

Hose Burst Valve

HBV SERIES

INTRODUCTION

The HBV (Hose Burst Valve) series allows free bidirectional flow under normal conditions, but will stop flow when there is a catastrophic hose failure.

The valve will shut off when a target flow rate has been reached, and this can be changed by adjusting the internal cartridge setting (dimension 'S' - see diagram on next page).

FEATURES

- ✓ Can be retrofitted to existing systems
- ✓ Shut-off flow rate can be adjusted
- ✓ Bi-directional Flow
- ✓ Replacement cartridges are available (on request)

APPLICATIONS

Construction, mobile hydraulics, test equipment, machine tools, lifting equipment, agricultural and general hydraulics.

MATERIALS

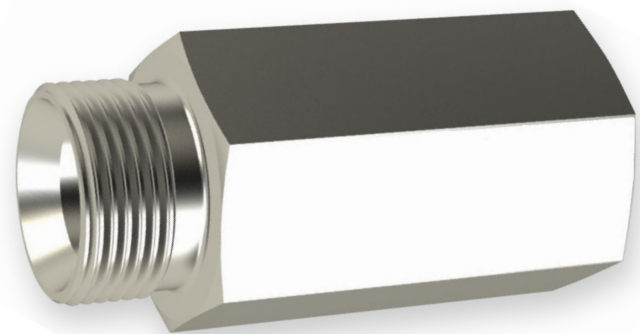
Trivalent plated carbon steel with metal-to-metal sealing.

SPECIFICATIONS

Operating Temperature: -20°C to 120°C

Fluid Viscosity: 10 to 200 cST

Max level of contamination: 18 / 16 / 13 (ISO 4406)

