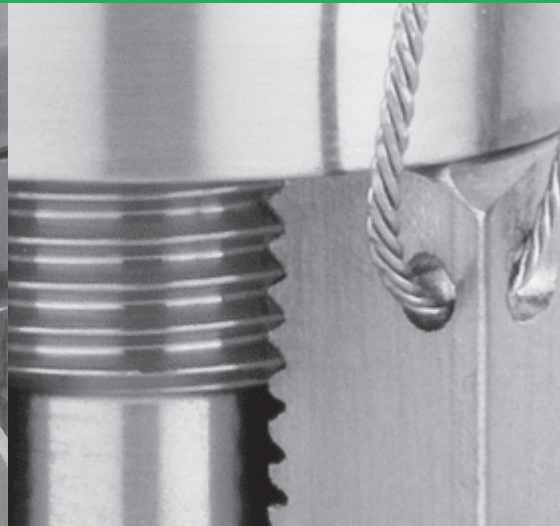
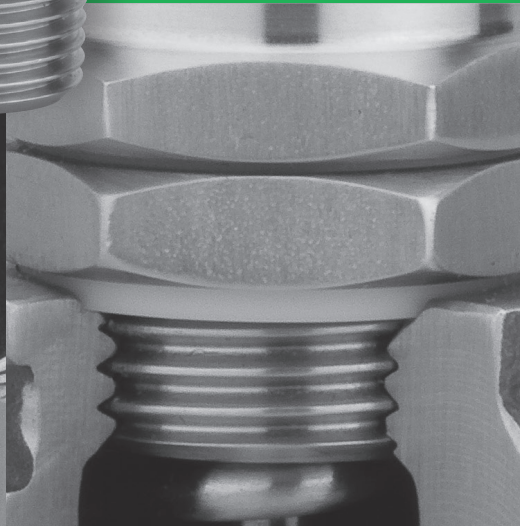
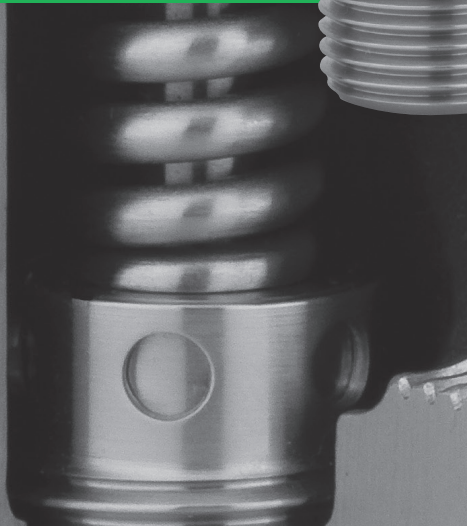
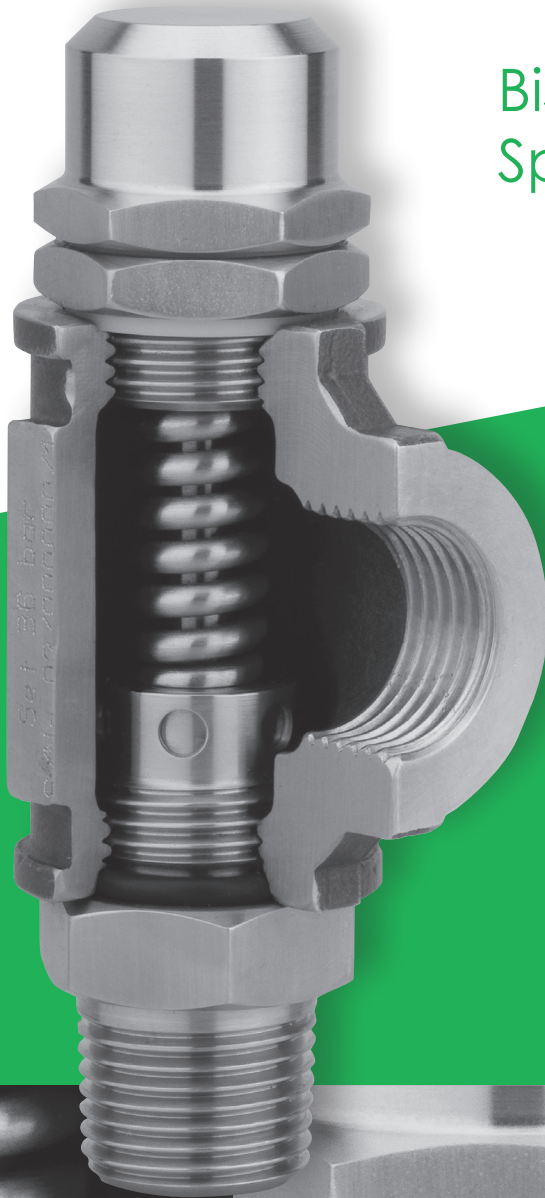


BiS Valves  
Specialists in Fluid Control



## Welcome to BiS Valves

BiS is an internationally recognised company with over 50 years experience in the design and manufacture of a wide range of small bore stainless steel pressure and flow control valves for high pressure liquid and gas.

Operating in a variety of sectors, we are a leading supplier to the Offshore Oil and Gas industry for topside, subsea and downhole applications where quality, reliability and safety are critical.

With an extensive range of standard products and a bespoke design service we aim to provide the right solutions for your applications.

### Markets

BiS has a strong profile and presence in the international offshore oil and gas market in both topside and subsea applications. Products are designed mainly for the low flow, high pressure control valve market, where demands for higher pressures and total reliability in the most extreme environments constantly push design boundaries. Working with materials from stainless steel to more exotic materials, such as inconel or titanium, we pride ourselves on finding the right solution, whatever the application.

As a supplier to the oil and gas topside market, our products are widely specified for use on a range of applications including hydraulic power units, work over control systems and chemical injection systems. As a solution provider, BiS also design, manufacture and supply complete integrated manifolds to meet our customers specific requirements.

Our standard, cartridge and manifold mounted flow and pressure control products are also suited to and specified in a wide range of industries, including water hydraulics, fuel distribution, metal manufacturing, industrial gas control and process control.

BiS Valves also has extensive experience providing products for subsea and downhole applications such as wellhead control, emergency shut-down and remotely operated vehicles. A strong design team, backed up with the latest test equipment are well suited to development of the bespoke products often required for subsea applications.

### Technology

Alongside our large range of standard products, BiS has the capability to design and manufacture the special product that is the perfect fit for your system.

Using our experience of fluids, materials and seals, our team of hydraulics engineers use computer aided design tools to develop the right solutions. Designs can be qualified for use via in-house test facilities, which can include flow, pressure, environmental and hyperbaric testing, and special testing through external facilities when required.

