

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижегород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727)345-47-04

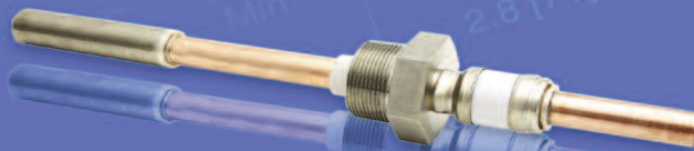
Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

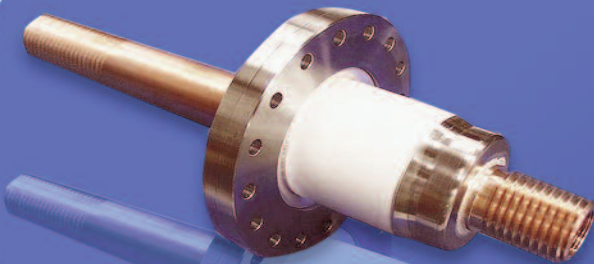
Киргизия +996(312)96-26-47

<https://ceramtec.nt-rt.ru> || cg@nt-rt.ru

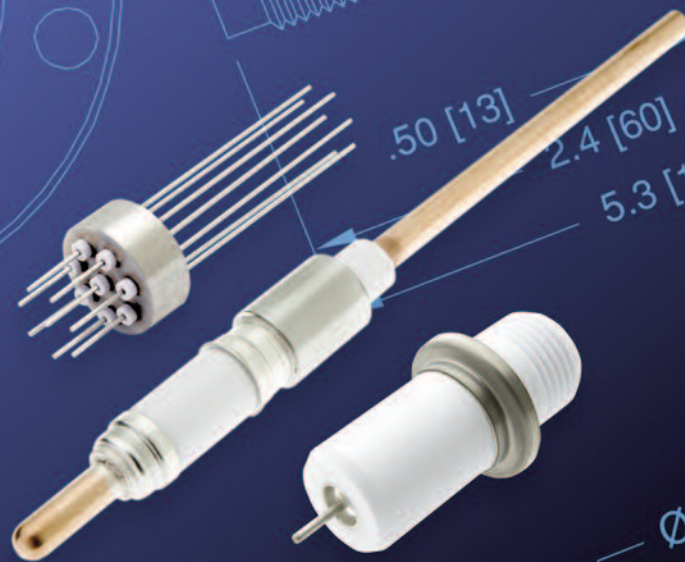
Проходные элементы Ceramaseal



CUSTOM FEEDTHROUGH ASSEMBLIES



Feedthrough



Advanced Ceramic-to-Metal & Glass Ceramic Sealing Technology

ULTRA-HIGH VACUUM | CRYOGENICS | HIGH VOLTAGE | HIGH TEMPERATURE | HIGH CURRENT
MICROWAVE | SEMICONDUCTOR EQUIPMENT | PHOTOVOLTAIC | NUCLEAR | FUSION
HIGH ENERGY PHYSICS | ACCELERATORS | SUPERCONDUCTIVITY | LASER TECHNOLOGY

Description

Feedthrough: An assembly which provides for the transfer of electrical power, gases or fluids from outside a hermetic chamber to the inside. Feedthroughs can provide both a hermetic seal and electrical isolation from the chamber wall. Feedthroughs are sometimes referred to as 'passthroughs.'

CeramTec feedthroughs provide the solutions for applications requiring hermeticity and electrical isolation. In addition to remaining leak-free in high and ultra-high vacuum, many of Ceramaseal® feedthroughs can accommodate:

- High temperatures
- Cryogenic temperatures
- High pressure
- Aggressive chemicals

A feedthrough is basically defined by the requirements for installation, insulation, and conductor material. The method of interconnection is flexible and left to the customer's discretion. A selection of push-on contacts can be found in the Accessories section of this catalog.

Standard Specifications

- Voltages to 100 kV
- Current to 1000 Amps
- Up to 41 conductors
- Temperature Range: -269° C to 450° C
- Internal Pressure 1 x 10⁻¹⁰ torr to 3000 psig

Extreme / Custom Design

- Multiple feedthrough flange assemblies
- 940-pin header assembly
- Corona-free designs to 180 kV DC
- Currents in excess of 2,500 Amps
- Pressures to 30,000 psig



Installation

Standard installation mountings include:

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

Applications

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

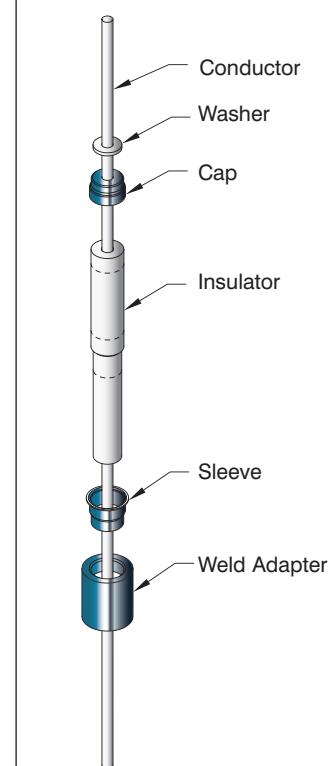
- Semiconductor processing equipment
- Particle accelerators
- Furnaces
- Analytical equipment
- In-vacuum coating
- Satellite instrumentation
- X-ray detection equipment

New Products

- New high-density, low current feedthroughs
- Micro & Mini HV (high voltage) feedthroughs with mating air side cable assemblies
- 40 & 50 kV feedthroughs with mating air side cable assemblies

- .154 & .250 Power Plugs for safe high voltage and high current connectivity

Typical Feedthrough Construction



Type	Voltage DC	Current (Amps per conductor)	# of Conductors	Conductor Size (in inches)	Sub-section	Section Pages
	to 2 kV	to 16 Amps	1 to 8	0.032 & 0.042	Instrumentation / Power	A.1 14-15
	to 6 kV	to 27 Amps	1 to 4	0.050	Power	A.2 16-17
	to 5 kV	5 Amps	4 to 10	0.062	Pin Header	A.3 18-19
	1 kV	5 Amps	3 to 41	0.040	Multipin Header	A.4 20-21
	to 15 kV	7.5 Amps	1 to 4	0.030 & 0.037	Micro & Mini HV	A.5 22-25
	to 25 kV	to 185 Amps	1 to 4	0.094, 0.154 & 0.250	Power Plug	A.6 26-35
	8 kV	to 1000 Amps	1 to 2	0.250, 0.500 & 0.750	High Power - Liquid Cooled	A.7 36-41
	to 100 kV	to 10 Amps	1	0.062 & 0.156	High Voltage	A.8 42-47
	to 14 kV	to 300 Amps	1 to 2	0.250	RF Power - Liquid Cooled	A.9 48-49
	to 15 kV	to 185 Amps	1 to 4	0.050, 0.094 & 0.250	Baseplate	A.10 50-51

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

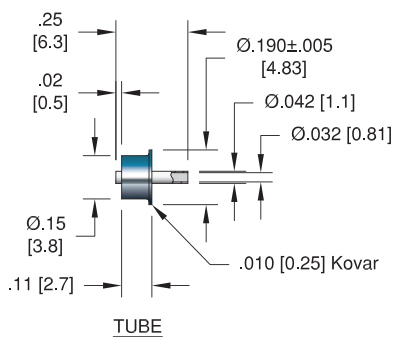
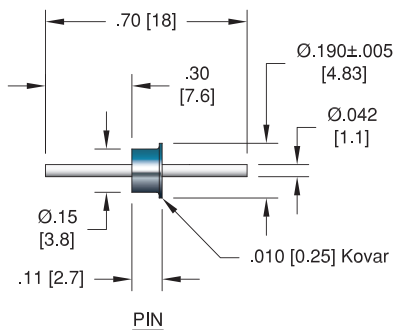
Viewport

Pressure

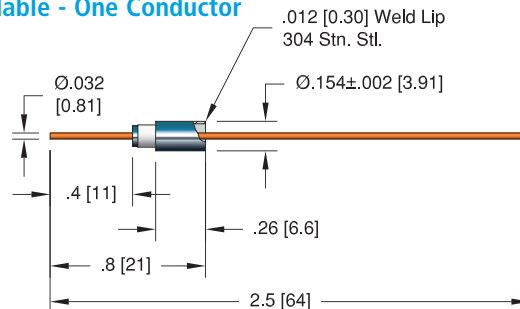
Accessories

Technical Reference

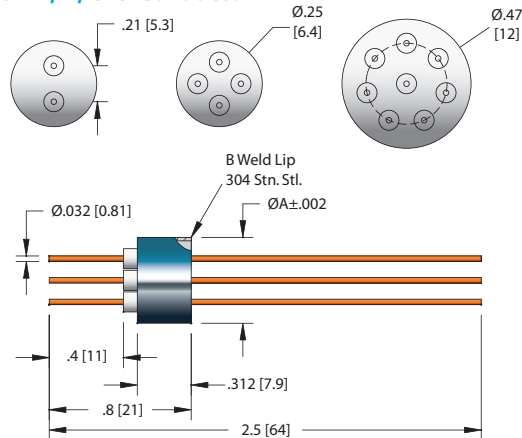
Weld/Braze - Superthru



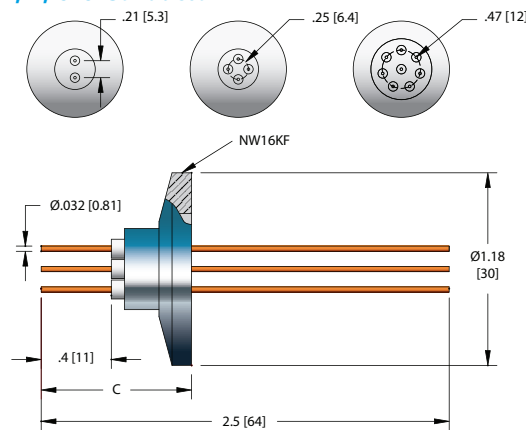
Weldable - One Conductor



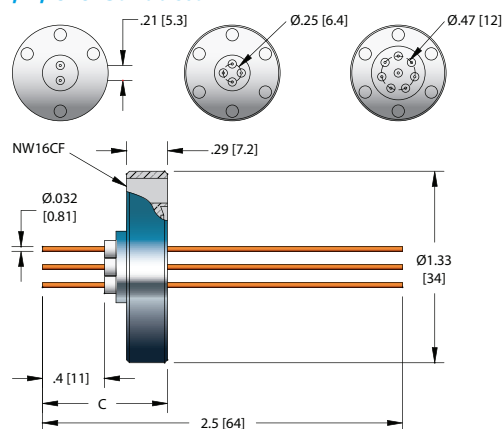
Weldable - 2, 4, & 8 Conductor



ISO KF - 2, 4, & 8 Conductor



ConFlat - 2, 4, & 8 Conductor



Specifications — Superthru

Materials

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

Voltage Rating 500 V DC

Current Rating See table

Temperature Range -80°C to 450°C

Pressure @ 20°C 2500 PSIG (172 Bar), ISO KF 0 PSIG

Specifications — 1, 2, 4, & 8 Conductor

Materials

- Housing: 304 Stainless steel
- Pin: See table
- Insulation: Alumina ceramic
- Magnetic Materials: See table

Voltage Rating See table

Current Rating See table

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

Pressure @ 20°C ISO KF 0 PSIG

- Single pin: 3500 PSIG (241 Bar)
- 2 & 4 pin: 1400 PSIG (96 Bar)
- 8 pin: 500 PSIG (34 Bar)

Weld or Braze Superthru



INSTALLATION	VOLTAGE DC	CONDUCTOR AMPS*	MATERIAL	PART NUMBER
Weld or Braze	500	-	Kovar Tube	9809-01-W
Weld or Braze	500	11.5	Molybdenum	9809-02-W

*Current carrying capacity of the tubular feedthroughs varies based on the coolant used and the flow rate.

Weldable Single Pin



NO. PINS	INSTALLATION	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	A	DIMENSIONS B	C	MAGNETIC MATERIALS	PART NUMBER
1	Weld	1 kV	1.1	304 Stn. Stl.	-	-	-	No	9297-03-W
1	Weld	1 kV	5	Nickel	-	-	-	Yes	9297-01-W
1	Weld	1 kV	8.5	Molybdenum	-	-	-	No	9297-06-W
1	Weld	1 kV	16	Copper	-	-	-	No	9297-08-W
2	Weld	2 kV	1.1	304 Stn. Stl.	0.497 [12.62]	.020 [0.51]	-	No	9298-07-W
2	Weld	2 kV	5	Nickel	0.497 [12.62]	.020 [0.51]	-	Yes	9298-01-W
2	Weld	2 kV	8.5	Molybdenum	0.497 [12.62]	.020 [0.51]	-	No	9298-05-W
2	Weld	2 kV	16	Copper	0.497 [12.62]	.020 [0.51]	-	No	9298-06-W
4	Weld	2 kV	1.1	304 Stn. Stl.	0.497 [12.62]	.020 [0.51]	-	No	9299-05-W
4	Weld	2 kV	5	Nickel	0.497 [12.62]	.020 [0.51]	-	Yes	9299-01-W
4	Weld	2 kV	8.5	Molybdenum	0.497 [12.62]	.020 [0.51]	-	No	9299-04-W
4	Weld	2 kV	16	Copper	0.497 [12.62]	.020 [0.51]	-	No	9299-06-W
8	Weld	1.5 kV	1.1	304 Stn. Stl.	0.747 [18.97]	.035 [0.89]	-	No	9294-03-W
8	Weld	1.5 kV	5	Nickel	0.747 [18.97]	.035 [0.89]	-	Yes	9294-01-W
8	Weld	1.5 kV	8.5	Molybdenum	0.747 [18.97]	.035 [0.89]	-	No	9294-04-W
8	Weld	1.5 kV	16	Copper	0.747 [18.97]	.035 [0.89]	-	No	9294-08-W


ISO FLANGE

2	NW16KF	2 kV	1.1	304 Stn. Stl.	-	-	.9 [23]	No	17006-01-KF
2	NW16KF	2 kV	5	Nickel	-	-	.9 [23]	Yes	17006-02-KF
2	NW16KF	2 kV	8.5	Molybdenum	-	-	.9 [23]	No	17006-03-KF
2	NW16KF	2 kV	16	Copper	-	-	.9 [23]	No	17006-04-KF
4	NW16KF	2 kV	1.1	304 Stn. Stl.	-	-	.9 [23]	No	17007-01-KF
4	NW16KF	2 kV	5	Nickel	-	-	.9 [23]	Yes	17007-02-KF
4	NW16KF	2 kV	8.5	Molybdenum	-	-	.9 [23]	No	17007-03-KF
4	NW16KF	2 kV	16	Copper	-	-	.9 [23]	No	17007-04-KF
8	NW16KF	1.5 kV	1.1	304 Stn. Stl.	-	-	1.3 [34]	No	17008-01-KF
8	NW16KF	1.5 kV	5	Nickel	-	-	1.3 [34]	Yes	17008-02-KF
8	NW16KF	1.5 kV	8.5	Molybdenum	-	-	1.3 [34]	No	17008-03-KF
8	NW16KF	1.5 kV	16	Copper	-	-	1.3 [34]	No	17008-04-KF


CONFLAT FLANGE

2	1 1/3" (NW16CF)	2 kV	1.1	304 Stn. Stl.	-	-	.9 [23]	No	17046-01-CF
2	1 1/3" (NW16CF)	2 kV	5	Nickel	-	-	.9 [23]	Yes	17046-02-CF
2	1 1/3" (NW16CF)	2 kV	8.5	Molybdenum	-	-	.9 [23]	No	17046-03-CF
2	1 1/3" (NW16CF)	2 kV	16	Copper	-	-	.9 [23]	No	17046-04-CF
4	1 1/3" (NW16CF)	2 kV	1.1	304 Stn. Stl.	-	-	.9 [23]	No	17048-01-CF
4	1 1/3" (NW16CF)	2 kV	5	Nickel	-	-	.9 [23]	Yes	17048-02-CF
4	1 1/3" (NW16CF)	2 kV	8.5	Molybdenum	-	-	.9 [23]	No	17048-03-CF
4	1 1/3" (NW16CF)	2 kV	16	Copper	-	-	.9 [23]	No	17048-04-CF
8	1 1/3" (NW16CF)	1.5 kV	1.1	304 Stn. Stl.	-	-	1.3 [34]	No	9340-06-CF
8	1 1/3" (NW16CF)	1.5 kV	5	Nickel	-	-	1.3 [34]	Yes	9340-01-CF
8	1 1/3" (NW16CF)	1.5 kV	8.5	Molybdenum	-	-	1.3 [34]	No	9340-04-CF
8	1 1/3" (NW16CF)	1.5 kV	16	Copper	-	-	1.3 [34]	No	9340-05-CF

ConFlat 2, 4, & 8 Pin



Contacts



TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.032 Crimp Contacts	Beryllium Copper	Accepts wire up to 0.032 [0.81]	11288-02-X†
0.042 Crimp Contacts	Stainless Steel - Gold Plated	Accepts wire up to 0.030 [0.76]	14461-04-A
Crimp Tool		For 0.025" - 0.075" Crimp Diameters	2840-05

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

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Specifications

Materials

Housing: 304 Stainless steel
Pin/Tube: See table
Insulation: Alumina ceramic
Magnetic Materials: See table

Voltage Rating See table

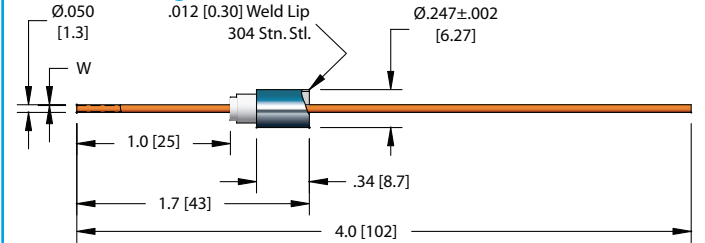
Current Rating See table

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

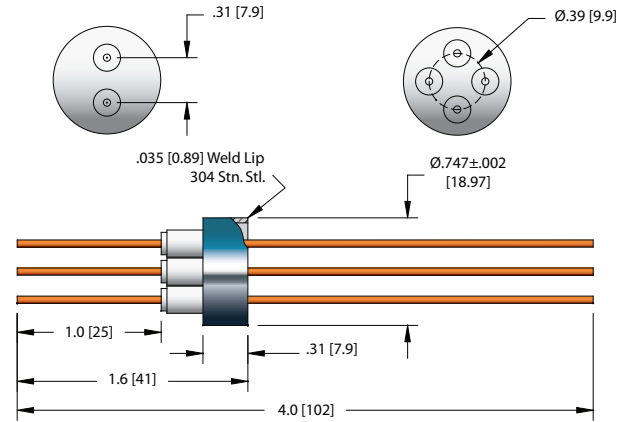
Pressure @ 20°C ISO KF 0 PSIG

Single Pin: 3500 PSIG (241 Bar)
2 & 4 Pin: 1250 PSIG (86 Bar)

