

Ball Valves 3,000 psi to 10,000 psi

SN Series

Single nut panel mounting 6,000 psi to 10,000 psi

PB Series

High pressure ball valves rated up to 6,000 psi

PSB Series

High pressure panel mounting ball valves rated up to 6,000 psi

PB & PSB Series (Tube Ended)

High pressure panel mounting ball valves rated up to 6,000 psi

E Series

High pressure two piece ball valve rated 6,000 psi

E Series (Compression Ended)

Ball valves with twin ferrule compression ends 6,000 psi rated

“O” Seal Ended Valves

1,000 psi & 3,000 psi versions

Centurion™ Valve

Heavy duty, high cycle ball valves

Actuated Centurion™

Actuated high cycle ball valves

Rhino Valve

2-Way heavy duty ball valves 6,000 psi & 10,000 psi

UB Series

Heavy duty high pressure ball valves 10,000 psi rated

UE Series

Two piece high pressure ball valves 10,000 psi rated

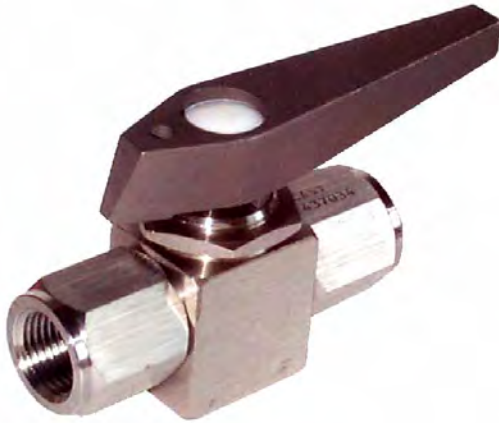
FBV Series

Forged body ball valves 10,000 psi rated

How to order the above

An explanation of the part numbering system

SN Series



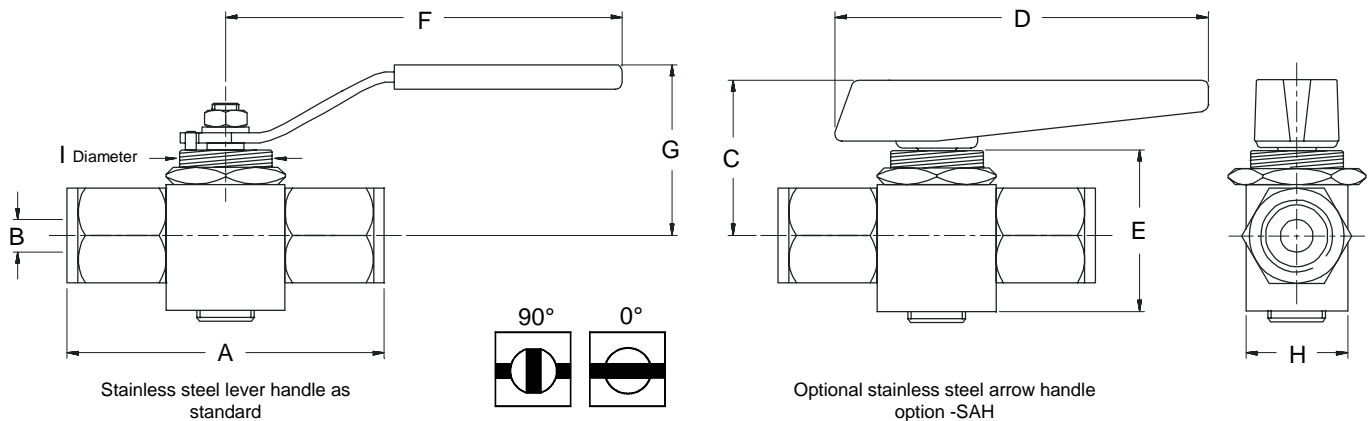
General Information

Single nut panel mounting 6,000 psi to 10,000 psi

The single nut mounted ball valve is rated from vacuum up to 10,000 psi dependent of seat selection. The single nut allows fast panel mounting. Max panel thickness is 10mm. A heavy duty yet compact design offering easy installation and maintainability. The "SN" is rated to 6,000 psi as standard with the option of 10,000 psi version.

Design Features

- Flexible 3 piece design for easy maintenance.
- Anti blow out internally loaded stem.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- 90° C low torque operation.
- Single nut panel mounting facility for ease of installation.
- Choice of ball and stem materials such as 316ss, Monel 400.
- Rated 6,000 psi as standard.
- Repair kits available to prolong the valves life.
- Pressure / Temperature rating -50°C to 250°C.
- Choice of end connections including NPT, BSPP, BSPT and twin ferrule compression ends.
- Choice of handle types stainless steel as standard, lever, compact flow indicating arrow style option -AS.
- 100% Hydrostatic testing.
- Full material traceability.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

Su/St Part No.	Connections Size	A BSPP	A NPT	B (Bore)	C	D	E	F	G	H	I	CV	KV	Weight (Kgs)
SN2NS	1/4"	61	68	10	49	110	48	115	48	32	29	4.2	3.6	0.6
SN3NS	3/8"	74	74	10	49	110	48	115	48	32	29	4.4	3.8	0.6
SN4NS	1/2"	78	93	10	49	110	48	115	48	32	29	4.5	3.9	0.6
SN6NS	3/4"	85	95	13	52	110	51	115	51	38	29	7.8	6.7	0.8
SN8NS	1"	109	116	19	-	-	64	150	64	54	29	16.7	14.4	1.8

For BSPP change 'N' for 'P' i.e. SN4PS

For 10,000 psi (670 bar) version add 'U' i.e. USN4NS

Seat materials: 6,000 psi = Peek® - 10,000 = Peek®

Seal Materials: Body = PTFE - Stem = Peek®

NOTE: 10,000 psi versions have reduced bores.

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K022

REV: 00

PB Series



Note: Also available with tube type compression ends (twin or single ferrule)

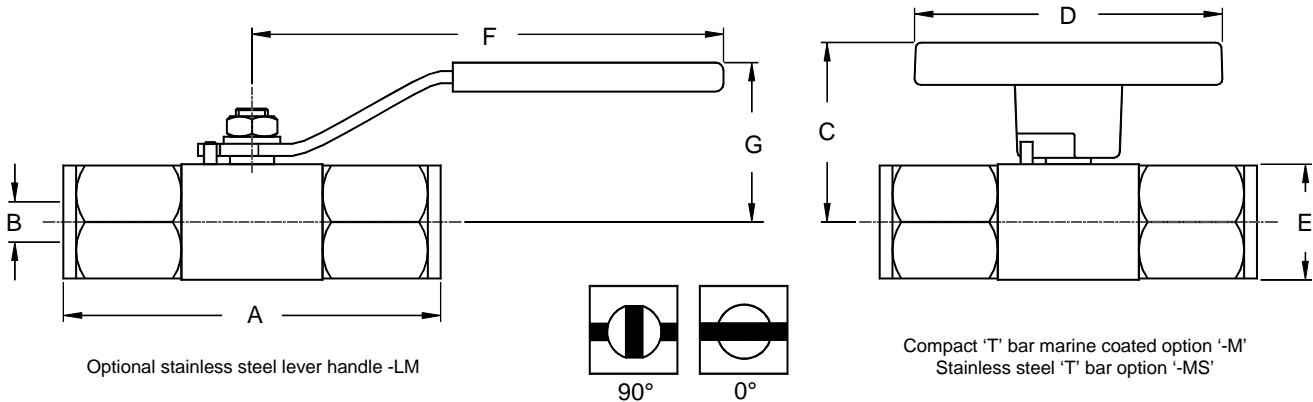
General information

High pressure ball valves Rated up to 6,000 psi

The 'PB' Series high pressure 3 piece ball valve, like it's lower pressure brother the 'B' Series, it offers flexibility where by the end connection sizes and types can be mixed i.e. PB4NS-12N offers 1/2" to 1/4" reduction in size across the valve. This design helps eliminate the use of fittings and additional unwanted potential leak paths. Rated at 414 Bar, the 'PB' Series is a reliable compact and flexible isolation ball valve with many options.

