

PIglide Air Preparation Kits

ACCESSORIES FOR PIGLIDE AIR BEARING STAGES



A-80x Series

- Cleans and filters compressed air supply
- Regulates supply pressure
- Optional pressure switch
- Recommended for use with all PIglide air bearing products
- Customization available

Overview

In order to guarantee long-term reliability and proper operation of air bearings, their air supply must be clean, dry, and oil-free. Contamination in the air can cause a reduction in stiffness and load capacity as well as increase in friction. Eventually, the bearing will be damaged and fail due to contamination. To prevent such contamination, PI offers efficient and cost effective air preparation assemblies which give users a simple way to clean any air supply. These kits will filter particulates and remove oil down to ISO 8573-1 Class 1.

Sizing & Selection

PI recommends the A-801 model for installations where the air supply quality is not clean to ISO 8573-1 Class 3 or for installations supporting more than four axes of air bearing motion.

If the air supply is clean and oil-free to ISO 8573-1 Class 3 and the installation requires less than 10 SCFM (300 SLPM) of air flow, customers may select the smaller A-802 model. Customers unsure of their air supply quality should use the A-801 model.

If the compressed air supply contains moisture (ISO 8573-1 Class 4 or higher, dew point higher than 0°C), PI recommends adding a dryer (desiccant or refrigeration type) to the air supply upstream of the air preparation kit.

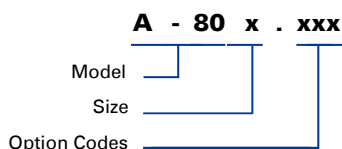
Features

- Multi-stage filtration - multiple filter elements enable the air preparation assembly to remove the most common air contaminants.
- Pressure regulation - the assembly includes a pressure regulator with integrated pressure gage. Adjustments to the bearing supply pressure are easily made.
- Shut-off Valve - a manual shut-off valve is standard with the air preparation kit.
- Tubing and fittings - PI offers a variety of air fittings for the input and the output connections to the air preparation kit. If you do not see the fitting you require, please contact us for customizations. 2 meters of tubing to connect the air preparation kit to the air bearing are included with each kit.
- Semi-automatic drains - allow easy removal of captured materials.
- Optional Pressure switch - when used to supply a motorized air bearing stage, the air preparation kit should be purchased with the optional air pressure switch. This switch can be wired into the E-stop/STO input of the motion controller to help prevent damage to the air bearing in the event of supply pressure failure. The set-point of the switch is adjustable.

Model	Description	Max Flow	Supply Air Quality (ISO 8573-1)(1)	Max Input Pressure	Primary Construction	Weight
A-801	Large 4-stage air prep kit	60 SCFM (1680 SLPM)	Any	150 psi (1035 kPa)	Aluminum	4.2 kg
A-802	Small 2-stage air prep kit	10 SCFM (300 SLPM)	Class 3 or better	150 psi (1035 kPa)	Polycarbonate	0.7 kg

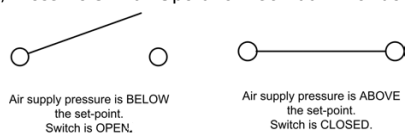
1. All kits require supply air humidity levels of Class 3 or better (dew point no greater than 0°C).

Ordering Information



Models	Option 1 Pressure Switch	Option 2 (1) Input Air Fitting	Option 3 (1) Output Air Fitting
A-801 = Large 4-stage kit, 60 SCFM	1 = None	0 = 6 & 8 mm OD tube (metric), One touch fitting	0 = 6 & 8 mm OD tube (metric), One touch fitting
A-802 = Small 2-stage kit, 10 SCFM	2 = Normally Open, Adjustable set point	3 = 1/4" & 3/8" OD tube (English), One-touch fitting	3 = 1/4" & 3/8" OD tube (English), One-touch fitting

(a) Pressure Switch Operation. Contact PI for detailed electrical specifications and wiring instructions.

