

PIglide Filter and Air Preparation Kits

Accessories for Air Bearings and Air Bearing Stages



A-80x

- Cleans and filters the compressed air supply, controls the supply pressure
- Optional pressure switch
- Recommended for use with all PIglide air bearing products
- Versions available with multiple channels, versions available with storage tank
- Versions available with vacuum generation
- Customized adaptations possible

Overview

In order to guarantee long-term reliability and proper operation of air bearing modules, the 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 an increase in friction. Eventually, the bearing will be damaged and fail. To prevent such contamination, PI offers efficient and inexpensive air preparation modules that allow users to clean the air supply easily. These modules filter particles and remove oil according to ISO 8573-1 Class 1.

Size & Selection

PI recommends the A-801 model when the air supply is not clean according to ISO 8573-1 Class 3 or if more than four air bearings need to be supplied with air.

If the air supply is clean and oil free according to ISO 8573-1 Class 3 and the system requires an air flow of less than 10 SCFM (300 SLPM), the smaller A-802 model is recommended. If the quality of the air supply is not known, the A-801 model is recommended.

The A-804 model is based either on the A-801 model or the A-802 model and is preconfigured with a multi-axis air distributor for 4 or 8 independently regulated pressure channels. Furthermore, the A-804 model is supplied fully assembled on a steel plate.

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.

Characteristics

- Multi-stage filtration system - several filter elements allow removal of the most common air contaminants.
- Pressure regulation - the modules include a pressure regulator with manometer for easy adjustment of the air supply.
- Shut-off valve - a manual shut-off valve is in the scope of delivery.
- Tubing and fittings - PI offers a variety of air fittings for the inlet and outlet connectors of the air preparation kit. If you do not see the fitting you require, please contact us for customizations. 2 meters of tubing for connecting the air preparation kit are in the scope of delivery.

- Semiautomatic drains - allow easy removal of filtered materials.
- Optional pressure switch - when used to supply a motorized linear stage with air bearings, the air preparation kit should be equipped with an optional air pressure switch. This switch can be wired into the Motion-Stop input of the motion controller to help prevent damage to the air bearing in the event of supply pressure failure. The threshold value of the switch is adjustable.

Specifications

	A-801.100 A-801.200	A-802.100 A-802.200	A-804.13200 A-804.18200	A-804.23200[T] A-804.28200[T]	A-805.28200[T]
Description	Air preparation kit, 4-stage	Air preparation kit, 2-stage	Air preparation kit on mounting plate, 4-stage, multi-channel	Air preparation kit on mounting plate, 2-stage, multi-channel A-804.2x200T: with compressed air storage tank	Air preparation kit on mounting plate, 2-stage, multi-channel, vacuum generation A-805.2x200T: with compressed air storage tank

