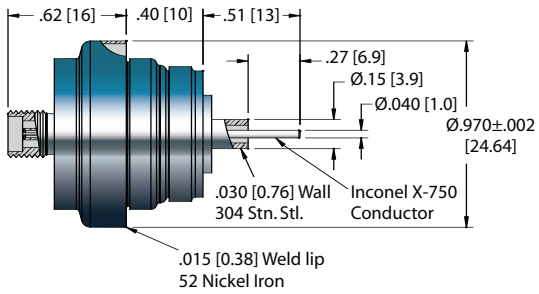
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN	TEMPERATURE MAX	PART NUMBER
50 Ohm SMA – Double Ended	10'	500 V	5	-70	200	21617-01-A

See the Accessories section for more information on all accessories.

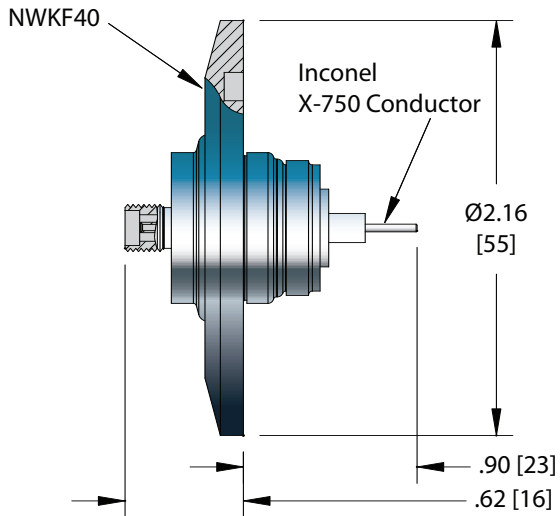


COAXIAL

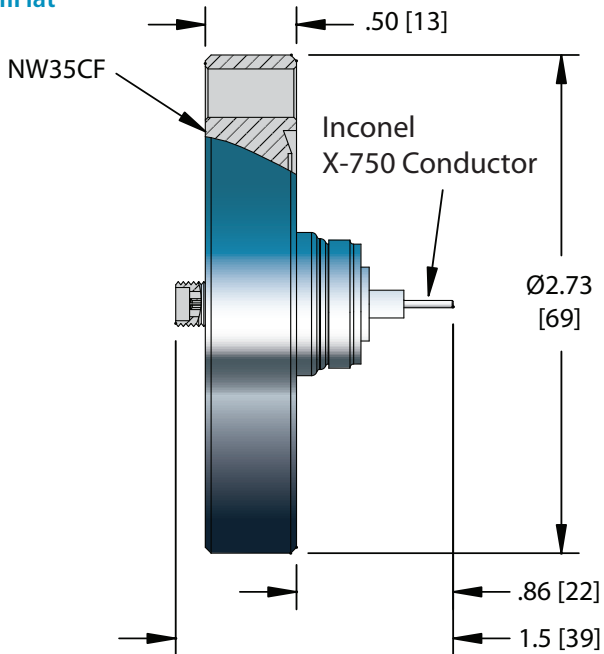
### Single Ended – Floating Shield Weldable



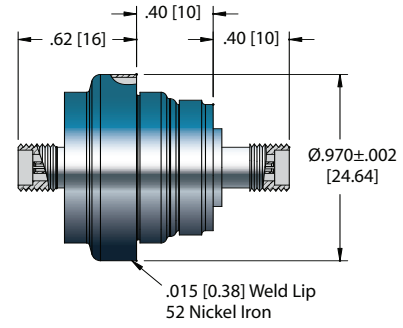
### ISO KF



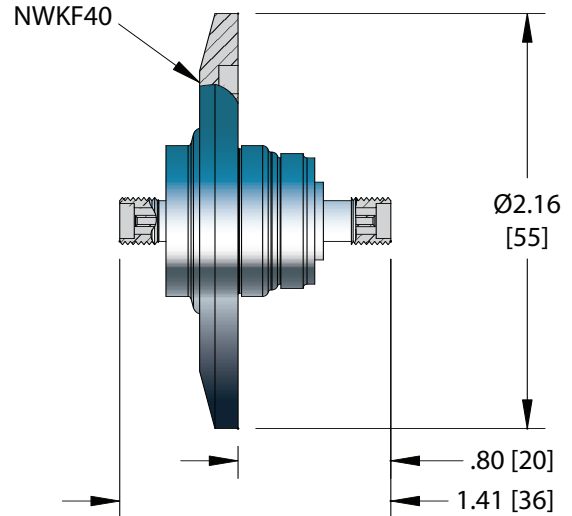
### ConFlat



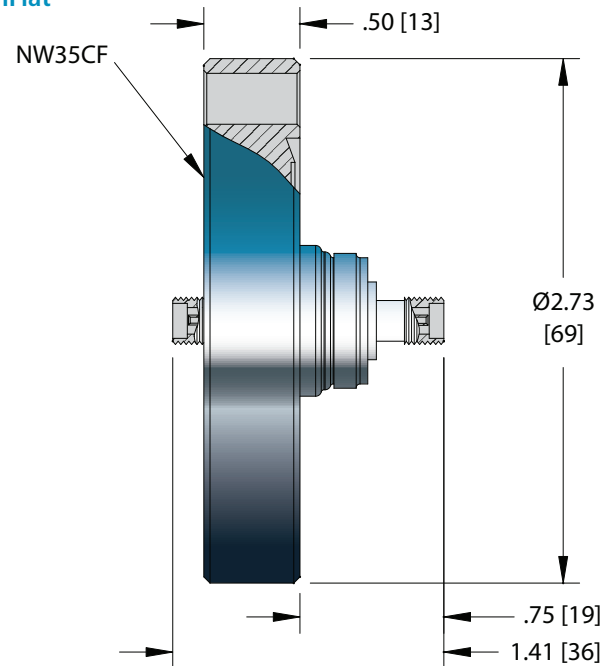
### Double Ended – Floating Shield Weldable



### ISO KF



### ConFlat



Single & Double Ended Weldable



STYLE	INSTALLATION	PART NUMBER
Single Ended	Weld	21283-01-W
Double Ended	Weld	19604-01-W†

Single & Double Ended ISO KF



ISO FLANGE		
STYLE	INSTALLATION	PART NUMBER
Single Ended	NW40KF	21285-01-KF
Double Ended	NW40KF	21287-01-KF†

Single & Double Ended ConFlat



CONFLAT FLANGE		
STYLE	INSTALLATION	PART NUMBER
Single Ended	2 3/4" (NW35CF)	21284-01-CF
Double Ended	2 3/4" (NW35CF)	21286-01-CF†

Air Side Plug



TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.31 [7.9]	0.98 [25]	SMA Plug	6524-02

Air Side Cable Assembly



TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm SMA – Double Ended	10'	500 V	5	-70	200	21617-01-A

Contacts



TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.040 Crimp Contacts	Copper Alloy - Gold Flash	Accepts wire up to 0.040 [1.0]	16167-03-A†
0.040 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-03-A
0.040 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.040 [1.0]	7332-01-A
Crimp Tool		For 0.025" – 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 5. \*\*Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.

Specifications

Materials

Housing: 52 Nickel Iron Insulation: Glass-ceramic & Alumina ceramic  
 Pin: Inconel X-750 Magnetic Materials: Yes

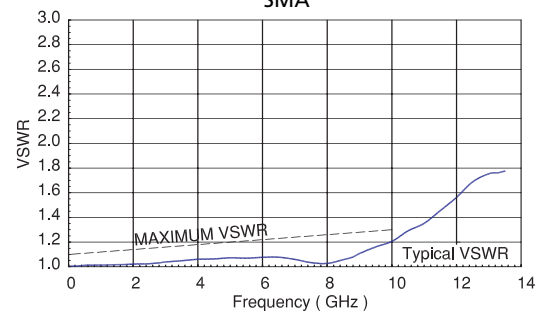
Voltage Rating Pin/Shield: 500 V DC, Shield/Gnd: 2.5 kV DC

Current Rating 1 Amp

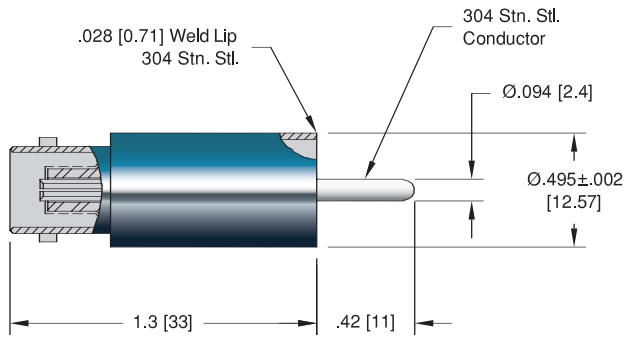
Temperature Range -269°C to 350°C, ISO KF -25°C to 205°C

Pressure @ 20°C 300 PSIG (20 Bar), ISO KF 0 PSIG

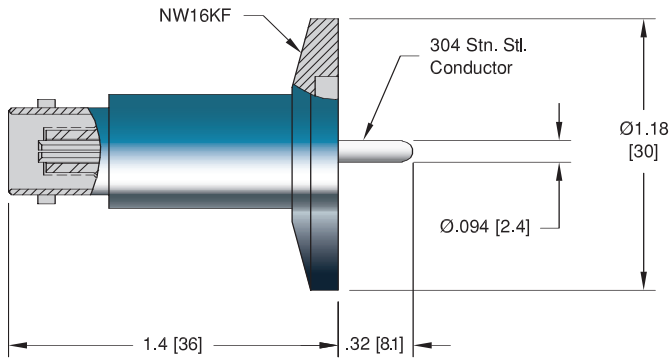
COAXIAL



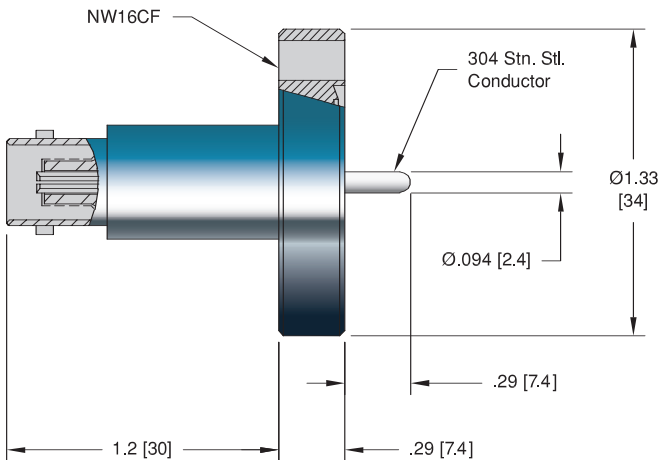
**Weldable**



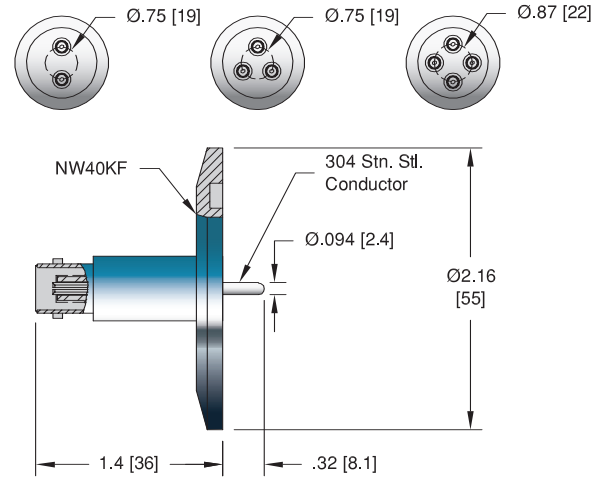
**ISO KF - NW16KF**



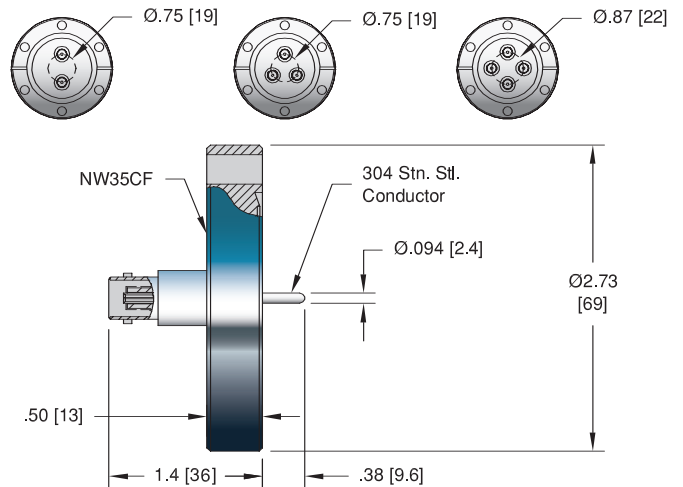
**ConFlat - NW16CF**



**ISO KF - NW40KF**



**ConFlat - NW35CF**



**Specifications**  
**Materials**

- Housing: 304 Stainless steel
- Pin: 304 Stainless steel
- Insulation: Alumina ceramic
- Magnetic Materials: No

**Voltage Rating** 500 V DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG



**Single Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	7007-02-W

**Single Ended ISO KF**

**ISO FLANGE**

1	NW16KF	17114-01-KF
1	NW40KF	17114-05-KF
2	NW40KF	17136-01-KF
3	NW40KF	17137-01-KF
4	NW40KF	17138-01-KF

**Single Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" ConFlat (NW16CF)	7593-02-CF
1	2 3/4" ConFlat (NW35CF)	7592-02-CF
2	2 3/4" ConFlat (NW35CF)	5822-04-CF
3	2 3/4" ConFlat (NW35CF)	6647-04-CF
4	2 3/4" ConFlat (NW35CF)	7184-05-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.56 [14]	1.1 [27]	BNC Plug	7116-02

**Air Side Cable Assembly**

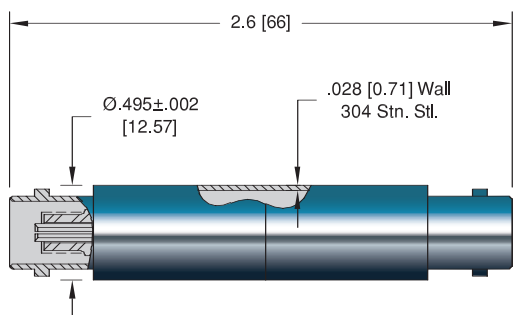
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN	TEMPERATURE MAX	PART NUMBER
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A

