B50, B100, & B100AB STYLE PROPORTIONAL DIVIDER
INSTALLATION & USER GUIDE

SPECIFICATIONS:

- Rated for 3000 psi (207 bar).
- 30-Micron filtration recommended.

- Weight:
  - B50 & B100 = 5 lbs. (2.3 kg).
  - B100AB = 7-1/2 lbs. (3.4 kg).

MOUNTING & ADJUSTMENT INSTRUCTIONS:

- **Mounting** – Valve can be mounted in any orientation. Valve must be mounted on a flat surface. Special attention should be paid to not bend or twist the casting when mounting. Doing so may cause the compensator spool to bind, causing valve to fail. It is recommended to install washers between casting and mounting surface.

- **Automatic Adjustment Bypass (B100AB valve)** – The adjustment screws are for the automatic adjustment bypass for each outlet. If one cylinder ends its stroke ahead of the other, the bypass to the lagging cylinder will automatically open (750psi [51.7bar] pressure differential) allowing the lagging cylinder to finish its stroke. The bypasses are factory set to open at a pressure difference of 750psi [51.7bar].

FREQUENTLY ASKED QUESTIONS:

Q: What port sizes and flow rates are available for this valve?
A: The following port sizes and flow rates are available
  - 3/8” NPT (2-8 gpm (7.6 to 30.2 lpm))
  - 1/2” NPT (8-16 gpm (30.2 to 60.5 lpm))
  - 3/4” NPT (16-30 gpm (60.5 to 113.4 lpm))
  - #10 SAE (8-16 gpm (30.2 to 60.5 lpm))
  - #12 SAE (16-30 gpm (60.5 to 113.4 lpm))

Q: Can one of the outlet ports be blocked?
A: No. If one of the outlet ports is blocked or plugged for any reason the compensation spool will attempt to compensate for increasing pressure, and shift thus blocking the other port as well, and rendering valve inoperable. DO NOT BLOCK EITHER OUTLET PORT.

Q: Can flow be sent in reverse through valve.
A: Yes, but only if you have the B100 or B100AB valves. If you’re unsure of your valve’s model number, please contact factory for assistance.

GENERAL INFORMATION:

**Pipe Thread Sealant** - Warranty is void when Teflon tape is used to seal pipe threads. This is because Teflon tape is a friction reducing agent which allows customers to over-torque fittings. We recommend using a sealant that does not include friction reducing agents i.e. Lead Plate.
DIMENSIONAL DATA:

**B50 OR B100**
- INLET
  - 1.91” [48.5]
- OUTLET
  - 4.56” [115.8]
  - 3.87” [98.3]
  - 1.88” [47.8]
  - 0.94” [23.9]

 Ø 9/32” [7.1] THRU (2 PLACES)

**B100AB**
- INLET
  - 3.88” [98.6]
  - 5.86” [148.8]
- OUTLET
  - 4.85” [123.2]
  - 1.88” [47.8]
  - 1.13” [28.7]
  - 0.85” [21.6]

**SAFETY PRECAUTIONS:**

- It is the purchaser’s responsibility to determine the suitability of any Brand Hydraulics Co. product for an intended application, and to ensure that it is installed in accordance with all federal, state, local, private safety and health regulations, codes and standards. Due to the unlimited variety of machines, vehicles and equipment on which our products can be used, it is impossible for Brand Hydraulics Co. to offer expert advice on the suitability of a product for a specific application. It is our customer’s responsibility to undertake the appropriate precautions, testing and evaluation to prevent injury to the end-user.

- Overpressure may cause sudden and unexpected failure of a component in the hydraulic system, resulting in serious personal injury or death. Always use a gauge when adjusting a relief valve.