



Safety Precautions

Be sure to read this section before use.
Refer to Intro Page 63 for general precautions.

Product-specific cautions: Air booster ABP Series

Design/selection

WARNING

- Do not use the air booster for continuous operation such as in a compressor.
The air booster is designed for partial boosting in the factory, etc. Life is shortened if used for high frequency continuous operation, such as in a compressor. (The air booster's nominal life is approximately 5,000,000 uses when used under normal conditions) Refer to page 679 for the estimated service life calculation.

CAUTION

- Do not use this product if vibration exceeds 50 m/s² or impact exceeds 300 m/s².
- Pressure is raised by air pressure, so half of the air is discharged during boosting.
If the secondary side flow rate must be 1, the primary side requires a flow rate of 1 + 1 = 2.

- Because the inside is cylindrical, a noise level of 60 to 80 dB (primary side 0.49 MPa and secondary side 0.95 MPa for measurement of 1 m) is generated during boosting.
* This is when a silencer is used.
- When the air booster is not used, stop the primary pressure. Stop unnecessary operation and prevent air consumption.
- AT-24 is an air tank made of steel sheets.
Periphery: Coating and interior surface are manganese phosphate treated, but in accordance with pressure vessel structure standards, the design tolerates some corrosion.
When clean air is required, install an oil mist filter, clean filter, etc., beyond AT-24.

Mounting, installation and adjustment

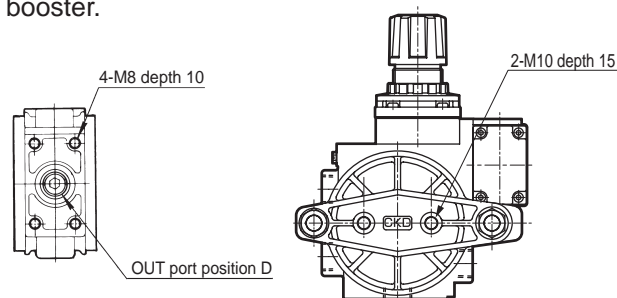
WARNING

- Do not supply pressure exceeding 0.99 MPa onto the primary side.
- Check that set pressure does not exceed 0.99 MPa.

CAUTION

- Install a filter on the primary side to remove rust, foreign matter and drainage. The air booster compresses compressed air so drain is discharged easily from the secondary side. Installation of a filter is recommended to remove any moisture from the piping.
- Install primary side piping at 1/2B or more to attain sufficient flow.
- Install a silencer (SLW-15A, SL-15) or exhaust cleaner (FA430-15A) on the exhaust port of the air booster. When using the exhaust cleaner, common porting of the exhaust port is recommended.
- Use piping with a stop valve at the air tank's drain port. Regularly discharge drain from the tank.

- There are no set regulations regarding the air booster's mounting orientation: it should optimally be horizontally installed on a flat surface.
- Install the air booster using 4-M8 depth 10 screw holes on the bottom or 2-M10 depth 15 screw holes on both sides.
Only use these screw holes for installing the air booster.

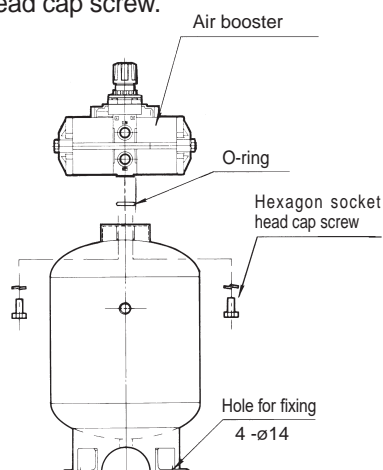


Air booster bottom (air tank mountable surface)

Side view of air booster

- The bolt used to install the air booster must not exceed the screw hole depth.
Forcibly tightening a long bolt could damage the screw hole and cause air leakage.

- A foot bracket installed on both ends is available as an option.
(Model No. ABP-12-B)
- Fix the air tank with the 4- $\varnothing 14$ anchor bolt hole on the bottom.
- When directly connecting the air booster to the air tank (AT-24), use OUT port position D, and mount the O-ring attached with the air tank on the air booster. Then, fix to the top of the air tank with a hexagon socket head cap screw.



- Installation of an air tank and regulator after the air booster is recommended for attaining stable secondary pressure.

Use/maintenance

⚠ WARNING

- Maintenance and inspection of air booster, Stop the primary pressure and release the secondary pressure before starting repair.

⚠ CAUTION

- When setting pressure, lift the pressure adjustment knob to release the lock, and then turn the pressure adjustment knob.
Secondary pressure increases when the pressure adjustment knob is turned clockwise. The pressure adjustment knob must be locked after use.
- If primary pressure exceeds the set pressure due to fluctuations in pressure, etc., air is released from the pressure adjustment knob.
Set a regulator on the primary side, and adjust the pressure at least 0.1 MPa lower from the set pressure.
- The silencer and pressure gauge are consumable parts and must be replaced regularly.

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

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending