

# Interface Valve Slide Valve Series

up to 1380 bar, 40 litres per minute



Superior performance  
throughout the full  
operational range

## Features:

- Temperatures upto 180°C
- 316L Stainless steel
- Arctic service option down to -46°C
- NACE MR-01-75 option
- Block before bleed
- Contamination tolerant fluids > NAS1638 Class 12

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## TECHNICAL SPECIFICATIONS

### MATERIALS OF CONSTRUCTION

All valve bodies:-	stainless steel 316L
Internal components:-	stainless steel 316 & 316L, CA104 Aluminium Bronze
Fasteners:-	A4 18/10 316 grade stainless steel
Springs:-	302S26 stainless steel
Seals:-	O-Rings :- Nitrile (standard). Alternative elastomers available for extreme conditions.
	Lip Seals:- PTFE compounds

### TEMPERATURE RANGE:

See elastomer options

### MEDIA:

Mineral oils, water glycol mixtures, sea water (filtered), some chemicals  
Air, natural gas, bottled gases (low pressure pilot operators and 84,55 series valves only)

### WORKING PRESSURE:

Up to 1380 Bar (20,000PSI). Maximum working pressure varies according to valve model. Refer to ordering code.

### SOUR GAS SERVICE (REFER TO ORDERING CODE):

All internal wetted and body metal materials conforming to NACE MR-01-75.

### INSTALLATION:

Valves can be mounted in any attitude. Systems should be flushed clean to ISO 4406 Class 18/15 or better. Bifold Fluidpower slide valves afford excellent sealing characteristics provided high standards of cleanliness are maintained.

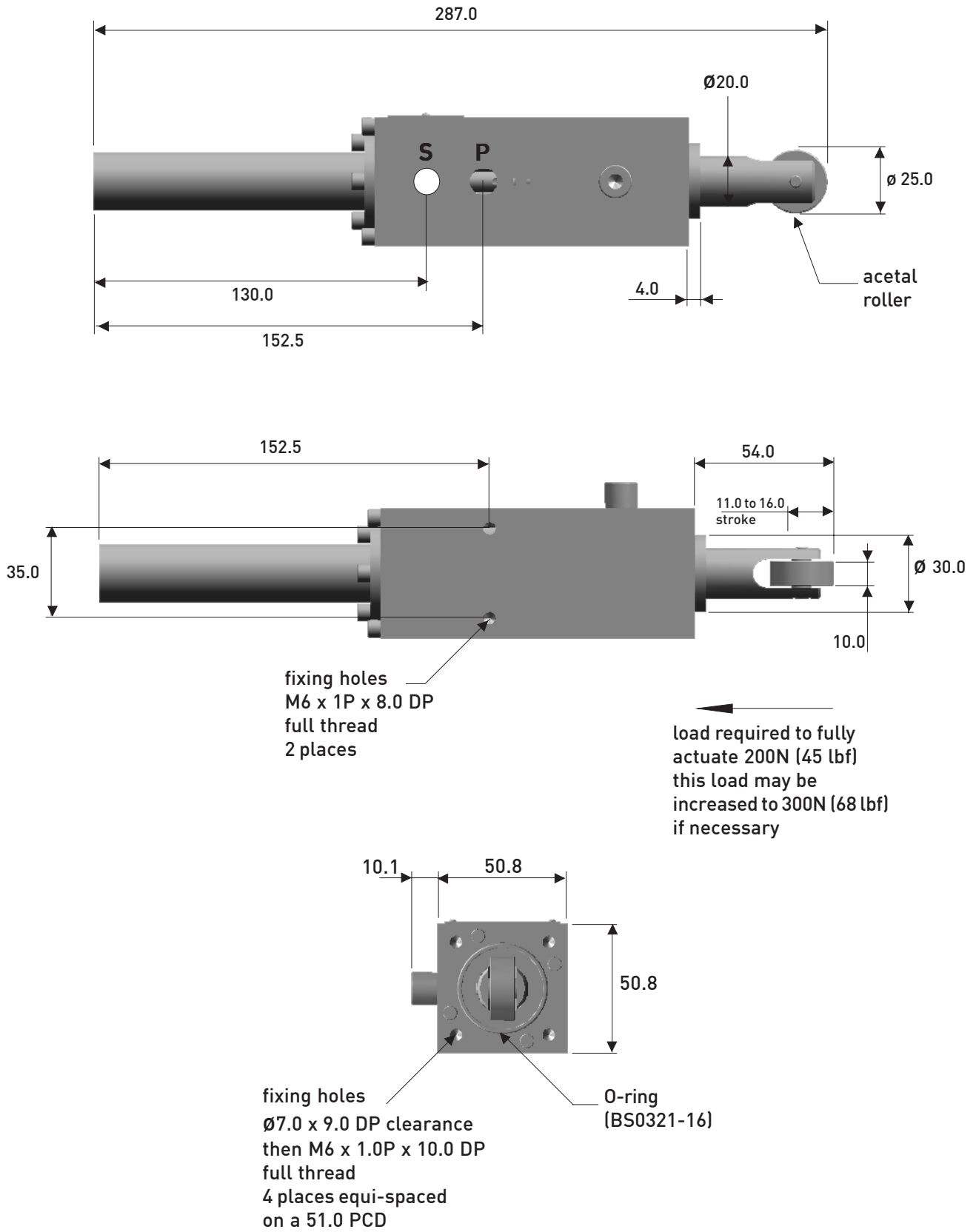
Weights detailed in this catalogue are approximate only

