



BRAND
HYDRAULICS Co.

Made in the Heartland of America
Serving the World

Engineering & Manufacturing Solutions

B

Non-Adjustable Proportional Flow Dividers

PB50 or PB100



PB100AB

Specifications:

- Rated for 3000 psi (207 bar).
- See “Port Size & Inlet Flow” on next page for flow capacity.
- 30-Micron filtration recommended.
- Weight -B50 & B100 = 5 lbs. (2.3 kg).
- -B100AB = 7-1/2 lbs. (3.4 kg).



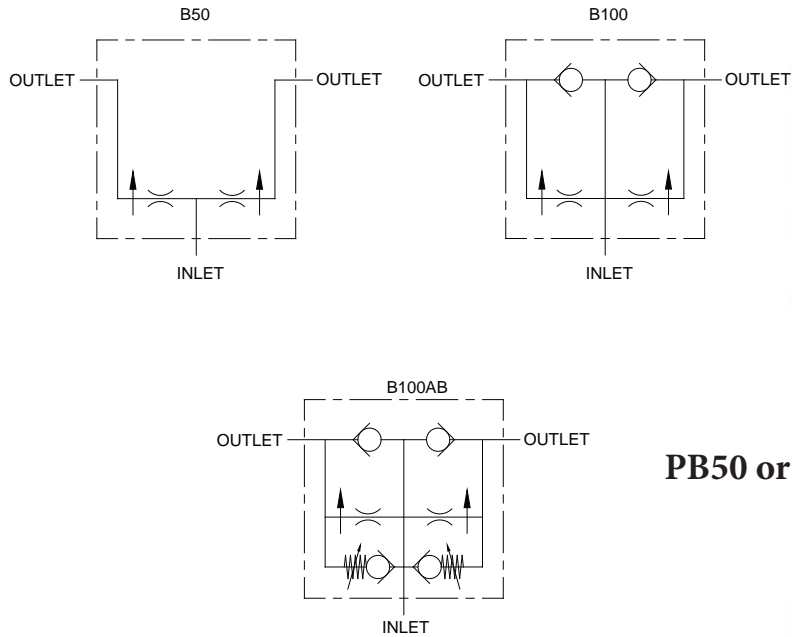
ISO 9001:2008 WITH DESIGN
Certificate #02.002.1



402.344.4434 • www.brand-hyd.com



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MATERIALS:

- Cast Iron Body
- Buna N O'Rings
- Heat Treated Steel Spool
- Heat Treated Free Reverse Check Seat

FEATURES:

- PRECISION GROUND HEAT TREATED SPOOL that assures long life.
- PRESSURE COMPENSATION for both outlet ports.
- EVERY B IS TESTED for flow ratio and pressure compensation.
- DIVIDES INLET FLOW INTO TWO FLOWS of equal flow or a ratio up to 95:5.
- OPTIONAL FREE REVERSE FLOW (B100 & B100AB) allows fluid to move from the outlet ports to the inlet port.
- OPTIONAL ADJUSTABLE BYPASS (B100AB) allows a cylinder to finish its stroke.

B – GENERAL INFORMATION

The Brand, non-adjustable, proportional flow divider comes in three basic models B50, B100 and B100AB. The B series receives a single stream of fluid and divides it into two output streams. The ratio of division to the two outlets will remain constant even though the work being done by one of the streams is much greater than the work being done by the other. The ratio of the outlet flows, remains constant even when the input flow increases or decreases. The ratio of the outlet flows may be varied from equal flow (50:50) all the way up to a 95:5 ratio.

