

PETROMETALIC

Solutions de régulation des fluides

High Pressure Equipment

1 - Low Pressure Valves, Fittings and Tubing
10,000 and 15,000 psi service



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PETROMETALIC Cambrai

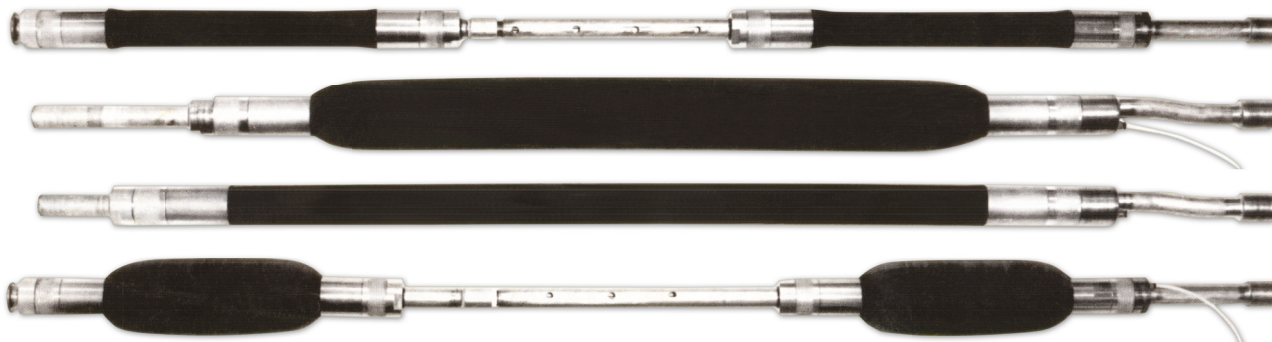
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DÉPARTEMENT ACTIVITÉS SPÉCIFIQUES, TP ET INDUSTRIE



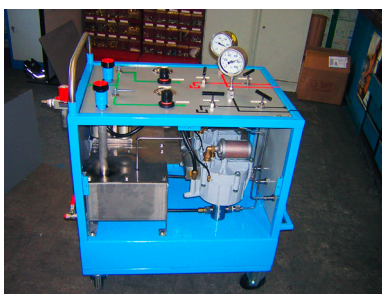
OBTURATEURS BIMBAR / PACKERS

Petrometalic développe et exporte dans le monde entier depuis 1975 le tuyau dilatable BIMBAR, d'abord pour l'abattage hydraulique du charbon, ensuite pour la consolidation des sols et les applications géotechniques.

📄 plus d'information sur les obturateurs sur Petrometalic.com



Surpresseur de chantier SP400 - 90 à 490 bar



Pompe HP Le Touquet - 210 à 2100 bar



Surpresseur SP2300 - 10 à 2330 bar



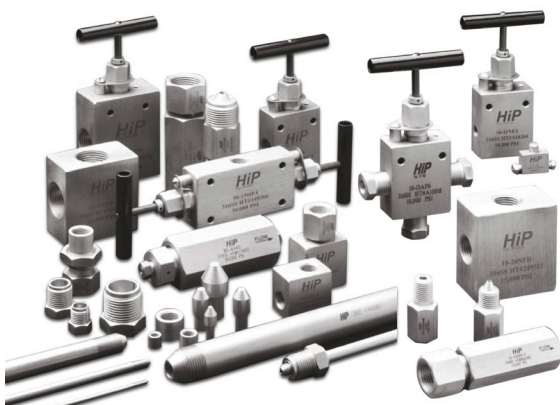
Pompe gros débit S218GJC - jusqu'à 1380 bar

POMPES ET SURPRESSEURS

Surpresseurs nus ou équipés en centrale jusqu'à 3000 bars.

- ▶ Types
 - surpresseurs hydropneumatiques
 - surpresseurs à gaz
 - surpresseurs d'injection ciment ou résine
 - surpresseurs de chantier
 - pompes manuelles
- ▶ Domaines
 - TP
 - offshore
 - industrie
 - géotechnologie

📄 catalogue surpresseurs et pompes téléchargeables sur Petrometalic.com



RACCORDS ET TUBES TRÈS HAUTE PRESSION

Une gamme HP et THP couvrant tous les composants consultables et téléchargeables dans nos catalogues.

📄 catalogues THP téléchargeables sur Petrometalic.com

SERVICE COMMERCIAL

email : packers@petrometalic.com
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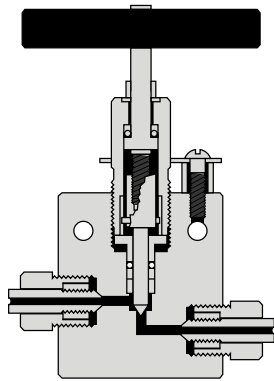
NOS ENGAGEMENTS

- ✓ un stock de 1.1M€
- ✓ 50 ans d'expérience
- ✓ conseil de qualité

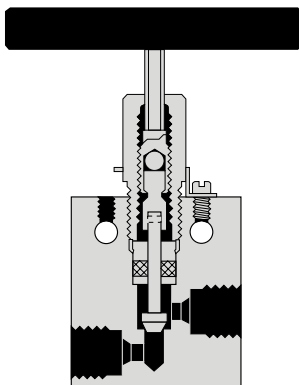
Valve Design

General

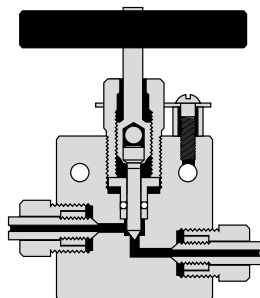
- Valve bodies through 100,000 psi are high tensile Type 316 stainless steel, 150,000 psi valve bodies are 17-4 PH stainless steel.
- Stem assemblies have non-rotating tips to prevent galling with valve seats.
- Packing is located below the stem threads to prevent contact with media (liquid or gas).
- Packing glands are equipped with locking devices or lock nuts.
- Six valve patterns (see chart on page 1.3).
- Tubing connections are: $\frac{1}{16}$ " , $\frac{1}{8}$ " , $\frac{1}{4}$ " , $\frac{3}{8}$ " , $\frac{9}{16}$ " , $\frac{3}{4}$ " , and 1". Pipe connections include: $\frac{1}{8}$ " , $\frac{1}{4}$ " , $\frac{3}{8}$ " , $\frac{1}{2}$ " , $\frac{3}{4}$ " , and 1" NPT.
- Remote control air operators are available for most valves.



Positive Guide Stem



Pinned Stem



Rolled Style Stem

Positive Guide Stem: High Pressure Equipment Company's patented "Positive Guide" stem assembly virtually eliminates lower stem rotation — one of the most common causes of premature stem failure. The lower section stem is manufactured from hardened 17-4 PH stainless steel for exceptional wear and corrosion resistance and can be easily serviced with no special tooling required. The one-piece upper section stem eliminates the need for continual adjustment and minimizes "loose handle" backlash.

The Positive Guide Stem is standard for all AF4, AF6, HF4, HF6, and HF9 valves, and 60,000 psi HF2 valves.

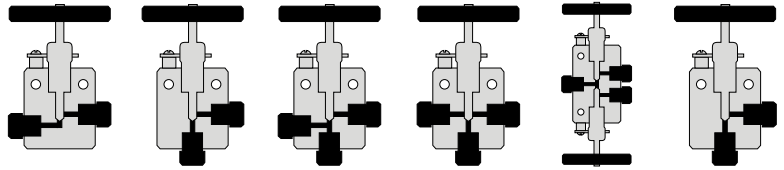
Rolled Style Stem: This simple two-piece design is also non-rotating and is ideal for smaller valves and for valves made from exotic materials. The standard lower section stem is manufactured from hardened 17-4 PH stainless steel. It is affixed to a one-piece upper stem requiring no periodic adjustment. The two stem components are free to rotate independently of each other, thereby minimizing rotation of the lower stem against the valve seat.

