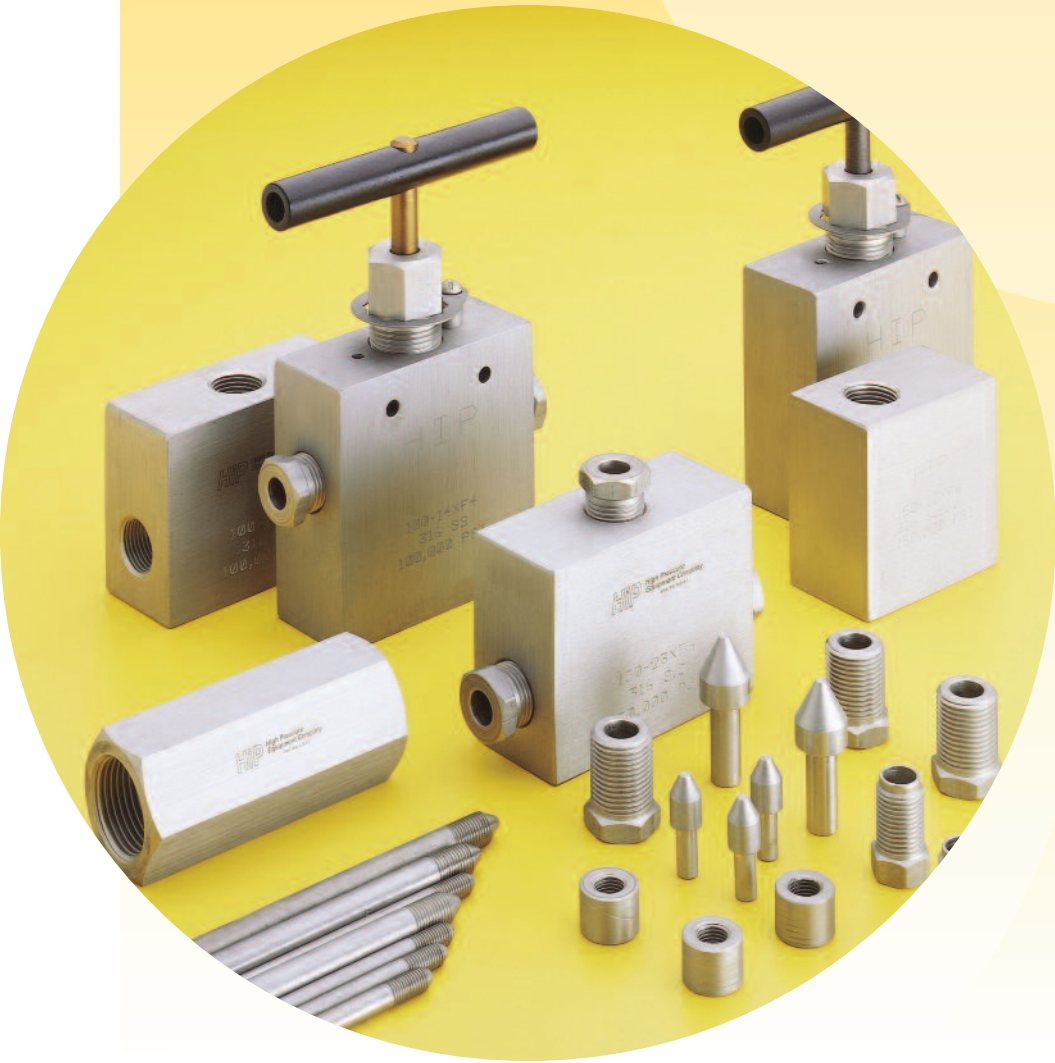




High Pressure Equipment

Oil and Gas Products

Since 1954, HiP has been designing and manufacturing the highest quality and most dependable high pressure products for oil and gas applications. Our ISO 9001 certified operation is part of a quality focus that has helped us gain the trust of many oil and gas industry leaders. And our on-time delivery and competitive pricing have made us integral partners in our customers' cost-reduction efforts.



Index

Sour Oil and Gas Valves	85-86
Fittings	87
Bulkheads, Caps, Line Filters & Check Valves	88
Adapters & Tubing	89
Coned & Threaded Nipples	89
Wellhead Gauge & Bleed Valves . . .	90

Sour Oil & Gas Valves

High Pressure Equipment Company has developed a complete line of valves and affiliated components specifically for the unique requirements of the oil and gas industry. We offer valves, fittings and tubing for use with sour oil and gas (H₂S) in a 10,000 psi, 20,000 psi and 30,000 psi series. Our "SGS" products are constructed of annealed 316 stainless steel and meet or exceed all requirements of NACE MR0175 and the American Petroleum Institute. For those applications where H₂S is not present, our standard line of valves, fittings and tubing will accommodate pressures to 150,000 psi.



Hastelloy & Other Exotic Material Products in Stock

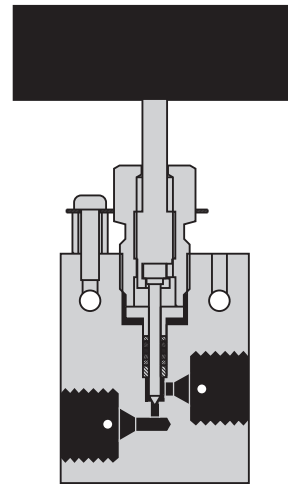
We know that some oil and gas applications demand material performance beyond our "SGS" stainless steel products. In an effort to provide our customers with their material of choice and meet tight shipping deadlines, we maintain an inventory of Hastelloy and Monel valves and fittings.

Sour Oil & Gas Valves

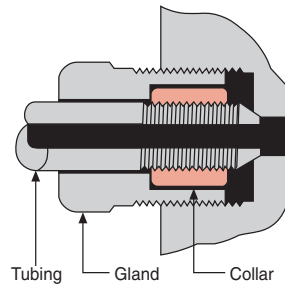
- 1/4", 3/8" & 9/16" O.D. tube connections
- 10,000, 20,000 & 30,000 psi series
- Vee and regulating stem types
- Annealed 316 stainless steel construction
- Meet or exceed requirements of NACE MR0175

High Pressure Coned and Threaded Connections

HiP oil field products use a high pressure coned and threaded connection which accommodates the high temperatures, high pressures and extreme conditions common in these applications. These connections may be disassembled and retightened indefinitely.



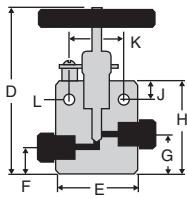
HF4 (1/4"), HF6 (3/8") and HF9 (9/16")



11

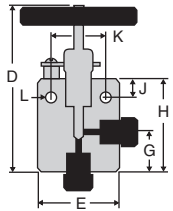
Oil and Gas Products

Two Way Straight Valves



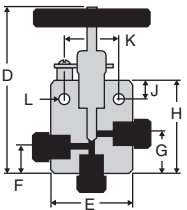
Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-11HF4-SGS	20,000	HF4	3/32"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	30-11HF6-SGS	20,000	HF6	1/8"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	30-11HF9-SGS	20,000	HF9	1/8"	5 5/8"	2 5/8"	1"	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"
1/4" O.D.	60-11HF4-SGS	30,000	HF4	1/16"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	60-11HF6-SGS	30,000	HF6	1/16"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	60-11HF9-SGS	30,000	HF9	1/16"	5 5/8"	2 5/8"	1"	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"

Two Way Angle Valves



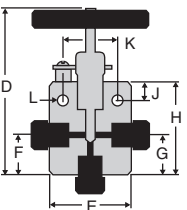
Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-12HF4-SGS	20,000	HF4	3/32"	5 3/16"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	30-12HF6-SGS	20,000	HF6	1/8"	5 3/16"	2"	—	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	30-12HF9-SGS	20,000	HF9	1/8"	5 5/8"	2 5/8"	—	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"
1/4" O.D.	60-12HF4-SGS	30,000	HF4	1/16"	5 3/16"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	60-12HF6-SGS	30,000	HF6	1/16"	5 3/16"	2"	—	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	60-12HF9-SGS	30,000	HF9	1/16"	5 5/8"	2 5/8"	—	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"

Three Way Valves / Two Pressure Connections



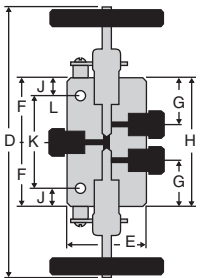
Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-13HF4-SGS	20,000	HF4	3/32"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	30-13HF6-SGS	20,000	HF6	1/8"	5 3/16"	2"	1"	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	30-13HF9-SGS	20,000	HF9	1/8"	6 1/16"	2 5/8"	1 7/16"	1 7/8"	3 5/16"	1/2"	1 3/8"	7/32"	1 1/2"
1/4" O.D.	60-13HF4-SGS	30,000	HF4	1/16"	5 3/16"	2"	5/8"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	60-13HF6-SGS	30,000	HF6	1/16"	5 3/16"	2"	1"	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	60-13HF9-SGS	30,000	HF9	1/16"	6 1/16"	2 5/8"	1 7/16"	1 7/8"	2 5/16"	1/2"	1 3/8"	7/32"	1 1/2"

Three Way Valves / One Pressure Connection



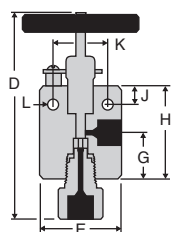
Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-14HF4-SGS	20,000	HF4	3/32"	5 3/16"	2"	1"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	30-14HF6-SGS	20,000	HF6	1/8"	5 3/16"	2"	2"	1 7/16"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	30-14HF9-SGS	20,000	HF9	1/8"	5 5/8"	2 5/8"	2 3/16"	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"
1/4" O.D.	60-14HF4-SGS	30,000	HF4	1/16"	5 3/16"	2"	1"	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	60-14HF6-SGS	30,000	HF6	1/16"	5 3/16"	2"	1 3/8"	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	60-14HF9-SGS	30,000	HF9	1/16"	5 5/8"	2 5/8"	1 7/16"	1 7/8"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"

Three Way / Two Stem Connection Valves



Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-15HF4-SGS	20,000	HF4	3/32"	9 1/4"	2"	1"	1 7/16"	3 3/4"	1/2"	2 3/4"	7/32"	1"
3/8" O.D.	30-15HF6-SGS	20,000	HF6	1/8"	9 1/2"	2"	2"	1 7/16"	4"	1/2"	3"	7/32"	1"
9/16" O.D.	30-15HF9-SGS	20,000	HF9	1/8"	9 7/8"	2 5/8"	2 3/16"	1 7/16"	4 3/8"	1/2"	3 3/8"	7/32"	1 1/2"
1/4" O.D.	60-15HF4-SGS	30,000	HF4	1/16"	9 1/4"	2"	1"	1 7/16"	3 3/4"	1/2"	2 3/4"	7/32"	1"
3/8" O.D.	60-15HF6-SGS	30,000	HF6	1/16"	9 1/2"	2"	2"	1 7/16"	4"	1/2"	3"	7/32"	1"
9/16" O.D.	60-15HF9-SGS	30,000	HF9	1/16"	9 7/8"	2 5/8"	2 3/16"	1 7/16"	4 3/8"	1/2"	3 3/8"	7/32"	1 1/2"

Replaceable Seat Valves

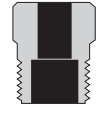

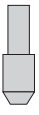


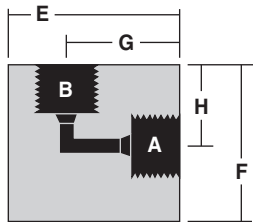
Tubing	Catalog No.	psi	Connection	Orifice	D	E	F	G	H	J	K	L	Thickness
1/4" O.D.	30-12HF4-R-SGS	20,000	HF4	3/32"	5 3/16"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	30-12HF6-R-SGS	20,000	HF6	1/8"	5 3/16"	2"	—	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	30-12HF9-R-SGS	20,000	HF9	1/8"	5 5/8"	2 5/8"	—	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"
1/4" O.D.	60-12HF4-R-SGS	30,000	HF4	1/16"	5 3/16"	2"	—	1"	2 7/16"	1/2"	1 3/8"	7/32"	1"
3/8" O.D.	60-12HF6-R-SGS	30,000	HF6	1/16"	5 3/16"	2"	—	1 3/8"	2 13/16"	1/2"	1 3/8"	7/32"	1"
9/16" O.D.	60-12HF9-R-SGS	30,000	HF9	1/16"	5 5/8"	2 5/8"	—	1 7/16"	2 7/8"	1/2"	1 3/8"	7/32"	1 1/2"

Glands/Sleeves/Plugs/Elbows/Tees/Crosses

A complete range of elbows, tees, and crosses is available for use with sour oil and gas. Material is annealed 316 stainless steel. All connection components and fittings are rated for 30,000 psi service. Standard tubing glands and collars are provided unless otherwise specified.

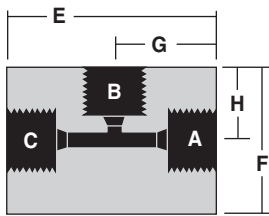
Connection Components

Catalog No.	Tube Size	Gland	Catalog No.	Tube Size	Collar	Catalog No.	Tube Size	Plug
60-2HM4-SGS	1/4"		60-2H4-SGS	1/4"		60-7HM4-SGS	1/4"	
60-2HM6-SGS	3/8"		60-2H6-SGS	3/8"		60-7HM6-SGS	3/8"	
60-2HM9-SGS	9/16"		60-2H9-SGS	9/16"		60-7HM9-SGS	9/16"	



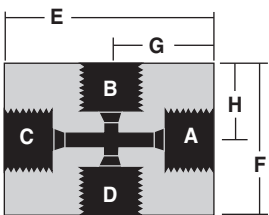
High Pressure Elbows

Catalog No.	Pressure Rating psi	Connections	A-B	E	F	G	H	Thickness
60-22HF4-SGS	30,000	1/4" O.D. TUBE	HF4	1 3/8"	1 1/2"	7/8"	1"	1"
60-22HF6-SGS	30,000	3/8" O.D. TUBE	HF6	1 3/4"	1 1/2"	1 1/4"	1"	1"
60-22HF9-SGS	30,000	9/16" O.D. TUBE	HF9	2 5/8"	1 7/8"	1 7/8"	1 1/8"	1 1/2"



High Pressure Tees

Catalog No.	Pressure Rating psi	Connections	A-B-C	E	F	G	H	Thickness
60-23HF4-SGS	30,000	1/4" O.D. TUBE	HF4	2"	1 3/8"	1"	7/8"	1"
60-23HF6-SGS	30,000	3/8" O.D. TUBE	HF6	2"	1 9/16"	1"	1 1/16"	1"
60-23HF9-SGS	30,000	9/16" O.D. TUBE	HF9	2 5/8"	2 1/8"	1 5/8"	1 3/8"	1 1/2"

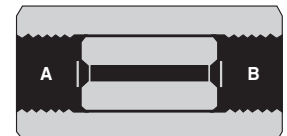


High Pressure Crosses

Catalog No.	Pressure Rating psi	Connections	A-B-C-D	E	F	G	H	Thickness
60-24HF4-SGS	30,000	1/4" O.D. TUBE	HF4	2"	1 1/2"	1"	3/4"	1"
60-24HF6-SGS	30,000	3/8" O.D. TUBE	HF6	2 1/8"	2"	1 1/16"	1"	1"
60-24HF9-SGS	30,000	9/16" O.D. TUBE	HF9	2 3/4"	2 5/8"	1 3/8"	1 5/16"	1 1/2"

Union Couplings (Slip Type)

Union (slip Type) couplings are ideal for use in confined space installations. This design allows the entire coupling to be disconnected and slipped back over the tubing to facilitate assembly and disassembly. In installations where tubing is easily assembled, it is preferable (and less expensive) to use standard straight couplings (see accessories section). Sour oil and gas material is annealed 316 stainless steel. Standard tubing collars and glands are provided unless otherwise specified.

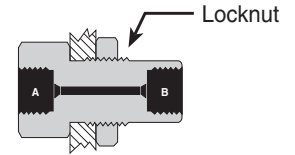


Catalog No.	Pressure Rating psi	Connections	A	B	Length	Hex Size
60-21HF4-U-SGS	30,000	1/4" O.D. TUBING	HF4	HF4	1 3/4"	1"
60-21HF6-U-SGS	30,000	3/8" O.D. TUBING	HF6	HF6	2"	1"
60-21HF9-U-SGS	30,000	9/16" O.D. TUBING	HF9	HF9	2 3/8"	1 3/8"

Oil and Gas Products

Bulkhead Couplings

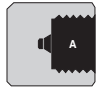
Bulkhead couplings are designed specifically for passing a tubing connection through a panel or steel barricade. These couplings include a locknut as shown. Material is annealed 316 stainless steel. Standard tubing collars and glands are included unless otherwise specified.



Catalog No.	Pressure Rating psi	Connections	Panel Hole	A	B	Length	Hex Size	Outside Thread	Max Panel Thickness
60-21HF4-B-SGS	30,000	1/4" O.D. TUBING	15/16"	HF4	HF4	2"	1"	7/8" - 14	7/16"
60-21HF6-B-SGS	30,000	3/8" O.D. TUBING	1 1/8"	HF6	HF6	2 3/8"	1 3/8"	1 1/16" - 12	5/8"
60-21HF9-B-SGS	30,000	9/16" O.D. TUBING	1 11/16"	HF9	HF9	2 3/4"	1 7/8"	1 5/8" - 12	7/16"

Caps

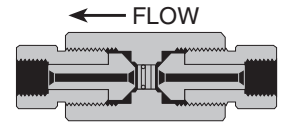
Tubing end caps are offered for use in sealing off tubing ends either for temporary use or permanent use such as on small volume reservoirs. Standard material is annealed 316 stainless steel. Standard tubing collars and glands are provided unless otherwise specified.



Catalog No.	Pressure Rating psi	Connections	A	Length	Hex Size
60-21HF4-C-SGS	30,000	1/4" O.D. TUBING	HF4	7/8"	3/4"
60-21HF6-C-SGS	30,000	3/8" O.D. TUBING	HF6	1 1/4"	1"
60-21HF9-C-SGS	30,000	9/16" O.D. TUBING	HF9	1 1/2"	1 3/8"

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 bodies and end covers is annealed 316 stainless steel. Standard tubing glands and collars are provided unless otherwise specified.

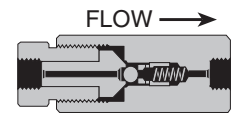


Catalog No.	Pressure Rating psi	Connections	Length	Hex Size	Micron Size Filter Available					
					0.5	2	5	10	40	100
60F-51HF4-SGS	30,000	1/4" HIGH PRESSURE	5 1/4"	1 1/2"	●	●	●	●	●	●
60F-51HF6-SGS	30,000	3/8" HIGH PRESSURE	5 1/4"	1 1/2"	●	●	●	●	●	●
60F-51HF9-SGS	30,000	9/16" HIGH PRESSURE	5 1/4"	1 1/2"	●	●	●	●	●	●

11

Ball Check Valves

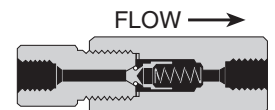
Ball type check valves insure flow in one direction only. Material for bodies and covers is annealed 316 stainless steel, the ball is 17-4PH. Standard tubing glands and collars are provided unless otherwise specified.



Catalog No.	psi	Connections	Length	Hex
60-41HF4-SGS	30,000	1/4" HIGH PRESSURE	4 1/4"	1 1/2"
60-41HF6-SGS	30,000	3/8" HIGH PRESSURE	4 5/8"	1 1/2"
60-41HF9-SGS	30,000	9/16" HIGH PRESSURE	5 1/8"	1 1/2"

Soft Seat Check Valves

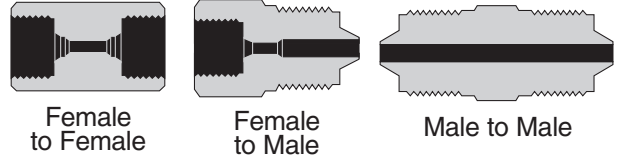
Soft seat check valves insure flow in one direction only and can be mounted in any position. These are highly reliable for both gas and liquid service. Standard O-ring (soft seat) material for the sealing surface is Buna-N (nitrile) with other materials including Teflon and Viton available on request.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



Catalog No.	psi	Connections	Length	Hex
30-41HF4-T-SGS	20,000	1/4" HIGH PRESSURE	3 7/8"	1"
30-41HF6-T-SGS	20,000	3/8" HIGH PRESSURE	3 7/8"	1"
30-41HF9-T-SGS	20,000	9/16" HIGH PRESSURE	4 1/4"	1 3/8"
60-41HF4-T-SGS	30,000	1/4" HIGH PRESSURE	4 9/16"	1 1/2"
60-41HF6-T-SGS	30,000	3/8" HIGH PRESSURE	4 9/16"	1 1/2"
60-41HF9-T-SGS	30,000	9/16" HIGH PRESSURE	5 1/16"	1 1/2"

Adapters

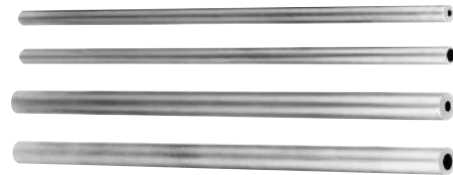
Connect different sizes of tubing or tubing and pipe with our female-to-female couplings, female-to-male adapters, male-to-male adapters, reducer couplings and thermocouple adapters. For complete adapter information, see accessories section of full line catalog.



Tubing

For sour gas applications, our tubing is annealed stainless steel, available for all standard valve and fitting sizes, and in any length specified.

For sweet applications, HiP tubing is cold drawn, seamless and supplied in the hard condition (not annealed). Tubing is stocked in lengths of 18 to 22 feet but may be ordered in true tubing lengths with **no additional cutting charge**.



	Tubing Size	Working Pressure psi	Type of Connection Used	Material	Catalog Order Number
1/4"	1/4" O.D. x 0.083" I.D.	30,000	1/4" HIGH PRESSURE (HF4)	316 SS	60-9H4-316-SGS
				304 SS	60-9H4-304-SGS
3/8"	3/8" O.D. x 1/8" I.D.	30,000	3/8" HIGH PRESSURE (HF6)	316 SS	60-9H6-316-SGS
				304 SS	60-9H6-304-SGS
9/16"	9/16" O.D. x 3/16" I.D.	30,000	9/16" HIGH PRESSURE (HF9)	316 SS	60-9H9-316-SGS
				304 SS	60-9H9-304-SGS

Coned and Threaded Nipples

Connection-ready nipples are available in annealed and standard tubing for all valve and fitting sizes, and in any length specified. Nipples are not furnished with collars and glands, unless specified at time of order. Sour gas nipples are annealed 316 SS.

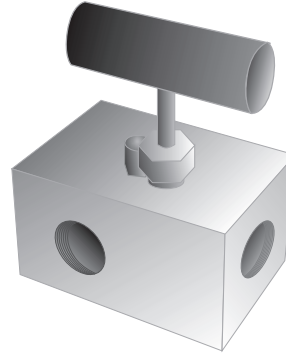


Length ↓	Tubing Size (O.D. x I.D.)		
	1/4" x 0.083"	3/8" x 1/8"	9/16" x 3/16"
psi →	30,000 psi	30,000 psi	30,000 psi
2 3/4"	60-HM4-2.75-SGS		
3"		60-HM6-3-SGS	
4"			60-HM9-4-SGS
6"	60-HM4-6-SGS	60-HM6-6-SGS	60-HM9-6-SGS
8"	60-HM4-8-SGS	60-HM6-8-SGS	60-HM9-8-SGS
10"	60-HM4-10-SGS	60-HM6-10-SGS	60-HM9-10-SGS
12"	60-HM4-12-SGS	60-HM6-12-SGS	60-HM9-12-SGS

Oil and Gas Products

Wellhead Gauge Valves

- One inlet and three outlet ports
- Packing located below stem threads
- Metal-to-metal seat for bubble tight shut-off
- Two piece non-rotating stem for standard service valves
- One piece stem for sour gas service
- Designed for line sampling or instrument calibration



Catalog No.	Pressure Rating psi	Service	Connections	Material	Inlet Port	Outlet Port
30GVHF9	30,000	Standard	3/16" HIGH PRESSURE	316 SS	HF9	HF9
30GVHF9-SGS	20,000	H ₂ S		Annealed 316 SS		

Bleed Valves

- Tee handle for easy operation
- Vent port tapped for safe plumbing
- Positive blow-out prevention on stem
- Metal-to-metal seat for bubble tight shut-off
- One piece hex construction for easy installation
- Compatible with standard API test and gauge connections for 20,000 psi
- Designed for pressure bleeding



Catalog No.	Pressure Rating psi	Service	Connections	Material	Inlet Port	Outlet Port
30BVHM9	30,000	Standard	3/16" HIGH PRESSURE	316 SS	HM9	NFA
30BVHM9-SGS	20,000	H ₂ S	x 1/8" Female NPT	Annealed 316 SS		