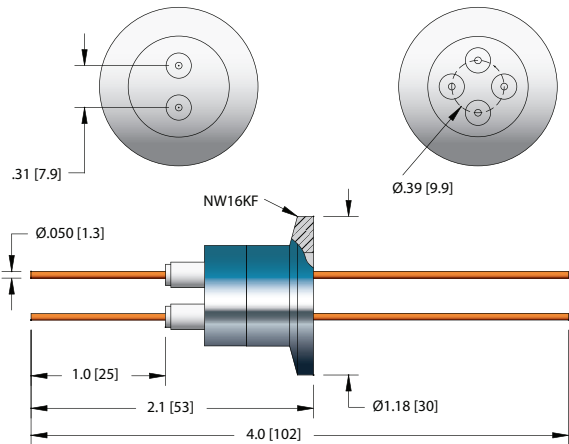
Weldable - Single Pin



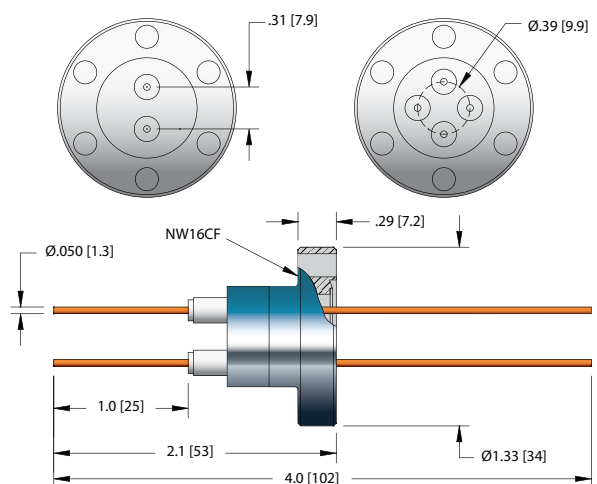
Weldable - 2 & 4 Pin



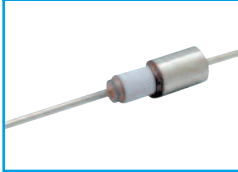
ISO KF - 2 & 4 Pin



ConFlat - 2 & 4 Pin 6 kV



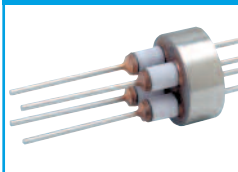
Weldable Single Pin



NO. PINS	INSTALLATION	VOLTAGE DC	AMPS*	CONDUCTOR MATERIAL	W	MAGNETIC MATERIALS	PART NUMBER
1	Weld	2 KV	1.8	304 Stn. Stl.	-	No	7844-02-W
1	Weld	2 KV	8.2	Nickel	-	Yes	7844-01-W
1	Weld	2 KV	13.5	Molybdenum	-	No	7844-21-W
1	Weld	2 KV	27	Copper	-	No	7844-04-W
1	Weld	5 KV	1.8	304 Stn. Stl.	-	No	9791-04-W
1	Weld	5 KV	8.2	Nickel	-	Yes	9791-02-W
1	Weld	5 KV	13.5	Molybdenum	-	No	9791-09-W
1	Weld	5 KV	27	Copper	-	No	9791-08-W
1	Weld	5 KV	-	Nickel Tube	.005	Yes	9791-06-W

*Current carrying capacity of the tubular feedthroughs varies based on the coolant used and the flow rate.

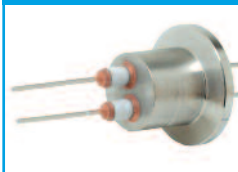
Weldable 2 & 4 Pin



2	Weld	6 KV	1.8	304 Stn. Stl.	-	No	9215-04-W
2	Weld	6 KV	8.2	Nickel	-	Yes	9215-02-W
2	Weld	6 KV	13.5	Molybdenum	-	No	9215-14-W
2	Weld	6 KV	27	Copper	-	No	9215-08-W
4	Weld	3 KV	1.8	304 Stn. Stl.	-	No	8177-02-W
4	Weld	3 KV	8.2	Nickel	-	Yes	8177-01-W
4	Weld	3 KV	13.5	Molybdenum	-	No	8177-06-W
4	Weld	3 KV	27	Copper	-	No	8177-04-W
4	Weld	6 KV	1.8	304 Stn. Stl.	-	No	9216-04-W
4	Weld	6 KV	8.2	Nickel	-	Yes	9216-02-W
4	Weld	6 KV	13.5	Molybdenum	-	No	9216-14-W
4	Weld	6 KV	27	Copper	-	No	9216-08-W

ISO FLANGE

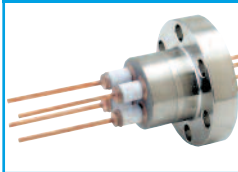
ISO KF 2 & 4 Pin



2	NW16KF	6 KV	1.8	304 Stn. Stl.	-	No	17018-01-KF
2	NW16KF	6 KV	8.2	Nickel	-	Yes	17018-02-KF
2	NW16KF	6 KV	27	Copper	-	No	17018-04-KF
4	NW16KF	6 KV	1.8	304 Stn. Stl.	-	No	17019-01-KF
4	NW16KF	6 KV	8.2	Nickel	-	Yes	17019-02-KF
4	NW16KF	6 KV	27	Copper	-	No	17019-04-KF

CONFLAT FLANGE

ConFlat 2 & 4 Pin



2	1 1/3" (NW16CF)	6 KV	1.8	304 Stn. Stl.	-	No	9871-02-CF
2	1 1/3" (NW16CF)	6 KV	8.2	Nickel	-	Yes	9871-01-CF
2	1 1/3" (NW16CF)	6 KV	27	Copper	-	No	9871-04-CF
4	1 1/3" (NW16CF)	3 KV	8.2	Nickel	-	Yes	8176-02-CF
4	1 1/3" (NW16CF)	3 KV	27	Copper	-	No	8176-08-CF
4	1 1/3" (NW16CF)	6 KV	1.8	304 Stn. Stl.	-	No	9871-06-CF
4	1 1/3" (NW16CF)	6 KV	8.2	Nickel	-	Yes	9871-05-CF
4	1 1/3" (NW16CF)	6 KV	27	Copper	-	No	9871-08-CF

*See page 213 for In-Vacuum Cable (Kapton). See page 195 for Contacts. See the Accessories section for more information on all accessories.

Feedthrough

Multi-pin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Specifications

Materials

Housing: 304 Stainless steel
 Pins: Alumel
 Insulation: Alumina ceramic
 Magnetic Materials: Yes

Voltage Rating See table

Current Rating 5 Amps per pin

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

Pressure @ 20°C ISO KF 0 PSIG

4 Pin - 600 PSIG (41 Bar)
 6 Pin - 550 PSIG (38 Bar)
 10 Pin - 500 PSIG (34 Bar)

Multipin Connector

Coaxial

Thermocouple

Isolator

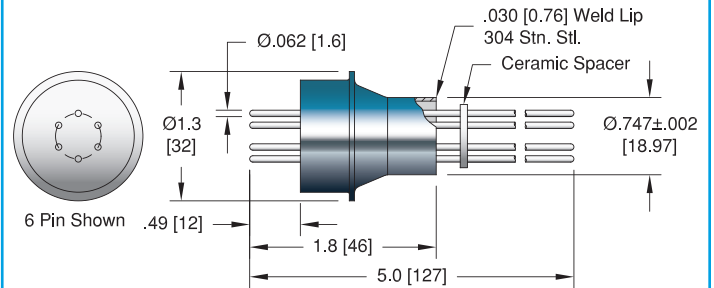
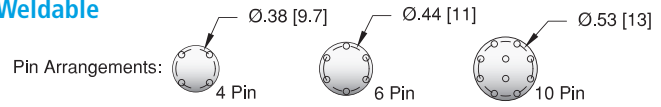
Viewport

Pressure

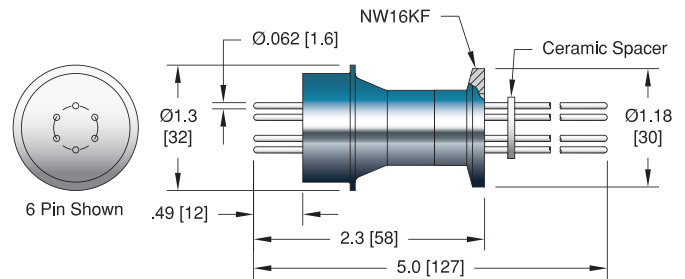
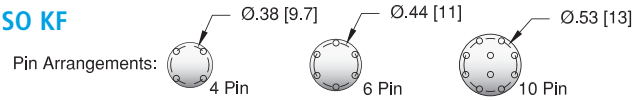
Accessories

Technical Reference

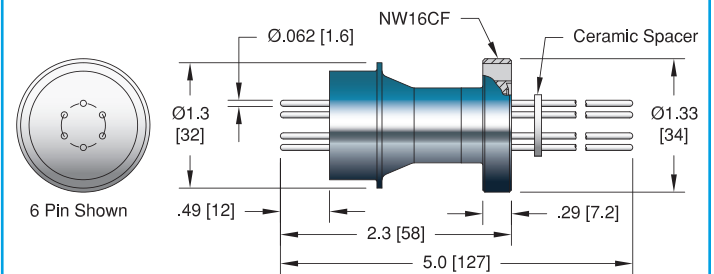
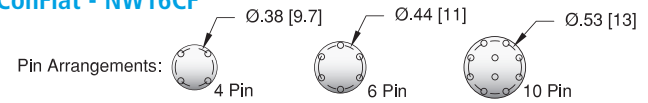
Weldable



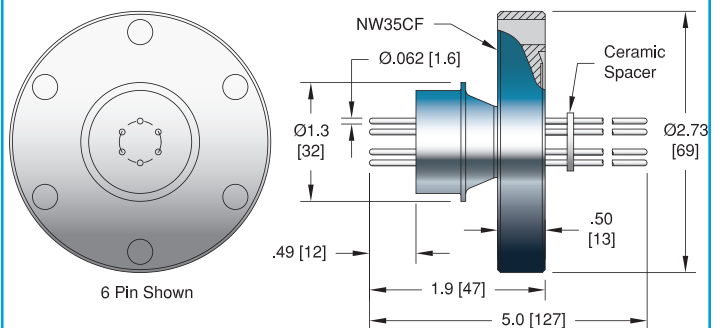
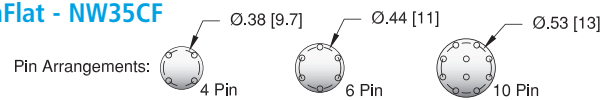
ISO KF

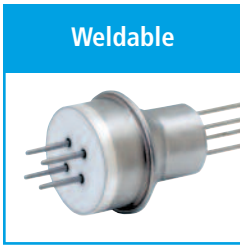


ConFlat - NW16CF



ConFlat - NW35CF





Weldable

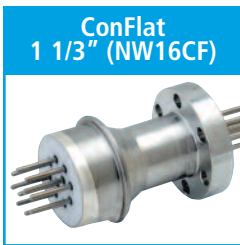
NO. PINS	INSTALLATION	VOLTAGE DC	PART NUMBER
4	Weld	1.5 KV	10234-01-W
6	Weld	1.5 KV	10235-01-W
10	Weld	800 V	10236-01-W



ISO KF

ISO FLANGE

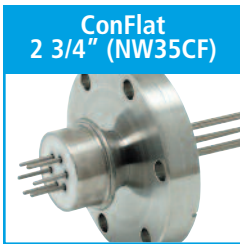
4	NW16KF	1.5 KV	10234-13-KF
6	NW16KF	1.5 KV	10235-13-KF
10	NW16KF	800 V	10236-15-KF



**ConFlat
1 1/3" (NW16CF)**

CONFLAT FLANGE

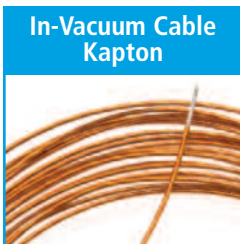
4	1 1/3" (NW16CF)	1.5 KV	10234-02-CF
6	1 1/3" (NW16CF)	1.5 KV	10235-02-CF
10	1 1/3" (NW16CF)	800 V	10236-02-CF



**ConFlat
2 3/4" (NW35CF)**

CONFLAT FLANGE

4	2 3/4" (NW35CF)	1.5 KV	10234-03-CF
6	2 3/4" (NW35CF)	1.5 KV	10235-03-CF
10	2 3/4" (NW35CF)	800 V	10236-03-CF



**In-Vacuum Cable
Kapton**

VOLTAGE DC	CONDUCTOR AMPS	GAUGE	TYPE	WIRE LENGTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
850 V	2.5	28 AWG	Stranded	30'	7 x 0.005	Ø .028	21621-01-A
850 V	5	22 AWG	Stranded	30'	19 x 0.0063	Ø .035	21643-01-A
850 V	20	12 AWG	Stranded	15'	37 x 0.013	Ø .101	21702-02-A

Adjustable wire stripper, 20-30 AWG (.25-.80mm) 21128-01



Contacts

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.062 Crimp Contacts Crimp Tool	Alumel	Accepts wire up to 0.050 [1.3] For 0.025" - 0.075" Crimp Diameters	11259-06-X† 2840-05

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

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

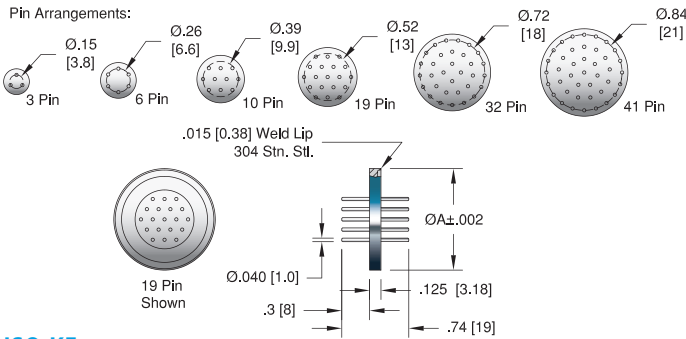
Viewport

Pressure

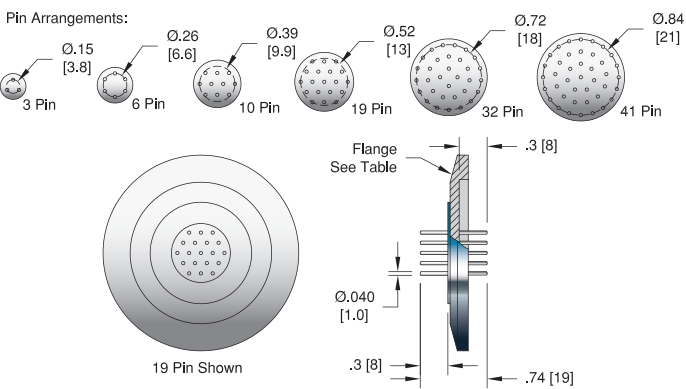
Accessories

Technical Reference

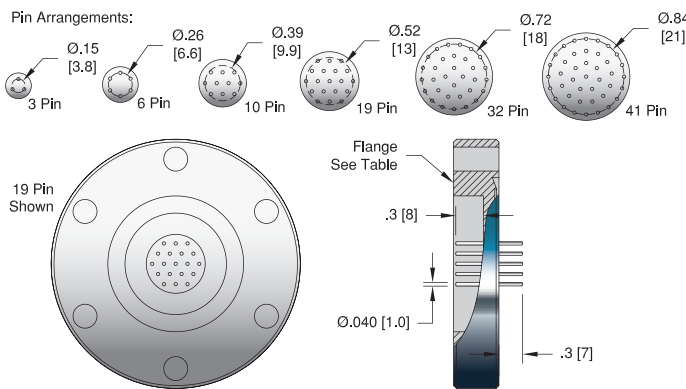
Straight Conductor Weldable



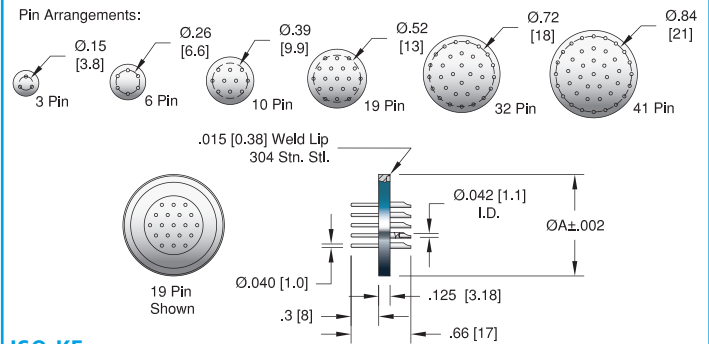
ISO KF



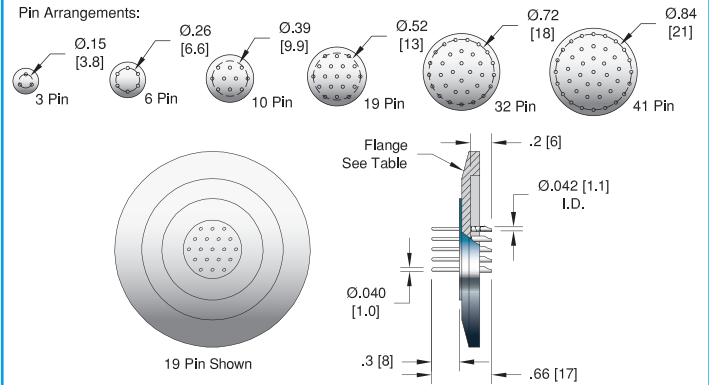
ConFlat



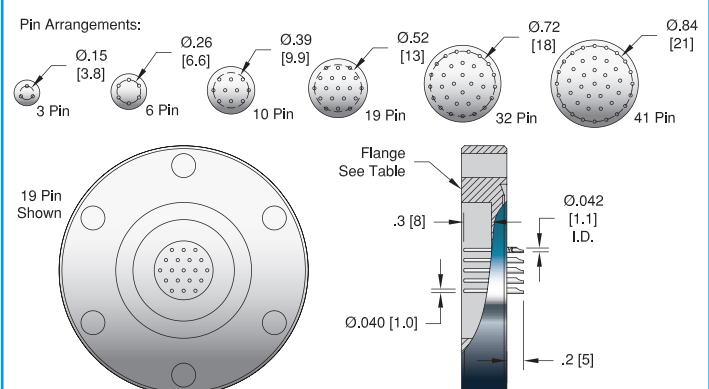
Straight/Solder Cup Conductor Weldable



ISO KF



ConFlat



Specifications

Materials

- Housing: 304 Stainless steel
- Pins: 330 Stainless steel (Nickel plated)
- Insulation: Glass-ceramic
- Magnetic Materials: No

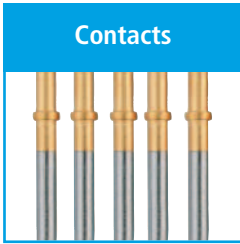
Voltage Rating 1 kV DC

Current Rating 5 Amps per pin

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

Pressure @ 20°C ISO KF 0 PSIG

3 Pin: 550 PSIG (38 Bar)	19 Pin: 400 PSIG (28 Bar)
6 Pin: 500 PSIG (34 Bar)	32 Pin: 375 PSIG (26 Bar)
10 Pin: 450 PSIG (31 Bar)	41 Pin: 350 PSIG (24 Bar)