The Rolled Style Stem is standard for all AF1, AF2, NFA, NFB, LF4, LF6 valves, 30,000 psi HF2, XF4, and XF6 valves, as well as most valves requiring stems made from exotic materials. It is optional for any valve normally supplied with a Positive Guide Stem.

Pinned Stem Design: This variation on the Rolled Style Stem is a three-piece design in which the lower stem is pinned into a freely-rotating stem guide. It has all of the advantages of the rolled style stem, with the additional benefit of a replaceable lower section stem.

The Pinned Stem Design is standard for all NFC, NFD, NFF, NFH, LF9, LF12, LF16, and HF16 valves.

Quick Selector Guide to Standard Valves



Taper Seal Valves

	Tubing Size		Two Way Straight	Two Way Angle	Three Way Two Press	Three Way One Press	Three Way Two Stem	Replaceable Seat
	O.D.	I.D.						
10,000 psi	1/4"	1/8"	10-11AF4	10-12AF4	10-13AF4	10-14AF4	10-15AF4	NA
	3/8"	1/4"	10-11AF6	10-12AF6	10-13AF6	10-14AF6	10-15AF6	NA
15,000 psi	1/16"	.030"	15-11AF1	15-12AF1	15-13AF1	15-14AF1	15-15AF1	NA
	1/8"	1/16"	15-11AF2	15-12AF2	15-13AF2	15-14AF2	15-15AF2	NA
20,000 psi	1/4"	7/64"	20-11LF4	20-12LF4	20-13LF4	20-14LF4	20-15LF4	20-12LF4R
	3/8"	19/64"	20-11LF6	20-12LF6	20-13LF6	20-14LF6	20-15LF6	20-12LF6R
	9/16"	5/16"	20-11LF9	20-12LF9	20-13LF9	20-14LF9	20-15LF9	20-12LF9R
	3/4"	33/64"	20-11LF12	20-12LF12	20-13LF12	20-14LF12	20-15LF12	20-12LF12R
	1"	11/16"	20-11LF16	20-12LF16	20-13LF16	20-14LF16	20-15LF16	20-12LF16R
30,000 psi	1/8"	.040"	30-11HF2	30-12HF2	30-13HF2	30-14HF2	30-15HF2	30-12HF2R
	1/4"	.083"	30-11HF4	30-12HF4	30-13HF4	30-14HF4	30-15HF4	30-12HF4R
	3/8"	1/8"	30-11HF6	30-12HF6	30-13HF6	30-14HF6	30-15HF6	30-12HF6R
	9/16"	3/16"	30-11HF9	30-12HF9	30-13HF9	30-14HF9	30-15HF9	30-12HF9R
60,000 psi	1/8"	.020"	60-11HF2	60-12HF2	60-13HF2	60-14HF2	60-15HF2	60-12HF2R
	1/4"	1/16"	60-11HF4	60-12HF4	60-13HF4	60-14HF4	60-15HF4	60-12HF4R
	3/8"	1/8"	60-11HF6	60-12HF6	60-13HF6	60-14HF6	60-15HF6	60-12HF6R
	9/16"	3/16"	60-11HF9	60-12HF9	60-13HF9	60-14HF9	60-15HF9	60-12HF9R
100,000 psi	1/4"	1/16"	100-11XF4	100-12XF4	100-13XF4	100-14XF4	NA	100-12XF4R
150,000 psi	3/8"	1/16"	150-11XF6	150-12XF6	150-13XF6	150-14XF6	NA	150-12XF6R

Medium Pressure Valves

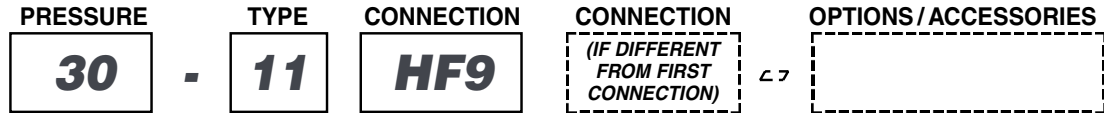
High Pressure Valves

Ultra High Pressure Valves



High Pressure Equipment

Catalog Numbering System



Pressure Series

- 10 = 10,000 psi
- 15 = 15,000 psi
- 20 = 20,000 psi
- 30 = 30,000 psi
- 40 = 40,000 psi
- 60 = 60,000 psi
- 100 = 100,000 psi
- 150 = 150,000 psi

Catalog part numbers for some components (NPT fittings, special alloy parts) have been maintained for historical consideration.

The referred pressure series may not reflect the actual pressure rating. Please refer to applicable catalog page for pressure rating, or consult the factory.

Type of Components

- 2 = Gland, Collar or Sleeve
- 3 = Anti-Vibration Assembly
- 7 = Plug
- 11 = 2-Way Straight Valve
- 12 = 2-Way Angle Valve
- 13 = 3-Way Valve with Two Pressure Connections
- 14 = 3-Way Valve with One Pressure Connections
- 15 = 3-Way, 2-Stem Valve
- 16 = Ball Valve (Floating)
- 21 = Coupling or Adapter
- 22 = Elbow
- 23 = Tee
- 24 = Cross
- 41 = Check Valve
- 51 = Line Filter
- 61 = Safety Head (Straight)
- 63 = Safety Head (Tee Type)
- 71 = 2-Way Ball Valve *
- 72 = 3-Way Ball Valve 180° *
- 73 = 3-Way Ball Valve Diverter *
- 74 = 2-Way Ball Valve *
- 75 = 3-Way Ball Valve 180° *
- 76 = 3-Way Ball Valve Diverter *
- 77 = 3-Way Mini Ball Valve 1/4" NPT
- 80 = 2-Way Ball Valve *
- 81 = 3-Way Ball Valve 180° *
- 82 = 3-Way Ball Valve Diverter *

* (Trunion)

Connection(s) Size and Type

Female	Male	
AF1	AM1	1/16" Taper Seal
AF2	AM2	1/8" Taper Seal
AF4	AM4	1/4" Taper Seal
AF6	AM6	3/8" Taper Seal
LF4	LM4	1/4" Medium Pressure
LF6	LM6	3/8" Medium Pressure
LF9	LM9	9/16" Medium Pressure
LF12	LM12	3/4" Medium Pressure
LF16	LM16	1" Medium Pressure
HF2	HM2	1/8" High Pressure
HF4	HM4	1/4" High Pressure
HF6	HM6	3/8" High Pressure
HF9	HM9	9/16" High Pressure
HF16	HM16	1" High Pressure
XF4	XM4	1/4" Ultra High Pressure
XF6	XM6	3/8" Ultra High Pressure
NFA	NMA	1/8" NPT Pipe
NFB	NMB	1/4" NPT Pipe
NFC	NMC	3/8" NPT Pipe
NFD	NMD	1/2" NPT Pipe
NFF	NMF	3/4" NPT Pipe
NFH	NMH	1" NPT Pipe
—	HA9	9/16" Hose
—	HA12	3/4" Hose
—	HA16	1" Hose
—	HA21	1 5/16" Hose

Options

- V = Micro Control Metering Assembly (See page 6.5)
- HT = High Temperature Stem Extension (Up to 1,000° F) (See page 6.4)
- SGS = Sour Gas (H₂S) Service
- N/O = Normally Open
- N/C = Normally Closed
- K = With Antivibration Collars and Glands
- REG = Regulating Tip
- TSR8 = Ball Valve Actuator
- TDA8 = Ball Valve Actuator Double Acting
- W/O = Without Collars and Glands
- LT = Low Temperature Stem Extension (to -320°F)
- MPO-NO = Medium Duty Piston Operator Normally Open
- MPO-NC = Medium Duty Piston Operator Normally Closed
- HPO-NO = Heavy Duty Piston Operator Normally Open
- HPO-NC = Heavy Duty Piston Operator Normally Closed
- EHPO-NO = Extra Heavy Piston Operator Normally Open
- EHPO-NC = Extra Heavy Piston Operator Normally Closed

How to Order Valves and Fittings

Simply indicate catalog number and specify option or special requirement.

