

# BuTech

an Accudyne Industries brand

Delivering Peak Performance

*High-pressure, high-temperature  
subsea valves*





## Table of Contents

Introduction to Subsea Valves	2
15,000 PSI Ball Valves	5
10,000 PSI Ball Valves	7
6,000 PSI Ball Valves	23
Check Valves	25
Needle Valves	26
Additional Subsea Valves	27



In subsea critical systems, nothing is more important than structural integrity to assure performance, safety and reliability. BuTech API 6A (19th ed.), ISO 10423:2003 PRs, Annex F/PSL3G qualified valves ensure the highest quality and most reliable performance for pressure control systems, throughout the entire life of the subsea structure.

BuTech subsea valves meet performance, safety and reliability expectations in the deepest water and harshest environments in the offshore oil and gas industry. As wells have become deeper, BuTech has been a leader at developing new and innovative ways to control the increasing temperature and pressure requirements at these greater depths.

BuTech's subsea, relief, needle, ball, double block and bleed valves, and assemblies are installed in some of the oil and gas industry's most challenging applications. From ball valves for onshore and topside applications to subsea valves performing in the harsh environments of the deepest offshore waters, BuTech leads the industry in performance, safety, and reliability.

### Features and Benefits

- API 6A , 19th ed., ISO 10423:2003 PR2, Annex F/PSL3G qualified valves available
- All valves are internally pressure tested to at least 50% over rated pressure
- Externally tested to 14,000' (4200 Meters) depth
- Typical service life guarantee of 25 years
- Custom designed for instrumentation, process control and chemical injection applications. Remote operated vehicle (ROV) capabilities in template control panels, subsea wellheads and christmas trees
- Manufactured to meet the requirements of NACE MR0175, API Spec 6A & 17D, ASME, ANSI and various others
- Trouble free operation in a variety of media including hydrogen sulfides, corrosion inhibitors, paraffin thinners, hydraulic fluids and other harsh chemicals

### Standard Materials of Construction

BuTech Subsea Ball Valves may be produced in any machinable metal with special seal materials. *Please consult factory for custom requirements.*

Standard materials include:

- 316 cold-worked stainless steel
- Super Duplex

### Considerations in Selecting the Proper Subsea Valve

- Pressure/temperature rating
- End connections
- Service conditions and fluids
- Performance requirements
- Material compatibility
- Flow pattern required
- Customer specifications
- Water depth
- Needle or ball valve
- Orifice size needed
- Flow requirements
- Dimensional envelope and weight
- Method of operation
- Service life expectancy
- Handle configuration

## Subsea Needle Valves

- Non-rotating, non-rising stem prevents galling and scoring
- Metal to metal seating
- Stem packing below threads prevents thread galling and fouling
- Positive gland locking device
- Special alloys available for extreme service
- High temperature stem packing available
- Bracket or panel mounting
- Externally sealed design for depths to 14,000' (4200 meters)
- Wide variety of end connections and actuation handles



## Subsea Ball Valves

- Rapid quarter turn action provides quick open/close action for easy ROV or diver operation
- Independent spring-loaded seals for full differential pressure
- Trunnion mounted ball design and blowout proof stem for maximum safety
- Externally sealed design for depths to 14,000 feet (4200 meters)
- Easy mounting for ROV, diver or remote actuation
- Unlimited replaceable end connection capabilities for installation versatility
- Double barrier o-rings or cup seal options to prevent the ingress of seawater
- Full port flow path through valve to minimize pressure drop
- Bi-directional flow capabilities
- A variety of seal materials are available for different services
- Special alloys available for extreme service
- PEEK® seats to offer resistance to chemicals, heat and wear/ abrasion
- Optional mounting patterns and interfaces
- 3/8', 1/2" & 1" 2-way design, 3/16', 3/8" & 1/2" 3-way design, 3/8" 4-way configurations available



### Connection

- Low Pressure - compression sleeve
- Medium Pressure - coned & threaded
- High Pressure - coned & threaded

## Subsea Check Valves

- Ensure flow in only one direction
- Rated to pressures of 15,000 psig and above
- Designed to the same rigorous standards as Subsea Ball and Needle Valves, insuring a long, maintenance free life
- Available in all machinable alloys
- Externally sealed design for depths to 14,000'
- Available with soft seat o-ring style or metal to metal seat poppet style
- Cracking pressures can be factory set to a desired pressure



### Availability

- Pipe - NPT threads
- Also available: API, flange, zero clearance, socket weld, butt weld, SAE, JIC, BSP, ISO and others

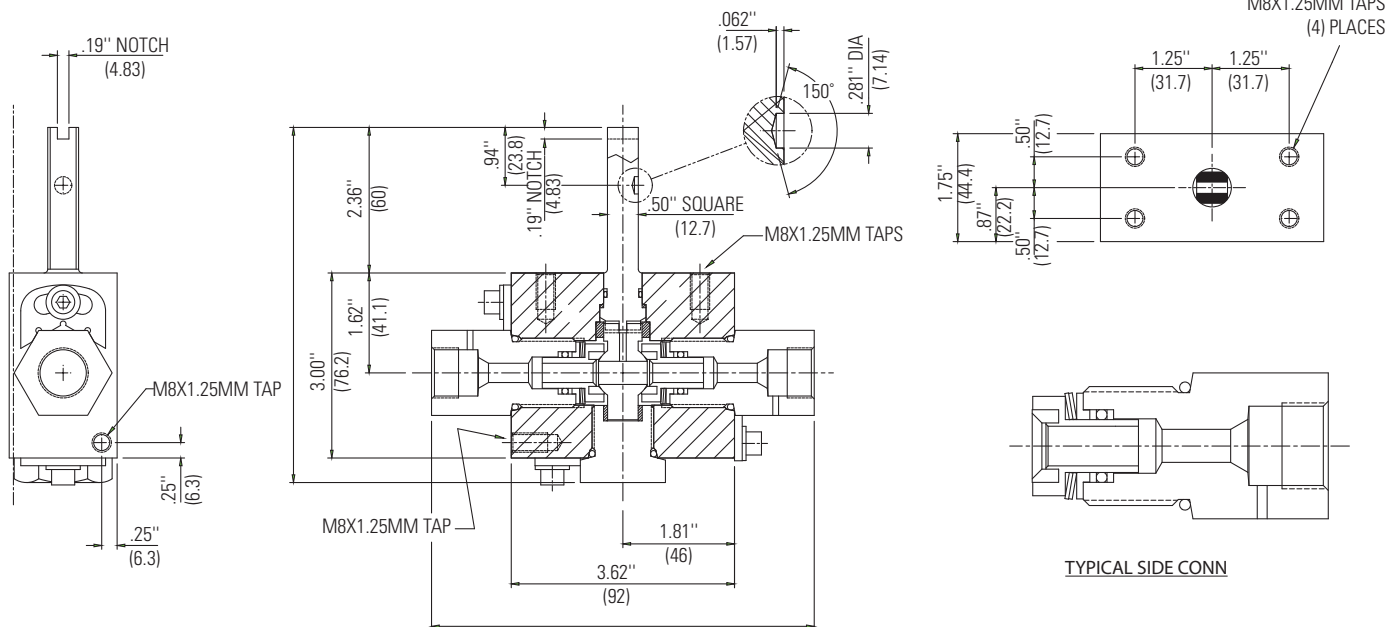
# Subsea Ball Valve

15,000 PSIG

C-2130-01	
Description	Subsea Ball Valve
Detail	2-way, 90 deg Turn
MAWP	15,000 psig
Orifice	.312"
CV	3.4
Barrier	Single
Body	2507 SD
Stem	Inconel 625
Trunnion	Inconel 625
O-Ring	HNBR 2269-90
Connection	Various
Actuator	ROV
Length	3.62"
Width	1.75"
Height	5.36"
Hydrostatic Test Pressure	22,500 psig
Max Torque on Stem	36 ft-lbs

### Valve Features

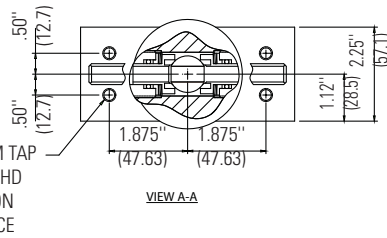
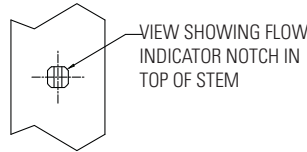
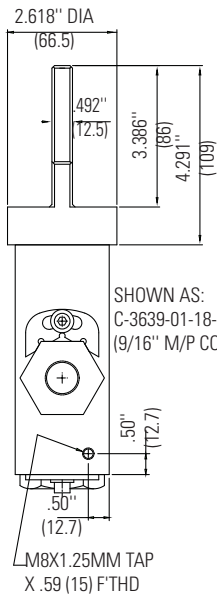
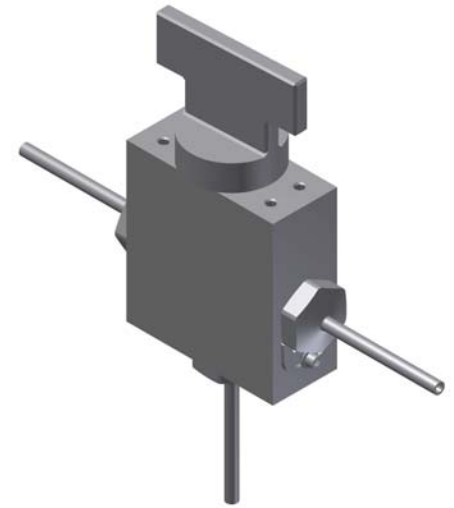
- 15,000 psi service
- NACE construction – MR0175 up to H2S pressure of .01 MPa (1.5 psia)
- ½" Sq. stem
- ROV operation with API bucket mounting
- Available in 3-way configuration with CV of 2.4



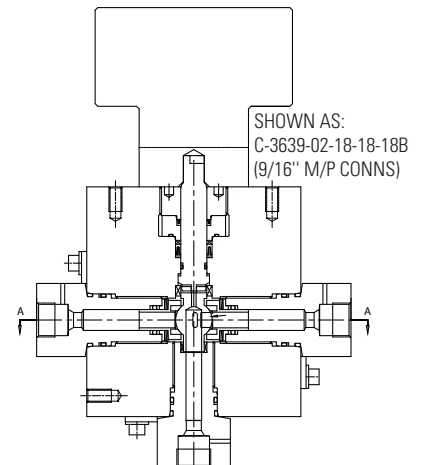
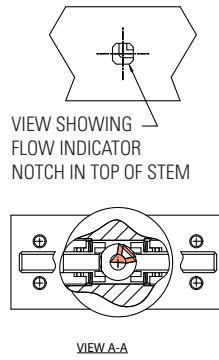
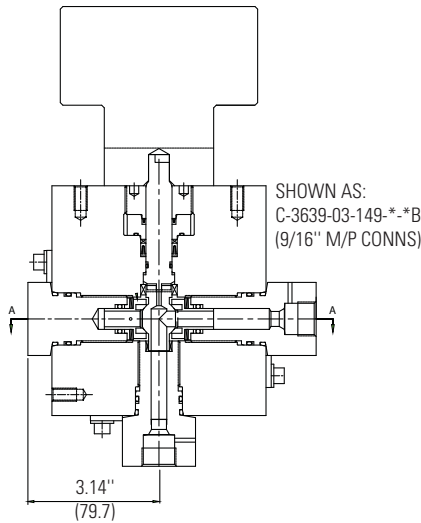
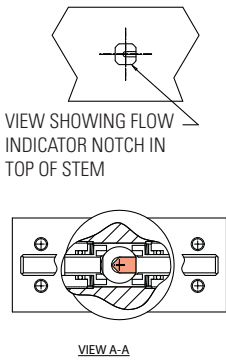
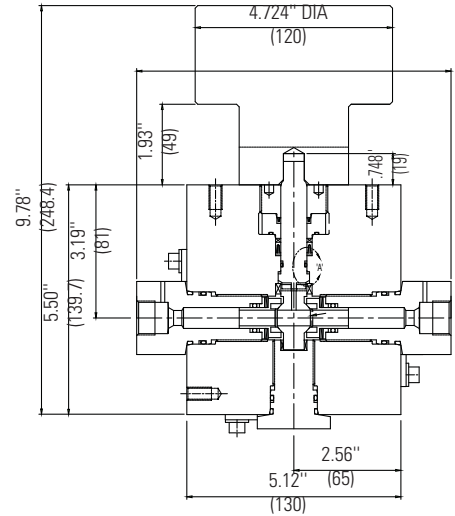
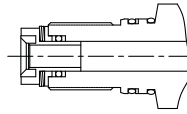
	C-3639-02	C-3639-03
Description	Subsea Ball Valve	Subsea Ball Valve
Detail	3-way, 90 deg Turn	2-way, 90 deg Turn
MAWP	15,000 psig	15,000 psig
Orifice	.375"	.375"
CV	2.4	3.4
Barrier	Double	Double
Body	2507 SD	2507 SD
Stem	Inconel 625	Inconel 625
Trunnion	2507 SD	2507 SD
O-Ring	HNBR 2269	HNBR 2269
Connection	Various	Various
Actuator	ROV	ROV
Length	5.12"	5.12"
Width	2.25"	2.25"
Height	9.78"	9.78"
Hydrostatic Test Pressure	22,500 psig	22,500 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs

### Valve Features

- Dynamic cup-seal on rotating stem
- Double barrier design
- NACE construction – MR0175 up to H2S pressure of .02 MPa (3.0 psia)
- ½" sq. stub stem
- API Bucket mounted with custom blade handle
- Available as 2-way straight, 2-way angle and 3-way with mid-stroke shut-off

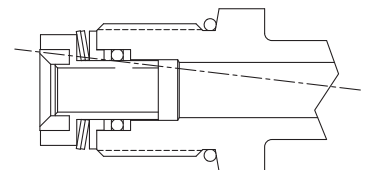
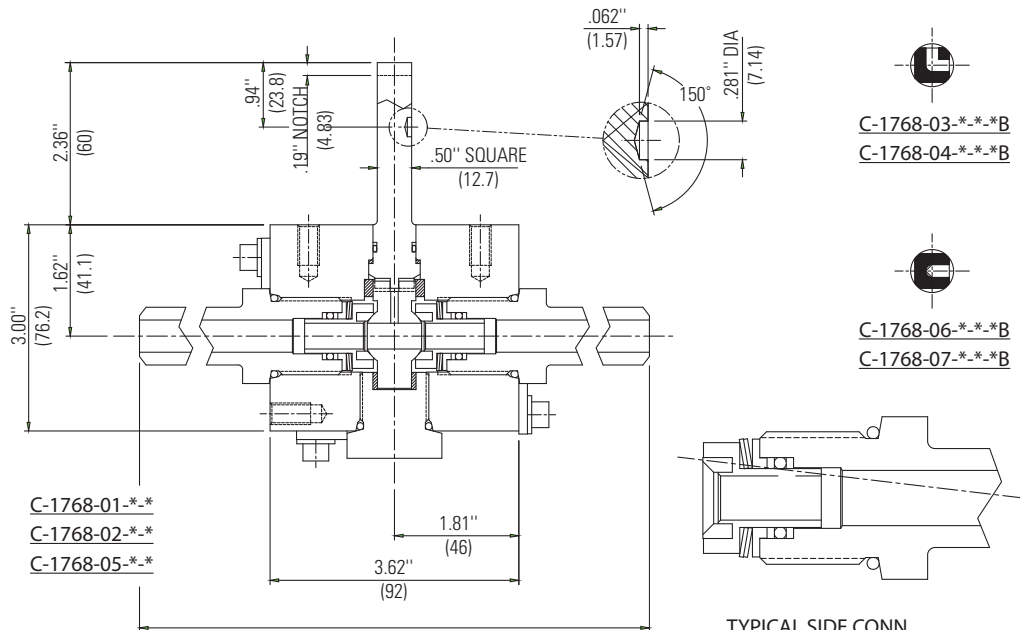
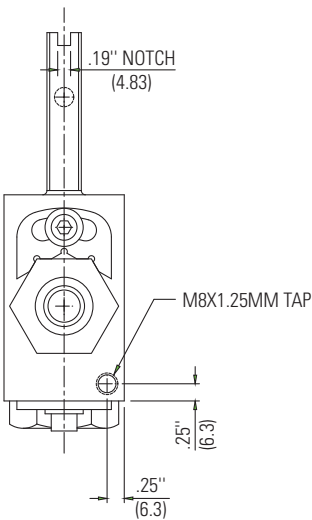
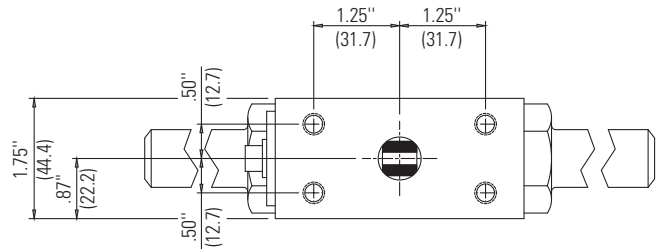


VIEW A-A



# 10,000 PSIG

	C-1768-02	C-1768-04	C-1768-05	C-1768-06	C-1768-07
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	2-way, 90 deg Turn	3-way, 90 deg Turn	2-way, 90 deg Turn	3-way, 90 deg Turn	3-way, 180 deg Turn
MAWP	10,000 psig	10,000 psig	10,000 psig	10,000 psig	10,000 psig
Orifice	.375"	.375"	.375"	.375"	.375"
CV	2.4	2.4	2.4	2.4	2.4
Barrier	Single	Single	Single	Single	Single
Body	316	316	316	316	316
Stem	Inconel 625	Inconel 625	Inconel 625	Inconel 625	Inconel 625
Trunnion	316	316	316	316	316
O-Ring	Nitrile N1210-90	Nitrile N1210-90	GFLT 9131	GFLT 9131	Nitrile N1210-90
Connection	Various	Various	Various	Various	Various
Actuator	ROV	ROV	ROV	ROV	ROV
Length	3.62"	3.62"	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"	1.75"	1.75"
Height	5.36"	5.36"	5.36"	5.36"	5.36"
Hydrostatic Test Pressure	15,000 psig	15,000 psig	15,000 psig	15,000 psig	15,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs



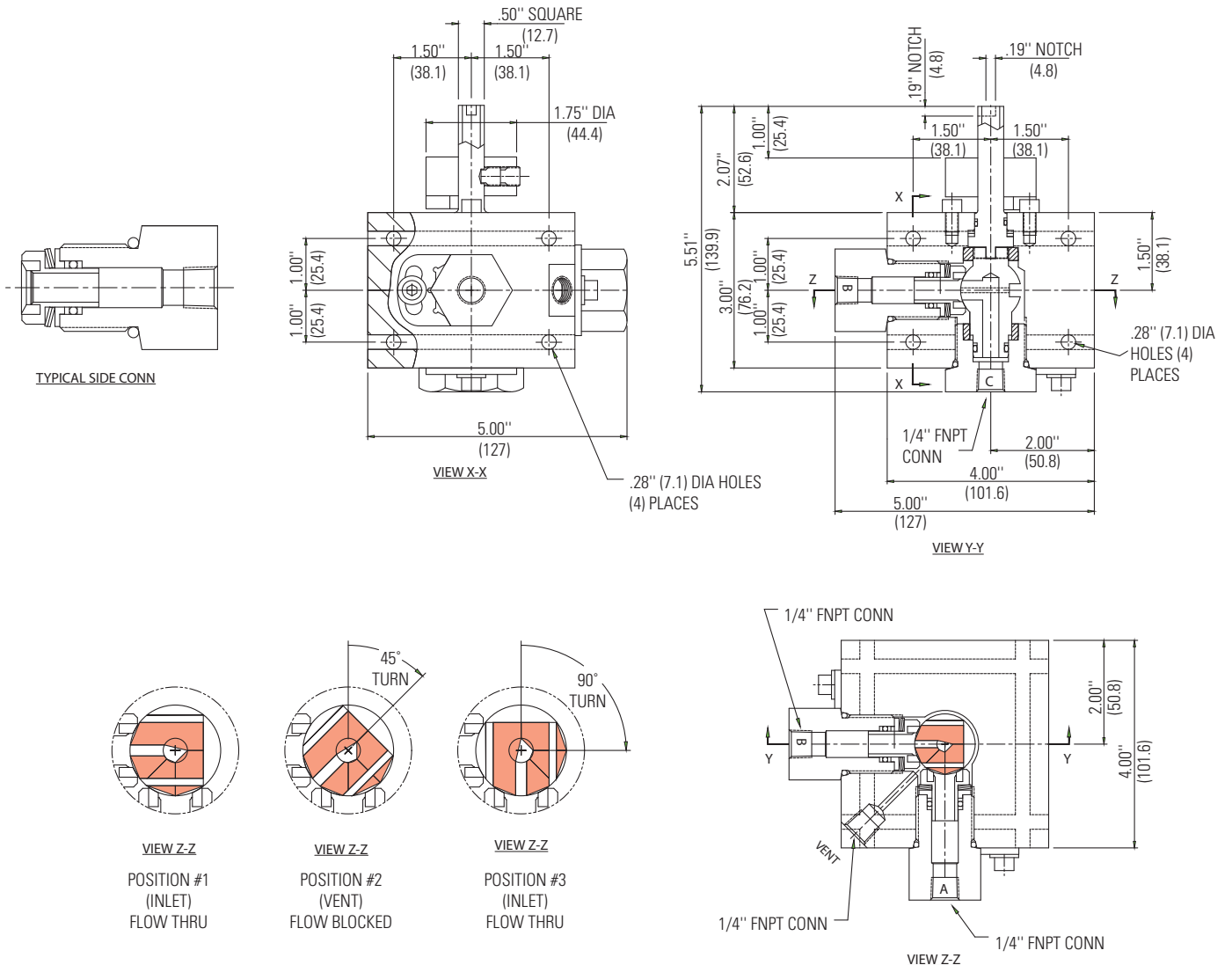
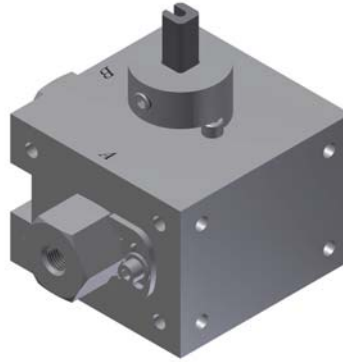
TYPICAL SIDE CONN



	C-2892-01	C-2892-02
Description	Subsea Ball Valve	Subsea Ball Valve
Detail	3-way, 90 deg Turn	3-way, 90 deg Turn
MAWP	10,000 psig	10,000 psig
Orifice	.28"	.28"
CV	1.4	1.4
Barrier	Single	Single
Body	316	316
Stem	Inconel 625	Inconel 625
Trunnion	316	316
O-Ring	Buna-N	Buna-N
Connection	1/4" FNPT	3/8" FNPT
Actuator	ROV	ROV
Length	5.00"	5.00"
Width	5.00"	5.00"
Height	5.51"	5.51"
Hydrostatic Test Pressure	15,000 psig	15,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs

### Valve Features

- Internally vented at mid-stroke to prevent cross contamination of injection fluids
- Hub stop included on 1/2" sq. stem
- Low torque operation
- Side bracket mounted
- Other flow patterns available