**Contacts**

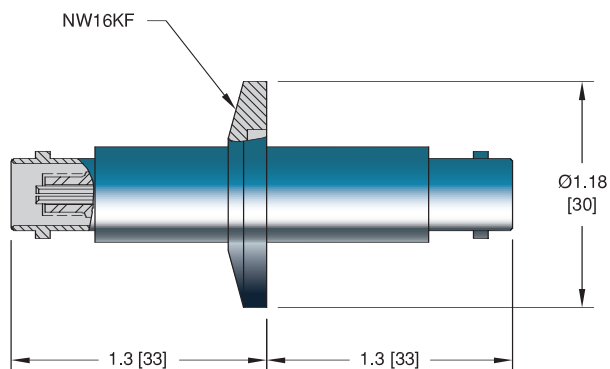
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

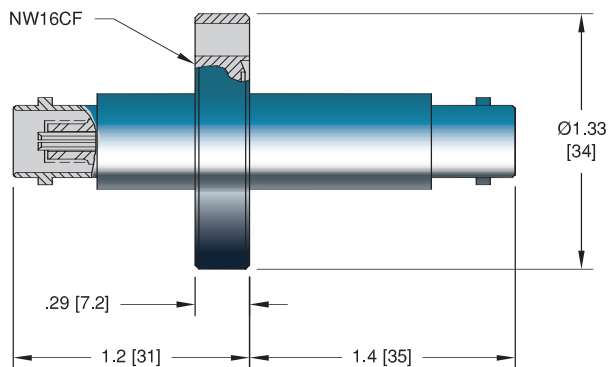
**Weldable**



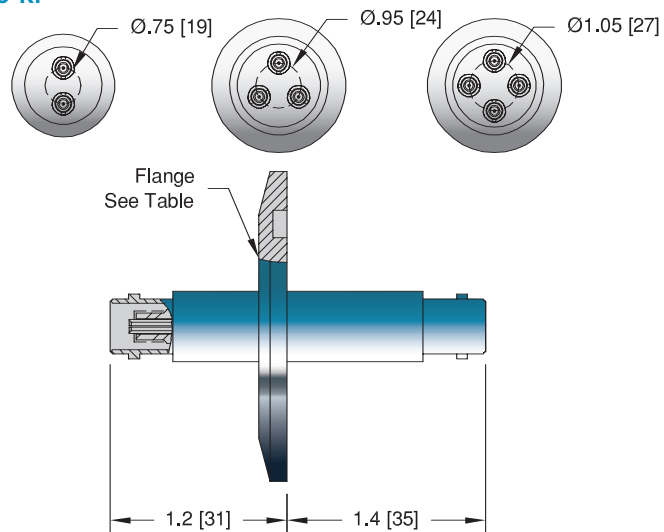
**ISO KF - NW16KF**



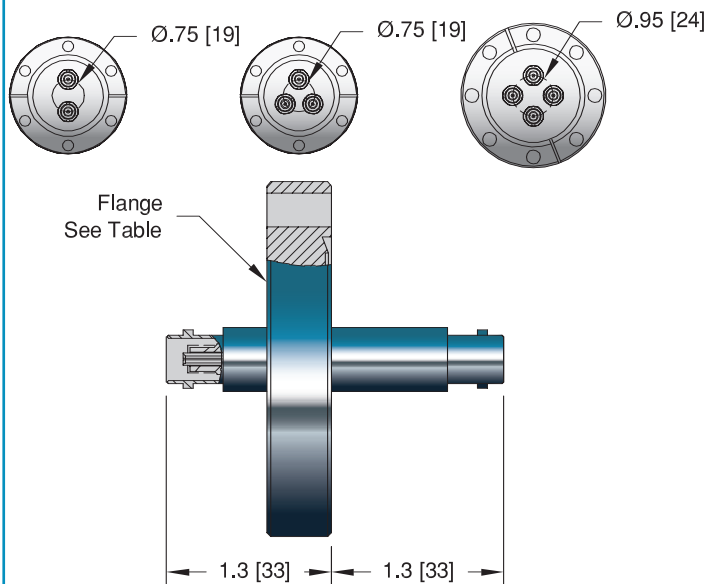
**ConFlat - NW16CF**



**ISO KF**



**ConFlat**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: 304 Stainless steel
- Insulation: Alumina ceramic
- Magnetic Materials: No

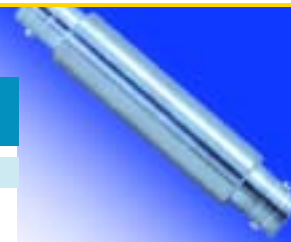
**Voltage Rating** 500 V DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG





**Double Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	17115-01-W

**Double Ended ISO KF**

**ISO FLANGE**

1	NW16KF	17116-01-KF
1	NW40KF	17118-01-KF
2	NW40KF	17118-05-KF
3	NW50KF	17122-01-KF
4	NW50KF	17139-01-KF

**Double Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" ConFlat (NW16CF)	17117-01-CF
1	2 3/4" ConFlat (NW35CF)	18604-01-CF
2	2 3/4" ConFlat (NW35CF)	17187-01-CF
3	2 3/4" ConFlat (NW35CF)	17188-01-CF
4	3 3/8" ConFlat (NW50CF)	17189-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.56 [14]	1.1 [28]	BNC Plug	7116-02

**Air Side Cable Assembly**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A

See the Accessories section for more information on all accessories.



## Specifications

### Materials

Housing: 52 Nickel Iron  
 Pin: 304 Stainless steel  
 Insulation: Alumina ceramic  
 Magnetic Materials: Yes

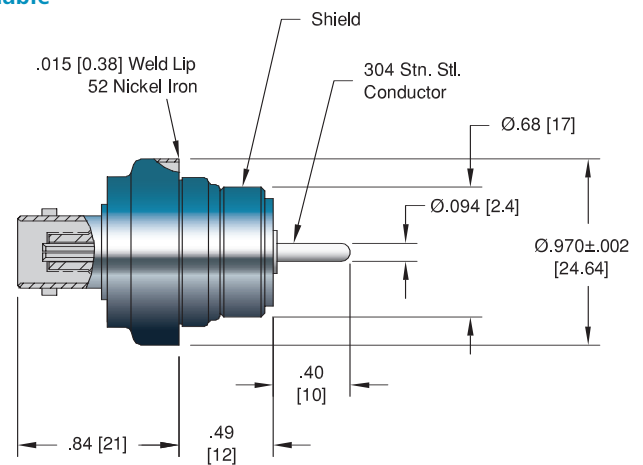
**Voltage Rating** Pin/Shield: 500 V DC, Shield/Gnd: 2.5 kV DC

**Current Rating** 3.6 Amps

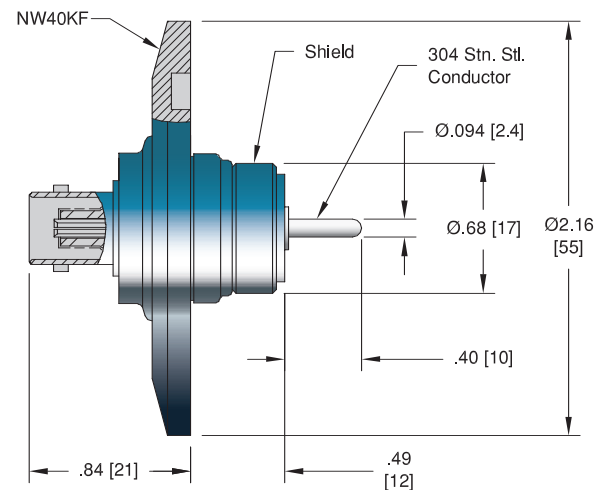
**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 300 PSIG (20 Bar), ISO KF 0 PSIG

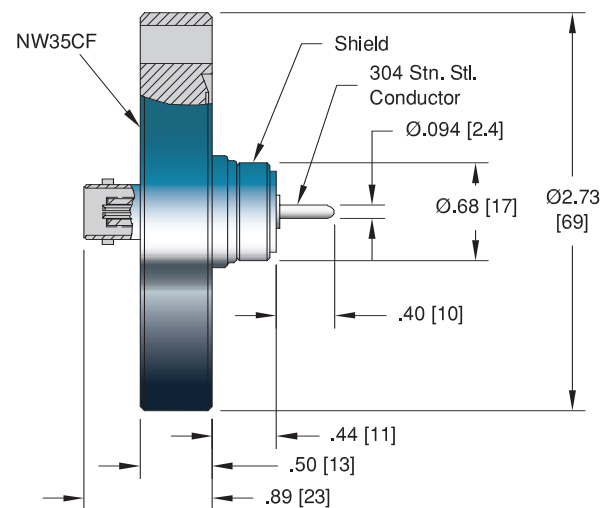
### Weldable



### ISO KF



### ConFlat

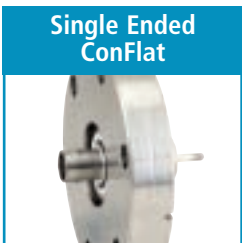




INSTALLATION	PART NUMBER
Weld	6511-03-W



ISO FLANGE	PART NUMBER
NW40KF	17177-01-KF



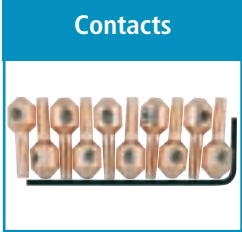
CONFLAT FLANGE	PART NUMBER
2 3/4" (NW35CF)	17178-01-CF



TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.56 [14]	1.1 [28]	BNC Plug	7116-02



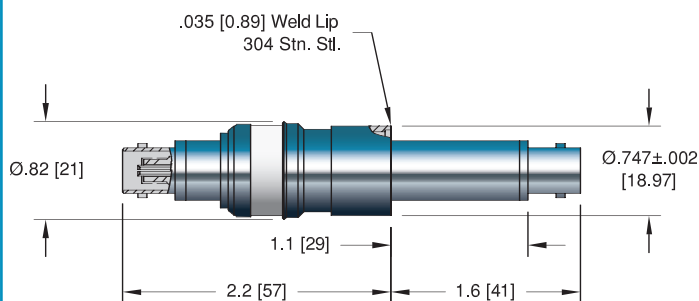
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A



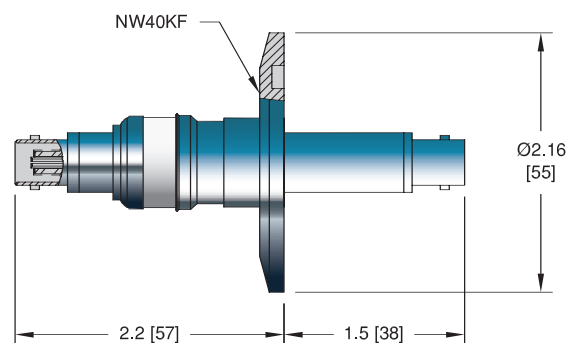
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

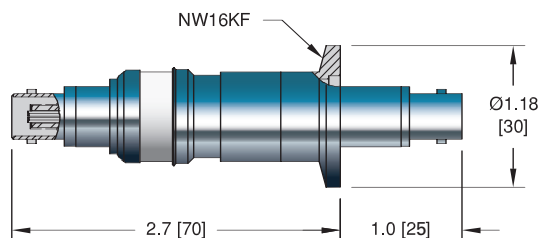
## Weldable



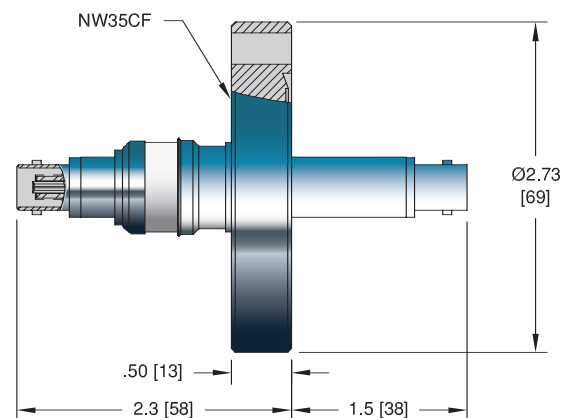
## ISO KF - NW40KF



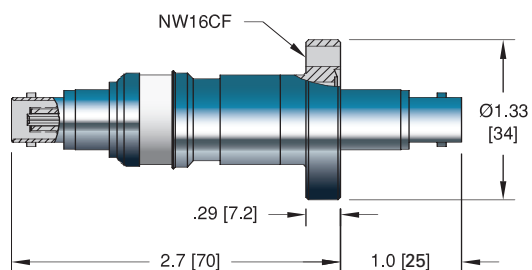
## ISO KF - NW16KF



## ConFlat - NW35CF



## ConFlat - NW16CF



## Specifications

## Materials

Housing: 304 Stainless steel  
Pin: 304 Stainless steel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

**Voltage Rating** Pin/Shield: 500 V DC, Shield/Gnd: 2.5 kV DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

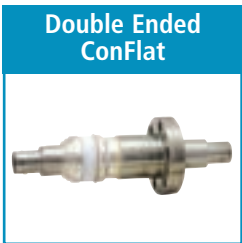
**Pressure @ 20°C** 400 PSIG (28 Bar), ISO KF 0 PSIG



INSTALLATION	PART NUMBER
Weld	17190-01-W



ISO FLANGE	PART NUMBER
NW16KF	17191-01-KF
NW40KF	17191-05-KF



CONFLAT FLANGE	PART NUMBER
1 1/3" (NW16CF)	17192-01-CF
2 3/4" (NW35CF)	17193-01-CF



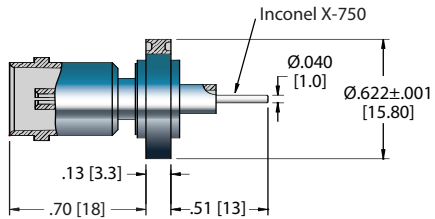
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN	TEMPERATURE MAX	PART NUMBER
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A



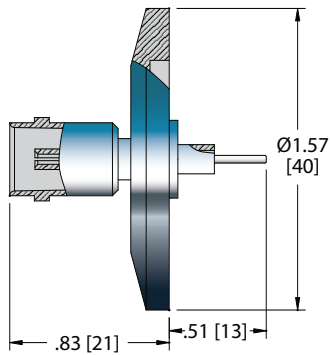
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	500 V	5	0.56 [14]	1.1 [28]	BNC Plug	7116-02

See the Accessories section for more information on all accessories.