NO. PINS	PIN TYPE	INSTALLATION	DIMENSION "A"	PART NUMBER
3	.040 [1.0] Straight	Weld	.745	18840-01-W
6	.040 [1.0] Straight	Weld	.870	18841-01-W
10	.040 [1.0] Straight	Weld	.995	18842-01-W
19	.040 [1.0] Straight	Weld	1.120	18843-01-W
32	.040 [1.0] Straight	Weld	1.370	18844-01-W
41	.040 [1.0] Straight	Weld	1.495	18845-01-W

ISO FLANGE

3	.040 [1.0] Straight	NW25KF	.745	17040-01-KF
6	.040 [1.0] Straight	NW40KF	.870	17041-01-KF
10	.040 [1.0] Straight	NW40KF	.995	17042-01-KF
19	.040 [1.0] Straight	NW40KF	1.120	17043-01-KF
32	.040 [1.0] Straight	NW40KF	1.370	17044-01-KF
41	.040 [1.0] Straight	NW50KF	1.495	17045-01-KF

CONFLAT FLANGE

3	.040 [1.0] Straight	2 3/4" (NW35CF)	.745	17020-01-CF
6	.040 [1.0] Straight	2 3/4" (NW35CF)	.870	17021-01-CF
10	.040 [1.0] Straight	2 3/4" (NW35CF)	.995	17022-01-CF
19	.040 [1.0] Straight	2 3/4" (NW35CF)	1.120	17023-01-CF
32	.040 [1.0] Straight	2 3/4" (NW35CF)	1.370	17024-01-CF
41	.040 [1.0] Straight	3 3/8" (NW50CF)	1.495	17025-01-CF

3	.040 [1.0] Solder Cup	Weld	.745	18850-01-W
6	.040 [1.0] Solder Cup	Weld	.870	18851-01-W
10	.040 [1.0] Solder Cup	Weld	.995	18852-01-W
19	.040 [1.0] Solder Cup	Weld	1.120	18853-01-W
32	.040 [1.0] Solder Cup	Weld	1.370	18854-01-W
41	.040 [1.0] Solder Cup	Weld	1.495	18855-01-W

ISO FLANGE

3	.040 [1.0] Solder Cup	NW25KF	.745	17050-01-KF
6	.040 [1.0] Solder Cup	NW40KF	.870	17051-01-KF
10	.040 [1.0] Solder Cup	NW40KF	.995	17052-01-KF
19	.040 [1.0] Solder Cup	NW40KF	1.120	17053-01-KF
32	.040 [1.0] Solder Cup	NW40KF	1.370	17054-01-KF
41	.040 [1.0] Solder Cup	NW50KF	1.495	17055-01-KF

CONFLAT FLANGE

3	.040 [1.0] Solder Cup	2 3/4" (NW35CF)	.745	17030-01-CF
6	.040 [1.0] Solder Cup	2 3/4" (NW35CF)	.870	17031-01-CF
10	.040 [1.0] Solder Cup	2 3/4" (NW35CF)	.995	17032-01-CF
19	.040 [1.0] Solder Cup	2 3/4" (NW35CF)	1.120	17033-01-CF
32	.040 [1.0] Solder Cup	2 3/4" (NW35CF)	1.370	17034-01-CF
41	.040 [1.0] Solder Cup	3 3/8" (NW50CF)	1.495	17035-01-CF

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

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

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

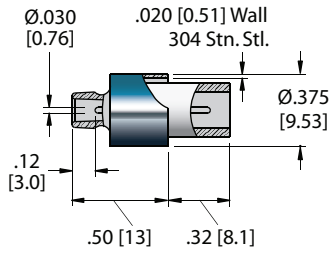
Pressure

Accessories

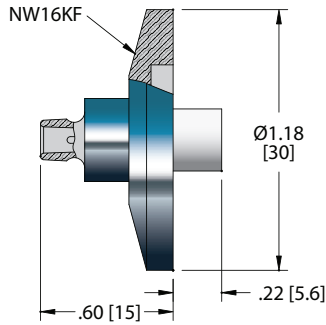
Technical Reference

Feedthrough
Multipin Connector
Coaxial
Thermocouple
Isolator
Viewport
Pressure
Accessories
Technical Reference

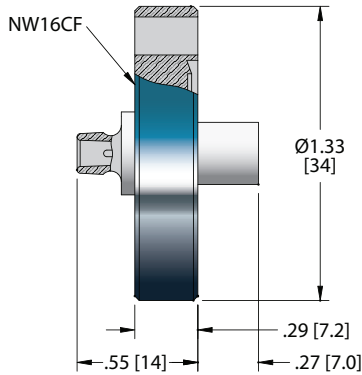
Weldable



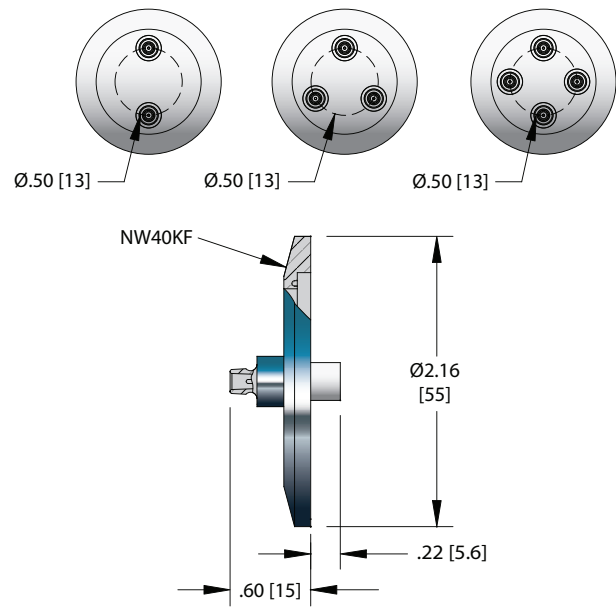
ISO KF - NW16KF



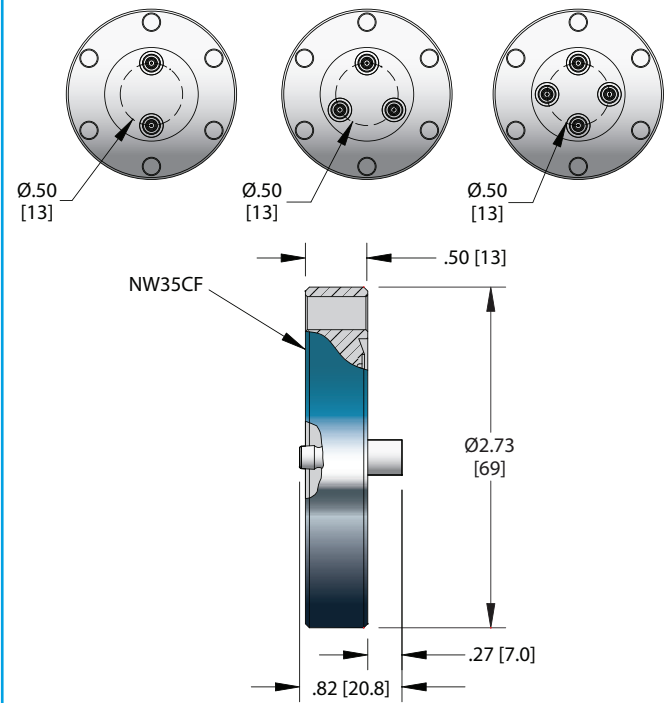
ConFlat - NW16CF



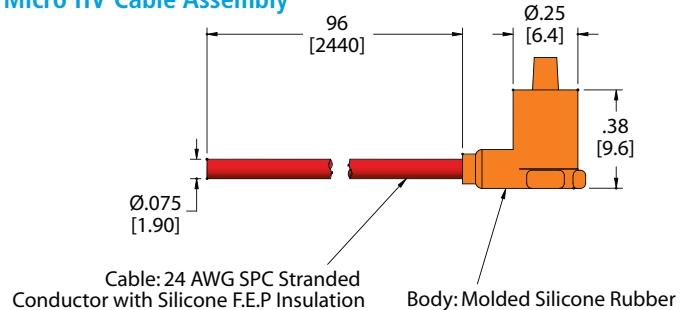
ISO KF - NW40KF



ConFlat - NW35CF



Micro HV Cable Assembly



Specifications - Micro HV

Materials

- Housing: 304 Stainless steel
- Pin: Molybdenum (Gold plated)
- Insulation: Alumina ceramic
- Magnetic Materials: No

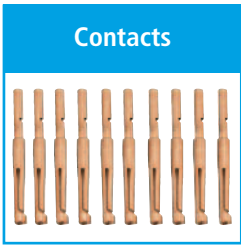
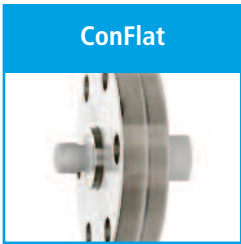
Voltage Rating 10 kV DC*

Current Rating 3 Amps

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

Pressure @ 20°C 2200 PSIG (152 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.



NO. PINS	INSTALLATION	PART NUMBER
1	Weld	21140-01-W

ISO FLANGE

1	NW16KF	21211-01-KF
2	NW40KF	21215-01-KF
3	NW40KF	21216-01-KF
4	NW40KF	21217-01-KF

CONFLAT FLANGE

1	1 1/3" (NW16CF)	21210-01-CF
2	2 3/4" (NW35CF)	21212-01-CF
3	2 3/4" (NW35CF)	21213-01-CF
4	2 3/4" (NW35CF)	21214-01-CF

TYPE	CABLE TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
Micro HV Air Side	24 AWG	8'	10 kV	3	-55	125	21039-01-A

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

*When used with air side cable assembly. **Contacts priced and sold in packages of 10. See the Accessories section for more information on all accessories.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

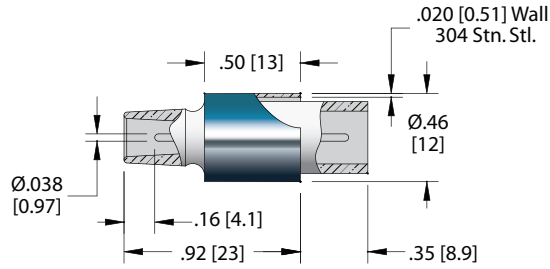
Viewport

Pressure

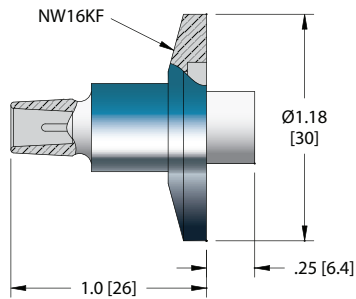
Accessories

Technical Reference

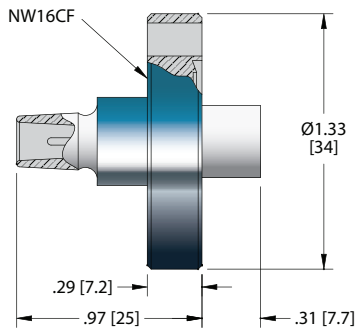
Weldable



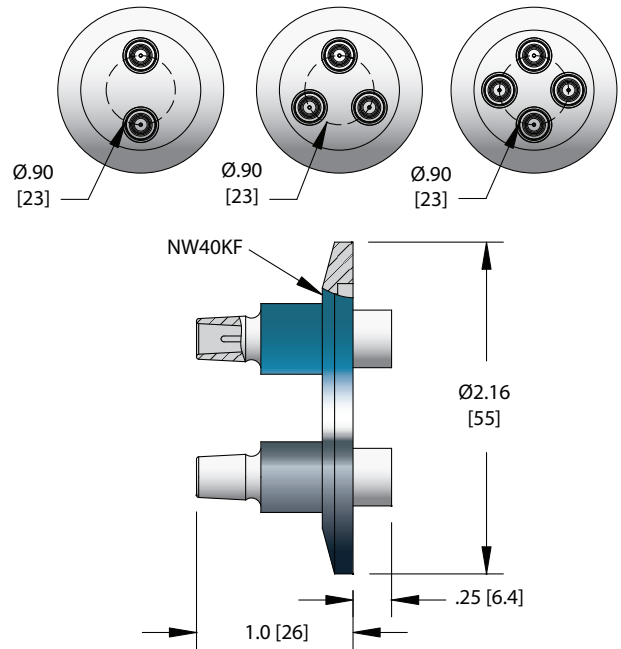
ISO KF - NW16KF



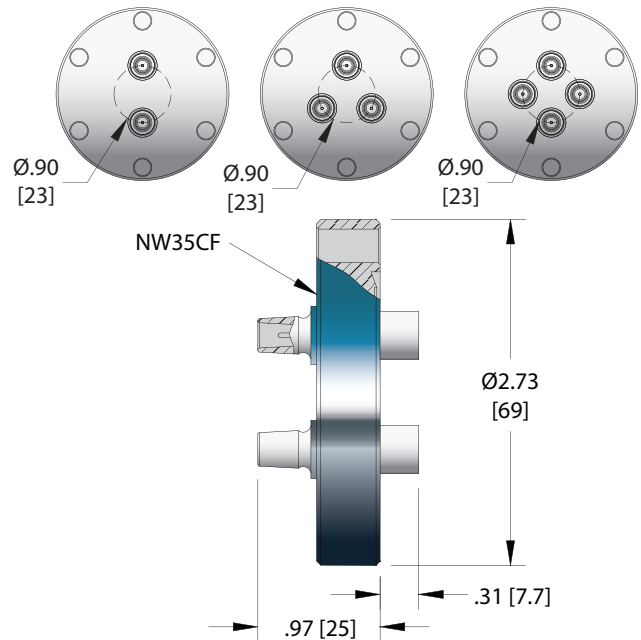
ConFlat - NW16CF



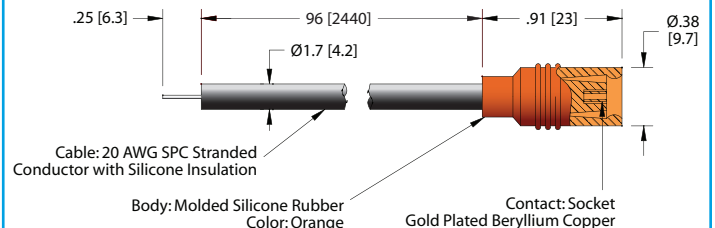
ISO KF - NW40KF



ConFlat - NW35CF



Mini HV Cable Assembly



Specifications - Mini HV

Materials

- Housing: 304 Stainless steel
- Pin: Molybdenum (Gold plated)
- Insulation: Alumina ceramic
- Magnetic Materials: Yes






Voltage Rating 15 kV DC*

Current Rating 7.5 Amps

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

Pressure @ 20°C 1100 PSIG (76 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.

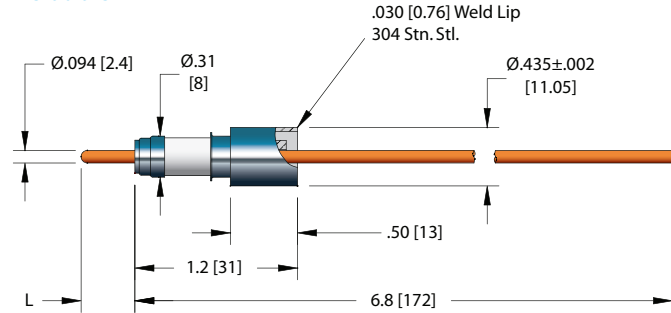
Weldable		NO. PINS	INSTALLATION	PART NUMBER					
		1	Weld	21169-01-W					
ISO KF		1	NW16KF	21227-01-KF					
		2	NW40KF	21231-01-KF					
		3	NW40KF	21232-01-KF					
		4	NW40KF	21233-01-KF					
ConFlat		1	1 1/3" (NW16CF)	21226-01-CF					
		2	2 3/4" (NW35CF)	21228-01-CF					
		3	2 3/4" (NW35CF)	21229-01-CF					
		4	2 3/4" (NW35CF)	21230-01-CF					
Air Side Cable Assembly		TYPE	CABLE TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
		Mini HV Air Side	20 AWG	8'	15 kV	7.5	-55	125	21119-01-A
Contacts		TYPE	MATERIAL	DESCRIPTION	PART NUMBER				
		0.040 Crimp Type Contacts	Copper Alloy - Gold Flash	Accepts wire up to 0.040 [1.0]	16757-02-A				
		Crimp Tool		For 0.025" - 0.075" Crimp Diameters	2840-05				

*When used with air side cable assembly. **Contacts priced and sold in packages of 5. See the Accessories section for more information on all accessories.

