



## High Pressure Equipment

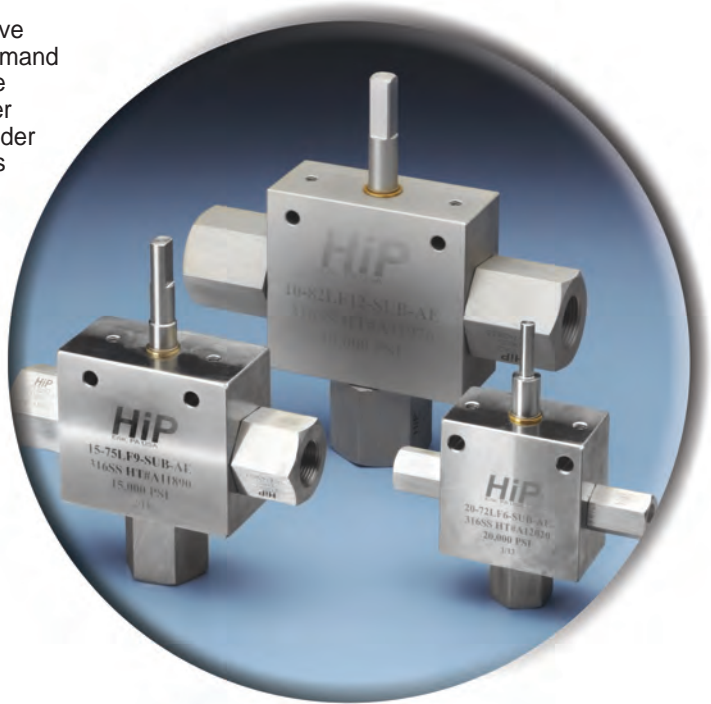
### Subsea Ball Valves

In today's offshore oil and gas industry, wells have become deeper than ever, causing a growing demand for subsea ball valves that can withstand extreme pressures and harshest environments. As a leader in developing ways to provide effective shut off under increasing temperature and pressure requirements at greater depths, High Pressure Equipment offers subsea ball valves that provide safe and reliable operation at very high external pressures.

High Pressure Equipment's Subsea Ball Valves feature their reliable trunion style ball design and incorporate the required design modifications for ideal performance in critical subsea systems. HiP offers the industry's widest range of subsea valve sizes, these valves are available in 2 or 3 way configurations with 180° operation or 90° diverter styles in .187", .375" and .500" orifices and 10, 15 and 20,000 psi pressure ranges.

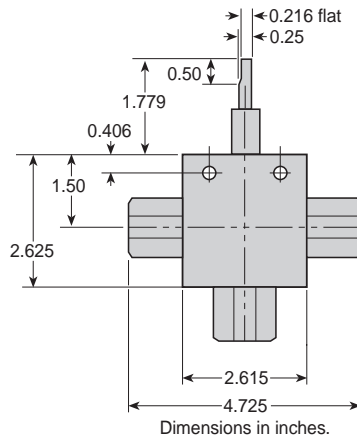
#### Subsea Valve Features

- Trunion style ball design
- 316 cold-worked SS construction
- Two and three-way valve configurations
- 90° diverter or 180° styles
- .187", .375" and .500" orifices
- PEEK ball seats, which offers excellent resistance to chemicals, heat and wear/abrasion
- Optional O-rings available
- Optional wetted materials
- Available to NACE MR-01-75

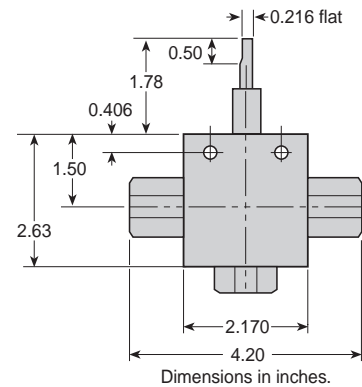


# Subsea Ball Valves

## .187 Orifice Subsea Ball Valves



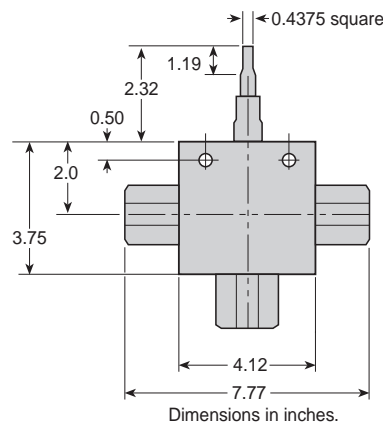
**3-Way Ball Valve**



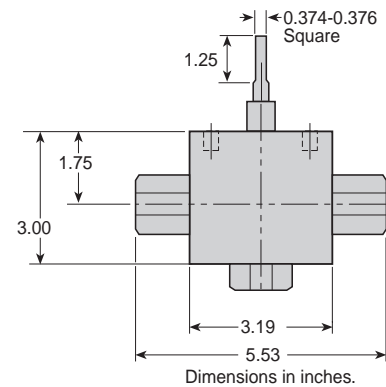
**2-Way Ball Valve**

Orifice	Tube Size	Connection	Pressure Rating	Minimum Orifice	C <sub>v</sub>	Catalog No.
3-Way 180°	3/8"	HF6	20,000 psi	0.125	0.22	20-72HF6-SUB
	1/4"	HF4	20,000 psi	0.094	0.10	20-72HF4-SUB
	9/16"	LF9	20,000 psi	0.187	0.71	20-72HF9-SUB
	3/8"	LF6	20,000 psi	0.187	0.71	20-72LF6-SUB
	1/4"	LF4	20,000 psi	0.109	0.15	20-72LF4-SUB
	3/8"	3/8" NPT	15,000 psi	0.187	0.71	15-72NFC-SUB
3-Way 90° Diverter	1/4"	1/4" NPT	15,000 psi	0.187	0.71	15-72NFB-SUB
	3/8"	HF6	20,000 psi	0.125	0.22	20-73HF6-SUB
	1/4"	HF4	20,000 psi	0.094	0.10	20-73HF4-SUB
	9/16"	LF9	20,000 psi	0.187	0.71	20-73LF9-SUB
	3/8"	LF6	20,000 psi	0.187	0.71	20-73LF6-SUB
	1/4"	LF4	20,000 psi	0.109	0.15	20-73LF4-SUB
2-Way	3/8"	3/8" NPT	15,000 psi	0.187	0.71	15-73NFC-SUB
	1/4"	1/4" NPT	15,000 psi	0.187	0.71	15-73NFB-SUB
	9/16"	HF9	20,000 psi	0.187	1.45	20-71HF9-SUB
	3/8"	HF6	20,000 psi	0.125	0.45	20-71HF6-SUB
	1/4"	HF4	20,000 psi	0.094	0.20	20-71HF4-SUB
	9/16"	LF9	20,000 psi	0.187	1.45	20-71LF9-SUB
	3/8"	LF6	20,000 psi	0.187	1.45	20-71LF6-SUB
	1/4"	LF4	20,000 psi	0.109	0.31	20-71LF4-SUB
	1/2"	1/2" NPT	15,000 psi	0.187	1.45	15-71NFD-SUB
3/8"	3/8" NPT	15,000 psi	0.187	1.45	15-71NFC-SUB	
1/4"	1/4" NPT	15,000 psi	0.187	1.45	15-71NFB-SUB	
1/8"	1/8" NPT	15,000 psi	0.187	1.45	15-71NFA-SUB	

# .375 Orifice Subsea Ball Valves



**3-Way Ball Valve**



**2-Way Ball Valve**

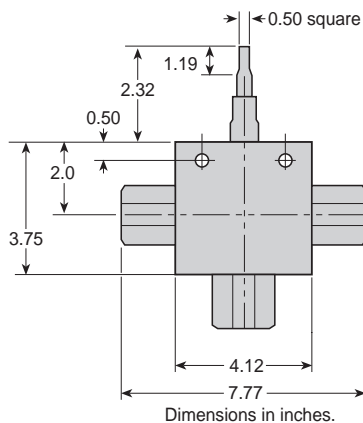
Orifice	Tube Size	Connection	Pressure Rating	Minimum Orifice	C <sub>v</sub>	Catalog No.
3-Way 180°	3/4"	LF12	15,000 psi	0.375	2.40	15-75LF12-SUB
	9/16"	LF9	15,000 psi	0.312	1.67	15-75LF9-SUB
	3/8"	LF6	15,000 psi	0.203	0.81	15-75LF6-SUB
	1/2"	1/2" NPT	15,000 psi	0.375	2.40	15-75NFD-SUB
	3/8"	3/8" NPT	15,000 psi	0.375	2.40	15-75NFC-SUB
	1/4"	1/4" NPT	15,000 psi	0.250	1.07	15-75NFB-SUB
3-Way 90° Diverter	3/4"	LF12	15,000 psi	0.375	2.40	15-76LF12-SUB
	9/16"	LF9	15,000 psi	0.312	1.67	15-76LF9-SUB
	3/8"	LF6	15,000 psi	0.203	0.81	15-76LF6-SUB
	1/2"	1/2" NPT	15,000 psi	0.375	2.40	15-76NFD-SUB
	3/8"	3/8" NPT	15,000 psi	0.375	2.40	15-76NFC-SUB
	1/4"	1/4" NPT	15,000 psi	0.250	1.07	15-76NFB-SUB
2-Way	3/4"	LF12	15,000 psi	0.375	6.08	15-74LF12-SUB
	9/16"	LF9	15,000 psi	0.312	4.22	15-74LF9-SUB
	3/8"	LF6	15,000 psi	0.203	2.20	15-74LF6-SUB
	1/2"	1/2" NPT	15,000 psi	0.375	6.08	15-74NFD-SUB
	3/8"	3/8" NPT	15,000 psi	0.375	6.08	15-74NFC-SUB
	1/4"	1/4" NPT	15,000 psi	0.250	2.70	15-74NFB-SUB