## \* FRANGIBLE BULB OPTIONS

ORDER CODE	BULB COLOUR	TEMPERATURE RANGE °C
57C	Orange	57 +/- 3.5%
68C	Red	68 +/- 3.5%
79C	Yellow	79 +/- 3.5%
93C	Green	93 +/- 3.5%
141C	Blue	141 +/- 3.5%
182C	Mauve	182 +/- 3.5%



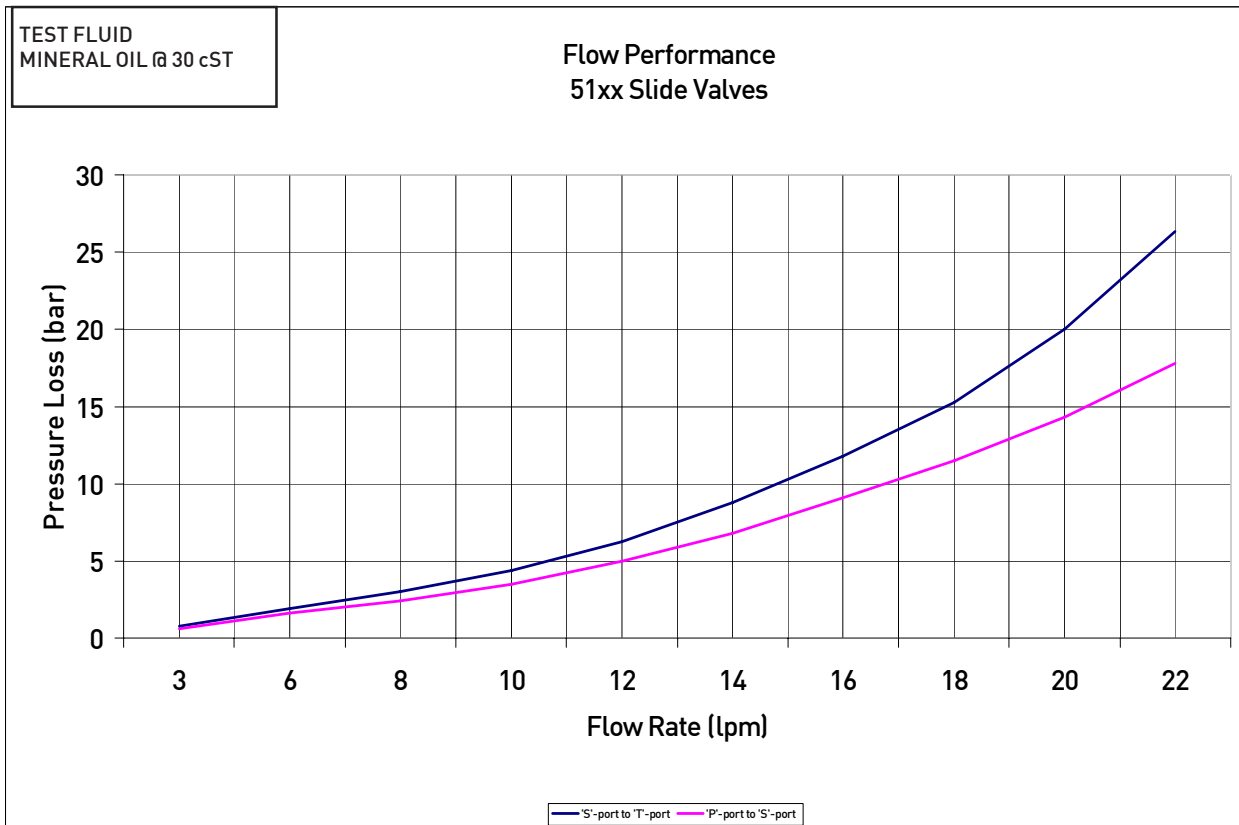
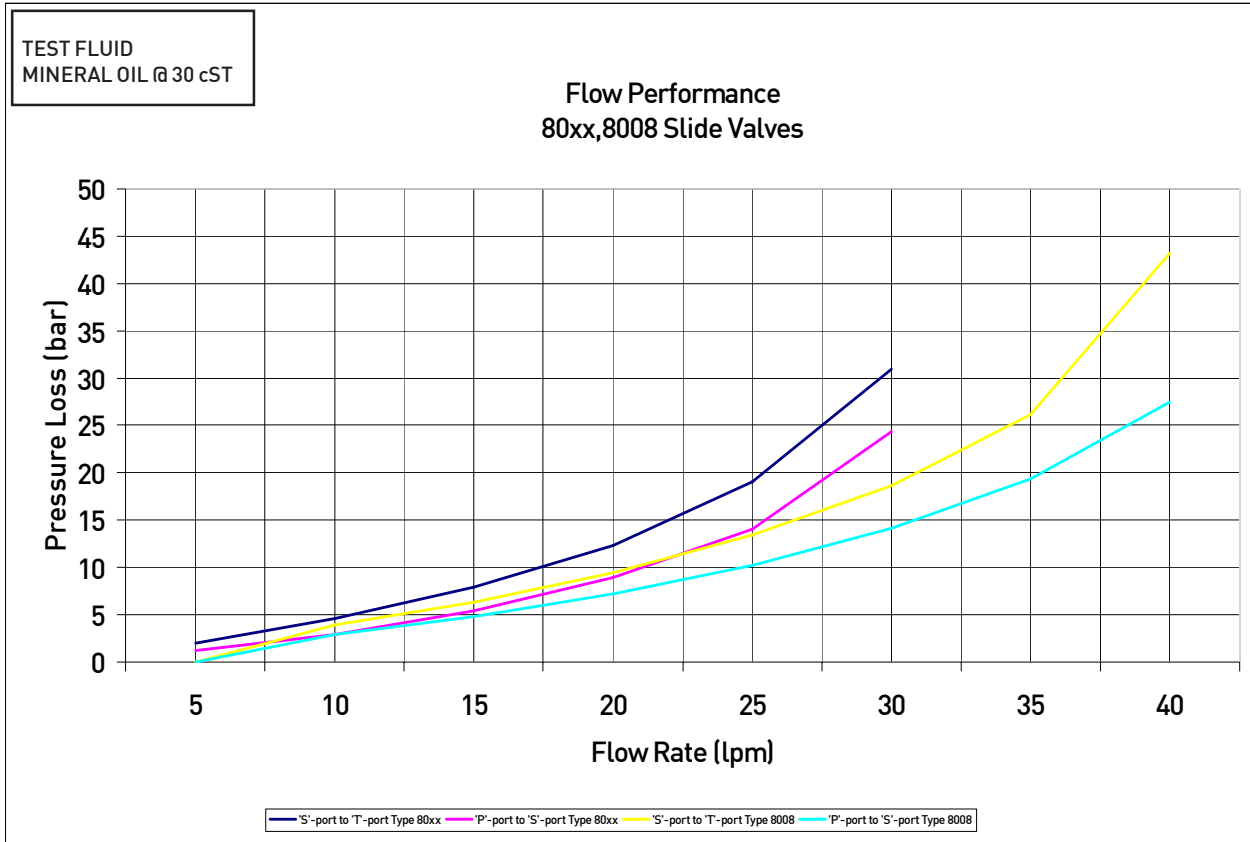
## EXAMPLE MODEL 80 Series