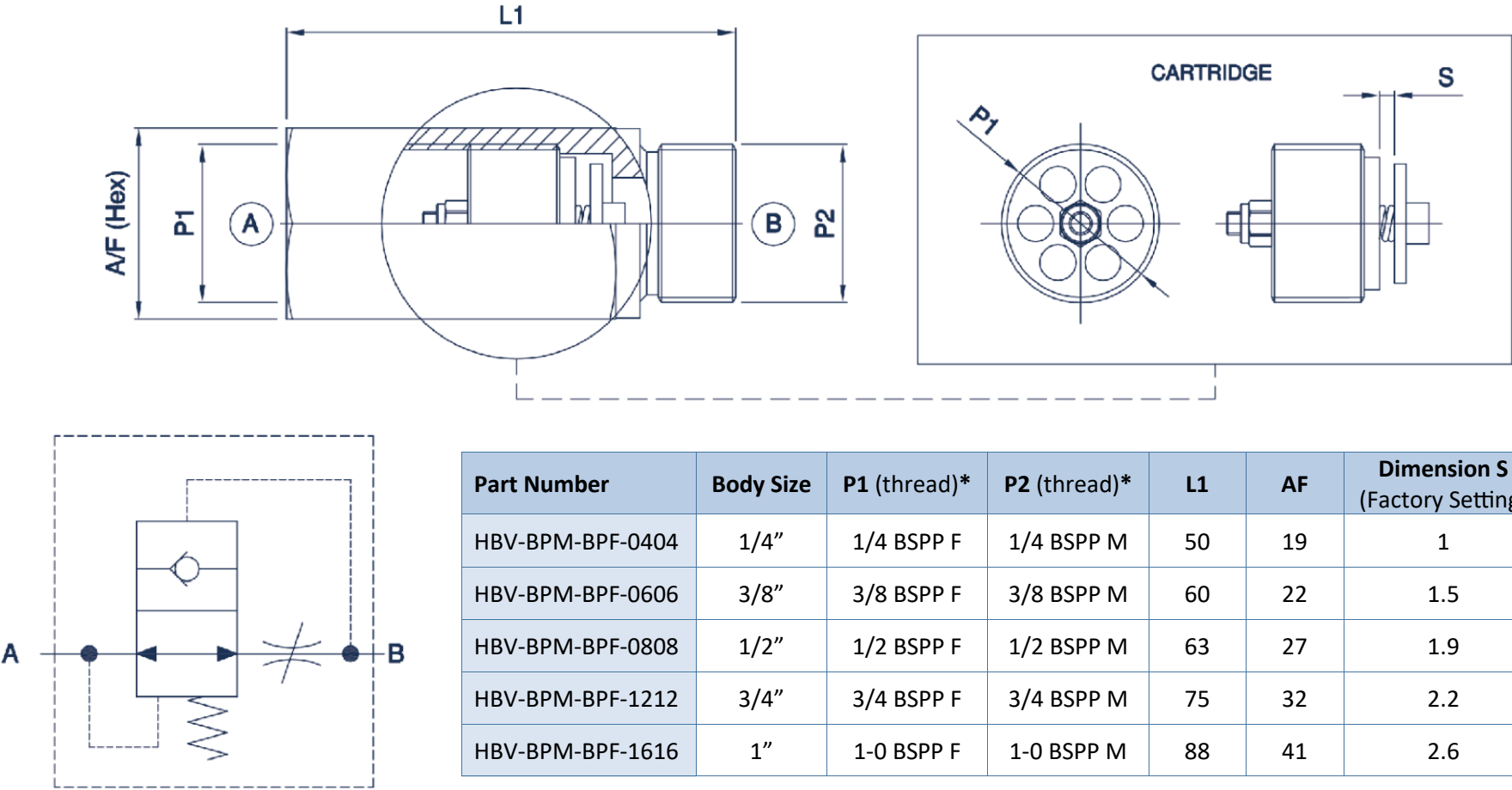


WARNING: If the burst valve shut-off is triggered, please replace it with a new one. DO NOT RE-USE.

Performance Characteristics	Valve Size				
	1/4"	3/8"	1/2"	3/4"	1"
Maximum Working Pressure	350 Bar				
	5075 PSI				
Rated Flow	18.5 L/min	35.5 L/min	60 L/min	149 L/min	190 L/min
	4.89 GPM	9.38 GPM	15.85 GPM	39.36 GPM	50.19 GPM
Maximum Flow	30 L/min	45 L/min	65 L/min	170 L/min	225 L/min
	7.9 GPM	11.9 GPM	17.2 GPM	44.9 GPM	59.4 GPM



Dimensions



* BSP threads are standard. Other thread forms available on request.

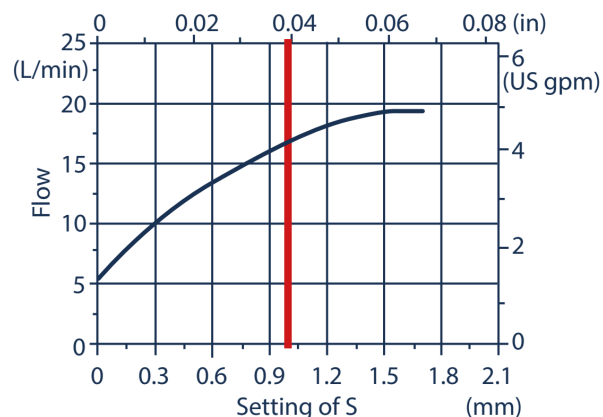
All dimensions in mm unless otherwise stated. Dimensions shown are for guidance only, if critical contact FCL staff.