NOTCH  
IN TOP  
OF STEM

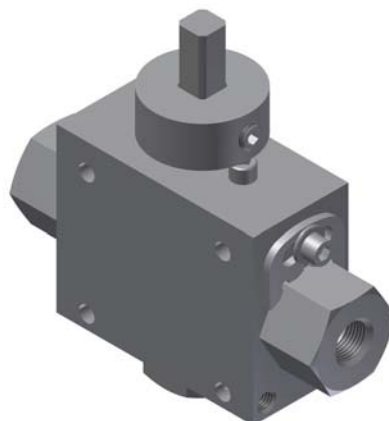


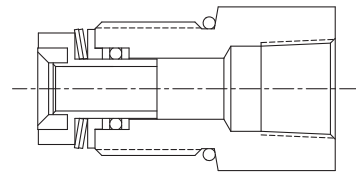
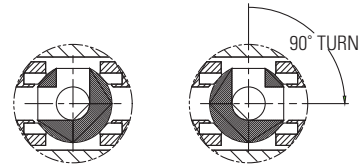
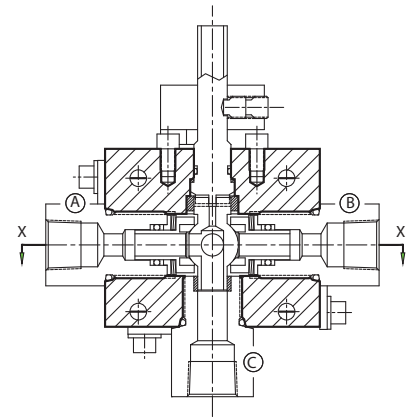
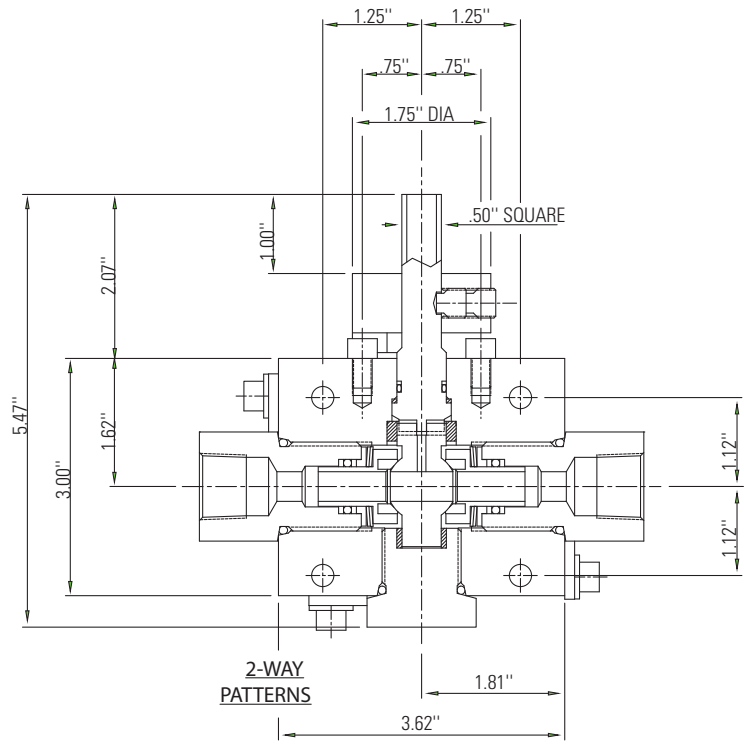
	C-1619-05	C-1619-06	C-1619-07	C-1619-09
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	2-way, 90 deg Turn	3-way diverter	3-way diverter	3-way diverter
MAWP	10,000 psig	10,000 psig	10,000 psig	10,000 psig
Orifice	.375"	.375"	.375"	.375"
CV	3.4	2.4	2.4	2.4
Barrier	Single	Single	Single	Single
Body	316	316	316	316
Stem	Inconel 625	Inconel 718	Inconel 625	Inconel 625
Trunnion	316	316	316	316
O-Ring	Buna-N	Buna-N	Buna-N	Buna-N
Connection	Various	Various	Various	Various
Actuator	ROV	ROV	ROV	ROV
Length	3.62"	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"	1.75"
Height	5.47"	5.47"	5.47"	5.47"
Hydrostatic Test Pressure	15,00 psig	15,00 psig	15,00 psig	15,00 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs

	C-1619-10	C-1619-11	C-1619-12	C-1619-13
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	2-way, 90 deg Turn	3-way diverter	3-way diverter	2-way, 90 deg Turn
MAWP	10,000 psig	10,000 psig	10,000 psig	10,000 psig
Orifice	.375"	.375"	.375"	.375"
CV	3.4	2.4	2.4	3.4
Barrier	Single	Single	Single	Single
Body	316	316	316	316
Stem	Inconel 625	Inconel 625	Inconel 625	Inconel 625
Trunnion	316	316	316	316
O-Ring	Buna-N	Buna-N	GFLT 9131	GFLT 9131
Connection	Various	Various	Various	Various
Actuator	ROV	Handle	ROV	ROV
Length	3.62"	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"	1.75"
Height	5.47"	5.47"	5.47"	5.47"
Hydrostatic Test Pressure	15,000 psig	15,000 psig	15,000 psig	15,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs

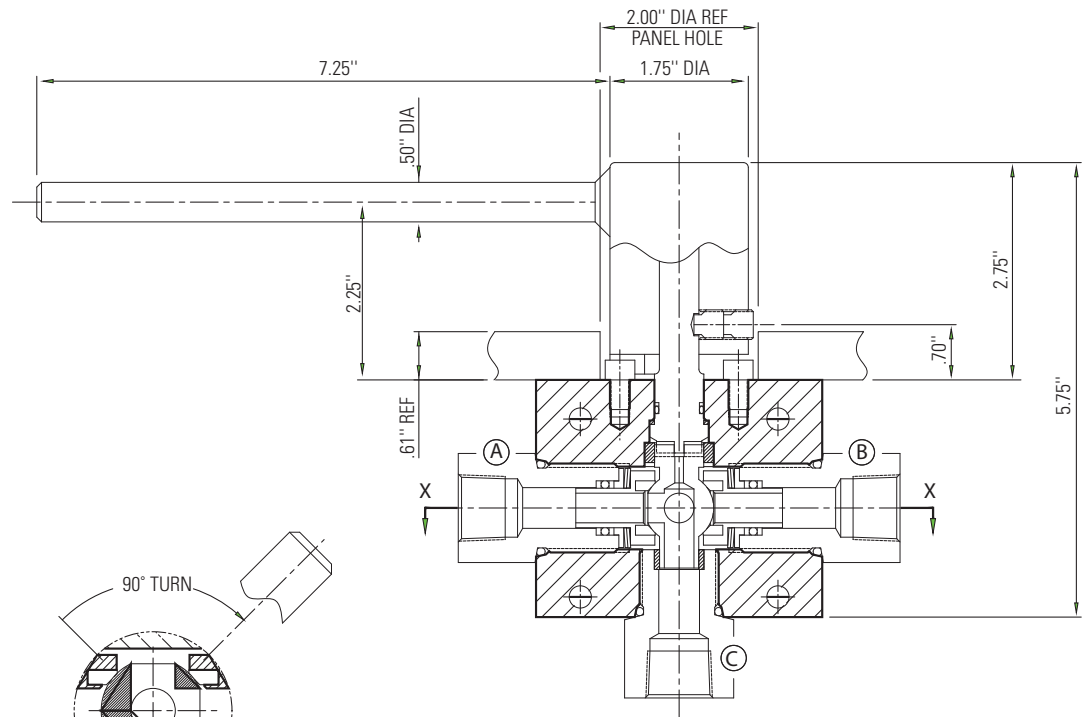
#### Valve Features

- Economical 316 construction
- 10,000 psi service
- ½" Sq. stem
- Side mounting
- Optional hub and stops

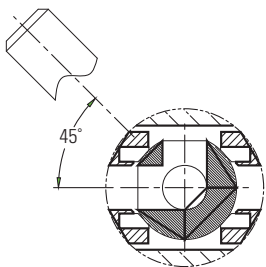




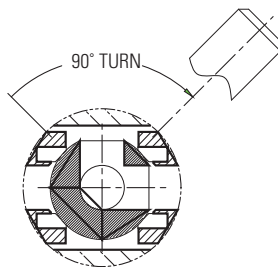
TYPICAL SIDE CONN



C-1619-11-22-22-22B



VIEW X-X



VIEW X-X



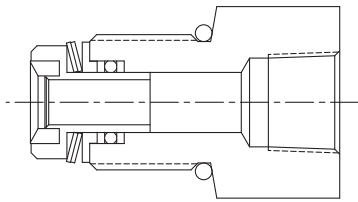
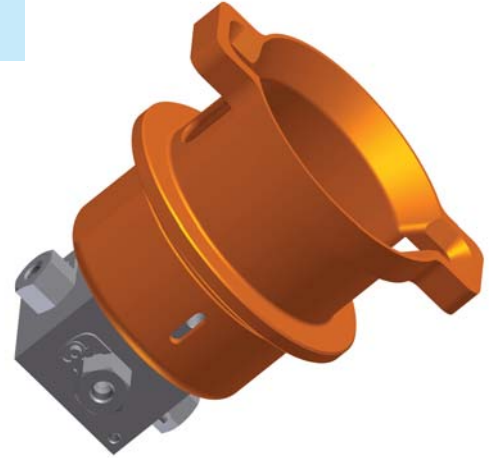


## C-3210-01

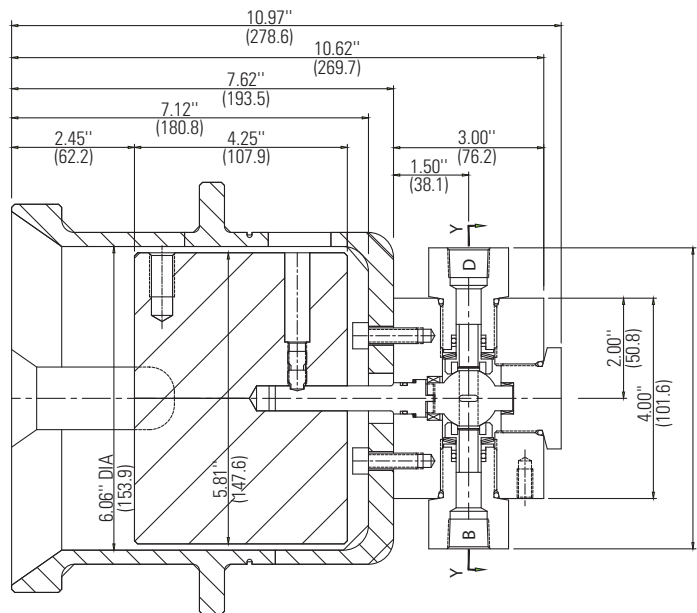
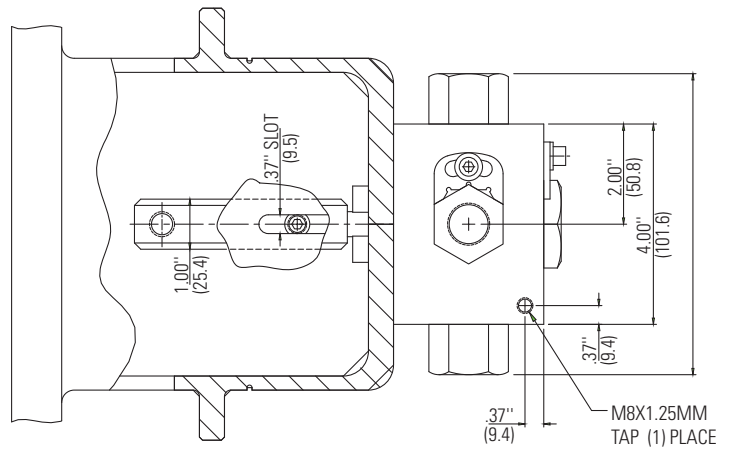
Description	Subsea Ball Valve
Detail	4-way, 90 deg turn
MAWP	10,000 psig
Orifice	.125"
CV	1.2
Barrier	Single
Body	316
Stem	Inconel 625
Trunnion	316
O-Ring	Buna-N
Connection	Various
Actuator	ROV
Length	4.00"
Width	4.00"
Height	8.52"
Hydrostatic Test Pressure	15,000 psig
Max Torque on Stem	36 ft-lbs