Design Features

- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Flexible 3 piece design for easy maintenance.
- Repair kits available should the valve need servicing to prolong its life.
- Available in 316ss / Monel / Duplex / Titanium / Hastalloy / Zirconium / Ali-Bronze.
- Anti-blow-out internally loaded stem for safety.
- Pressure / Temperature rating -50°C to 250°C
- Choice of handles and trim materials.
- Handle indicates OPEN/CLOSED position at a glance.
- Full material traceability
- 100% Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Rated	Connections Size	A		B (Bore)	C	D	E	F	G	Cv	Kv	Weight (kgs)
			BSPP	NPT									
PB2NS	6,000 psi	1/4"	61	68	10	43	77	25	115	38	4.2	3.6	0.30
PB3NS	6,000 psi	3/8"	74	74	10	43	77	25	115	38	4.4	3.8	0.32
PB4NS	6,000 psi	1/2"	78	93	10	43	77	28	115	38	4.5	3.9	0.35
PB6NS	6,000 psi	3/4"	85	95	13	45	77	32	115	40	7.8	6.7	0.45
PB8NS	5,000 psi	1"	109	116	19	52	100	41	150	60	16.7	14.4	1.1

Dims are in mm (Appx)

For BSPP threads change 'N' to 'P' i.e. PB4PS.

Can be available full bore, contact our sales office for details

Seat materials: 6,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

See technical section for important additional valve data.

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REF: AVCAT2K023

REV: 00

PSB Series

General Information

High pressure panel mounting ball valves Rated up to 6,000 psi

The Panel Mount range or 'PSB' Series is a variation of the standard 'PB' Series and as such retains its flexibility of end connection variations with the added advantage of the panel mounting facility onto a flat face. The 'PSB' valve is easy to mount to a control panel or actuator. The Major benefits of using four panel mount holes instead of one single nut type are that this design eliminates the possibility of the valve turning underneath a panel. This would cause undue stressing of the thread joint. Also four small holes can be beneficial for positioning, if access to the panel is reduced only two holes (diagonally opposite) can be used. The 'PSB' series has a pressure rating of 6,000 psi.

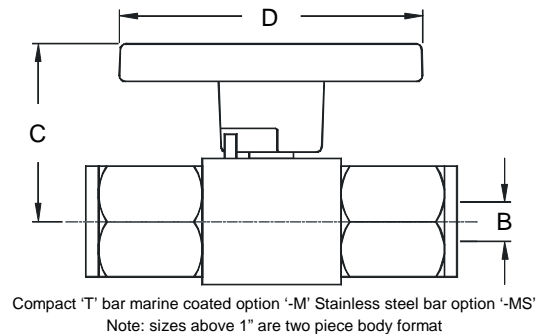
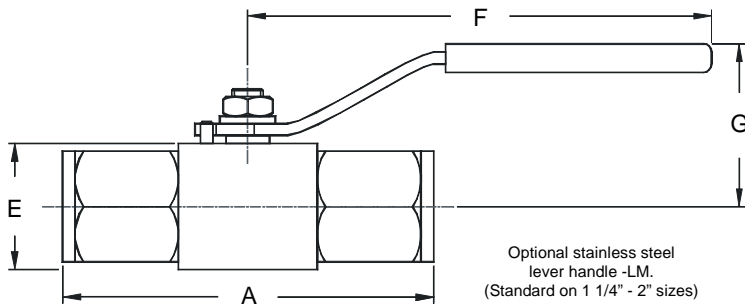
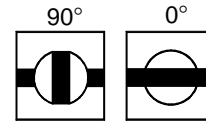
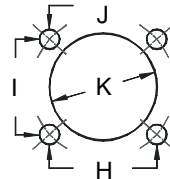


Design Features

- Flexible 3 piece design for easy maintenance.
- Anti-blow-out internally loaded stem for safety.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Choice of handles & trim materials.
- 90° quick, light action handle indicates position.
- Repair Kits available should the valve need servicing.
- Pressure range 6,000 psi
- Pressure / Temperature rating -20°C to 250°C
- Choice of end connections.
- Can be supplied bare shaft & suitable for actuation (if specified)
- Full material traceability and 100% Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.

VALVE SIZE	H	I	J	K
1/4"-3/4"	27	24	5	27
1"	38	38	5	38
1 1/4"-2"	48	48	6	67

1/4" - 1" = 4 - off M4 Mounting Holes
1 1/4" - 2" = 4 - off M6 Mounting Holes



Part Numbers

St/St Part No.	Rated	Connections Size	A		B	C	D	E	F	G	Cv	Kv	Weight (kgs)
			BSPP	NPT									
PSB2NS	6,000 psi	1/4"	61	68	10	43	77	32	115	38	2.5	2.2	0.40
PSB3NS	6,000 psi	3/8"	74	74	10	43	77	32	115	38	3.0	2.6	0.43
PSB4NS	6,000 psi	1/2"	78	93	10	43	77	32	115	38	4.2	3.6	0.45
PSB6NS	6,000 psi	3/4"	85	95	13	45	77	38	115	40	7.8	6.7	0.70
PSB8NS	5,000 psi	1"	109	116	19	51	100	51	150	60	16.7	14.4	1.0
PSB10NS	6,000 psi	1 1/4"	165	165	25	-	-	91	170	90Ø	20	17.3	2.3
PSB12NS	6,000 psi	1 1/2"	165	165	25	-	-	91	170	90Ø	22	19	4
PSB16NS	6,000 psi	2"	165	165	25	-	-	91	170	90Ø	23	19.9	4.5