Shut-Off Flow Rate vs Dimension S

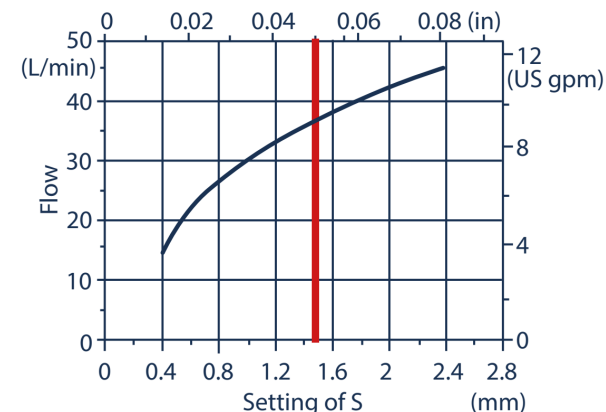
EXAMPLE: How to set dimension 'S'

1. Burst Valve body size = 1/2"
2. Target shut-off flow rate = 30 L/min
3. Adjust for spikes in flow during normal use
 - * (Multiply target shut-off flow rate by 1.5) = $30 \times 1.5 = 45$ L/min
4. Find the adjusted flow rate (calculated in previous step) on the Y-axis of the Flow vs Dimension S graph, and read off the 'S' distance (X-axis).
- * (Body Size 1/2" graph: Flow of 45L/min = Setting 'S' at 1.2mm)
5. Set 'S' at a distance of 1.2mm

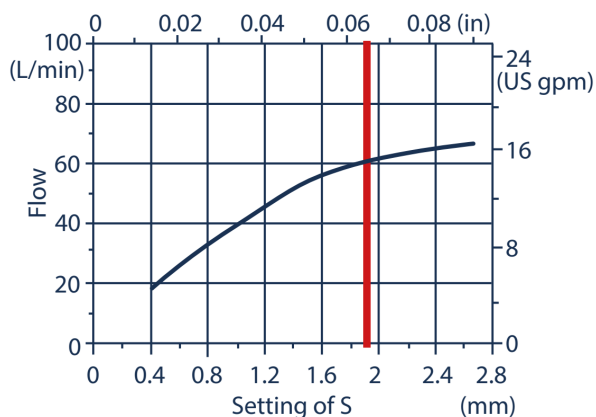
Valve Body 1/4"



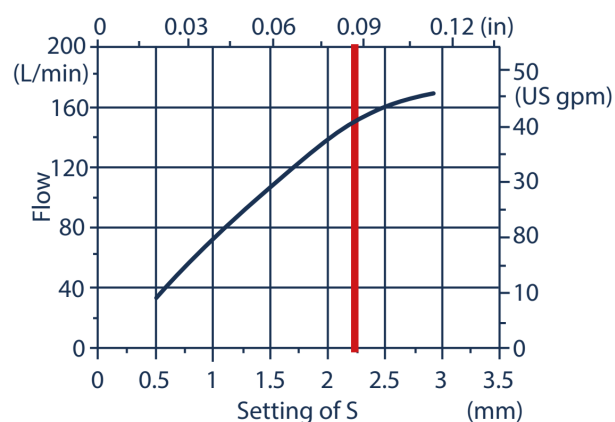
Valve Body 3/8"



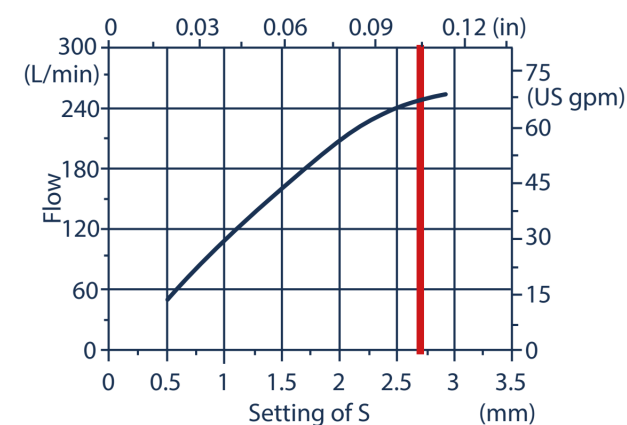
Valve Body 1/2"



Valve Body 3/4"



Valve Body 1"



Technical specifications and diagrams are measured with ISO VG32 Oil at 40°C (104°F)

The red vertical line on each graph shows the factory setting of dimension 'S'.