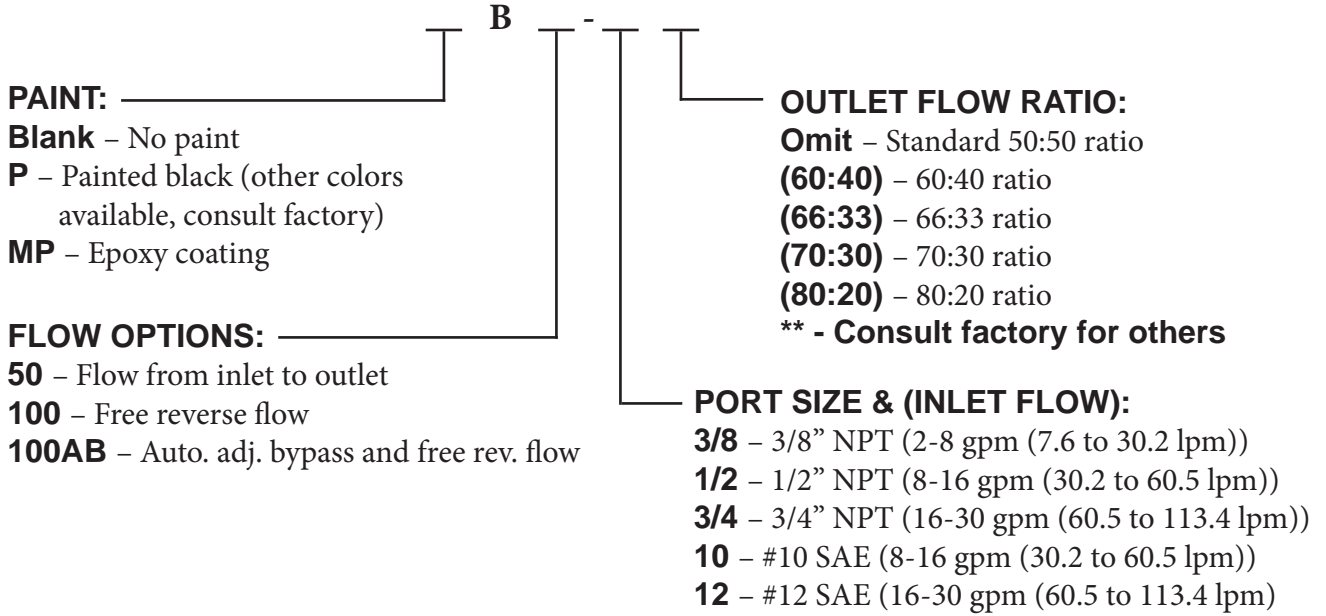
B50 – is a non-adjustable divider that receives a single stream and divides into two streams. The two outlet flows are pressure compensating and the sum of said flows equals the inlet flow. The ratio of the outlet flows must be specified when ordering.

B100 – is very similar to the B50 in that it is a non-adjustable proportional divider, but in addition to the B50 it also offers free reverse flow for both outlet ports. Flow can travel in reverse through both outlet ports and is not metered when it goes in reverse. The non-metered flow travels past the poppet, down the center of the valve, past the orificed spool and through the inlet. The two outlet flows are pressure compensating and the sum of said flows equals the inlet flow. The ratio of the outlet flows must be specified when ordering.

B100AB – is very similar to the B100 in that it is a non-adjustable proportional divider and has free reverse flow for both outlets, in addition it offers automatic adjustable bypass for each outlet. If one cylinder ends its stroke ahead of the other, the bypass to the lagging cylinder will automatically open and allow the lagging cylinder to finish its stroke. The two outlet flows are pressure compensating and the sum of said flows equals the inlet flow. The ratio of the outlet flows must be specified when ordering.

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BG - CREATING A MODEL CODE FOR BG'S:



B - EXAMPLES OF COMMON MODEL CODES:

- B50-1/2**.....1/2" NPT ports, and divides at 50:50 ratio.
- B100-1/2**.....1/2" NPT ports, free reverse flow for both outlets and divides at 50:50 ratio.
- B100AB-3/8**.....3/8" NPT ports, free reverse flow for both outlets, automatic adjustable bypass for both outlets and divides at 50:50 ratio.

DIMENSIONAL DATA : inches & [millimeters]

