### **BETA Industrie:**

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## Manifold-, DBB-, Needle-, Modular-,

## Injection- & Mono-Flange- & Super Alloy Valves



#### N-Series - Needle Valves 6,000 psi & 10,000 psi

The precision made 'N' series, single isolation hand valve utilising metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The "N" series also offers nonrotating hardened tip for extended service life. The unique antivibration cam locking device at the body bonnet connection is for extra safety. Working pressures are 6,000 psi and 10,000 psi. Maximum working temperature up to 230°C and up to 570°C with GP option.



#### **Tubed End N Series Compression Ended Needle Valve**

The standard 'N' series with compression type tube fitting ends. Single isolation hand valve utilising metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The N series also offers non-rotating hardened tip for extended service life. The unique anti-vibration cam locking device at the body bonnet connection is for extra safety. Working pressures are 6,000 psi and 10,000 psi. Maximum working temperature up to 230°C and up to 570°C with GP option.



#### In-line 2 Valve Manifold 6,000 psi and 10,000 psi rated

The "2VG" series 2 valve gauge manifold offering single process isolation and controlled venting. Unlike the '2VR' series, the '2VG' series can be offered with male inlet and female outlet connections. Available 6,000 psi and 10,000 psi versions, a slimline and compact 2 valve manifold. The '2VG' series, utilises metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The "2VG" series also offers non-rotating hardened tip for extended service life. The unique anti-vibration cam locking safety device at the body bonnet connection is for extra safety. Maximum working temperature up to 230°C and up to 570°C with -GP option at reduced pressure. Many options available including hand wheels and locking devices.



# **2VR-Series - 2 Valve Manifold** 6,000 psi and 10,000 psi rated



The two-valve isolating and venting manifold used mainly in gauge and static instrument applications such as pressure switches, pressure transmitters and manometers. The manifold will isolate instrumentation from the process and allow venting of the instrument for calibration / removal from the circuit without effecting the process / application and or recovery of a sample etc. Standard 1/2" inlet x 1/2" outlet with a 1/4" vent port. Incorporated are all the standard long service life features of the standard 'N' series needle valve, multi-ring piston style packings, back sealing facility. Safe, anti-rotational cam locking device. Most standard options such as locking devices are available. Mounting holes supplied as standard for pipe or wall mounting to suit quick installation.



# 3VBD/5VBD Series - Direct Mount 3 Valve Manifold 6,000 psi and 10,000 psi Rated

Direct mounted three-valve manifold, instrument mount to pipe connection. Offering two isolation valves, and one equalising valve for differential pressure transmitter or static instrument applications. Supplied with bolt pack and spare seals as standard. This slim, compact 3-valve manifold offers all the features of high integrity needle valve head design incorporated in one common instrument manifold block that mounts directly to an instrument.



#### Remote mount 5 valve manifold 6,000 psi rated

Remote mounted, pipe to pipe configuration five valve manifold. Offering two isolation valves, two vent valves and one equalising valve. Used in differential pressure transmitters and static instrument applications. Standard 2 x 1/2" inlet x 2 x 1/2" outlet all on 54mm instrument centres with 2 x 1/4" vent port. Incorporating all the standard long service life features of the standard N series needle valve, multi-ring piston style packings, back sealing facility. Safe anti-rotational cam locking device. Most standard options such as locking devices are available. Mounting holes supplied as standard for wall or bracket mounting.



## PSB-Series - 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 it's 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.





#### SN-Series - Single nut panel Mounting 6,000 psi

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



#### SSB- Series - Fire safe ball valves Rated up to 3,000 psi

The rugged SSB range of Fire Safe Ball Valve is manufactured in 316 stainless steel. Available in sizes from 1/4" to 1". The SSB range offers Drop-centre accessibility for welding / positioning / pipe access or maintenance purposes. Fire safe tested to BS 6755 Part 2 , API 607 or ISO 10497. Available with lever handle and locking device for a higher level of security. The range can be fitted with pneumatic or electric actuators at our factory.



#### 3-Way Port 1,000 psi to 3,000 psi rated

The 3-way L-Port diverter valves are an economical and safe method of diverting high pressure lines, where several high 2-way valves may have been used. Ensuring an altogether safe, compact and easy to install solution to low and high pressure diversion.

