![Itahydraulic Power Tecnology logo]

NON-ADJUSTABLE PROPORTIONAL FLOW DIVIDERS "B"

B50 or B100

B100AB

FEATURES:

- **P**RECISION **G**ROUND **H**EAT **T**REATED **S**POOL that assures long life.
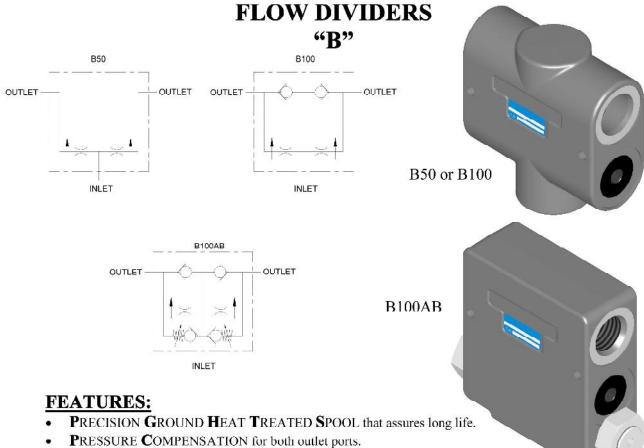- **P**RESSURE **C**OMPENSATION for both outlet ports.
- **E**VERY **B** **I**S **T**ESTED for flow ratio and pressure compensation.
- **D**IVIDES **I**NLET **F**LOW **I**NTO **T**WO **F**LOWS of equal flow or a ratio up to 95:5.
- **O**PTIONAL **F**REE **R**EVERSE **F**LOW (B100 & B100AB) allows fluid to move from the outlet ports to the inlet port.
- **O**PTIONAL **A**DJUSTABLE **B**YPASS (B100AB) allows a cylinder to finish its stroke.

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).

MATERIALS:

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

B – GENERAL INFORMATION CONT…

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.
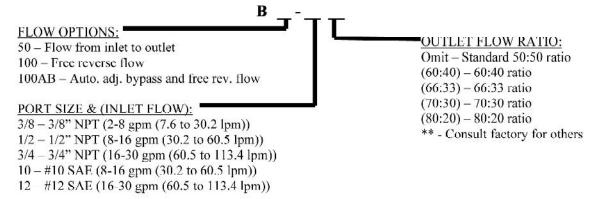
B100AB – is very similar to the B100 in that it is a non-adjustable proportional divider and has free reverse flow for both outlets, in addition it offers automatic adjustable bypass for each outlet. If one cylinder ends its stroke ahead of the other, the bypass to the lagging cylinder will automatically 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.

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.

B – CREATING A COMMON MODEL CODE FOR B'S:

B -

FLOW OPTIONS:
50 – Flow from inlet to outlet
100 – Free reverse flow
100AB – Auto. adj. bypass and free rev. flow

OUTLET FLOW RATIO:
Omit – Standard 50:50 ratio
(60:40) – 60:40 ratio
(66:33) – 66:33 ratio
(70:30) – 70:30 ratio
(80:20) – 80:20 ratio
** - Consult factory for others

PORT SIZE & (INLET FLOW):
3/8 – 3/8" NPT (2-8 gpm (7.6 to 30.2 lpm))
1/2 – 1/2" NPT (8-16 gpm (30.2 to 60.5 lpm))
3/4 – 3/4" NPT (16-30 gpm (60.5 to 113.4 lpm))
10 – #10 SAE (8-16 gpm (30.2 to 60.5 lpm))
12 – #12 SAE (16-30 gpm (60.5 to 113.4 lpm))

DIMENSIONAL DATA: inches & [millimeters]

B50 OR B100
4.56" [115.8]
3.87" [98.3]
OUTLET
1.88" [47.8]
0.94" [23.9]
OUTLET
BRAND HYD
4.54" [115.3]
1.91" [48.5]
INLET
Ø 9/32" [7.1] THRU
(2 PLACES)

B100AB
4.55" [115.6]
OUTLET
Ø17/64" [6.7] THRU
(2 PLACES)
BRAND HYD
OUTLET
1.88" [47.8]
4.85" [123.2]
1.13" [28.7]
0.85" [21.6]
2.95" [74.9]
INLET
1.94" [49.3]
0.94" [23.9]
3.88" [98.0]
1.88" [47.8]
5.86" [148.8]