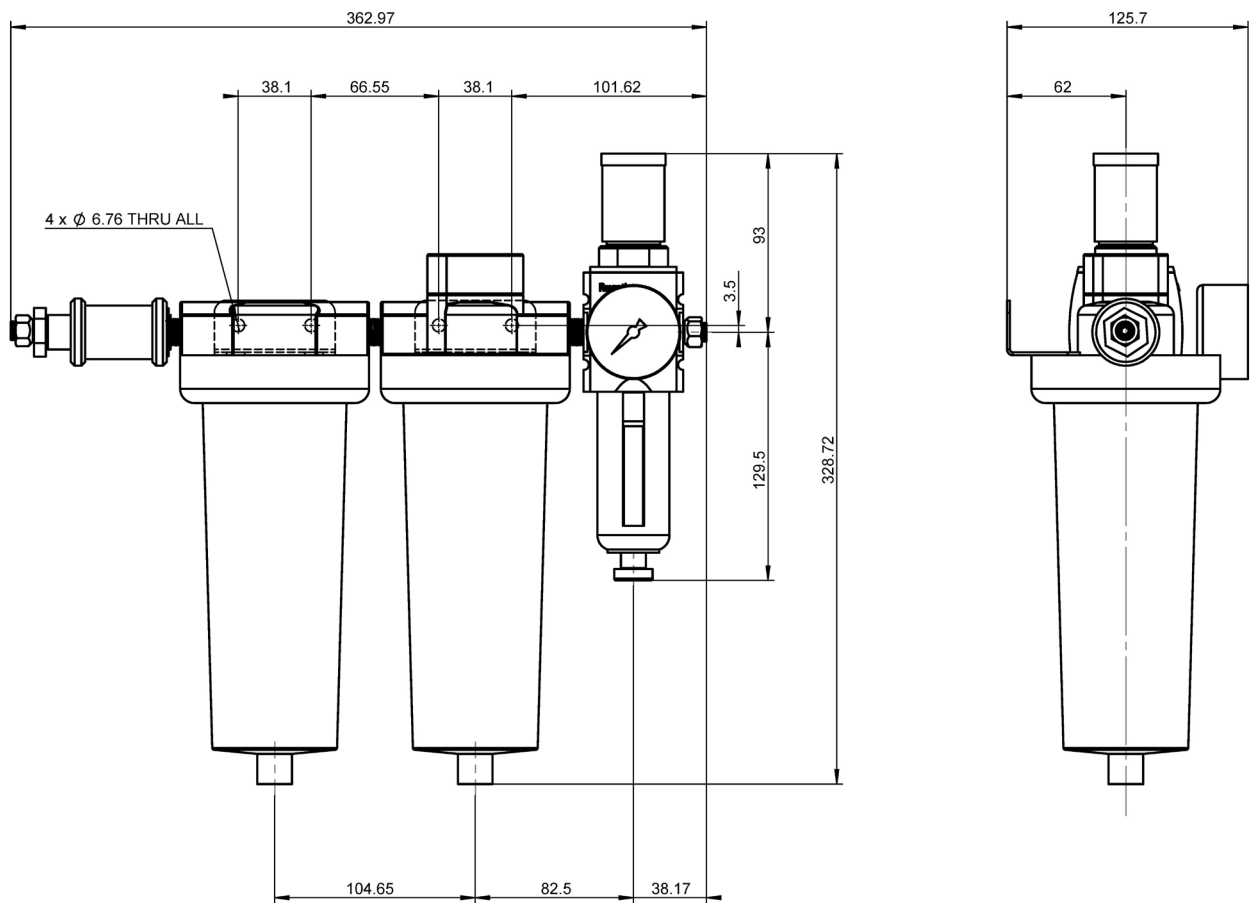
Air supply	A-801.100 A-801.200	A-802.100 A-802.200	A-804.13200 A-804.18200	A-804.23200[T] A-804.28200[T]	A-805.28200[T]
Maximum flow	60 SCFM (1680 SLPM)	10 SCFM (300 SLPM)	60 SCFM (1680 SLPM)	10 SCFM (300 SLPM)	10 SCFM (300 SLPM)
Required compressed air inlet quality (ISO 8573-1)	As desired	Class 3 or better	As desired	Class 3 or better	Class 3 or better
Max inlet pressure	150 psi (1035 kPa)	150 psi (1035 kPa)	150 psi (1035 kPa)	150 psi (1035 kPa)	150 psi (1035 kPa)
Air outlets	1	1	A-804.13200: 4 A-804.18200: 8	A-804.23200[T]: 4 A-804.28200[T]: 8	6
Compressed air outlet quality (ISO 8573-1)	Class 1 (oil and particles)	Class 1 (oil and particles)	Class 1 (oil and particles)	Class 1 (oil and particles)	Class 1 (oil and particles)
Vacuum generation to max.	-	-	-	-	-88 kPa
Vacuum outlets	-	-	-	-	2

Miscellaneous	A-801.100 A-801.200	A-802.100 A-802.200	A-804.13200 A-804.18200	A-804.23200[T] A-804.28200[T]	A-805.28200[T]
Materials	Aluminum	Polycarbonate	Aluminum Mounting plate: Painted steel	Polycarbonate Mounting plate: Stainless steel	Polycarbonate Mounting plate: Stainless steel
Mass	4.2 kg	0.7 kg	A-804.13200: 5.5 kg A-804.18200: 5.7 kg	A-804.23200: 1.8 kg A-804.23200T: 3 kg A-804.28200: 2 kg A-804.28200T: 3.2 kg	A-805.28200: 2.2 kg A-805.28200T: 3.4 kg
Pressure switch	A-801.100: None A-801.200: N/O contact, adjustable threshold value	A-802.100: None A-802.200: N/O contact, adjustable threshold value	N/O contact, adjustable threshold value	N/O contact, adjustable threshold value	N/O contact, adjustable threshold value
Compressed air storage tank	-	-	-	0.75 l stainless steel	0.75 l stainless steel