### Customer Care

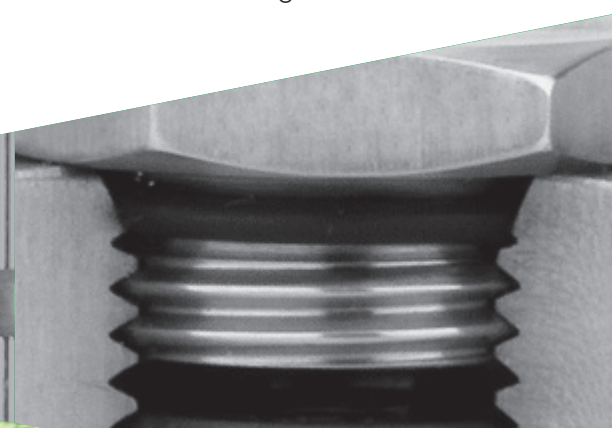
In a competitive market place, we recognise the importance of customer care, whether your requirement is for a single valve from our standard range, or large quantities of multiple products for a specific project, or for a bespoke design. Our team constantly strive to provide customers with a prompt, efficient service, competitive lead times, on-time deliveries, and products designed, manufactured, assembled and tested in accordance with strict quality control procedures.

We enjoy a reputation for short lead times, and our flexible manufacturing methods give us the capability to respond to your most urgent requirements.

### Global Partner Network

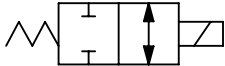
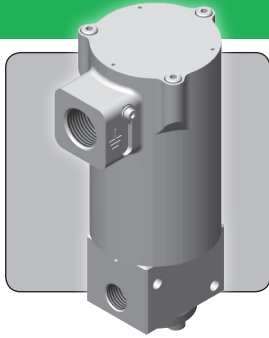
BiS Valves market and support their range of products through a network of international stocking distributors, based in strategic countries.

Please refer to reverse of brochure for global locations.



## Solenoid

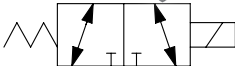
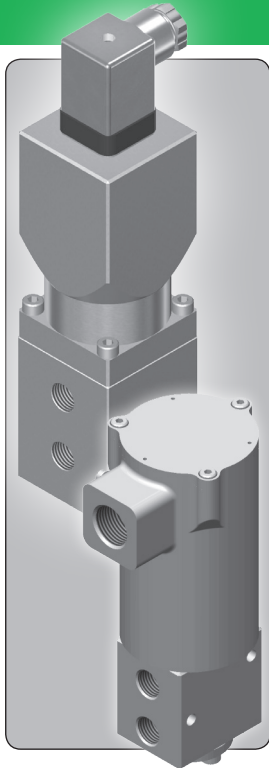
## 2 port direct acting solenoid valves



Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	16 bar (232 psi)	Liquids & Gases	<b>2/2AS25</b>
1/2"	16 bar (232 psi)	Liquids & Gases	<b>2/2AS50</b>

2 port solenoid valves, primarily stainless steel construction. Direct acting valves that incorporate balanced spool technology to enable bi-directional use. Elastomeric sealing for virtually zero leakage. Normally closed and normally open configurations. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available.

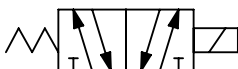
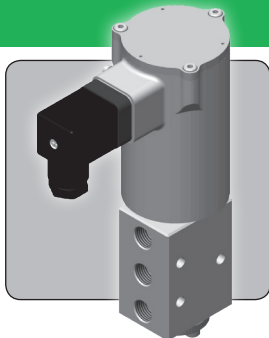
## 3 port direct acting solenoid valves



Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	16 bar (232 psi)	Liquids & Gases	<b>2/3AS25</b>
1/2"	16 bar (232 psi)	Liquids & Gases	<b>2/3AS50</b>
1/8", 1/4"	690 bar (10,000 psi)	Liquids only	<b>2/3DS01</b>
1/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>2/3DS25</b>
3/8"	414 bar (6,000 psi)*	Liquids & Gases	<b>2/3DS37</b>
1/8", 1/4"	690 bar (10,000 psi)	Liquids only	<b>2/3DS20/25</b>
1/8", 1/4"	690 bar (10,000 psi)	Liquids only	<b>CS20</b>

3 port solenoid valves, primarily stainless steel construction. Direct acting valves mostly incorporating balanced spool technology to enable bi-directional use. Wide range of flow and pressure options. Topside and subsea valves available. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available. \* NOTE - Pressure rating is reduced with gases.

## 5 port direct acting solenoid valves

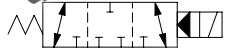
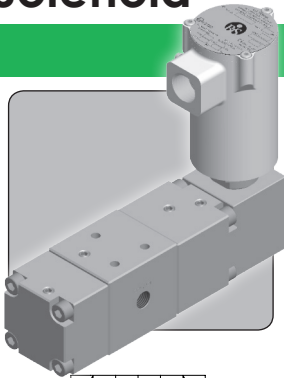


Nominal Size	Pressure	Media	Valve Type
1/4"	16 bar (232 psi)	Liquids & Gases	<b>2/5AS25</b>

5 port solenoid valves, primarily stainless steel construction. Direct acting valves that incorporate balanced spool technology. Used for control of double acting cylinders. Elastomeric sealing for virtually zero leakage. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available.

## Solenoid

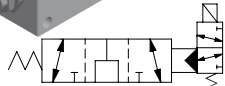
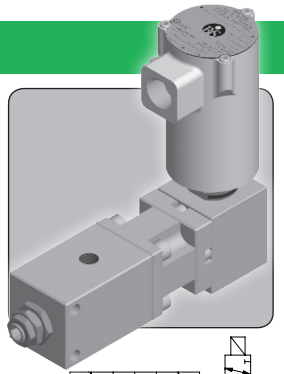
## 3 port internal pilot solenoid valves



Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	690 bar (10,000 psi)	Liquids only	<b>2/3PS25</b>
1/2"	690 bar (10,000 psi)	Liquids only	<b>2/3PS50</b>
1"	690 bar (10,000 psi)	Liquids only	<b>2/3PS100</b>

3 port solenoid valves, primarily stainless steel construction. Pilot operation from an integral solenoid pilot valve connected to the main stage supply line allows electrical control of higher pressures and flows than direct acting valves. Normally closed and normally open configurations. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available.

## 3 port external pilot solenoid valves (open transition)

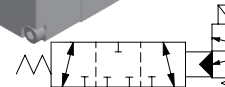
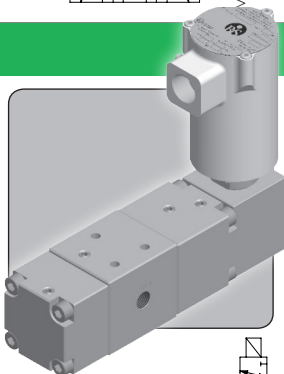


Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	690 bar (10,000 psi)*	Liquids & Gases	<b>2/3EPS25</b>
1/2"	690 bar (10,000 psi)*	Liquids & Gases	<b>2/3EPS50</b>
1"	690 bar (10,000 psi)*	Liquids & Gases	<b>2/3EPS100</b>

3 port solenoid valves, primarily stainless steel construction. Pilot operation from an integral solenoid pilot valve. The main stage valve element is controlled from an external hydraulic or pneumatic pilot supply. Normally closed and normally open configurations. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available.

