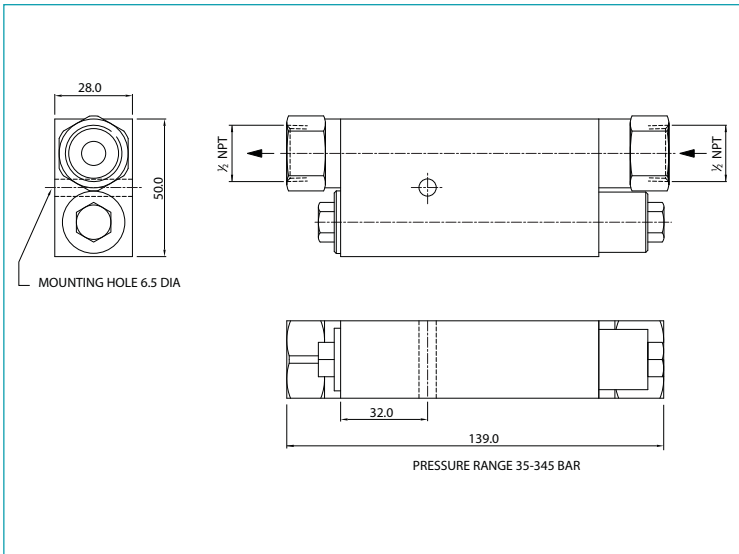


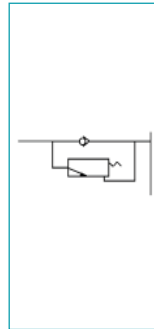
Hydraulic Service



Integrated Check / Thermal Relief Valves



SCHEMATIC



Features and Benefits

- No Exhaust Line Connection required - exhaust line piping is eliminated.
- Set Point Repeatability  $\pm 2\%$ .
- Set Point Range - user specified up to 700 bar.
- Sealing Re-Seat Pressure - Virtually zero leakage re-seat pressure  $\geq 90\%$  of cracking pressure.
- Orifice Size:  $\varnothing 4\text{mm}$ .
- Back Pressure - set point is not affected by vent back pressure. Maximum permissible back pressure 100 bar.
- Operating Media - mineral oils, water glycol fluids and some chemicals. Consult Bifold Marshalsea for specific chemicals and synthetic oils compatibility.
- Single Integrated Unit - single integrated unit eliminates inter-valve piping.
- Valve Proof Testing - removal or disconnection of the valve during proof testing is not required.

Materials

- External & Wetted Parts - 316L stainless steel
- Seat Material: Check Valve - Acetal
- Relief Valve - Polyurethane

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.

Hydraulic Service

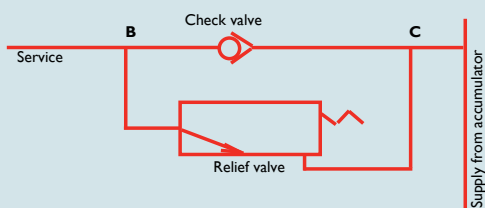


Product Description

The Type I4460 and I4470 check / thermal relief valves have been developed to directly replace a single unit separate check and thermal relief valves used, for example, in wellhead control systems.

The principal feature of this valve is its ability to return over pressurised fluid caused by thermal expansion downstream internally back to the supply point - thereby eliminating separate exhaust piping.

The check / thermal relief valve weight is 1.04 Kg.



The pressure differential between **B** and **C** caused by thermal expansion downstream of **B** is exhausted through the relief valve back into the supply at point **C**. The design of the relief valve is such that variations in pressure at point **C** caused by the operation of adjacent valves or by leakage have no effect on the setting of the relief valve. Even in the event of the supply pressure falling to zero, the set point and sealing integrity of the relief valve will be retained.

Selection Chart - Ordering Example

CHECK / THERMAL RELIEF VALVE I4460 AND I4470 SPECIFICATIONS								
Part Number	Pressure Range (bar)	Port Size	Dimension A	Check Valve Flow Rate Cv	Proof Test Pressure (bar)	Cracking Pressure (bar)	Thermal Expansion Max Flow (litres / min)	Repair Kit
*I4460 - 01	35 - 345	Manifold	132	0.56	1000	0.3	2	RS I4460 - 01
*I4460 - 02	345 - 700	Manifold	132	0.56	1000	0.3	2	RS I4460 - 02
I4470 - 01	35 - 345	1/4" NPT	132	0.56	1000	0.3	2	RS I4470 - 01
I4470 - 02	345 - 700	1/4" NPT	132	0.56	1000	0.3	2	RS I4470 - 02
I4470 - 03	35 - 345	3/8" NPT	132	0.56	1000	0.3	2	RS I4470 - 03
I4470 - 04	345 - 700	3/8" NPT	132	0.56	1000	0.3	2	RS I4470 - 04
I4470 - 07	35 - 345	1/2" NPT	139	1.60	400	0.4	6	RS I4470 - 07
I4470 - 08	345 - 700	1/2" NPT	132	0.56	1000	0.3	2	RS I4470 - 08
I4470 - 10	345 - 700	3/8" MP Butech	139	1.60	400	0.4	6	RS I4470 - 10

\* Models I4460 are manifold mounted.

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