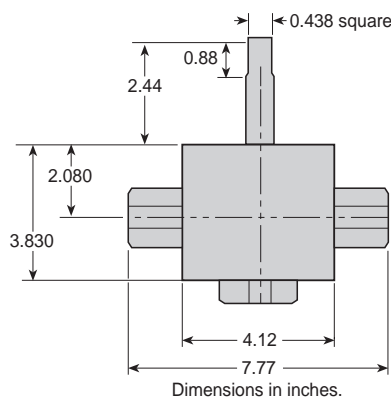
## High Pressure Equipment

### .500 Orifice Subsea Ball Valves

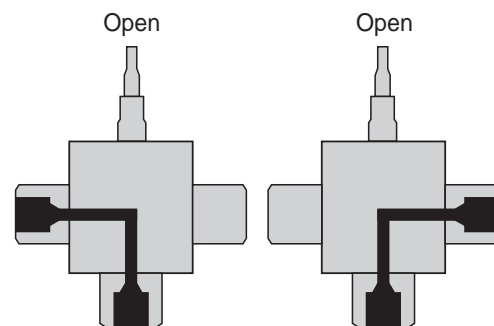
Orifice	Tube Size	Connection	Pressure Rating	Minimum Orifice	C <sub>v</sub>	Catalog No.
3-Way 180°	1"	1" NPT	10,000 psi	.500	4.40	10-81NFH-SUB
	3/4"	3/4" NPT	10,000 psi	.500	4.40	10-81NFF-SUB
	1"	LF16	10,000 psi	.500	4.40	10-81LF16-SUB
	3/4"	LF12	10,000 psi	.500	4.40	10-81LF12-SUB
3-Way 90° Diverter	1"	1" NPT	10,000 psi	.500	4.40	10-82NFH-SUB
	3/4"	3/4" NPT	10,000 psi	.500	4.40	10-82NFF-SUB
	1"	LF16	10,000 psi	.500	4.40	10-82LF16-SUB
	3/4"	LF12	10,000 psi	.500	4.40	10-82LF12-SUB
2-Way	1"	1" NPT	10,000 psi	.500	10.2	10-80NFH-SUB
	3/4"	3/4" NPT	10,000 psi	.500	10.2	10-80NFF-SUB
	1"	LF16	10,000 psi	.500	10.2	10-80LF16-SUB
	3/4"	LF12	10,000 psi	.500	10.2	10-80LF12-SUB



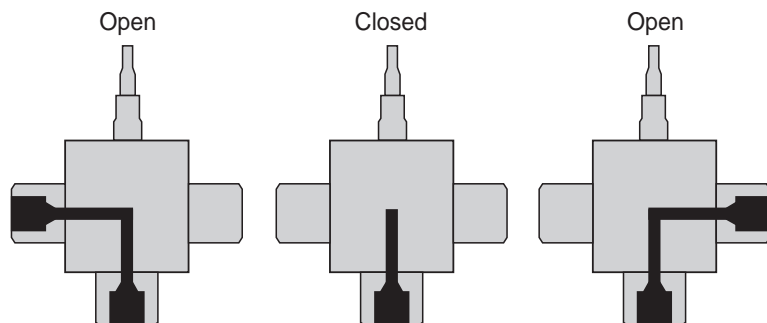
**3-Way Ball Valve**



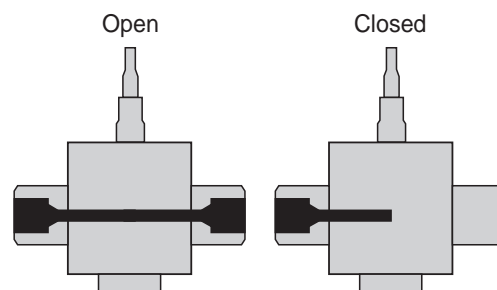
**2-Way Ball Valve**



**90° Three-Way Diverter Valve**



**180° Three-Way Ball Valve**



**Two-Way Valve**