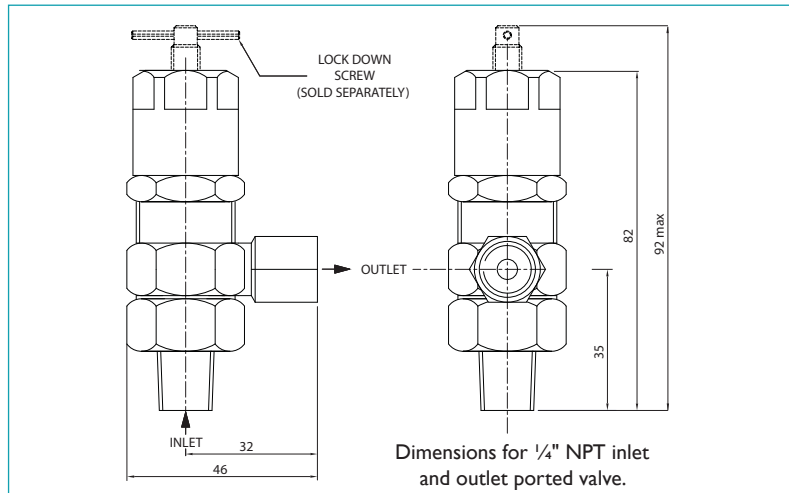


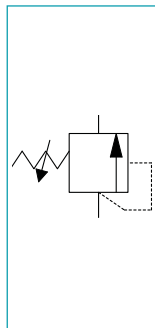
Hydraulic Service



Thermal Relief Valves



SCHEMATIC



Features and Benefits

- No need to remove from the system for proof testing.
- Unique lock down screw facility.
- Set Point Repeatability ±2%.
- Set Point Range - user specified up to 1300 bar.
- Sealing Re-Seat Pressure - Virtually zero leakage re-seat pressure ≥ 90% of cracking pressure.
- Proof Test - proof test pressure: 1000 bar. proof test pressure: 1700 bar.
- Orifice Size: Ø 4mm.
- 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.
- Long Life and Repeatable Performance - are ensured through the use of hardened elements.

Materials

Body	- 316L stainless steel
Spring	- 316S42 and 302S26 stainless steel
Seal Material	- Nitrile
	- Viton
	- Silicone
	- Low Temp Nitrile
	- standard
	- add suffix M089 eg. I4480 - 08 - M089
	- add suffix M065 eg. I4480 - 08 - M065
	- add suffix M106 eg. I4480 - 08 - M106
Seat Material	- PEEK, Stainless Steel, 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.

Product Description

The Type I4480 thermal relief valve has been designed primarily to provide over pressure protection in systems subject to fluid thermal expansion, but it can also be reliably used as the primary relief valve in systems with low volume pump flow rates.

A unique feature of this valve is the lock down facility that eliminates the need to remove or disconnect the valve during proof testing of the system. Provision is made in the cap for a special lock down screw to be inserted to disable the valve and hold it closed against the increasing pressures applied during testing of the system pipe work and components. This eliminates the

need to remove or disconnect the valve during test procedures. When the lock down screw is removed, the valve reverts to its as set condition without further adjustment or re-calibration.

The thread in the cap is a non-preferred size, thereby preventing unauthorised insertion of other types of screw. Lock down screws are not provided with each valve to prevent unauthorised use; they are available on request.

The relief valve weight is :- 0.24 Kg.