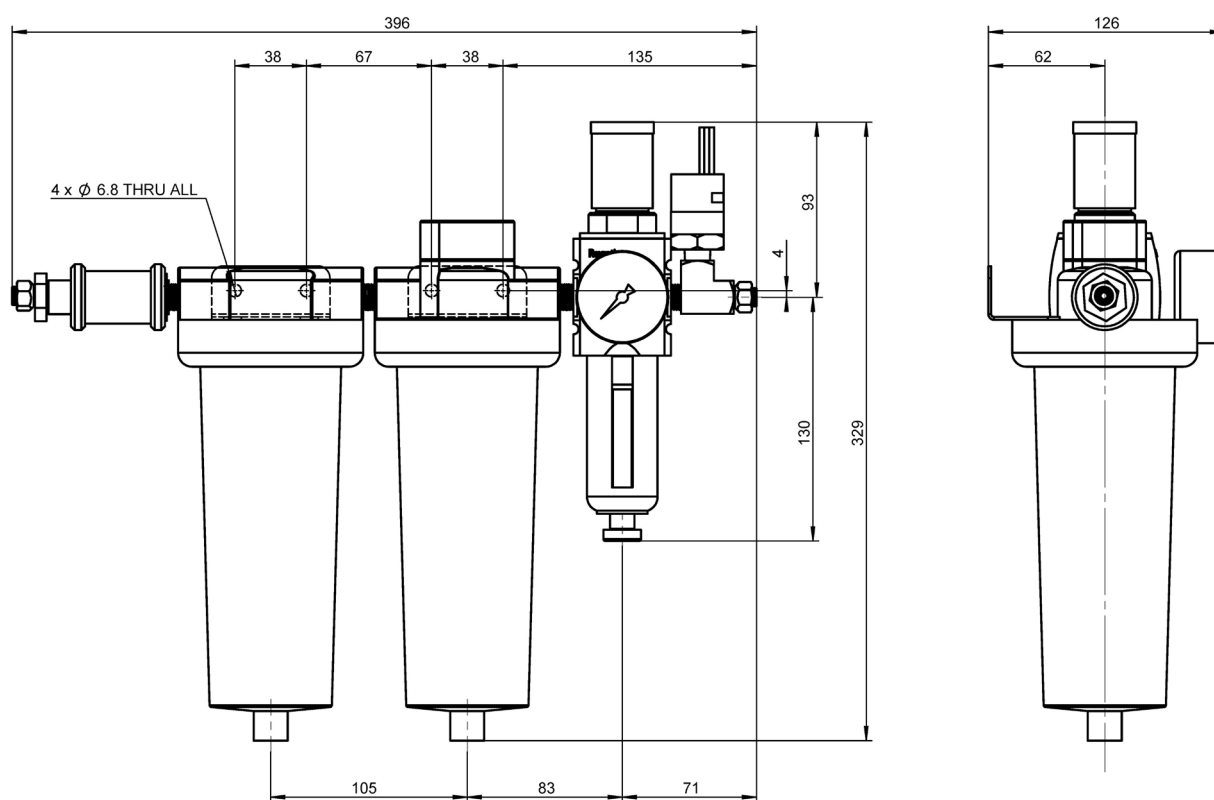
All modules require a compressed air supply with dry air according to ISO 8573-1 Class 3 or better (dew point no greater than 0°C).

[Ask about customized versions.](#)