Examples:

- 30-11HF4 = 30,000 psi Straight Valve for 1/4" O.D. tubing
- 60-23HF4 = 60,000 psi Tee for 1/4" O.D. tubing
- 15-21AF2 = 15,000 psi Straight Coupling for 1/8" O.D. tubing, Taper Seal connections
- 15-21AF2NMB = 15,000 psi Adapter with one end 1/8" O.D. Female Taper Seal and opposite end Male 1/4" NPT Pipe
- 30-11HF6-HT = 30,000 psi Straight Valve for 3/8" O.D. tubing with High Temperature Extension
- "HIPCO" 10-12NFB (N/C) = 10,000 psi Angle Valve for 1/4" NPT Pipe with "Hipco" Air Operator, Normally Closed
- "HIPPO" 15-11A4F (N/C) = 10,000 psi Angle Valve for 1/4" Taper Seal with "Hippo" Piston Operator, Normally Closed
- 60-21HF4 (Hastelloy C-276) = 60,000 psi Straight Coupling for 1/4" O.D. tubing, made from Hastelloy C-276 material



Warranty

High Pressure Equipment Company warrants the products which it manufactures to be free from defects in material and workmanship which would impair their intended usefulness. This warranty is for a period of one year after the date of shipment. Warranty is limited to the repair or replacement of any item manufactured by High Pressure Equipment Company. High Pressure Equipment Company shall not be liable for any direct or indirect consequential damage arising from a failure or malfunction of the equipment. This warranty further excludes damage, failure or malfunction which is caused by corrosion or erosion common to the material supplied.

Terms: Net 30 for qualified accounts

FOB: Erie, PA - USA



High Pressure Equipment

Low Pressure Valves, Fittings and Tubing

Taper Seal and NPT -10,000 and 15,000 psi service

High Pressure Equipment Company has developed the Taper Seal and NPT lines of products to assure safe and easy plumbing through 15,000 psi. These needle valves, fittings, line filters, check valves, safety heads, rupture discs and tubing are engineered and manufactured to the highest standards of repeatable quality. The reliable performance of these products has made HiP one of the world's leading suppliers of elevated pressure components.



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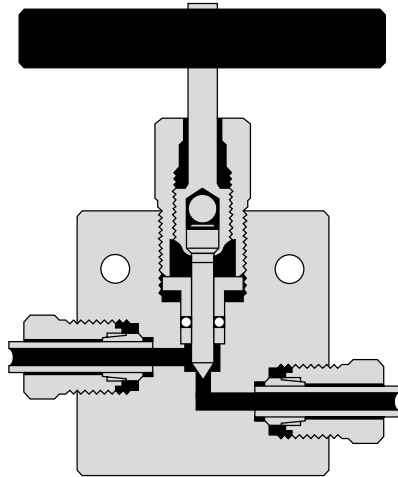
Index - NPT

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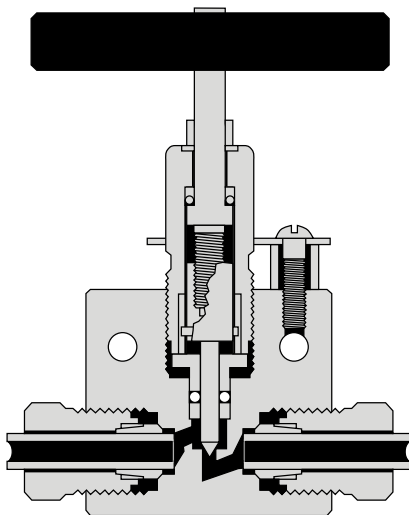


High Pressure Equipment

Taper Seal Needle Valves 10,000 and 15,000 psi service



AF1 ($\frac{1}{16}$ ") and AF2 ($\frac{1}{8}$ ")
15,000 psi



AF4 ($\frac{1}{4}$ ") and AF6 ($\frac{3}{8}$ ")
10,000 psi

Compression type tubing connections for $\frac{1}{16}$ " , $\frac{1}{8}$ " , $\frac{1}{4}$ " , and $\frac{3}{8}$ " O.D. tubing. Requires no special tooling for tubing preparation (simply cut off, deburr, and insert tubing into connection). Connection details are shown on page 2.A.

Non-rotating tip stems are standard for on-off service and insure long life on valve seats. Regulating tip stems are available at no additional cost, add - REG to the catalog number.

Glands and sleeves are supplied with each valve unless otherwise requested (glands and sleeves shown on 2.A).

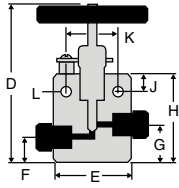
Materials include high tensile type 316 stainless steel for the valve body and hardened 17-4PH stainless steel lower section stem.

Packing is Teflon (450°F) standard, with optional Viton (350°F), BUNA-N (200°F) or Grafoil (650°F) available at no additional cost.

Air operators for remote control operation are available for all valves. (Select required valve and add "HIPCO". Refer to section 7.0 for additional data).

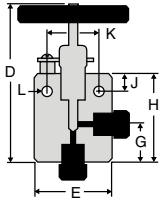
Valve Features

- Non-rotating stem tips
- Packing below stem threads
- Type 316 ss high tensile bodies
- Positive gland lock device
- No stem adjustment needed
- Black T-handles or choice of 4 colors
- Tube sizes $\frac{1}{16}$ " through $\frac{3}{8}$ "



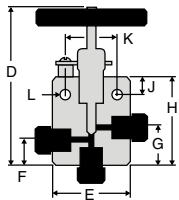
Two Way Straight Valves

Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/16" O.D.	15-11AF1	15,000	AF1	0.052"	2 1/2"	1 1/8"	1/4"	13/32"	1 1/8"	5/16"	3/4"	9/64"	1/2"
1/8" O.D.	15-11AF2	15,000	AF2	1/16"	3 1/8"	1 1/2"	1 1/16"	15/16"	1 13/16"	5/16"	7/8"	9/64"	3/4"
1/4" O.D.	10-11AF4	10,000	AF4	1/8"	4 5/8"	2"	1 1/2"	1 1/2"	1 7/8"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	10-11AF6	10,000	AF6	1/8"	4 5/8"	2"	1 1/2"	1 1/2"	1 7/8"	1/2"	1 3/8"	7/32"	1"



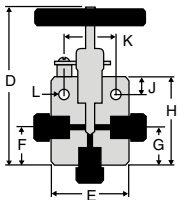
Two Way Angle Valves

Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/16" O.D.	15-12AF1	15,000	AF1	0.052"	2 5/8"	1 1/8"	—	2 1/32"	1 3/8"	5/16"	3/4"	9/64"	1/2"
1/8" O.D.	15-12AF2	15,000	AF2	1/16"	3 1/8"	1 1/2"	—	1 5/16"	1 13/16"	5/16"	7/8"	9/64"	3/4"
1/4" O.D.	10-12AF4	10,000	AF4	1/8"	5 5/16"	2"	—	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	10-12AF6	10,000	AF6	1/8"	5 5/16"	2"	—	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"



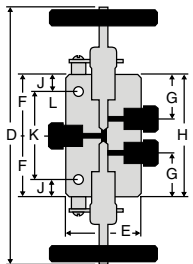
Three Way Valves / Two Pressure Connections

Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/16" O.D.	15-13AF1	15,000	AF1	0.052"	2 3/4"	1 1/8"	1/2"	2 1/32"	1 3/8"	5/16"	3/4"	9/64"	1/2"
1/8" O.D.	15-13AF2	15,000	AF2	1/16"	3 1/8"	1 1/2"	1 1/16"	1 5/16"	1 13/16"	5/16"	7/8"	9/64"	3/4"
1/4" O.D.	10-13AF4	10,000	AF4	1/8"	5 3/16"	2"	1 1/2"	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	10-13AF6	10,000	AF6	1/8"	5 3/16"	2"	1 1/2"	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"