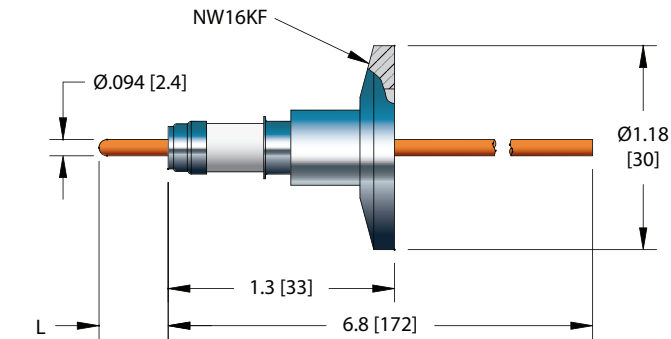
Feedthrough
Multipin Connector
Coaxial
Thermocouple
Isolator
Viewport
Pressure
Accessories
Technical Reference

Feedthrough
Multipin Connector
Coaxial
Thermocouple
Isolator
Viewport
Pressure
Accessories
Technical Reference

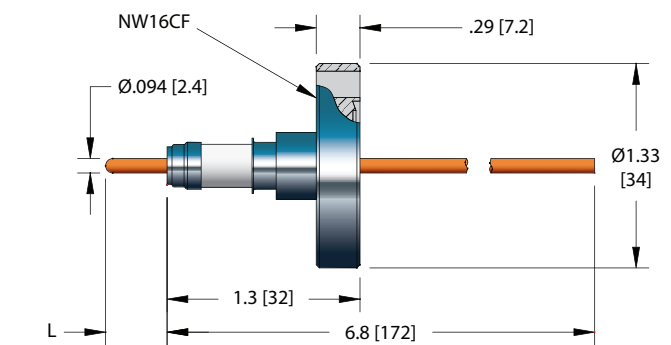
Weldable



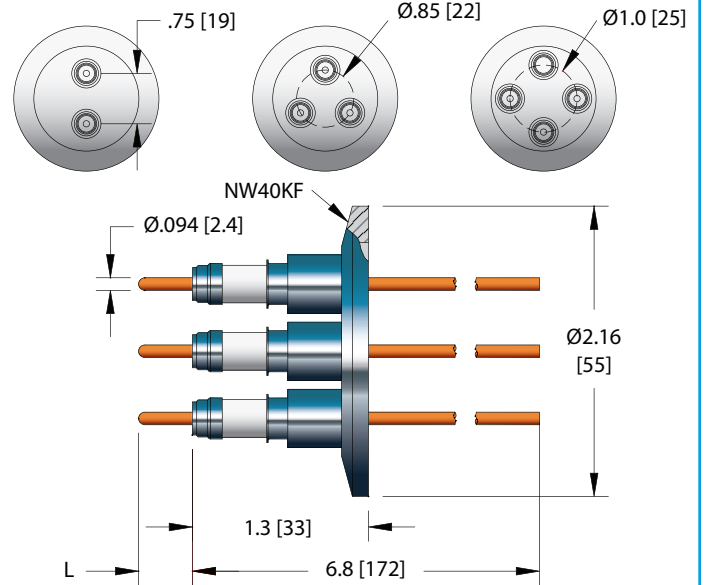
ISO KF - NW16KF



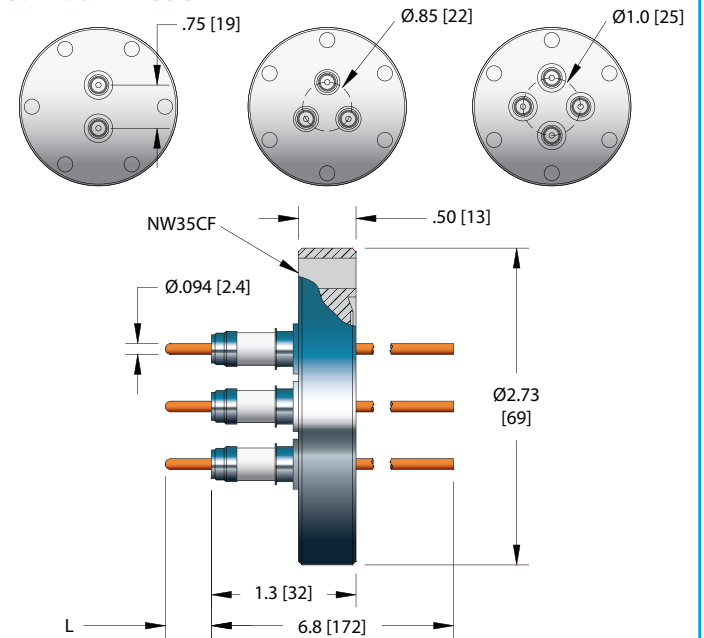
ConFlat - NW16CF



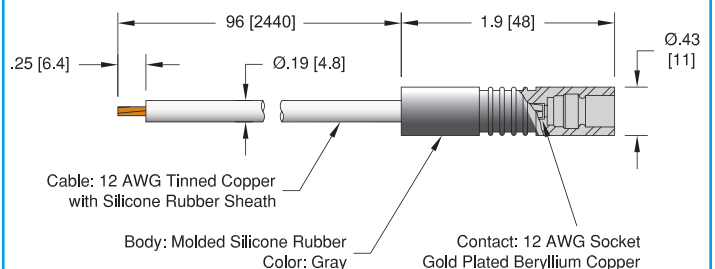
ISO KF - NW40KF



ConFlat - NW35CF



10 KV Power Plug



Specifications

Materials

- Housing: 304 Stainless steel
- Pin: See table
- Insulation: Alumina ceramic
- Magnetic Materials: See table

Voltage Rating See table*

Current Rating See table

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

Pressure @ 20°C 1500 PSIG (103 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.

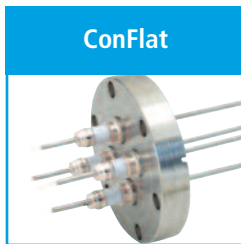


NO. PINS	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	INSTALLATION	MAGNETIC MATERIALS	DIMENSION "L"	PART NUMBER
1	5 KV	3.6	304 Stn. Stl.	Weld	No	1.0"	3887-68-W
1	5 KV	16.5	Nickel	Weld	Yes	1.0"	3887-51-W
1	5 KV	55	Copper	Weld	No	1.0"	3887-12-W
1	10 KV	3.6	304 Stn. Stl.	Weld	No	.4"	3888-08-W
1	10 KV	16.5	Nickel	Weld	Yes	.4"	3888-09-W
1	10 KV	55	Copper	Weld	No	.4"	3888-10-W



ISO FLANGE

1	10 KV	3.6	304 Stn. Stl.	NW16KF	No	.4"	17026-05-KF
1	10 KV	16.5	Nickel	NW16KF	Yes	.4"	17026-06-KF
1	10 KV	55	Copper	NW16KF	No	.4"	17026-08-KF
2	10 KV	3.6	304 Stn. Stl.	NW40KF	No	.4"	17027-05-KF
2	10 KV	16.5	Nickel	NW40KF	Yes	.4"	17027-06-KF
2	10 KV	55	Copper	NW40KF	No	.4"	17027-08-KF
3	10 KV	3.6	304 Stn. Stl.	NW40KF	No	.4"	17067-05-KF
3	10 KV	16.5	Nickel	NW40KF	Yes	.4"	17067-06-KF
3	10 KV	55	Copper	NW40KF	No	.4"	17067-08-KF
4	10 KV	3.6	304 Stn. Stl.	NW40KF	No	.4"	17028-05-KF
4	10 KV	16.5	Nickel	NW40KF	Yes	.4"	17028-06-KF
4	10 KV	55	Copper	NW40KF	No	.4"	17028-08-KF



CONFLAT FLANGE

1	10 KV	3.6	304 Stn. Stl.	1 1/3" (NW16CF)	No	.4"	19542-07-CF
1	10 KV	16.5	Nickel	1 1/3" (NW16CF)	Yes	.4"	19542-03-CF
1	10 KV	55	Copper	1 1/3" (NW16CF)	No	.4"	19542-04-CF
2	5 KV	16.5	Nickel	1 1/3" (NW16CF)	Yes	1.0"	9545-01-CF
2	5 KV	55	Copper	1 1/3" (NW16CF)	No	1.0"	9545-02-CF
2	10 KV	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	17060-05-CF
2	10 KV	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	17060-06-CF
2	10 KV	55	Copper	2 3/4" (NW35CF)	No	.4"	17060-08-CF
3	5 KV	16.5	Nickel	1 1/3" (NW16CF)	Yes	1.0"	6404-03-CF
3	5 KV	55	Copper	1 1/3" (NW16CF)	No	1.0"	6404-02-CF
3	10 KV	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	17064-05-CF
3	10 KV	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	17064-06-CF
3	10 KV	55	Copper	2 3/4" (NW35CF)	No	.4"	17064-08-CF
4	10 KV	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	17069-05-CF
4	10 KV	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	17069-06-CF
4	10 KV	55	Copper	2 3/4" (NW35CF)	No	.4"	17069-08-CF

*See page 213 for In-Vacuum Cable (Kapton). See page 195 for Contacts. See the Accessories section for more information on all accessories.

Feedthrough

Multi-pin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

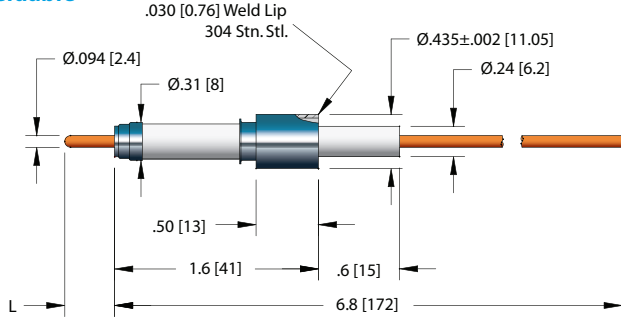
Viewport

Pressure

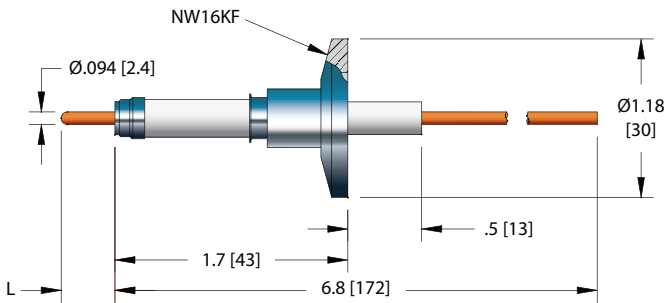
Accessories

Technical Reference

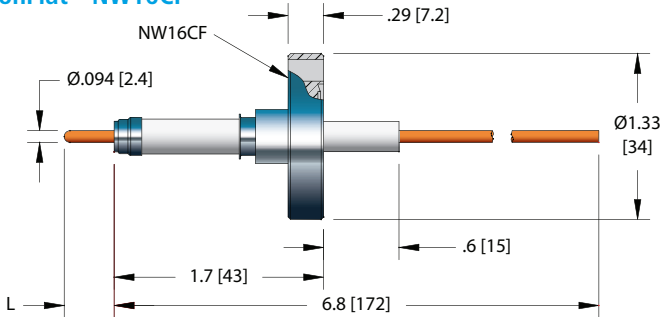
Weldable



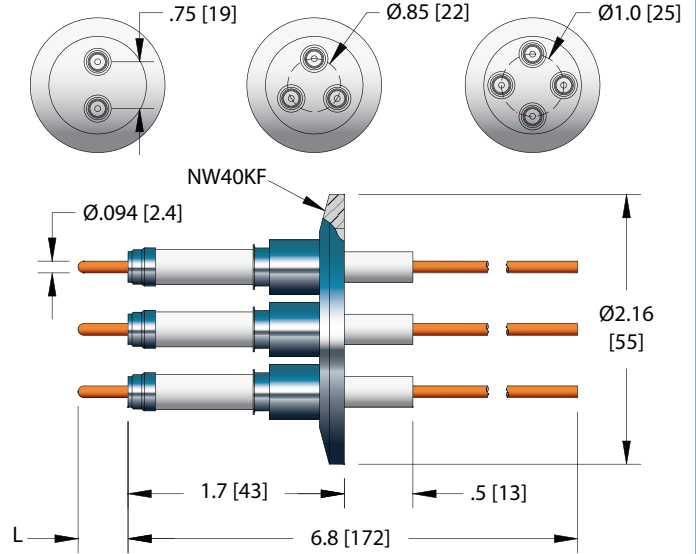
ISO KF - NW16KF



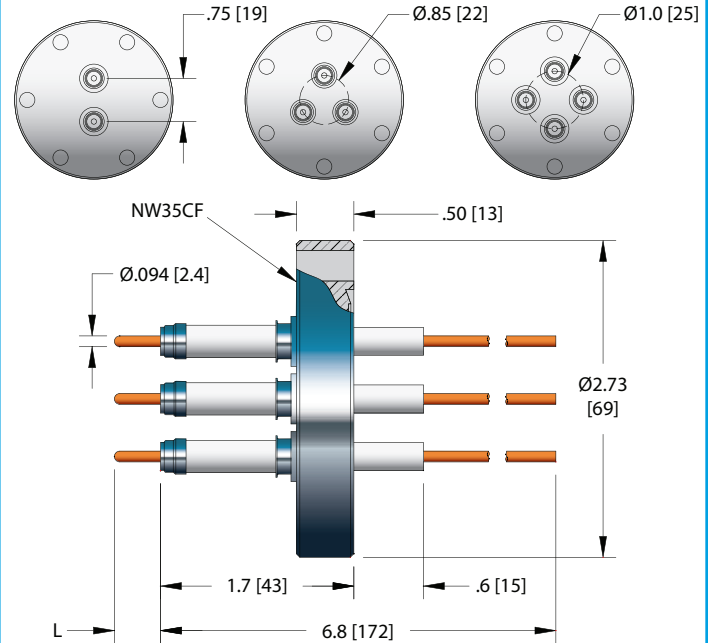
ConFlat - NW16CF



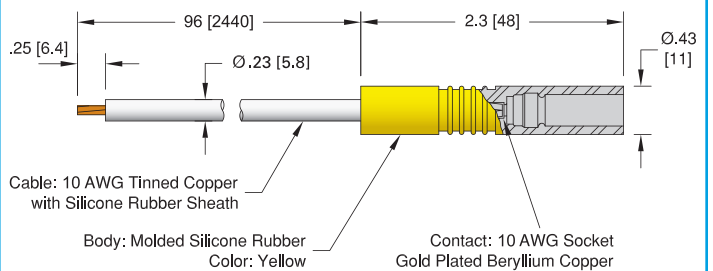
ISO KF - NW40KF



ConFlat - NW35CF



20 KV Power Plug



Specifications

Materials

Housing: 304 Stainless steel

Pin: See table

Insulation: Alumina ceramic

Magnetic Materials: See table

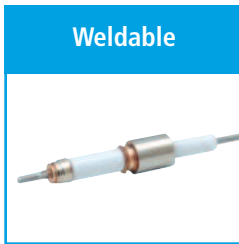
Voltage Rating Without plug 14 KV, with plug 20 KV*

Current Rating See table

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

Pressure @ 20°C 1500 PSIG (103 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.



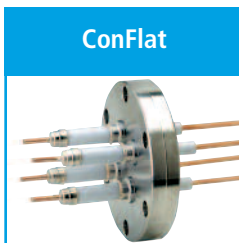
NO. PINS	AMPS	CONDUCTOR MATERIAL	INSTALLATION	MAGNETIC MATERIALS	DIMENSION "L"	PART NUMBER
1	3.6	304 Stn. Stl.	Weld	No	1.0"	4275-17-W
1	16.5	Nickel	Weld	Yes	1.0"	4275-15-W
1	55	Copper	Weld	No	1.0"	4275-14-W
1	3.6	304 Stn. Stl.	Weld	No	.4"	17575-03-W
1	16.5	Nickel	Weld	Yes	.4"	4275-22-W
1	55	Copper	Weld	No	.4"	4275-21-W

ISO FLANGE



1	3.6	304 Stn. Stl.	NW16KF	No	.4"	17036-05-KF
1	16.5	Nickel	NW16KF	Yes	.4"	17036-06-KF
1	55	Copper	NW16KF	No	.4"	17036-08-KF
2	3.6	304 Stn. Stl.	NW40KF	No	.4"	17037-05-KF
2	16.5	Nickel	NW40KF	Yes	.4"	17037-06-KF
2	55	Copper	NW40KF	No	.4"	17037-08-KF
3	3.6	304 Stn. Stl.	NW40KF	No	.4"	17068-05-KF
3	16.5	Nickel	NW40KF	Yes	.4"	17068-06-KF
3	55	Copper	NW40KF	No	.4"	17068-08-KF
4	3.6	304 Stn. Stl.	NW40KF	No	.4"	17038-05-KF
4	16.5	Nickel	NW40KF	Yes	.4"	17038-06-KF
4	55	Copper	NW40KF	No	.4"	17038-08-KF

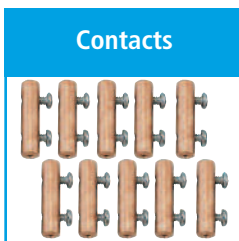
CONFLAT FLANGE



1	3.6	304 Stn. Stl.	1 1/3" (NW16CF)	No	.4"	19543-07-CF
1	16.5	Nickel	1 1/3" (NW16CF)	Yes	.4"	19543-03-CF
1	55	Copper	1 1/3" (NW16CF)	No	.4"	19543-04-CF
2	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	10287-04-CF
2	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	10287-05-CF
2	55	Copper	2 3/4" (NW35CF)	No	.4"	10287-03-CF
3	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	17065-05-CF
3	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	17065-06-CF
3	55	Copper	2 3/4" (NW35CF)	No	.4"	17065-08-CF
4	3.6	304 Stn. Stl.	2 3/4" (NW35CF)	No	.4"	16709-16-CF
4	16.5	Nickel	2 3/4" (NW35CF)	Yes	.4"	16709-08-CF
4	55	Copper	2 3/4" (NW35CF)	No	.4"	16709-10-CF



TYPE	CABLE TYPE	LENGTH	CONDUCTOR AMPS	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
20 kV Power Plug	10 AWG	8'	55	-55	125	14419-02-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
0.094 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.094 [2.4]	7332-04-A [†]

*When used with air side cable assembly. **Contacts priced and sold in packages of 10. †Shown in photo. See the Accessories section for more information on all accessories.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