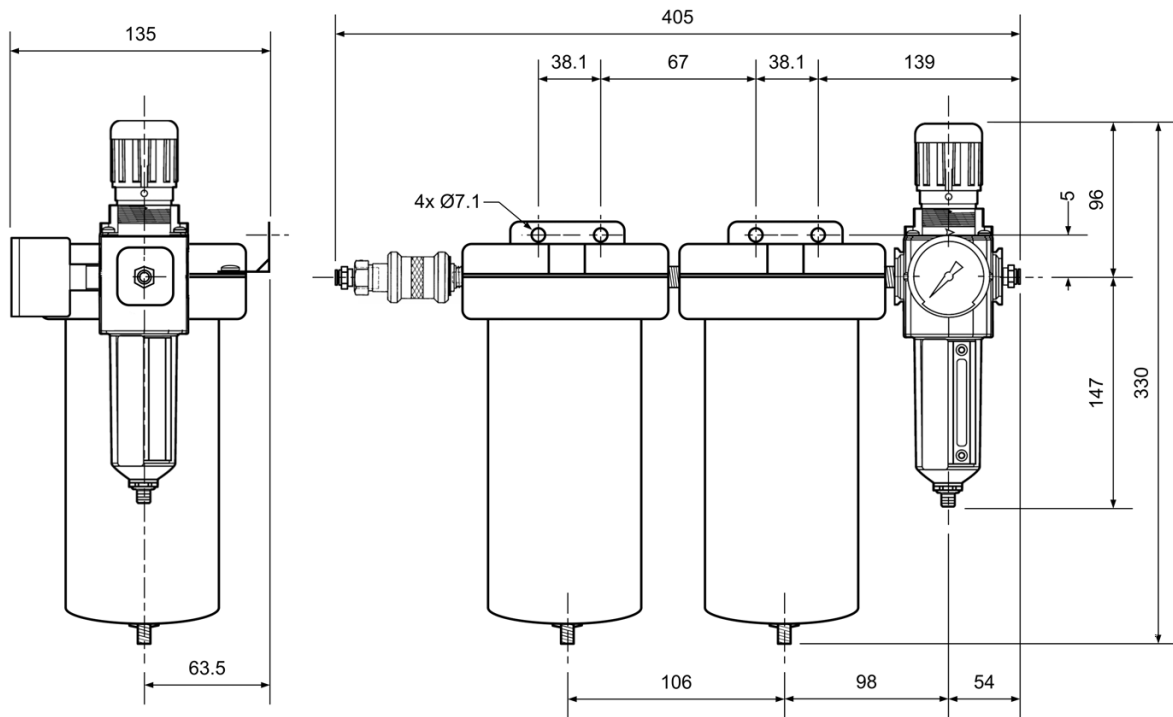


(b) Other fitting types and sizes available upon request, contact PI for a quote.

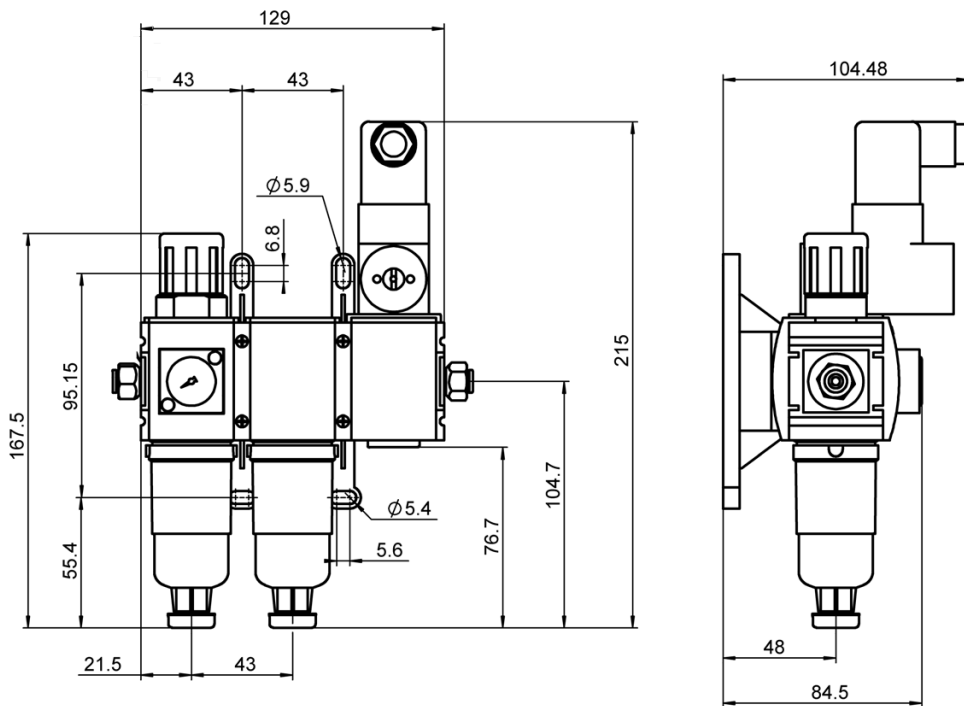
Ordering Example

Part# **A-801.200** is a

- Model:** A-80 (PIglide Air Preparation Kit)
- Size:** 1 (Large 4 Stage)
- Option 1:** 2 (Includes normally open adjustable pressure switch)
- Option 2:** 0 (Input air fitting is a one-touch style for 6mm OD flexible tube)
- Option 3:** 0 (Output air fitting is a one-touch style for 6mm OD flexible tube)



Model A-801.1xx, in mm



Model A-802.2xx, in mm