### Valve Features

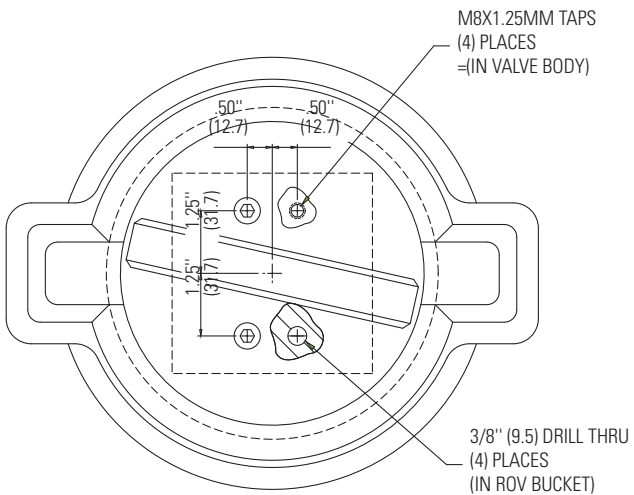
- Unique porting to prevent cross contamination of injection fluids
- Blade handle adapter to 1/2" sq. stem
- API bucket mounted

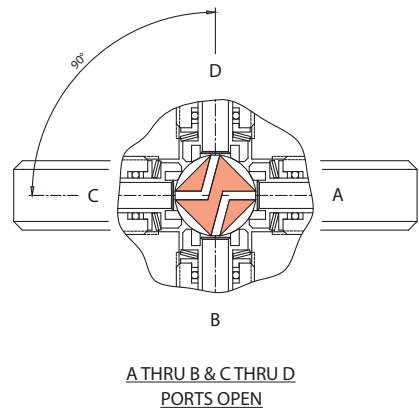
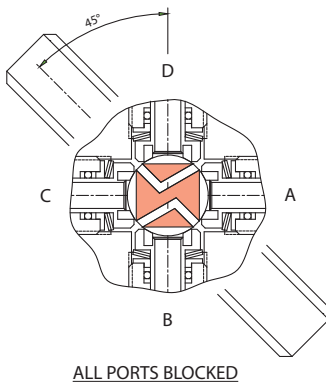
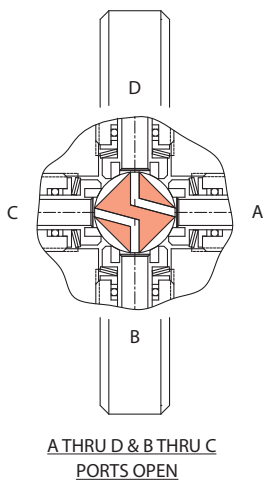
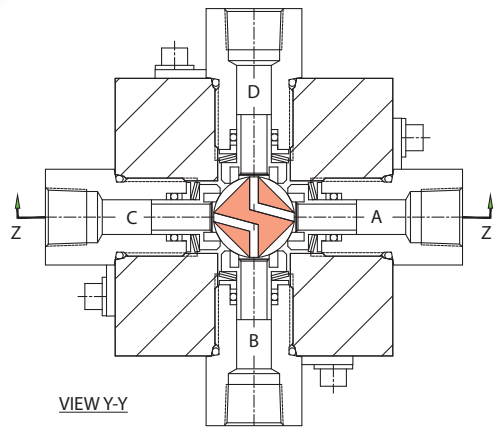


TYPICAL SIDE CONN



VIEW Z-Z





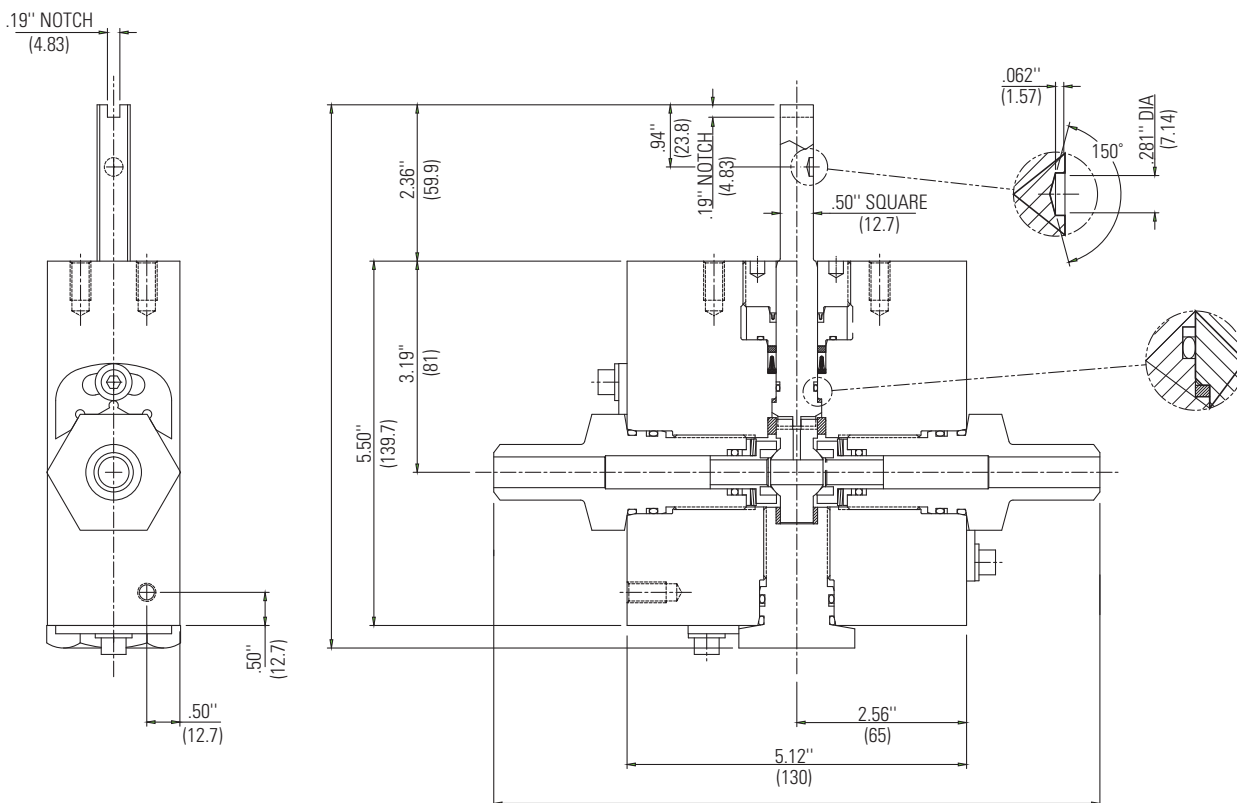
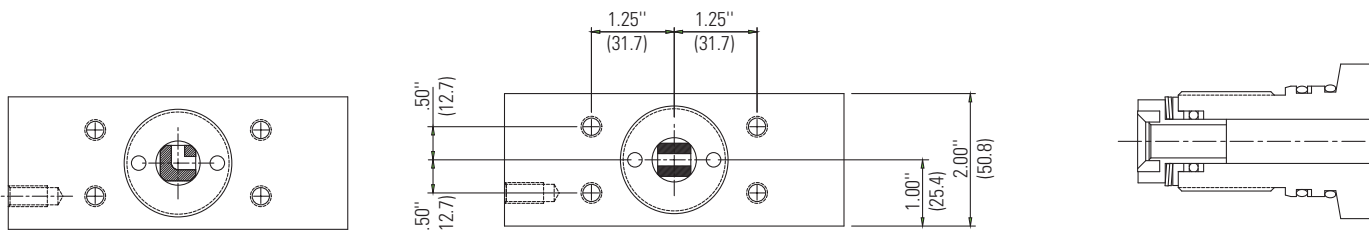
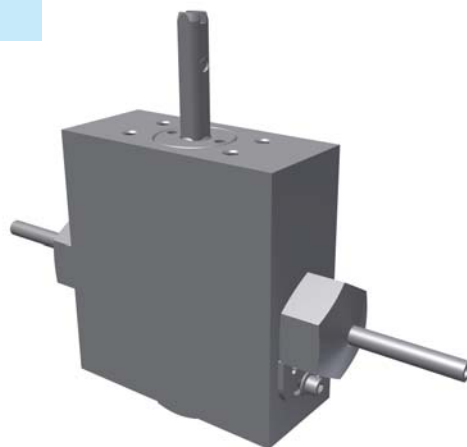
C-3210-01 Flow Patterns

## C-1128-01

Description	Subsea Ball Valve
Detail	2-way, 90 deg Turn
MAWP	10,000 psig
Orifice	.375"
CV	2.4
Barrier	Double
Body	316
Stem	Inconel 625
Trunnion	316
O-Ring	Nitrile
Connection	Various
Actuator	ROV
Length	5.12"
Width	2"
Height	7.86"
Hydrostatic Test Pressure	15,000 psig
Max Torque on Stem	36 ft-lbs

### Valve Features

- Dynamic cup-seal on rotating stem
- Double barrier design
- ½" sq. stub stem
- API Bucket mounted





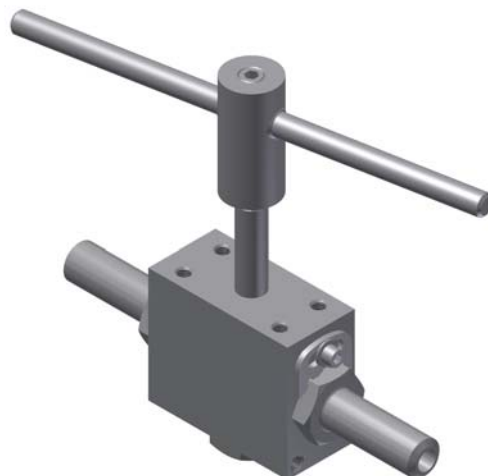


	C-1147-02	C-1147-04	C-1147-05	C-1147-06
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	2-way, 90 deg Turn	3-way, 90 deg Turn	3-way, 180 deg Turn	3-way, 90 deg Turn
MAWP	10,000 psig	10,000 psig	10,000 psig	10,000 psig
Orifice	.375"	.375"	.375"	.375"
CV	3.4	2.4	2.4	2.4
Barrier	Single	Single	Single	Single
Body	316	316	316	316
Stem	Inconel 625	Inconel 625	Inconel 625	Inconel 625
Trunnion	316	316	316	316
O-Ring	Nitrile	Nitrile	Nitrile	Viton/Flourosilicone
Connection	Various	Various	Various	Various
Actuator	Handle	Handle	Handle	Handle
Length	3.62"	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"	1.75"
Height	7.75"	7.75"	7.75"	7.75"
Hydrostatic Test Pressure	15,000 psig	15,000 psig	15,000 psig	15,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs

	C-1147-07	C-1147-08	C-1147-09	C-1147-10
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	3-way, 90 deg Turn	3-way, 90 deg Turn	2-way, 90 deg Turn	2-way, 90 deg Turn
MAWP	10,000 psig	10,000 psig	10,000 psig	10,000 psig
Orifice	.375"	.375"	.375"	.375"
CV	2.4	2.4	3.4	3.4
Barrier	Single	Single	Single	Single
Body	316	316	316	316
Stem	Inconel 626	Inconel 626	Inconel 626	Inconel 625
Trunnion	317	317	317	316
O-Ring	Nitrile	Nitrile	Nitrile	Nitrile
Connection	Various	Various	Various	Various
Actuator	Handle	Handle	Handle	Handle
Length	3.62"	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"	1.75"
Height	7.75"	7.75"	7.75"	7.75"
Hydrostatic Test Pressure	15,000 psig	15,000 psig	15,000 psig	15,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs	36 ft-lbs