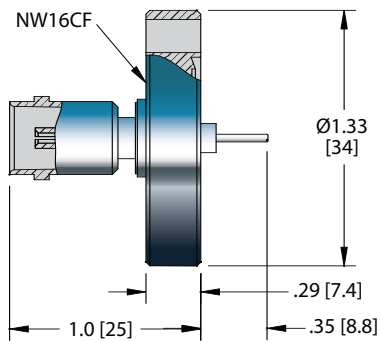
**Single Ended - Grounded Shield  
Weldable**



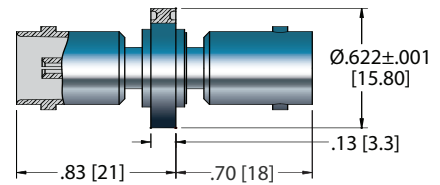
**ISO KF**



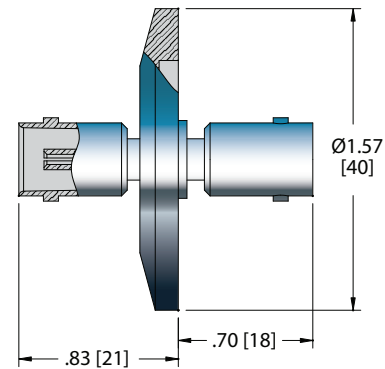
**ConFlat**



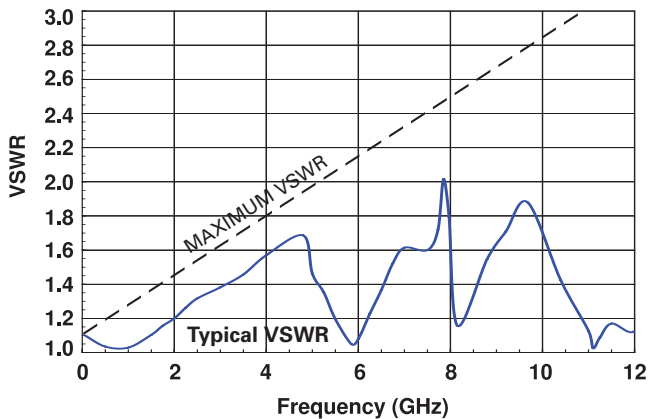
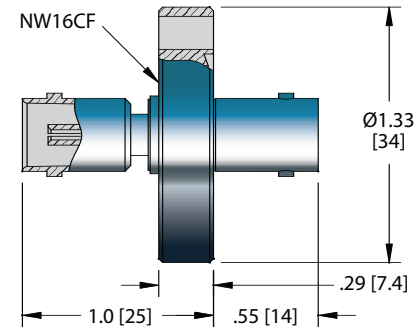
**Double Ended - Grounded Shield  
Weldable**



**ISO KF**



**ConFlat**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: Inconel X-750
- Insulation: Glass-ceramic
- Magnetic Materials: No

**Voltage Rating** 500 V DC

**Current Rating** 1 Amp

**Temperature Range** -269°C to 350°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG



**Single & Double Ended Weldable**



STYLE	INSTALLATION	PART NUMBER
Single Ended	Weld	21200-01-W
Double Ended	Weld	21201-01-W

**ISO FLANGE**

**Single & Double Ended ISO KF**



Single Ended	NW25KF	21205-01-KF
Double Ended	NW25KF	21207-01-KF

**CONFLAT FLANGE**

**Single & Double Ended ConFlat**



Single Ended	1 1/3" ConFlat (NW16CF)	21204-01-CF
Double Ended	1 1/3" ConFlat (NW16CF)	21206-01-CF

**Air Side Plug**



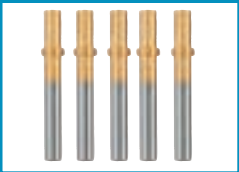
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	500 V	5	0.56 [14]	1.1 [28]	BNC Plug	7116-02

**Air Side Cable Assembly**



TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A

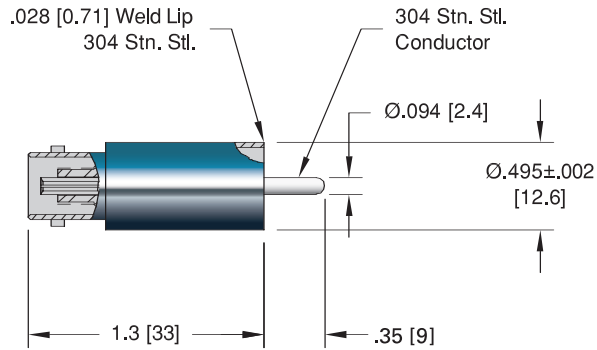
**Contacts**



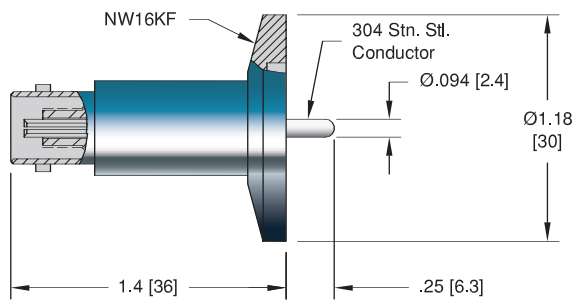
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
Crimp Type Contacts	Copper Alloy - Gold Flash	Accepts wire up to 0.040 [1.0]	16167-03-A
Crimp Tool		For 0.025" – 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 5. See the Accessories section for more information on all accessories.

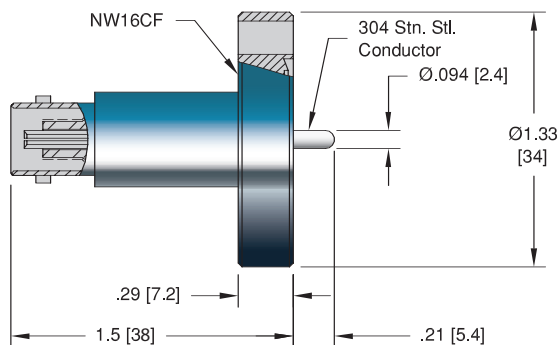
## Weldable



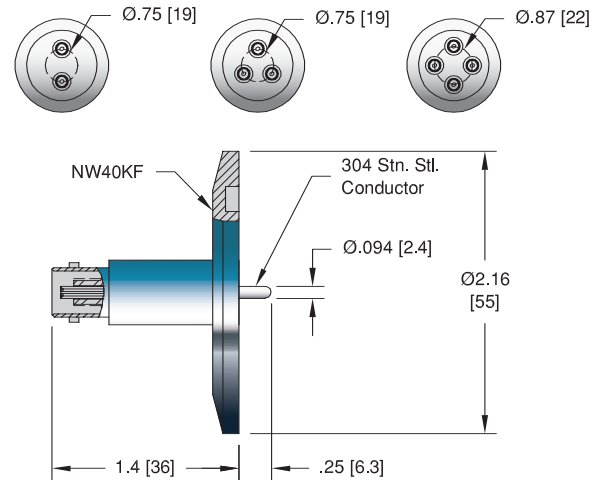
## ISO KF - NW16KF



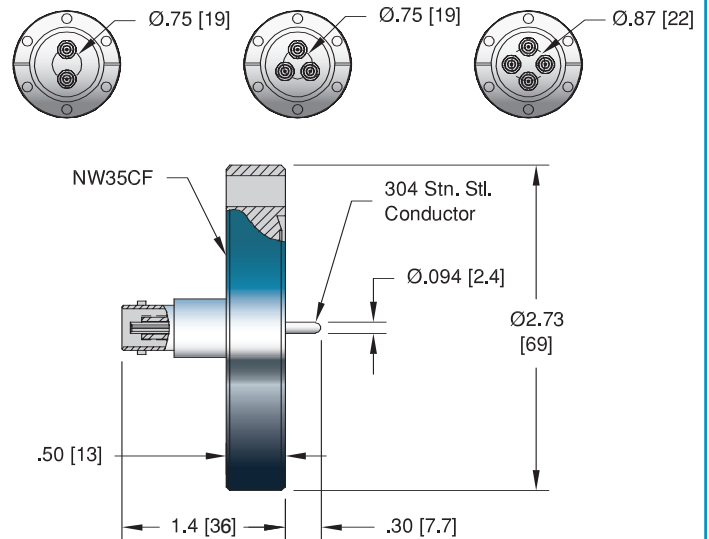
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
Pin: 304 Stainless steel  
Insulation: Alumina ceramic  
Magnetic Materials: No

**Voltage Rating** 5 kV DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG





**Single Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	5230-07-W

**Single Ended ISO KF**

**ISO FLANGE**

1	NW16KF	17114-03-KF
1	NW40KF	17114-07-KF
2	NW40KF	17136-03-KF
3	NW40KF	17137-03-KF
4	NW40KF	17138-03-KF

**Single Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" ConFlat (NW16CF)	6924-03-CF
1	2 3/4" ConFlat (NW35CF)	7590-02-CF
2	2 3/4" ConFlat (NW35CF)	5822-05-CF
3	2 3/4" ConFlat (NW35CF)	6647-01-CF
4	2 3/4" ConFlat (NW35CF)	7184-06-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	5 kV	10	0.56 [14]	1.5 [38]	MHV Plug	7116-01

**Air Side Cable Assembly**

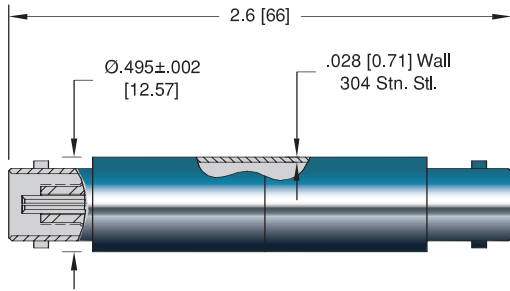
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
52 Ohm MHV – Double Ended	10'	5 kV	10	-55	85	18921-02-A

**Contacts**

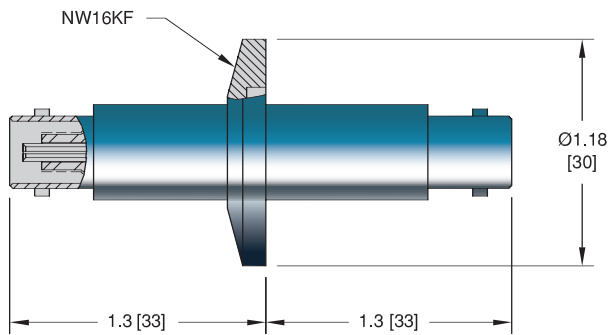
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

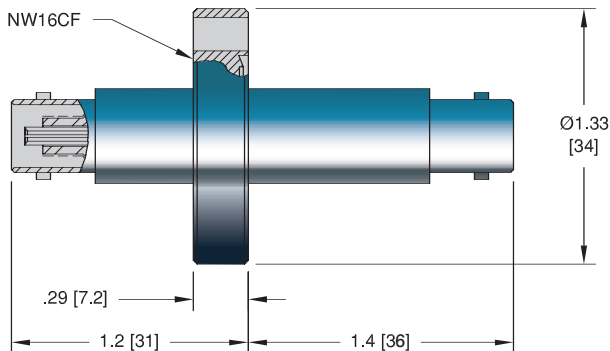
**Weldable**



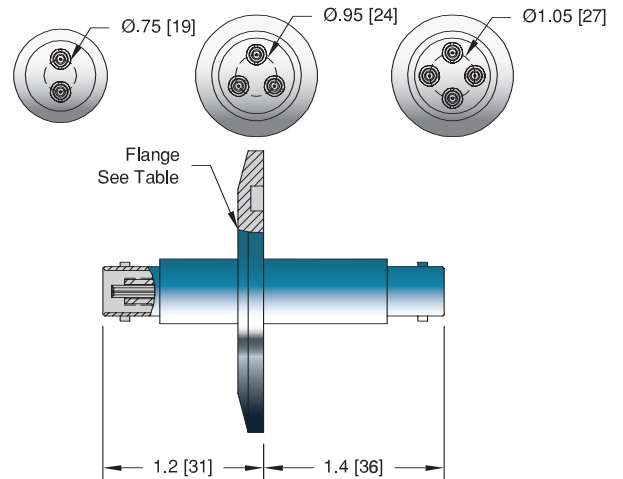
**ISO KF - NW16KF**



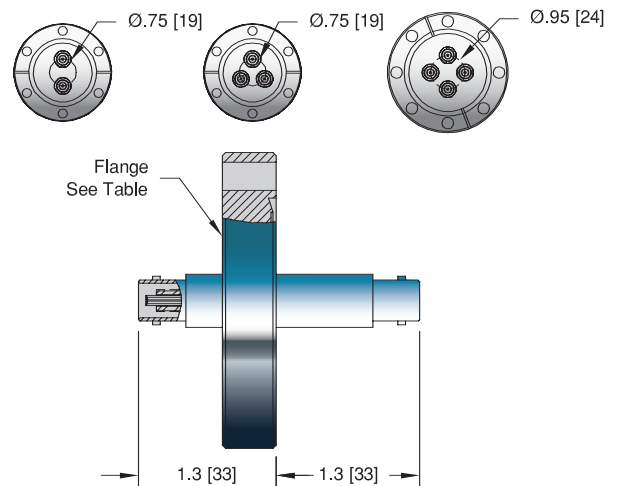
**ConFlat - NW16CF**



**ISO KF**



**ConFlat**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: 304 Stainless steel
- Insulation: Alumina ceramic
- Magnetic Materials: No

**Voltage Rating** 5 kV DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG



**Double Ended Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	17115-03-W

**Double Ended ISO KF**

**ISO FLANGE**

1	NW16KF	17116-03-KF
1	NW40KF	17118-03-KF
2	NW40KF	17118-07-KF
3	NW50KF	17122-03-KF
4	NW50KF	17139-03-KF

**Double Ended ConFlat**

**CONFLAT FLANGE**

1	1 1/3" ConFlat (NW16CF)	17117-03-CF
1	2 3/4" ConFlat (NW35CF)	18604-03-CF
2	2 3/4" ConFlat (NW35CF)	17187-03-CF
3	2 3/4" ConFlat (NW35CF)	17188-03-CF
4	3 3/8" ConFlat (NW50CF)	17189-03-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	5 kV	10	0.56 [14]	1.5 [38]	MHV Plug	7116-01

**Air Side Cable Assembly**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
52 Ohm MHV – Double Ended	10'	5 kV	10	-55	85	18921-02-A

See the Accessories section for more information on all accessories.



