

Pressure Activated Bypass Valve Submittal - Page 1 of 2

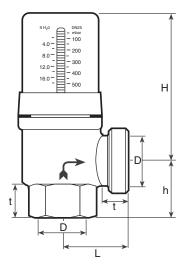
Job or Customer :					
Location:					
Engineer:					
☐ Complies with Spec☐ Alternate	Notes:				
Contractor:	Intractor:				
HeatLink Rep :					
Submitted By :		Date:			
Approved By :		Date:			
P.O. Number :		Date :			

Description

This valve prevents a steep rise of the pump head and maintains flow at a stable rate. Also ensures only required amount of circulating water is used for hydronic systems.

Technical Data

Valve Body Material:	bronze
Operating Temperature:	248°F (120°C)
Operating Pressure:	145 psi (10 bar)

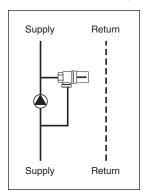


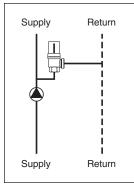
Qty	Valve Size	Stk.#	Recommended Max Flow	Adjustment Range	D	t	L	н	h	Weight
	3/4"	60020	13 US gpm (2950 L/h)	1.5 - 17 ft H ₂ O (50 - 500 mbar)	3/4" FIP	5/8" (16.3 mm)	1-1/2" (40 mm)	3-3/8" (85 mm)	1-1/4" (32 mm)	1.5 lb 0.7 kg
	1"	60025	22 US gpm (5000 L/h)	10 - 60 ft H ₂ O (30 - 1800 mbar)	1" FIP	3/4" (19.1 mm)	1-7/8" (48 mm)	3-1/2" (90 mm)	1-1/2" (37 mm)	1.5 lb 0.7 kg
	1-1/4"	60040	35 US gpm (7950 L/h)	10 - 60 ft H ₂ O (30 - 1800 mbar)	1-1/4" FIP	7/8" (21.4 mm)	2-1/8" (55 mm)	3-1/2" (90 mm)	1-3/4" (46 mm)	2.0 lb 0.9 kg

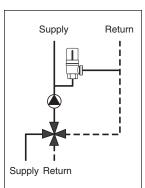


Installation Guidelines

Installation can be made in virtually any position. For ease of use, the valve should be placed in the vertical position whenever possible. The following diagrams show recommended installation positions.







The diagrams to the left show the position of the pressure bypass valve only. Do not use as piping schematic. Refer to the technical section of the manual for complete mechanical room piping.

Note:

- Ensure that flow directions are obeyed.
- For best performance, minimize the pressure drop in the bypass piping.

Selection Guidelines

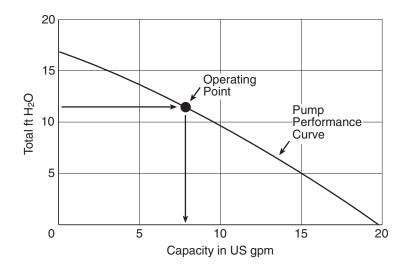
- 1. Note pressure drop and flow requirement information from HeatLoss and Analysis sheets. Add the pressure drop for the supply pipes.
- 2. Using this information, select your pump size.
- 3. After pump has been selected, review pump performance curve to determine flow from the operating point of the curve.
- 4. With this information, refer to the balancing valve chart below, and determine if the size of valve selected can produce the necessary flow requirements for the particular pressure drop.
- 5. Loosen the screw at the end of the valve. Turn the black plastic cap to adjust the pressure indicator to the total system pressure. Tighten the screw to prevent the setting from being accidentally changed.

Note: General selection of the balancing valve will be close to the piping main size that it is bypassing. In other words, since the pressure balancing valve is a calibrated component, we want as little flow restriction (or pressure drop) to occur in the piping feeding the valve as possible. If necessary, one piping size reduction is acceptable. (i.e. With a 1" main, using a 3/4" valve is possible if it falls within the flow requirements)

How to Use Pump Performance Curves:

- 1. Determine total system head in feet of water based on the desired rate of flow.
- 2. Locate the total head on the vertical scale of the pump performance curve.
- 3. From the total head, move horizontally across the chart to the pump performance curve. This is the pump operating point.
- 4. From the operating point, move vertically downward to read the corresponding pump capacity in US gpm.

With this information, refer to the chart on the previous page, and determine if the size of valve selected can produce the necessary flow requirements for the particular pressure drop.



Related Documents

- Pressure Balancing Valve Installation Guidelines (L660000)
- Component Warranty