#### Valve Features

- Economical 316 construction
- 10,000 psi service
- ½" Sq. stem
- ROV operation with "T" handle and API bucket mounting
- Offset "T" and "L" handles available

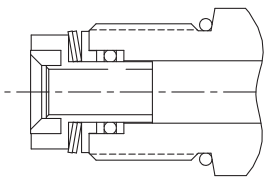
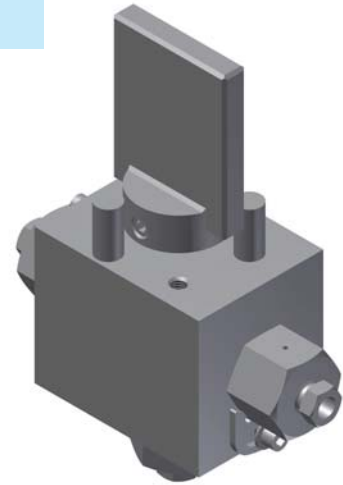




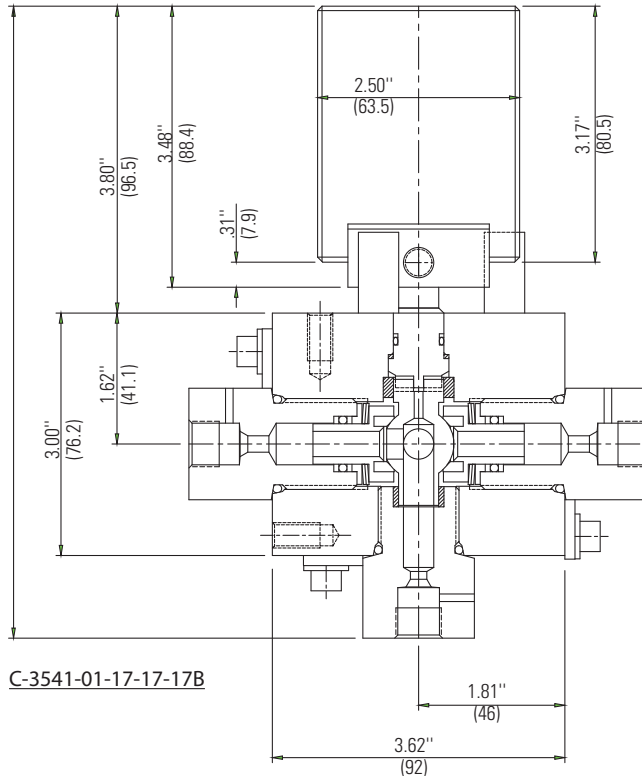
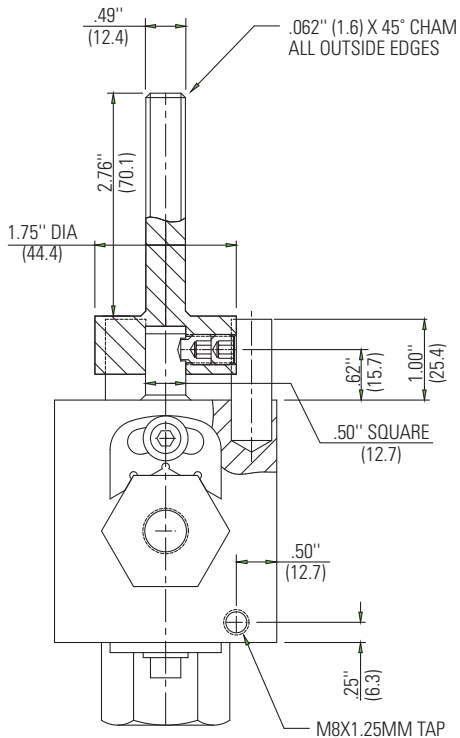
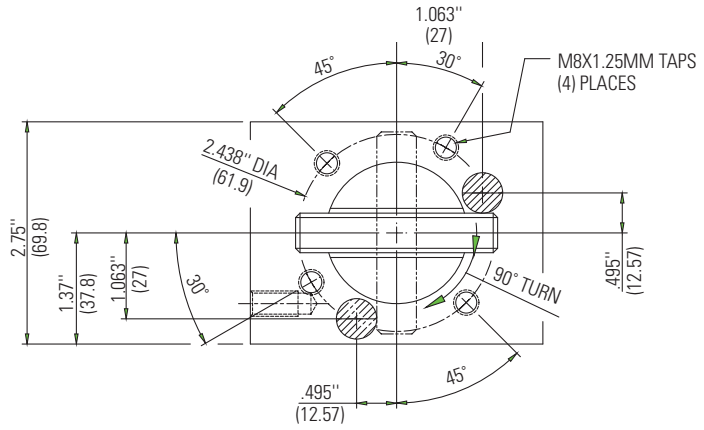
	C-3541-01	C-3541-02
Description	Subsea Ball Valve	Subsea Ball Valve
Detail	3-way, 90 deg Turn	2-way, 90 deg Turn
MAWP	10,000 psig	10,000 psig
Orifice	.312"	.312"
CV	2	2
Barrier	Single	Single
Body	316	316
Stem	Inconel 625	Inconel 625
Trunnion	Inconel 625	Inconel 625
O-Ring	HNBR 2269-90	HNBR 2269-90
Connection	Various	Various
Actuator	ROV	ROV
Length	3.62"	3.62"
Width	2.75"	2.75"
Height	6.80"	6.80"
Hydrostatic Test Pressure	15,000 psig	15,000 psig
Max Torque on Stem	155 ft-lbs	155 ft-lbs

**Valve Features**

- NACE construction
- Blade handle on 1/2" sq. stub stem
- Robust pin stops
- API Bucket mounted



TYPICAL SIDE CONN



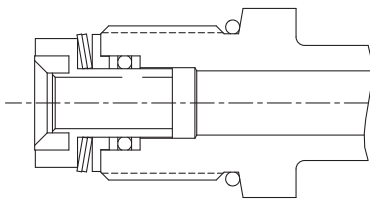
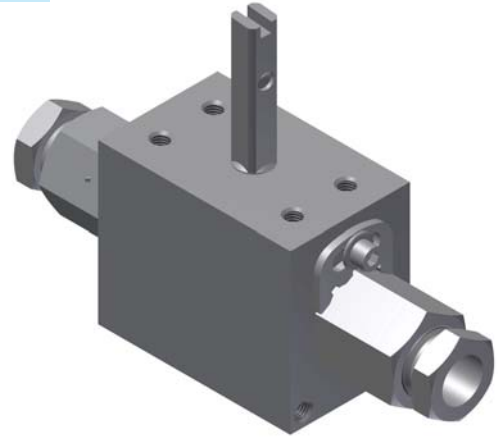


## C-2013-02

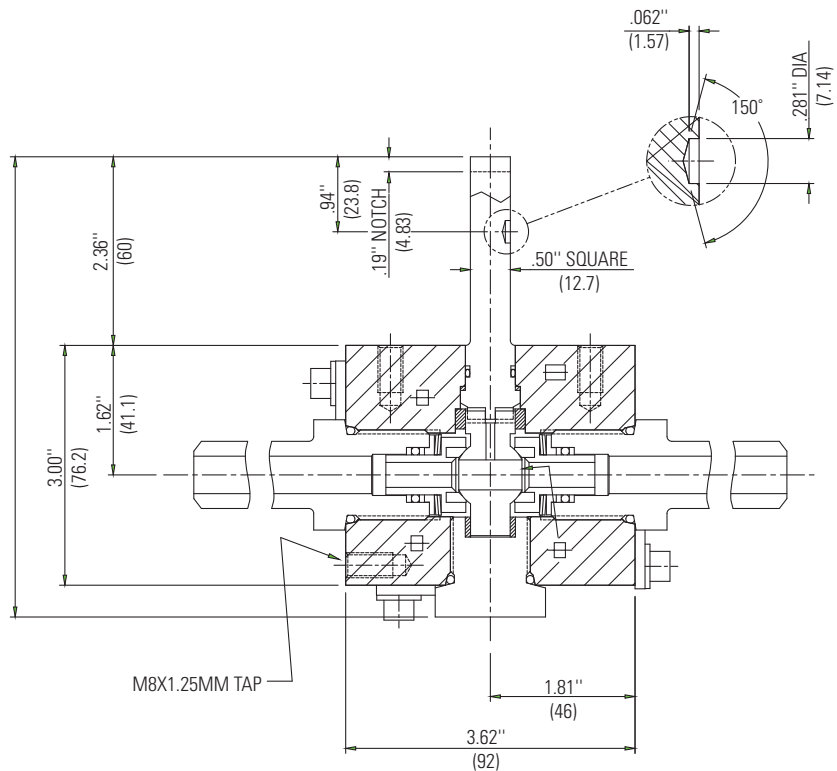
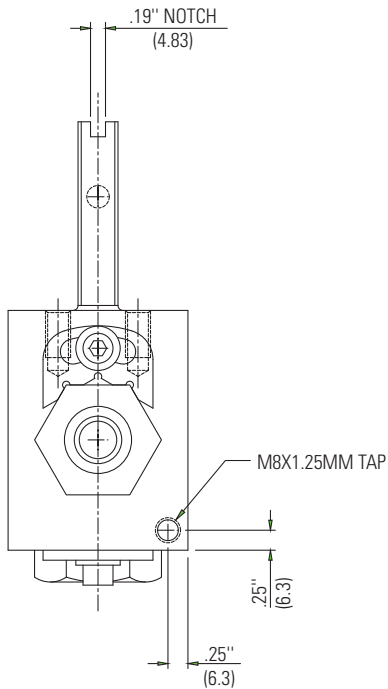
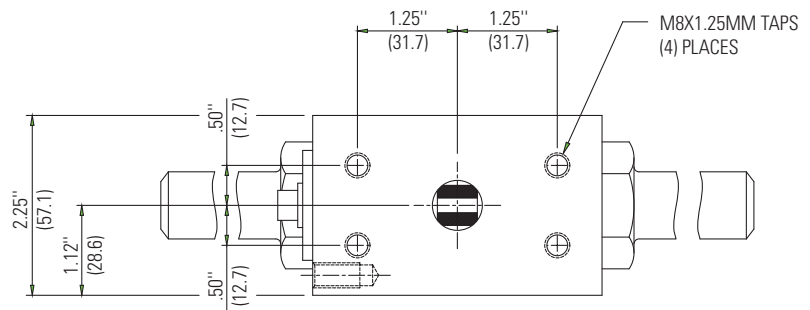
Description	Subsea Ball Valve
Detail	2-way, 90 deg Turn
MAWP	10,000 psig
Orifice	.312"
CV	2
Barrier	Single
Body	316
Stem	Inconel 625
Trunnion	Inconel 625
O-Ring	HNBR 2269-90
Connection	Various
Actuator	ROV
Length	3.62"
Width	2.25"
Height	5.36"
Hydrostatic Test Pressure	15,000 psig
Max Torque on Stem	36 ft-lbs

### Valve Features

- 10,000 psi service
- 316 Annealed NACE construction
- ½" Sq. stem
- ROV operation with API bucket mounting