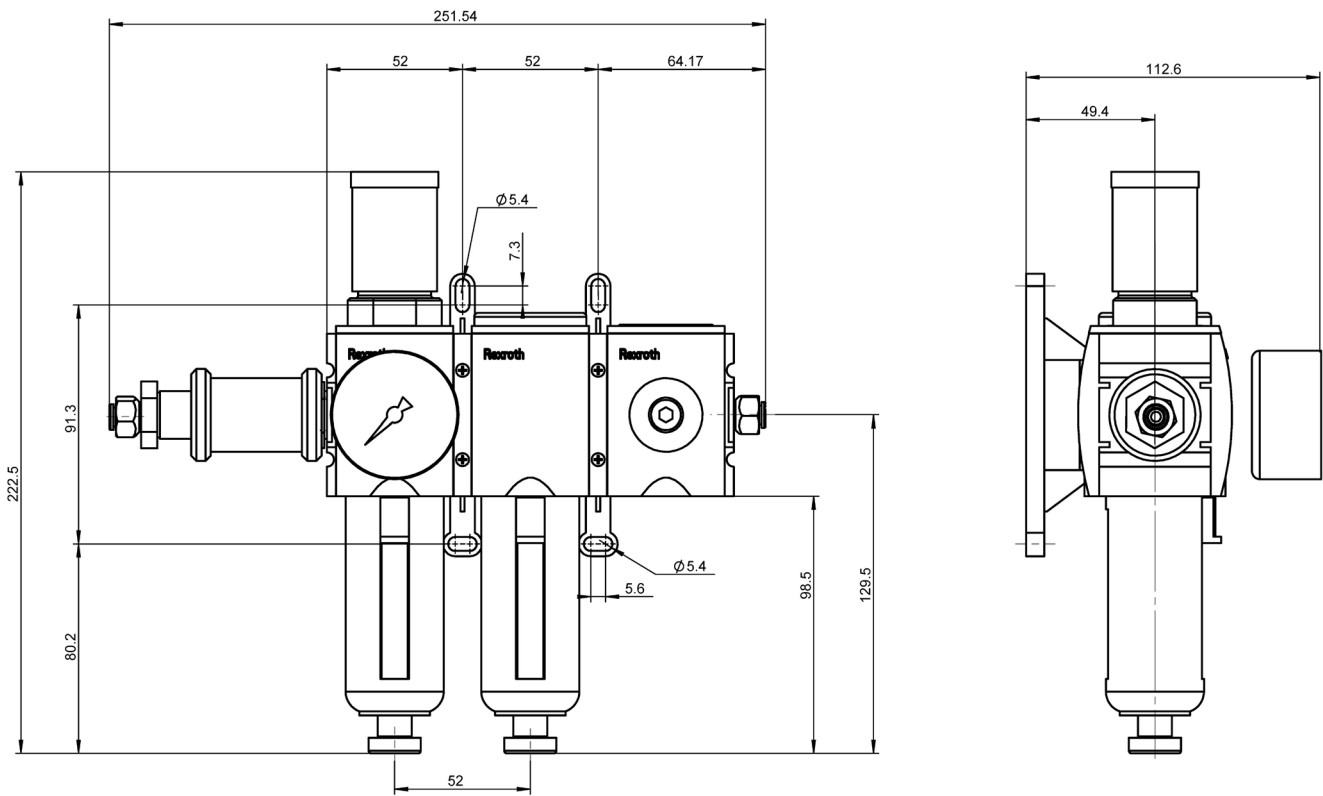
Drawings / Images



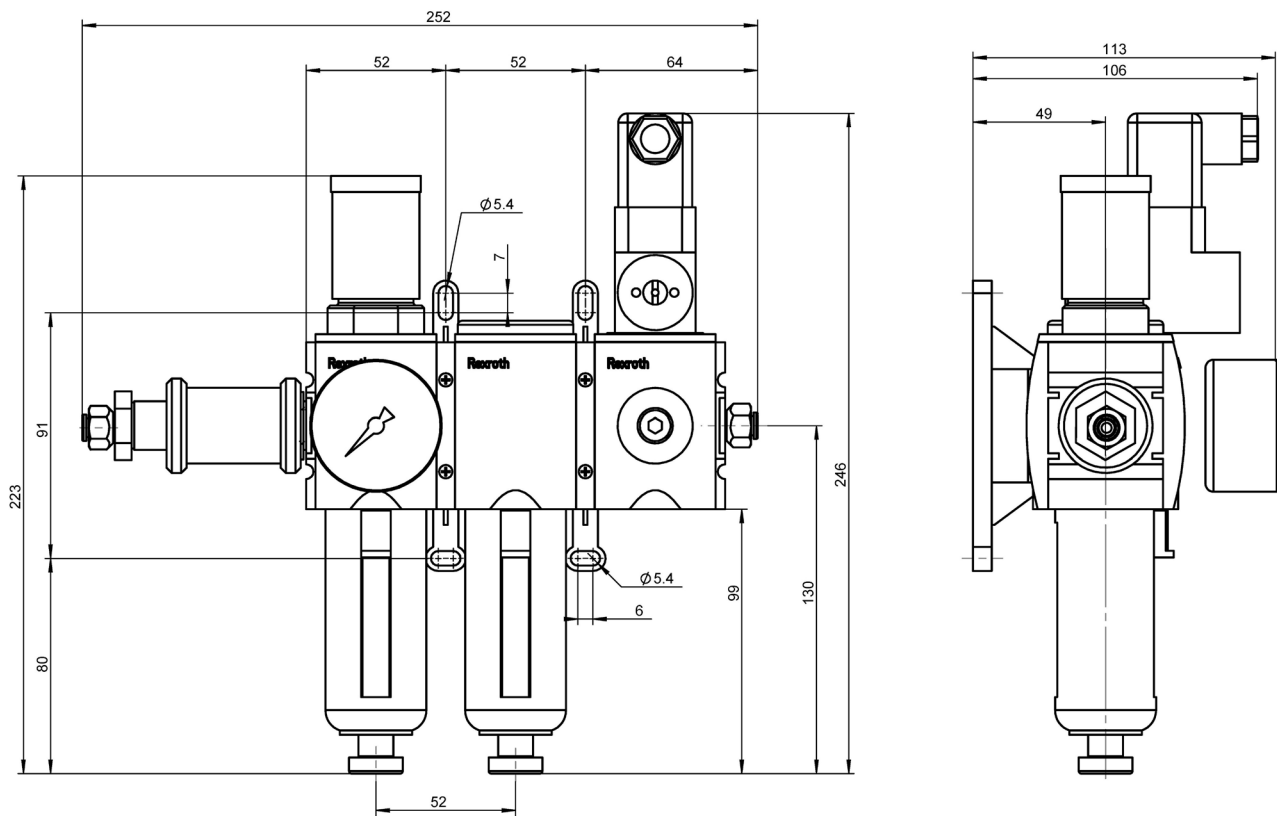
A-801.100, dimensions in mm



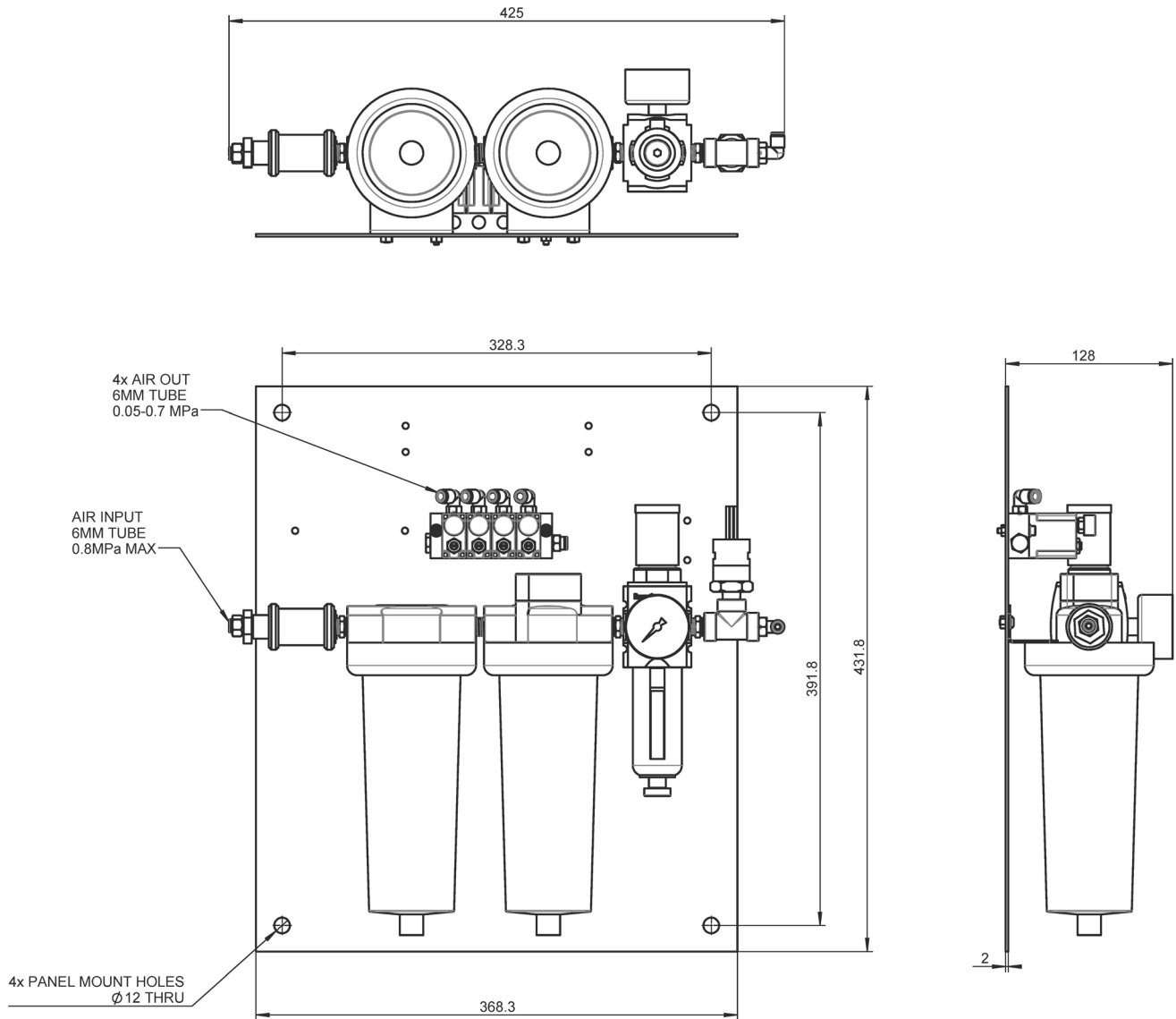
A-801.200, dimensions in mm



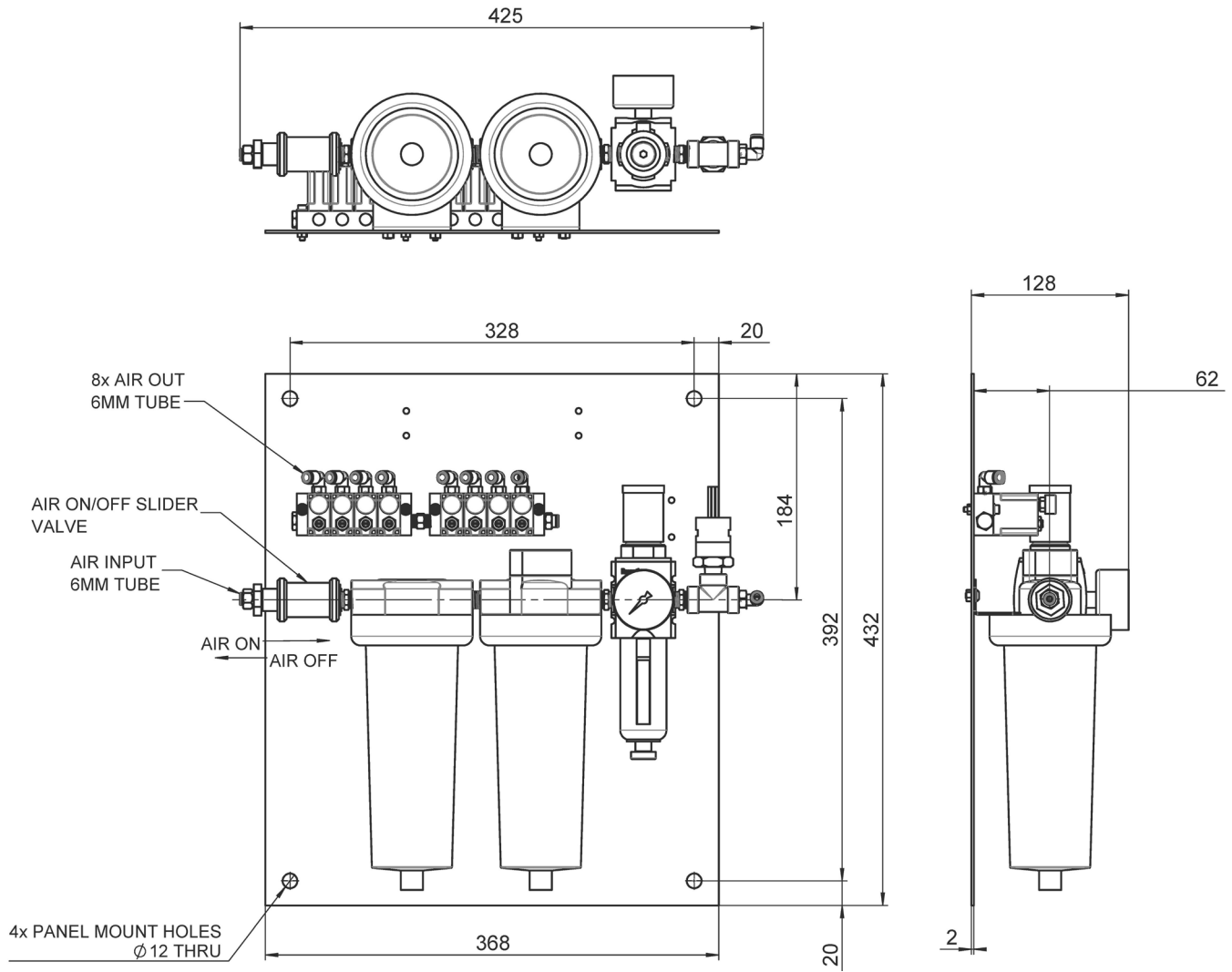
A-802.100, dimensions in mm



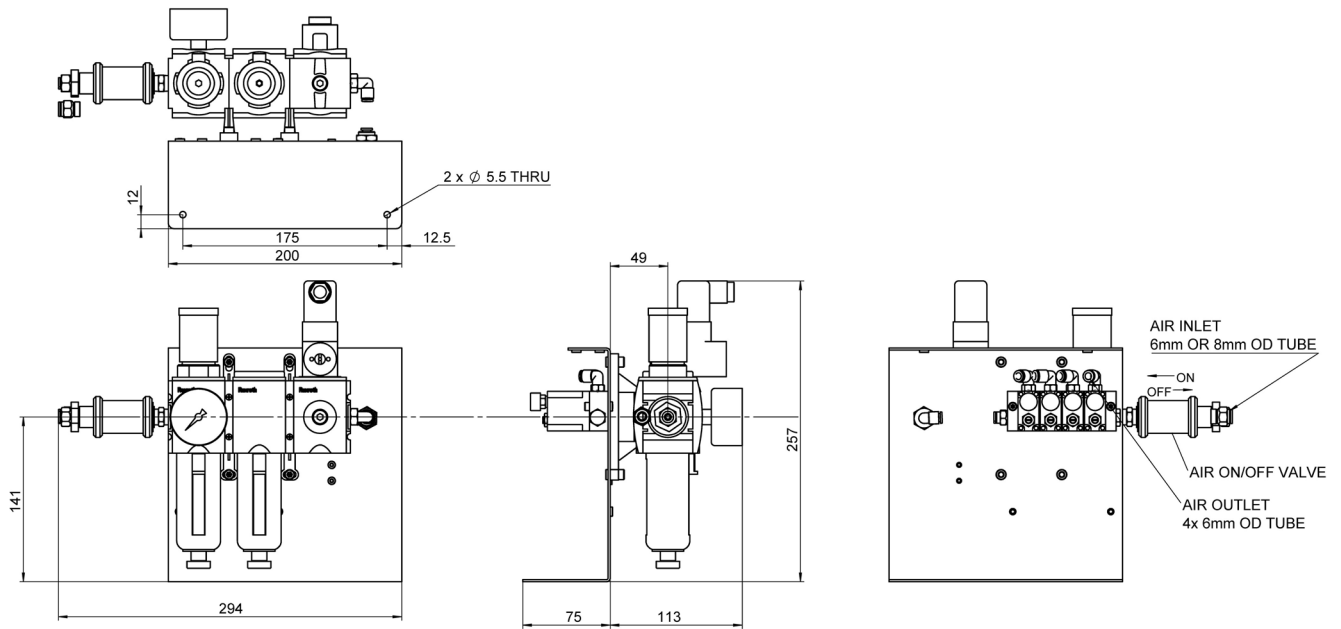
A-802.200, dimensions in mm



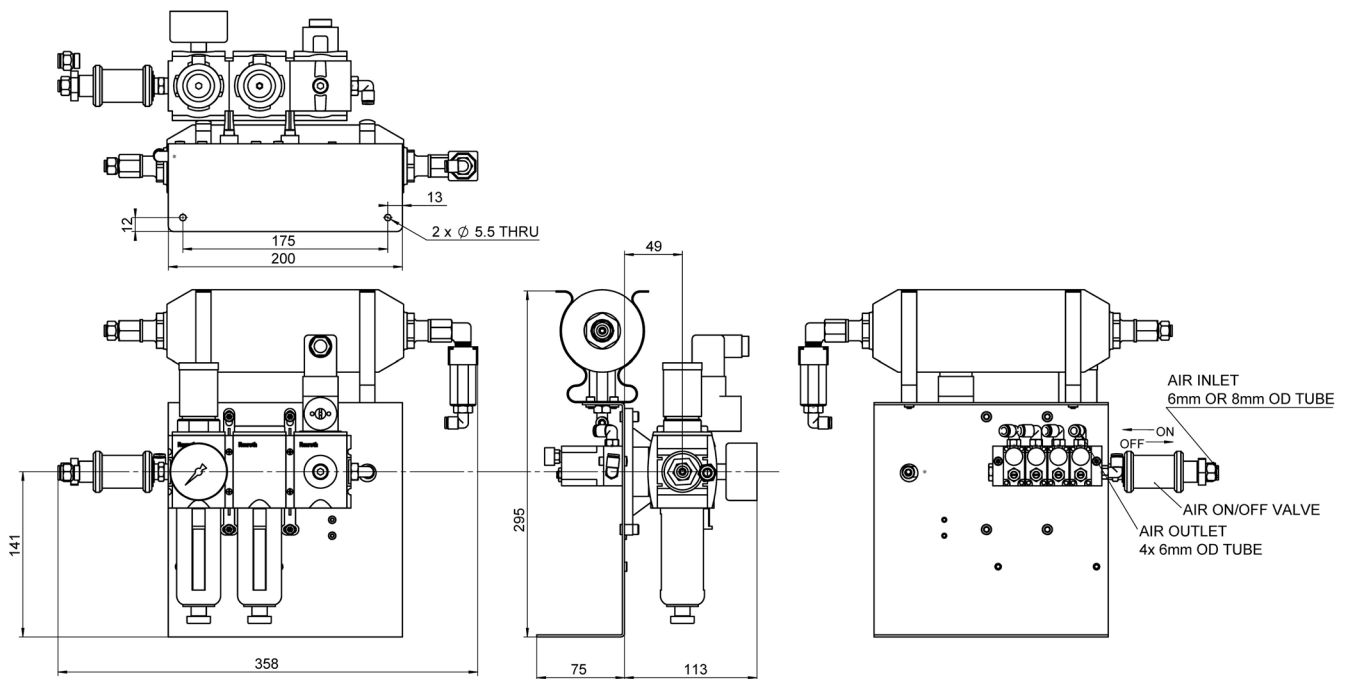
A-804.13200, dimensions in mm



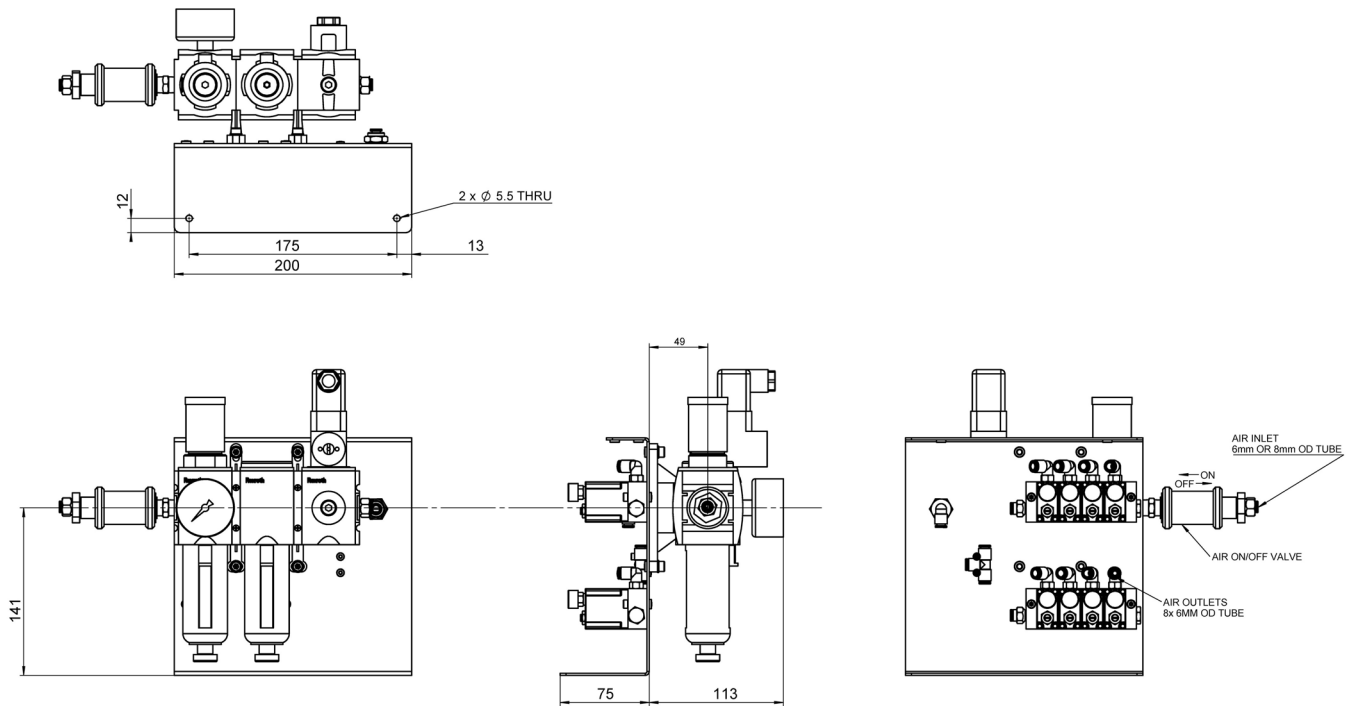