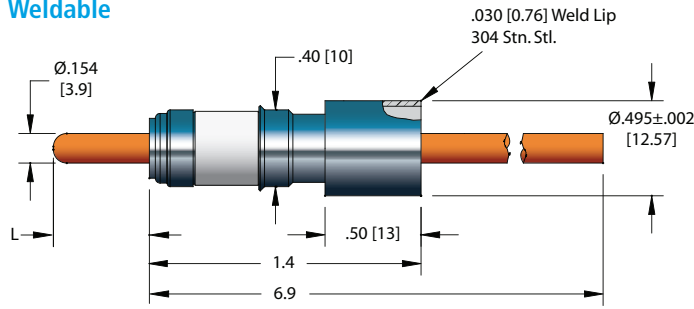
Viewport

Pressure

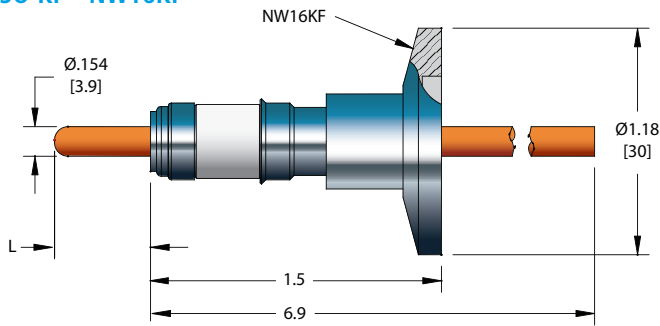
Accessories

Technical Reference

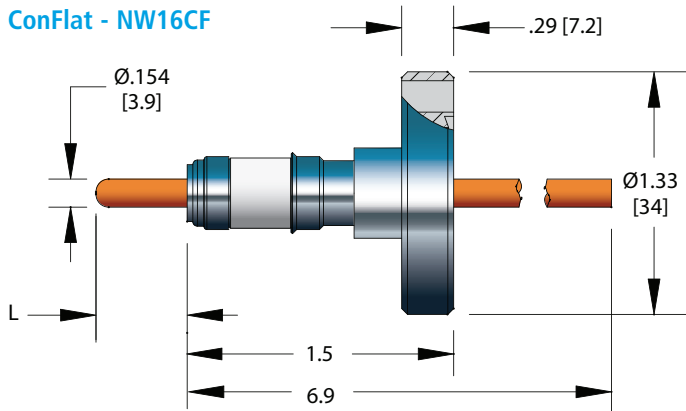
Weldable



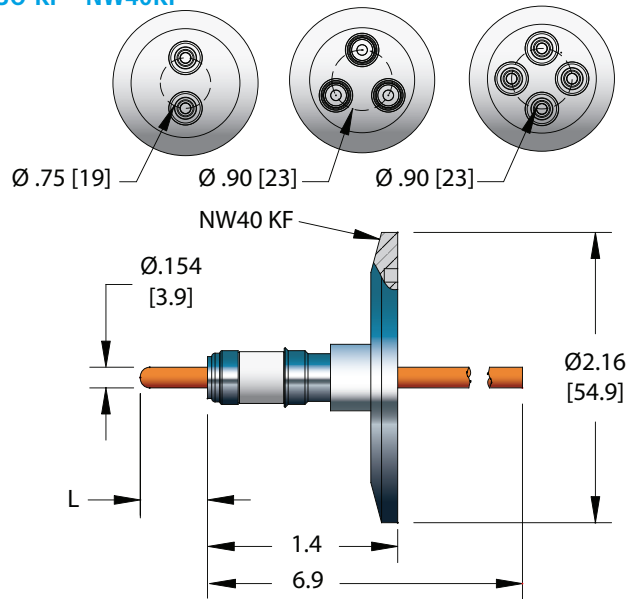
ISO KF - NW16KF



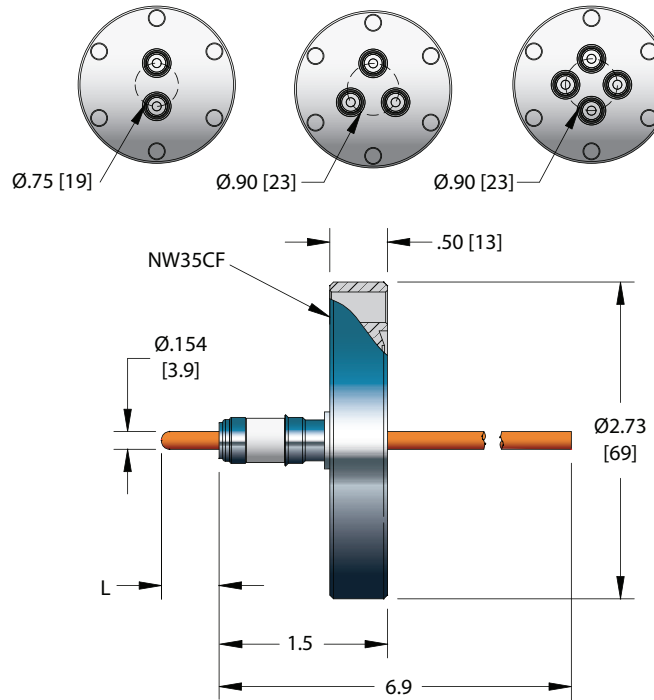
ConFlat - NW16CF



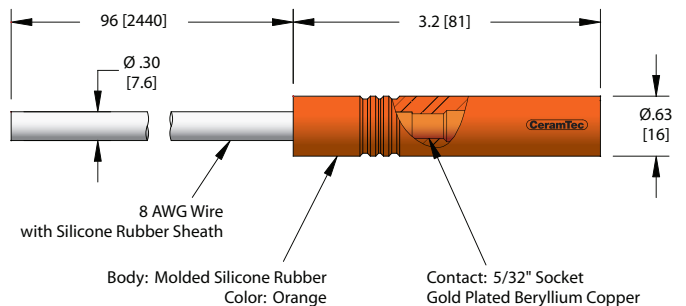
ISO KF - NW40KF



ConFlat - NW35CF



.154 Power Plug



Specifications

Materials

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

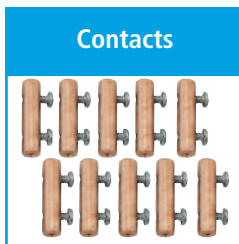
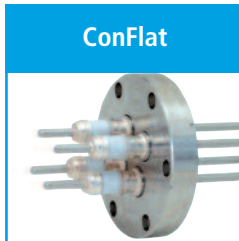
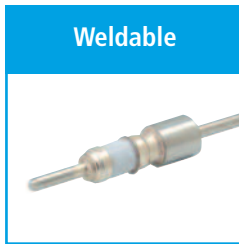
Voltage Rating See table*

Current Rating See table

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

Pressure @ 20°C 1000 PSIG (69 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.



NO. PINS	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	INSTALLATION	DIMENSION "L"	PART NUMBER
1	5 KV	30	Nickel	Weld	1.0"	6514-02-W
1	5 KV	100	Nickel	Weld	1.0"	6514-01-W
1	10 KV	30	Nickel	Weld	.5"	21032-02-W
1	10 KV	100	Copper	Weld	.5"	21032-01-W

ISO FLANGE

1	10 KV	30	Nickel	NW16KF	.5"	21134-02-KF
1	10 KV	100	Copper	NW16KF	.5"	21134-01-KF
2	10 KV	30	Nickel	NW40KF	.5"	21158-02-KF
2	10 KV	100	Copper	NW40KF	.5"	21158-01-KF
3	10 KV	30	Nickel	NW40KF	.5"	21159-02-KF
3	10 KV	100	Copper	NW40KF	.5"	21159-01-KF
4	10 KV	30	Nickel	NW40KF	.5"	21160-02-KF
4	10 KV	100	Copper	NW40KF	.5"	21160-01-KF

CONFLAT FLANGE

1	10 KV	30	Nickel	1 1/3" (NW16CF)	.5"	21131-02-CF
1	10 KV	100	Copper	1 1/3" (NW16CF)	.5"	21131-01-CF
2	10 KV	30	Nickel	2 3/4" (NW35CF)	.5"	21154-02-CF
2	10 KV	100	Copper	2 3/4" (NW35CF)	.5"	21154-01-CF
3	10 KV	30	Nickel	2 3/4" (NW35CF)	.5"	21155-02-CF
3	10 KV	100	Copper	2 3/4" (NW35CF)	.5"	21155-01-CF
4	10 KV	30	Nickel	2 3/4" (NW35CF)	.5"	21156-02-CF
4	10 KV	100	Copper	2 3/4" (NW35CF)	.5"	21156-01-CF

TYPE	CABLE TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
.154 Power Plug	8 AWG	8'	10 kV	75	-55	125	21094-01-A

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.154 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.154 [3.9]	7332-07-A

*When used with air side cable assembly. **Contacts priced and sold in packages of 10. See the Accessories section for more information on all accessories.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

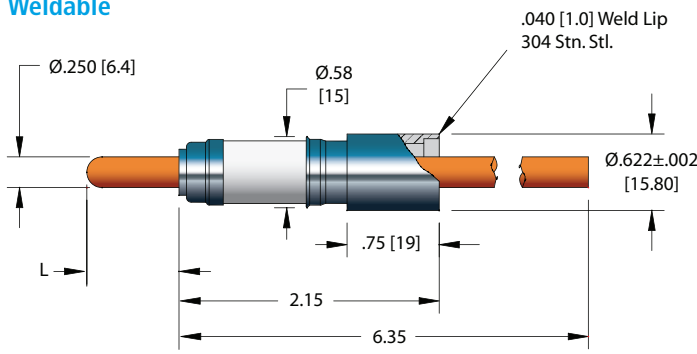
Viewport

Pressure

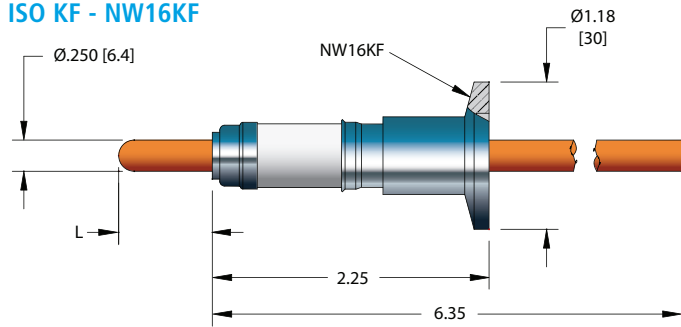
Accessories

Technical Reference

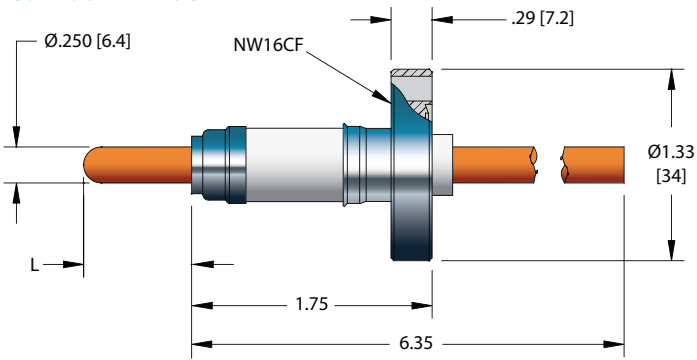
Weldable



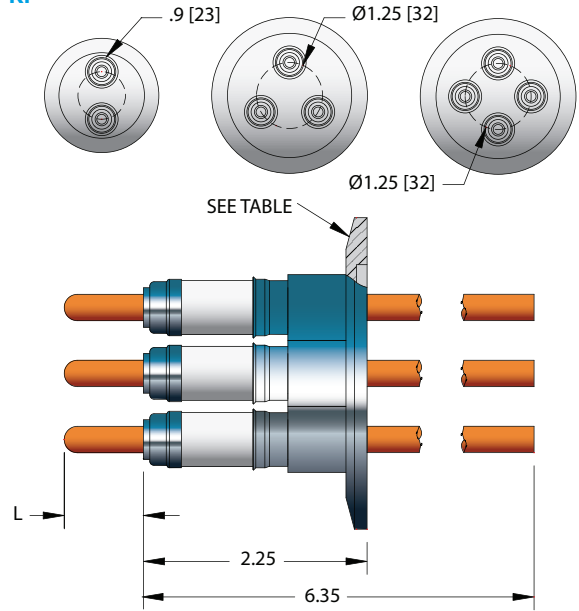
ISO KF - NW16KF



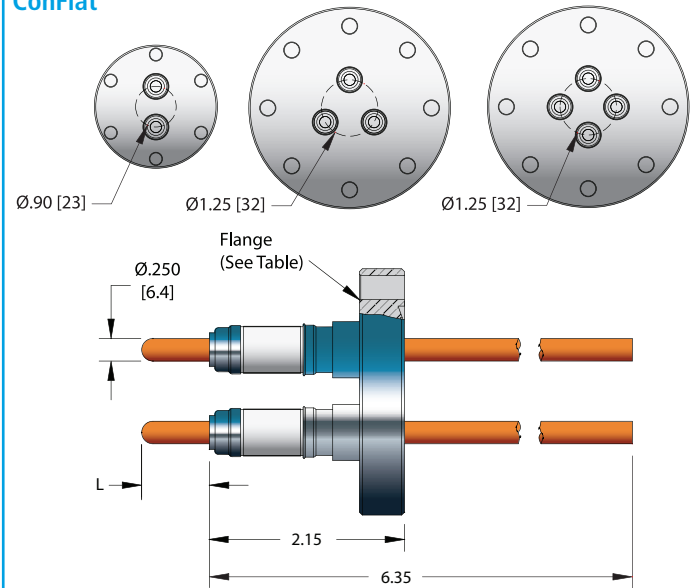
ConFlat - NW16CF



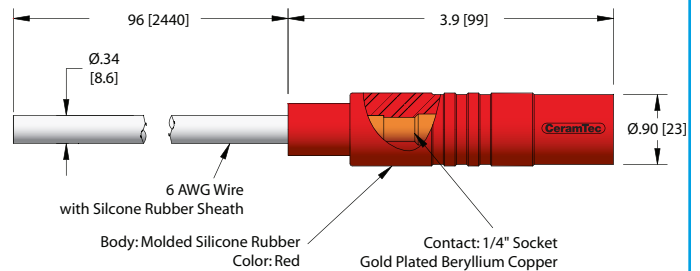
ISO KF



ConFlat



.250 Power Plug



Specifications

Materials

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

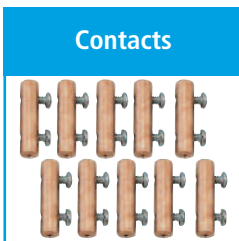
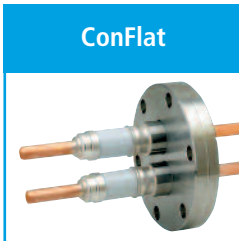
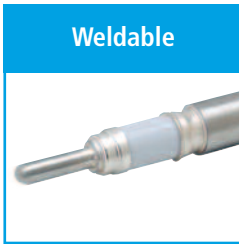
Voltage Rating See table*

Current Rating See table

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

Pressure @ 20°C 750 PSIG (52 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.



NO. PINS	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	INSTALLATION	DIMENSION "L"	PART NUMBER
1	12 KV	56	Nickel	Weld	1.0"	2779-07-W
1	12 KV	185	Copper	Weld	1.0"	2779-01-W
1	15 KV	56	Nickel	Weld	.75"	21414-07-W
1	15 KV	185	Copper	Weld	.75"	21414-01-W

ISO FLANGE

1	15 KV	56	Nickel	NW16KF	.75"	21308-02-KF
1	15 KV	185	Copper	NW16KF	.75"	21308-01-KF
1	15 KV	56	Nickel	NW40KF	.75"	21278-02-KF
1	15 KV	185	Copper	NW40KF	.75"	21278-01-KF
2	15 KV	56	Nickel	NW40KF	.75"	21278-04-KF
2	15 KV	185	Copper	NW40KF	.75"	21278-03-KF
3	15 KV	56	Nickel	NW50KF	.75"	21278-06-KF
3	15 KV	185	Copper	NW50KF	.75"	21278-05-KF
4	15 KV	56	Nickel	NW50KF	.75"	21278-08-KF
4	15 KV	185	Copper	NW50KF	.75"	21278-07-KF

CONFLAT FLANGE

1	15 KV	56	Nickel	1 1/3" (NW16CF)	.75"	21309-02-CF
1	15 KV	185	Copper	1 1/3" (NW16CF)	.75"	21309-01-CF
1	15 KV	56	Nickel	2 3/4" (NW35CF)	.75"	21280-02-CF
1	15 KV	185	Copper	2 3/4" (NW35CF)	.75"	21280-01-CF
2	12 KV	56	Nickel	2 3/4" (NW35CF)	1.0"	16705-06-CF
2	12 KV	185	Copper	2 3/4" (NW35CF)	1.0"	16705-01-CF
2	15 KV	56	Nickel	2 3/4" (NW35CF)	.75"	21280-04-CF
2	15 KV	185	Copper	2 3/4" (NW35CF)	.75"	21280-03-CF
3	15 KV	56	Nickel	4 1/2" (NW63CF)	.75"	21280-06-CF
3	15 KV	185	Copper	4 1/2" (NW63CF)	.75"	21280-05-CF
4	15 KV	56	Nickel	4 1/2" (NW63CF)	.75"	21280-08-CF
4	15 KV	185	Copper	4 1/2" (NW63CF)	.75"	21280-07-CF

TYPE	CABLE TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
.250 Power Plug	6 AWG	8'	25 kv	100	-55	125	20956-02-A

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.250 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.250 [6.4]	7332-06-A [†]
0.250 Clamp Type Contacts	Copper	Accepts wire up to 0.250 [6.4]	18740-01-A

*When used with air side cable assembly. **Contacts priced and sold in packages of 10. [†]Shown in photo. See the Accessories section for more information on all accessories.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

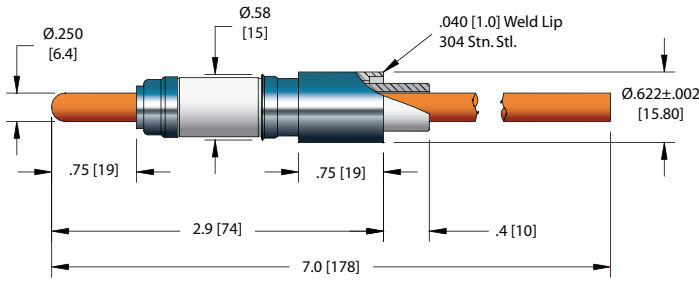
Viewport

Pressure

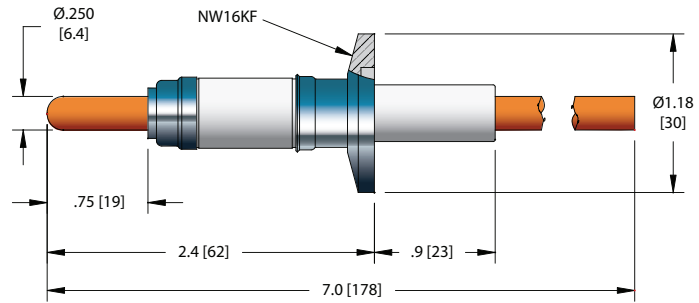
Accessories

Technical Reference

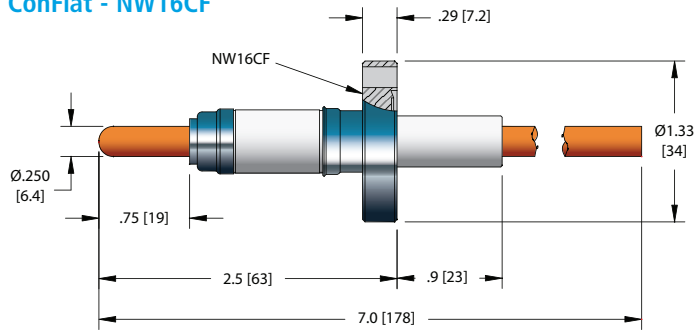
Weldable



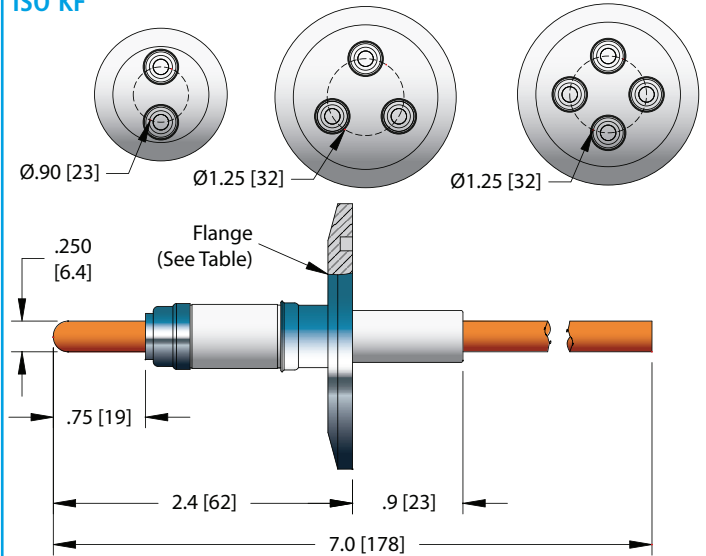
ISO KF - NW16KF



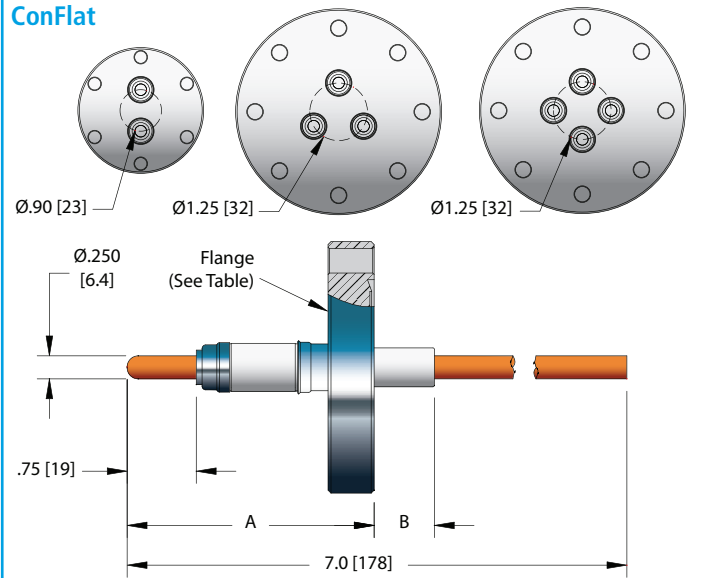
ConFlat - NW16CF



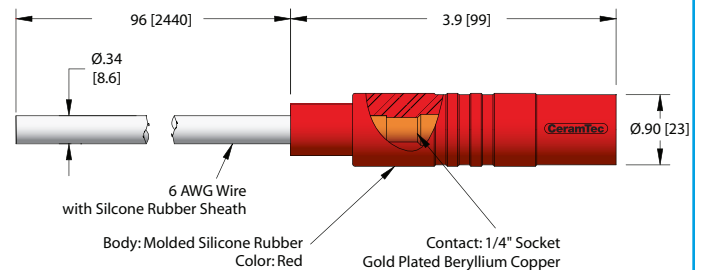
ISO KF



ConFlat



.250 Power Plug



Specifications

Materials

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

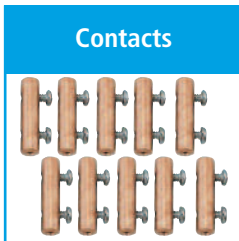
Voltage Rating 25 kV DC*

Current Rating 185 Amps

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

Pressure @ 20°C 750 PSIG (52 Bar), ISO KF 0 PSIG

*When used with air side cable assembly.