\* NOTE - Pressure rating is reduced with gases.

## 3 port external pilot solenoid valves (closed transition)



Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	690 bar (10,000 psi)	Liquids only	<b>2/3EPSC25</b>
1/2"	690 bar (10,000 psi)	Liquids only	<b>2/3EPSC50</b>
1"	690 bar (10,000 psi)	Liquids only	<b>2/3EPSC100</b>

3 port solenoid valves, primarily stainless steel construction. Pilot operation from an integral solenoid pilot valve. The block-before-bleed main stage minimises fluid loss during switching and is controlled from an external hydraulic or pneumatic pilot supply. Normally closed and normally open configurations. Manual override and manual reset options. Various port and seal options available. Various solenoid thrusters available.

## Flow Control

## Stop (shut-off with handwheel) valves

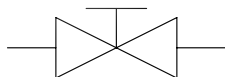
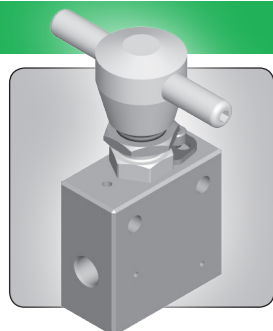


Nominal Size	Pressure	Media	Valve Type
1/4", 3/8"	690 bar (10,000 psi)	Liquids only	<b>BNV25</b>
1/4", 3/8"	414 bar (6,000 psi)	Liquids & Gases	<b>BNV25-G</b>
1/2", 3/4"	690 bar (10,000 psi)	Liquids only	<b>BNV50</b>
1/2", 3/4"	414 bar (6,000 psi)	Liquids & Gases	<b>BNV50-G</b>

Stop valves, stainless steel construction. Provides tight shut-off via coarse adjustment for rapid operation. Non-rotating stem design. Various port and seal options available.

## Flow Control

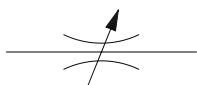
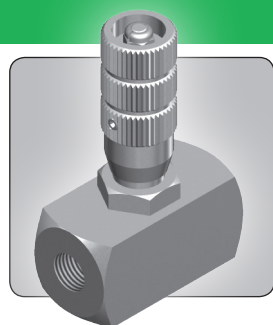
## Stop valves (shut-off with T-bar)



Nominal Size	Pressure	Media	Valve Type
1/8"	1,379 bar (20,000 psi)	Liquids only	<b>BNV10FC</b>
1/4", 3/8"	862 bar (12,500 psi)	Liquids only	<b>BNV25-TB</b>
1/4"	1,379 bar (20,000 psi)	Liquids only	<b>BNV44AE</b>
3/8"	1,379 bar (20,000 psi)	Liquids only	<b>BNV56AE</b>
9/16"	1,379 bar (20,000 psi)	Liquids only	<b>BNV81AE</b>

Stop valves, stainless steel construction. Provides tight shut-off via a T-bar with coarse adjustment for rapid operation. Non-rotating stem design. Designed with minimal backlash for improved operator feel. Various seal and port options including industry standard medium pressure configurations.

## Fine metering valves

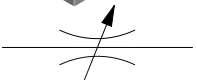
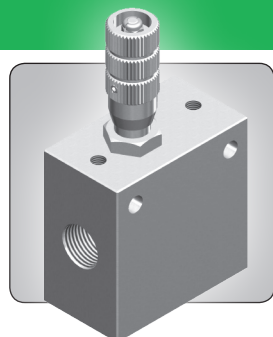


Nominal Size	Pressure	Media	Valve Type
1/4" (CV up to 0.65)	552 bar (8,000 psi)*	Liquids & Gases	<b>FMF25</b>
1/4" (CV up to 0.20)	552 bar (8,000 psi)*	Liquids & Gases	<b>XFMF25</b>
1/4" (CV up to 0.028)	552 bar (8,000 psi)*	Liquids & Gases	<b>VFMF25</b>

Fine metering flow control valves, stainless steel construction. Provides non-pressure compensated flow control, which is fully adjustable within a given range via a lockable micrometer style adjustment. Non-rotating stem design. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases.

## Metering valves

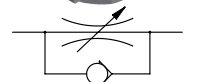
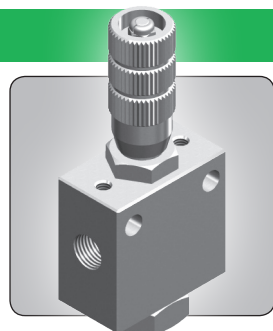


Nominal Size	Pressure	Media	Valve Type
1/4"	552 bar (8,000 psi)*	Liquids & Gases	<b>MF25</b>
3/8"	552 bar (8,000 psi)*	Liquids & Gases	<b>MF37</b>
1/2"	552 bar (8,000 psi)*	Liquids & Gases	<b>MF50</b>
3/4"	552 bar (8,000 psi)*	Liquids & Gases	<b>MF75</b>
1"	552 bar (8,000 psi)*	Liquids & Gases	<b>MF100</b>

Metering flow control valves, stainless steel construction. Provides non-pressure compensated flow control, which is fully adjustable within a given range via a lockable micrometer style adjustment. Non-rotating stem design. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Metering with check valves



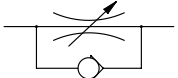
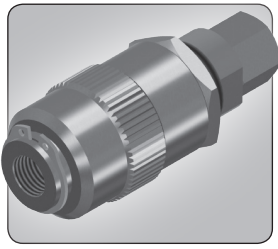
Nominal Size	Pressure	Media	Valve Type
1/4"	552 bar (8,000 psi)*	Liquids & Gases	<b>CMF25</b>
3/8"	552 bar (8,000 psi)*	Liquids & Gases	<b>CMF37</b>
1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>CMF50</b>
3/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>CMF75</b>
1"	414 bar (6,000 psi)*	Liquids & Gases	<b>CMF100</b>

Metering valves with check, stainless steel construction. Provides non-pressure compensated flow control in one direction and allows free flow in the other direction via the check valve. Non-rotating stem design. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Flow Control

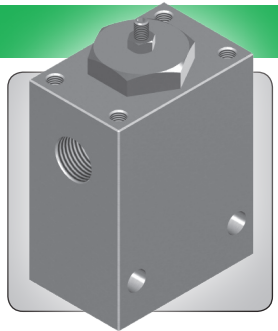
## Pressure compensated flow regulator valves



Nominal Size	Pressure	Media	Valve Type
1/4"	552 bar (8,000 psi)	Liquids only	<b>IMC25</b>
3/8"	552 bar (8,000 psi)	Liquids only	<b>IMC37</b>
1/2"	552 bar (8,000 psi)	Liquids only	<b>IMC50</b>

Metering valves with check (in-line design), stainless steel construction. Provides non-pressure compensated flow control in one direction and allows free flow in the other direction via the check valve. The valve can be tailor made to suit many types of flow metering characteristics. Various port and seal options available.