For BSPP change 'N' to 'P' i.e. PSB4PS

For BSPT change 'N' to 'T' i.e. PSB4TS

Seat materials: 6,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K024

REV: 00

PB & PSB Tube ended

General Information

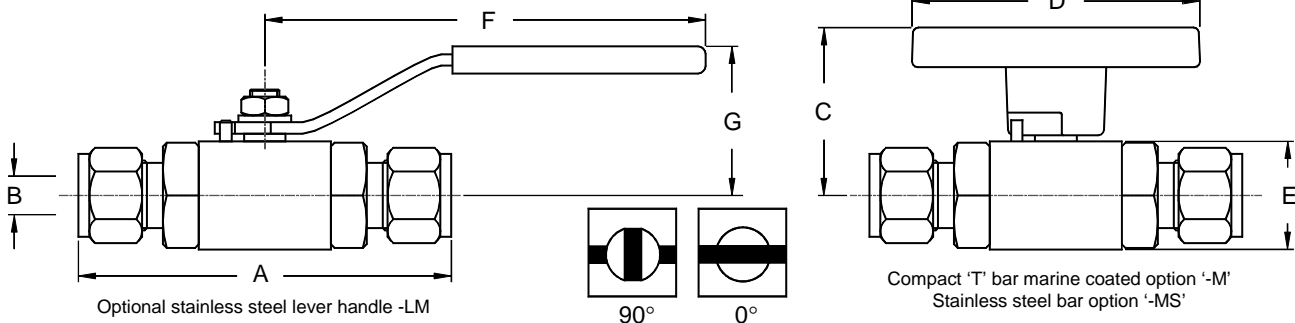
Ball valves with twin or single ferrule tube type compression ends. Rated up to 6,000 psi

Using the 'B' or 'SB' series centre section, the valve can be supplied in either single or twin ferrule style compression ends using the round body or the panel mount or 3-way body types to provide an economical method of installing the valve into instrumentation tubing systems. The PSB can be used for mounting actuators or fixing to panels.



Design Features

- Instant installation into tubing pipework, no pipe thread or sealing problems.
- Three piece design for easy maintenance.
- Repair kits available to extend valve life.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Choice of single or twin ferrule ends to suit the requirements of most systems.
- Rated 6,000 psi as standard.
- Positive 90° action-position indication.
- Pressure / Temperature rating -20°C to 250°C.
- Can be supplied bare shaft & suitable for actuation (if specified on the panel mount version).
- Anti blow-out internally loaded stem for extra safety.
- Versatile design allows mixture of pipe threads, types and compression ends of different sizes.
- Full material traceability, valves 100 % tested.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

Twin ferrule Part No.	Connections Size O.D	A	B (Bore)	C	D	E	F	G	Cv	Kv	Weight (kgs)
Imperial tube connections		loose									
PB2KS	1/4" O.D	92	10	39	75	28	115	44	2.5	2.2	0.30
PB3KS	3/8" O.D	92	10	39	75	28	115	44	3.0	2.6	0.32
PB4KS	1/2" O.D	102	10	39	75	28	115	44	4.2	3.6	0.35
PB6KS	3/4" O.D	105	13	42	75	35	115	46	9.5	8.2	0.45
PB8KS	1" O.D	127	19	52	100	48	150	60	19	16.4	0.9
Metric tube connections											
PBM6KS	6mm O.D	92	10	39	75	28	115	44	2.1	1.8	0.30
PBM8KS	8mm O.D	94	10	39	75	28	115	44	2.6	2.2	0.32
PBM10KS	10mm O.D	95	10	39	75	28	115	44	3.8	3.3	0.35
PBM12KS	12mm O.D	102	10	39	75	28	115	44	4.2	3.6	0.45
PBM15KS	15mm O.D	102	10	39	75	28	115	44	4.4	3.8	0.45
PBM20KS	20mm O.D	105	13	42	75	35	115	46	9.5	8.2	0.45
PBM22KS	22mm O.D	127	19	51	100	48	150	60	19	16.4	0.9

For panel mount version (square body) change PB to PSB i.e. PSB4KS

For single ferrule change K to Q i.e. PB2QS

Bore shown is through the ball

Seat materials: 6,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

Dims are in mm (Appx)

See technical section for important additional valve data.
Note: Bore may vary dependant upon end connection selected.

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REF: AVCAT2K025

REV: 00

E Series

General Information

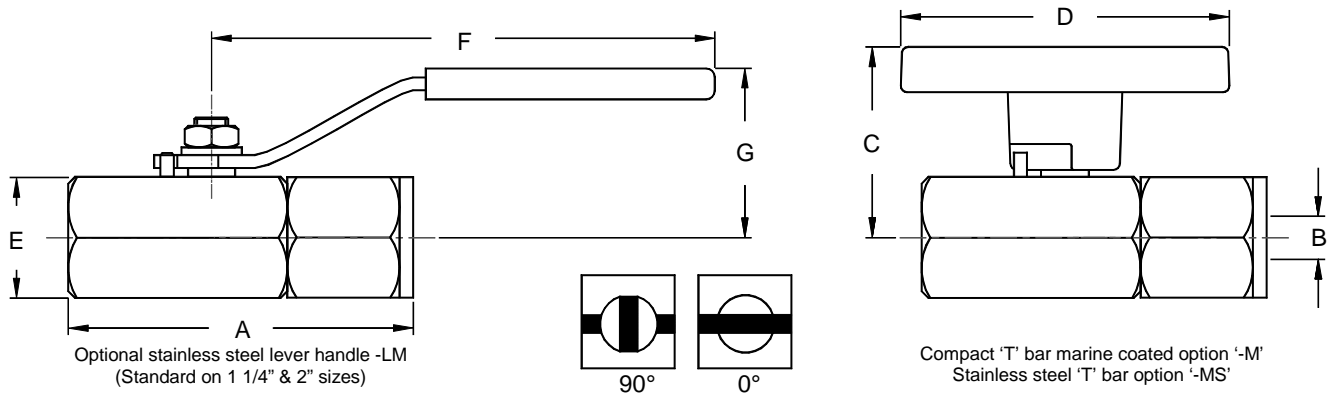
6,000 psi rated

The 'E' series ball valve is a hybrid of the 'A' and 'B' series ball valve range. The 'E' series has been designed to be lighter and more compact than the 'B' series range. It is available in a variety of configurations to suit many applications within the instrumentation and general engineering industries. The 'E' series comes with a compact 'T' bar handle as standard, or stainless steel lever. Other options are available including locking devices, extension handles etc.



Design Features

- Smooth low torque 90° operation.
- Two piece design means less leak paths
- Value for money by economical design.
- Compact overall length, reduced weight.
- Choice of trim materials.
- Available in BSPP, BSPT, NPT threads or twin ferrule Compression ends.
- Available in female x female, male x female or male x male versions.
- Anti-blow-out internally loaded stem for extra safety.
- Available in 316ss / Monel / Duplex.
- Pressure / Temperature rating -20°C to 250°C
- Repair kits available to extend valve life.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Many options available such as locking devices, Mounting brackets.
- Full material traceability.
- 100 % Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

Stainless Steel	Connections Size	A	B (Bore)	C	D	E	F	G	Cv	Kv	Weight (Kgs)
E2NS	1/4" NPT	67	10	44	77	28	115	38	2.5	2.2	0.30
E3NS	3/8" NPT	71	10	44	77	28	115	38	3.0	2.6	0.32
E4NS	1/2" NPT	80	10	44	77	28	115	38	4.2	3.6	0.36
E6NS	3/4" NPT	85	13	46	77	38	115	43	7.8	6.7	0.60
E8NS	1" NPT	111	19	48	100	50	150	52	16.7	14.4	1.20
E10NS	1 1/4" NPT	165	25	-	-	Ø83	170	90	20	17.3	5.80
E12NS	1 1/2" NPT	165	25	-	-	Ø83	170	90	22	19	5.70
E16NS	2" NPT	165	25	-	-	Ø83	170	90	23	19.9	5.50

For lever handle add '-LM' i.e. E4NS-LM.