NO. PINS	AMPS	CONDUCTORS MATERIAL	INSTALLATION	DIMENSIONS		PART NUMBER
				A	B	
1	185	Copper	Weld	-	-	20955-01-W
1	56	Nickel	Weld	-	-	20955-02-W

ISO FLANGE

1	185	Copper	NW16KF	-	-	21133-01-KF
1	56	Nickel	NW16KF	-	-	21133-02-KF
2	185	Copper	NW40KF	-	-	21149-01-KF
2	56	Nickel	NW40KF	-	-	21149-02-KF
3	185	Copper	NW50KF	-	-	21150-01-KF
3	56	Nickel	NW50KF	-	-	21150-02-KF
4	185	Copper	NW50KF	-	-	21151-01-KF
4	56	Nickel	NW50KF	-	-	21151-02-KF

CONFLAT FLANGE

1	185	Copper	1 1/3" (NW16CF)	-	-	21130-01-CF
1	56	Nickel	1 1/3" (NW16CF)	-	-	21130-02-CF
1	185	Copper	2 3/4" (NW35CF)	2.68 [68]	.65 [17]	21144-01-CF
1	56	Nickel	2 3/4" (NW35CF)	2.68 [68]	.65 [17]	21144-02-CF
2	185	Copper	2 3/4" (NW35CF)	2.68 [68]	.65 [17]	21145-01-CF
2	56	Nickel	2 3/4" (NW35CF)	2.68 [68]	.65 [17]	21145-02-CF
3	185	Copper	4 1/2" (NW63CF)	2.87 [73]	.47 [12]	21146-01-CF
3	56	Nickel	4 1/2" (NW63CF)	2.87 [73]	.47 [12]	21146-02-CF
4	185	Copper	4 1/2" (NW63CF)	2.87 [73]	.47 [12]	21147-01-CF
4	56	Nickel	4 1/2" (NW63CF)	2.87 [73]	.47 [12]	21147-02-CF

TYPE	CABLE TYPE	LENGTH	VOLTAGE DC	CONDUCTOR AMPS	TEMPERATURE °C		PART NUMBER
					MIN	MAX	
.250 Power Plug	6 AWG	8'	25 kV	100	-55	125	20956-02-A

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.250 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.250 [6.4]	7332-06-A [†]
0.250 Clamp Type Contacts	Copper	Accepts wire up to 0.250 [6.4]	18740-01-A

*When used with air side cable assembly. **Contacts priced and sold in packages of 10. [†]Shown in photo. See the Accessories section for more information on all accessories.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

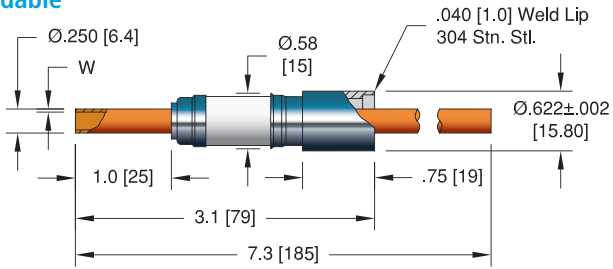
Viewport

Pressure

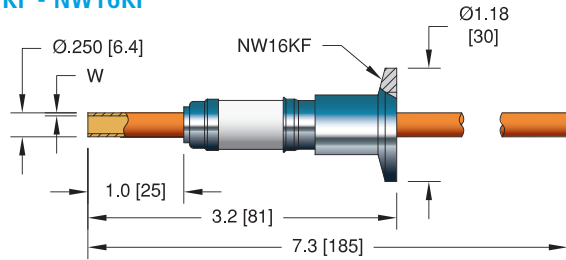
Accessories

Technical Reference

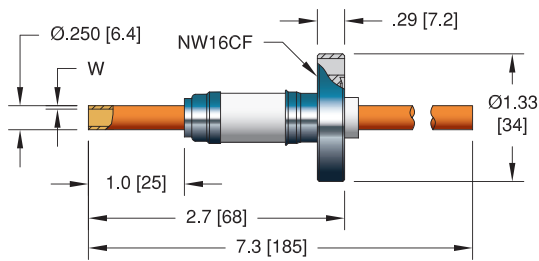
**.250 [6.4] Dia. Conductor
Weldable**



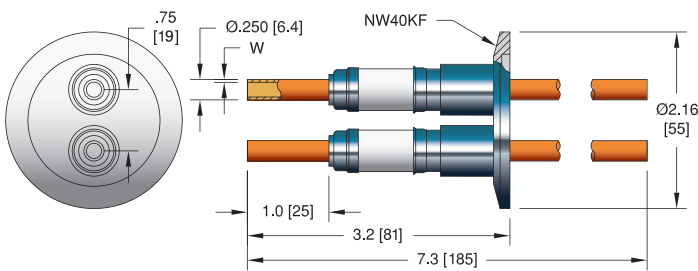
ISO KF - NW16KF



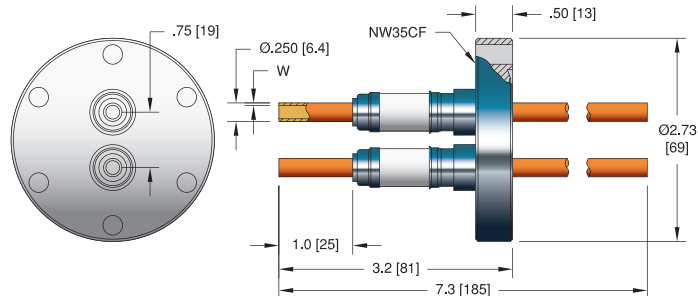
ConFlat - NW16CF



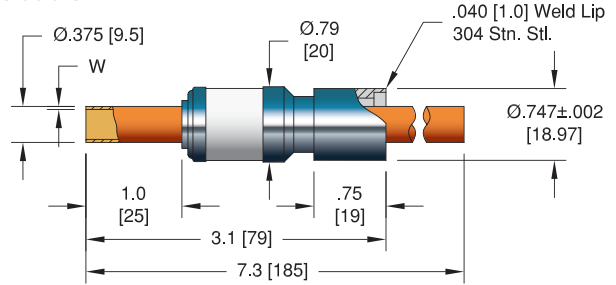
ISO KF - NW40KF



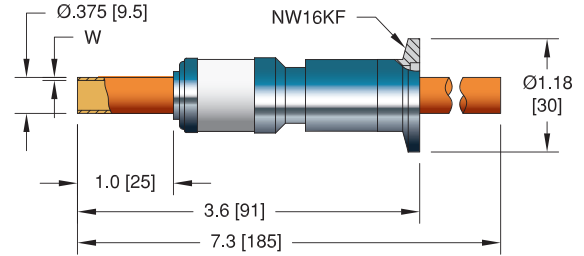
ConFlat - NW35CF



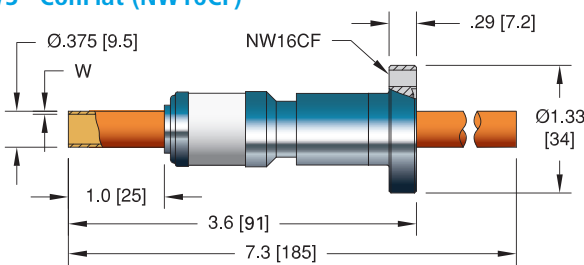
**.375 [9.5] Dia. Conductor
Weldable**



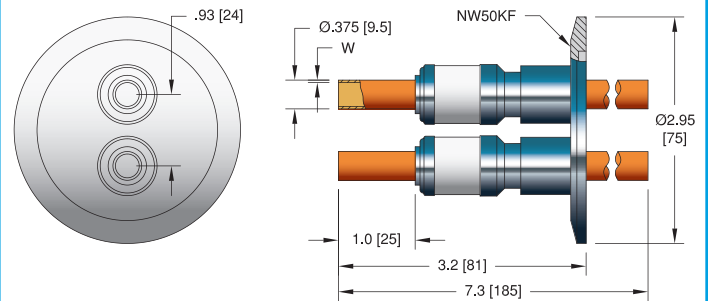
ISO KF - NW16KF



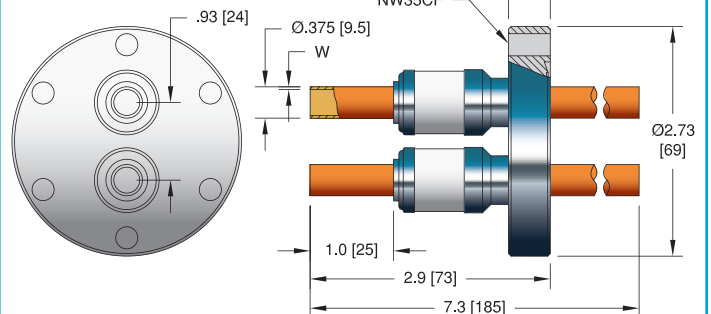
1 1/3" ConFlat (NW16CF)

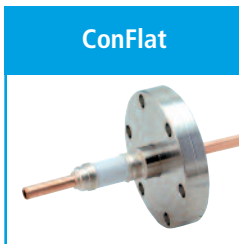
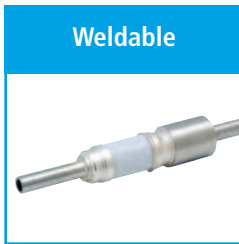


ISO KF - NW50KF



ConFlat - NW35CF





NO. PINS/TUBES	DIA.	CONDUCTOR W	AMPS*	MATERIAL	INSTALLATION	PART NUMBER
1	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	Weld	2779-06-W
1	.250 [6.4]	.032 [0.81]	-	Copper Tube	Weld	2779-02-W
1	.375 [9.5]	.035 [0.89]	-	304 Stn. Stl. Tube	Weld	2780-16-W
1	.375 [9.5]	.032 [0.81]	-	Copper Tube	Weld	2780-02-W
1	.375 [9.5]	-	330	Copper	Weld	2780-01-W

ISO FLANGE

1	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	NW16KF	16614-02-KF
1	.250 [6.4]	.032 [0.81]	-	Copper Tube	NW16KF	16614-05-KF
2	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	NW40KF	14308-06-KF
2	.250 [6.4]	.032 [0.81]	-	Copper Tube	NW40KF	14308-05-KF
1	.375 [9.5]	.035 [0.89]	-	304 Stn. Stl. Tube	NW16KF	17091-05-KF
1	.375 [9.5]	.032 [0.81]	-	Copper Tube	NW16KF	17091-06-KF
1	.375 [9.5]	-	330	Copper	NW16KF	17091-04-KF
2	.375 [9.5]	.035 [0.89]	-	304 Stn. Stl. Tube	NW50KF	17093-05-KF
2	.375 [9.5]	.032 [0.81]	-	Copper Tube	NW50KF	17093-06-KF
2	.375 [9.5]	-	330	Copper	NW50KF	17093-04-KF

CONFLAT FLANGE

1	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	1 1/3" (NW16CF)	7161-02-CF
1	.250 [6.4]	.032 [0.81]	-	Copper Tube	1 1/3" (NW16CF)	7161-05-CF
1	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	2 3/4" (NW35CF)	6700-08-CF
1	.250 [6.4]	.032 [0.81]	-	Copper Tube	2 3/4" (NW35CF)	6700-05-CF
2	.250 [6.4]	.035 [0.89]	-	304 Stn. Stl. Tube	2 3/4" (NW35CF)	16705-04-CF
2	.250 [6.4]	.032 [0.81]	-	Copper Tube	2 3/4" (NW35CF)	16705-02-CF
1	.375 [9.5]	.035 [0.89]	-	304 Stn. Stl. Tube	1 1/3" (NW16CF)	17099-01-CF
1	.375 [9.5]	.032 [0.81]	-	Copper Tube	1 1/3" (NW16CF)	17099-02-CF
1	.375 [9.5]	-	330	Copper	1 1/3" (NW16CF)	17099-06-CF
2	.375 [9.5]	.035 [0.89]	-	304 Stn. Stl. Tube	2 3/4" (NW35CF)	17092-05-CF
2	.375 [9.5]	.032 [0.81]	-	Copper Tube	2 3/4" (NW35CF)	17092-06-CF
2	.375 [9.5]	-	330	Copper	2 3/4" (NW35CF)	17092-04-CF

*Current carrying capacity of the tubular feedthroughs varies based on the coolant used and the flow rate.

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.250 Barrel Type Contacts	Beryllium Copper	Accepts wire up to 0.250 [6.4]	7332-06-A
0.250 Clamp Type Contacts	Copper	Accepts wire up to 0.250 [6.4]	18740-01-A [†]
0.375 Clamp Type Contacts	Copper	Accepts wire up to 0.375 [9.5]	18737-01-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/Tube: See table
 Insulation: Alumina ceramic
 Magnetic Materials: Yes

Voltage Rating 8 kV DC

Current Rating See table

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

Pressure @ 20°C ISO KF 0 PSIG

.250 [6.4] Dia. Conductor: 750 PSIG (52 Bar)
 .375 [9.5] Dia. Conductor: 500 PSIG (34 Bar)

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

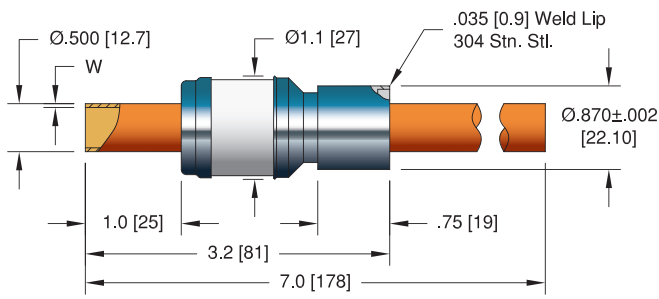
Viewport

Pressure

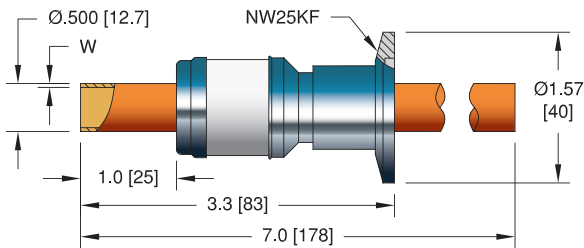
Accessories

Technical Reference

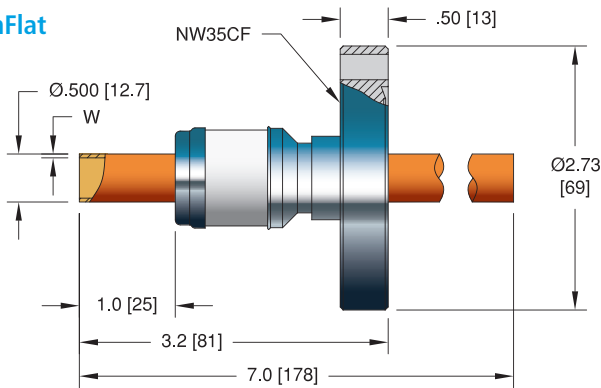
**.500 [12.7] Dia. Conductor
Weldable**



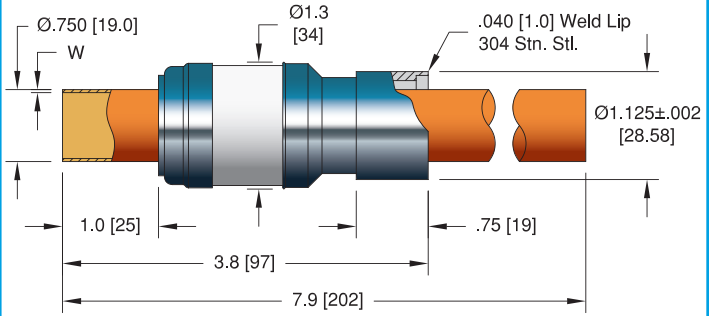
ISO KF



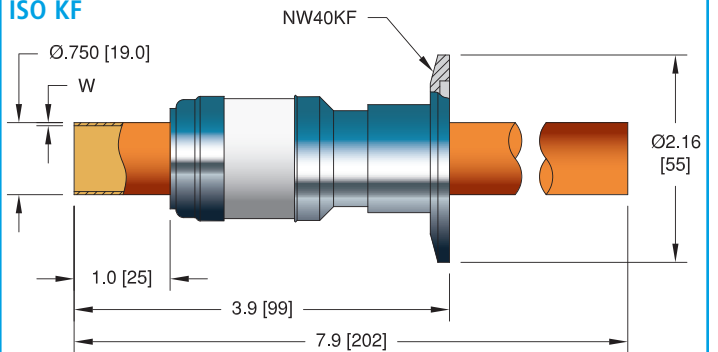
ConFlat



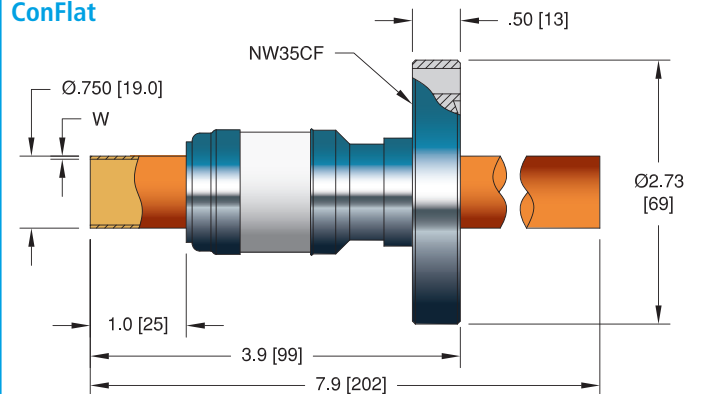
**.750 [19.0] Dia. Conductor
Weldable**



ISO KF



ConFlat



Specifications

Materials

- Housing: 304 Stainless steel
- Pin/Tube: See table
- Insulation: Alumina ceramic
- Magnetic Materials: Yes

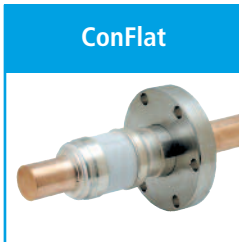
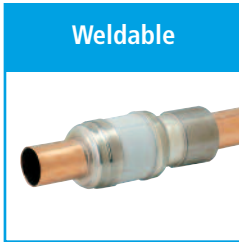
Voltage Rating 8 kV DC

Current Rating See table

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

Pressure @ 20°C ISO KF 0 PSIG

- .500 [12.7] Dia. Conductor: 350 PSIG (24 Bar)
- .750 [19.0] Dia. Conductor: 250 PSIG (17 Bar)



NO. PINS/TUBES	DIA.	CONDUCTOR W	AMPS*	MATERIAL	INSTALLATION	PART NUMBER
1	.500 [12.7]	.032 [0.81]	-	Copper Tube	Weld	17095-06-W
1	.500 [12.7]	-	470	Copper	Weld	17095-04-W
1	.750 [19.0]	.032 [0.81]	-	Copper Tube	Weld	2781-02-W
1	.750 [19.0]	-	800	Copper	Weld	2781-01-W

ISO FLANGE

1	.500 [12.7]	.032 [0.81]	-	Copper Tube	NW25KF	17097-06-KF
1	.500 [12.7]	-	470	Copper	NW25KF	17097-04-KF
1	.750 [19.0]	.032 [0.81]	-	Copper Tube	NW40KF	17094-06-KF
1	.750 [19.0]	-	800	Copper	NW40KF	17094-04-KF

CONFLAT FLANGE

1	.500 [12.7]	.032 [0.81]	-	Copper Tube	2 3/4" (NW35CF)	17096-06-CF
1	.500 [12.7]	-	470	Copper	2 3/4" (NW35CF)	17096-04-CF
1	.750 [19.0]	.032 [0.81]	-	Copper Tube	2 3/4" (NW35CF)	16702-03-CF
1	.750 [19.0]	-	800	Copper	2 3/4" (NW35CF)	16702-01-CF

*Current carrying capacity of the tubular feedthroughs varies based on the coolant used and the flow rate.