Available in bottom or side entry body formats. Materials of construction include 316 stainless steel, brass, carbon steel, monel, hastalloy, titanium, duplex and other exotic alloys. Many options apply including locking devices, actuator operation etc.



#### Ball valve multi-port gauge valves 1,000 psi to 6,000 psi

The multiport gauge (ball valve) is designed to provide an economical method for mounting gauges with the facility to test and calibrate gauges and pressure switches. The '3' series, being a ball valve construction / clear bore, offers roddability due to it's straight through flow passage. The valve is available with male, female, compression end or standpipe inlet and 3 x outlets. It can also be supplied complete with a swivel gauge adapter for 360° rotation gauge positioning.



#### 10,000 psi rated Piston Check Non-return valves

The Valves Non Return Valve is designed for high flow and low pressure drop in a pressurised medium. The "EC" series valve has a wide range of body and trim materials available, several types of sealing materials can be used to cope with most aggressive mediums.

Having a soft primary seat means it is suitable for gases or liquids. Altogether a very compact unit, suitable for many arduous duties. Various cracking pressures to suit your application are available.



#### **Bolted Construction DBB's**



DVB - Series Double Block & Bleed is approved and widely used by many of the worlds oil and petro-chemical majors. Forged body giving excellent grain flow around body and flanges. Fully roddable bore. Materials of construction include ASTM A350 LF2 / A105, ASTM A182 F316 / F316L, Duplex and Super Duplex. Outlets and vents are all 1/2" NPT as standard, 1/4" and 3/4" are optional. Butt weld / socket weld connections available. Through bore sizes from 3/8" (10mm) to 4" (100mm). Pressure ratings from vacuum to CLASS 2500lbs or API 10,000psi. Fire safe tested and certified. Also available in trunnion, metal seated and lipseal configurations.

#### **One-Piece Construction DBB's**



One piece body Double Block & Bleed is available with needle, Outside screw & yoke or ball type valves. One Piece forged body minimizes the number of potential leak paths and delivers excellent grain flow around body and flanges for extra strength, also reduces overall size and weight of the assembly. Outlets and vents are 1/2" NPT as standard, 1/4" and 3/4" are also available. Connection types include butt weld, socket weld or hubbed. Through bore sizes from 3/8" (10mm) to 4" (100mm). Pressure ratings from vacuum to CLASS 2500lbs or API 10,000psi. Fire safe tested and certified.

#### Flanged x Screwed Construction DBB's



Flanged x Screwed DBB valve for the safest and most cost effective pipeline to instrumentation interface available. Simple and fast 4 bolt installation to the pipeline / process, high strength one-piece body which reduces potential leak paths to a minimum. Big reductions in overall size and weight of the assembly which almost certainly eliminates the need for additional supporting. Outlets and vents are 1/2" NPT as standard, 1/4" and 3/4" are also available. Connections types include flanged, butt weld, socket weld or hubbed. Through bore sizes from 3/8" (10mm) to 4" (100mm). Pressure ratings from vacuum to CLASS 2500lbs or API 10,000psi. Fire safe tested and certified. Also available in trunnion, metal seated and lipseal configurations.

#### **Hubbed x Screwed Construction DBB's**



Hubbed x Screwed DBB valve for the quickest and most cost effective pipeline to instrumentation interface available. Installation to the pipeline / process by third party client approved hub manufacture. High strength one-piece forged body which reduces potential leak paths to a minimum. A dramatic reduction in overall size and weight is realized by using this design. Materials of construction include ASTM A350 LF2 /A105, ASTM A182 F316 / F316L, Duplex and Super Duplex. Bore sizes from 1/4" (6mm) to 3/4" (19mm). Pressure ratings from vacuum to CLASS 2500lbs or API 10,000psi. Available Fire safe tested and certified.





#### **Screwed x Screwed Instrument DBB's**

Screwed series for direct instrumentation compatibility, typically used on high and low pressure gauge applications. Having clear bore ball valve isolation ensures effective process to instrumentation interface using standard screwed connections. Needle valve vent ensures controlled and safe bleed /venting. Overall size and weight is reduced and no additional supporting is required. Inlet, Outlet and vent sizes from 1/4" NPT to 2" NPT. Other connection types include NPT, BSPP, BSPT, twin ferrule compression fittings and weld ends. Through bore sizes from 3/8" (10mm) to 4" (100mm). Pressure ratings from vacuum to 10,000psi. Available Fire safe tested and certified.