For BSPP version change 'N' to 'P' i.e. E4PS.

For BSPT version change 'N' to 'T' i.e. E4TS.

Seat materials: 6,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

Note: Valves 1 1/4" size and above have lever handle only.

Valves above 1 1/4" size have round Ø body.

Dims are in mm(Appx)

See technical section for important additional valve data.

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REF: AVCAT2K026

REV: 00

E Series

Compression Tube Ended

General Information

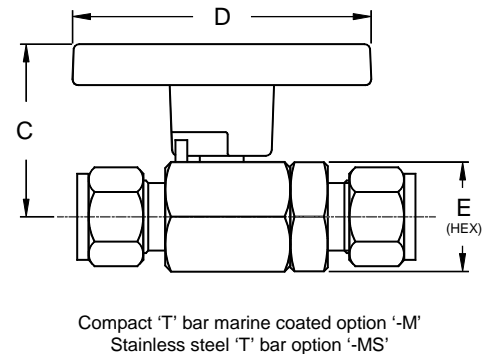
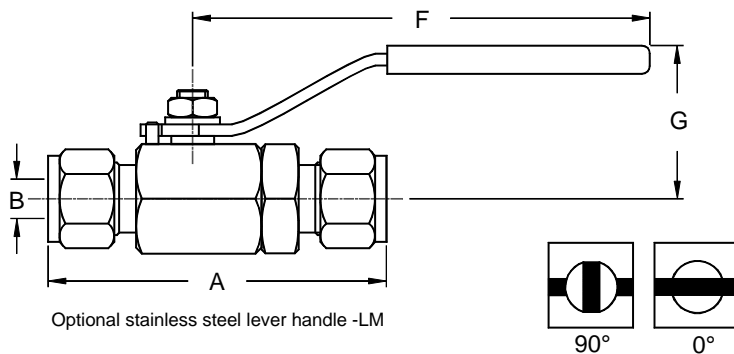
Ball valves with twin ferrule compression ends 6,000 psi rated

The 'E' series ball valve is a hybrid of the 'A' and 'B' series ball valve range. The 'E' series has been designed to be lighter and more compact than the 'B' series range with fewer potential leak paths having only one joint. It is available in a variety of configurations to suit many applications within the instrumentation and general engineering industries. The 'E' series comes with the compact 'T' bar handle as standard, or stainless steel lever. Other options are available including locking devices, extension handles etc.



Design Features

- Smooth low torque 90° operation.
- Value for money by economical two piece design.
- Compact overall length, reduced weight.
- Two piece design means less leak paths.
- Choice of trim materials i.e. monel, hastalloy etc.
- Twin or single ferrule compression end connectors.
- Anti-blow-out internally loaded stem for extra safety.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Service / spares kits available to extend service life.
- Many options available such as lever handle, tagged, locking devices etc.
- Pressure / Temperature rating -20°C to 250°C
- Twin ferrule compression ends are made by or interchangeable with other mainstream manufacturers brands.
- Metric sizes available 6mm / 8mm / 10mm / 12mm / 15mm / 18mm / 22mm etc.
- Handle indicates open / closed positions at a glance.
- Working temperature up to 250°C at reduced pressure.
- Full material traceability.
- 100 % Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	F	G	CV	KV	Weight (Kgs)
E2KS	1/4" Twin ferrule	83	10	44	77	28	115	41	2	1.73	0.25
E3KS	3/8" Twin ferrule	83	10	44	77	28	115	41	3	2.6	0.26
E4KS	1/2" Twin ferrule	87	10	44	77	28	115	41	4.2	3.6	0.30
E6KS	3/4" Twin ferrule	87	13	46	77	35	115	43	7.8	6.7	0.53
E8KS	1" Twin ferrule	127	19	51	100	42	150	60	16.7	14.4	0.7

Metric and imperial tube sizes available

For lever handle add '-LM' i.e. E4NS-LM.

For BSPP version change 'N' to 'P' i.e. E4PS.

For BSPT version change 'N' to 'T' i.e. E4TS.

Bore shown is through the bore

Seat materials: 6,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K027

REV: 00



“O” Seal Ended Valves

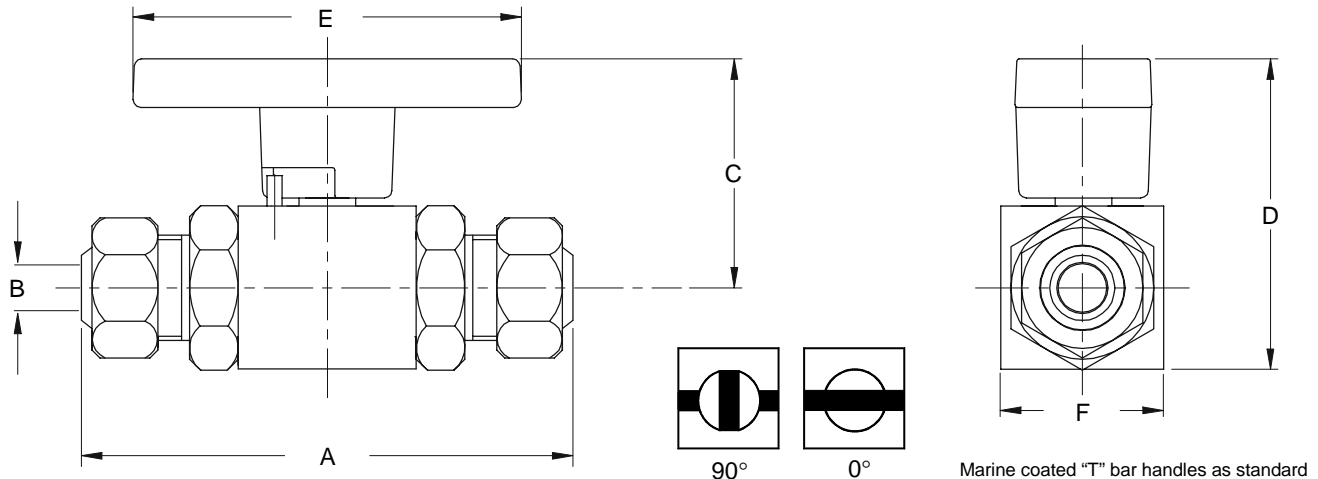
General Information

1,000 psi to 6,000 psi versions

The SB-Series is the original 3-piece screw together barstock range of valve. It is a flexible design with many options, rated at 1,000 psi as standard that can be up-rated to 6,000 psi. Having the benefit of a three-piece construction allows maintainability with service kits which are readily available. The SB is especially suited for use with the world renowned CPV “O” seal type tube connections. “O” seal utilises a polymer face ring, which due to the precision of this design, performs gas tight operation when tightened by hand. In addition to this “O” seal is virtually exempt from separation caused by vibration which can affect metal ring type fittings. CPV and Alco together bring you a reliable high performance precision made product with unique slip in slip out facility for high pressure gas or liquid services.

