

Air-hydro booster

## **RUSH BOOSTER - mini**

Generates air pressure to hydraulic pressure.  
Small booster specialized for small, short stroke cylinders.



## Overview

The air-hydro booster that converts compressed air into high hydraulic pressure as a hydraulic source for small diameter and small stroke hydraulic actuators.

## Feature

- ① When the air pressure is 0.2MPa to 0.7MPa, hydraulic pressure of 2.8MPa to 9.8MPa is generated.
- ② Since it has a small diameter, it does not take up installation space.
- ③ The booster can be equipped with a switch. The piston position signal is obtained.
- ④ Since it uses air pressure, there is no trouble due to temperature rise even in continuous pressurization.
- ⑤ The oil pressure can be changed steplessly by changing the air pressure.
- ⑥ The operation can be easily performed with one pneumatic five-way valve.

## How to order

**RBM 30 × 06 - 14 - V - 2**

| Product name        | Bore size | Amount of discharged oil | Boosting ratio | Symbol | Mounting direction | Symbol | No. of Auto switches |
|---------------------|-----------|--------------------------|----------------|--------|--------------------|--------|----------------------|
| Rush Booster - mini | 30 mm     | 6.1 cm <sup>3</sup>      | 14 times       | Nil    | Horizontal         | Nil    | Without auto switch  |
|                     |           |                          |                | V      | Vertical           | 1      | 1 pc.                |
|                     |           |                          |                |        |                    | 2      | 2 pcs.               |

## Specifications

|                                |                                             |
|--------------------------------|---------------------------------------------|
| Pneumatic cylinder diameter    | φ 30                                        |
| Ram diameter                   | φ 8                                         |
| Pressure boosting ratio        | 1 : 14                                      |
| Amount of discharged oil       | 6.1 cm <sup>3</sup>                         |
| Maximum generated oil pressure | 9.8 MPa (Air pressure 0.7 MPa)              |
| Proof pressure                 | 1.0 MPa                                     |
| Operating pressure             | 0.2 to 0.7 MPa                              |
| Fluid (Air pressure)           | Air                                         |
| Fluid (Oil pressure)           | Standard mineral hydraulic fluid (ISO VG22) |

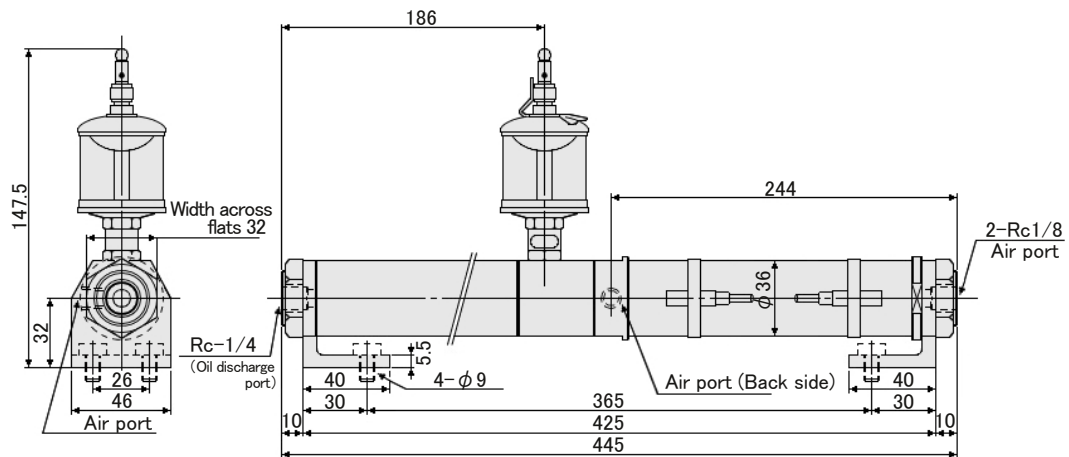
## Auto Switch

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| Model No.                 | 10 TYPE                                                                   |
| Indicating lamp           | LED illuminates when turned ON. (Return side : RED Pressure side : GREEN) |
| Lead wire                 | Two - core cable, 1 m                                                     |
| Voltage                   | 5 to 100 V                                                                |
| Operating current range   | 5 to 50 mA                                                                |
| Internal voltage drop     | 2.4 V or less                                                             |
| Impact resistance         | 30 G                                                                      |
| Working temperature range | -10 to 60°C                                                               |