## Specifications

### Materials

Housing: 52 Nickel Iron  
 Pin: 304 Stainless steel  
 Insulation: Alumina ceramic  
 Magnetic Materials: Yes

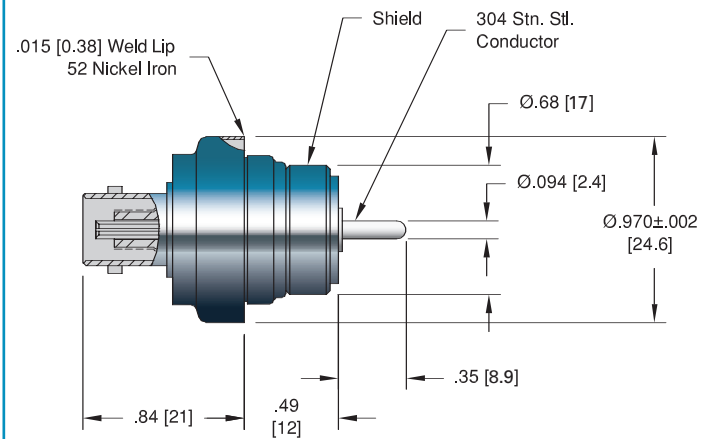
**Voltage Rating** Pin/Shield: 5 kV DC, Shield/Gnd: 2.5 kV DC

**Current Rating** 3.6 Amps

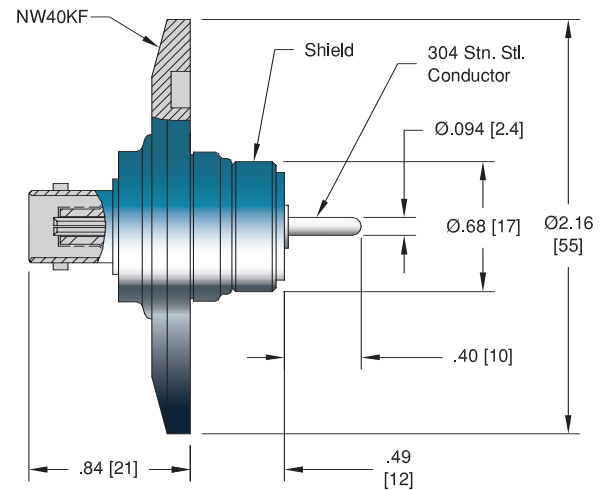
**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 300 PSIG (20 Bar), ISO KF 0 PSIG

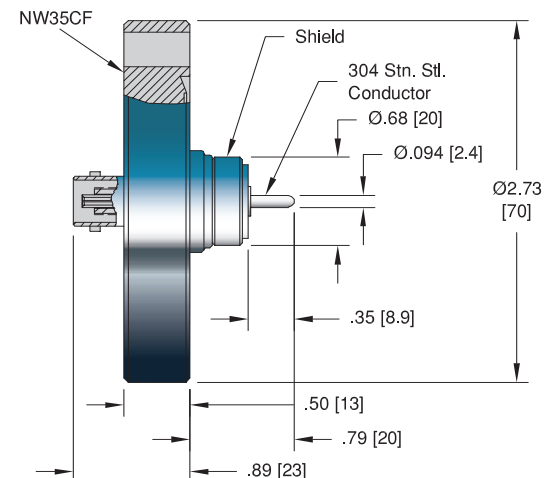
### Weldable



### ISO KF



### ConFlat





**Single Ended Weldable**

INSTALLATION	PART NUMBER
Weld	6511-04-W

**Single Ended ISO KF**

ISO FLANGE	PART NUMBER
NW40KF	17177-03-KF

**Single Ended ConFlat**

CONFLAT FLANGE	PART NUMBER
2 3/4" (NW35CF)	17178-03-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	5 kV	10	0.56 [14]	1.5 [38]	MHV Plug	7116-01

**Air Side Cable Assembly**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
52 Ohm MHV – Double Ended	10'	5 kV	10	-55	85	18921-02-A

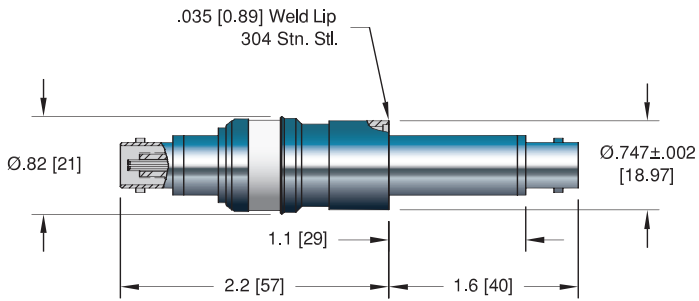
**Contacts**

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

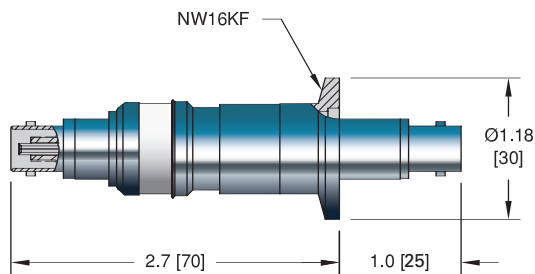
\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

COAXIAL

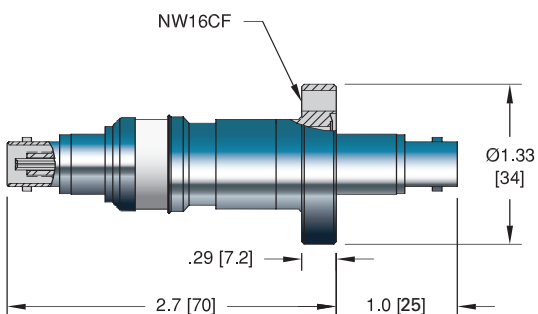
## Weldable



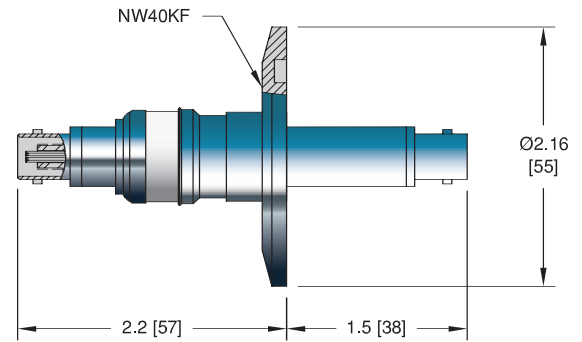
## ISO KF - NW16KF



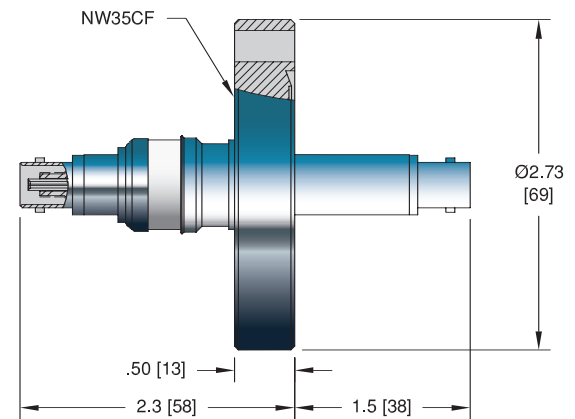
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
 Pin: 304 Stainless steel  
 Insulation: Alumina ceramic  
 Magnetic Materials: Yes

**Voltage Rating** Pin/Shield: 5 kV DC, Shield/Gnd: 2.5 kV DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 400 PSIG (28 Bar), ISO KF 0 PSIG



**Double Ended Weldable**

INSTALLATION	PART NUMBER
Weld	17190-03-W

**Double Ended ISO KF**

ISO FLANGE	PART NUMBER
NW16KF	17191-03-KF
NW40KF	17191-07-KF

**Double Ended ConFlat**

CONFLAT FLANGE	PART NUMBER
1 1/3" (NW16CF)	17192-03-CF
2 3/4" (NW35CF)	17193-03-CF

**Air Side Plug**

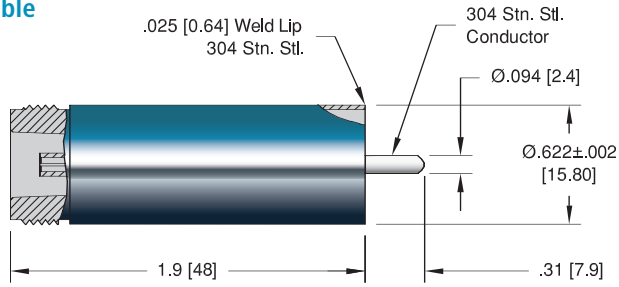
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	5 kV	10	0.56 [14]	1.5 [38]	MHV Plug	7116-01

**Air Side Cable Assembly**

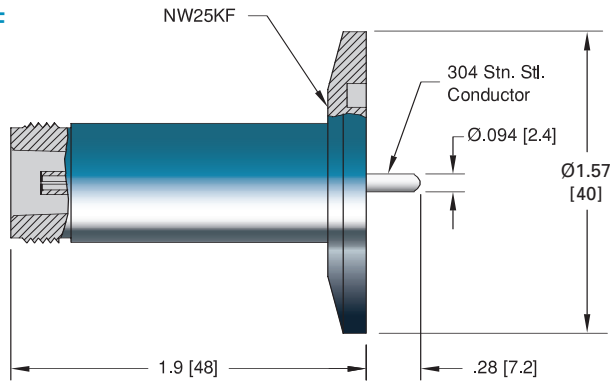
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
52 Ohm MHV – Double Ended	10'	5 kV	10	-55	85	18921-02-A

See the Accessories section for more information on all accessories.

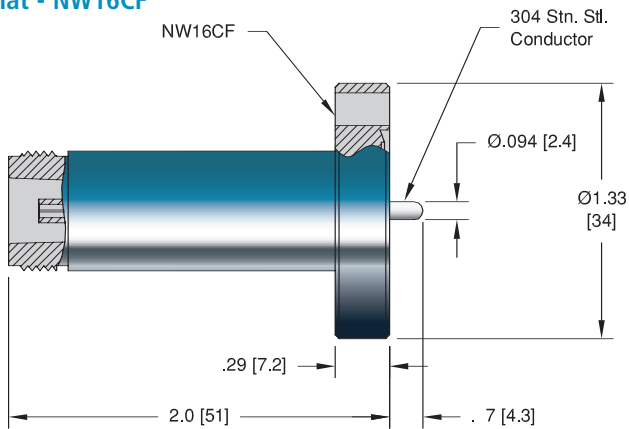
**Single Ended – Grounded Shield  
Weldable**



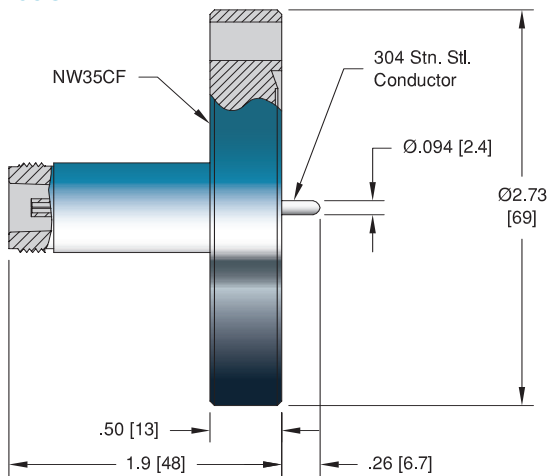
**ISO KF**



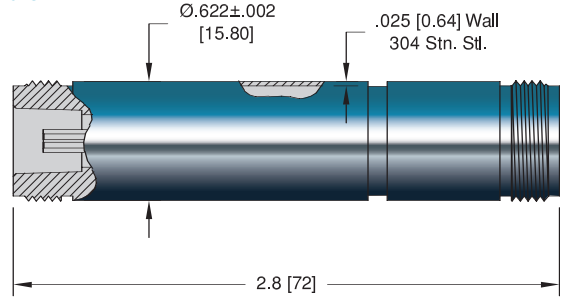
**ConFlat - NW16CF**



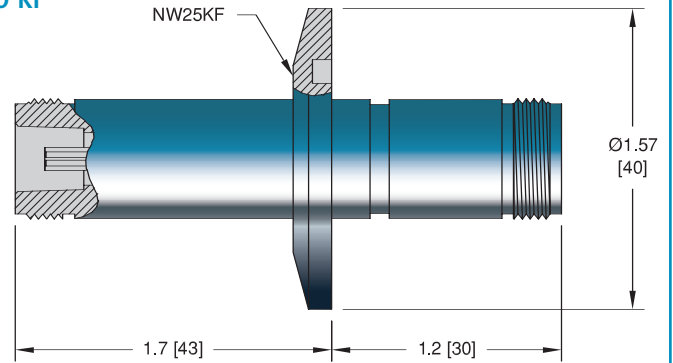
**ConFlat - NW35CF**



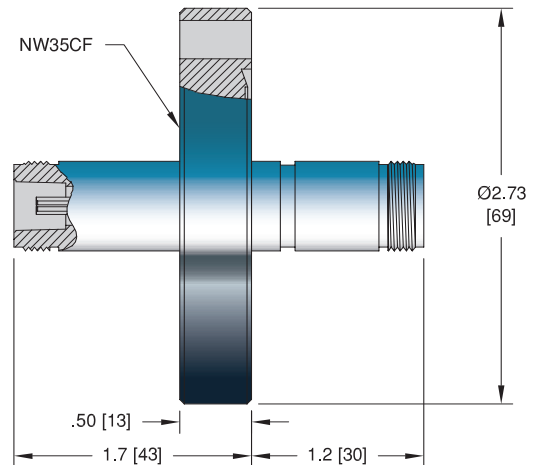
**Double Ended – Grounded Shield  
Weldable**



**ISO KF**



**ConFlat**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: 304 Stainless steel
- Insulation: Alumina ceramic
- Magnetic Materials: No

**Voltage Rating** 1.5 kV DC

**Current Rating** 3.6 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table



Single & Double Ended  
Weldable



STYLE	INSTALLATION	PRESSURE @ 20°C PSIG BAR		PART NUMBER
Single Ended	Weld	1800	124	7589-02-W†
Double Ended	Weld	1800	124	18077-02-W

ISO FLANGE

Single & Double Ended  
ISO KF



Single Ended	NW25KF	-	-	18057-01-KF
Double Ended	NW40KF	-	-	18078-02-KF†

CONFLAT FLANGE

Single & Double Ended  
ConFlat



Single Ended	1 1/3" (NW16CF)	1800	124	7588-02-CF†
Single Ended	2 3/4" (NW35CF)	1500	103	7587-02-CF
Double Ended	2 3/4" (NW35CF)	1500	103	18080-02-CF

Air Side Plug



TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	1.5 kV	5	0.81 [20]	1.5 [38]	Type N Plug	7707-01

Air Side Cable  
Assembly



TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm Type N – Double Ended	10'	1.5 kV	5	-55	85	21619-01-A

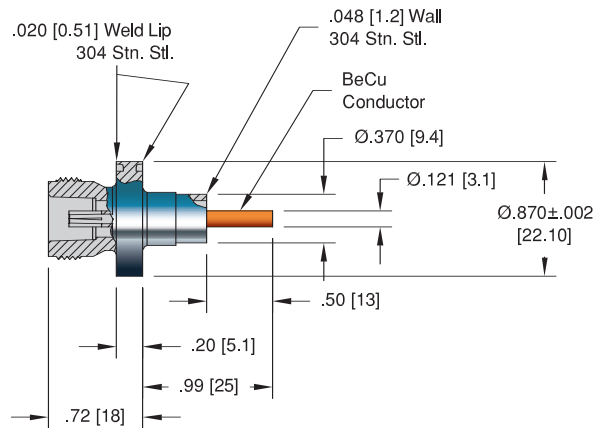
Contacts



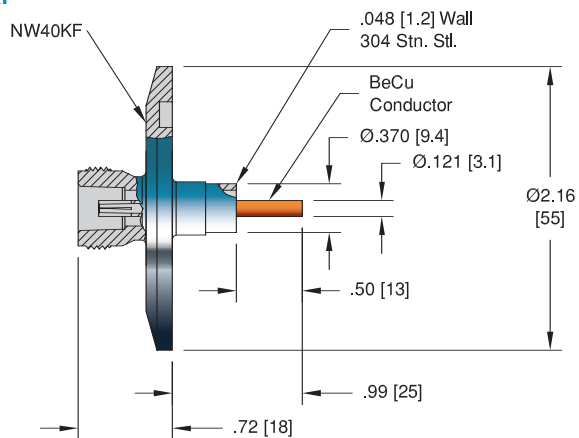
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A†
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.