Design Features

- Flexible 3 piece design for easy maintenance.
- Full material traceability.
- 90° smooth action, handle indicates valve position.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Available in 316 ss / Monel / Duplex / 6Mo / Titanium / Hastalloy / Zirconium.
- Anti-blow-out internally loaded stem for safety.
- Slip in slip out design.
- Pressure / Temperature rating -20°C to 250°C.
- Can be supplied bare shaft & suitable for actuation (if specified)
- Repair kits available should the valve need servicing to prolong its life.
- 100% hydrostatic testing.
- A choice of handles and trim materials.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	F	Cv	Kv	Weight (kgs)
SB2CPVS	1/4"	85	10	45	62	77	32	2.5	2.2	0.3
SB3CPVS	3/8"	85	10	45	62	77	32	3.0	2.6	0.3
SB4CPVS	1/2"	93	10	45	62	77	32	4.2	3.6	0.3
SB6CPVS	3/4"	107	13	49	68	77	38	7.8	6.7	0.5
SB8CPVS	1"	124	19	55	81	100	51	16.7	14.4	1.1

Seat materials: 1000psi = PTFE - 2000psi = RTFE - 3000psi = Acetal - 6,000 psi = Peek
 Seal materials: Body = PTFE - Stem = RTFE

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K028

REV: 00

One
Million
Cycle
Tested



Centurion™ Valve

General Information

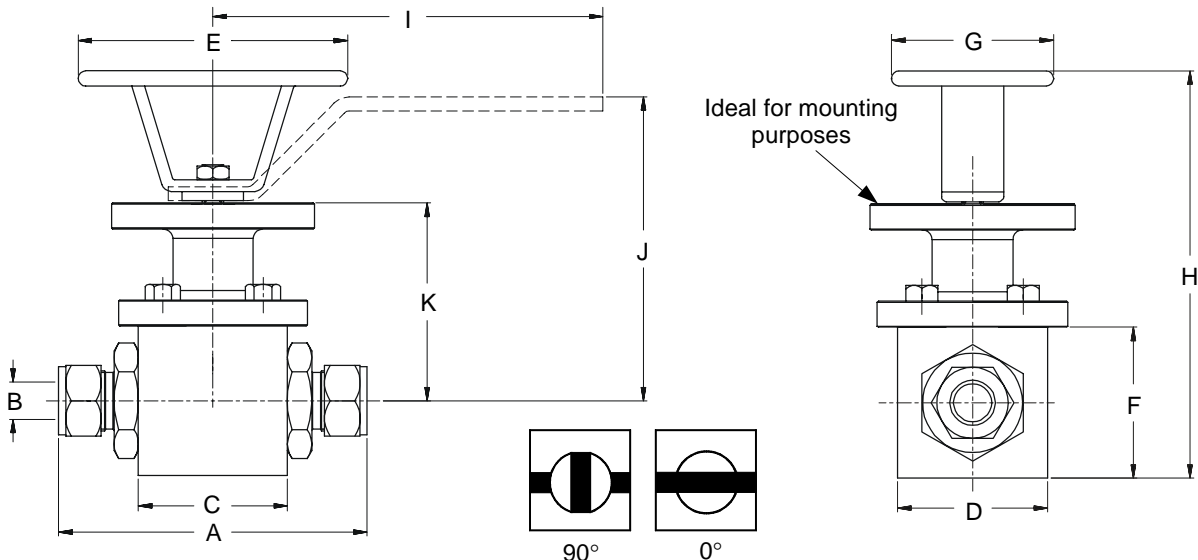
Heavy Duty, High Cycle Ball valve

The Alco Centurion valve was initially designed and developed as the primary isolation valve for the loading of natural gas powered public service vehicles. A duty where valve reliability and safety are the primary concerns. In order to prove the Centurion valves suitability for continuous repetitive operation it was cycle tested to one million cycles and far beyond, with the pressure integrity being tested with interim high pressure gas tests. The testing was third party witnessed and verified. This ensures that the Centurion is the optimum valve to select where the requirement calls for a long life maintenance free durable valve. The Centurion can also be fitted with CPV "O" seal flat face type tube connectors.

Note: Shown with option -OVH handwheel

Design Features

- Rugged robust construction
- 6000 psi rated
- Bi-directional floating ball design
- Stem sealing which ensures leak proof operation under vacuum service
- Bubble tight shut off
- Certified and documented extended life data available
- Available with various connection options
- Readily adapted to powered actuation (ISO 5211 mounting flange optional)
- Operating temperature ranges of -20°C to +100°C (-4°F to 212°F)
- Accepts varying forms of handle and locks to suit customer requirements
- Manufactured in 316 St / St and other exotics.
- Full tracability of materials to DIN 50049 3.1.B for all major components
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	F	G	H	I	J	K	Weight (Kgs)
CBV4KS	1/2"	136	19	63	63	114	63	68	171	165	129	84	2.1
CBV6KS	3/4"	140	19	63	63	114	63	68	171	165	129	84	2.1
CBV8KS	1"	146	19	63	63	114	63	68	171	165	129	84	2.1

Dimension "B" is the bore through the ball

Seat material: 6,000 psi = Nylon 12 Seal material: Body = NBR - Stem = Turcon variseal

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K029

REV: 00

Actuated Centurion™



One
Million
Cycle
Tested

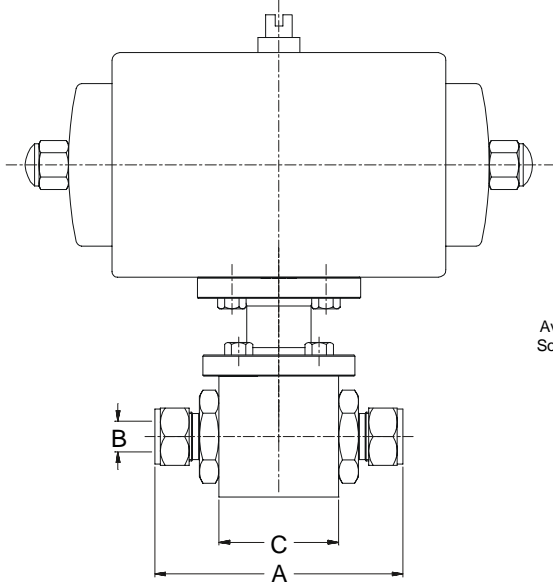
General Information

Rated up to 6,000 psi

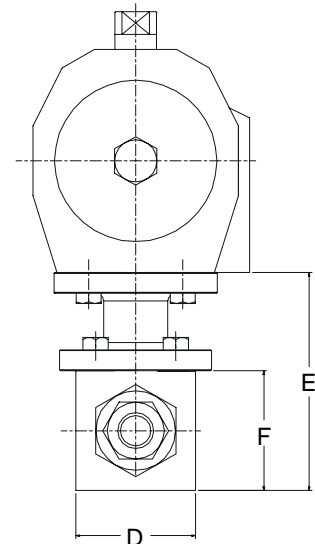
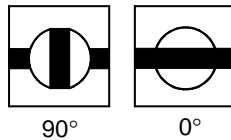
The Alco Centurion valve with its ISO 5211 mounting flange can be easily adapted to accept actuators for most forms of powered mechanical actuation hydraulic, pneumatic and electric. Customer specified or free issued actuators, which do not benefit from the ISO mounting, can be supplied via a bracket and drive piece. Shown is a double acting pneumatic actuator close coupled to a 19mm compression ended Centurion valve. The actuator is available in four sizes depending on the air supply available and has a torque output ranging from 64 to 2775 in/lbs (10 to 303 Nm).