Three Way Valves / One Pressure Connection

Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/16" O.D.	15-14AF1	15,000	AF1	0.052"	2 3/4"	1 1/8"	2 1/32"	2 1/32"	1 3/8"	5/16"	3/4"	9/64"	1/2"
1/8" O.D.	15-14AF2	15,000	AF2	1/16"	3 1/8"	1 1/2"	1 5/16"	1 5/16"	1 13/16"	5/16"	7/8"	9/64"	3/4"
1/4" O.D.	10-14AF4	10,000	AF4	1/8"	5 3/16"	2"	1 1/16"	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	10-14AF6	10,000	AF6	1/8"	5 3/16"	2"	1 1/16"	1 1/16"	2 7/16"	1/2"	1 3/8"	7/32"	1"



Three Way / Two Stem Connection Valves

Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/16" O.D.	15-15AF1	15,000	AF1	0.052"	4 3/4"	1 1/8"	1"	2 3/32"	2"	5/16"	1 3/8"	9/64"	1/2"
1/8" O.D.	15-15AF2	15,000	AF2	1/16"	5"	1 1/2"	1 1/4"	7/8"	2 1/2"	5/16"	1 7/8"	9/64"	3/4"
1/4" O.D.	10-15AF4	10,000	AF4	1/8"	8 7/8"	2"	1 11/16"	1 3/16"	3 3/8"	1/2"	2 3/8"	7/32"	1"
3/8" O.D.	10-15AF6	10,000	AF6	1/8"	8 7/8"	2"	1 11/16"	1 3/16"	3 3/8"	1/2"	2 3/8"	7/32"	1"



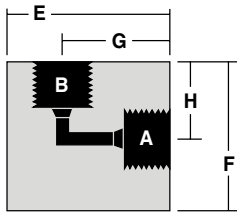
High Pressure Equipment

Glands/Sleeves/Plugs Elbows/Tees/Crosses

A complete range of elbows, tees, and crosses is available for all of the tubing connection sizes. Material is high tensile 316 stainless steel. Standard tubing glands and sleeves are furnished unless otherwise specified.

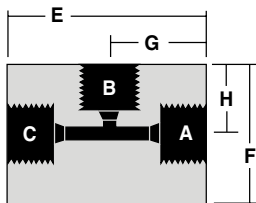
Connection Components

Catalog No.	Tube Size	Gland	Catalog No.	Tube Size	Sleeve	Catalog No.	Tube Size	Plug
15-2AM1	1/16"		15-2A1	1/16"		15-7AM1	1/16"	
15-2AM2	1/8"		15-2A2	1/8"		15-7AM2	1/8"	
10-2AM4	1/4"		10-2A4	1/4"		10-7AM4	1/4"	
10-2AM6	3/8"		10-2A6	3/8"		10-7AM6	3/8"	



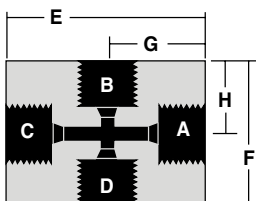
Taper Seal Elbows

Catalog No.	Pressure Rating psi	Connections	A-B	E	F	G	H	Thickness
15-22AF1	15,000	1/16" O.D. TUBE	AF1	3/4"	3/4"	9/16"	9/16"	3/8"
15-22AF2	15,000	1/8" O.D. TUBE	AF2	1 1/8"	1 1/8"	3/4"	3/4"	3/4"
10-22AF4	10,000	1/4" O.D. TUBE	AF4	1 1/2"	1 1/2"	1"	1"	1"
10-22AF6	10,000	3/8" O.D. TUBE	AF6	1 1/2"	1 1/2"	1"	1"	1"



Taper Seal Tees

Catalog No.	Pressure Rating psi	Connections	A-B-C	E	F	G	H	Thickness
15-23AF1	15,000	1/16" O.D. TUBE	AF1	1"	3/4"	1/2"	9/16"	3/8"
15-23AF2	15,000	1/8" O.D. TUBE	AF2	1 1/2"	1 1/8"	3/4"	3/4"	3/4"
10-23AF4	10,000	1/4" O.D. TUBE	AF4	2"	1 1/2"	1"	1"	1"
10-23AF6	10,000	3/8" O.D. TUBE	AF6	2"	1 1/2"	1"	1"	1"

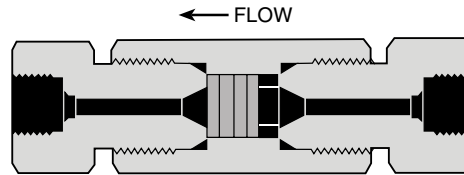


Taper Seal Crosses

Catalog No.	Pressure Rating psi	Connections	A-B-C-D	E	F	G	H	Thickness
15-24AF1	15,000	1/16" O.D. TUBE	AF1	1"	1"	1/2"	1/2"	3/8"
15-24AF2	15,000	1/8" O.D. TUBE	AF2	1 1/2"	1 1/2"	3/4"	3/4"	3/4"
10-24AF4	10,000	1/4" O.D. TUBE	AF4	2"	2"	1"	1"	1"
10-24AF6	10,000	3/8" O.D. TUBE	AF6	2"	2"	1"	1"	1"

Line Filters

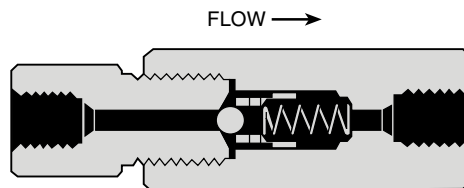
The line filters as shown utilize sintered stainless steel filter discs (AF2 & AF1 – 3 pc./set, AF4 & AF6 – 4 pc./set). Porosities are available as per the chart to the right. If not otherwise specified, 100 micron filter discs are supplied. (One micron = 0.001 millimeters). Material of bodies and end covers is high tensile 316 stainless steel. Standard tubing glands and sleeves are provided unless otherwise specified.



Catalog No.	Pressure Rating psi	Connections	Length	Hex Size	Micron Size Filter Available					
					0.5	2	5	10	40	100
15-51AF1	15,000	1/16" TAPER SEAL	3 7/8"	3/4"	●	●	●	●	●	●
15-51AF2	15,000	1/8" TAPER SEAL	3 7/8"	3/4"	●	●	●	●	●	●
10-51AF4	10,000	1/4" TAPER SEAL	5 1/4"	1 3/8"	●	●	●	●	●	●
10-51AF6	10,000	3/8" TAPER SEAL	5 1/4"	1 3/8"	●	●	●	●	●	●

Ball Check Valves

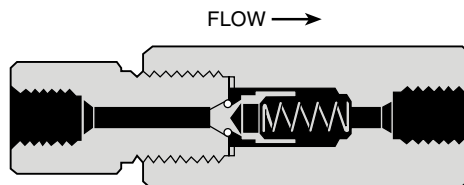
Ball type check valves insure flow in one direction only. Material for bodies, balls, and covers is high tensile 316 stainless steel. Standard tubing glands and sleeves are provided unless otherwise specified.



Catalog No.	psi	Connections	Length	Hex
15-41AF1	15,000	1/16" TAPER SEAL	3 7/8"	1"
15-41AF2	15,000	1/8" TAPER SEAL	3 9/16"	1"
10-41AF4	10,000	1/4" TAPER SEAL	3 7/8"	1"
10-41AF6	10,000	3/8" TAPER SEAL	3 7/8"	1"

Soft Seat Check Valves

Soft seat check valves insure flow in one direction only and can be mounted in any position. These are highly reliable for both gas and liquid service. Standard O-ring (soft seat) material for the sealing surface is Buna-N (nitrile) with other materials including Teflon and Viton available on request. Temperature is limited by the choice of O-ring material. Material of all other parts is high tensile 316 stainless steel. Standard glands and sleeves are provided unless otherwise specified.