TYPICAL SIDE CONN

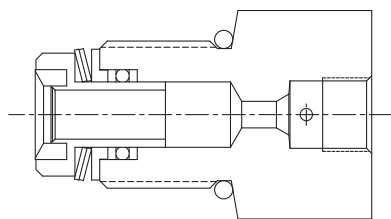
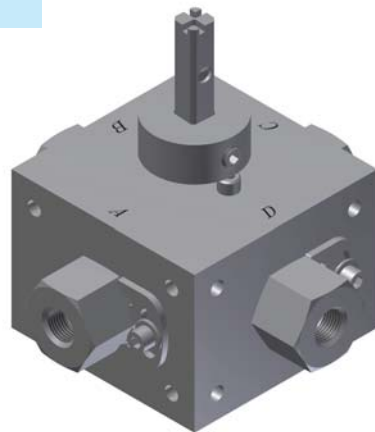


### C-2023-01

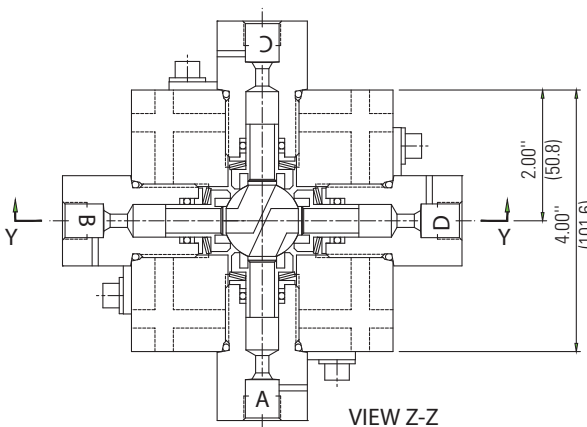
Description	Subsea Ball Valve
Detail	4-way, 90 deg turn
MAWP	10,000 psig
Orifice	.375"
CV	2.4
Barrier	Single
Body	316
Stem	Inconel 625
Trunnion	316
O-Ring	Buna-N
Connection	Various
Actuator	ROV
Length	4.00"
Width	4.00"
Height	5.86"
Hydrostatic Test Pressure	15,000 psig
Max Torque on Stem	36 ft-lbs

### Valve Features

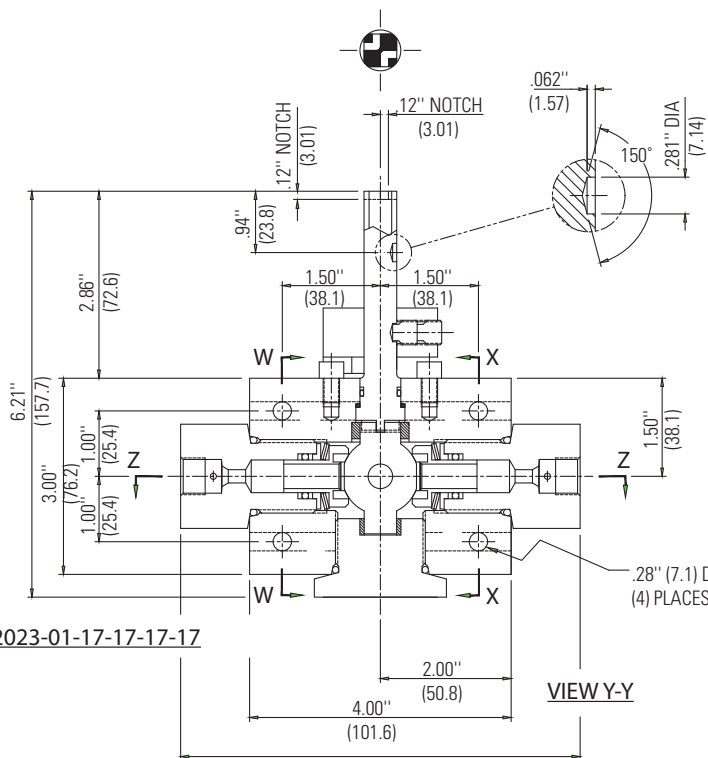
- Economical 316 construction
- Hub stop included on 1/2" sq. stem
- Low torque operation
- Side bracket mounted
- Other flow patterns available



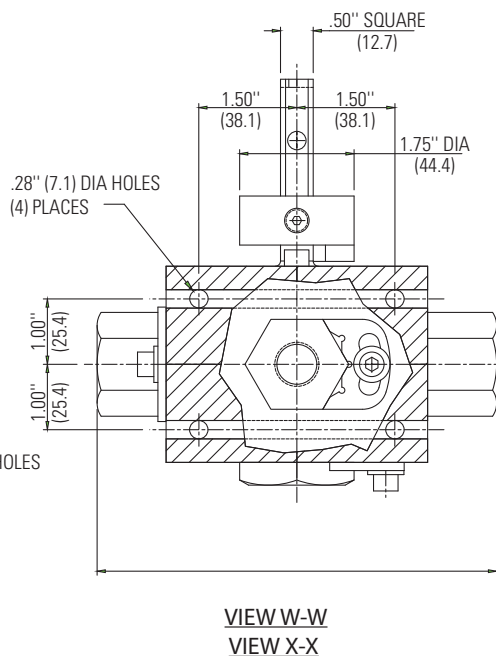
TYPICAL SIDE CONN



VIEW Z-Z



VIEW Y-Y

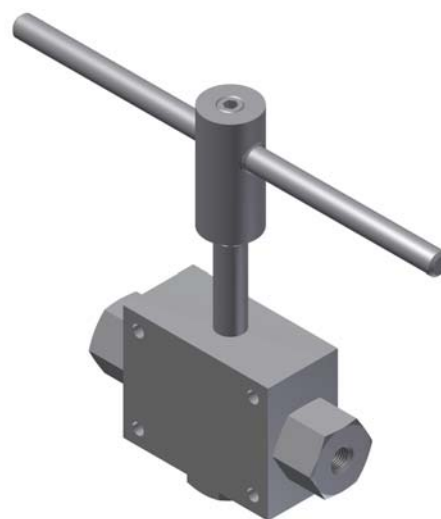


VIEW W-W  
VIEW X-X

C-2023-01-17-17-17-17

# 6,000 PSIG

	C-1884-01	C-1884-02	C-1884-03
Description	Subsea Ball Valve	Subsea Ball Valve	Subsea Ball Valve
Detail	2-way, 90 deg Turn	3-way, 90 deg Turn	3-way, 90 deg Turn
MAWP	6,000 psig	6,000 psig	6,000 psig
Orifice	.375"	.375"	.375"
CV	3.4	2.4	2.4
Barrier	Single	Single	Single
Body	316	316	316
Stem	Inconel 625	Inconel 625	Inconel 625
Trunnion	316	316	316
O-Ring	Nitrile N1210-90	Nitrile N1210-90	Nitrile N1210-90
Connection	Various	Various	Various
Actuator	Handle	Handle	Handle
Length	3.62"	3.62"	3.62"
Width	1.75"	1.75"	1.75"
Height	7.63"	7.63"	7.63"
Hydrostatic Test Pressure	9,000 psig	9,000 psig	9,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs	36 ft-lbs

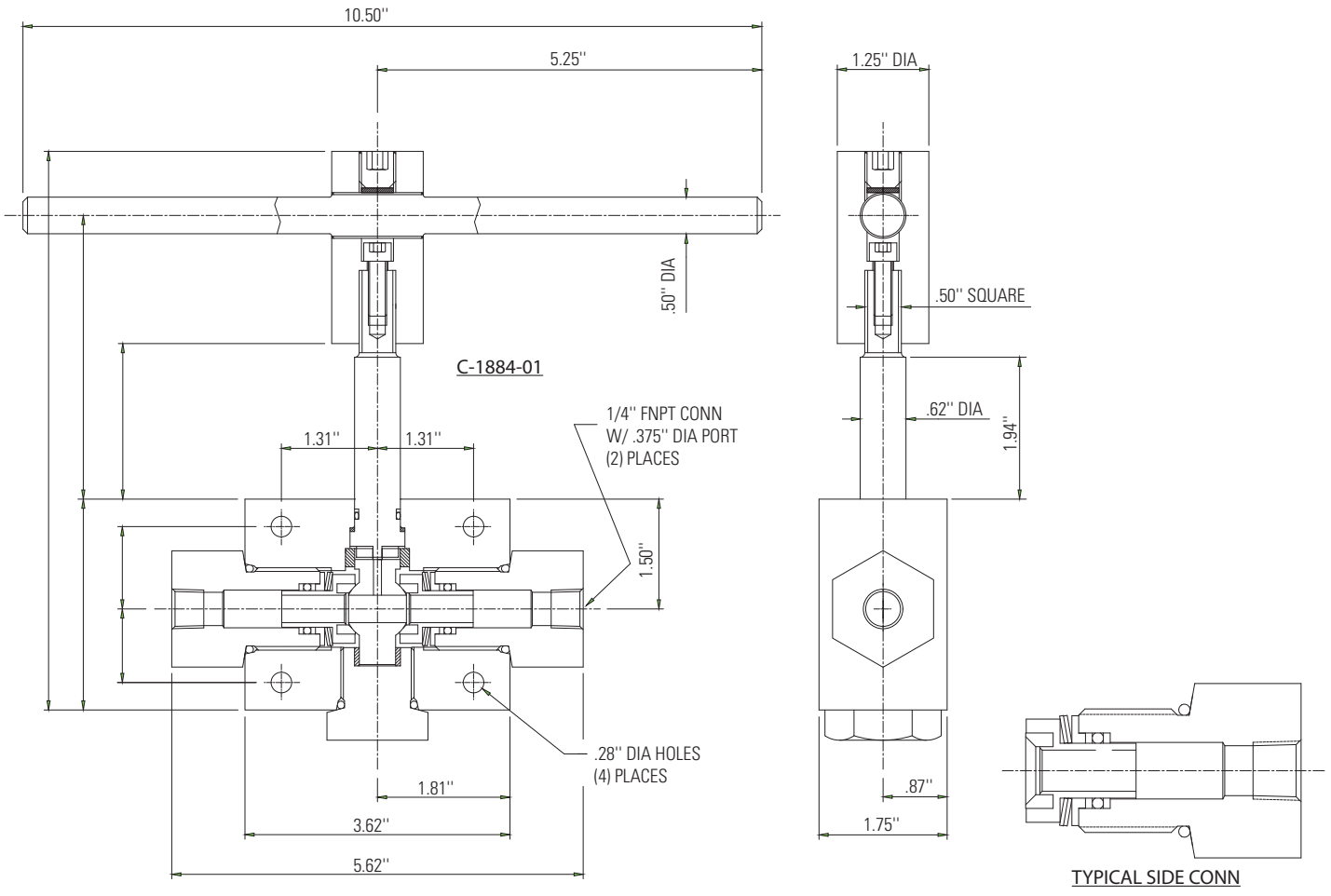


	C-1884-04	C-1884-05
Description	Subsea Ball Valve	Subsea Ball Valve
Detail	3-way, 180 deg Turn	2-way, 90 deg Turn
MAWP	6,000 psig	6,000 psig
Orifice	.375"	.375"
CV	2.4	3.4
Barrier	Single	Single
Body	316	316
Stem	Inconel 625	Inconel 625
Trunnion	316	316
O-Ring	Nitrile N1210-90	Nitrile N1210-90
Connection	Various	Various
Actuator	Handle	Handle
Length	3.62"	3.62"
Width	1.75"	1.75"
Height	7.63"	7.63"
Hydrostatic Test Pressure	9,000 psig	9,000 psig
Max Torque on Stem	36 ft-lbs	36 ft-lbs

#### Valve Features

- Economical 316 construction
- 6,000 psi service
- ½" Sq. stem
- ROV operation with "T" handle and API bucket mounting
- Side bracket mounting