#### Flange x Screwed - Integral Bolting DBB's

Flanged x Screwed DBB valve with integral flange bolts for even safer and faster installation. Having clear bore ball valve isolation ensures effective process to instrumentation interface using flanged x screwed connections. Needle valve vent ensures controlled and safe bleed / venting. Outlet and vent connections are 1/2" NPT as standard with the option of 1/4" or 3/4". Other outlet and vent connections include NPT, BSPP, BSPT, twin ferrule tube / compression fittings and weld ends. Through bore sizes from 3/8" (10mm) to 4" (100mm). Pressure ratings from vacuum to CLASS 2500lbs or API 10,000psi.



#### **Pipeline Ball Valves - High Integrity**

ANSI standard pipeline ball valves. Two piece design minimizing potential leak paths. Available in all our standard grade materials ASTM A350 LF2 / A105 dual certified, ASTM A182 F316 / F316L and ASTM A182 F51 and super alloys. Available with Standard floating ball or high pressure trunnion mounted designs (upto 10,000 psi). Tight shut off is delivered by soft primary seating followed by metal to metal secondary sealing as standard for extra safety in fire conditions. Long life, low emission stem packing is used for reliable long term service / field life. Fire safe design as standard. Available in sizes from 1/2" to 4".



#### Mono-Flange / Slim-line DBB's

SMF - series valve offers a compact lightweight instrument double block and bleed valve. The SMF has a primary isolation valve that is a piping class outside screw and yoke bolted design, and high integrity instrument needle valve secondary isolation and vent / bleed. This compact model offers the lowest possible number of potential leak paths from a process connection, this involves only one joint - the pipeline flange to the valve body. It is easily understood that the benefits of this unit are many. Ideal for manometer, pressure gauge and temperature measurement device installations. Pressure ratings from vacuum to CLASS 2500lbs. Available fire safe. ANSI Flange sizes 1/2" to 4"



#### **Mono-Flange HT/HP & Direct Instrument Interface**



MF - series, as with the SMF, offers a compact lightweight instrument double block and bleed valve. Solution with the added advantage of integral (or bolt-on) instrument interface for direct connection to pressure measurement equipment / instruments. Also having the lowest possible number of potential leak paths, this involves only one joint - the pipeline flange to the valve body. Ideal for manometer, pressure gauge and temperature measurement device installations. Various bore sizes available, standard 1/4" (6mm) up to 3/4" (19mm). Metal seated for High temperature and high pressure applications (HT/HP),from vacuum to CLASS 2500lbs. Available fire safe.

#### **Chemical Injection / Sampling DBB**



Injection - vibration a normally closed check valve opens when material is passed through it, this also prevents return. Sampling - taken at full system pressure by opening then closing of the primary isolate valve, thus producing a sample trapped in the cavity between primary and secondary isolation valves. The trapped sample is safely vented to a desired location at reduced pressure. Both probes and quills can be manufactured to the desired length to suit the application pipe size for maximum dispersal in injection services and mean-samples in sampling services. supports for longer probes. Vortex Shedding / Wake Frequency calculations available on request.

#### **Gate & Globe Valves - Pipeline Solutions**



ANSI B16.10 standard pipeline gate and globe valves. Single piece design minimizing potential leak paths. Available in all our standard grade materials ASTM A350 LF2 / A105 dual certified, ASTM A182 F316 / F316L and Duplex. Other materials of construction are available. This range of valves has been designed to fulfil new requirements for high temperature and high pressure sour service applications. This valve in standard form comprises of a single isolate gate or globe valve. In manifold configurations primary isolation is delivered by the gate valve which can deal with high temperature / high pressure and abrasive elements and followed by a globe valve for throttling purposes. Many different versions of this valve are available

#### **Triple Flange DBB's**



Flanged inlet, outlet and vent / bleed port allowing direct pipeline interface for all three ports.

Available on all one-piece and bolted construction DBB valve designs.