

# Ultra-High Pressure Valves, Fittings & Tubing

## Ultra-High Pressure Valves Up to (150,000 PSI / 10345 BAR)



### Features & Benefits

HTG Standard Needle Valve offer low-torque, compact design providing positive shutoff in applications up to 150,000 psi. Other features include:

- Two pieces heavy duty non-rotating stem for a reliable assembly.
- Bi-directional flow capability.
- Panel mounting option available.
- 4-sided tapered stem for maximum handle contact.
- Complete material traceability.

1/4"	3/8"	Ultra High Pressure
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### Specifications

Pressure rating	: 100,000 – 150,000 psi
Temp. Rating	: -100°F to 600°F
Body Material	: SS316 cold Worked
Stem	: 15-5 PH
Packing	: Glass filled Teflon

### Typical Applications

- Hydraulic applications
- Pneumatic applications
- General plant service
- Isolating or venting

### Optional

- Grafoil Packing for temperature up to 800°F
- Extended Stuffing Box for temperature up to 1200°F
- Air Actuator for remote control operation is available
- Can be manufactured to meet NACE MR0175 standard
  - o Reduces throttling and therefore increase seat life

# Ultra-High Pressure Valves, Fittings & Tubing

## Ultra-High Pressure Check Valves (100,000 – 150,000 PSI / 6896 – 10345 BAR)

1/4"	3/8"	Ultra High Pressure
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### Specifications

Pressure rating	: 100,000 to 150,000 psi
Ball Seat Poppet	: -420°F to 1200°F
Soft Seat Poppet	: -65°F to 250°F
Body Material	: SS316 cold worked
Cracking Press.	: 15 PSI

### Typical Applications

- Hydraulic applications
- Pneumatic applications
- General plant service

### Features & Benefits

- Prevents reverse flow where leak-tight shutoff is required.
- Ball Seat Poppet offers metal to metal seat for rapid cycling or severe environments.
- Soft Seat Poppet offers O-ring seat for fast shutoff and reliable seal.
- Nitrile is standard material of Soft Seat Poppet Check Valve.
- Complete material traceability.



## Ultra-High Pressure Fittings and Tubing (100,000 – 150,000 PSI / 6896 – 10345 BAR)

1/4"	3/8"	Ultra High Pressure
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### Specifications

Pressure rating	: 100,000 – 150,000 psi
Body Material	: SS316 cold worked

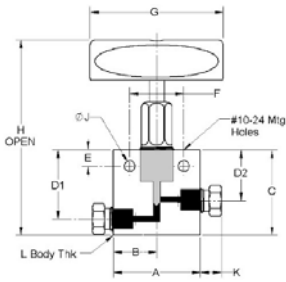
### Features & Benefits

- A complete range of elbows, tees, crosses and adaptors are available for all of the tubing connection sizes.
- Can be manufactured to meet NACE MR0175 standard.
- Other materials available on request.



# Ultra-High Pressure Needle Valves (Up to 150,000 PSI / 10345 BAR)

## Ultra-High Pressure 2-Way Straight Valves

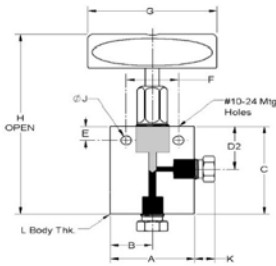


Pressure (PSI)	Connection Type	Connection Size in.	Part Number	Orifice in. (mm)
100,000	Ultra-High Pressure Cone & Thread	1/4	<b>100NVS4XF</b>	1/16 (0.0625)
150,000	Ultra-High Pressure Cone & Thread	3/8	<b>150NVS6XF</b>	1/16 (0.0625)

### Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
3.00 (76.2)	1.50 (38.1)	2.38 (60.45)	1.75 (44.45)	1.44 (36.58)	0.5 (12.7)	1.75 (44.45)	4.00 (101.6)	5.025 (128.32)	0.34 (8.73)	0.59 (15.0)	1.376 (34.95)
3.50 (88.9)	1.75 (44.45)	2.63 (66.8)	1.75 (44.45)	1.44 (36.58)	0.5 (12.7)	1.75 (44.45)	4.00 (101.6)	5.025 (128.32)	0.34 (8.73)	0.59 (15.0)	1.376 (34.95)

## Ultra-High Pressure 2-Way Angle Valves



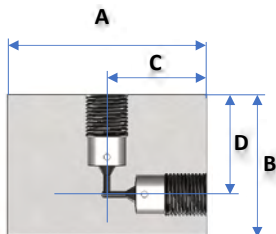
Pressure (PSI)	Connection Type	Connection Size in.	Part Number	Orifice in. (mm)
100,000	Ultra-High Pressure Cone & Thread	1/4	<b>100NVA4XF</b>	1/16 (0.0625)
150,000	Ultra-High Pressure Cone & Thread	3/8	<b>150NVA6XF</b>	1/16 (0.0625)

### Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
3.00 (76.2)	1.50 (38.1)	2.38 (60.45)	-	1.44 (36.58)	0.5 (12.7)	1.75 (44.45)	4.00 (101.6)	5.025 (128.32)	0.34 (8.73)	0.59 (15.0)	1.376 (34.95)
3.50 (88.9)	1.75 (44.45)	3.50 (88.9)	-	1.44 (36.58)	0.5 (12.7)	1.75 (44.45)	4.00 (101.6)	5.025 (128.32)	0.34 (8.73)	0.59 (15.0)	1.376 (34.95)

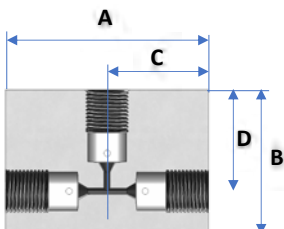
# Ultra-High Pressure Fittings (Up to 150,000 PSI / 10,345 BAR)

## Ultra-High Pressure Elbows



Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	Thickness (in.)
<b>100L4XF</b>	100,000	1/4" UHP.F	1.75	1.75	1.25	1.25	1.00
<b>150L6XF</b>	150,000	3/8" UHP.F	2.63	2.63	1.75	1.75	1.50

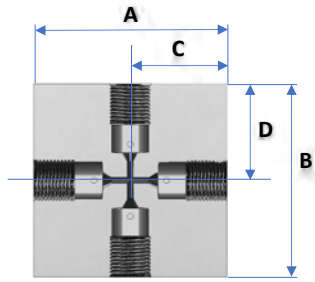
## Ultra-High Pressure Tees



Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	Thickness (in.)
<b>100T4XF</b>	100,000	1/4" UHP.F	2.50	1.75	1.25	1.25	1.00
<b>150T6XF</b>	150,000	3/8" UHP.F	3.50	2.63	1.75	1.75	1.50

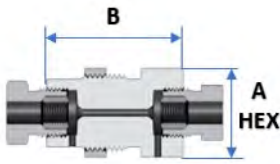
# Ultra-High Pressure Fittings (Up to 150,000 PSI / 10,345 BAR)

## Ultra-High Pressure Crosses



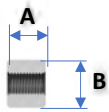
Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	Thickness (in.)
<b>100X4XF</b>	100,000	1/4" UHP.F	2.50	2.50	1.25	1.25	1.00
<b>150X6XF</b>	150,000	3/8" UHP.F	3.50	2.63	1.75	1.75	1.50

## Ultra-High Pressure Bulkhead Couplings



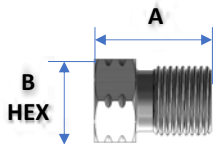
Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	Panel Cutout (in.)
<b>100BU4XF</b>	100,000	1/4" UHP.F	1.00	2.00	0.94
<b>150BU6XF</b>	150,000	3/8" UHP.F	1.75	4.00	1.25