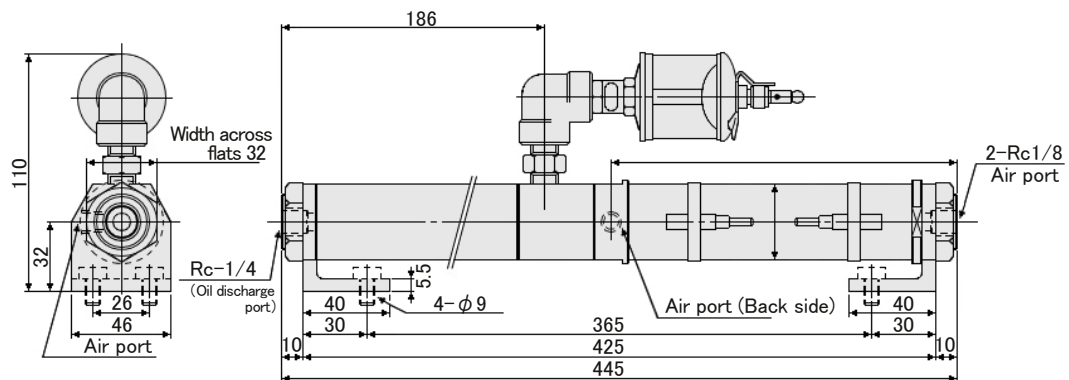
When the number of switches is one, a red color is attached as standard. It can be changed to green.

## Dimensions

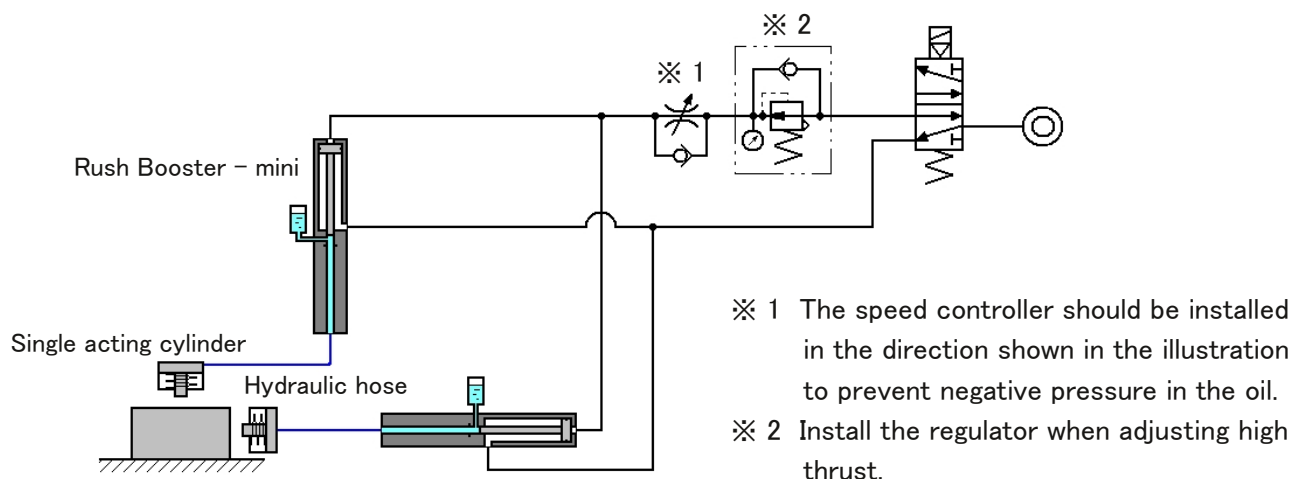
### Horizontal



### Vertical



## Piping



### Precautions for hydraulic actuators.

1. Use a hydraulic actuator that has a working pressure range higher than the discharge pressure of the rush booster.
2. When using the hydraulic actuator backward or forward with pneumatic pressure, attention to the minimum operating pressure of the hydraulic actuator.  
Make sure that it can be operated with the pneumatic pressure to be used before selecting.
3. The oil capacity of the hydraulic actuator should be 4 cm<sup>3</sup> or less. Consider a sufficient margin for the amount of discharged oil.
4. Use a type of hydraulic piping that does not cause expansion loss.



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●LINE UP●

**PNEUMATIC POWER CYLINDER**

**PNEUMATIC BOOSTER**

**POWER PACK CYLINDER**

**RUSH BOOSTER**

**HYDRAULIC CYLINDER**

**FREE LOCK PAD**

**SELLOCK CYLINDER**

**FLOATING CONNECTOR**

**AUTO CLAMPER**

**SEL NUT**

**LINEA BRAKE**

**PNEUMATIC AND HYDRAULIC**

**EQUIPMENT**