## Pressure compensated flow regulator valves

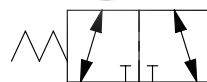
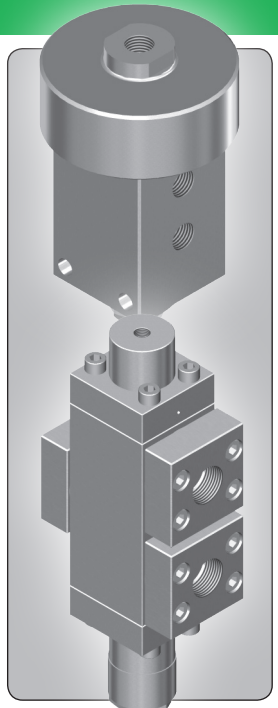


Nominal Size	Pressure	Media	Valve Type
3/8", 1/2"	690 bar (10,000 psi)	Liquids only	<b>PCFR50</b>

Pressure compensated flow control valves, stainless steel construction. Valve provides a relatively constant flow in one direction, regardless of the differential pressure across the valve. Suitable for use with non-corrosive fluids only. Various adjustable flow ranges, port options and seal options available.

## 3 Port Directional Control

## 3 port directional control valves



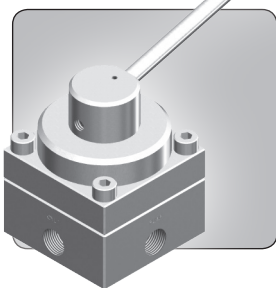
Nominal Size	Pressure	Media	Valve Type
1/4"	690 bar (10,000 psi)	Liquids only	<b>3B25</b>
1/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>3B25-G</b>
3/8"	690 bar (10,000 psi)	Liquids only	<b>S-3B37</b>
3/8"	414 bar (6,000 psi)*	Liquids & Gases	<b>S-3B37-G</b>
1/2"	690 bar (10,000 psi)	Liquids only	<b>3B50</b>
1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>3B50-G</b>
1"	241 bar (3,500 psi)	Liquids & Gases	<b>3BHF100</b>
1"	690 bar (10,000 psi)	Liquids only	<b>3BLF100</b>

Three port directional control valves, stainless steel construction. Balanced spool technology. Service pressure does not affect switching pressures. Bi-directional, may also be used as a two port valve. Pneumatic, hydraulic, lever and cam actuators and various port options and seal options available.

\* NOTE - Pressure rating is reduced with gases

## 4 Port Directional Control

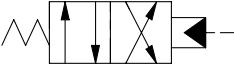
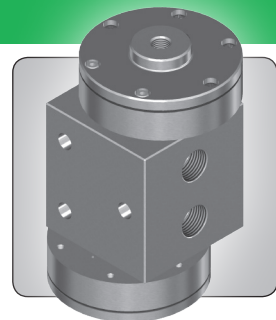
## 4 port rotary directional control valves



Nominal Size	Pressure	Media	Valve Type
1/4"	690 bar (10,000 psi)	Liquids only	<b>4R25</b>
3/8"	414 bar (6,000 psi)	Liquids only	<b>4R37</b>

Four port rotary control valves, primarily stainless steel construction. Shear style technology for excellent contamination resistance. Suitable for use with non-corrosive liquids only. Various flow configurations, port options and seal options available.

## 4 port directional control valves



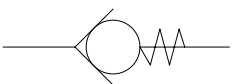
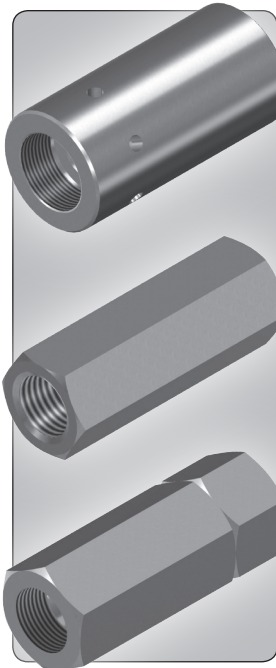
Nominal Size	Pressure	Media	Valve Type
3/8"	690 bar (10,000 psi)	Liquids only	<b>S-6B37</b>
3/8"	414 bar (6,000 psi)*	Liquids & Gases	<b>S-6B37-G</b>

Four port directional control valves, stainless steel construction. Balanced spool technology. Service pressure does not affect switching pressures. Various actuators, port options and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Check and Shuttle

## Check valves



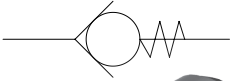
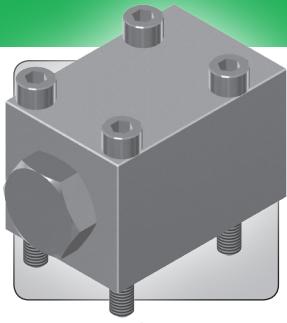
Nominal Size	Pressure	Media	Valve Type
1/4"	621 bar (9,000 psi)*	Liquids & Gases	<b>C25</b>
3/8"	621 bar (9,000 psi)*	Liquids & Gases	<b>C37</b>
1/2"	621 bar (9,000 psi)*	Liquids & Gases	<b>C50</b>
3/4"	621 bar (9,000 psi)*	Liquids & Gases	<b>C75</b>
1"	621 bar (9,000 psi)*	Liquids & Gases	<b>C100</b>
1 1/4"	483 bar (7,000 psi)*	Liquids & Gases	<b>C125</b>
1 1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>C150</b>
1/4"	828 bar (12,000 psi)*	Liquids & Gases	<b>NR25</b>
1/4", 3/8"	1,379 bar (20,000 psi)*	Liquids & Gases	<b>NR25 (20K)</b>
3/8"	828 bar (12,000 psi)*	Liquids & Gases	<b>NR37</b>
1/2"	828 bar (12,000 psi)*	Liquids & Gases	<b>NR50</b>
9/16"	1,379 bar (20,000 psi)*	Liquids & Gases	<b>NR50 (20K)</b>
3/4"	828 bar (12,000 psi)*	Liquids & Gases	<b>NR75</b>
1"	621 bar (9,000 psi)*	Liquids & Gases	<b>NR100</b>
1 1/4", 1 1/2", 2"	414 bar (6,000 psi)*	Liquids & Gases	<b>NR200</b>