**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



Selection Chart - Ordering Example

THERMAL RELIEF VALVE I4480 SPECIFICATIONS				
Part Number	Pressure Range (bar)	Inlet Connection	Outlet Connection	Repair Kit
I4480 - 24	7 - 50	1/4" NPT Female	1/4" NPT Female	RS I4480 - 24
I4480 - 25	50 - 200	1/4" NPT Female	1/4" NPT Female	RS I4480 - 25
I4480 - 26	200 - 600	1/4" NPT Female	1/4" NPT Female	RS I4480 - 26
I4480 - 27	600 - 800	1/4" NPT Female	1/4" NPT Female	RS I4480 - 27
I4480 - 20	7 - 50	1/4" NPT Female	1/4" NPT Female	RS I4480 - 20
I4480 - 03	35 - 345	1/4" NPT Female	1/4" NPT Female	RS I4480 - 03
I4480 - 21	50 - 200	1/4" NPT Female	1/4" NPT Female	RS I4480 - 21
I4480 - 22	200 - 600	1/4" NPT Female	1/4" NPT Female	RS I4480 - 22
I4480 - 04	345 - 690	1/4" NPT Female	1/4" NPT Female	RS I4480 - 04
I4480 - 23	600 - 800	1/4" NPT Female	1/4" NPT Female	RS I4480 - 23
I4480 - 30	7 - 50	1/4" BSP Female	1/4" BSP Female	RS I4480 - 30
I4480 - 31	50 - 200	1/4" BSP Female	1/4" BSP Female	RS I4480 - 31
I4480 - 32	200 - 600	1/4" BSP Female	1/4" BSP Female	RS I4480 - 32
I4480 - 33	600 - 800	1/4" BSP Female	1/4" BSP Female	RS I4480 - 33
I4480 - 49	7 - 50	1/4" MP	1/4" NPT	RS I4480 - 49
I4480 - 50	35 - 345	1/4" MP	1/4" NPT	RS I4480 - 50
I4480 - 51	50 - 200	1/4" MP	1/4" NPT	RS I4480 - 51
I4480 - 52	200 - 600	1/4" MP	1/4" NPT	RS I4480 - 52
I4480 - 53	345 - 690	1/4" MP	1/4" NPT	RS I4480 - 53
I4480 - 54	600 - 800	1/4" MP	1/4" NPT	RS I4480 - 54
I4480 - 55	600 - 1300	1/4" MP	1/4" NPT	RS I4480 - 55
I4480 - 44	7 - 50	3/8" MP Female	1/4" MP Female	RS I4480 - 44
I4480 - 46	200 - 600	3/8" MP Female	1/4" MP Female	RS I4480 - 46
I4480 - 47	600 - 1300	3/8" MP Female	1/4" MP Female	RS I4480 - 47
I4480 - 56	7 - 50	3/8" NPT Female	1/4" NPT Female	RS I4480 - 56
I4480 - 57	35 - 345	3/8" NPT Female	1/4" NPT Female	RS I4480 - 57
I4480 - 58	50 - 200	3/8" NPT Female	1/4" NPT Female	RS I4480 - 58
I4480 - 59	200 - 600	3/8" NPT Female	1/4" NPT Female	RS I4480 - 59
I4480 - 60	345 - 690	3/8" NPT Female	1/4" NPT Female	RS I4480 - 60
I4480 - 61	600 - 800	3/8" NPT Female	1/4" NPT Female	RS I4480 - 61
I4480 - 62	600 - 1300	3/8" NPT Female	1/4" NPT Female	RS I4480 - 62
I4480 - 63	7 - 50	3/8" NPT	3/8" NPT	RS I4480 - 63
I4480 - 64	35 - 345	3/8" NPT	3/8" NPT	RS I4480 - 64
I4480 - 65	50 - 200	3/8" NPT	3/8" NPT	RS I4480 - 65
I4480 - 66	200 - 600	3/8" NPT	3/8" NPT	RS I4480 - 66
I4480 - 67	345 - 690	3/8" NPT	3/8" NPT	RS I4480 - 67
I4480 - 68	600 - 800	3/8" NPT	3/8" NPT	RS I4480 - 68
I4480 - 69	600 - 1300	3/8" NPT	3/8" NPT	RS I4480 - 69
I4480 - 70	7 - 50	3/8" BSP	3/8" BSP	RS I4480 - 70
I4480 - 71	35 - 345	3/8" BSP	3/8" BSP	RS I4480 - 71
I4480 - 72	50 - 200	3/8" BSP	3/8" BSP	RS I4480 - 72
I4480 - 73	200 - 600	3/8" BSP	3/8" BSP	RS I4480 - 73
I4480 - 74	345 - 690	3/8" BSP	3/8" BSP	RS I4480 - 74
I4480 - 75	600 - 800	3/8" BSP	3/8" BSP	RS I4480 - 75
I4480 - 76	600 - 1300	3/8" BSP	3/8" BSP	RS I4480 - 76
I4480 - 77	7 - 50	3/8" MP Female	3/8" NPT Female	RS I4480 - 77
I4480 - 78	35 - 345	3/8" MP Female	3/8" NPT Female	RS I4480 - 78
I4480 - 79	50 - 200	3/8" MP Female	3/8" NPT Female	RS I4480 - 79
I4480 - 80	200 - 600	3/8" MP Female	3/8" NPT Female	RS I4480 - 80
I4480 - 81	345 - 690	3/8" MP Female	3/8" NPT Female	RS I4480 - 81
I4480 - 82	600 - 800	3/8" MP Female	3/8" NPT Female	RS I4480 - 82
I4480 - 83	600 - 1300	3/8" MP Female	3/8" NPT Female	RS I4480 - 83
I4480 - 84	7 - 50	1/6" MP	1/4" NPT	RS I4480 - 84
I4480 - 85	35 - 345	1/6" MP	1/4" NPT	RS I4480 - 85
I4480 - 86	50 - 200	1/6" MP	1/4" NPT	RS I4480 - 86
I4480 - 87	200 - 600	1/6" MP	1/4" NPT	RS I4480 - 87
I4480 - 88	345 - 690	1/6" MP	1/4" NPT	RS I4480 - 88
I4480 - 89	600 - 800	1/6" MP	1/4" NPT	RS I4480 - 89
I4480 - 90	600 - 1300	1/6" MP	1/4" NPT	RS I4480 - 90
I4480 - 91	7 - 50	1/6" MP	3/8" NPT	RS I4480 - 91
I4480 - 92	35 - 345	1/6" MP	3/8" NPT	RS I4480 - 92
I4480 - 93	50 - 200	1/6" MP	3/8" NPT	RS I4480 - 93
I4480 - 94	200 - 600	1/6" MP	3/8" NPT	RS I4480 - 94
I4480 - 95	345 - 690	1/6" MP	3/8" NPT	RS I4480 - 95
I4480 - 96	600 - 800	1/6" MP	3/8" NPT	RS I4480 - 96
I4480 - 97	600 - 1300	1/6" MP	3/8" NPT	RS I4480 - 97

Lock Down Screw Part Number: I4489 - 01

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