## Ultra-High Pressure Collars



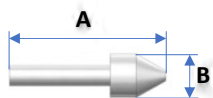
Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
<b>100CL4X</b>	100,000	1/4" OD	0.38	0.38
<b>150CL6X</b>	150,000	3/8" OD	0.50	0.688

## Ultra-High Pressure Glands



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
<b>100GL4X</b>	100,000	1/4" OD	1.13	0.63
<b>150GL6X</b>	150,000	3/8" OD	1.13	0.81

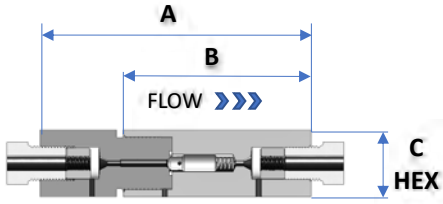
## Ultra-High Pressure Plugs



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
<b>100PL4X</b>	100,000	1/4" OD	1.13	0.38
<b>150PL6X</b>	150,000	3/8" OD	1.75	0.50

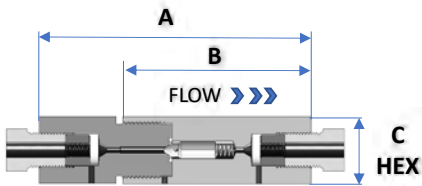
# Ultra-High Pressure Check Valves (Up to 150,000 PSI / 10,345 BAR)

## Ultra-High Pressure Ball Check Valves



Part Number	Pressure (PSI)	Orifice (in.)	Connections	A (in.)	B (in.)	C (in.)
<b>100BCV4XF</b>	100,000	0.094	1/4" HP.F	4.00	3.00	1.25
<b>150BCV6XF</b>	150,000	0.125	3/8" HP.F	4.50	3.50	1.25

## Ultra-High Pressure Soft Seat Check Valves



Part Number	Pressure (PSI)	Orifice (in.)	Connections	A (in.)	B (in.)	C (in.)
<b>100SCV4XF</b>	100,000	0.094	1/4" HP.F	4.00	3.00	1.25
<b>150SCV6XF</b>	150,000	0.125	3/8" HP.F	4.50	3.50	1.25

## Ultra-High Pressure Tubing & Nipples (Up To 150,000PSI / 10,345 BAR)

HTG's high pressure tubing is capable of operating up to 150,000 psi and range in size from 1/4" to 3/8" tube size. Tubing is cold drawn, seamless and high yield & tensile strength in connection with high elongation.

Standard tubing is available in 316 stainless steel tubing, other materials available by request.

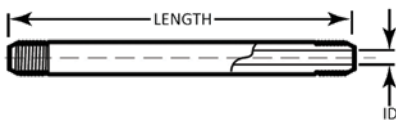
-\* Tubing is stocked in lengths of 20-27 feet



### Ultra-High Pressure Tubing

Part Number	Tubing Size	Connections	Material	Pressure (PSI)
<b>100TU4X-*</b>	1/4" O.D. x 1/16" I.D.	1/4" UHP	SS316	100,000
<b>150TU6X-*</b>	3/8" O.D. x 1/16" I.D.	3/8" UHP	SS316	150,000

### Ultra-High Pressure Coned and Threaded Nipples



Tubing Size (Pressure)

Length	Tubing Size (Pressure)	
	1/4" O.D. x 0.083" I.D. (100,000 psi)	3/8" O.D. x 0.125" I.D. (150,000 psi)
<b>2 3/4"</b>	<b>100N4X-2.75</b>	
<b>4"</b>	<b>100N4X-4</b>	<b>150N6X-4</b>
<b>6"</b>	<b>100N4X-6</b>	<b>150N6X-6</b>
<b>8"</b>	<b>100N4X-8</b>	<b>150N6X-8</b>
<b>10"</b>	<b>100N4X-10</b>	<b>150N6X-8</b>
<b>12"</b>	<b>100N4X-12</b>	<b>150N6X-10</b>

