

High Density Sub-D

26, 44 and 78 Pins in a Standard Shell

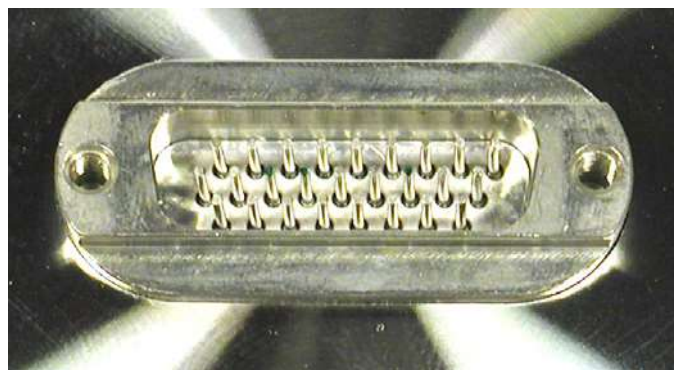
High density Sub-D Connectors offer more pins on the same shell size:

15 Pin standard- Sub-D -> 26 pin HD Sub-D

25 Pin standard- Sub-D -> 44 pin HD Sub-D

50 Pin standard- Sub-D -> 78 pin HD Sub-D

A 3-row / 4-row pin arrangement with reduced pin diameter makes this possible.

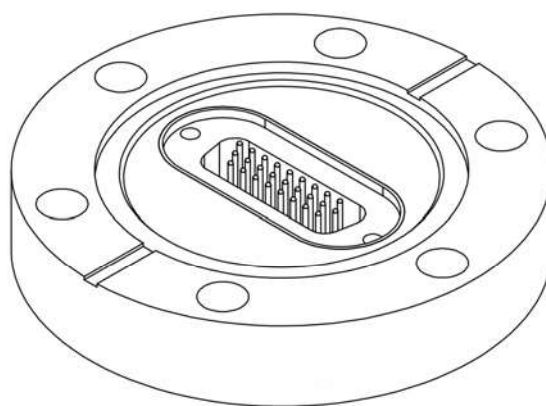


Size	H26	HD44	HD78
CF40	1	-	-
CF63	3	2	1
CF100	8	5	2

List of how many feedthroughs of one shell size will fit to a given CF flange size.



High Density Pins, Male and Female.
As a comparison, a Standard Sub-D Pin is shown on the left.



The Allectra 26 pin High Density Sub-D feedthrough fits on a DN40CF Flange.



Air Side Connector. The connector is solder type. It comes with a thumb screw housing.

High Density Sub-D Feedthroughs on CF Flanges / Ceramic Connectors / Weldable

Here the most common assemblies of High Density feedthroughs on CF flanges are listed.
Combinations with other feedthroughs are available



General Specifications HIGH DENSITY SUB-D

Compliance	DIN 41652 part 2 , MIL-C-24308
Pin-ø	0.7 mm
Pin material	Gold plated NiFe
Seal	Glass Ceramic
Flange	Stainless Steel 316L
Test Voltage	500V DC
Max. Current	3A per pin
Cont. Current	1.5A, all pins loaded
Temp.	-200°C to 230°C
Leak rate	<5x10 ⁻¹⁰ mbar-l/s He

Sub-D Feedthroughs on CF Flanges, HIGH DENSITY

SIZE	NO. OF PINS	PART NUMBER
40CF	26	210-HD26-C40
63CF	44	210-HD44-C63
63CF	78	210-HD78-C63
100CF	78	210-HD78-C100
63CF	2x26 (52)	210-HD26-C63-2
63CF	3x26 (78)	210-HD26-C63-3
63CF	2x44 (88)	210-HD44-C63-2
100CF	2x78 (156)	210-HD78-C100-2

Please ask for a quote for other combinations!

Sub-D High Density CERAMIC CONNECTORS, VACUUM SIDE

TYPE	NO. OF PINS	PART NUMBER
UHV Ceramic	26	211-FS26H-UHV
UHV Ceramic	44	211-FS44H-UHV
UHV Ceramic	78	211-FS78H-UHV

26 / 44 / 78 off Crimp pins are included

PEEK connectors are listed on page 1.25

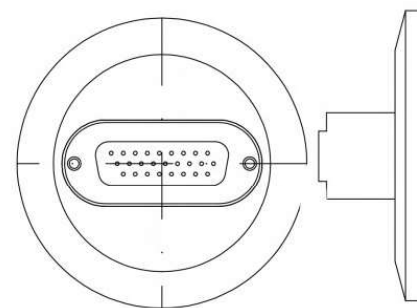
Weldable Sub-D Feedthroughs HIGH DENSITY

SIZE	NO. OF PINS	PART NUMBER
WELD	26	218-HD26-SS
WELD	44	218-HD44-SS
WELD	78	218-HD78-SS

Please note: Welding Sub-D Feedthroughs requires care and experience! Damage to the feedthroughs during welding is not covered by the warranty. We are happy to offer complete assemblies at competitive prices.