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.500 Clamp Type Contact	Copper	Accepts wire up to 0.500 [12.7]	18738-01-A
0.750 Clamp Type Contact	Copper	Accepts wire up to 0.750 [19.0]	18739-01-A [†]

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

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Specifications

Materials

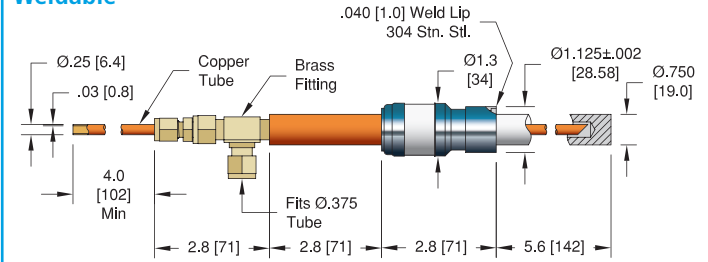
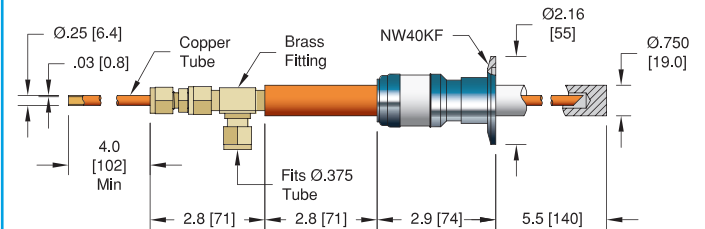
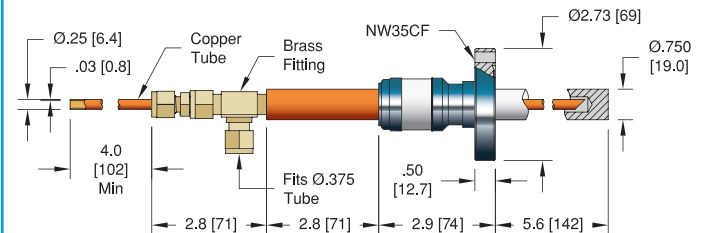
Housing: 304 Stainless steel




Tube: Tellurium copper

Fitting: Brass

Insulation: Alumina ceramic

Magnetic Materials: Yes

Voltage Rating 8 kV DC**Current Rating** 1000 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**.750 [19.0] Dia. Conductor
Weldable****ISO KF****ConFlat**

Weldable	CONDUCTOR			PART	
	AMPS	MATERIAL	INSTALLATION	VOLTAGE DC	NUMBER
	1000	Tellurium Copper	Weld	8 KV	17110-01-W
ISO FLANGE					
ISO KF 	1000	Tellurium Copper	NW40KF	8 KV	17111-01-KF
CONFLAT FLANGE					
ConFlat 	1000	Tellurium Copper	2 3/4" (NW35CF)	8 KV	17112-01-CF

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

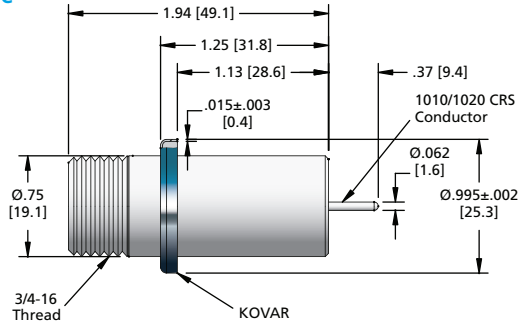
Viewport

Pressure

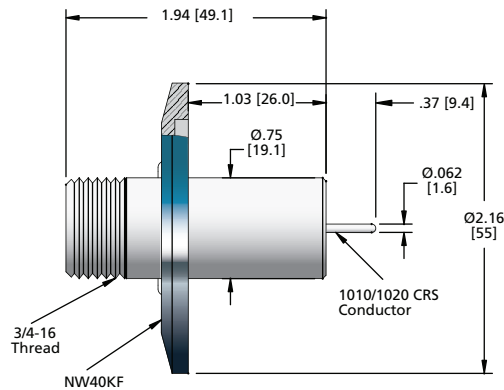
Accessories

Technical Reference

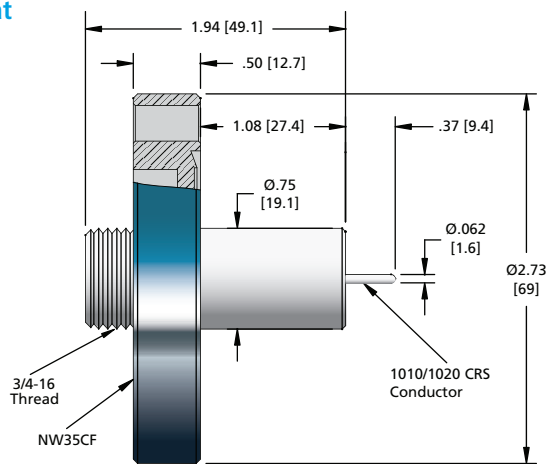
40 KV Single Pin Weldable



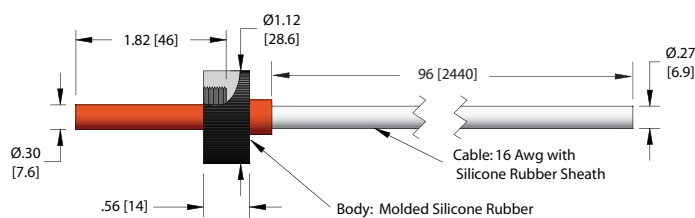
ISO KF



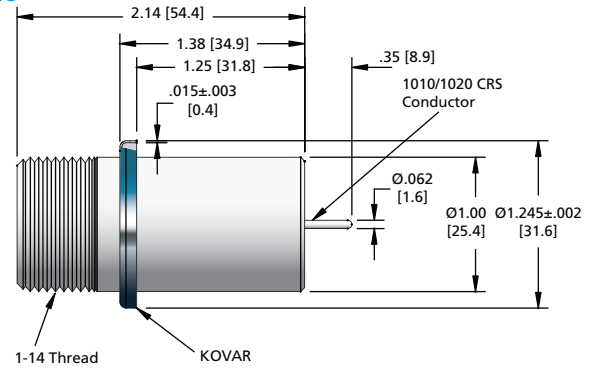
ConFlat



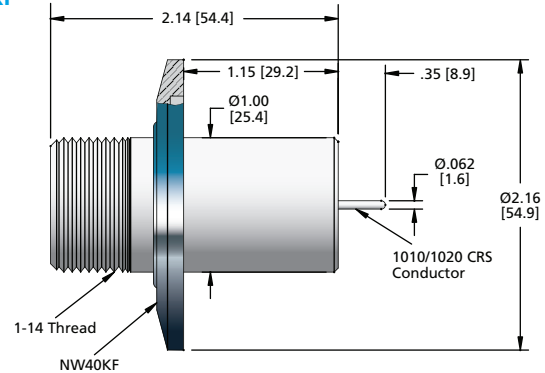
40 KV Cable Assembly



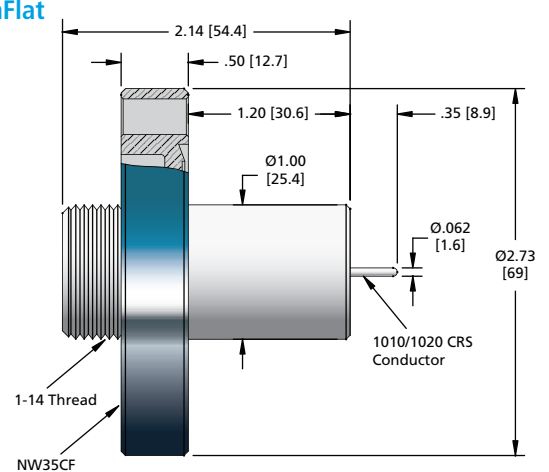
50 KV Single Pin Weldable



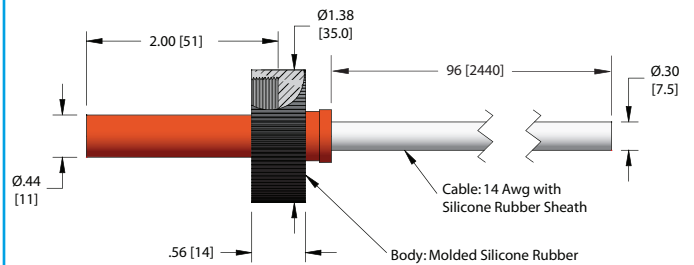
ISO KF

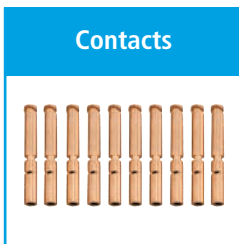


ConFlat



50 KV Cable Assembly





INSTALLATION	VOLTAGE DC	PART NUMBER
Weld	40 kV	21191-01-W
Weld	50 kV	21183-01-W

ISO FLANGE

NW40KF	40 kV	21117-01-KF
NW40KF	50 kV	21185-01-KF

CONFLAT FLANGE

2 3/4" (NW35CF)	40 kV	21194-01-CF
2 3/4" (NW35CF)	50 kV	21184-01-CF

VOLTAGE DC	CABLE TYPE	LENGTH	CURRENT CAPACITY	TEMPERATURE °C MIN	TEMPERATURE °C MAX	PART NUMBER
40 kV	16 AWG	8'	10 Amps	-55	125	21034-01-A
50 kV	14 AWG	8'	10 Amps	-55	125	21112-01-A

TYPE	MATERIAL	DESCRIPTION	PART NUMBER
0.062 Crimp Contacts	Beryllium Copper	Accepts wire up to 0.062 [1.6]	2044-02-A [†]
0.062 Crimp Contacts	Nickel Alloy	Accepts wire up to 0.062 [1.6]	0821-01-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" Crimp Diameters	2840-05

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

Specifications - 40 KV Single Pin

Materials

Housing: Kovar
Pin: Cold Rolled Steel (Nickel plated)
Insulation: Alumina ceramic
Magnetic Materials: Yes

Voltage Rating 40 kV DC*

Current Rating 10 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

Specifications - 50 KV Single Pin

Materials

Housing: Kovar
Pin: Cold Rolled Steel (Nickel plated)
Insulation: Alumina ceramic
Magnetic Materials: Yes

Voltage Rating 50 kV DC*

Current Rating 10 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

*When used with air side cable assembly. The use of silicone insulating grease is recommended for the air side cable assembly to feedthrough interface.

Feedthrough

Multipin Connector

Coaxial

Thermocouple

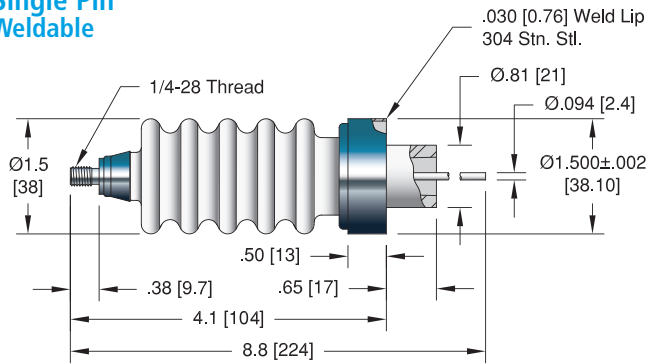
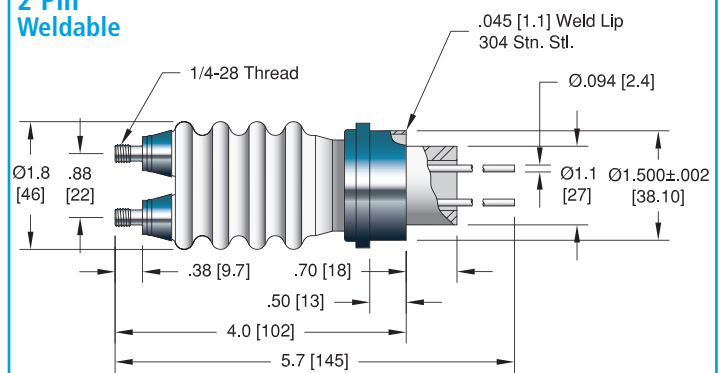
Isolator

Viewport

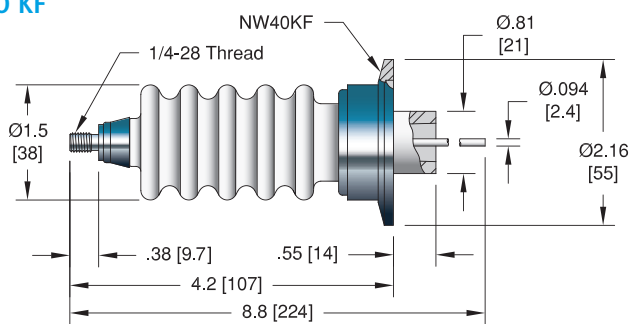
Pressure

Accessories

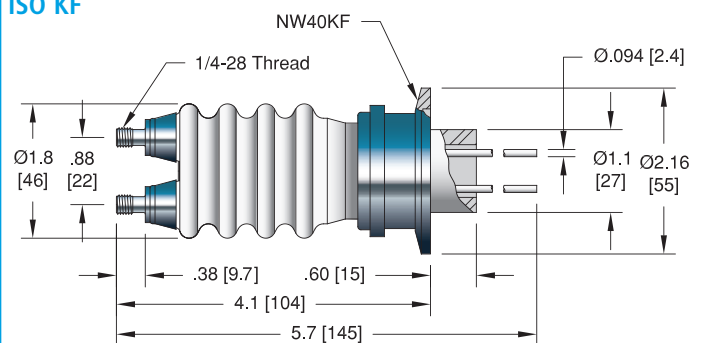
Technical Reference

Single Pin
Weldable2 Pin
Weldable

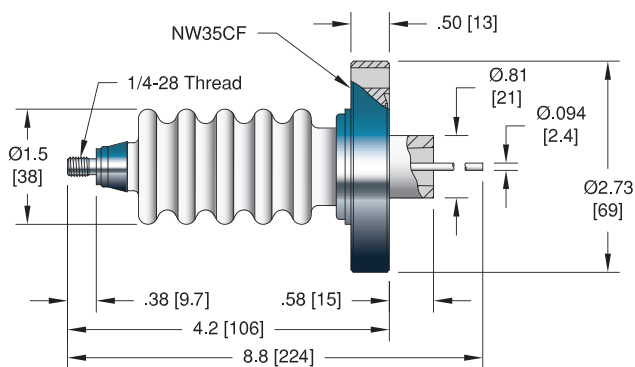
ISO KF



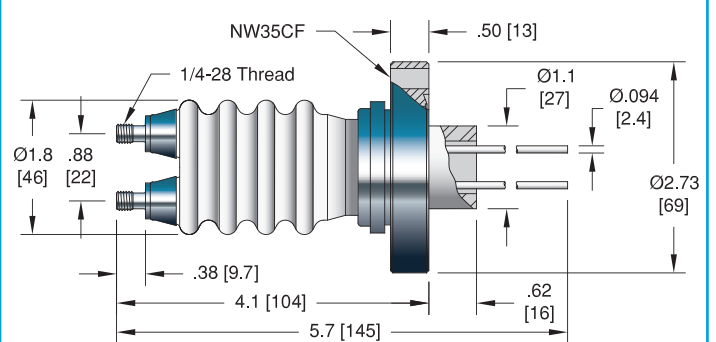
ISO KF



ConFlat



ConFlat



Specifications

Materials


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

Voltage Rating 30 kV DC

Current Rating 4 Amps per pin

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

	NO. PINS	CONDUCTORS AMPS	MATERIAL	INSTALLATION	VOLTAGE DC	PART NUMBER																
Weldable Single Pin 	1	4	304 Stn. Stl.	Weld	30 kV	6530-03-W																
ISO FLANGE																						
ISO KF Single Pin 	1	4	304 Stn. Stl.	NW40KF	30 kV	17100-01-KF																
CONFLAT FLANGE																						
ConFlat Single Pin 	1	4	304 Stn. Stl.	2 3/4" (NW35CF)	30 kV	16729-03-CF																
Weldable 2 Pin 	2	4	304 Stn. Stl.	Weld	30 kV	6532-05-W																
ISO FLANGE																						
ISO KF 2 Pin 	2	4	304 Stn. Stl.	NW40KF	30 kV	17103-03-KF																
CONFLAT FLANGE																						
ConFlat 2 Pin 	2	4	304 Stn. Stl.	2 3/4" (NW35CF)	30 kV	16764-06-CF																
Contacts 	<table border="1"> <thead> <tr> <th>TYPE</th> <th>MATERIAL</th> <th>DESCRIPTION</th> <th>PART NUMBER</th> </tr> </thead> <tbody> <tr> <td>0.094 Set Screw Type Contacts</td> <td>Beryllium Copper</td> <td>Accepts wire up to 0.050 [1.3]</td> <td>7429-01-A</td> </tr> <tr> <td>0.094 Barrel Type Contacts</td> <td>Beryllium Copper</td> <td>Accepts wire up to 0.094 [2.4]</td> <td>7332-04-A†</td> </tr> <tr> <td>Crimp Tool</td> <td></td> <td>For 0.025" - 0.075" Crimp Diameters</td> <td>2840-05</td> </tr> </tbody> </table>					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†	Crimp Tool		For 0.025" - 0.075" Crimp Diameters	2840-05	
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†																			
Crimp Tool		For 0.025" - 0.075" Crimp Diameters	2840-05																			