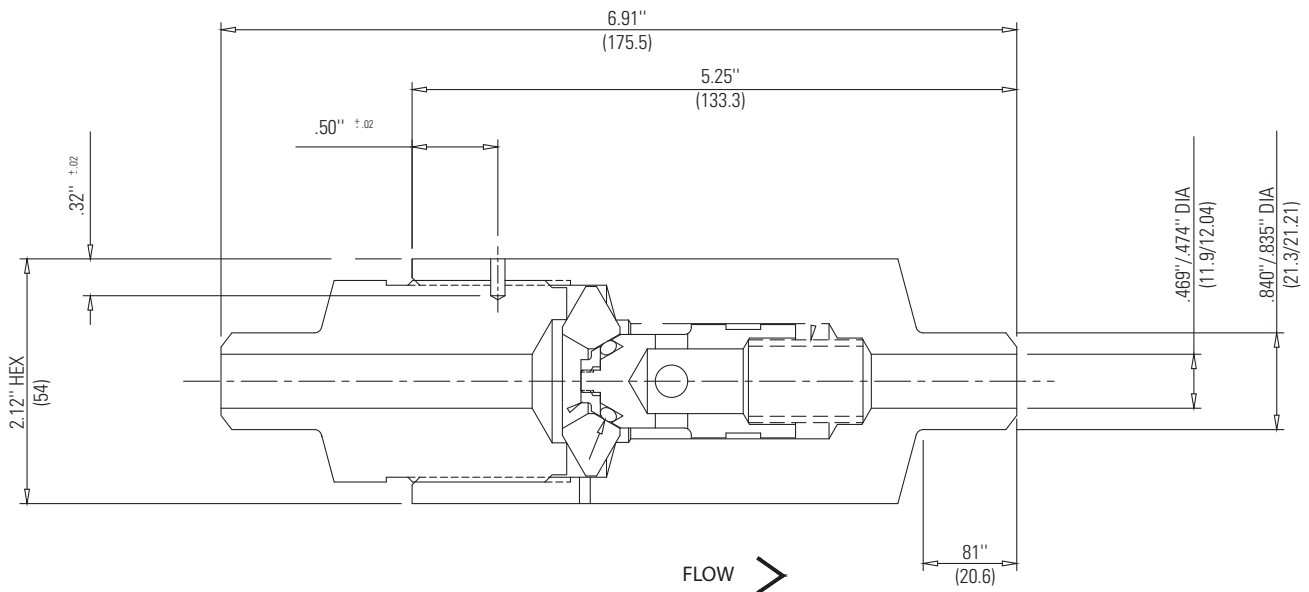


# Subsea Check Valves

B-2756-01	
Description	Sub-Sea Check Valve
Detail	O-RING CHECK VALVE
MAWP	10,000 psig
Orifice	.375"
CV	3.4
Barrier	NA
Body	316
O-Ring	PTFE
Connection	1/2" 160 BWP
Actuator	N/A
Length	6.91"
Width	2.12"
Height	2.12"
Hydrostatic Test Pressure	15,000 psig
Max Torque on Stem	NA

### Valve Features

- Teflon seated impervious to harsh chemicals
- Locking gland to prevent back-out
- Bubble tight for liquid or gas service

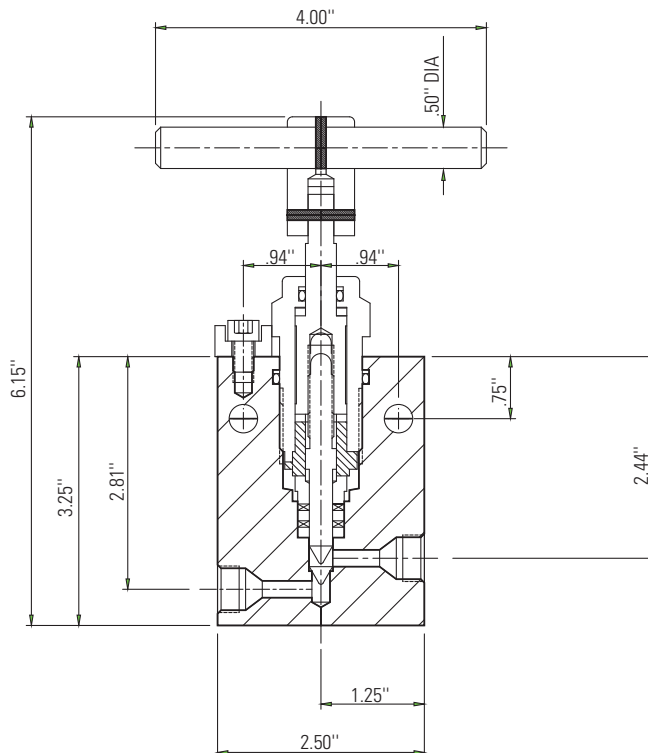


# Subsea Needle Valves

B-4957-01	
Description	Sub-Sea Needle Valve
Detail	2-way Straight
MAWP	6,000 psig
Orifice	.203"
CV	0.75
Barrior	NA
Body	316
Stem	Alloy 725
O-Ring	Glass filled PTFE
Connection	3/8" SAE
Actuator	Handle
Length	2.5"
Width	1.5"
Height	6.15"
Hydrostatic Test Pressure	9,000 psig
Max Torque on Stem	NA

## Valve Features

- Internal stem threads protected from ingress of crud and debris
- Pressures to 15,000 psi with M/P connections
- Higher flow with larger trim options
- Available in Multi-Stem manifold valves
- API flange face mount options
- Can be produced in NACE and CR alloys



# Additional Subsea Valves

For more information, please contact factory.

2ND ITEM NUMBER	DESCRIPTION	DETAIL	MAWP	ORIFICE	CV
<b>Subsea Check Valves</b>					
B-3865-02	Subsea Check Valve	Poppet	15,000 psig	.203"	
<b>Subsea Needle Valves</b>					
B-4560-01	Subsea Needle Valve	2-way straight	15,000 psig	.203"	
B-4742-01	Subsea Needle Valve	2-way straight, with 3/4" MP tube stub adapter	15,000 psig	.203"	
B-4760-01	Subsea Needle Valve	2-way angle, 1/2 FNPT x 1/2" MNPT	15,000 psig	.203"	
B-5063-01	Subsea Needle Valve	2-way straight	15,000 psig	.203"	
B-5567-02	Subsea Needle Valve	2-way angle, with replacable seat	20,000 psig	.094"	
C-1452-01	Subsea Needle Valve	2-way straight	10,000 psig	.44"	
C-1555-01	Subsea Needle Valve	2-way straight, API BX-151/NACE MRO175	10,000 psig	.359"	
C-1754-01	Needle Valve	2-way straight, API BX-151/NACE MRO175	10,000 psig	.427"	
C-1772-02	Needle Valve	2-way angle, API BX-151/NACE MRO175	10,000 psig	.427"	
C-3299-01	Needle Valve Assembly	2-way angle	10,000 psig	.56"	
C-2329-01	Subsea Needle Valve	2-way straight	10,000 psig	.44"	
C-2540-01	Subsea Needle Valve	2-way straight	10,000 psig	.44"	
D-1035-01	Subsea Needle Valve	2-way straight	10,000 psig	.427"	
D-1036-01	Subsea Needle Valve	2-way straight	10,000 psig	.427"	
<b>Ball Valves - 2-Way 90 Degree Turn</b>					
C-1641-01	Subsea Ball Valve	2-way straight, 90 degree turn	15,000 psig	.375"	2.4
C-2513-01	Subsea Valve	2-way, 90 deg turn	15,000 psig	.47"	9.4
C-3236-01	Subsea Ball Valve	2-way, 90 deg turn	15,000 psig	.375"	2
C-2418-01	Subsea Ball Valve	2-way, 90 degree turn	15,000 psig	.375"	2.4
C-1728-01	Subsea Valve	2-way straight, 90 degree turn	12,500 psig	.500"	10
C-2233-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.5"	10
C-2311-01	Subsea Valve	2-way, 90 deg turn	10,000 psig	.375"	2.4
C-2832-01	Metal Boss Seal Valve	2-way, 90 deg turn	10,000 psig	.5"	10
C-2935-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	2.4
C-3022-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	3.4
C-3023-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.5"	10
C-3027-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	3.4
C-3037-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	3.4
C-3130-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	2.4
C-3168-02	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	2.4
C-3489-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.375"	2.4
C-3567-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.312"	2
C-3591-01	Ball Valve	2-way, 90 deg turn	10,000 psig	.5"	10
C-3618-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.5"	9.4
C-2369-01	Subsea Ball Valve	2-way, 90 deg turn	10,000 psig	.466"	9.4
C-1903-01	SOG Subsea Valve	2-way, 90 degree turn, Sour Gas	10,000 psig	0.312"	2
C-2124-01	Subsea Ball Valve	2-way, 90 deg turn, Sour gas	10,000 psig	.469"	9.4
C-2461-01	Subsea Ball Valve	2-way, 90 degree turn	10,000 psig	.375"	3.4
C-3143-01	Subsea Ball Valve	2-way, 90 degree turn	10,000 psig	.5"	10
C-3300-01	Ball Valve Assembly	2-way, 90 degree turn	10,000 psig	.5"	10
C-3358-01	Subsea Ball Valve	2-way, 90 degree turn	10,000 psig	.375"	2.4
C-3443-01	Subsea Ball Valve	2-way, 90 degree turn	10,000 psig	.375"	2.4
C-1148-02	Subsea 2-Way Ball Valve	2-way/90 degree turn	10,000 psig	.500"	10
C-1925-01	Subsea Ball Valve	2-way/90 degree turn	10,000 psig	.375"	2.4