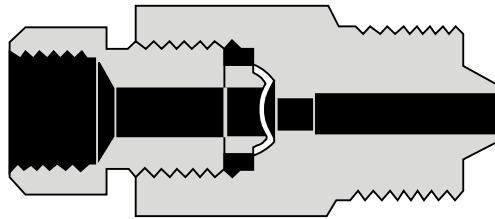


Catalog No.	psi	Connections	Length	Hex
15-41AF1-T	15,000	1/16" TAPER SEAL	3 1/2"	1"
15-41AF2-T	15,000	1/8" TAPER SEAL	3 1/2"	1"
10-41AF4-T	10,000	1/4" TAPER SEAL	3 7/8"	1"
10-41AF6-T	10,000	3/8" TAPER SEAL	3 7/8"	1"



High Pressure Equipment

Safety Heads



A choice of three safety head designs is available: male inlet, female inlet (straight), and tee type. The male inlet design can be inserted directly into the tubing connections of valves and various fittings such as tees and crosses, or located in pressure vessels.

Outlet connections on all sizes are $\frac{3}{8}$ " pipe (NPT). This outlet may be connected to a suitable discharge line to vent pressure to a safe location in the event of bursting of the rupture disc. Torque required for sealing rupture discs will range from 40 to 60 foot pounds, depending upon pressure and media being used.

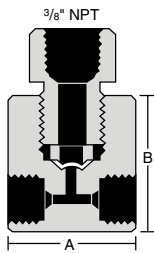
Material of bodies and hold down nuts is high tensile 316 stainless steel. Hold down rings are hardened 17-4PH stainless steel. Standard tubing glands and collars (sleeves) are provided unless otherwise specified.

Note: Rupture discs are **not** included and must be ordered as a separate item.



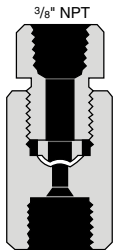
Male Inlet Safety Heads

Catalog No.	Pressure Rating psi	Inlet Connection	Length	Hex Size
10-61AM4	10,000	$\frac{1}{4}$ " TAPER SEAL	2 $\frac{1}{8}$ "	1"
10-61AM6	10,000	$\frac{3}{8}$ " TAPER SEAL	2 $\frac{1}{8}$ "	1"



Tee Type Safety Heads

Catalog No.	Pressure Rating psi	Inlet Connection	A	B	Thickness
15-63AF1	15,000	$\frac{1}{16}$ " TAPER SEAL	1 $\frac{1}{8}$ " HEX	1 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "
15-63AF2	15,000	$\frac{1}{8}$ " TAPER SEAL	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1"
10-63AF4	10,000	$\frac{1}{4}$ " TAPER SEAL	2"	1 $\frac{3}{4}$ "	1"
10-63AF6	10,000	$\frac{3}{8}$ " TAPER SEAL	2"	1 $\frac{3}{4}$ "	1"



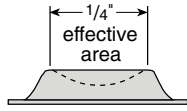
Female Inlet (Straight) Safety Heads

Catalog No.	Pressure Rating psi	Inlet Connection	Length	Hex Size
15-61AF1	15,000	$\frac{1}{16}$ " TAPER SEAL	1 $\frac{7}{8}$ "	1"
15-61AF2	15,000	$\frac{1}{8}$ " TAPER SEAL	1 $\frac{7}{8}$ "	1"
10-61AF4	10,000	$\frac{1}{4}$ " TAPER SEAL	1 $\frac{7}{8}$ "	1"
10-61AF6	10,000	$\frac{3}{8}$ " TAPER SEAL	1 $\frac{7}{8}$ "	1"



Rupture Discs

1/4" Angled Seat



SPECIAL DISCS are available on special order for pressure ranges not shown above and in numerous materials and coatings. Consult factory for price and delivery.

Standard rupture discs are available from stock in burst pressures as listed in the chart below. Taper seal pressures are shaded. These discs are 316 stainless steel (except for 1000 psi which are Inconel) and may be used with any of the safety heads shown. Note that these rupture discs are supplied with a tolerance of plus 6% and minus 3% of specified burst pressure. Samples of each batch are then tested and the actual average burst pressure is stamped on an accompanying metal tag. Factors influencing rupture disc life include corrosion, metal fatigue, and cyclic effects. Periodic replacement is recommended to prevent premature failure.

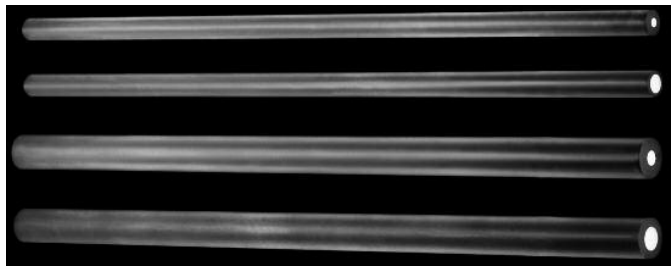
Standard Burst Pressures (in psi at 72°F)

1,000	3,000	5,000	7,000	9,000	11,000	17,500	25,000	37,500	55,000
1,500	3,500	5,500	7,500	9,500	11,500	18,000	27,000	40,000	60,000
2,000	4,000	6,000	8,000	10,000	12,500	20,000	30,000	45,000	65,000
2,500	4,500	6,500	8,500	10,500	15,000	22,500	35,000	50,000	

High Pressure Tubing

Tubing is cold drawn, seamless, and is supplied in the 1/8 hard condition (not annealed). Tensile strength is approximately 40 percent higher than that of annealed tubing. All tubing is manufactured in strict accordance with High Pressure Equipment Company specifications to insure tolerances and bore quality. Tubing is stocked in lengths of 18 to 22 feet but may be ordered in shorter lengths with **no additional cutting charge**.

Note: The 1/16" and 1/8" O.D. tubing sizes may be coiled for shipment. Larger sizes must be shipped in straight lengths.



	Tubing Size	Working Pressure psi	Type of Connection Used	Material	Catalog Order Number
1/16"	1/16" O.D. x 0.006" I.D.	15,000	1/16" TAPER SEAL (AF1)	316 SS	15-9A1-006
	1/16" O.D. x 0.030" I.D.				15-9A1-030
1/8"	1/8" O.D. x 0.060" I.D.	15,000	1/8" TAPER SEAL (AF2)	316 SS	15-9A2
1/4"	1/4" O.D. x 1/8" I.D.	10,000	1/4" TAPER SEAL (AF4)	316 SS	10-9A4-316
				304 SS	10-9A4-304
3/8"	3/8" O.D. x 1/4" I.D.	10,000	3/8" TAPER SEAL (AF6)	316 SS	10-9A6-316
				304 SS	10-9A6-304



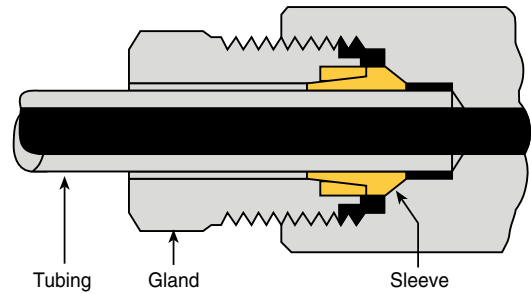
High Pressure Equipment

Taper Seal Connections

10,000 and 15,000 psi service

Taper Seal connections are available for $\frac{1}{16}$ " , $\frac{1}{8}$ " , $\frac{1}{4}$ " , and $\frac{3}{8}$ " O.D. tubing. No special tubing preparation is required – simply cut tubing to desired length, deburr and assemble.

The $\frac{1}{8}$ " , $\frac{1}{4}$ " , and $\frac{3}{8}$ " sizes utilize a two-piece sleeve which is supplied partially assembled. When the connection is assembled, the outer sleeve portion is permanently compressed over the inner portion to rigidly lock the sleeve onto the tubing. Note that the sleeve is not forced to bite into the tubing, but rather is clamped onto the tubing much like a machine collet.



Pressure ratings.

The $\frac{1}{16}$ " and $\frac{1}{8}$ " O.D. tubing size connections are rated to 15,000 psi working pressure. The $\frac{1}{4}$ " and $\frac{3}{8}$ " O.D. sizes are rated to 10,000 psi working pressure.