A-804.18200, dimensions in mm



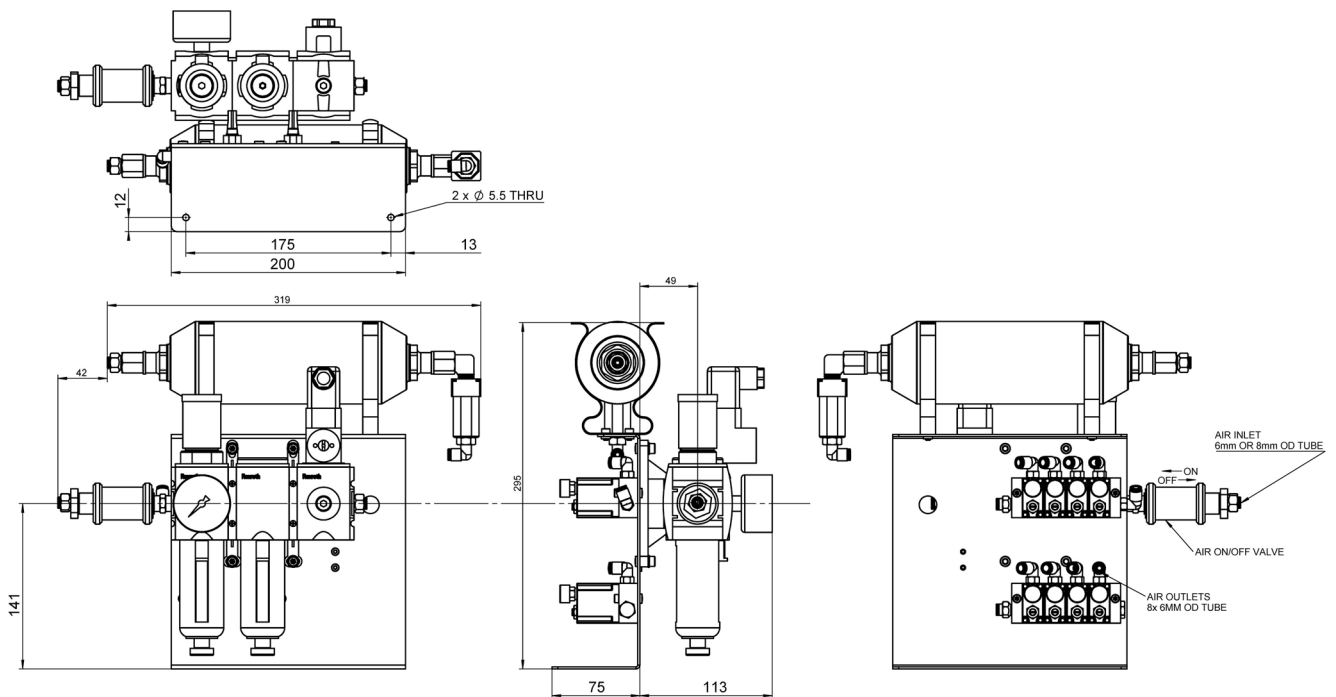
A-804.23200, dimensions in mm



A-804.23200T, dimensions in mm



A-804.28200, dimensions in mm



A-804.28200T, dimensions in mm



Air pressure below the threshold value, pressure switch opened (left); air pressure above the threshold value, pressure switch closed (right)



A-802.200

Ordering Information

A-801.100

Plglide filter and air preparation kit, 4-stage, 1680 SLPM (60 SCFM), metric quick connections

A-801.200

Plglide filter and air preparation kit, 4-stage, 1680 SLPM (60 SCFM), metric quick connections, pressure switch

A-802.100

Plglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections

A-802.200

Plglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch

A-804.13200

Piglide filter and air preparation kit, 4-stage, 1680 SLPM (60 SCFM), metric quick connections, pressure switch, 4 air outlets, preassembled

A-804.18200

Piglide filter and air preparation kit, 4-stage, 1680 SLPM (60 SCFM), metric quick connections, pressure switch, 8 air outlets, preassembled

A-804.23200

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 4 air outlets, preassembled

A-804.23200T

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 4 air outlets, preassembled, 0.75 l compressed air storage tank

A-804.28200

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 8 air outlets, preassembled

A-804.28200T

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 8 air outlets, preassembled, 0.75 l compressed air storage tank

A-805.28200

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 6 air outlets, 2 vacuum outlets, preassembled

A-805.28200T

Piglide filter and air preparation kit, 2-stage, 300 SLPM (10 SCFM), metric quick connections, pressure switch, 6 air outlets, 2 vacuum outlets, preassembled, 0.75 l compressed air storage tank