Design Features

- Valve and actuator combination have undergone extensive third party witnessed extended life testing
- Available with all forms of powered actuation
- Actuators can be close coupled or mounted on spacer brackets
- Fail safe modes available, both open and closed whichever method of actuation is chosen
- Available with easily identifiable visual status indication
- Actuators can be fitted with limit switch boxes for open and closed positions
- Valve positioners can be fitted to enable the valves to operate in a closed loop control circuit
- Pneumatic actuators are available with NAMUR solenoid valve mounting pads
- Travel stops are integral with the actuators and adjustable
- Actuators have low hysteresis features incorporated
- Operating temperature ranges of -20°C to +100°C (-4°F to 212°F)
- Valve / actuator combination has been tested in salt spray environment for over 2000 hours without signs of corrosion
- Manual over rides available for most actuation forms



Available threaded NPT, BSPP, BSPT, Socket Weld Ends, Butt Weld Ends etc.



Part Numbers

St/St Part No.	Connections Size	A (Loose)	B (Bore)	C	D	E	F	CV	KV	Weight (Kgs) Without Actuator
CBV4KS-ACT	1/2"	136	19	63	63	115	63	7.8	6.7	2.0
CBV6KS-ACT	3/4"	140	19	63	63	115	63	11.8	10.2	2.0
CBV8KS-ACT	1"	146	19	63	63	115	63	16.7	14.4	2.0

Bore shown is through the ball

Seat material: 6,000 psi = Nylon 12 Seal material: Body = NBR - Stem = Turcon variseal

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K030

REV: 00



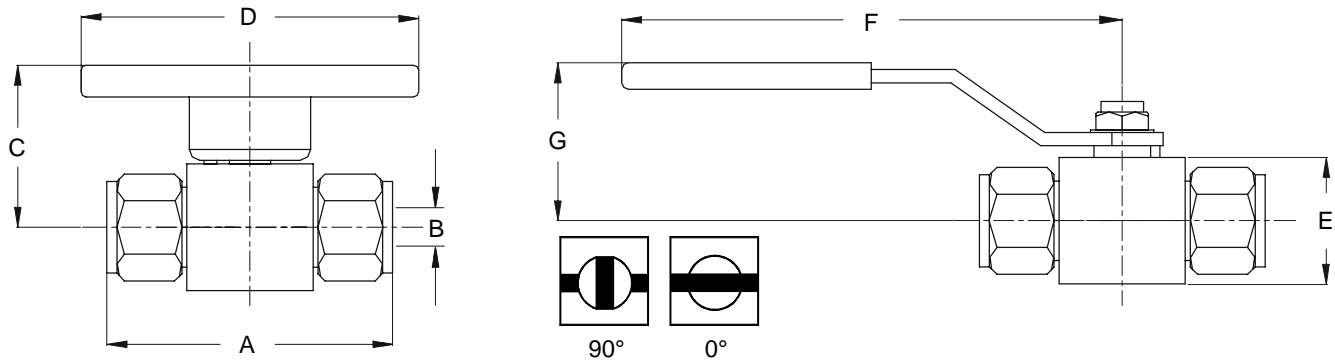
General Information

2 way Heavy duty ball valves 6,000 psi & 10,000 psi

The Rhino Range of valves are aptly named due to their tough, rugged, very strong construction and high design specification. The Rhino is a true "heavy duty small bore", multi-purpose ball valve that will withstand arduous services and unkind operator treatment. The Rhino can deliver a greater field life than other valves presently available in the market place. Rhino would suit any application where it may experience shock loading, impacts, thermal changes in excess of normal application parameters and anywhere that extra confidence in valving is required. The Rhino is available in sizes 1/4" to 1" with threaded, socket weld or even "quick to install" twin ferrule compression ends. Many standard options apply such as security locking feature, oval handle and actuated versions.

Design Features

- Rugged extra strong body construction with oversize handle, stem and ball for extra strength.
- *Rated upto 6,000 psi - to ASME B16.34 or 10,000 psi working pressure version.
- Seat options, PVDF / Peek
- Soft primary seating, with metal secondary seating.
- *Pressure / Temperature rating -20°C to 250°C
- Internally loaded anti-blow out stem for safety.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum services.
- Low operating torque under pressure.
- Flexible designs.
- Can be supplied fire safe to BS 6755 part 2 API 607.
- Light, quick and positive 90° action.
- Solid, strong and compact body construction.
- Available in 316ss / Monel / Duplex / Hastelloy other materials available on request.
- A choice of "T" bar or lever style handles, connection sizes and material of construction to suit your, or your clients application or safety level requirements.
- Panel mounting facility and stainless steel lever handle as standard.
- Full material traceability for all major components.
- 100% Hydrostatic and gas testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Connections Size	A NPT	B (Bore)	C	D	E	F	G	Cv	Kv	Weight (Kgs)
RV2NS	1/4" female x female	70	10	52	100	42	150	48	2.5	2.2	0.58
RV3NS	3/8" female x female	74	10	52	100	42	150	48	3.0	2.6	0.60
RV4NS	1/2" female x female	86	10	52	100	42	150	48	4.2	3.6	0.62
RV6NS	3/4" female x female	95	13	56	100	45	150	52	7.8	6.7	0.9
RV8NS	1" female x female	125	19	-	-	63	200	62	16.7	14.4	1.8

Seat material: 6,000 psi = PVDF / Peek

*See pressure / temperature data

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REF: AVCAT2K031

REV: 00

UB Series

General Information

Heavy duty high pressure ball valve 10,000 psi rated



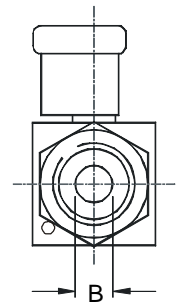
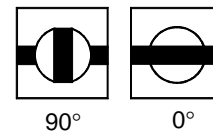
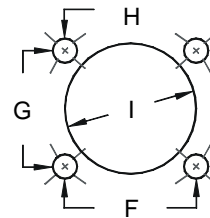
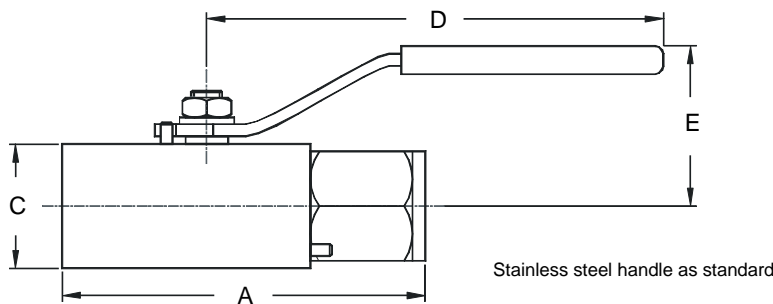
Alco are aware of the ever increasing operating pressures demanded by industry, and for this reason have developed the "UB" range of valves to accommodate these stringent requirements. The UB series high pressure valve has a working pressure of 10,000 psi with a body test at (15,000 psi). The UB Series is a tried and tested rugged design for high pressure applications. It comes with panel mounting holes and stainless steel handle as standard. Service / repair kits are available to prolong service / field life. Many options available such as locking device.

