



High Pressure Equipment

Specialty Valves

High Pressure Equipment Company produces many valves engineered for specific requirements and operating conditions.

Ball Valves provide shut-off of liquid or gas flow through 20,000 psi. These valves are available in two way and three way configurations.

Hastelloy Valves are the most common special material valves we produce. We maintain an inventory of Hastelloy C-276 to assure prompt delivery.

High Temperature Valves feature an extension to remove the packing area (stuffing box) from the hot zone of a valve, making them suitable for use at 1,000°F (538°C).

Micro Control Metering Valves are designed to assure the fine and precise stem travel necessary for excellent control of flow. An integral vernier indicator provides exact measurement of stem revolution.

Relief Valves protect a system from over-pressure damage and failure. Relief Valves are offered in pressure ranges: 3,000 psi to 30,000 psi.

Male Bottom Connection Valves

are designed for applications where extra rigidity or space restrictions are critical. These valves feature one-piece stem construction to increase durability and reduce overall height.

Block and Bleed Valves

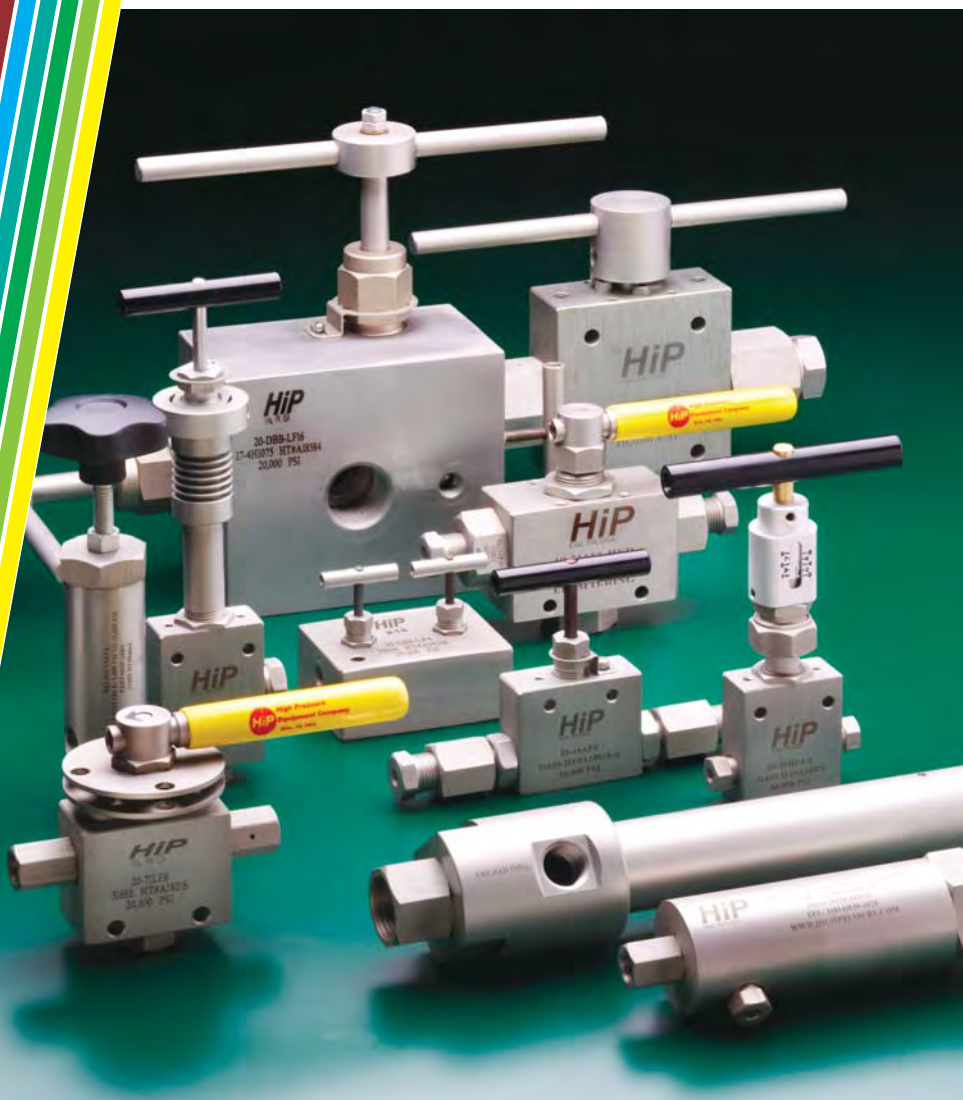
These two stem manifold valves are an excellent method of blocking, bleeding and calibrating pressure gauges and transmitters.

Subsea Ball Valves

Designed for extreme pressures and harsh environments, the industry's broadest line of subsea ball valves for 10, 15 and 20,000 psi.