Check valves, stainless steel construction. Sealed poppet technology for virtually zero leakage performance. High cracking pressure variants available on request. Versions available for use with more corrosive fluids. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Check and Shuttle

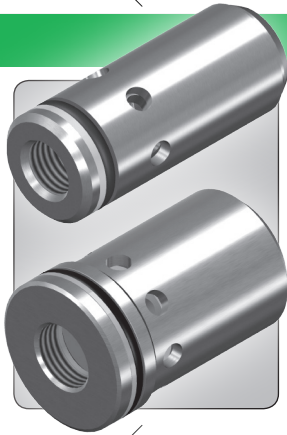
## Check valves (manifold mounted)



Nominal Size	Pressure	Media	Valve Type
1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>NR50M</b>

Manifold mounted check valves, stainless steel construction. Valve design incorporates soft-seated sealing technology for excellent leakage performance. Ideally suited for manifold applications. Various seal options available.  
\* NOTE - Pressure rating is reduced with gases

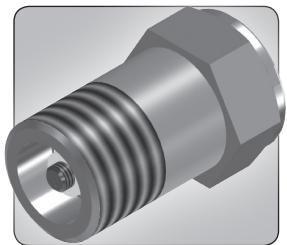
## Cartridge check valves



Nominal Size	Pressure	Media	Valve Type
1/4"	690 bar (10,000 psi)*	Liquids & Gases	<b>CC25</b>
3/8"	690 bar (10,000 psi)*	Liquids & Gases	<b>CC37</b>
1/2"	690 bar (10,000 psi)*	Liquids & Gases	<b>CC50</b>
3/4"	690 bar (10,000 psi)*	Liquids & Gases	<b>CC75</b>
1"	690 bar (10,000 psi)*	Liquids & Gases	<b>CC100</b>

Cartridge check valves, stainless steel construction. Sealed poppet technology for virtually zero leakage performance. Ideally suited for manifold applications. Various seal options available.  
\* NOTE - Pressure rating is reduced with gases

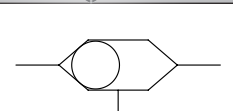
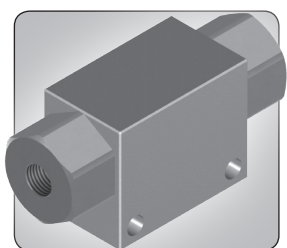
## Venting check valves



Nominal Size	Pressure	Media	Valve Type
1/4"	250 bar (3,625 psi)*	Liquids & Gases	<b>CV25</b>

Venting check valves, stainless steel construction. Sealed poppet technology for virtually zero leakage performance. Small compact design that vents directly to atmosphere. Various cracking pressure variants available. Various seal options available.  
\* NOTE - Maximum reverse pressure differential

## Shuttle valves



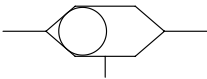
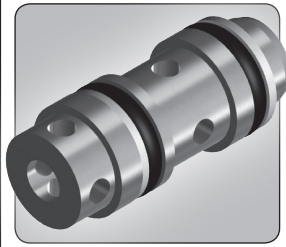
Nominal Size	Pressure	Media	Valve Type
1/4"	690 bar (10,000 psi)	Liquids only	<b>SV25</b>
1/4", 3/8", 1/2"	552 bar (8,000 psi)*	Liquids & Gases	<b>SV50</b>

Shuttle valves, stainless steel construction. Ideally suited for applications where dual redundancy of control lines is required. Non-spring biased design, valve senses the higher of two pressures. Various port and seal options available.  
\* NOTE - Pressure rating is reduced with gases



## Check and Shuttle

## Cartridge shuttle valves

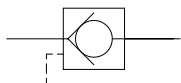
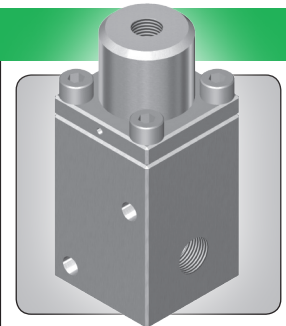


Nominal Size	Pressure	Media	Valve Type
1/4"	276 bar (4,000 psi)	Liquids only	<b>SV25C</b>

Cartridge shuttle valves, stainless steel construction. Ideally suited for manifold applications where dual redundancy is required. Non-spring biased hard seated design, valve senses the higher of two pressures. Various seal options available.

## Pilot Operated Check

## Pilot operated check valves

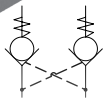
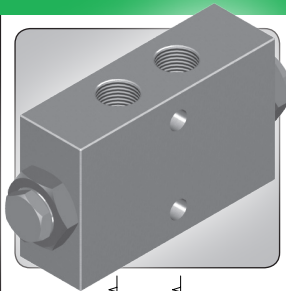


Nominal Size	Pressure	Media	Valve Type
3/8"	1,379 bar (20,000 psi)*	Liquids & Gases	<b>V1-37</b>
3/4"	828 bar (12,000 psi)	Liquids only	<b>MS75</b>
1/8"	276 bar (4,000 psi)	Liquids & Gases	<b>SVA12</b>
1/8"	1,379 bar (20,000 psi)	Liquids only	<b>B1-12</b>

Pilot operated check valves, stainless steel construction. Ball or poppet on seat design for excellent leakage performance. Soft and Hard seated variants available. Various actuation methods available including pneumatic, hydraulic and mechanical via a lever. Various pilot ratios available to suit a wide range of applications. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

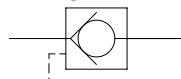
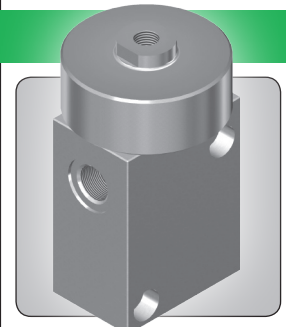
## Double pilot operated check valves



Nominal Size	Pressure	Media	Valve Type
3/8", 1/2"	414 bar (6,000 psi)	Liquids only	<b>2XPC50</b>

Double pilot operated check valves, stainless steel construction. Hard seated ball on seat design. Ideally suited for double acting cylinder applications, where it will allow the cylinder to move when instructed, but will lock the position when the directional control valve is returned to its centre position. Various port and seal options available.

## Decompression check valves

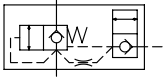
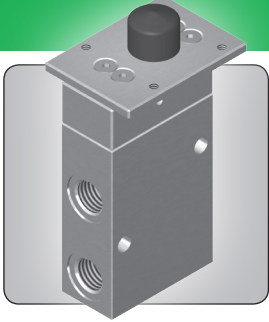


Nominal Size	Pressure	Media	Valve Type
1/2"	1,379 bar (20,000 psi)	Liquids only	<b>M1-50</b>

Decompression check valves, ideally suited for applications where shock is to be reduced when a high pressure trapped volume line is opened. Various actuation methods available including pneumatic, hydraulic and mechanical via a lever. Various pilot ratios and seal options available.

