



To Use This Product Safely

Be sure to read this before use. Refer to Intro 27 in the introduction for general precautions.

Individual Precautions : Air booster ABP Series, Air tank AT Series

Design / Selection

Warning

- Do not use the air booster in continuous operation like a compressor.
The air booster is equipment for partial pressure boosting in factories, etc. If used frequently or continuously like a compressor, the service life will be shortened. (The nominal service life of the air booster is 5 million cycles even under normal usage) Refer to P. 869 for approximate service life calculation.

- When performing maintenance, inspection, or repair of the air booster, be sure to stop the primary pressure and release the secondary pressure before proceeding.

CAUTION

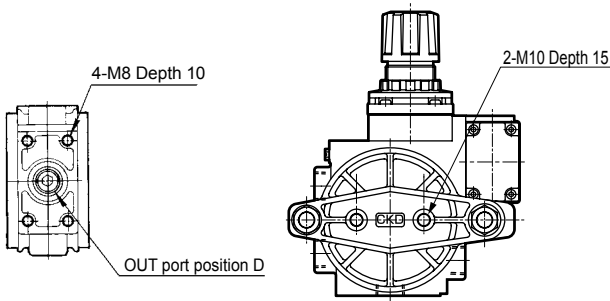
- Avoid using this product where vibration exceeding 50 m/s² or impact exceeding 300 m/s² is applied.
- Since pressure boosting is performed by air pressure, about half of the air is exhausted to the outside during the boosting process.
Therefore, if a flow rate of 1 is required on the secondary side, a flow rate of 1 + 1 = 2 is required on the primary side.
- Since the internal structure is a cylinder structure, noise of 60 to 80 dB (Primary 0.49 MPa → Secondary 0.95 MPa, measurement distance 1 m) is generated during the boosting process.
* Noise when silencer is attached.

- Stop the primary pressure when not using the air booster. Stop unnecessary operation to prevent wasteful air consumption.

- AT-24 is a steel plate air tank.
Outer circumference : Painting / Inner surface : Although treated with manganese phosphate, the design allows a certain degree of corrosion in accordance with the pressure vessel structure standard. If clean air is required, install an oil mist filter, clean filter, etc. appropriately after AT-24.

- Install a filter on the primary side to remove rust, foreign matter, and drainage. Also, since the air booster further compresses compressed air, drainage is likely to occur on the secondary side, so we recommend installing a filter for removing moisture in the piping.

- Use piping of 1/2B or larger on the primary side to obtain sufficient flow rate.
- Install a silencer (SLW-15A, SL-15) or exhaust cleaner (FA430-15A) to the exhaust port of the air booster. When using an exhaust cleaner, we recommend centralized piping that collects exhaust ports.
- Use piping with a stop valve at the air tank's drain port. Regularly discharge drain from the tank.
- To install the air booster, secure it using the 4-M8 depth 10 screw holes at the bottom or the 2-M10 depth 15 screw holes at both ends. Do not use these screw holes for purposes other than installing the air booster.

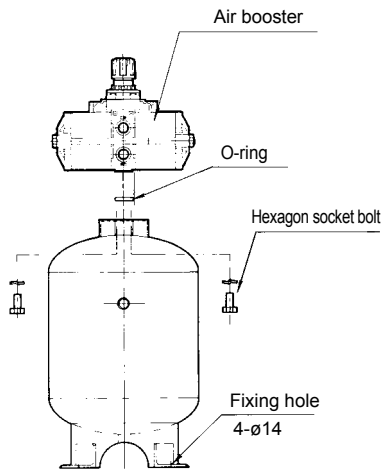


Air booster bottom (Air tank mounting surface)

Air booster end face

- Be careful not to let the length of bolts used for installing the air booster exceed the depth of the screw holes.
Forcibly tightening long bolts may damage the bottom of the screw hole and cause air leakage.
- Foot brackets to be attached to both ends are available as an option, so please use them. (Model No. ABP-12-B)
- Secure the air tank using the 4-ø14 anchor bolt holes at the bottom.

- When connecting the air booster directly to the air tank (AT-24), use OUT port position D, attach the O-ring supplied with the air tank to the air booster, and secure it to the top surface of the air tank with hexagon socket bolts.



- To obtain stable secondary pressure, we recommend installing an air tank and regulator after the air booster.
- If the primary pressure becomes higher than the set pressure due to pressure fluctuation etc., air is relieved from the pressure adjustment knob.
Install a regulator on the primary side and adjust it so that the pressure is 0.1 MPa or more lower than the set pressure.

- Silencer and pressure gauge are consumable parts, so please replace them periodically.

* Refer to the separate maintenance manual (ST-130606) for maintenance procedures.

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Components Product Site (<https://www.ckd.co.jp/kiki/en/>) → 'model No.' → Instruction Manual.