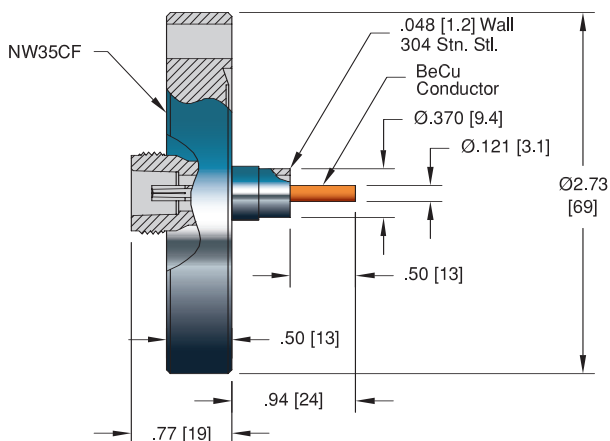
### Single Ended – Grounded Shield Weldable



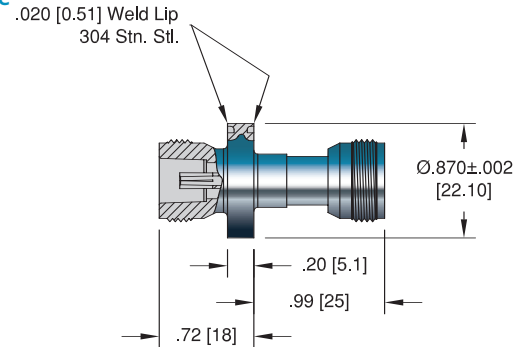
### ISO KF



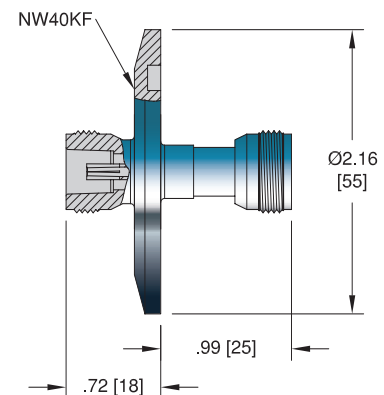
### ConFlat



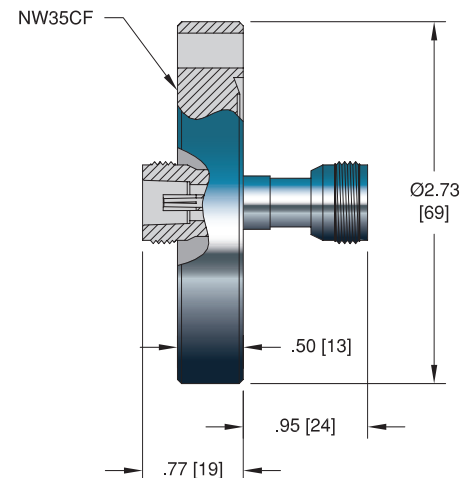
### Double Ended – Grounded Shield Weldable



### ISO KF



### ConFlat



## Specifications

### Materials

Housing: 304 Stainless steel  
Pin/Contact: Beryllium Copper  
Insulation: Glass-ceramic  
Magnetic Materials: No

**Voltage Rating** 1.5 kV DC

**Current Rating** 1 Amp

**Temperature Range** -200°C to 225°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 500 PSIG (34 Bar), ISO KF 0 PSIG



Single & Double Ended  
Weldable



STYLE	INSTALLATION	PART NUMBER
Single Ended	Weld	18066-01-W†
Double Ended	Weld	18069-01-W

ISO FLANGE

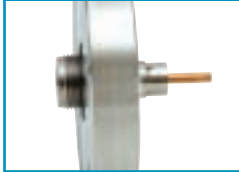
Single & Double Ended  
ISO KF



Single Ended	NW40KF	18067-01-KF
Double Ended	NW40KF	18070-01-KF†

CONFLAT FLANGE

Single & Double Ended  
ConFlat



Single Ended	2 3/4" (NW35CF)	18068-01-CF†
Double Ended	2 3/4" (NW35CF)	18071-01-CF

Air Side Plug



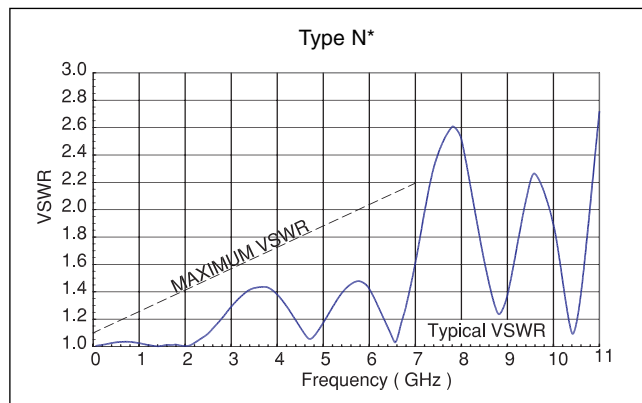
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	1.5 kV	5	0.81 [20]	1.5 [38]	Type N Plug	7707-01

Air Side Cable  
Assembly



TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
50 Ohm Type N – Double Ended	10'	1.5 kV	5	-55	85	21619-01-A

†Shown in photo. See the Accessories section for more information on all accessories.



\*Applies when properly mated to a 50 Ohm load.



## Specifications

### Materials

Housing: 304 Stainless steel  
 Pin: 70/30 Copper Nickel  
 Insulation: Alumina ceramic  
 Magnetic Materials: No

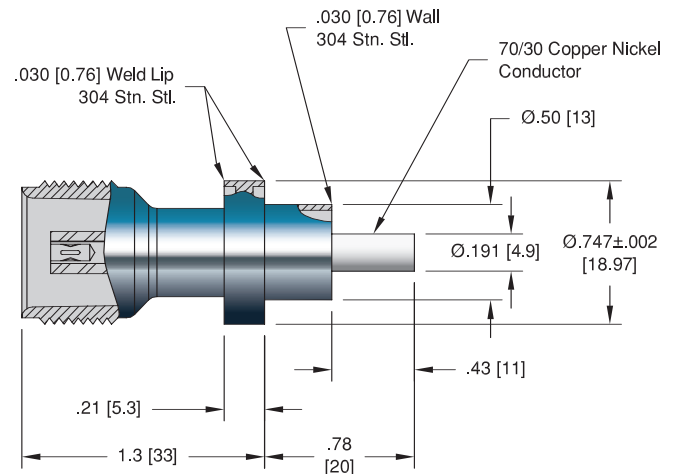
**Voltage Rating** 7 kV DC

**Current Rating** 7 Amps

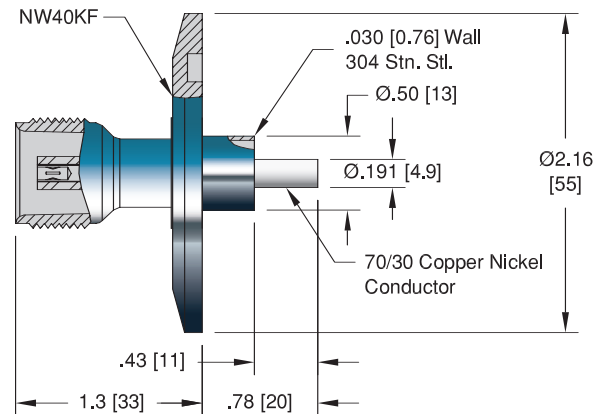
**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 320 PSIG (22 Bar), ISO KF 0 PSIG

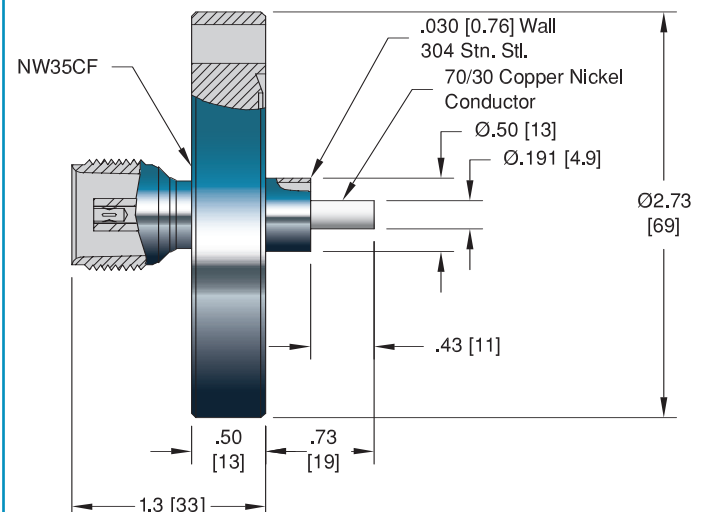
### Single Ended – Grounded Shield Weldable



### ISO KF



### ConFlat





**Weldable**

INSTALLATION
Weld

PART NUMBER
1084-01-W

**ISO KF**

ISO FLANGE
NW40KF

PART NUMBER
18072-01-KF

**ConFlat**

CONFLAT FLANGE
2 3/4" (NW35CF)

PART NUMBER
10339-02-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION
			H	L	
Air Side	7 kV	10	0.88 [22]	2.4 [61]	HN Plug

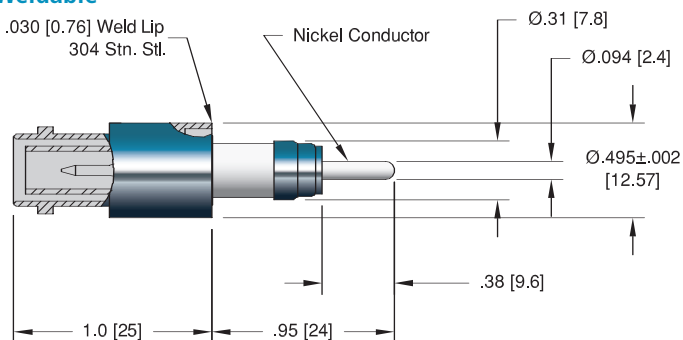
PART NUMBER
6524-05

**Contacts**

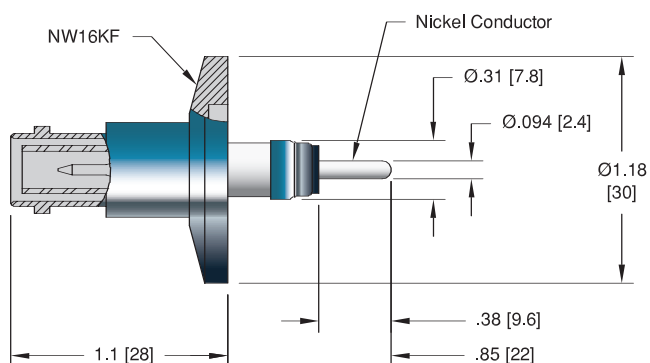
TYPE	MATERIAL	DESCRIPTION
0.250 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.250 [6.4]

PART NUMBER
7332-06-A

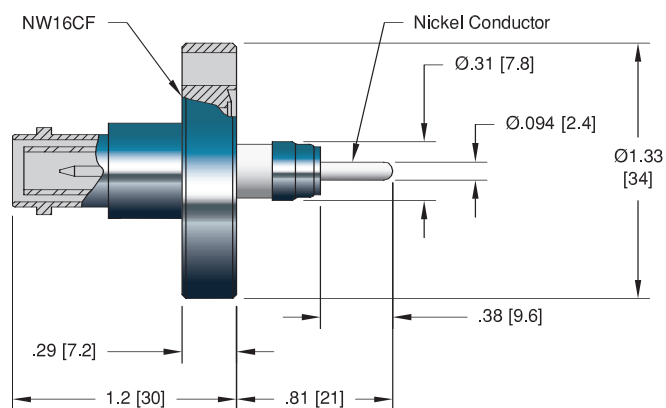
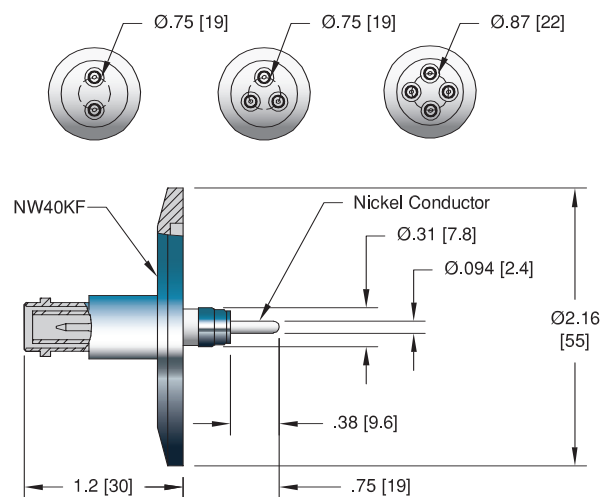
\*Contacts priced and sold in packages of 10. See the Accessories section for more information on all accessories.

