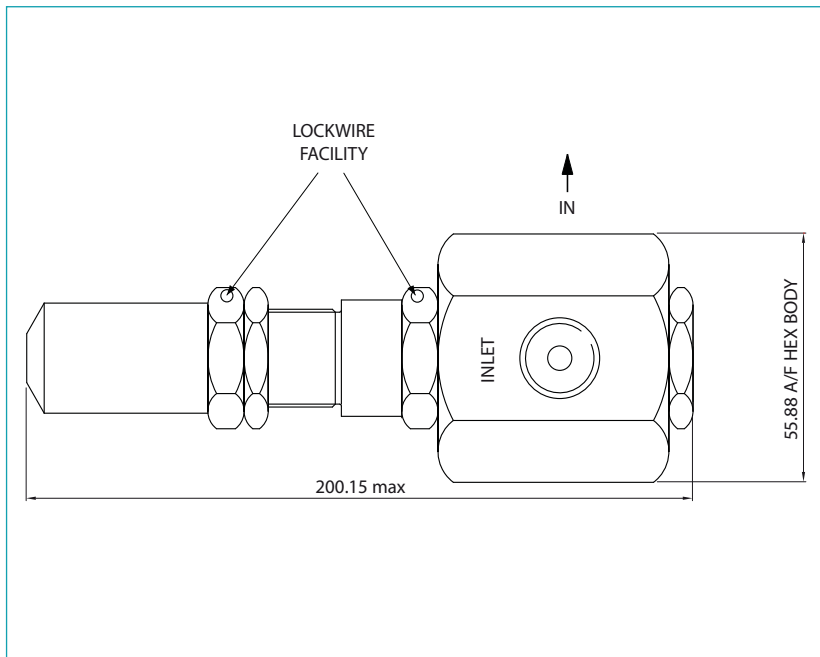


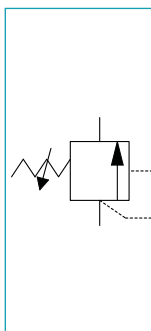
Hydraulic Service



Relief Valves for Accurate Pressure Control



SCHEMATIC



Features and Benefits

- Up to 700 bar, 45 l / m
- Set Point Repeatability ±2%.
- Sealing Re-Seat Pressure - Virtually zero leakage re-seat pressure ≥ 90% of cracking pressure.
- Proof Test - proof test pressure: 1000 bar.
- Flow Capacity - at 10% overpressure: 45 l / m.
- Orifice Size: Ø 3/16".
- Important - Set point is affected by vent port back pressure and will DECREASE accordingly.
- The Main Spring Load - is not transmitted to the seat, thus reducing distortion and wear.

Materials

External & Wetted Parts	- 316L stainless steel		
	- M390		
Seal Material	- Nitrile	- standard	
	- Viton	- add suffix M089	eg. 14450 - 08 - M089
	- Silicone	- add suffix M065	eg. 14450 - 08 - M065
	- Low Temp Nitrile	- add suffix M106	eg. 14450 - 08 - M106
Seat Material	- M340		

Approvals Details

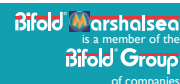


These relief valves conform to European Directive 94/9/EC relating to equipment intended for use in potentially explosive atmospheres and are ATEX compliant. These valves also conform to the Pressure Equipment Directive 97/23/EC. All valves are CE marked and supplied with a test certificate plus a declaration of conformity.

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

When selecting a product, the applicable operating system design must be considered to ensure safe use. The products function, material compatibility, adequate ratings, correct installation, operation and maintenance are the responsibilities of the system designer and user.

Quality Assurance
All Bifold products are manufactured to a most stringent QA programme to ensure that every product will give optimum performance and reliability. We are third party certified to BS EN ISO 9001:2008. Functional test certificate, letter of conformity and copies of original mill certificates, providing total traceability are available on request, to BS EN 10204 3.1 where available. We reserve the right to make changes to the specifications and design etc., without prior notice.



Hydraulic Service



Product Description

The Type I 4450 precision relief valve has been designed to provide accurate over pressure protection in systems operating at pressures of up to 700 bar and flows of up to 45 l / m.

Precision relief valves have very high sealing forces along with accurate and narrow dead bands. Precision relief valves should be used in preference to sprung relief valves where there is risk of vibration induced leakage or where dead bands are important to system safety performance. Sprung relief valves typically will have a narrow dead band when tested on a static dead weight tester but will have a much wider dead band under flowing conditions that will require a significant drop in system pressure to enable the valve to reset.

The floating poppet design enhanced by the use of linear bearings produces characteristics which are non flow dependent and ensures long life with repeatable performance.

Installation and removal of system pipe work is simplified by the right angled porting configuration.

The relief valve weight is 1.38 Kg.

Selection Chart - Ordering Example

RELIEF VALVE I 4450 SPECIFICATIONS				
Part Number	Pressure Range (bar)	Outlet Connection	Inlet Connection	Repair Kit
I 4450 - 01	103 - 240	½" NPT Female	½" NPT Female	RS I 4450 - 01
I 4450 - 02	207 - 414	½" NPT Female	½" NPT Female	RS I 4450 - 02
I 4450 - 03	345 - 700	½" NPT Female	½" NPT Female	RS I 4450 - 03
I 4450 - 04	103 - 240	½" BSP Female	½" BSP Female	RS I 4450 - 04
I 4450 - 05	207 - 414	½" BSP Female	½" BSP Female	RS I 4450 - 05
I 4450 - 06	345 - 700	½" BSP Female	½" BSP Female	RS I 4450 - 06
I 4450 - 07	103 - 240	¾" NPT Female	¾" NPT Female	RS I 4450 - 07
I 4450 - 08	207 - 414	¾" NPT Female	¾" NPT Female	RS I 4450 - 08
I 4450 - 09	345 - 700	¾" NPT Female	¾" NPT Female	RS I 4450 - 09
I 4450 - 10	103 - 240	¾" MP Female	¾" MP Female	RS I 4450 - 10
I 4450 - 11	207 - 414	¾" MP Female	¾" MP Female	RS I 4450 - 11
I 4450 - 12	345 - 700	¾" MP Female	¾" MP Female	RS I 4450 - 12

It is the responsibility of the system designer and user to select products that are suitable for their intended application of use.