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

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

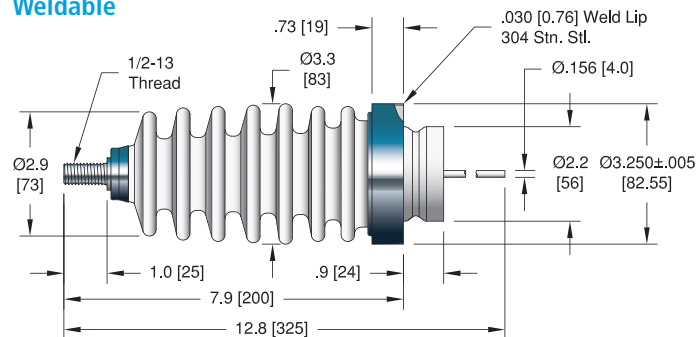
Viewport

Pressure

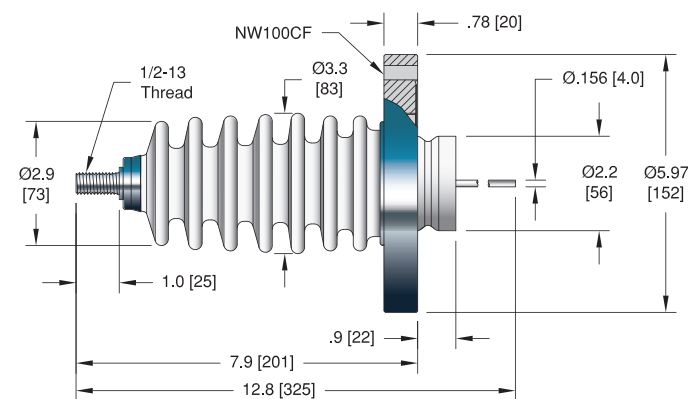
Accessories

Technical Reference

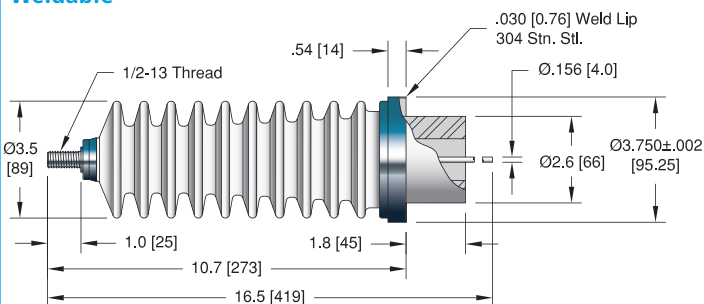
DC Voltage: 70 KV
Weldable



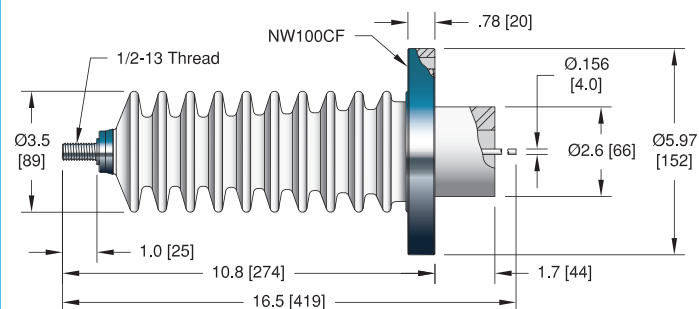
ConFlat



DC Voltage: 100 KV
Weldable



ConFlat



Specifications - 70 KV

Materials

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

Voltage Rating 70 kV DC

Current Rating 6.5 Amps

Temperature Range -269°C to 450°C

Pressure @ 20°C 125 PSIG (8.6 Bar), ISO KF 0 PSIG

Specifications - 100 KV

Materials


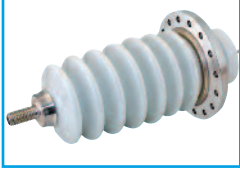


- Housing: 304 Stainless steel
- Conductor: 304 Stainless steel
- Insulation: Alumina ceramic
- Magnetic Materials: Yes

Voltage Rating 100 kV DC

Current Rating 6.5 Amps

Temperature Range -269°C to 450°C

Pressure @ 20°C 125 PSIG (8.6 Bar), ISO KF 0 PSIG

	CONDUCTORS			VOLTAGE	PART
	AMPS	MATERIAL	INSTALLATION	DC	NUMBER
Weldable 70 KV DC 	6.5	304 Stn. Stl.	Weld	70 kV	6526-01-W
CONFLAT FLANGE					
ConFlat 70 KV DC 	6.5	304 Stn. Stl.	6" (NW100CF)	70 kV	7884-01-CF
Weldable 100 KV DC 	6.5	304 Stn. Stl.	Weld	100 kV	6523-01-W
CONFLAT FLANGE					
ConFlat 100 KV DC 	6.5	304 Stn. Stl.	6" (NW100CF)	100 kV	6722-01-CF

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

Viewport

Pressure

Accessories

Technical Reference

Feedthrough

Multipin Connector

Coaxial

Thermocouple

Isolator

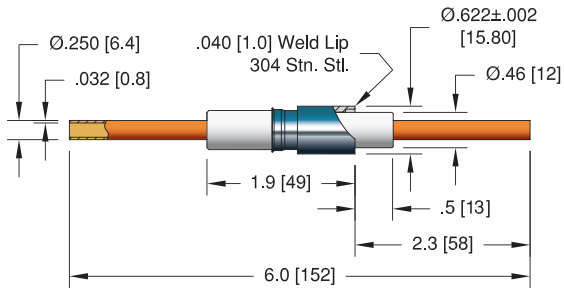
Viewport

Pressure

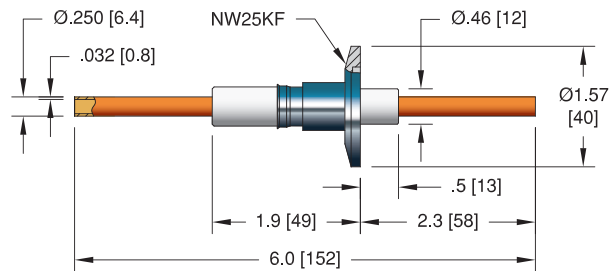
Accessories

Technical Reference

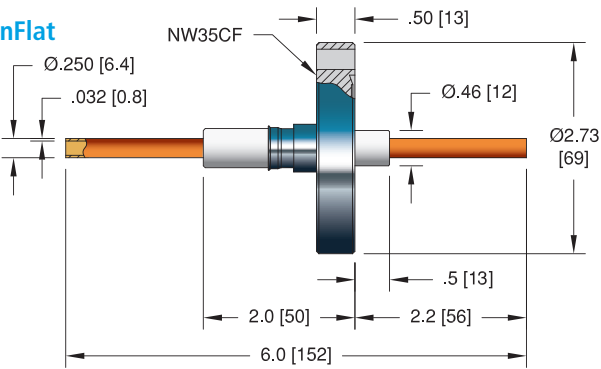
Single Conductor Weldable



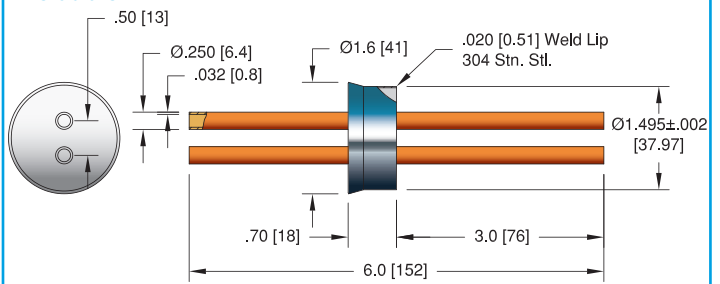
ISO KF



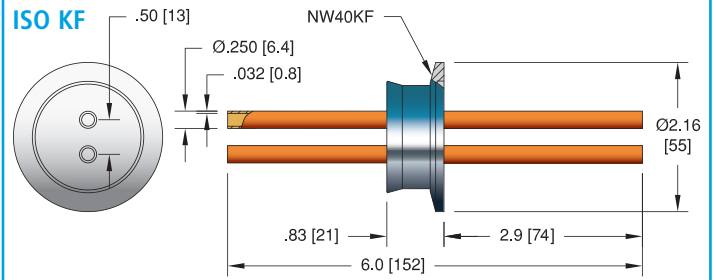
ConFlat



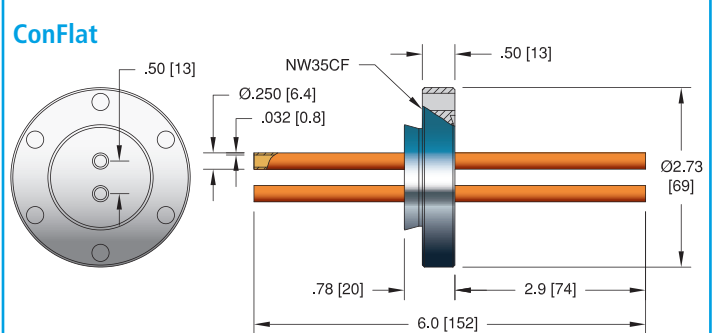
Dual Conductor Weldable



ISO KF



ConFlat



Specifications - Single Conductor

Materials

- Housing: 304 Stainless steel
- Conductor: Copper Tube
- Insulation: Alumina ceramic
- Magnetic Materials: No

Voltage Rating 14 kV DC

Current Rating 100 Amps

Temperature Range -55°C to 350°C, ISO KF -25°C to 205°C

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

Specifications - Dual Conductor

Materials

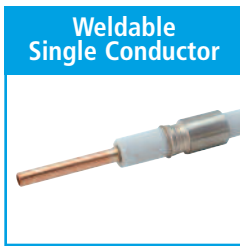
- Housing: 304 Stainless steel
- Conductor: Copper Tube
- Insulation: Alumina ceramic
- Magnetic Materials: No

Voltage Rating 8 kV DC

Current Rating See table

Temperature Range -55°C to 350°C, ISO KF -25°C to 205°C

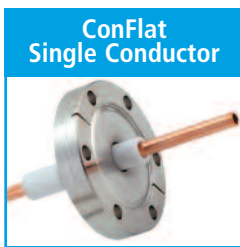
Pressure @ 20°C 125 PSIG (8.6 Bar), ISO KF 0 PSIG



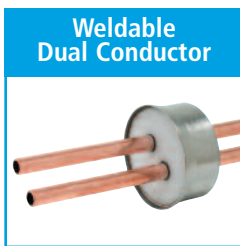
FREQUENCY	CONDUCTOR AMPS	MATERIAL	INSTALLATION	PART NUMBER
13.56 MHz	100	Copper Tube	Weld	16476-01-W



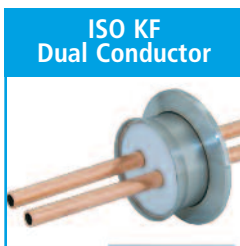
ISO KF FLANGE				
13.56 MHz	100	Copper Tube	NW25KF	16959-01-KF



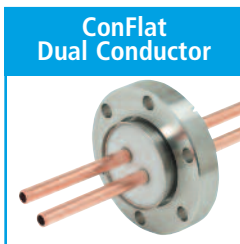
CONFLAT FLANGE				
13.56 MHz	100	Copper Tube	2 3/4" (NW35CF)	16941-01-KF



100 KHz	300	Copper Tube	Weld	16976-01-W
300 KHz	250			
450 KHz	200			
13.56 MHz	100			



ISO KF FLANGE				
100 KHz	300	Copper Tube	NW40KF	17119-01-KF
300 KHz	250			
450 KHz	200			
13.56 MHz	100			



CONFLAT FLANGE				
100 KHz	300	Copper Tube	2 3/4" (NW35CF)	16991-01-CF
300 KHz	250			
450 KHz	200			
13.56 MHz	100			

Feedthrough

Multipin Connector

Coaxial

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Viewport

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Multipin Connector

Coaxial

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Isolator

Viewport

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Accessories

Technical Reference

Specifications

Materials

- Bolt: 304 Stainless steel
- O-Ring: Viton®
- Pin: See table
- Insulation: Alumina ceramic
- Magnetic Materials: See table

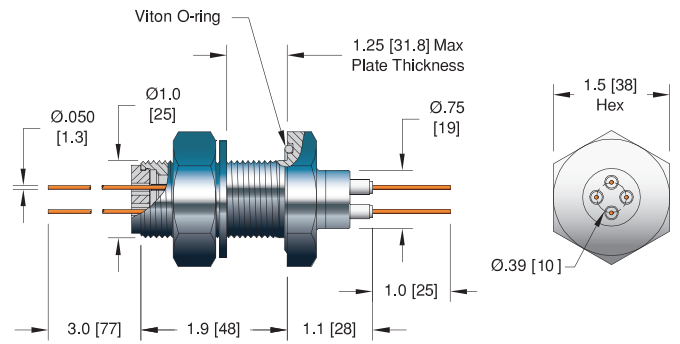
Voltage Rating See table

Current Rating See table

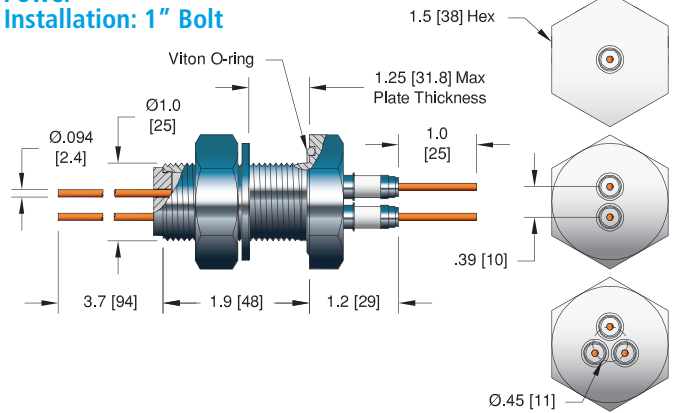
Temperature Range -25°C to 205°C

Pressure @ 20°C 200 PSIG (14 Bar) unless otherwise noted

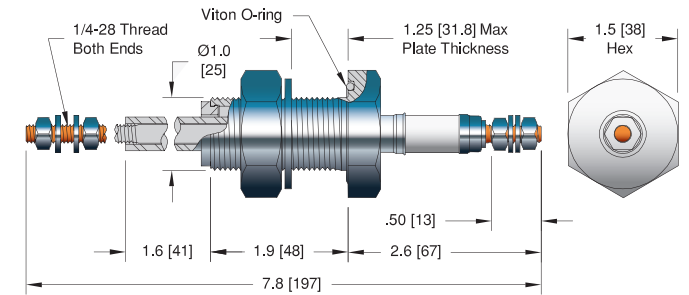
**Instrumentation/Power
Installation: 1" Bolt**



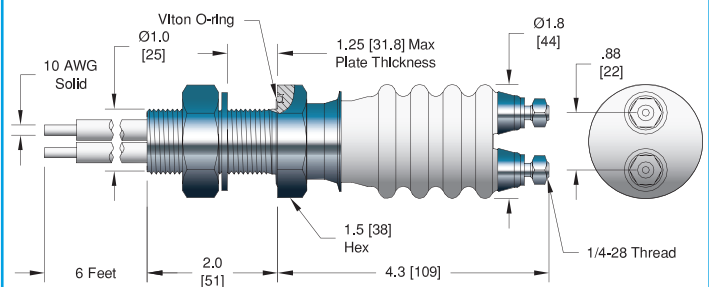
**Power
Installation: 1" Bolt**

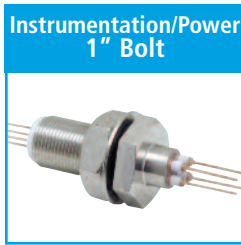


**High Power
Installation: 1" Bolt**

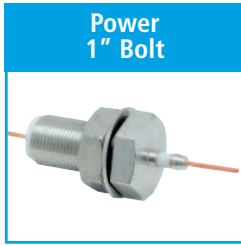


**High Voltage
Installation: 1" Bolt**

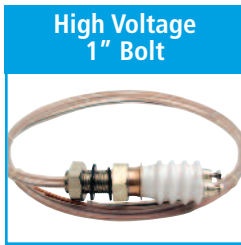




NO. PINS	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	MAGNETIC MATERIALS	PART NUMBER
4	2 kV	8.2	Nickel	Yes	15710-02-A
4	2 kV	27	Copper	No	15710-04-A



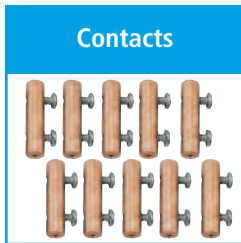
1	5 kV	55	Copper	No	15702-04-A
2	2 kV	55	Copper	No	15703-04-A
3	2 kV	55	Copper	No	15704-04-A



NO. PINS	VOLTAGE DC	CONDUCTOR AMPS	MATERIAL	PRESSURE @ 20°C PSIG	BAR	MAGNETIC MATERIALS	PART NUMBER
2	15 kV	185	Copper	125	8.6	Yes	9388-01-A



DESCRIPTION	PART NUMBER
PTFE Teflon Shield for use with part # 15700-04-A.	17413-01-A



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 [†]
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
Crimp Tool		For 0.025" - 0.075" Crimp Diameters	2840-05

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

Алматы (727)345-47-04
 Ангарск (3955)60-70-56
 Архангельск (8182)63-90-72
 Астрахань (8512)99-46-04
 Барнаул (3852)73-04-60
 Белгород (4722)40-23-64
 Благовещенск (4162)22-76-07
 Брянск (4832)59-03-52
 Владивосток (423)249-28-31
 Владикавказ (8672)28-90-48
 Владимир (4922)49-43-18
 Волгоград (844)278-03-48
 Вологда (8172)26-41-59
 Воронеж (473)204-51-73
 Екатеринбург (343)384-55-89

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 Ижевск (3412)26-03-58
 Иркутск (395)279-98-46
 Казань (843)206-01-48
 Калининград (4012)72-03-81
 Калуга (4842)92-23-67
 Кемерово (3842)65-04-62
 Киров (8332)68-02-04
 Коломна (4966)23-41-49
 Кострома (4942)77-07-48
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 Красноярск (391)204-63-61
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 Новокузнецк (3843)20-46-81
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 Омск (3812)21-46-40
 Орел (4862)44-53-42
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 Сочи (862)225-72-31
 Ставрополь (8652)20-65-13
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 Тверь (4822)63-31-35

Тольятти (8482)63-91-07
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