Design Features

- 2 piece design for safety.
- Quick 90° operation, lever handle standard.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Anti-blowout stem for safety.
- End pinned, stopping accidental removal or loosening by vibration.
- Available with 4-panel mounting holes M4 x 10 deep, can be actuated (if specified)
- Available in 316ss / Duplex / Monel.
- Pressure / Temperature rating -20°C to 250°C
- Available loose with socket weld or butt weld ends.
- Renewable seats and seals for long life.
- Repair kits available to prolong valve life.
- Floating ball design for first time seal.
- Available FULL bore or STANDARD bore.
- Full material traceability.
- 100% Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.

VALVE SIZE	F	G	H	I
1/4"-3/4"	27	24	5	27

4 – off M4 x 10 Mounting Holes



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	Cv	Kv	Weight (kgs)
UB2NS	1/4" NPT	89	10	32	115	36	2.5	2.2	0.7
UB3NS	3/8" NPT	92	10	32	115	36	3.0	2.6	0.7
UB4NS	1/2" NPT	95	10	32	115	36	4.2	3.6	0.7
UB6NS	3/4" NPT	110	13	38	140	40	7.8	6.7	1.0

For BSPT threads change 'N' to 'T' i.e. UB4TS

For BSPP version change "N" to "P" i.e. UB4PS

Note: check the international standards for pressure limitations of certain threads before you specify a thread form or end connection

Seat materials: 10,000psi = Peek® Seal materials: Body = PTFE - Stem = Peek

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K032

REV: 00

UE Series



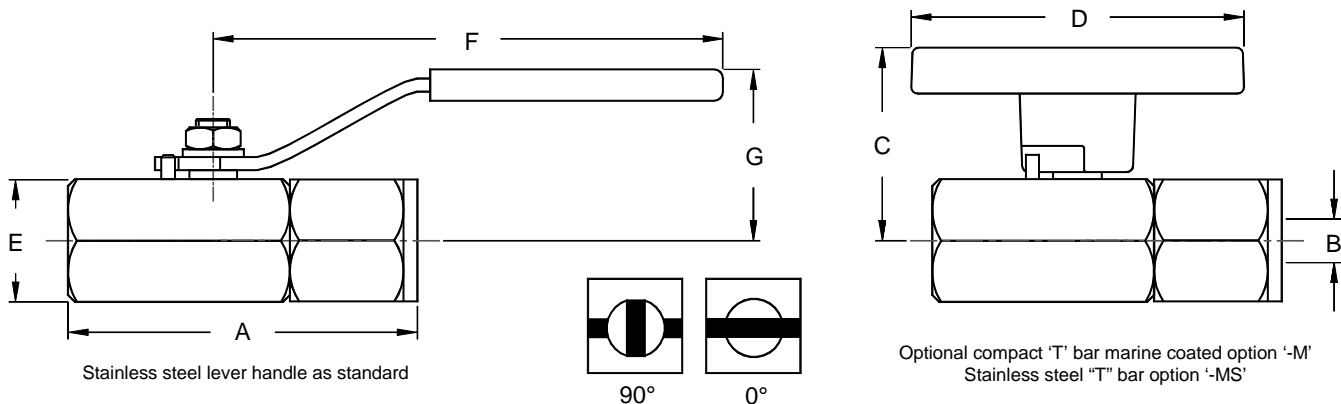
General Information

10,000 psi rated

The 'UE' series is a compact hybrid of the 'A' and 'B' series ball valve range. The UE series has been designed to be lighter and more compact than the 'UB' series range. It is available in a variety of configurations to suit many applications within the instrumentation and general engineering industries. The UE series comes with a stainless steel lever handle or the optional marine coated compact 'T' bar handle as standard. Fully floating ball for first time seal.

Design Features

- Smooth low torque 90° operation.
- Two piece design means less leak paths for extra safety.
- Value for money by economical design.
- Compact overall length, reduced weight.
- Choice of trim materials.
- Available in BSPP, BSPT, NPT threads or twin ferrule Compression ends (subject to rating).
- Available female x female, male x female or male x male.
- Available in 316ss / Monel / Duplex.
- Anti-blowout internally loaded stem for extra safety.
- Pressure / Temperature rating -20°C to 250°C
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Many options available such as locking devices,
- Service repair kits available to extend field life.
- Stainless steel lever handle as standard.
- Full material traceability.
- 100 % Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	F	G	Cv	Kv	Weight (Kgs)
UE2NS	1/4" NPT	89	10	44	77	32	115	40	2.5	2.2	0.25
UE3NS	3/8" NPT	92	10	44	77	32	115	40	3.0	2.6	0.26
UE4NS	1/2" NPT	95	10	44	77	32	115	40	4.2	3.6	0.30
UE6NS	3/4" NPT	110	13	46	77	38	150	52	7.8	6.7	0.53
UE8NS	1" NPT	124	19	-	-	64	170	75	16.7	14.4	1.1

Standard valve has lever handle.

For 'T' bar handle add '-M' i.e. E4NS-M.

For BSPP version change 'N' to 'P' i.e. E4PS.

For BSPT version change 'N' to 'T' i.e. E4TS.

Seat materials: 10,000psi = Peek® Seal materials: Body = PTFE - Stem = Peek®

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K033

REV: 00

FBV Series

General Information

Forged body ball valve 10,000 psi rated

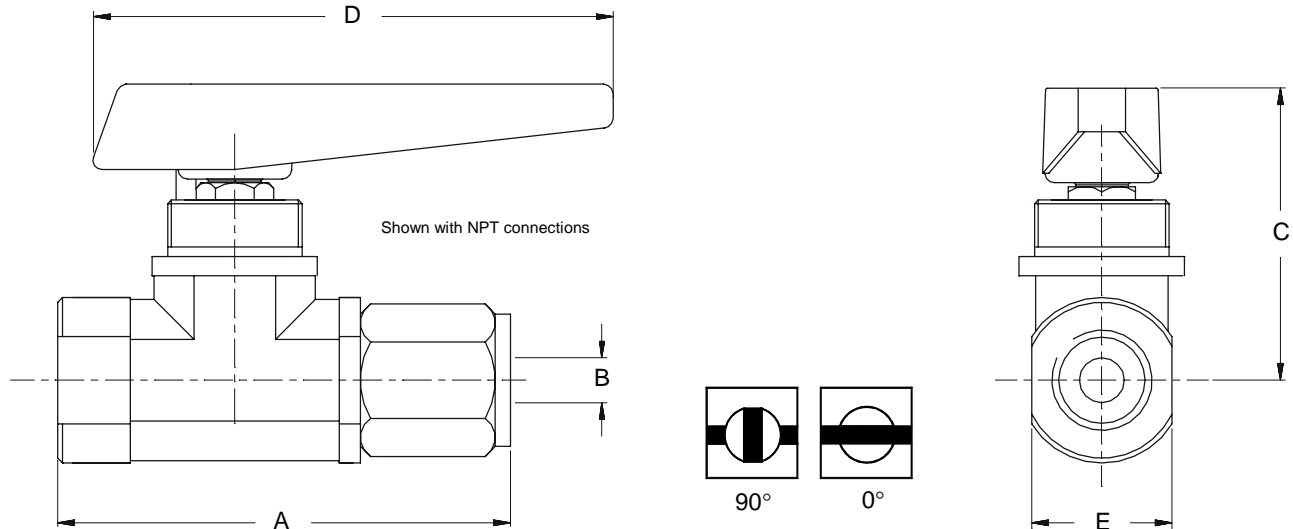


Shown with twin ferrule, tube type compression ends

High pressure, high integrity forged body construction. The Alco FBV series offers high pressure shut off with the added bonus of having very few potential leak paths. Single nut style panel mounting makes panel fitting easy and orientation difficulties are overcome. The FBV series comes as standard with a stainless steel flow indication arrow style handle. Twin ferrule compression end connectors are also available and due to the high specifications of the materials of construction the FBV is suitable for use in aggressive, corrosive environments.

