



# FLOW SAFE INC.

High Performance Safety Relief Valves

## SALES BRIEF

### Flow Safe Micro Liquid Relief Valve, F84L-2

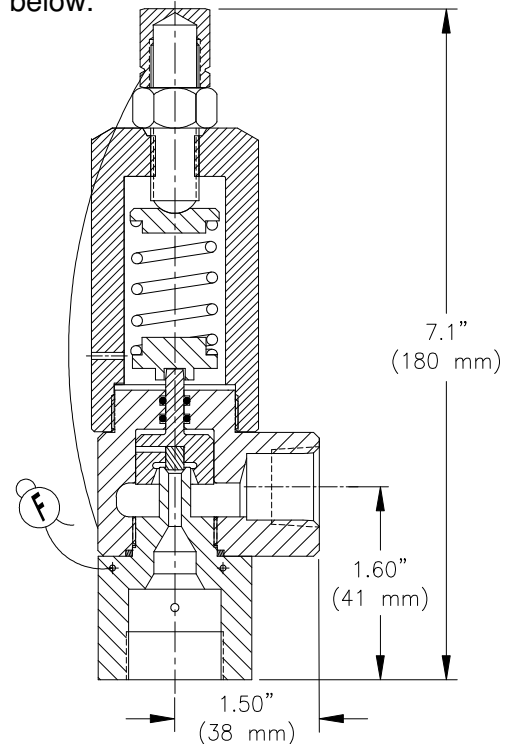
Flow Safe has just introduced the -2 orifice size to their ASME UV-stamped F84L Series. One intended application for this valve will be high-pressure, low-capacity injection systems for oil and gas exploration and production. This -2 design follows the F84L tradition of being balanced against the effects of backpressure without bellows.

The F84L-2 has an orifice area of 0.015 sq.in. (0.0967 sq.cm.) and a pressure range of 200 to 15,500 psig (13.8 to 1068 barg). Seating materials will include Vespel and PEEK at high pressures and Teflon and Kel-F (PCTFE) at lower pressures, with standard elastomer O-rings sealing the upper spindle just below the spring chamber. Nominal inlet and outlet sizes range from 1/2" to 3/4". Very high set points require a special inlet such as a coned & threaded type compatible with Autoclave or Butech (shown below).

Capacities on water are shown in the table below. Consistent with operation of other F84L's, the new F84L-2 will relieve a modest but steady stream of liquid right at set pressure. If pressure continues to rise to about 107.5% of set pressure, the valve will pop open to a full gush. Blowdown will average from approximately 20 to 30%. Standard materials are 316 SS, with 17-4PH for most inlet bushings/nozzles. Contact factory for configurations not shown below.

Set Pressure, psig	F84L-2 (0.015 sq in)
	GPM Water <sup>1</sup>
200	5.2
500	8.2
1000	11.7
2000	16.5
3000	20.2
4000	23.4
5000	26.1
6000	28.6
7000	30.9
8000	33.0
9000	35.1
10000	37.0
11000	38.8
12000	40.5
13000	42.1
14000	43.7
15500	46.0

<sup>1</sup> Capacities based on zero backpressure, 70 °F, 10% overpressure. Certified flow factor = 0.353 gpm / (psid)<sup>1/2</sup>; equivalent Kd = 0.619.



Inlet conn. type: TC = threaded / coned; FN = female NPT; FS = female SAE

Part numbering: **S 8 L 2 P - 3 4 T C 0 - 0 5 F N 0 - S S - S S - P V**

Inlet size: 05 = 1/2"  
91 = 9/16"  
34 = 3/4"

Outlet conn. type: FN = female NPT

Outlet size: 05 = 1/2"  
34 = 3/4"

Seat / seals: P = PEEK  
W = Vespel  
T = Teflon  
V = Viton (seals)  
B = Buna-N (seals)