Supports

Work

# Air hydraulic boosters Application & selection

Shown: AHB-46, B-5003, B-3006



### AHB and B-series boosters

Large effective area of air piston allows compressed air to generate high output hydraulic pressure.

## For high production applications

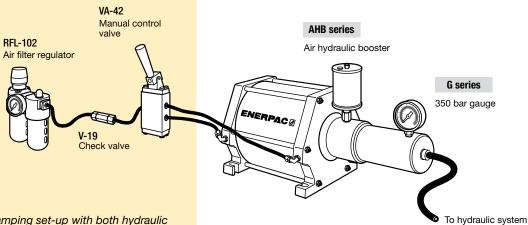
- High speed operation
- Extended service life
- · Constant hydraulic output
- Large oil delivery per stroke allows quick filling of cylinders for clamping or punching

#### **AHB** series boosters

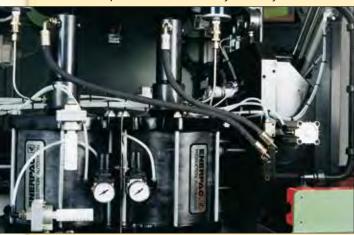
- Fiberglass wound air chamber eliminates possibility of rust due to moisture in air system
- Designed for fully automated production applications
- Double-acting, one-shot, high speed operation of air piston

#### **B** series boosters

- One-shot spring return
- · Steel and cast iron construction
- Built-in stroke sensor for automatic cycle operation 30 VDC switch closes 25 mm before end of full air piston stroke
- Internal self-bleeding
   Automatically purges air from system when booster piston is at highest point in circuit

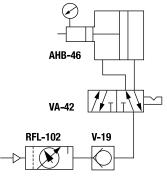


In an automated clamping set-up with both hydraulic and pneumatic components, AHB series boosters are used as a power source for the hydraulic system.

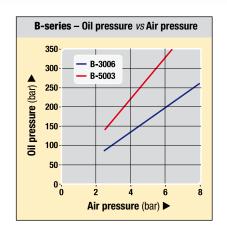


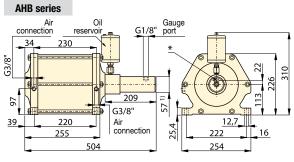
## Hydraulic system schematics

Complete power systems eliminate the guesswork of selecting valves and other system components. Plug in your 1 to 8 bar shop air line and connect your hydraulic components for a total system.



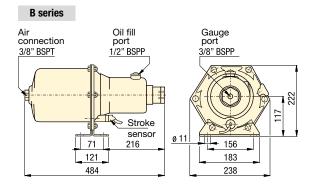
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- 1) Ø 72 mm for model **AHB-17**
- \* Oil connection (G1/4")
- \*\*\* Adapter to 3/8" NPT air connection is included.

NOTE: FZ-2060 Adaptor available for gauge port.



Ratio: 1:16 - 1:64

Pressure: 100 - 350 bar

Oil flow: 60-295 cm<sup>3</sup>/stroke

Air: 27 - 64 dm<sup>3</sup>/cycle

- (E) Multiplicadores
- F Multiplicateurs
- D Druckübersetzer







Air valves

□ 106,158 ▶



Regulatorfilter-lubricator





**Fittings** 

**□**194 ▶



Power Sources

Valves

Pallet Components

System Components

Yellow Pages

## Important

Boosters can provide high oil flow rates based on the volume of in-coming air.

Do not exceed the flow rate requirements of the components being used.

For vertical mounting of booster, an elbow fitting is recommended for the oil reservoir.

# Selection chart

| Oil pressure<br>bar      |                          | Oil volume<br>per stroke | Air to oil<br>pressure<br>ratio | Model<br>number | Air<br>consumption<br>per cycle 1) | Air<br>piston<br>diameter | Hydraulic<br>piston<br>diameter | Hydraulic<br>stroke | Air operating pressure | Ā    |
|--------------------------|--------------------------|--------------------------|---------------------------------|-----------------|------------------------------------|---------------------------|---------------------------------|---------------------|------------------------|------|
| at 5 bar<br>air pressure | at 7 bar<br>air pressure | cm <sup>3</sup>          |                                 |                 | dm³<br>at 6 bar air                | mm                        | mm                              | mm                  | bar                    | kg   |
| ▼ AHB series             |                          |                          |                                 |                 |                                    |                           |                                 |                     |                        |      |
| 83                       | 110                      | 295,0                    | 1:16                            | AHB-17          | 62,6                               | 203                       | 51                              | 145                 | 1-8                    | 18,8 |
| 175                      | 235                      | 139,3                    | 1:34                            | AHB-34          | 63,6                               | 203                       | 35                              | 145                 | 1-8                    | 16,8 |
| 240                      | 315                      | 100,0                    | 1:46                            | AHB-46          | 63,9                               | 203                       | 30                              | 145                 | 1-8                    | 16,4 |
| 330                      | -                        | 73,7                     | 1:64                            | AHB-66          | 64,1                               | 203                       | 25                              | 145                 | 1-5                    | 16,0 |
| ▼ B series               |                          |                          |                                 |                 |                                    |                           |                                 |                     |                        |      |
| 155                      | 210                      | 101,6                    | 1:30                            | B-3006          | 27                                 | 180                       | 31                              | 132                 | 3-9                    | 14,0 |
| 260                      | 350                      | 60,6                     | 1:50                            | B-5003          | 27                                 | 180                       | 24                              | 132                 | 3-9                    | 14,0 |

1) One cycle = advance + retract stroke. Note: Seal material: Buna-N, Polyurethane.

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