Design Features

- 2 piece design for safety.
- Quick 90° operation, lever handle standard.
- Bi-directional floating ball design to ensure leak-proof shut-off on pressure or vacuum.
- Anti-blowout stem for safety.
- Single nut panel mounting as standard.
- Available in 316ss / Duplex / Monel.
- Renewable seats and seals for long life.
- Pressure / Temperature rating -20°C to 250°C
- Available loose with socket weld or butt weld ends.
- Can be supplied with twin ferrule compression ends.
- Available FULL bore or STANDARD bore up to 1/2".
- Full material traceability.
- 100% Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



Part Numbers

St/St Part No.	Connections Size	A	B (Bore)	C	D	E	Cv	Kv	Weight (kgs)
FBV2NS	1/4" NPT	90	10	64	109	28	2.5	2.2	0.4
FBV3NS	3/8" NPT	93	10	64	109	28	3.0	2.6	0.4
FBV4NS	1/2" NPT	96	10	64	109	28	4.2	3.6	0.4
FBV6NS	3/4" NPT	105	13	64	109	38	7.8	6.7	0.8

Dims are in mm (Appx)

For compression ends change "N" to "K" i.e. FBV4KS
For 1/2" NPT male x 1/2" NPT female add 1M i.e. FBV4NS-1M
Seat materials: 10,000 psi = Peek® Seal Materials: Body = PTFE - Stem = Peek®

See technical section for important additional valve data.

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REF: AVCAT2K034

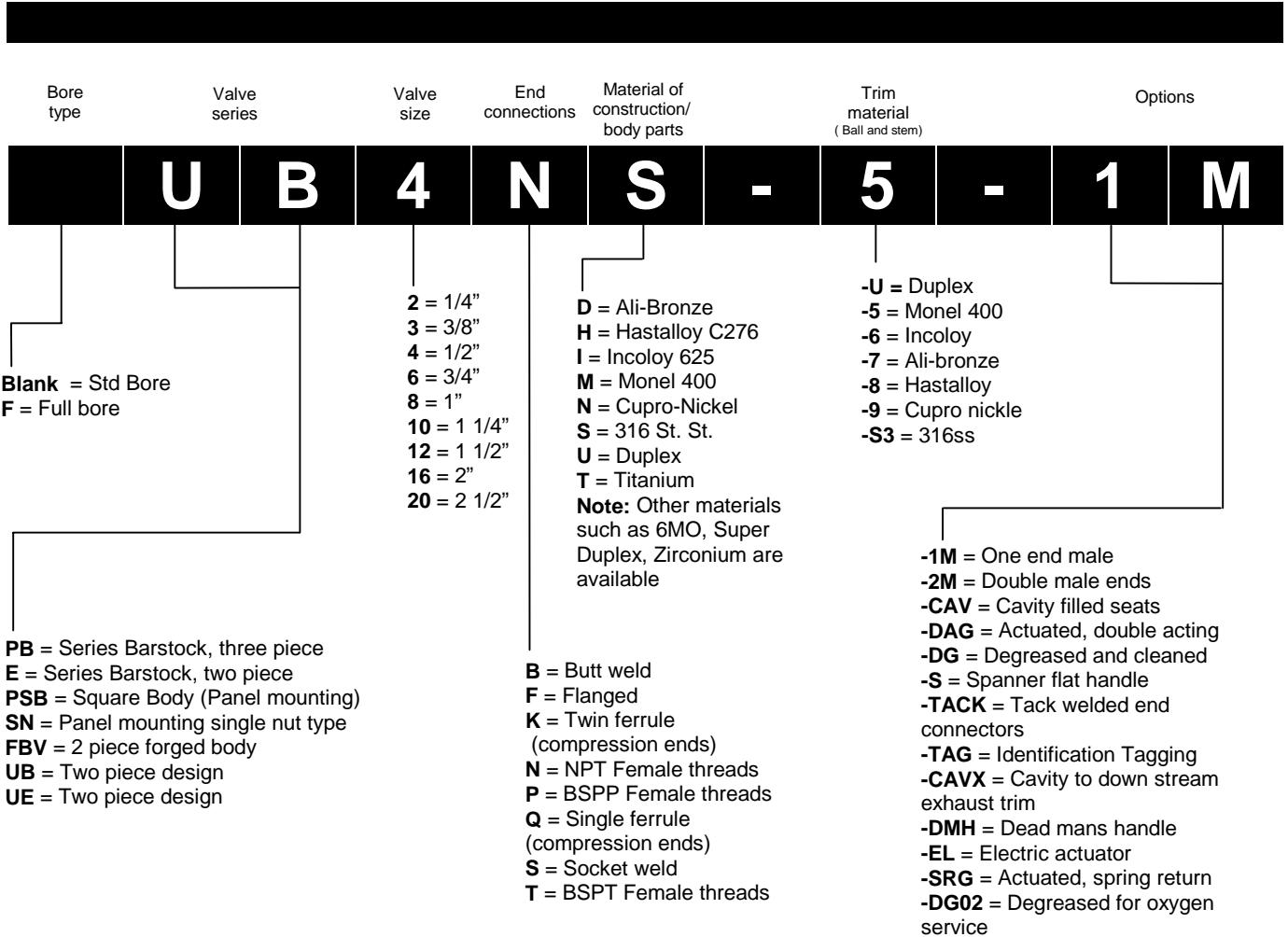
REV: 00

How to order valves 3,000 to 10,000 psi

Our part number system is made up of alphanumeric / generic code system as explained below.
An example is :-

1/2" NPT male x female 316ss 'UB' series ball valve, Monel® trim, lever handle rated 680 BAR (10,000 psi)

The part number shown below is made up using the following system:-



Socket weld and butt weld end connectors may be extended for thermal protection of the valve internals

NOTE 1: The pressure ratings quoted within our literature are maximum hydrostatic pressure ratings for the valves. Certain options available are the products / designs of other manufacturers, Alco valves cannot accept any responsibility for these products unsuitability or failure in service.

NOTE 2: It is always advisable to refer to specific product literature or contact our technical sales department when ordering valves as some of these options are available only on certain styles of valves. Any special end connections such as compression ends or butt / socket weld may limit the rated working pressure of the valve or component supplied in accordance with the relevant specification of design or use of that method of connection. The valve or component will still carry the maximum working pressure markings in accordance with the valve or component design not the connection method as they vary.



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REF: AVCAT2K021

REV: 00