**BARRIER BODY STEM TRUNNION O-RING CONNECTION ACTUATOR LENGTH WIDTH HEIGHT**

N/A	316			NA	3/8" NPT	N/A	3.54"	1.12"	1.12"
N/A	316	Alloy 725		Glass filled PTFE	3/8" MP	Handle	2.5"	1.75"	6.15"
N/A	316	Alloy 725		Glass filled PTFE	3/8" MP	Handle	6.56"	1.75"	6.4"
N/A	316	Alloy 725		Glass filled PTFE	1/2" NPT	Handle	3"	1.75"	7.15"
N/A	315	Alloy 725		Glass filled PTFE	1/4" NPT	Handle	2.5"	1.75"	6.15"
N/A	2507 SD	Alloy 725		Glass filled PTFE	1/4" HP	Handle	2.5"	1.75"	7.05"
N/A	316 annld	Alloy 725		Glass filled PTFE	1/2" NPT	Hex Cpling	3"	2.25"	9.76"
N/A	316 annld	Alloy 725		Glass filled PTFE	9/16" MP	Hex Cpling	5.5"	3"	11.19"
N/A	316 annld	Alloy 725		Glass filled PTFE	1/2" NPT	Hex Cpling	5.5"	3"	11.26"
N/A	316 annld	Alloy 725		GFLT 9131	1/2" NPT	ROV	5.906"	4.5"	9.29"
Single	316 annld	Inconel 725		Nitrile	1" MP	Handle	4.12"	2.25"	9.82"
N/A	316	Alloy 725		HNBR 2269	1/2" FNPT	Handle	3"	2.25"	9.75"
Single	316	Alloy 725		HNBR 2269	3/4" MP x 1/2 FNPT"	Handle	3.25"	2.25"	9.75"
Single	316 annld	Alloy 725		HNBR 2269	1/2" FNPT	Hex Cpling	3.5"	4.5"	11.19"
Single	316 annld	Alloy 725		HNBR 2269	1/2" FNPT	Hex Cpling	3.5"	4.5"	11.19"
Single	316	Monel K500	316	viton	Various	Handle	3.62"	1.75"	5.75"
Single	2507 SD	2507 SD	2507 SD	HNBR 2269	Various	ROV	5.75"	2.25"	6.86"
Single	2205 Duplex	Inconel 625	2507 Duplex	HNBR 2269	Various	ROV	3.62"	1.75"	5.36"
Single	316	Inconel 625	316	Nitrile	Various	Handle	3.62"	1.75"	7.75"
Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	2.37"	6"
Single	316	Inconel 625	316	GFLT 9131	1/2" FNPT	Handle	4.12"	1.75"	8.69"
Double	316 annld	Inconel 625	316	Nitrile	3/8" M/P	Handle	5.12"	2"	10.59"
Single	316	Inconel 625	316	Nitrile	3/4" MP	ROV	4.12"	1.75"	6.3"
Double	316 annld	Inconel 625	316	Nitrile	Various	ROV	5.12"	2"	7.86"
Single	316	Inconel 625	316	Nitrile	Socket weld	ROV	3.62"	1.75"	6.82"
Single	316	Inconel 625	316	EPDM	Socket weld	ROV	4.12"	1.75"	7.36"
Single	316	Inconel 625	316	Nitrile	Socket weld	ROV	3.62"	1.75"	6.82"
Single	316	Inconel 625	316	Nitrile	Socket weld	ROV	3.62"	1.75"	6.82"
Single	316	Inconel 625	316	Nitrile	Various	ROV	3.62"	1.75"	5.76"
Single	316	Inconel 625	316	Nitrile	Various	ROV	3.62"	1.75"	5.76"
Single	316	Alloy 625	316	Nitrile	Various	ROV	3.62"	1.75"	4.53"
Single	316 annld	Inconel 625	316	Nitrile	3/8" M/P	Blade Handle	3.62"	2.75"	6.8"
Single	316	Alloy 725	316	Buna-N	Various	Handle	4.12"	1.75"	5.62"
Single	2507 SD	Alloy 625	316	Nitrile	Various	Blade Handle	4"	2.75"	7.74"
Double	2205 SD	2507 SD	2507 SD	HNBR 2269	Various	ROV	5.12"	2.2"	6.73"
Single	316 annld	Inconel 625	Inconel 625	GFLT 9131	Various	Handle	3.62"	2.25"	7.75"
Double	2507 SD	Inconel 625	Inconel 625	GFLT 9131	Various	Handle	5.12"	2.25"	10.86"
Single	316	Inconel 625	316	Kalrez 4079	.5" Nipple	Blade Handle	3.62"	1.75"	9.18"
Single	316	Inconel 625	316	Nitrile	Various	ROV	4.12"	1.75"	5.86"
Single	316	inconel 625	316	Nitrile	Various	Handle	4.12"	1.75"	8.06"
Single	316	Inconel 625	316	Buna-N	Various	Handle	3.62"	1.75"	6.86"
Single	316	Alloy 625	316	Nitrile	Various	ROV	3.62"	1.75"	4.53"
Single	316	Inconel 625	316	Buna-N	Various	Handle	4.12"	1.75:	8.24"
Double	316 annld	Inconel 625	316	Nitrile	Various	Handle	5.12"	2"	10.59"

# Additional Subsea Valves

For more information, please contact factory.

2ND ITEM NUMBER	DESCRIPTION	DETAIL	MAWP	ORIFICE	CV
<b>Ball Valves - 2-Way 90 Degree Turn</b>					
C-1949-01	2-Way Subsea Valve	2-way/90 degree turn	10,000 psig	.375"	2.4
C-3060-01	Subsea Valve	2-way, 90 deg turn	8,000 psig	.5"	10
C-2323-01	Subsea Valve	2-way, 90 deg turn	7,500 psig	.375"	3.4
C-2324-01	Subsea Valve	2-way, 90 deg turn	7,500 psig	.5"	10
C-2728-01	Subsea Valve	2-way, 90 deg turn	7,500 psig	.375"	3.4
C-2310-01	Subsea Ball Valve	2-way/90 degree turn	6,000 psig	.375"	2.4
C-2322-01	Subsea Valve	2-way, 90 deg turn	5,000 psig	.5"	10
C-2928-01	Subsea Valve	2-way, 90 deg turn	5,000 psig	0.61"	30
C-3396-01	2-Way Subsea Ball Valve	2-way, 90 degree turn	5,000 psig	.5"	10
<b>Ball Valves - 3-Way 90 Degree Turn</b>					
C-3460-01	Subsea Ball Valve	3-way, 90 degree turn	15,000 psig	.375"	2.4
C-1958-01	3-Way Subsea Valve	3-way, 90 degree turn	10,000 psig	.375"	2.4
C-1980-02	Subsea 3-Way Ball Valve	3-way, 90 degree turn	10,000 psig	.5"	10
C-2046-01	Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.375"	2.4
C-2336-01	Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.5"	10
C-2345-02	Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.469"	9.4
C-2641-01	3-Way Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.375"	2.4
C-2969-01	Subsea Valve	3-way, 90 degree turn	10,000 psig	.312"	2
C-3062-01	Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.375"	2.4
C-3238-01	Subsea Valve	3-way, 90 degree turn	10,000 psig	.28"	1.4
C-3435-02	Subsea Ball Valve	3-way, 90 degree turn	10,000 psig	.469"	9.4
C-3428-02	Subsea Ball Valve	3-way, 90 degree turn	5,000 psig	.5"	7.5
<b>Ball Valves - 3-Way 180 Degree Turn</b>					
C-1838-01	3-Way Ball Valve	3-way Ball Valve, 180 deg turn	10,000 psig	.375"	2.4
C-2556-01	3-Way Subsea Ball Valve	3-way, 180 deg turn	10,000 psig	.375"	2.4
C-3208-02	Subsea Ball Valve Assembly	3-way, 180 deg turn	10,000 psig	.5"	10
C-3512-02	Subsea Ball Valve Assembly	3-way, 180 deg turn	10,000 psig	.5"	10
C-3439-02	Subsea Ball Valve	3-way, 180 deg turn	8,000 psig	.469"	9.4
<b>Ball Valves - 4-Way 90 Degree Turn</b>					
C-1166-01	4-Way Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"	2.4
C-1803-01	4-Way Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"	2.4
C-1900-01	4-Way Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.125"x.375"	1.2
C-1971-01	4-Way Subsea Ball Valve W/O Adapters	4-way/90 deg turn	10,000 psig	.344"	0.12
C-2041-01	Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"	2.4
C-2134-02	Ball Valve	4-way/90 deg turn	10,000 psig	.375"	2.4
C-2148-01	Subsea Valve	4-way/90 deg turn	10,000 psig	.28"	1.4
C-2378-01	Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"	2.4
C-2466-01	Subsea Valve	4-way/90 deg turn	10,000 psig	.28"	1.4
C-2485-01	Subsea Valve	4-way/90 deg turn	10,000 psig	.28"	1.4
C-3474-01	4-Way Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"x.125"	1.2
C-3487-01	Subsea Ball Valve	4-way/90 deg turn	10,000 psig	.375"x.125"	1.2
<b>Ball Valves - 5-Way 180 Degree Turn</b>					
C-2136-01	Subsea Ball Valve	5-way, 180 degree turn	10,000 psig	.375"	2.4

	BARRIOR	BODY	STEM	TRUNNION	O-RING	CONNECTION	ACTUATOR	LENGTH	WIDTH	HEIGHT
	Single	316	Inconel 625	316	Nitrile	Various	Handle	3.62"	1.75"	5.76"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	2.37"	6"
	Single	316	Inconel 625	316	Kalrez 4079	.5" Nipple	ROV	3.62"	1.75"	9.18"
	Single	316	Inconel 625	316	Kalrez 4079	.75" Nipple	ROV	4.12"	1.75"	9.72"
	Single	316	Inconel 625	316	Kalrez 4079	.5" nipple	Blade Handle	3.62"	1.75"	9.18"
	Single	316	Inconel 625	316	Nitrile	Various	Handle	3.62"	1.75"	7.63"
	Single	316	Inconel 625	316	Kalrez 4079	1" Nipple	Handle	4.12"	1.75"	9.72"
	Single	2205 Duplex	Inconel 625	2507 Duplex	Nitrile	Various	ROV	5.25"	3.5"	7.81"
	Single	316 annld	Inconel 625	2507 Duplex	HNBR 2269	3/4" M/P	Blade Handle	4.12"	1.75"	9.72"
	Single	316	Inconel 625	316	Nitrile	1/4" FNPT	ROV	3.62"	3.62"	6.1"
	Single	316	Inconel 625	316	Nitrile	Various	Handle	3.62"	1.75"	6.38"
	Single	316	Inconel 625	316	Nitrile	Various	ROV	4.12"	1.75"	7.17"
	Single	316	Inconel 625	316	Buna-N	Various	ROV	3.62"	1.75"	6.10"
	Single	316	Inconel 625	316	Nitrile	1" FNPT	ROV	4.12"	1.75"	7.36"
	Single	316 annld	Inconel 625	Inconel 625	GFLT 9131	Various	Handle	4"	2"	8.25"
	Single	316 annld	Inconel 625	316	Nitrile	Various	Handle	4"	4"	7.35"
	Single	316 annld	Inconel 625	Inconel 625	HNBR 2269	Various	Blade Handle	3.62"	2.75"	6.8"
	Single	316	Inconel 625	316	Nitrile	3/8" MP	ROV	3.62"	1.75"	9.12"
	Single	316 annld	Inconel 625	316	Buna-N	3/8" FNPT	ROV	4"	4"	5.79"
	Single	2507 duplex	Inconel 625	316	Nitrile	Various	Handle	4"	2"	8.25"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	2.37"	6"
	Single	316 annld	17-4 PH	316	viton	Various	Handle	4"	4"	5.12"
	Single	316 annld	Inconel 625	316	Nitrile	Various	Handle	4"	4"	7.35"
	Single	2205 Duplex	Alloy 625	2507 Duplex	HNBR 2269	Various	ROV	4"	2"	7.57"
	Single	2205 Duplex	Inconel 625	316	HNBR 2269	Various	ROV	4"	2"	5.57"
	Single	316 annld	Inconel 625	316	Nitrile	Various	ROV	4"	2.38"	8.61"
	Single	316 annld	Monel K500	316	Nitrile	Various	Handle	4"	4"	8.1"
	Single	316 annld	Inconel 625	316	Buna-N	Varous	ROV	4"	4"	5.71"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	4"	5.71"
	Single	316 annld	Inconel 625	316	Nitrile	Various	ROV	4"	4"	5.71"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	4"	5.42"
	Single	316 annld	17-4 PH	316	GFLT 9131	Various	Handle	4"	4"	5.12"
	Single	316 annld	Inconel 625	316	Buna-N	1/4" FNPT	ROV	4"	4"	5.42"
	Single	316 annld	Inconel 625	316	Buna-N	1/4" FNPT	ROV	4"	4"	5.42"
	Single	316 annld	Inconel 625	316	Buna-N	3/8" FNPT	ROV	4"	4"	5.72"
	Single	316 annld	Inconel 625	316	Buna-N	3/8" FNPT	ROV	4"	4"	5.58"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	4"	5.71"
	Single	316 annld	Inconel 625	316	Buna-N	Various	ROV	4"	4"	4.47"
	Single	316 annld	Inconel 625	316	Nitrile	Various	ROV	4"	4"	5.36"

**For more information on our high-pressure products,  
visit [butech-valve.com](http://butech-valve.com) or contact your local BuTech representative.**

*BuTech is a brand of Accudyne Industries, a leading global provider of precision-engineered, process-critical and technologically advanced flow control systems and industrial compressors that deliver consistently high performance and give confidence to the mission of our customers in the most important industries and harshest environments around the world. The company is powered by more than 3,000 employees at 18 manufacturing facilities, supporting a broad range of industries in more than 150 countries.*

**Accudyne**  
INDUSTRIES

**BuTech**<sup>®</sup>  
an Accudyne Industries brand

[butech-valve.com](http://butech-valve.com)  
[hq@butech-valve.com](mailto:hq@butech-valve.com)

CAT05 07/15  
Printed in USA