High Density Sub-D Feedthroughs on KF and ISO Flanges

Here the most common assemblies of High Density feedthroughs on CF flanges are listed. Combinations with other feedthroughs are available.

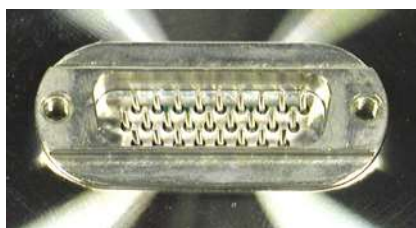


General Specifications HIGH DENSITY SUB-D

Compliance	DIN 41652 part 2 , MIL-C-24308
Pin-ø	0.7 mm
Pin material	Gold plated NiFe
Seal	Glass Ceramic
Flange	Stainless Steel 316L
Test Voltage	500V DC
Max. Current	3A per pin
Cont. Current	1.5A, all pins loaded
Temp.	-200°C to 230°C
Leak rate	<5x10 ⁻¹⁰ mbar-l/s He

Sub-D Feedthroughs on KF / ISO-K Flanges, HIGH DENSITY

SIZE	NO. OF PINS	PART NUMBER
40KF	26	210-HD26-K40
50KF	26	210-HD26-K50
ISO-K63	44	210-HD44-ISO63
ISO-K63	78	210-HD78-ISO63
ISO-K63	2x44 (88)	210-HD44-ISO63-2
ISO-K100	2x78 (156)	210-HD78-ISO100-2



Sub-D HIGH DENSITY Gender Changers for Air side

TYPE	NO. OF PINS	PART NUMBER
Female-Female	26	211-HD26-ADR
Female-Female	44	211-HD44-ADR
Female-Female	78	211-HD78-ADR

Why is there no version with 15 pins and with 68 pins?

The design of the Standard 15-pin Sub D of Allectra fits to a DN40CF, so there is no significant space saving by using a High Density version.

The 68 pin version would be bigger than the 78 pin version (3 row/ 4 row design).

Nevertheless, if you have a reasonable demand for these sizes, Allectra can produce these types.

High Density Sub-D

Connectors for vacuum and air side

For all sizes, fitting vacuum side connectors made from PEEK or Ceramic (page 1.23) are offered. Aluminium housings with strain relief are available.

Important: The versions with 26 and 44 pin are not symmetric on air and vacuum side. By this, the vacuum side connectors will **not** fit to the air side and vice versa. Allectra offers also UHV compatible connectors for the air side for special applications (Please contact sales office for a quote)



General Specifications HIGH DENSITY PINS

Pin-ø	0.7 mm
Cable diameter	0.25 - 0.8 mm max (AWG22)
Material	phosphor bronze (female) Cu-Alloy (male)
Contact finish	hard gold-plated over nickel non-magnetic versions on request

Sub-D High Density CONNECTORS, VACUUM SIDE

TYPE	NO. OF PINS	PART NUMBER
HV/ UHV	26	211-FS26H-PK
HV/ UHV	44	211-FS44H-PK
HV/ UHV	78	211-FS78H-PK

26 / 44 / 78 off Crimp pins are included

Sub-D High Density MALE CONNECTORS, VACUUM SIDE

TYPE	NO. OF PINS	PART NUMBER
HV/ UHV	26	211-MS26H-PK
HV/ UHV	44	211-MS44H-PK
HV/ UHV	78	211-MS78H-PK

Please note: These versions fit to the vacuum side connectors listed above.

Contact sales office for versions fitting to the air side of our feedthroughs for special applications.

26 / 44 / 78 off Crimp pins are included

Sub-D High Density CONNECTORS AIR SIDE

TYPE	NO. OF PINS	PART NUMBER
AIR	26	211-FS26H-AIR
AIR	44	211-FS44H-AIR
AIR	78	211-FS78H-AIR

Sub-D High Density CRIMP PINS

TYPE	NO. OF PINS	PART NUMBER
FEMALE	10	212-PINFHD-10
FEMALE	26	212-PINFHD-26
FEMALE	44	212-PINFHD-44
MALE	10	212-PINMHD-10
MALE	26	212-PINMHD-26
MALE	44	212-PINMHD-44

For 78 pins please use 3x26 pin packages

HD vacuum connectors include already crimp pins

Non-magnetic female pins are available as well, add "-NM" to the part number