

INSTRUCTION MANUAL

AIR TANK

AT-24

- Please read this instruction manual carefully before using this product, particularly the section describing safety.
- Retain this instruction manual with the product for further consultation whenever necessary.

For Safety Use

To use this product safely, basic knowledge of pneumatic equipment, including materials, piping, electrical system and mechanism, is required (to the level pursuant to JIS B 8370 Pneumatic System Rules)

We do not bear any responsibility for accidents caused by any person without such knowledge or arising from improper operation.

Our customers use this product for a very wide range of applications, and we cannot keep track of all of them. Depending on operating conditions, the product may fail to operate to maximum performance, or cause an accident. Thus, before placing an order, examine whether the product meets your application, requirements, and how to use it.

This product incorporates many functions and mechanisms to ensure safety. However, improper operation could result in an accident. To prevent such accidents, read this instruction manual carefully for proper operation.

Observe the cautions on handling described in this manual, as well as the following instructions :



Caution

Only use compressed air as the media. Maintain the pressure of the media within the specified pressure range. Failure to follow this instruction may cause explosion.

Notes on the Use of the Tank

1. Purpose of Use

This air tank is designed and intended for use with general pneumatic circuits and related equipment.

2. General Instructions

2.1 This instruction manual describes how to unpack, install, use, and maintain the AT air tank.

2.2 Before installing this product, please understand the contents of this manual so that the product will be properly handled and its safety will be secured.

INDEX

AT-24
Air Tank
SM-312361-A

1. Unpacking	1
2. Installation	
2.1 Condition for installation	1
2.2 Piping	2
3. Important Safety Instructions on Installation and Use	
3.1 Media	3
3.2 Necessity to install a safety valve	3
4. Maintenance	
4.1 Maintenance and inspection	3
4.2 Expendable part	3
5. Specifications of the Product	3

1. Unpacking

1) Notes on handling

Be careful not to injure yourself when removing the heavy air tank (weighing 17.5 kg) from plastic air-mat wrapping.

- 2) Make sure that the model No. of your order matches that on the name plate affixed on the product.
- 3) Examine the air tank for any damage on its outer surface.
- 4) To prevent foreign matter from entering the air tank, do not yet remove the seal plugs

2. Installation

2.1 Condition for installation

1) Mounting attitude

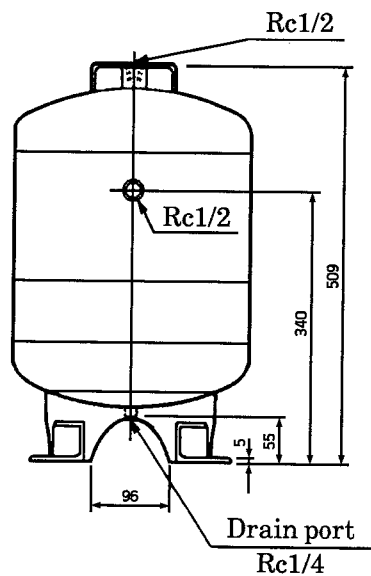
Secure the air tank vertically on a horizontal, flat surface, with the fixing plates facing down. Take care not to injure yourself on the angular corners of the fixing plates during this work.

※ Be sure to mount the tank on a horizontal surface. Mounting the product on a slanting surface will hinder drainage, resulting in internal corrosion.

- 2) For maintenance, connect a drain cock to the drain port located on the bottom of the tank.

3) Space necessary to perform maintenance

When installing the air tank secure sufficient space to conduct draining .

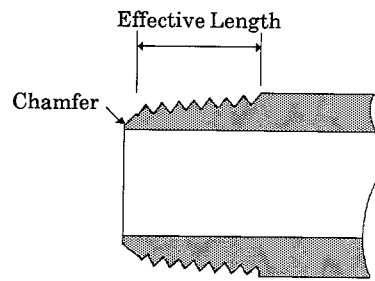


4) Protection against rusting

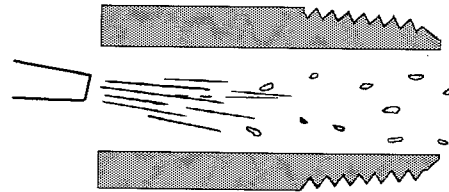
To prevent rust formation, do not expose the tank to water.

2.2 Piping

- 1) Use galvanized pipes, nylon tubes, rubber tubes, or other anti-corrosive material for piping.
- 2) Secure the effective length of threaded part on the gas pipe. Chamfer the half pitch off the end of the thread part.

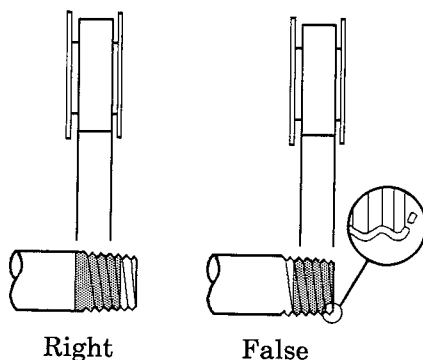


- 3) Perform air flushing (air blowing) through the pipe before piping to remove any foreign matter or chips.



- 4) When winding seal tape, and applying seal material to the thread parts of pipes, make sure the two end threads (are free of) tape and sealant. This is an important precaution to prevent scraps of the tape or seal material from entering the pipe or the connected equipment.

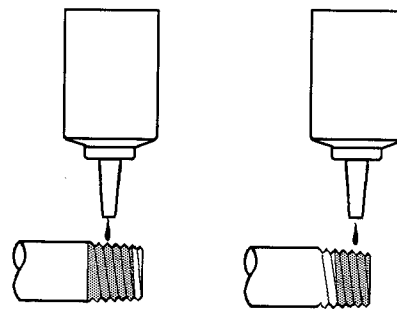
● Seal Tape



Right

False

● Sealant (Paste or liquid)



Right

False

- 5) Tightening torque for piping

Port size	Tightening torque
Rc1/2	15.7~17.6N·m
Rc1/4	5.9~7.8N·m

3. Important Safety Instructions on Installation and Use

3.1 Media



Caution

Only use compressed air as the media. Maintain the pressure of the media within the specified pressure range. Failure to follow this instruction may cause explosion.

3.2 Necessity to install a safety valve

Install a safety valve or other effective safety device to prevent the internal tank pressure from exceeding the maximum working pressure due to exposure to extreme heat in case of fire or other emergency situations.

4. Maintenance

4.1 Maintenance and inspection

Perform drainage during every daily inspection. Unless the drain is frequently removed, the inside of the tank will be corroded and damaged.

4.2 Expendable part

The O-ring supplied with the air tank is an expendable part. Once the currently used ring is removed due to disassembly, replace it with a new one before reassembly.

O-ring JIS B2401 P-24-1A

5. Specifications of the Product

Model No.		AT
Item		
Media		Compressed air
Maximum working pressure MPa		1
Hydraulic test pressure MPa		1.5
Ambient temperature °C		0~60 (To be free from freezing)
Unobstructed capacity m ³		0.024
Port size Rc		1/2
Product weight kg		12

This product is supplied with an O-ring, hex. head bolts, and spring washers for mounting an air booster.