Custom Manifolds

These manifolds are available in a range of materials and configurations to address demanding environmental and layout requirements, as well as transitions in line sizes and tubing pressures.



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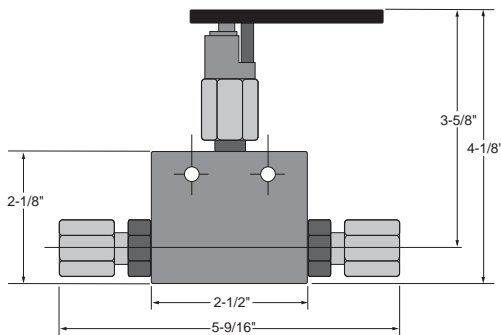
Ball Valves

10,000, 15,000 and 20,000 psi service

High Pressure Equipment offers two styles of ball valves (free floating and trunion) to provide effective shut-off of liquid or gas flow.

Two-way ball valves offer complete shut-off with a convenient $\frac{1}{4}$ turn. Valve actuators are available for remote control of HiP ball valves.

Virtually all metal components are stainless steel to insure consistent operation under even the most severe applications. Teflon packing provides reliable leak-free service up to 400°F. Other packings, including Polypak and Grafoil are available upon request.



Two-Way Free Floating Ball Valves

Catalog No.	Tube Size	Conn*	Pressure Rating @RT	Minimum Orifice	C _v
15-16AF1	$\frac{1}{16}$ "	AF1	15,000 psi	0.052	0.09
15-16AF2	$\frac{1}{8}$ "	AF2	15,000 psi	0.094	0.20
10-16AF4	$\frac{1}{4}$ "	AF4	10,000 psi	0.125	0.45
10-16AF6	$\frac{3}{8}$ "	AF6	10,000 psi	0.250	2.70
20-16LF4	$\frac{1}{4}$ "	LF4	20,000 psi	0.109	0.31
20-16LF6	$\frac{3}{8}$ "	LF6	20,000 psi	0.203	1.70
20-16LF9	$\frac{9}{16}$ "	LF9	20,000 psi	0.250	2.70
20-16HF2	$\frac{1}{8}$ "	HF2	20,000 psi	0.062	0.12
20-16HF4	$\frac{1}{4}$ "	HF4	20,000 psi	0.094	0.20
20-16HF6	$\frac{3}{8}$ "	HF6	20,000 psi	0.125	0.45
20-16HF9	$\frac{9}{16}$ "	HF9	20,000 psi	0.188	1.45
15-16NFA	$\frac{1}{8}$ "	$\frac{1}{8}$ " NPT	15,000 psi	0.250	2.70
15-16NFB	$\frac{1}{4}$ "	$\frac{1}{4}$ " NPT	15,000 psi	0.250	2.70
15-16NFC	$\frac{3}{8}$ "	$\frac{3}{8}$ " NPT	15,000 psi	0.250	2.70
15-16NFD	$\frac{1}{2}$ "	$\frac{1}{2}$ " NPT	15,000 psi	0.250	2.70

* Other connections available upon request. Consult factory.

Severe Duty Ball Valves (Trunion Style)

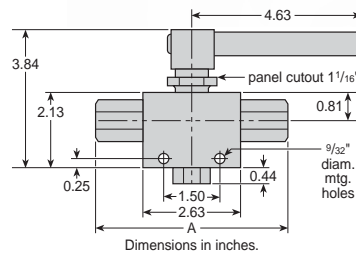
10,000, 15,000 and 20,000 psi service

High Pressure Equipment Company introduces its TRUNION STYLE ball valves for effective shut-off of liquid and gas flow through 20,000 psi @ 400°F maximum. Our offering features a trunion ball design, making this type of valve ideal for severe duty applications. This valve is available in two-way or three-way configurations with orifices of .187", .375", .500" or 1.000".

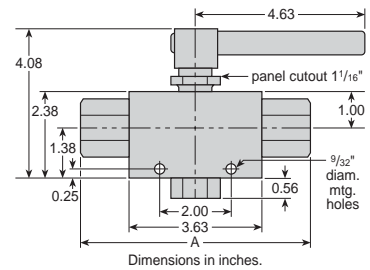
The two-way ball valve offers complete shut-off with a convenient 1/4 turn. The standard configuration of the three-way ball valve requires 1/2 turn to change port outlets and provides for complete shut-off. An optional diverter style three-way ball valve requires only a 1/4 turn to change the port outlets. Air operated actuators are available for remote control.

Material of construction is 316 stainless steel, O-rings are Viton, ball seat is PEEK. Alternate materials of construction are available upon request.

