



AIR MOTOR (1AM,2AM,4AM,6AM)

OPERATIONS MANUAL – PARTS LIST VERSION 1.3

Air-operated air motor, vane-type

7 bar (0.7 MPa, 100psi) Maximum Air Input Pressure

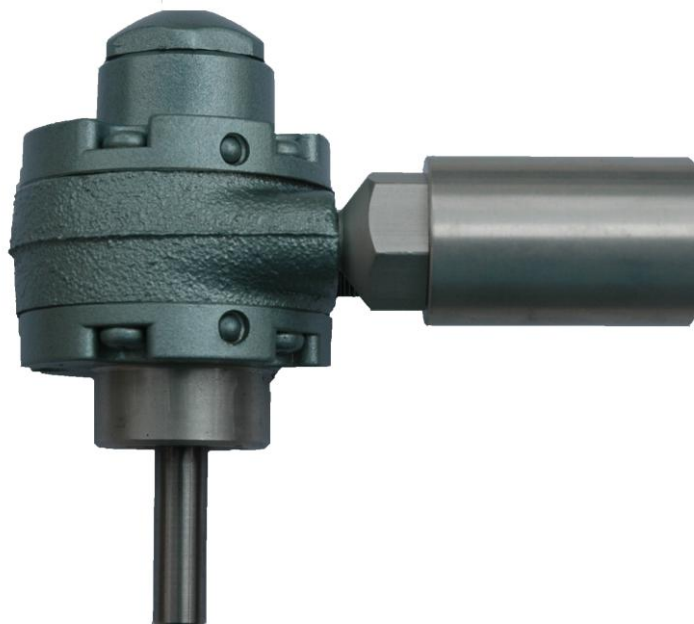


TABLE OF CONTENTS

1 WARNINGS	3
1.1 EQUIPMENT MISUSE HAZARD	3
1.2 FIRE AND EXPLOSION HAZARD	3
2 INSTALLATION	4
2.1 ASSEMBLY	4
2.2 AIR REQUIREMENTS	5
3 OPERATION	6
3.1 STARTUP	6
3.2 SHUTDOWN.....	6
4 SERVICE	6
4.1 INSTRUCTIONS.....	6
5 DRAWINGS	7
6 TECHNICAL DATA	9
7 KEY CONTACTS	ERROR! BOOKMARK NOT DEFINED.

1 WARNINGS

1.1 EQUIPMENT MISUSE HAZARD

Misuse of the air motor can result in serious injury and cause the air motor to break or malfunction.

- Read this instruction manual before operating the air motor.
- This air motor is for professional use only.
- Do **not exceed the maximum working pressure of 7 bar** (100 psi, 0.7 MPa).
- Do not alter or modify this air motor.
- Comply with all applicable local and national fire, electrical, and safety regulations.

1.2 FIRE AND EXPLOSION HAZARD

Poor ventilation, open flames, sparks or improper grounding can cause a hazardous condition and result in a fire or explosion and serious injury.

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents, or fluids containing such solvents. The use could result in a serious chemical reaction and explosion.
- Do not use kerosene or other flammable solvents or combustible gases to flush the unit.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being dispensed.
- Ground all equipment.

2 INSTALLATION

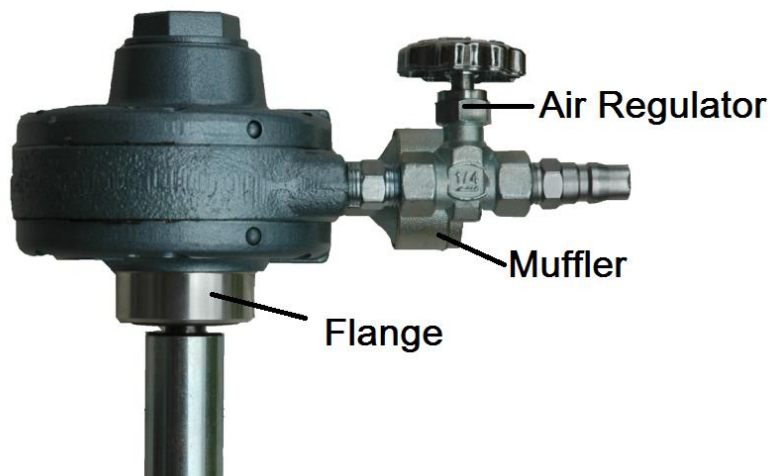
2.1 ASSEMBLY

For transportation purposes the muffler (silencer) is disconnected from the air motor.

- **Muffler:** screw in the muffler on the right side (facing the opening) and tighten it.



- **Air Regulator:** The volume of air (and herewith the speed of the air motor) can be regulated by an air regulator (**not scope of supply**) which can be mounted directly to the air inlet on the left side (facing the opening) or which can be mounted remotely via a pipe/hose.
Make sure that the size of the air regulator or hose is not smaller than the diameter of the air inlet (see table).



- **Flange Connection:** connect the air motor to your machine/system by using the flange (see table)
- **Coupling:** Connect the drive shaft of the air motor to a coupling (**not scope of supply**) which is connected to the drive system of your machine/system.