## Pilot Operated Check

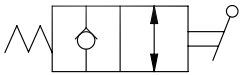
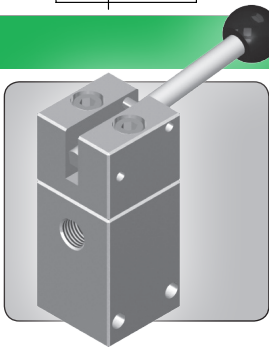
## Unloader valves



Nominal Size	Pressure	Media	Valve Type
1/2"	207 bar (3,000 psi)	Liquids only	<b>UL75/50</b>
3/4"	379 bar (5,500 psi)	Liquids only	<b>UL75</b>

Unloader valves, ideally suited for pump unloading applications. Various actuation methods available including pneumatic and mechanical via a lever or push button. Some variants may also be remotely operated. Various port and seal options available.

## Lever operated check valves

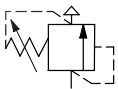
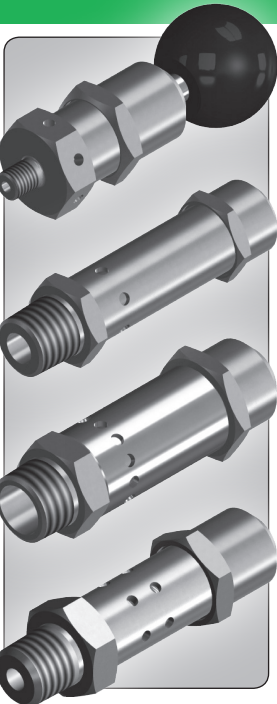


Nominal Size	Pressure	Media	Valve Type
1/8"	138 bar (2,000 psi)	Liquids & Gases	<b>SVT12</b>

Lever operated check valves, stainless steel construction. Valve design incorporates soft-seated sealing technology for excellent leakage performance. Ideally suited for manual override applications. Small compact design. Various seal options available.

## Relief

## Safety relief valves (vent to atmosphere)

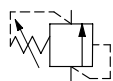
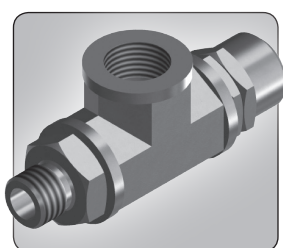


Nominal Size	Pressure	Media	Valve Type
1/4"	40 bar (580 psi)	Liquids & Gases	<b>BS25</b>
3/8"	40 bar (580 psi)	Liquids & Gases	<b>BS37</b>
1/2"	40 bar (580 psi)	Liquids & Gases	<b>BS50</b>
3/4"	40 bar (580 psi)	Liquids & Gases	<b>BS75</b>
1/4"	40 bar (580 psi)	Liquids & Gases	<b>S25</b>
3/8"	40 bar (580 psi)	Liquids & Gases	<b>S37</b>
1/2"	40 bar (580 psi)	Liquids & Gases	<b>S50</b>
3/4"	40 bar (580 psi)	Liquids & Gases	<b>S75</b>
1"	18 bar (261 psi)	Liquids & Gases	<b>S100</b>
1/4"	19 bar (275 psi)	Liquids & Gases	<b>SM25UF</b>

Safety relief valves with a vent to atmosphere feature, stainless steel construction (BS variants in Brass). Valve designs mostly incorporate elastomeric sealing technology for virtually zero leakage performance. Relatively high discharge capacities are achieved via the pop-open style valve characteristic. BSP and NPT inlet port options available. Not designed for use with corrosive or hazardous media.

## Relief

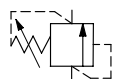
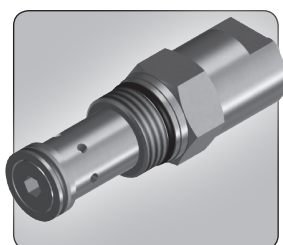
## Safety relief valves



Nominal Size	Pressure	Media	Valve Type
1/4"	40 bar (580 psi)	Liquids & Gases	<b>TS25</b>
3/8"	40 bar (580 psi)	Liquids & Gases	<b>TS37</b>
1/2"	40 bar (580 psi)	Liquids & Gases	<b>TS50</b>
3/4"	40 bar (580 psi)	Liquids & Gases	<b>TS75</b>
1"	28 bar (406 psi)	Liquids & Gases	<b>TS100</b>

Safety relief valves, stainless steel construction. Threaded exhaust port. Valve designs mostly incorporate elastomeric sealing technology for virtually zero leakage performance. Relatively high discharge capacities are achieved via the pop-open style valve characteristic. Various port and seal options available.

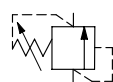
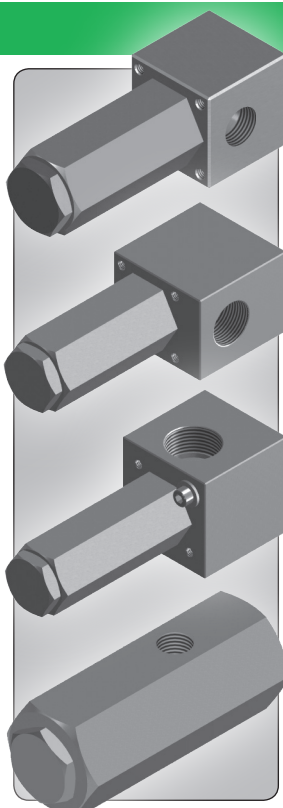
## Cartridge safety relief valves



Nominal Size	Pressure	Media	Valve Type
1/4"	40 bar (580 psi)	Liquids & Gases	<b>TS25C</b>

Cartridge safety relief valves, stainless steel construction. Valve design incorporates elastomeric sealing technology for virtually zero leakage performance. Relatively high discharge capacities are achieved via the pop-open style valve characteristic. Ideally suited for manifold applications. Various seal options available.