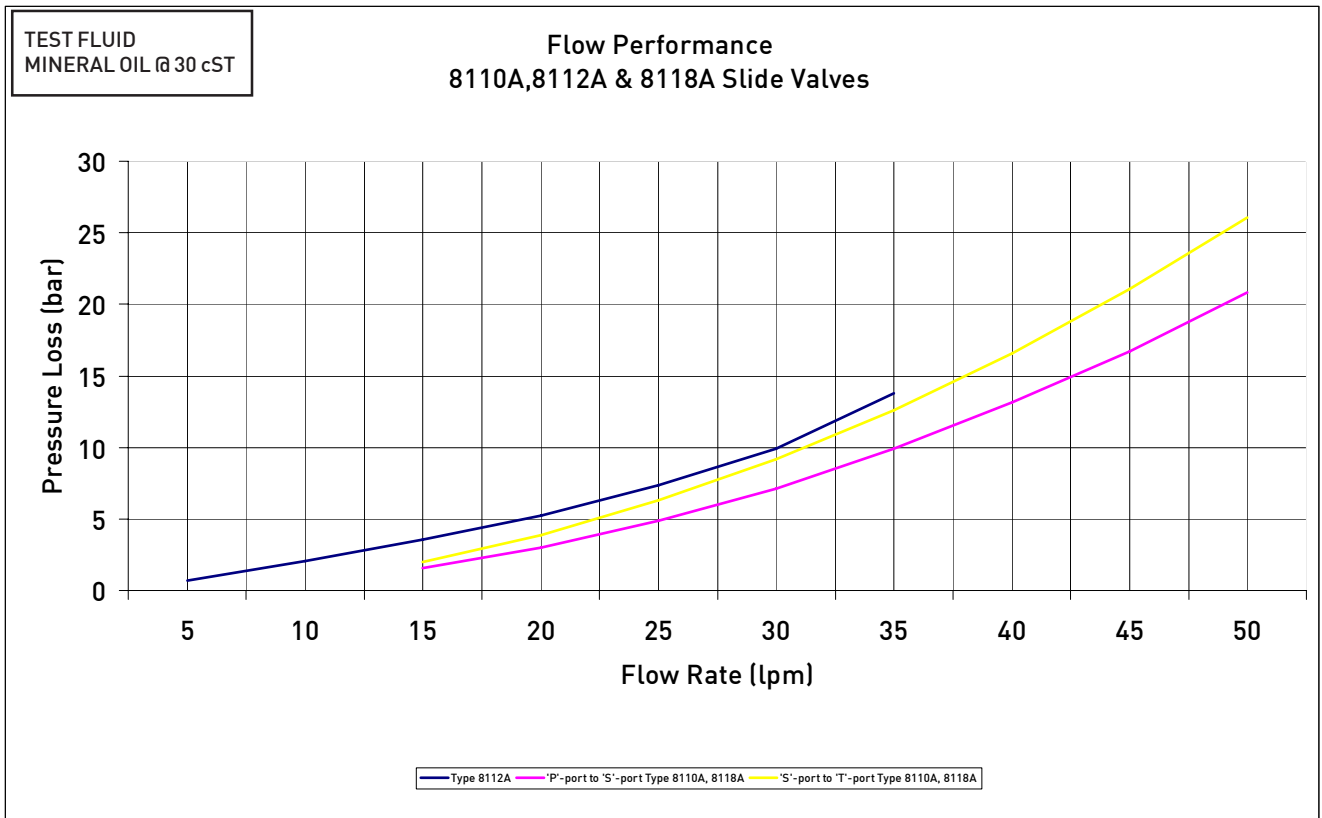


Example shown:- COV(A)8002/NC/05/S-R

## FLOW PERFORMANCE

Reliability and Innovation in directional control valves





## OPERATING LIMITATIONS

### APPLICABLE TO ALL 5000 AND 8000 SERIES 2-WAY, 3-WAY AND 5-WAY SLIDE VALVES

#### WARNING

Slide type valves incorporating single acting seals will if subjected to reverse pressurisation/flow partially or fully collapse these seals.

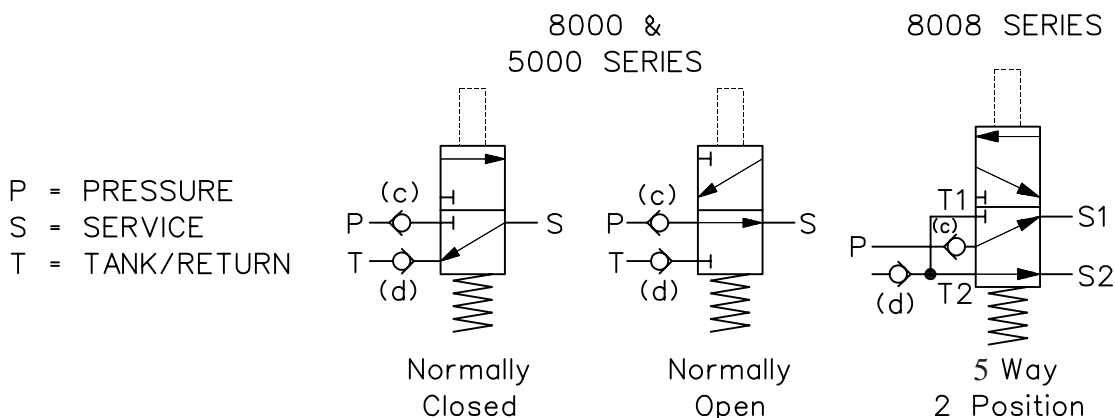
Seal failure will occur if the following operating conditions are introduced into the hydraulic system.

- A higher pressure is applied to the tank/return port than at the service port
- A higher pressure is applied to service port than at the pressure port.
- Depressurisation of the hydraulic supply pressure with the valve in a pressure to service flow mode. (If this is a system design requirement we recommend the 5101 or 8001 valve types are used).
- Back pressure at the tank port exceeding the maximum recommended 200 psi (14 bar) above the service line pressure.

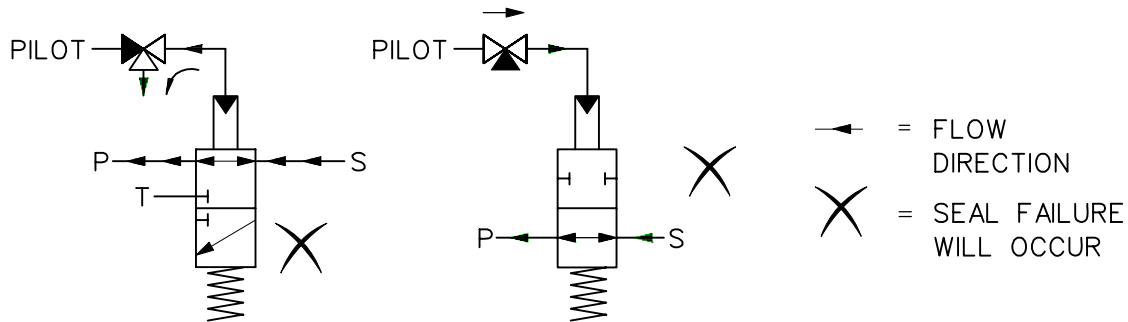
If conditions (c) and (d) can arise during normal operation we recommend the following action is taken.

To eliminate condition (c) install a check valve directly at pressure 'P' inlet port.

To eliminate condition (d) install a check valve directly at the tank 'T' port.



- e) Valve types 5101, 5102, 8001 and 8002 are fitted with a bi-directional seal which is capable of tolerating flow from the pressure (P) port to the service (S) port and vice versa. The reverse flow capability of these valves is only permitted while the valve is in a static mode i.e. the valve must not change position whilst in a reverse flow mode as the seal will be damaged. **Note:** Condition (d) will remain applicable to these valve types.

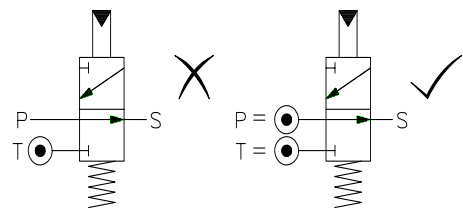


### TESTING

For the purpose of proof testing an entire hydraulic system, including return/tank lines at the maximum test pressure, the tank port lines can be pressurised providing an equivalent pressure is always maintained at the valve pressure port with the valve in a pressure to service mode.

Always dissipate a test pressure down stream of the tank port.

Under no circumstances should the tank port be plugged.



To depressurise a control circuit with the direction for flow maintained P to S (Normally Open Valve or Normally Closed Valve pilot operated to open), pressure must always be dissipated down stream of the service port. (Excluding valves with reverse flow capability, refer to warning paragraph (e)).

### Other Slide Valve Types Affected

- (i) 3-way and 5-way for gas service  
Types: 5500, 8400 and 8408
- (ii) 2-way, 2 position valves for gas service  
Types: 5502 and 8402
- (iii) 2-way, 2 position valves for hydraulic service  
Types 8102 and 8112

The above valve types are fitted with a bi-directional seal which is capable of tolerating flow from the pressure (P) port to the service port (S) and vice versa. The reverse flow capability of these valves is only permitted while the valve is in a static mode i.e. the valve must not change position whilst in a reverse flow mode as the seal will be damaged. (Refer to warning paragraph (e))

### NOTE

To eliminate the modes of failure as described (excludes reverse flow type, refer to warning), we offer a stackable valve system, incorporating 5100 series, subbase manifolds, thermal relief and check valves.

We also manufacture a range of block before bleed and balanced poppet valves which are not susceptible to the seal damage through reverse flow mode applications. For further details on these and our stackable valve system please contact Bifold Fluidpower.

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### **Quality Assurance**

*All Bifold Fluidpower products are manufactured to a most stringent QA programme. Every care is taken at all stages of manufacture to ensure that every product will give optimum performance and reliability. We are recognised to EN ISO 9001:2000. Functional test certificate, letter of conformity and copies of original mill certificates, providing total traceability are available on request, to BSEN 10204 3.1.B where available. The manufacturer reserves the right to make changes to the specifications and design etc., without prior notice*

### **Accuracy of information**

*We take care to ensure that product information in this catalogue is reasonably accurate and up-to-date. However, our products and services are continually updated so to ensure accurate and up-to-date information please refer to the issue list on the web site or contact a member of our sales team.*