	Flange Diameter	Shaft Size	Air Inlet Size
1AM	32 mm	9.5 mm	1/8" NPT
2AM	44.5 mm	12.7 mm	1/4" NPT
4AM	44.5 mm	12.7 mm	1/4" NPT
6AM	see drawing	see drawing	1/2" NPT

2.2 AIR REQUIREMENTS

The maximum air consumption can be seen in the table below. For continuous use in many applications, the air motor typically requires less than the maximum air consumption

- Install an air line filter (5-micron) to remove dirt and moisture.
- An automatic air line lubricator should be installed in the air line as close as possible. Adjust lubricator to feed 1 drop of oil (e.g. detergent SAE #10 automotive engine oil) for every 1.4 m³/min (50 CFM) of air while the unit is running. Do Not overfeed oil or exhaust air may become contaminated.

	Air Consumption (max.)
1AM	0.57 m ³ /min (20 cfm)
2AM	0.85 m ³ /min (30 cfm)
4AM	2.04 m ³ /min (72 cfm)
6AM	3.68 m ³ /min(130 cfm)

3 OPERATION

3.1 STARTUP

- Make sure that the air regulator is closed.
- Connect the air line and turn on the air supply
- Use the air regulator to adjust the motor speed.

3.2 SHUTDOWN

- Turn off the air regulator to stop the agitator.
- Turn off the air supply.

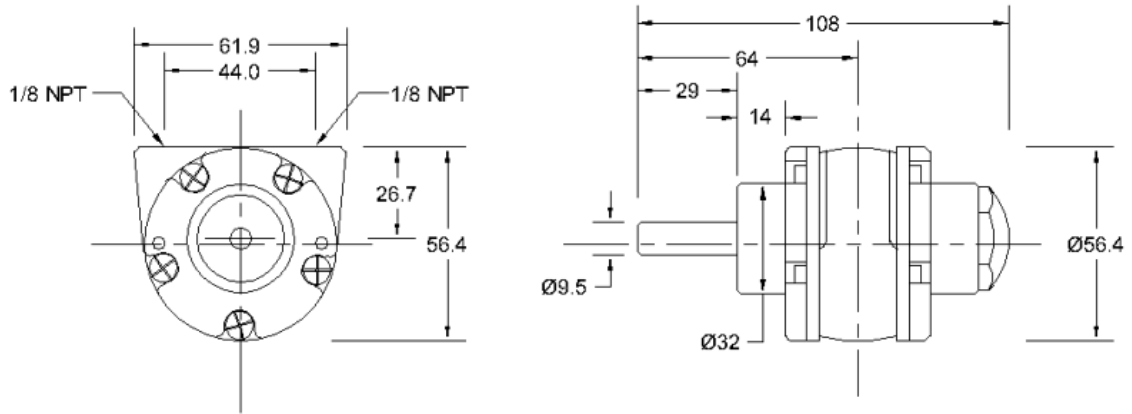
4 SERVICE

4.1 INSTRUCTIONS

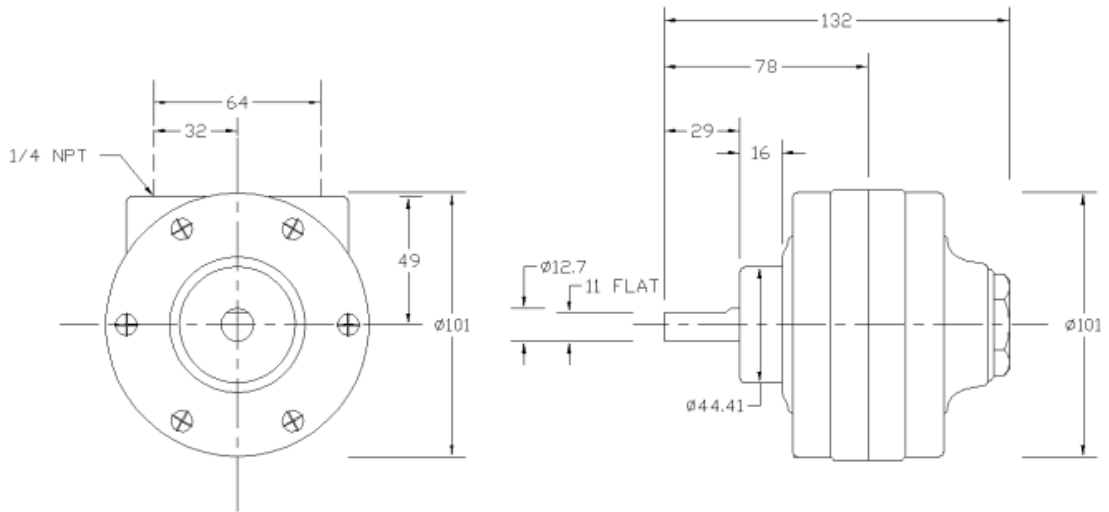
- If no air line lubricator is installed, then the air motor must be manually lubricated every 8 hours by placing 10–20 drops of SAE #10 light oil in the motor's air inlet. Then run the agitator for about 30 seconds.