## Relief valves

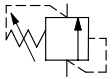
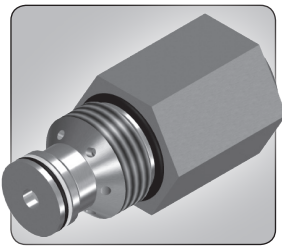


Nominal Size	Pressure	Media	Valve Type
1/4"	1,034 bar (15,000 psi)	Liquids only	<b>RL25</b>
1/4"	414 bar (6,000 psi)	Liquids & Gases	<b>RL25-G</b>
3/8"	1,034 bar (15,000 psi)	Liquids only	<b>RL37</b>
3/8"	414 bar (6,000 psi)	Liquids & Gases	<b>RL37-G</b>
1/2"	1,034 bar (15,000 psi)	Liquids only	<b>RL50</b>
1/2"	414 bar (6,000 psi)	Liquids & Gases	<b>RL50-G</b>
3/4"	1,034 bar (15,000 psi)	Liquids only	<b>RL75</b>
3/4"	414 bar (6,000 psi)	Liquids & Gases	<b>RL75-G</b>
1"	207 bar (3,000 psi)	Liquids only	<b>RL100</b>
1"	207 bar (3,000 psi)	Liquids & Gases	<b>RL100-G</b>

Relief valves, stainless steel construction. Hard seated ball on seat design for excellent leakage performance. Conventional style relief valve for high pressure relief applications. Various port, seal and build specifications available to suit a wide range of applications.

## Relief

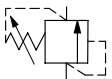
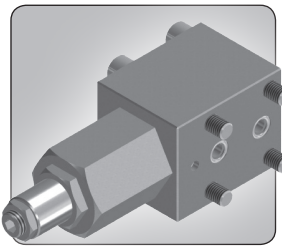
## Cartridge relief valves



Nominal Size	Pressure	Media	Valve Type
1/4"	1,034 bar (15,000 psi)	Liquids only	<b>RL25C</b>
3/4"	414 bar (6,000 psi)	Liquids only	<b>PRV75C</b>

Cartridge relief valves, stainless steel construction. Hard seated ball on seat design for excellent leakage performance. Conventional style relief valve for high pressure relief applications. Ideally suited for manifold applications. Various seal and build specifications available to suit a wide range of applications.

## Relief valves (manifold mounted)

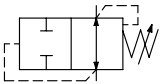
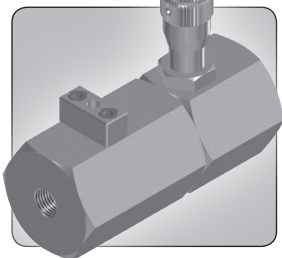


Nominal Size	Pressure	Media	Valve Type
1/4"	1,034 bar (15,000 psi)	Liquids only	<b>RL25M</b>
1/2"	1,034 bar (15,000 psi)	Liquids only	<b>RL50M</b>

Manifold mountable relief valves, stainless steel construction. Hard seated ball on seat design for excellent leakage performance. Conventional style relief valve for high pressure relief applications. Various seal and build specifications available to suit a wide range of applications.

## Excess Flow

## Excess flow valves (externally adjustable)

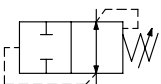
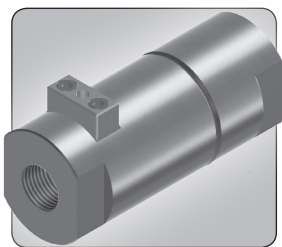


Nominal Size	Pressure	Media	Valve Type
1/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>ER25</b>
3/8"	414 bar (6,000 psi)*	Liquids & Gases	<b>ER37</b>

Externally adjustable excess flow valves, stainless steel construction. Designed to close a flow line in the event of a breakage or rupture of a downstream pipe or hose. The valve may also be used on applications where excess flow must be avoided. Externally adjustable such that the valve can be set after installation. Various port, reset and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Excess flow valves (internally adjustable)



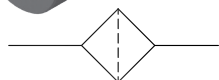
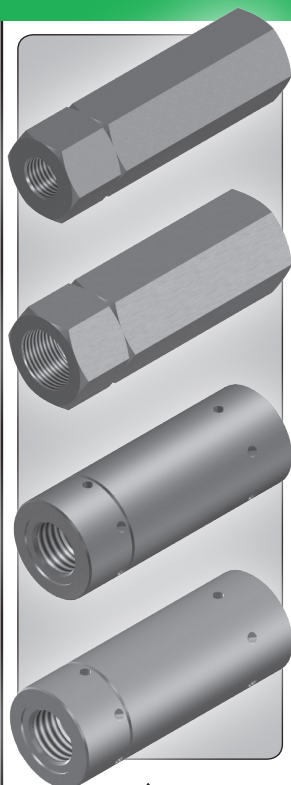
Nominal Size	Pressure	Media	Valve Type
1/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>R25</b>
3/8"	414 bar (6,000 psi)*	Liquids & Gases	<b>R37</b>
1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>R50</b>
3/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>R75</b>
1"	414 bar (6,000 psi)*	Liquids & Gases	<b>R100</b>
1 1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>R150</b>

Internally adjustable excess flow valves, stainless steel construction. Designed to close a flow line in the event of a breakage or rupture of a downstream pipe or hose. The valve may also be used on applications where excess flow must be avoided. Various port, reset and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Filters

## Inline filters

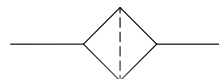
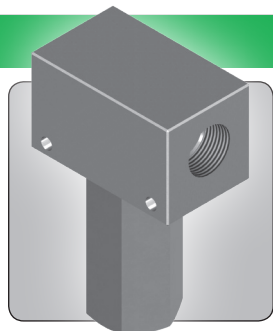


Nominal Size	Pressure	Media	Valve Type
1/4"	828 bar (12,000 psi)*	Liquids & Gases	<b>F25</b>
3/8"	828 bar (12,000 psi)*	Liquids & Gases	<b>F37</b>
1/2"	828 bar (12,000 psi)*	Liquids & Gases	<b>F50</b>
3/4"	828 bar (12,000 psi)*	Liquids & Gases	<b>F75</b>
1"	621 bar (9,000 psi)*	Liquids & Gases	<b>F100</b>
1 1/4"	414 bar (6,000 psi)*	Liquids & Gases	<b>F125</b>
1 1/2"	414 bar (6,000 psi)*	Liquids & Gases	<b>F150</b>
2"	414 bar (6,000 psi)*	Liquids & Gases	<b>F200</b>

In-line filters, stainless steel construction. These filters are intended for device protection of critical components and should be used in conjunction with the main-line filter. Rigid mesh design, suitable for use with a wide range of media. Various micron rating sizes available. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Inline filters (easy replacement)

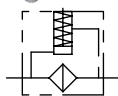
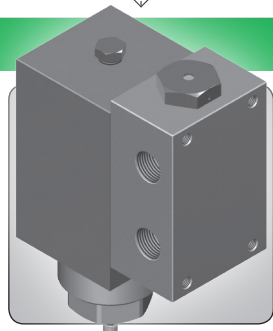


Nominal Size	Pressure	Media	Valve Type
1/4"	552 bar (8,000 psi)*	Liquids & Gases	<b>EF25</b>
3/8"	552 bar (8,000 psi)*	Liquids & Gases	<b>EF37</b>
1/2"	552 bar (8,000 psi)*	Liquids & Gases	<b>EF50</b>
1/2"	552 bar (8,000 psi)*	Liquids & Gases	<b>EF50-DP</b>
1"	552 bar (8,000 psi)*	Liquids & Gases	<b>EF100</b>

In-line filters, stainless steel construction. These filters are intended for device protection of critical components and should be used in conjunction with the main-line filter. Rigid mesh design, suitable for use with a wide range of media. Easy replacement filter design. Element can be cleaned or replaced without disturbing pipe work. Various micron rating sizes available. Various port and seal options available.