SHV 5 KV - Exposed  
Weldable

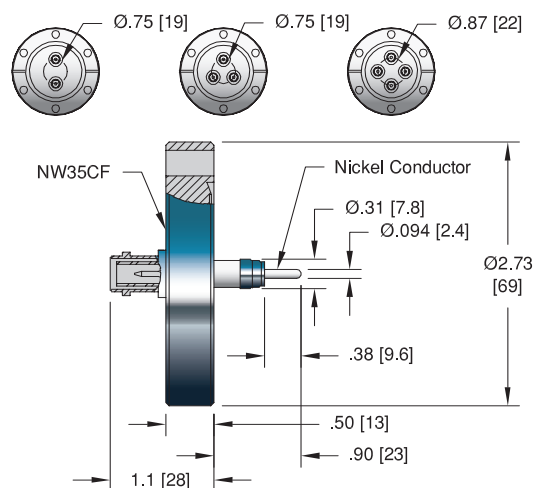
## ISO KF - NW16KF



## ConFlat - NW16CF

SHV 5 KV - Exposed  
ISO KF - NW40KF

## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
Pin: Nickel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

Voltage Rating 5 kV DC

Current Rating 16.5 Amps

Temperature Range -269°C to 450°C, ISO KF -25°C to 205°C

Pressure @ 20°C See table



**Weldable**

NO. PINS	INSTALLATION	PRESSURE @ 20°C PSIG BAR		PART NUMBER
1	Weld	1600	110	8630-02-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	-	-	17205-01-KF
1	NW40KF	-	-	17208-07-KF
2	NW40KF	-	-	17208-01-KF
3	NW40KF	-	-	17208-03-KF
4	NW40KF	-	-	17208-05-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	1600	110	8880-02-CF
1	2 3/4" (NW35CF)	1500	103	14366-07-CF
2	2 3/4" (NW35CF)	1500	103	14366-03-CF
3	2 3/4" (NW35CF)	1500	103	14366-05-CF
4	2 3/4" (NW35CF)	1500	103	14366-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	5 KV	10	0.56 [14]	1.8 [46]	SHV 5 kV Plug	8058-01

**Air Side Cable Assembly**

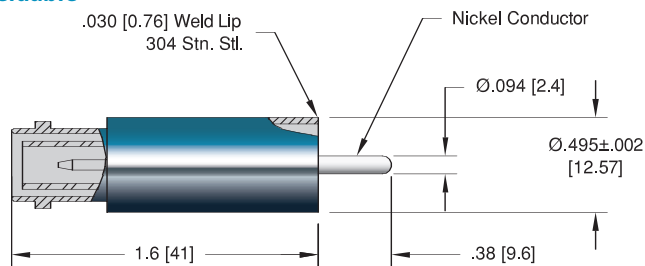
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
52 Ohm SHV – Double Ended	10'	5 kV	10	-55	85	18921-03-A

**Contacts**

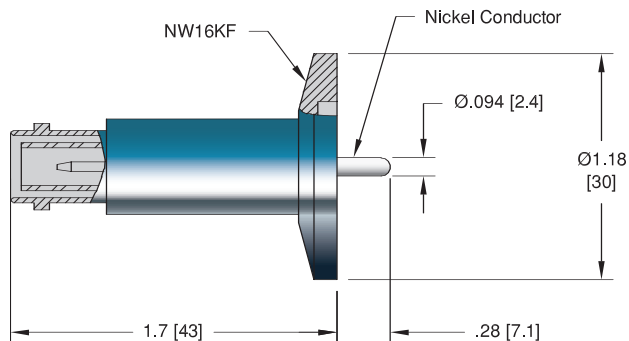
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

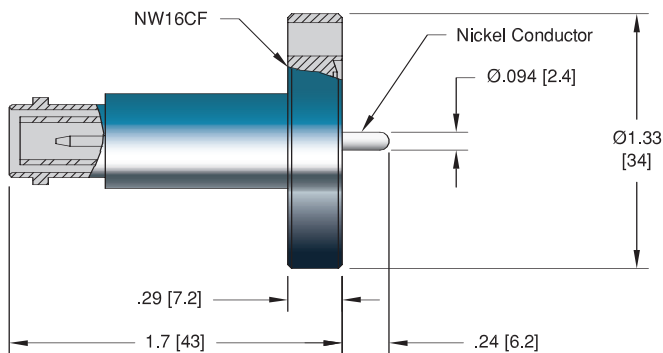
### SHV 5 KV - Recessed Weldable



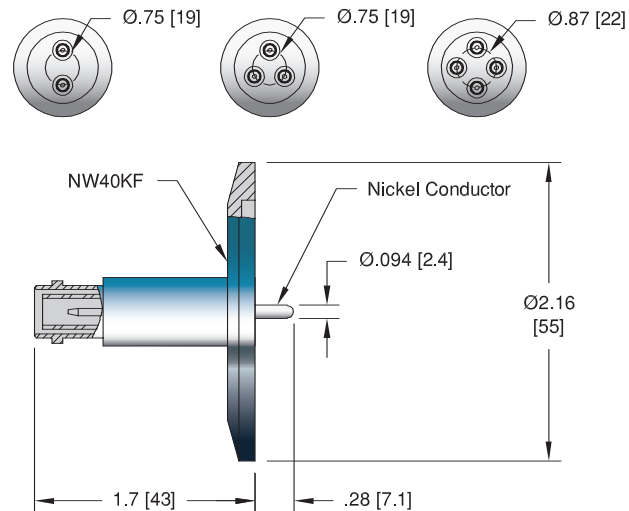
### ISO KF - NW16KF



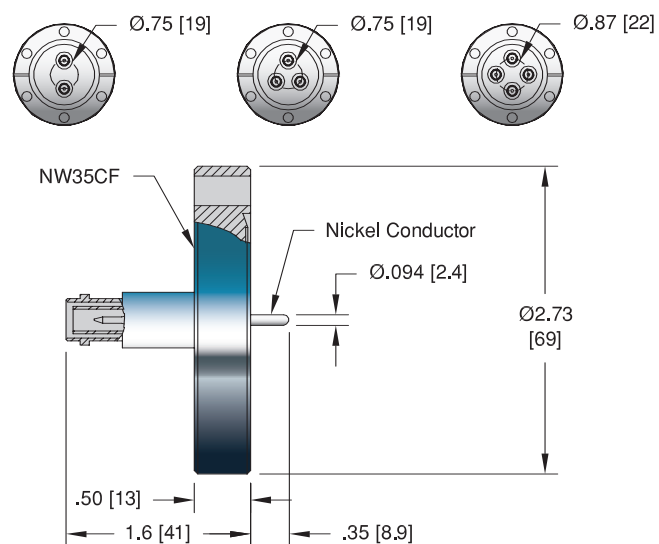
### ConFlat - NW16CF



### SHV 5 KV - Recessed ISO KF - NW40KF



### ConFlat - NW35CF



## Specifications

### Materials

Housing: 304 Stainless steel  
 Pin: Nickel  
 Insulation: Alumina ceramic  
 Magnetic Materials: Yes

**Voltage Rating** 5 kV DC

**Current Rating** 16.5 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table





COAXIAL

**Weldable**

NO. PINS	INSTALLATION	PRESSURE @ 20°C BAR		PART NUMBER
1	Weld	1600	110	8030-02-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	-	-	17207-02-KF
1	NW40KF	-	-	17206-07-KF
2	NW40KF	-	-	17206-01-KF
3	NW40KF	-	-	17206-03-KF
4	NW40KF	-	-	17206-05-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	1600	110	9485-02-CF
1	2 3/4" (NW35CF)	1500	103	11179-04-CF
2	2 3/4" (NW35CF)	1500	103	0268-02-CF
3	2 3/4" (NW35CF)	1500	103	1958-02-CF
4	2 3/4" (NW35CF)	1500	103	11179-02-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	5 kV	10	0.56 [14]	1.8 [46]	SHV 5 kV Plug	8058-01

**Air Side Cable Assembly**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE MIN MAX		PART NUMBER
52 Ohm SHV – Double Ended	10'	5 kV	10	-55	85	18921-03-A

**Contacts**

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.



## Specifications

### Materials

Housing: 304 Stainless steel  
Pin: Nickel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

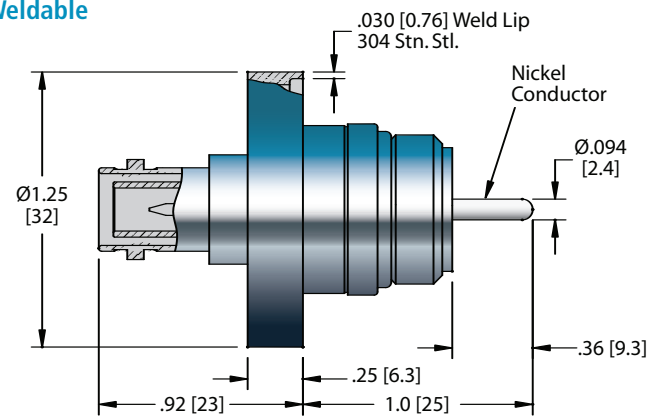
**Voltage Rating** Pin/Shield: 5 kV DC, Shield/Gnd: 2.5 kV DC

**Current Rating** 16.5 Amps

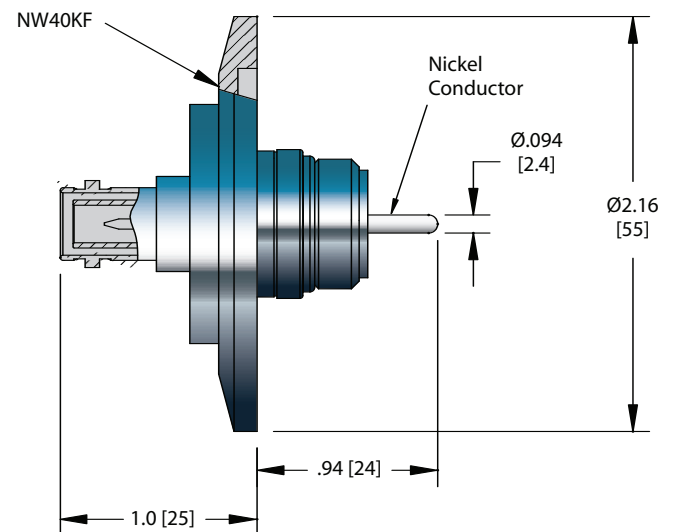
**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 300 PSIG (20 Bar), ISO KF 0 PSIG

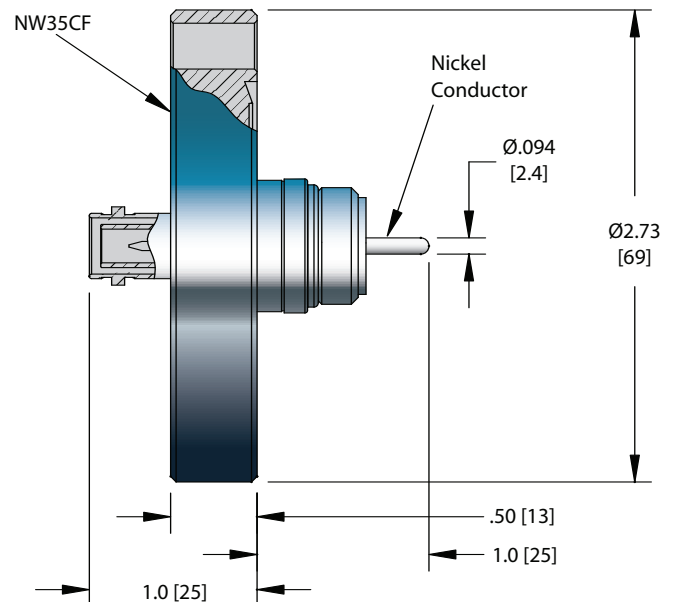
### Weldable



### ISO KF



### ConFlat





**Weldable**

INSTALLATION	PART NUMBER
Weld	15619-01-W

**ISO KF**

ISO FLANGE	PART NUMBER
NW40KF	21303-01-KF

**ConFlat**

CONFLAT FLANGE	PART NUMBER
2 3/4" (NW35CF)	21304-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION	PART NUMBER
			H	L		
Air Side	5 kV	10	0.56 [14]	1.8 [46]	SHV 5 kV Plug	8058-01

**Air Side Cable Assembly**

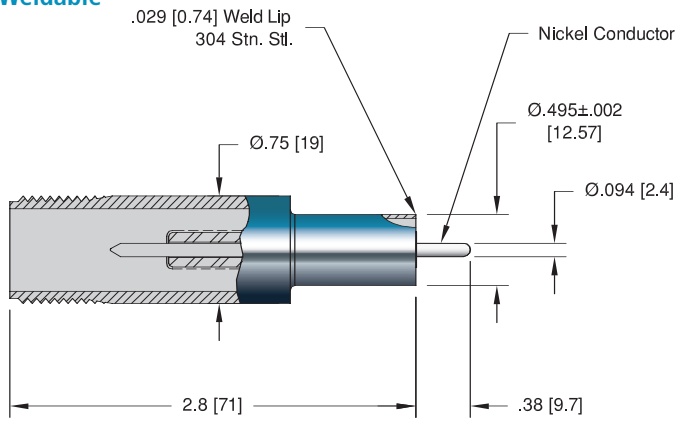
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
52 Ohm SHV – Double Ended	10'	5 kV	10	-55	85	18921-03-A

**Contacts**

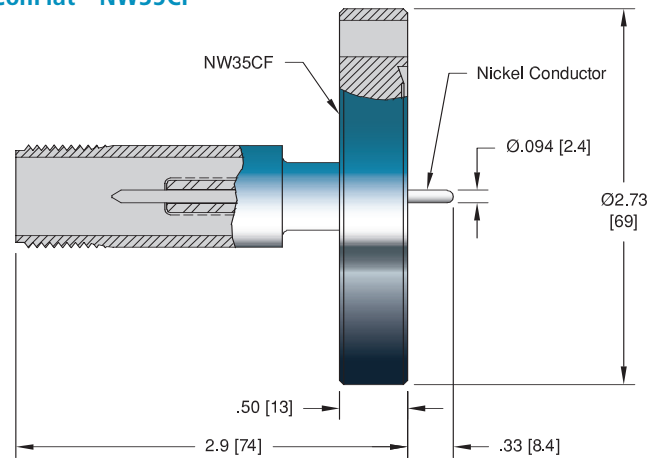
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A <sup>†</sup>
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