Easy make-up connections.

One of the popular benefits of taper seal connections is that it is very easy to determine when the connection is "tight enough" during initial assembly. Simply rotate the tubing gland into the connection until you feel a "bottoming out" or "dead stop" of the wrench. This signals that the connection has been properly made.

A commercial thread lubricant is highly recommended to facilitate initial makeup of the connection, but such lubrication may be removed afterwards if desired. The Taper Seal connection can be disassembled and then reassembled an indefinite number of times.

Standard material for the gland is Type 316 stainless steel. The inner portion of the two-piece sleeve is Type 316 stainless steel. The non-wetted outer sleeve portion is zinc plated alloy steel. (Note that the $\frac{1}{16}$ " O.D. size is a one-piece sleeve design) in Type 316 stainless steel.

Tubing glands and sleeves are provided with all valves and fittings unless otherwise requested. (See chart at right for size details and catalog numbers).

	15,000 psi		10,000 psi	
	AF1 <i>1/16" O.D. Tubing</i>	AF2 <i>1/8" O.D. Tubing</i>	AF4 <i>1/4" O.D. Tubing</i>	AF6 <i>3/8" O.D. Tubing</i>
Female Opening Detail				
Gland				
Sleeve				
Plug				



Female NPT/10,000 psi

Pipe Connection Valves

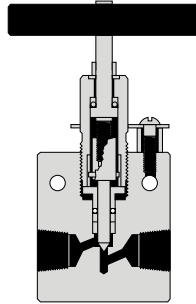
1/8" • 1/4" • 3/8" • 1/2" NPT

Non-rotating tip stems are standard for on-off service and insure long life on valve seats. Regulating tip stems are available for all valves at no additional cost.

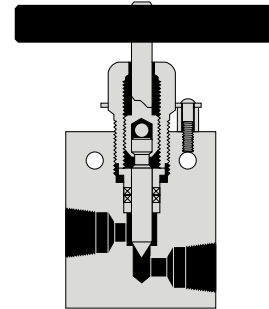
Materials include high tensile Type 316 stainless steel for valve bodies, and hardened 17-4PH stainless steel for lower section stems.

Packing is Teflon (450°F) standard with optional Viton (350°F), BUNA-N (200°F) and Grafoil (650°F) available at no additional cost.

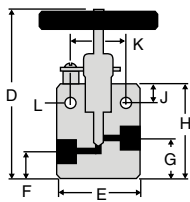
Air operators for remote control operation are available for all valves. (See Air Operator section of catalog).



NFA (1/8"), NFB (1/4") and NFC (3/8")

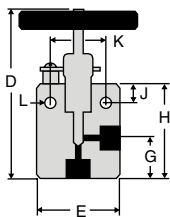


NFD (1/2")



Two Way Straight Valves

Pipe Size	Catalog No.*	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/8" NPT	10-11NFA	10,000	NFA	1/8"	4 3/4"	2"	7/8"	7/8"	2 7/16"	1/2"	1 3/8"	7/32"	1"
1/4" NPT	10-11NFB	10,000	NFB	1/8"	4 3/4"	2"	7/8"	7/8"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" NPT	10-11NFC	10,000	NFC	1/8"	4 3/4"	2"	7/8"	7/8"	2 7/16"	1/2"	1 3/8"	7/32"	1"
1/2" NPT	10-11NFD	10,000	NFD	5/16"	5 5/8"	2 5/8"	3/4"	1 3/8"	3 1/8"	1/2"	1 5/8"	5/16"	1 1/2"



Two Way Angle Valves

Pipe Size	Catalog No.*	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/8" NPT	10-12NFA	10,000	NFA	1/8"	4 3/4"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
1/4" NPT	10-12NFB	10,000	NFB	1/8"	4 3/4"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" NPT	10-12NFC	10,000	NFC	1/8"	4 3/4"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
1/2" NPT	10-12NFD	10,000	NFD	5/16"	5 3/4"	2 5/8"	—	1 1/2"	3 1/4"	1/2"	1 5/8"	5/16"	1 1/2"

* For valves requiring high temperature Grafoil packing in the 1/8" NPT, or 1/4" NPT or 3/8" NPT sizes, add suffix "-W" to catalog number. (Example 10-11NFB-W.)



High Pressure Equipment

Female NPT/10,000 and 15,000 psi

Pipe Connection Valves

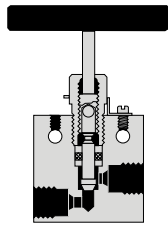
$\frac{1}{8}$ " • $\frac{1}{4}$ " • $\frac{3}{8}$ " • $\frac{1}{2}$ " NPT • $\frac{3}{4}$ " NPT • 1" NPT

Non-rotating tip stems are standard for on-off service and insure long life on valve seats. Regulating tip stems are available for all valves at no additional cost.

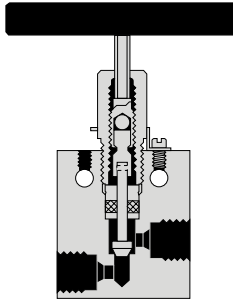
Materials include high tensile Type 316 stainless steel for valve bodies, and hardened 17-4PH stainless steel for lower section stems.

Packing is Teflon (450°F) standard with optional Viton (350°F), BUNA-N (200°F) and Grafoil (650°F) available at no additional cost.

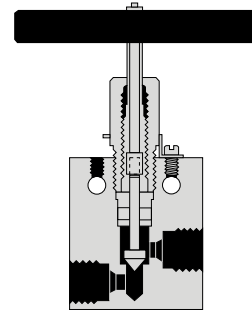
Air operators for remote control operation are available for all valves. (See Air Operator section of catalog).



NFA ($\frac{1}{8}$ ") and NFB ($\frac{1}{4}$ ")

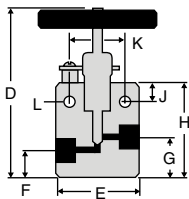


NFC ($\frac{3}{8}$ ") and NFD ($\frac{1}{2}$ ")



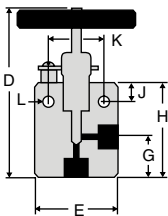
NFF ($\frac{3}{4}$ ") and NFH (1")

Two Way Straight Valves



Pipe Size	Catalog No.*	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
$\frac{1}{8}$ " NPT	15F-11NFA	15,000	NFA	.203	$4\frac{3}{8}$ "	2"	$\frac{3}{8}$ "	$\frac{13}{16}$ "	2"	$\frac{3}{8}$ "	$1\frac{1}{4}$ "	$\frac{7}{32}$ "	$\frac{3}{4}$ "
$\frac{1}{4}$ " NPT	15F-11NFB	15,000	NFB	.203	$4\frac{3}{8}$ "	2"	$\frac{3}{8}$ "	$\frac{13}{16}$ "	2"	$\frac{3}{8}$ "	$1\frac{1}{4}$ "	$\frac{7}{32}$ "	$\frac{3}{4}$ "
$\frac{3}{8}$ " NPT	15F-11NFC	15,000	NFC	.312	$6\frac{1}{2}$ "	$2\frac{1}{2}$ "	$\frac{1}{2}$ "	$1\frac{1}{8}$ "	$2\frac{7}{8}$ "	$\frac{1}{2}$ "	$1\frac{3}{8}$ "	$\frac{11}{32}$ "	1"
$\frac{1}{2}$ " NPT	15F-11NFD	15,000	NFD	.312	$6\frac{3}{8}$ "	$2\frac{5}{8}$ "	$\frac{3}{4}$ "	$1\frac{3}{8}$ "	$3\frac{1}{8}$ "	$\frac{1}{2}$ "	$1\frac{3}{8}$ "	$\frac{11}{32}$ "	$1\frac{1}{2}$ "
$\frac{3}{4}$ " NPT	10F-11NFF	10,000	NFF	.687	$8\frac{1}{2}$ "	$4\frac{1}{8}$ "	$\frac{7}{8}$ "	$1\frac{13}{16}$ "	$4\frac{5}{8}$ "	$1\frac{1}{8}$ "	$2\frac{1}{2}$ "	$\frac{9}{16}$ "	$1\frac{3}{4}$ "
1" NPT	10F-11NFH	10,000	NFH	.687	$8\frac{1}{2}$ "	$4\frac{1}{8}$ "	$\frac{7}{8}$ "	$1\frac{13}{16}$ "	$4\frac{5}{8}$ "	$1\frac{1}{8}$ "	$2\frac{1}{2}$ "	$\frac{9}{16}$ "	$1\frac{3}{4}$ "

Two Way Angle Valves



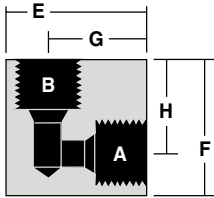
Pipe Size	Catalog No.*	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
$\frac{1}{8}$ " NPT	15F-12NFA	15,000	NFA	.203	$4\frac{13}{16}$ "	2"	—	$1\frac{1}{4}$ "	$2\frac{7}{16}$ "	$\frac{3}{8}$ "	$1\frac{1}{4}$ "	$\frac{7}{32}$ "	$\frac{3}{4}$ "
$\frac{1}{4}$ " NPT	15F-12NFB	15,000	NFB	.203	$4\frac{13}{16}$ "	2"	—	$1\frac{1}{4}$ "	$2\frac{7}{16}$ "	$\frac{3}{8}$ "	$1\frac{1}{4}$ "	$\frac{7}{32}$ "	$\frac{3}{4}$ "
$\frac{3}{8}$ " NPT	15F-12NFC	15,000	NFC	.312	$6\frac{1}{2}$ "	$2\frac{1}{2}$ "	—	$1\frac{1}{2}$ "	$3\frac{1}{4}$ "	$\frac{1}{2}$ "	$1\frac{3}{8}$ "	$\frac{11}{32}$ "	1"
$\frac{1}{2}$ " NPT	15F-12NFD	15,000	NFD	.312	$6\frac{1}{2}$ "	$2\frac{5}{8}$ "	—	$1\frac{1}{2}$ "	$3\frac{1}{4}$ "	$\frac{1}{2}$ "	$1\frac{3}{8}$ "	$\frac{11}{32}$ "	$1\frac{1}{2}$ "
$\frac{3}{4}$ " NPT	10F-12NFF	10,000	NFF	.687	9"	$4\frac{1}{8}$ "	—	$2\frac{5}{16}$ "	$5\frac{1}{8}$ "	$1\frac{1}{8}$ "	$2\frac{1}{2}$ "	$\frac{9}{16}$ "	$1\frac{3}{4}$ "
1" NPT	10F-12NFH	10,000	NFH	.687	9"	$4\frac{1}{8}$ "	—	$2\frac{5}{16}$ "	$5\frac{1}{8}$ "	$1\frac{1}{8}$ "	$2\frac{1}{2}$ "	$\frac{9}{16}$ "	$1\frac{3}{4}$ "

* For valves requiring high temperature Grafoil packing in the $\frac{1}{8}$ " NPT, or $\frac{1}{4}$ " NPT or $\frac{3}{8}$ " NPT sizes, add suffix "-W" to catalog number. (Example 10-11NFB-W.)

Elbows/Tees/Crosses

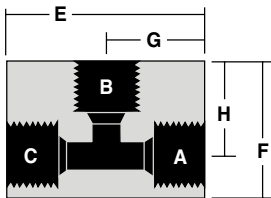
A complete range of elbows, tees, and crosses is available for all of the tubing connection sizes. Material is high tensile 316 stainless steel.

NPT Elbows



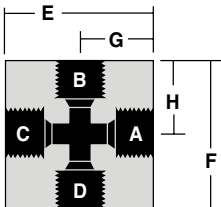
Catalog No.	Pressure Rating psi	Connections	A-B	E	F	G	H	Thickness
15-22NFA	15,000	1/8" FNPT	NFA	1 1/2"	1 1/2"	1"	1"	3/4"
15-22NFB	15,000	1/4" FNPT	NFB	1 1/2"	1 1/2"	1"	1"	1"
15-22NFC	15,000	3/8" FNPT	NFC	1 1/2"	1 1/2"	1"	1"	1"
15-22NFD	15,000	1/2" FNPT	NFD	2 5/8"	1 7/8"	1 7/8"	1 1/8"	1 1/2"
10-22NFF	10,000	3/4" FNPT	NFF	2 5/8"	2 5/16"	1 5/16"	1 3/8"	1 1/2"
10-22NFH	10,000	1" FNPT	NFH	3"	3"	2 1/16"	2 1/16"	1 3/4"

NPT Tees



Catalog No.	Pressure Rating psi	Connections	A-B	E	F	G	H	Thickness
15-23NFA	15,000	1/8" FNPT	NFA	1 1/2"	1 1/4"	3/4"	3/4"	3/4"
15-23NFB	15,000	1/4" FNPT	NFB	2"	1 1/2"	1"	1"	1"
15-23NFC	15,000	3/8" FNPT	NFC	2"	1 1/2"	1"	1"	1"
15-23NFD	15,000	1/2" FNPT	NFD	2 5/8"	2 1/8"	1 5/16"	1 3/8"	1 1/2"
10-23NFF	10,000	3/4" FNPT	NFF	2 5/8"	2 1/8"	1 5/16"	1 3/8"	1 1/2"
10-23NFH	10,000	1" FNPT	NFH	4 1/8"	3"	2 1/16"	2 1/16"	1 3/4"

NPT Crosses



Catalog No.	Pressure Rating psi	Connections	A-B	E	F	G	H	Thickness
15-24NFA	15,000	1/8" FNPT	NFA	1 1/2"	1 1/2"	3/4"	3/4"	3/4"
15-24NFB	15,000	1/4" FNPT	NFB	2"	2"	1"	1"	1"
15-24NFC	15,000	3/8" FNPT	NFC	2"	2"	1"	1"	1"
15-24NFD	15,000	1/2" FNPT	NFD	2 5/8"	2 3/4"	1 5/16"	1 3/8"	1 1/2"
10-24NFF	10,000	3/4" FNPT	NFF	2 5/8"	2 3/4"	1 5/16"	1 3/8"	1 1/2"
10-24NFH	10,000	1" FNPT	NFH	4 1/8"	4 1/8"	2 1/16"	2 1/16"	1 3/4"



High Pressure Equipment

NPT Straight Couplings

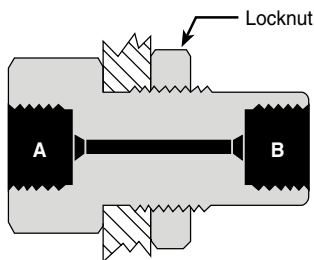
Standard material is high tensile 316 stainless steel.



Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex
15-21NFA	15,000	1/8" FNPT	NFA	1 1/4"	3/4"
15-21NFB	15,000	1/4" FNPT	NFB	1 3/4"	1"
15-21NFC	15,000	3/8" FNPT	NFC	1 3/8"	1"
15-21NFD	15,000	1/2" FNPT	NFD	1 7/8"	1 3/8"
10-21NFF	10,000	3/4" FNPT	NFF	2 1/2"	1 3/8"
10-21NFH	10,000	1" FNPT	NFH	2 1/2"	1 3/4"

NPT Bulkhead Couplings

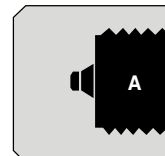
Bulkhead couplings are designed specifically for passing a tubing connection through a panel or steel barricade. These couplings include a locknut as shown. Material is high tensile 316 stainless steel.



Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex	Hole Diameter
15-21NFA-B	15,000	1/8" FNPT	NFA	2 1/8"	1"	7/8" - 14
15-21NFB-B	15,000	1/4" FNPT	NFB	2 1/8"	1"	7/8" - 14
15-21NFC-B	15,000	3/8" FNPT	NFC	2 3/8"	1 3/8"	1 1/16" - 12
15-21NFD-B	15,000	1/2" FNPT	NFD	2 3/8"	1 1/2"	1 3/8" - 12
10-21NFF-B	10,000	3/4" FNPT	NFF	2 5/8"	1 7/8"	1 5/8" - 12
10-21NFH-B	10,000	1" FNPT	NFH	3 1/2"	2 1/8"	1 7/8" - 12

NPT Caps

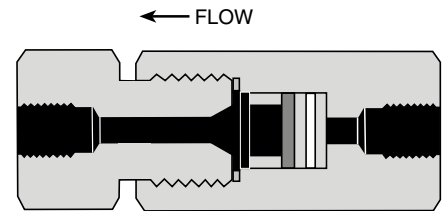
Tubing end caps are offered for use in sealing off tubing ends either for temporary use or permanent use such as on small volume reservoirs. Standard material is high tensile 316 stainless steel.



Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex
15-21NFA-C	15,000	1/8" FNPT	NFA	3/4"	3/4"
15-21NFB-C	15,000	1/4" FNPT	NFB	1"	1"
15-21NFC-C	15,000	3/8" FNPT	NFC	1 1/4"	1"
15-21NFD-C	15,000	1/2" FNPT	NFD	1 1/2"	1 3/8"
10-21NFF-C	10,000	3/4" FNPT	NFF	1 3/4"	1 3/8"
10-21NFH-C	10,000	1" FNPT	NFH	1 3/4"	1 3/4"

NPT Line Filters

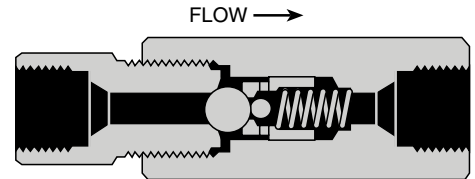
The line filters as shown utilize sintered stainless steel filter discs 3 pc./set. Porosities are available as per the chart to the right. If not otherwise specified, 100 micron filter discs are supplied. (One micron = 0.001 millimeters). Material of body, caps and cover is high tensile 316 stainless steel.



Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex	Micron Size Filter Available					
						0.5	2	5	10	40	100
15-51NFA	15,000	1/8" FNPT	NFA	3 ³ / ₁₆ "	1 ³ / ₈ "	●	●	●	●	●	●
15-51NFB	15,000	1/4" FNPT	NFB	4 ³ / ₁₆ "	1 ³ / ₈ "	●	●	●	●	●	●
15-51NFC	15,000	3/8" FNPT	NFC	4 ³ / ₁₆ "	1 ³ / ₈ "	●	●	●	●	●	●
15-51NFD	15,000	1/2" FNPT	NFD	4 ³ / ₁₆ "	1 ³ / ₈ "	●	●	●	●	●	●

NPT Ball Check Valves

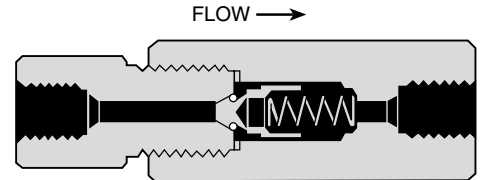
Ball type check valves insure flow in one direction only. Material for body, caps and cover is high tensile 316 stainless steel.



Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex
15-41NFA	15,000	1/8" FNPT	NFA	4 ⁵ / ₃₂ "	1"
15-41NFB	15,000	1/4" FNPT	NFB	4 ⁵ / ₃₂ "	1"
15-41NFC	15,000	3/8" FNPT	NFC	4 ⁵ / ₃₂ "	1"
15-41NFD	15,000	1/2" FNPT	NFD	4 ⁹ / ₁₆ "	1 ³ / ₈ "
10-41NFF	10,000	3/4" FNPT	NFF	5 ⁵ / ₁₆ "	1 ³ / ₈ "
10-41NFH	10,000	1" FNPT	NFH	7 ¹ / ₈ "	2 ¹ / ₂ "

NPT Softseat Check Valves

Soft seat check valves insure flow in one direction only and can be mounted in any position. These are highly reliable for both gas and liquid service. Standard O-ring (soft seat) material for the sealing surface is Buna-N (nitrile) with other materials including Teflon and Viton available on request. Temperature is limited by the choice of O-ring material. Material of all other parts is high tensile 316 stainless steel.

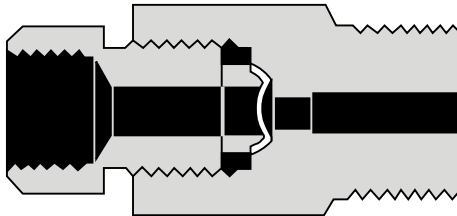


Catalog No.	Pressure Rating psi	Connections	A-B	Length	Hex
15-41NFA-T	15,000	1/8" FNPT	NFA	4 ⁵ / ₃₂ "	1"
15-41NFB-T	15,000	1/4" FNPT	NFB	4 ⁵ / ₃₂ "	1"
15-41NFC-T	15,000	3/8" FNPT	NFC	4 ⁵ / ₃₂ "	1"
15-41NFD-T	15,000	1/2" FNPT	NFD	4 ⁹ / ₁₆ "	1 ³ / ₈ "
10-41NFF-T	10,000	3/4" FNPT	NFF	5 ⁵ / ₁₆ "	1 ³ / ₈ "
10-41NFH-T	10,000	1" FNPT	NFH	7 ¹ / ₈ "	2 ¹ / ₂ "



High Pressure Equipment

NPT Safety Heads



The male inlet design can be inserted directly into the tubing connections of valves and various fittings such as tees and crosses, or located in pressure vessels.

Outlet connections are $\frac{3}{8}$ " pipe (NPT). This outlet may be connected to a suitable discharge line to vent pressure to a safe location in the event of bursting of the rupture disc. Torque required for sealing rupture discs will range from 40 to 90 foot pounds, depending upon pressure and media being used.

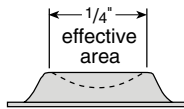
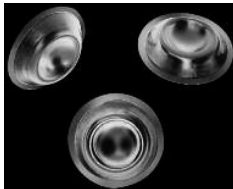
Material of body and hold down nut is high tensile 316 stainless steel.

Note: Rupture discs are **not** included and must be ordered as a separate item.

Catalog No.	psi	Connections	Length	Hex
15-61NMA	15,000	$\frac{1}{8}$ " MNPT	2"	1"
15-61NMB	15,000	$\frac{1}{4}$ " MNPT	2"	1"
15-61NMC	15,000	$\frac{3}{8}$ " MNPT	2"	1"
15-61NMD	15,000	$\frac{1}{2}$ " MNPT	2"	1"

Rupture Discs

$\frac{1}{4}$ " Angled Seat



SPECIAL DISCS are available on special order for pressure ranges not shown above and in numerous materials and coatings. Consult factory for price and delivery.

Standard rupture discs are available from stock in burst pressures as listed in the chart below. All pressures through 15,000 psi are shaded. These discs are 316 stainless steel (except for 1,000 psi which are inconel) and may be used with any of the safety heads shown. Note that these rupture discs are supplied with a tolerance of plus 6% and minus 3% of specified burst pressure. Samples of each batch are tested and the actual average burst pressure is stamped on an accompanying metal tag. Factors influencing rupture disc life include corrosion, metal fatigue, and cyclic effects. Periodic replacement is recommended to prevent premature failure.

Standard Burst Pressures (in psi at 72°F)

1,000	3,000	5,000	7,000	9,000	11,000	17,500	25,000	37,500	55,000
1,500	3,500	5,500	7,500	9,500	11,500	18,000	27,000	40,000	60,000
2,000	4,000	6,000	8,000	10,000	12,500	20,000	30,000	45,000	65,000
2,500	4,500	6,500	8,500	10,500	15,000	22,500	35,000	50,000	

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