\* NOTE - Pressure rating is reduced with gases

## Simplex filters

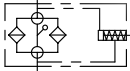
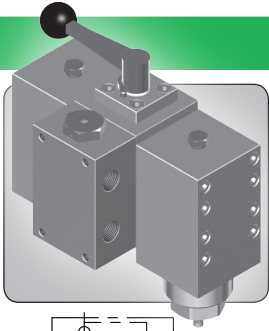


Nominal Size	Pressure	Media	Valve Type
1/2"	414 bar (6,000 psi)	Liquids only	<b>SF50</b>

Simplex filters, stainless steel construction. High pressure main-line filter. Filter is available with a visual pop-out indicator to show when the element is becoming blocked and is also available with a visual pop-out indicator with a by-pass facility. Various micron rating sizes available. Various port and seal options available.

## Filters

## Duplex filters

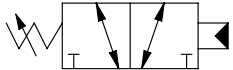
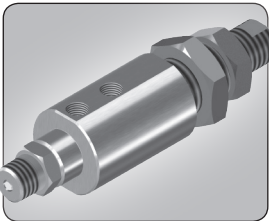


Nominal Size	Pressure	Media	Valve Type
1/2"	414 bar (6,000 psi)	Liquids only	<b>DF50</b>

Duplex filters, stainless steel construction. High pressure main-line filter. Filter is available with a visual pop-out indicator to show when the element is becoming blocked and is also available with a visual pop-out indicator with a by-pass facility. Filter is ideally suited to applications where a shut-down cannot be tolerated. Element can be changed in the system whilst the other filter is still in service. Various micron rating sizes available. Various port and seal options available.

## Pressure Sensing

## Sensing valves

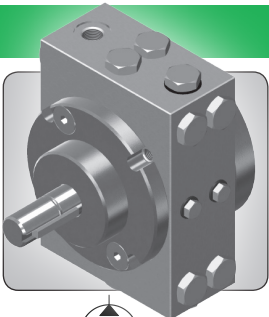


Nominal Size	Pressure	Media	Valve Type
3/8", 1/2"	414 bar (6,000 psi)	Liquids & Gases	<b>3SV25</b>

Pressure sensing valves, stainless steel construction. Primarily used to send a pneumatic pilot signal to actuate another valve when the state of a sensed service rises or falls beyond a pre-determined pressure. Various sensing pressures, port and seal options available.

## Pumps

## H.P. rotary piston pumps

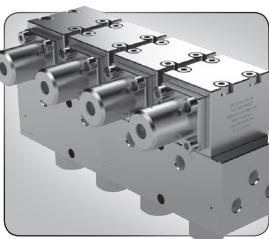


Nominal Size	Pressure	Media	Valve Type
1/4"	828 bar (12,000 psi)	Liquids only	<b>260PR</b>
1/4"	828 bar (12,000 psi)	Liquids only	<b>520PR</b>

High pressure radial piston pumps, primarily carbon steel construction. Ideally suited for high pressure low flow applications, such as maintaining pressure in accumulator banks. Suitable for use with mineral oils, but may be used with certain water glycols (contact factory).

## Manifold Solutions

## Manifolds



Nominal Size	Pressure	Media	Valve Type
Various	Various	Liquids & Gases	Various

Bespoke manifold solutions utilising BiS cartridge and manifold mounted valves. Custom design allows complex hydraulic or pneumatic circuits to be packaged perfectly to suit the specific application. Manifold solutions typically save space, reduce pipework, assembly time, leakage points and cost while improving the way a system is operated and serviced. Contact us with details of your application.

## Design, Manufacturing, Testing & Quality

### Design

All BiS Valves products are backed up by a team of hydraulic design engineers. As well as making continuous improvements to the current range, and designing new products, the team are ready to help you find the right solution for your application.

Our design service can include making simple modifications to existing valves, to make them an exact match for your requirements, through to development of a complete new valve.

One of our most popular product solutions are hydraulic manifolds, where we can incorporate several valves into a single unit. This improves installation, reducing the number of expensive fittings required, makes servicing easier since pipe work does not have to be removed when a valve needs servicing, and minimises potential leakage points in the system.

We can also offer design consultancy services, and we have the capability to work with you to design new products and systems, and to develop your existing designs. Contact us for details.

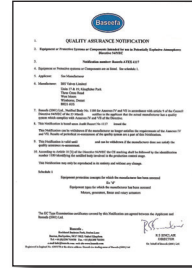
### Manufacturing

Manufacturing of BiS Valves products is mostly carried out in our own factory near Wimborne, Dorset, where we have extensive machining facilities devoted to close tolerance manufacture of stainless steel valve parts. In order to achieve the high levels of seat integrity required by the demanding low leakage applications that we serve in the offshore oil and gas industry, sound manufacturing and assembly techniques are essential, and are even more critical when handling more exotic materials such as monel, inconel, hastelloy and titanium.

### Testing

BiS Valves has an extensive and growing list of in-house testing capability, both for production testing and for qualification work.

This includes hydraulic testing to 1379 bar (20,000 psi), flow and pressure drop testing, pressure decay and leakage testing. Test mediums include mineral oil, water, various water glycols and nitrogen. Our capabilities, which are augmented by external testing when necessary, also include high pressure gas testing, environmental testing, hyperbaric facilities and shock and vibration testing.



### Quality

As an ISO 9001:2008 company, our objective is to be your preferred partner and supplier, providing you with product solutions that are engineered to meet your exacting requirements, delivered on time, with a commitment to through-life support and above all, to the quality standards demanded in today's business arena. We will continue to achieve this by focussing all personnel into sustaining the standards established by our quality system and through continuous improvement and innovation in our products, design, manufacturing and business systems.

At BiS quality is of paramount importance and particular care is taken to ensure that the product is well finished, as well as dimensionally correct. Every batch of components is inspected by our quality department before it is released for assembly, or to the customer, ensuring we get it right first time.

Our Quality Assurance Management System approvals include:-

- BS EN ISO 9001:2008 - Quality Systems
- ATEX Directive 94/9/EC - Equipment for use in potentially explosive atmospheres
- Pressure Equipment Directive 97/23/EC (PED)



## Contacts

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## Global Distributors

See [www.bisvalves.co.uk](http://www.bisvalves.co.uk) for comprehensive contact details



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