5 DRAWINGS

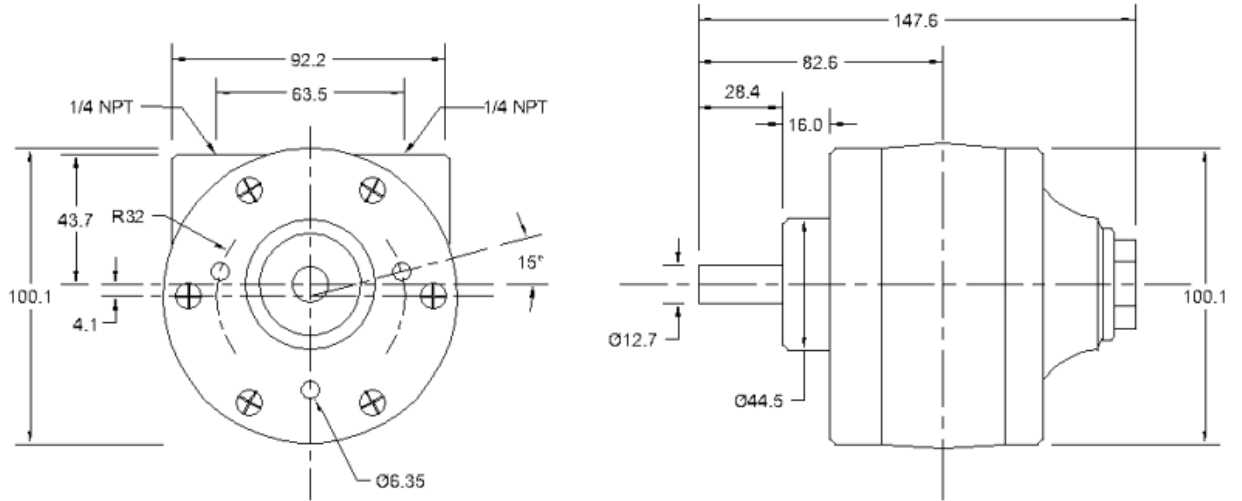
1AM AIR MOTOR



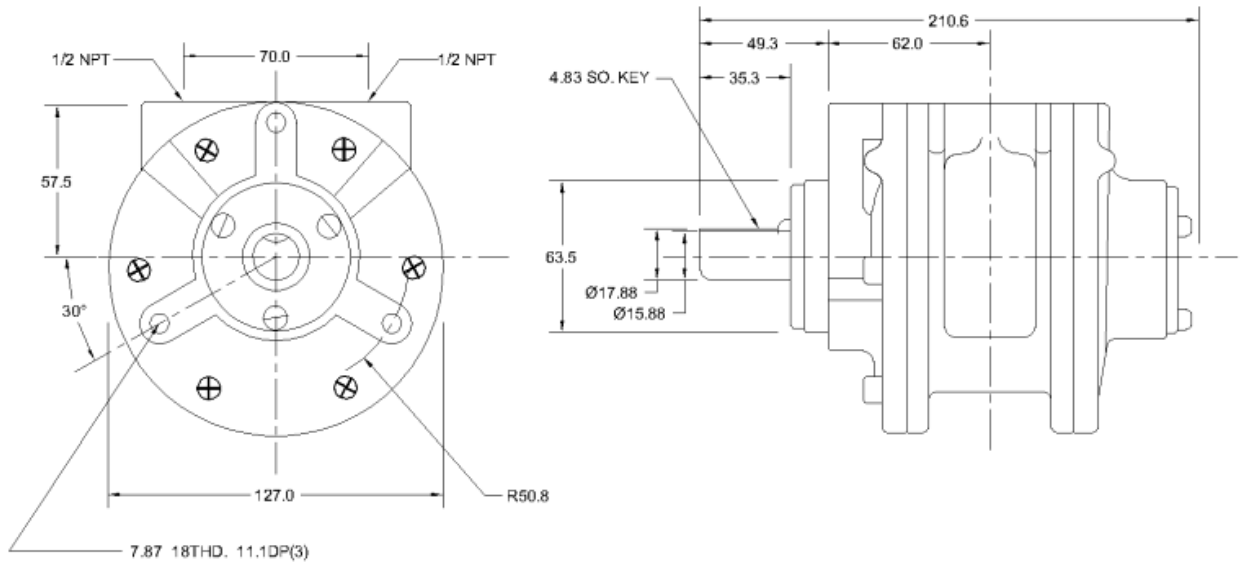
2AM AIR MOTOR



4AM AIR MOTOR



6AM AIR MOTOR



6 TECHNICAL DATA

	Power	Speed	Weight	Operating Pressure (max)
1AM	1/3 HP (0.25 kW)	500-6,000 RPM	700 g	7 bar
2AM	3/4 HP (0.56 kW)	300-3,000 RPM	2 kg	7 bar
4AM	1 1/2 HP (1.12 kW)	300-3,000 RPM	3.8 kg	7 bar
6AM	4 HP (3 kW)	300-3,000 RPM	7.8 kg	7 bar

7 KEY CONTACTS

General Inquiries & Service: info@bsc-teknik.com Tel. +66-2-402 6212

For the latest information, visit www.bsc-teknik.com