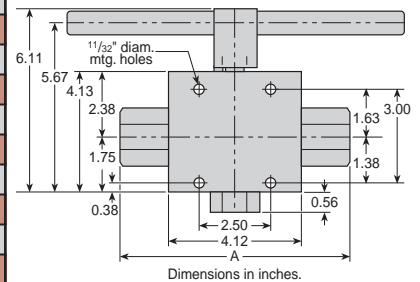
- Trunion style closure, ideal for severe duty applications
- Two-way and three-way valve configurations
- Three-way, 1/4 turn diverter valve
- .187", .375", .500" or 1.000" orifices
- Air actuators for remote operation
- Convenient panel mount design (cut 1 1/16" diameter hole) .187 and .375 only
- Large selection of tube and pipe fittings available
- Optional wetted parts available
- Optional O-rings available



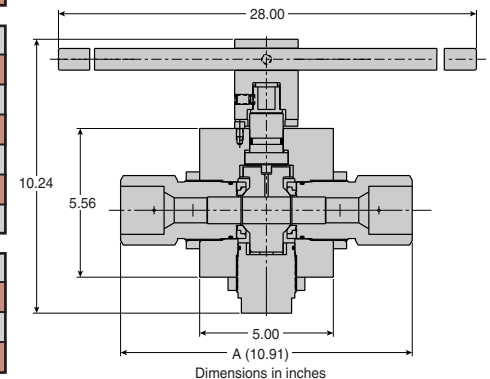
.187 Orifice



.375 Orifice



.500 Orifice

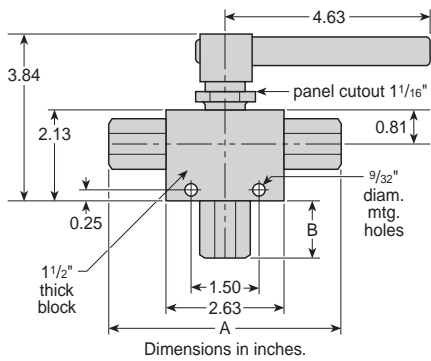


1.000 Orifice

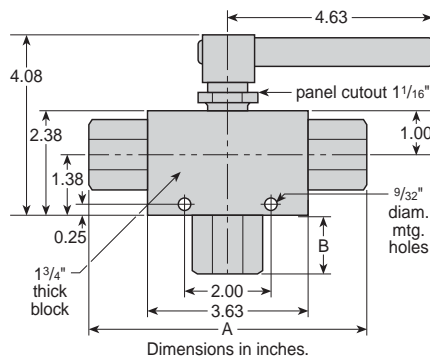
Two-Way Trunion Ball Valves - 90°

Orifice	Tube Size	Connection	Pressure Rating	Minimum Orifice	Cv	A	Catalog No.
.187	1/16"	AF1	15,000 psi	.052	0.09	4.19	15-71AF1
	1/8"	AF2	15,000 psi	.094	0.20	4.19	15-71AF2
	1/4"	AF4	10,000 psi	.125	0.45	4.69	10-71AF4
	3/8"	AF6	10,000 psi	.187	1.45	4.69	10-71AF6
	1/4"	LF4	20,000 psi	.109	0.31	4.63	20-71LF4
	3/8"	LF6	20,000 psi	.187	1.45	4.63	20-71LF6
	9/16"	LF9	20,000 psi	.187	1.45	5.13	20-71LF9
	1/4"	HF4	20,000 psi	.094	0.20	4.63	20-71HF4
	3/8"	HF6	20,000 psi	.125	0.45	4.63	20-71HF6
	9/16"	HF9	20,000 psi	.187	1.45	4.87	20-71HF9
	1/8"	1/8" NPT	15,000 psi	.187	1.45	4.63	15-71NFA
	1/4"	1/4" NPT	15,000 psi	.187	1.45	4.63	15-71NFB
3/8"	3/8" NPT	15,000 psi	.187	1.45	4.65	15-71NFC	
.375	3/8"	AF6	10,000 psi	.250	2.70	5.13	10-74AF6
	9/16"	LF9	15,000 psi	.312	4.22	6.25	15-74LF9
	3/4"	LF12	15,000 psi	.375	6.08	6.67	15-74LF12
	1"	LF16	15,000 psi	.375	6.08	7.45	15-74LF16
	1/4"	1/4" NPT	15,000 psi	.250	2.70	5.63	15-74NFB
	3/8"	3/8" NPT	15,000 psi	.375	6.08	5.63	15-74NFC
.500	3/4"	LF12	10,000 psi	.500	10.2	6.56	10-80LF12
	1"	LF16	10,000 psi	.500	10.2	7.44	10-80LF16
	3/4"	3/4" NPT	10,000 psi	.500	10.2	6.44	10-80NFF
	1"	1" NPT	10,000 psi	.500	10.2	7.44	10-80NFH
1.000	1 1/2"	LF24	10,000 psi	1.000	30.0	10.91	10-83LF24

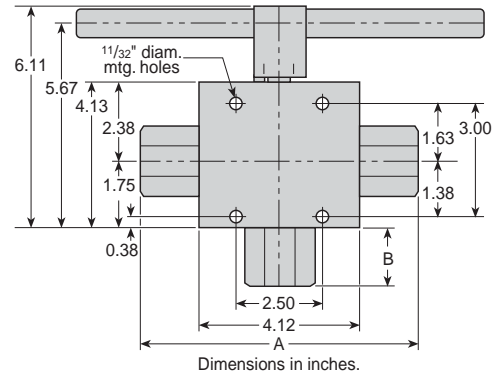
Three-Way Trunion Ball Valves



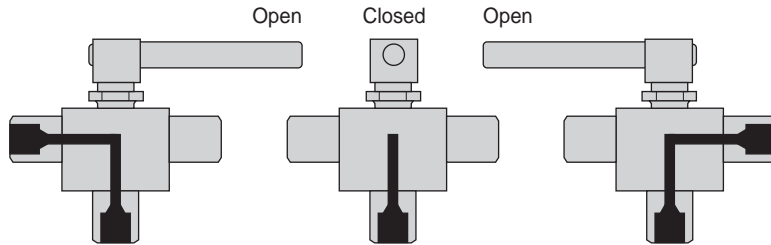
.187 Orifice



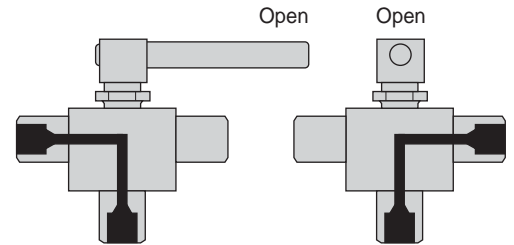
.375 Orifice



.500 Orifice



180° Three-Way Ball Valve



90° Three-Way Diverter Valve

Orifice	Tube Size	Connection	Pressure Rating	Minimum Orifice	Cv	A	B	3-Way 90° Catalog No.	3-Way 180° Catalog No.
.187	1/16"	AF1	15,000 psi	.052	0.04	4.19	0.55	15-73AF1	15-72AF1
	1/8"	AF2	15,000 psi	.094	0.10	4.19	0.55	15-73AF2	15-72AF2
	1/4"	AF4	10,000 psi	.125	0.22	4.69	0.83	10-73AF4	10-72AF4
	3/8"	AF6	10,000 psi	.187	0.71	4.69	1.01	10-73AF6	10-72AF6
	1/4"	LF4	20,000 psi	.109	0.15	4.63	1.00	20-73LF4	20-72LF4
	3/8"	LF6	20,000 psi	.187	0.71	4.63	1.00	20-73LF6	20-72LF6
	9/16"	LF9	20,000 psi	.187	0.71	5.13	1.25	20-73LF9	20-72LF9
	1/4"	HF4	20,000 psi	.094	0.10	4.63	0.81	20-73HF4	20-72HF4
	3/8"	HF6	20,000 psi	.125	0.22	4.63	0.94	20-73HF6	20-72HF6
	9/16"	HF9	20,000 psi	.187	0.71	4.87	1.19	20-73HF9	20-72HF9
	1/8"	1/8" NPT	15,000 psi	.187	0.71	4.63	0.50	15-73NFA	15-72NFA
	1/4"	1/4" NPT	15,000 psi	.187	0.71	4.63	1.06	15-73NFB	15-72NFB
3/8"	3/8" NPT	15,000 psi	.187	0.71	4.65	1.06	15-73NFC	15-72NFC	
.375	3/8"	AF6	10,000 psi	.250	1.07	5.13	0.75	10-76AF6	10-75AF6
	9/16"	LF9	15,000 psi	.312	1.67	6.25	1.06	15-76LF9	15-75LF9
	3/4"	LF12	15,000 psi	.375	2.40	6.67	1.18	15-76LF12	15-75LF12
	1"	LF16	15,000 psi	.375	2.40	7.45	1.99	15-76LF16	15-75LF16
	1/4"	1/4" NPT	15,000 psi	.250	1.07	5.63	1.06	15-76NFB	15-75NFB
	3/8"	3/8" NPT	15,000 psi	.375	2.40	5.63	1.06	15-76NFC	15-75NFC
	1/2"	1/2" NPT	15,000 psi	.375	2.40	5.63	1.06	15-76NFD	15-75NFD
.500	3/4"	LF12	10,000 psi	.500	7.43	6.56	1.30	10-82LF12	10-81LF12
	1"	LF16	10,000 psi	.500	7.43	7.44	1.74	10-82LF16	10-81LF16
	3/4"	3/4" NPT	10,000 psi	.500	7.43	6.44	1.30	10-82NFF	10-81NFF
	1"	1" NPT	10,000 psi	.500	7.43	7.44	1.74	10-82NFH	10-81NFH