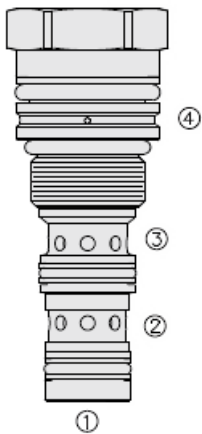




## Overview



### Description

The HPB08-E40 is a screw in cartridge style, direct acting, spool type hydraulic pressure load equalizer valve with internal spring pilot chamber and spool damping chamber. It is designed to act as pressure regulating device for secondary circuits.

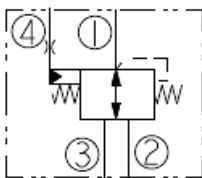
### Operation

In its steady state the HPB08-E40 blocks flow in from port 2 to port 1 and port 2 to port 3. Port 1 is control pressure, port 2 is inlet, port 3 is tank, and port 4 is signal. Port 4 receives signal from the boom cylinder. since port 1 and port 4 have a 1:1 ratio, signal at port 4 sets the pressure at port 1. The valve controls the pressure in the suspension accumulator by adding or removing oil from it.

### Features

- High pressure operation.
- Adjustments prohibit springs from going solid.
- Internal spring pilot chamber.
- Internal damping chamber. .
- Pressure-balanced accumulator charging.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	350 bar (5075 psi)
Proof pressure	517.1 bar (7500 psi)
Burst pressure	1379.0 bar (20000 psi)

### Flow Ratings

Flow rating	37.9 lpm (10 gpm)	- <b>Note:</b> At max pressure
Maximum internal leakage	15 ml/min (0.9 in <sup>3</sup> /min)	- <b>Note:</b> To port 3

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

## Operating Parameters

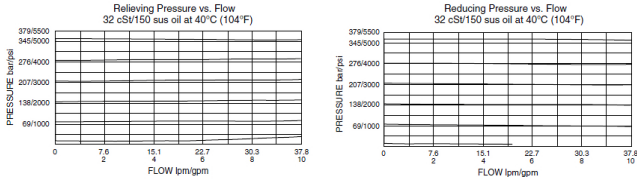
Fluids	Mineral based or synthetic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

## Properties

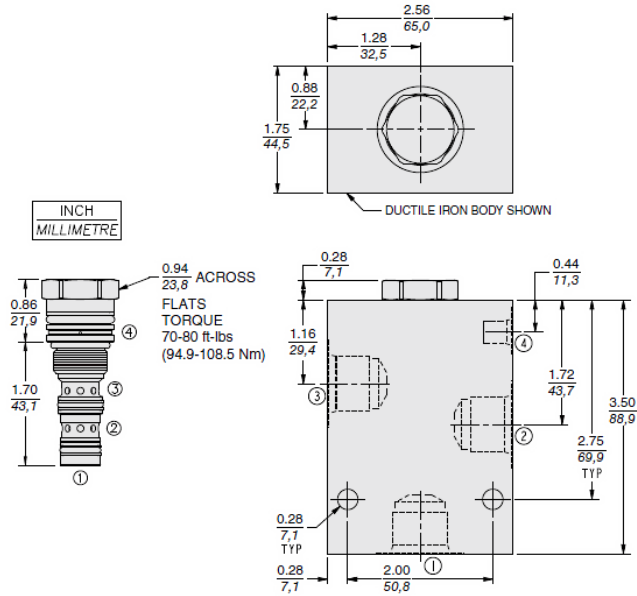
Unit weight	0.17 kg (0.37 lb)
Internal wetted surface area	141 cm <sup>2</sup> (21.8 in <sup>2</sup> )



## Performance



## Dimensions



## Installation Specifications

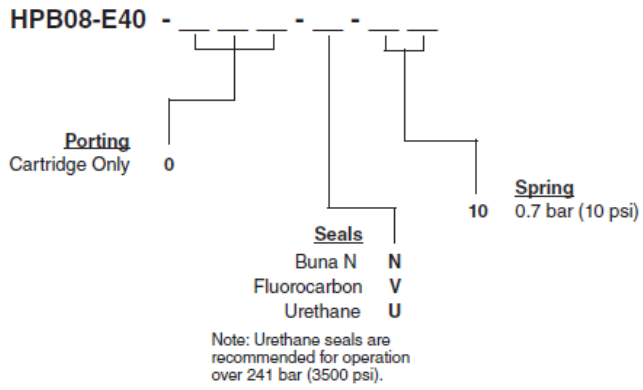
Cavity	HVC08-E4
Cartridge installation torque	94.9 to 108.5 N-m (70 to 80 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK08-E4N-BMM	- <b>Note:</b> Buna-N
	SK08-E4V-BMM	- <b>Note:</b> Fluorocarbon
	SK08-E4U-OOO	- <b>Note:</b> Urethane



**Order Code**



**Model Options**

**HPB08-E40-H-J**

**H Line Body**

CODE	DESCRIPTION
0	No Body

**J Seal**

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
U	PPDI Urethane