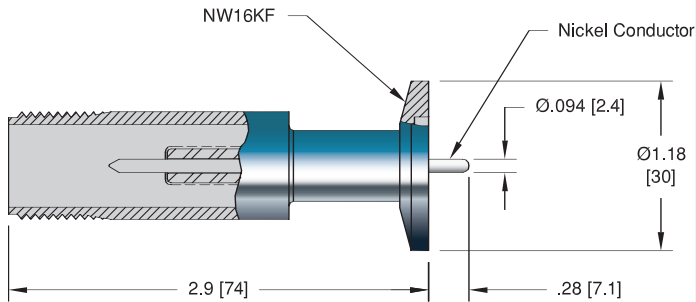
**Weldable**



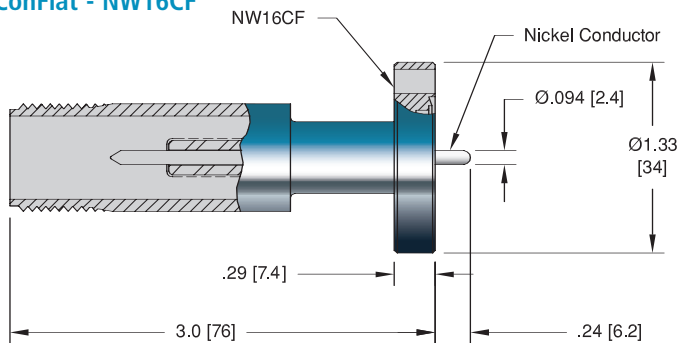
**ConFlat - NW35CF**



**ISO KF**



**ConFlat - NW16CF**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: Nickel
- Insulation: Alumina ceramic
- Magnetic Materials: Yes

**Voltage Rating** 7.5 kV DC

**Current Rating** 16.5 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** See table



**Weldable**

INSTALLATION	PRESSURE @ 20°C PSIG      BAR		PART NUMBER
Weld	1600	110	7546-02-W

**ISO KF**

**ISO FLANGE**

NW16KF	-	-	18047-02-KF
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**ConFlat**

**CONFLAT FLANGE**

1 1/3" (NW16CF)	1600	110	7585-02-CF
2 3/4" (NW35CF)	1500	103	7584-02-CF

**Air Side Plug**

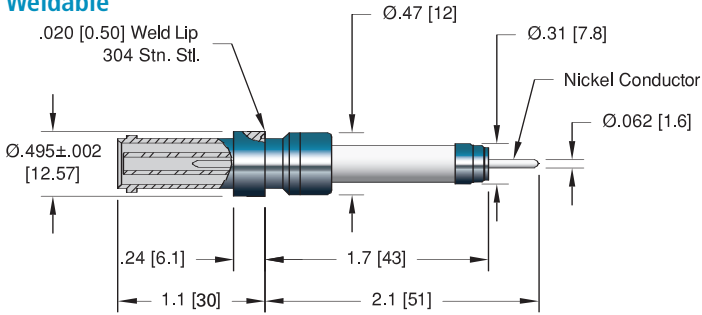
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H      L		DESCRIPTION	PART NUMBER
Air Side	7.5 kV	8	0.88 [22]	3.5 [88]	BSHV Plug	7604-01-A

**Contacts**

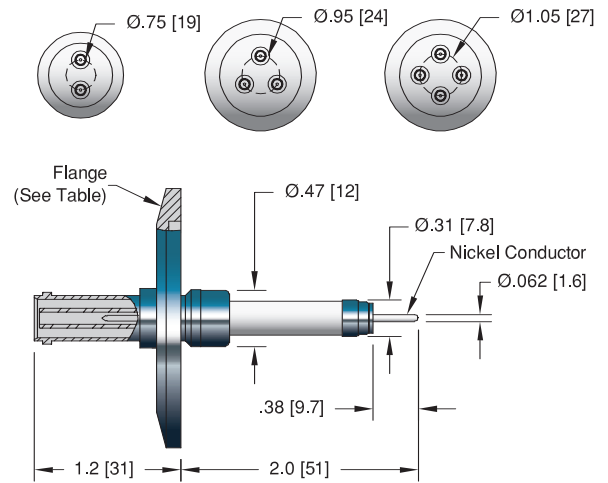
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A†
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.

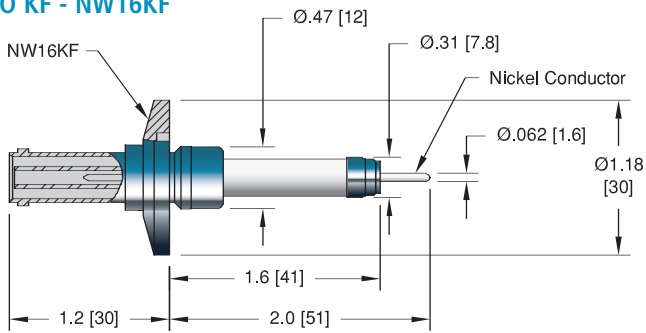
**SHV 10 KV - Exposed Weldable**



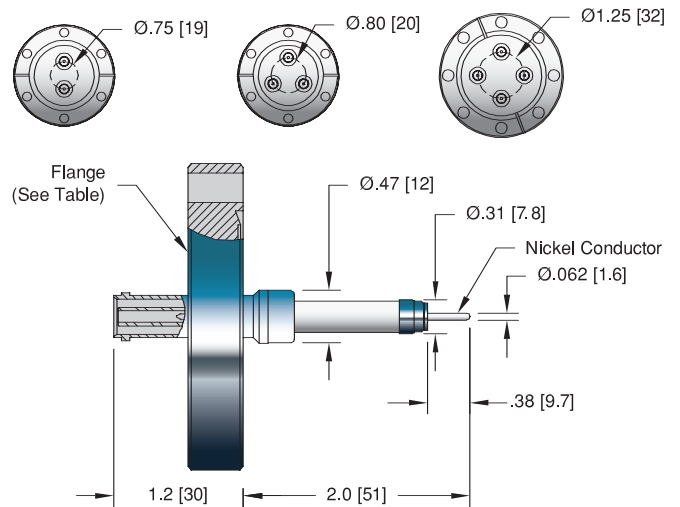
**ISO KF**



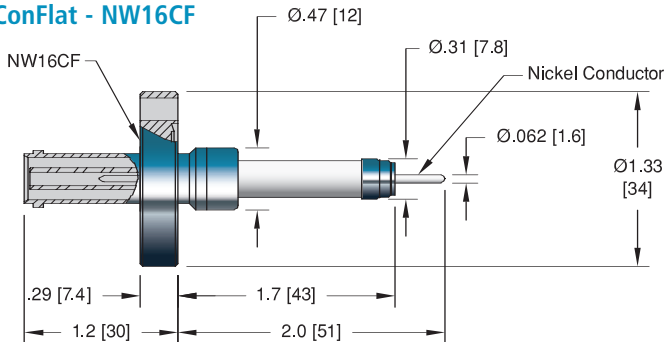
**ISO KF - NW16KF**



**ConFlat**



**ConFlat - NW16CF**



**Specifications**

**Materials**

- Housing: 304 Stainless steel
- Pin: Nickel
- Insulation: Alumina ceramic
- Magnetic Materials: Yes

**Voltage Rating** 10 kV DC

**Current Rating** 10 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 120 PSIG (8.3 Bar), ISO KF 0 PSIG



**Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	17213-01-W

**ISO KF**

**ISO FLANGE**

1	NW16KF	18043-01-KF
1	NW40KF	17215-07-KF
2	NW40KF	17215-01-KF
3	NW50KF	17215-03-KF
4	NW50KF	17215-05-KF

**ConFlat**

**CONFLAT FLANGE**

1	1 1/3" (NW16CF)	17214-01-CF
1	2 3/4" (NW35CF)	17216-08-CF
2	2 3/4" (NW35CF)	17216-02-CF
3	2 3/4" (NW35CF)	17216-04-CF
4	3 3/8" (NW50CF)	17216-06-CF

**Air Side Plug**

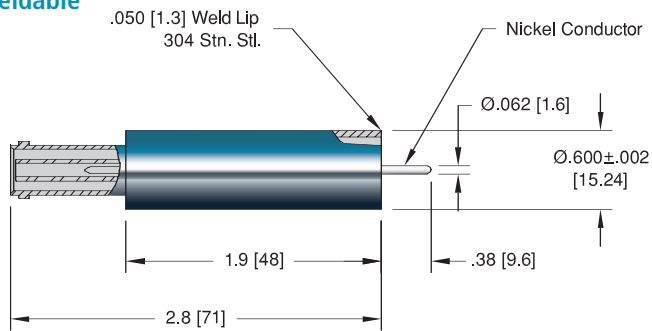
TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	10 kV	10	0.56 [14]	1.8 [46]	SHV 10 kV Plug	8058-02

**Contacts**

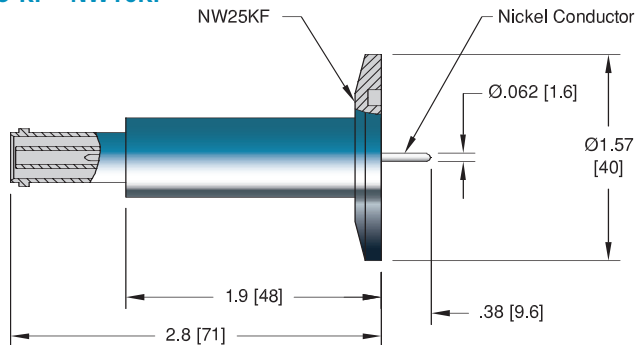
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.062 Crimp Contacts	Nickel Alloy	Accepts wire up to 0.062 [1.6]	0821-01-A <sup>†</sup>
0.062 Crimp Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	2044-02-A
0.062 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	7332-03-A
Crimp Tool		For 0.025" - 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

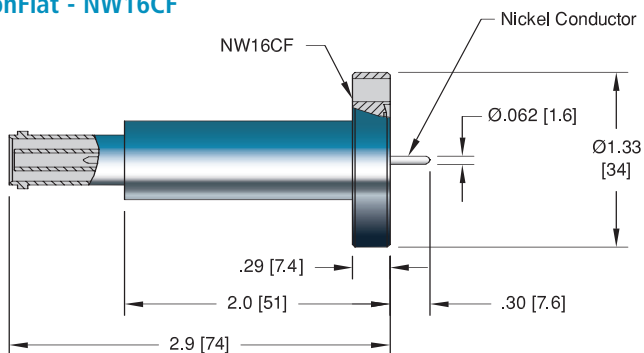
### SHV 10 KV - Recessed Insulator Weldable



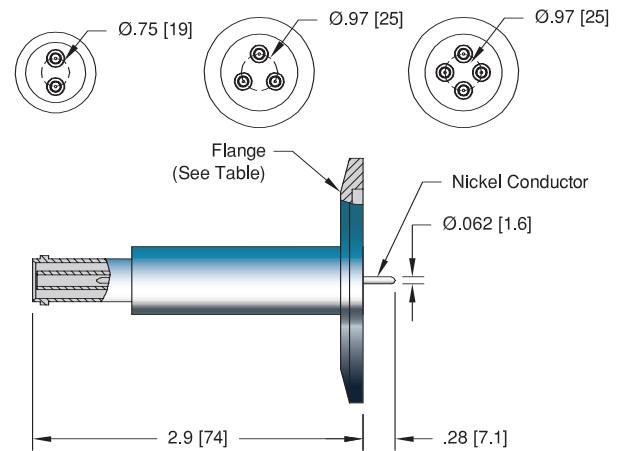
### ISO KF - NW16KF



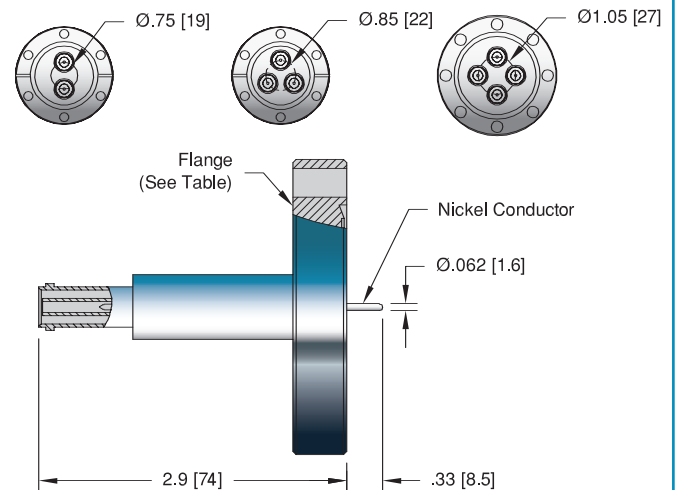
### ConFlat - NW16CF



### ISO KF



### ConFlat



### Specifications Materials

Housing: 304 Stainless steel  
Pin: Nickel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

**Voltage Rating** 10 kV DC

**Current Rating** 10 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 120 PSIG (8.3 Bar), ISO KF 0 PSIG





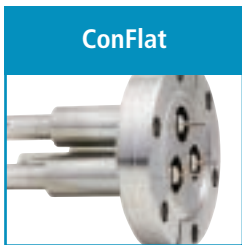
Weldable

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	17217-01-W



ISO KF

ISO FLANGE		
1	NW25KF	17218-01-KF
1	NW40KF	18000-07-KF
2	NW40KF	18000-01-KF
3	NW50KF	18000-03-KF
4	NW50KF	18000-05-KF



ConFlat

CONFLAT FLANGE		
1	1 1/3" (NW16CF)	17219-01-CF
1	2 3/4" (NW35CF)	18001-07-CF
2	2 3/4" (NW35CF)	18001-01-CF
3	2 3/4" (NW35CF)	18001-03-CF
4	3 3/8" (NW50CF)	18001-05-CF



Air Side Plug

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	10 kV	10	0.56 [14]	1.8 [46]	SHV 10 kV Plug	8058-02

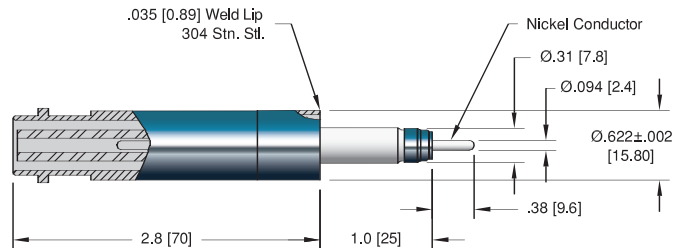


Contacts

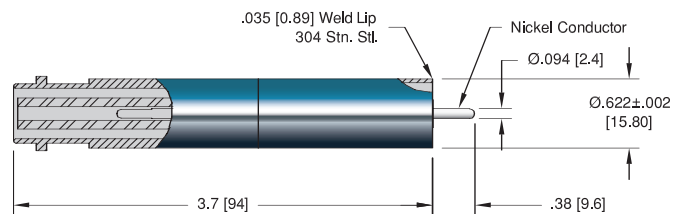
TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.062 Crimp Contacts	Nickel Alloy	Accepts wire up to 0.062 [1.6]	0821-01-A <sup>†</sup>
0.062 Crimp Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	2044-02-A
0.062 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	7332-03-A
Crimp Tool		For 0.025" - 0.075" Diameters	2840-05

\*Contacts priced and sold in packages of 10. <sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.

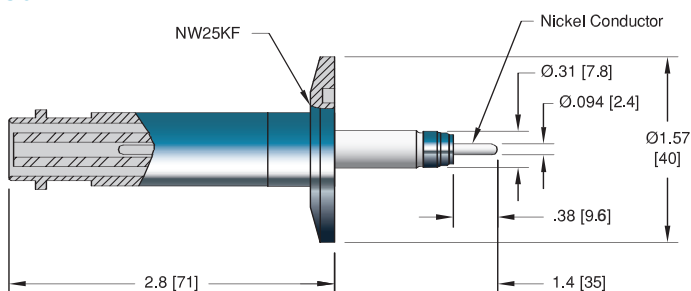
### SHV 20 KV - Exposed Insulator Weldable



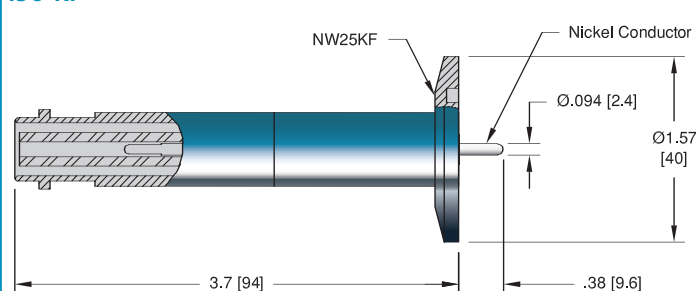
### SHV 20 KV - Recessed Insulator Weldable



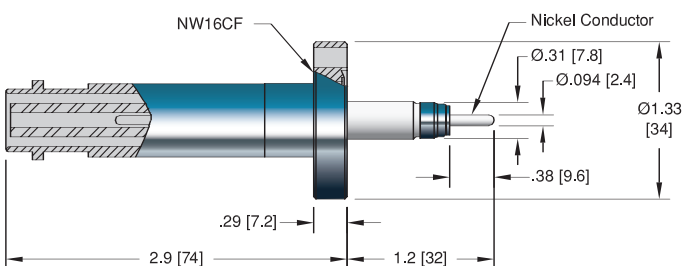
### ISO KF



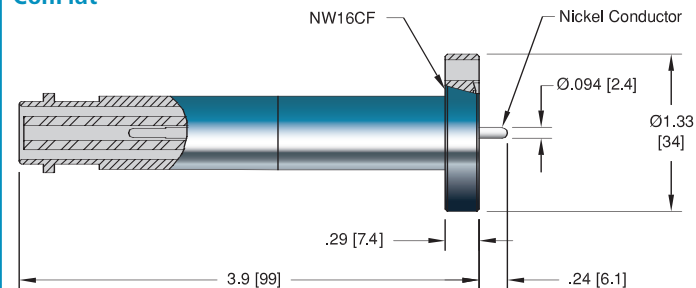
### ISO KF



### ConFlat



### ConFlat



## Specifications

### Materials

Housing: 304 Stainless steel  
Pin: Nickel  
Insulation: Alumina ceramic  
Magnetic Materials: Yes

**Voltage Rating** 20 kV DC

**Current Rating** 16.5 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 250 PSIG (17 Bar), ISO KF 0 PSIG



**Weldable**

STYLE	INSTALLATION	PART NUMBER
Exposed Insulator	Weld	18086-01-W
Recessed Insulator	Weld	18089-01-W†

**ISO KF**

**ISO FLANGE**

Exposed Insulator	NW25KF	18087-01-KF†
Recessed Insulator	NW25KF	18090-01-KF

**ConFlat**

**CONFLAT FLANGE**

Exposed Insulator	1 1/3" (NW16CF)	18088-01-CF†
Recessed Insulator	1 1/3" (NW16CF)	18091-01-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS H L		DESCRIPTION	PART NUMBER
Air Side	20 kV	20	0.75 [19]	4.5 [115]	SHV 20 kV Plug	8208-02

**Contacts**

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.094 Set Screw Type Contacts	Beryllium Copper	Accepts wire up to 0.050 [1.3]	7429-01-A†
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A

\*Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.



## Specifications

### Materials

Housing: 304 Stainless steel  
 Pin: Inconel X-750  
 Contacts: 300 Series Stainless steel  
 Insulation: Glass-ceramic  
 Magnetic Materials: No

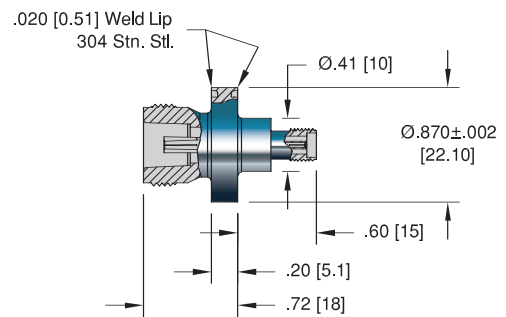
**Voltage Rating** 1.5 kV DC

**Current Rating** 1 Amp

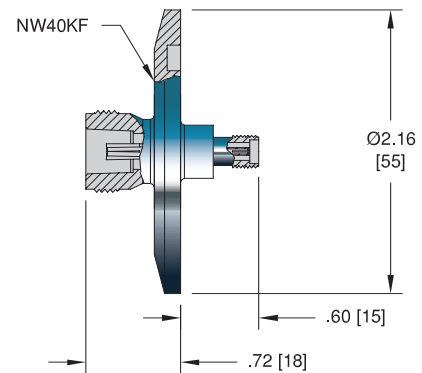
**Temperature Range** -269°C to 350°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG

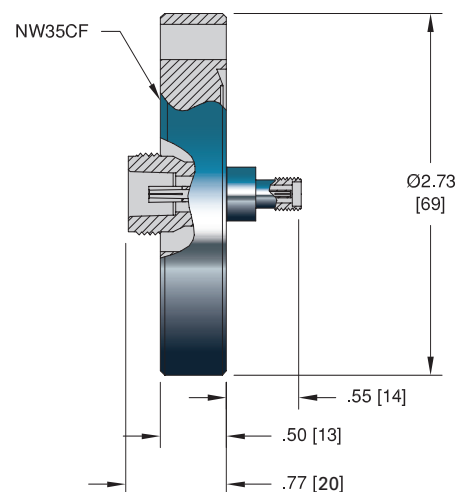
### Weldable



### ISO KF



### ConFlat





**Weldable**

INSTALLATION
Weld

PART NUMBER
15025-02-W

**ISO KF**

ISO FLANGE
NW40KF

PART NUMBER
18083-02-KF

**ConFlat**

CONFLAT FLANGE
2 3/4" (NW35CF)

PART NUMBER
18084-02-CF

**Air Side Plug**

TYPE	VOLTAGE DC	CONDUCTOR AMPS	DIMENSIONS		DESCRIPTION
			H	L	
Air Side	1.5 kV	5	0.81 [20]	1.5 [38]	Type N Plug

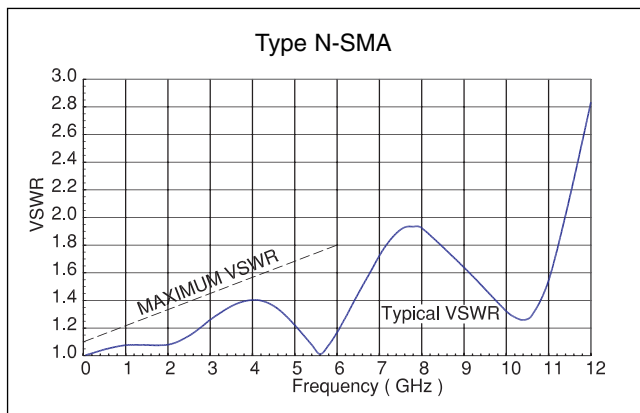
PART NUMBER
7707-01

**Air Side Cable Assembly**

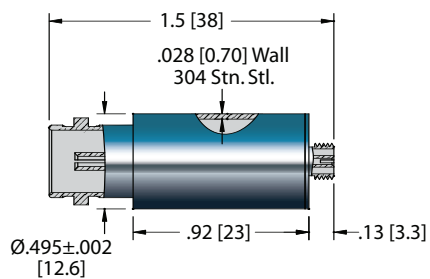
TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE	
				MIN	MAX
50 Ohm Type N – Double Ended	10'	1.5 kV	5	-55	85

PART NUMBER
21619-01-A

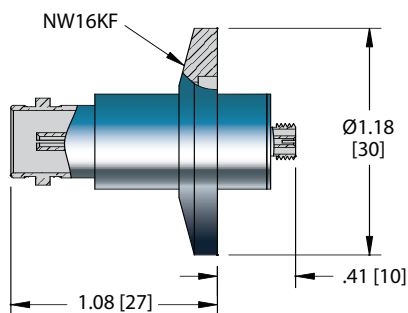
See the Accessories section for more information on all accessories.



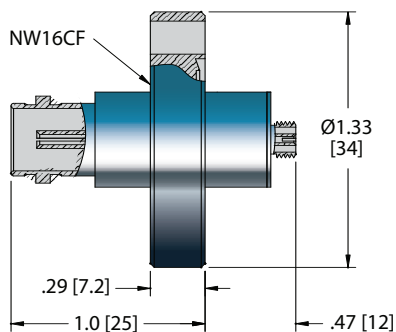
## Weldable



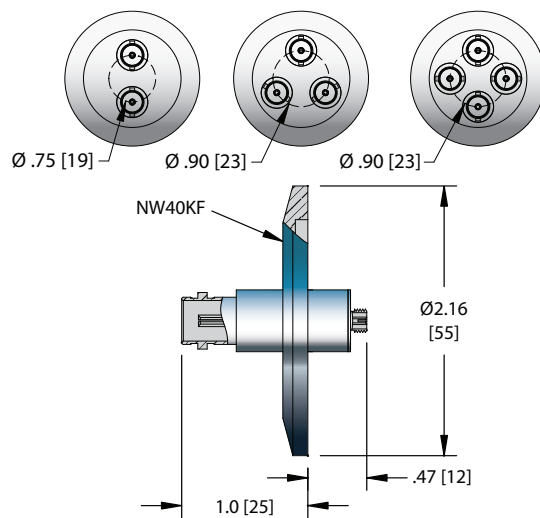
## ISO KF - NW16KF



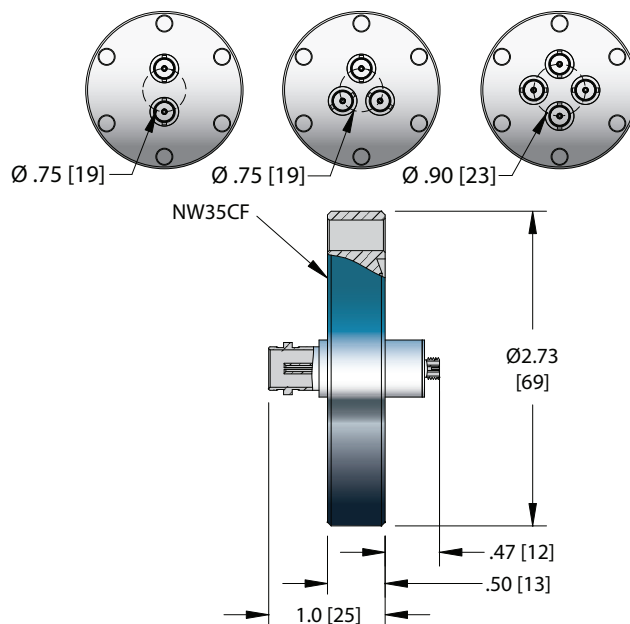
## ConFlat - NW16CF



## ISO KF - NW40KF



## ConFlat - NW35CF



## Specifications

## Materials

Housing: 304 Stainless steel  
 Pin: 330 Stainless steel  
 Insulation: Glass-ceramic  
 Magnetic Materials: No

**Voltage Rating** 500 V DC

**Current Rating** 5 Amps

**Temperature Range** -269°C to 450°C, ISO KF -25°C to 205°C

**Pressure @ 20°C** 1400 PSIG (97 Bar), ISO KF 0 PSIG



**Weldable**

NO. PINS	INSTALLATION	PART NUMBER
1	Weld	21254-01-W

**ISO KF**

ISO FLANGE		
1	NW16KF	21256-01-KF
1	NW40KF	21292-01-KF
2	NW40KF	21261-01-KF
3	NW40KF	21262-01-KF
4	NW40KF	21263-01-KF

**ConFlat**

CONFLAT FLANGE		
1	1 1/3" (NW16CF)	21255-01-CF
1	2 3/4" (NW35CF)	21291-01-CF
2	2 3/4" (NW35CF)	21257-01-CF
3	2 3/4" (NW35CF)	21258-01-CF
4	2 3/4" (NW35CF)	21259-01-CF

**Air Side Plug**

TYPE	DIMENSIONS		DESCRIPTION	PART NUMBER
	H	L		
Air Side	0.56 [14]	1.1 [27]	BNC Plug	7116-02

**Air Side Cable Assembly**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
50 Ohm BNC – Double Ended	10'	500 V	5	-40	85	18921-01-A

**Vacuum Side Cable Assemblies**

TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE		PART NUMBER
				MIN	MAX	
Microdot Vacuum Side – Double Ended	12"	500 V	2	-65°C	125°C	15767-12-A
Microdot Vacuum Side – Double Ended	24"	500 V	2	-65°C	125°C	15767-24-A
Microdot Vacuum Side – Double Ended	36"	500 V	2	-65°C	125°C	15767-36-A <sup>†</sup>

<sup>†</sup>Shown in photo. See the Accessories section for more information on all accessories.