

Direct Operated Precision Regulator Modular Style

Series *ARP3000*

- Setting sensitivity: 0.001 MPa
- Can be connected as a module to a mist separator.
(AFM30 + ARP3000)
(AFD30 + ARP3000)
- Direct-driven, bleed type
(With relieving function)

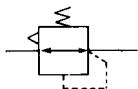


ARP3000-02



ARP3000-02BG

JIS Symbol



Standard Specifications

| Model | ARP3000 |
|----------------------------------|------------------------------|
| Port size | 1/4 |
| Fluid | Air |
| Proof pressure | 1.2 MPa |
| Maximum operating pressure | 0.8 MPa |
| Regulating pressure range | 0.005 to 0.3 MPa |
| Setting sensitivity | 0.001 MPa |
| Repeatability | ±0.003 MPa |
| Air consumption ^{Note)} | 4 to 6 l/min (ANR) (0.3 MPa) |
| Pressure gauge port size | 1/8 |
| Ambient and fluid temperature | -5 to 60°C (No freezing) |
| Construction | Bleed type |
| Weight (kg) | 0.42 |

Note) Air consumption differs depending on the set pressure.

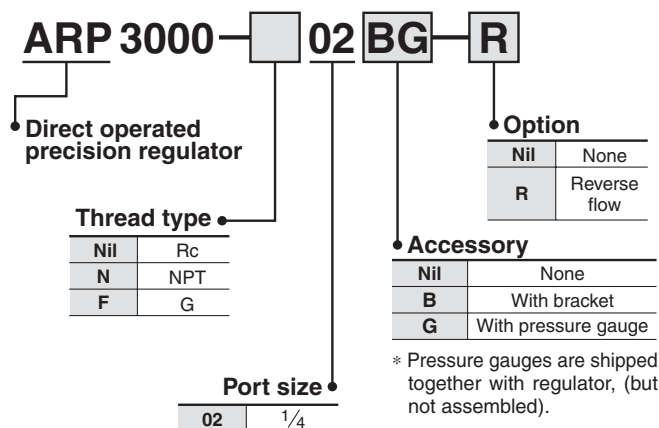
Accessory (Option)/Part No.

| Description | Part no. |
|-------------------------------|-------------------|
| Bracket | B320 |
| Pressure gauge ⁽¹⁾ | 0.4 MPa G36-4-□01 |

Note 1) • □ in the gauge part no. indicates the threads used for connection. For Rc, leave the symbol blank, and for NPT, enter "N".
• Please contact SMC concerning the supply of NPT pressure gauges.

Note 2) Use caution not to tighten excessively when mounting a pressure gauge, otherwise it will may result in a breakdown. (Fastening torque recommended: 7 to 9 N·m.) For sealing, use a pipe tape.

How to Order



F.R.L.

AV

AU

AF

AR

IR

VEX

AMR

ITV

IC

VBA

VE□

VY1

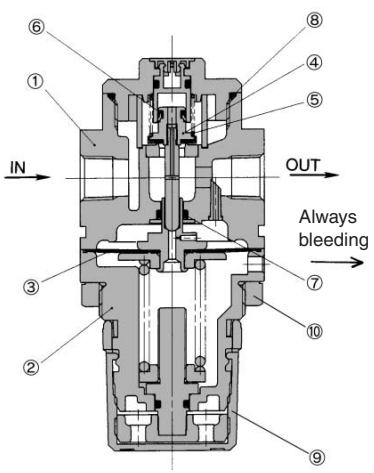
G

PPA

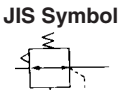
AL

Series ARP3000

Construction



JIS Symbol



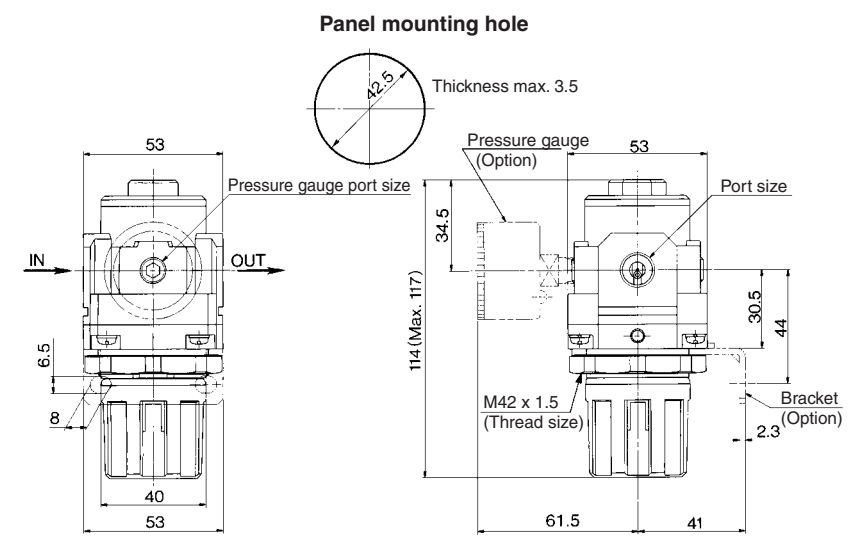
Component Parts

| No. | Description | Material | Note |
|-----|-------------|---------------------|-------------------------|
| ① | Body | Aluminum die-casted | Platinum silver painted |
| ② | Bonnet | Aluminum die-casted | Black painted |

Replacement Parts

| No. | Description | Material | Part no. |
|-----|----------------------|-----------------------|--------------|
| ③ | Diaphragm assembly | Weather resistant NBR | 1315510A |
| ④ | Valve assembly | Brass, HNBR | 1315506A |
| ⑤ | Valve spring | Stainless steel | 1315516-2 |
| ⑥ | Valve mini Y packing | NBR | MYN-5 |
| ⑦ | O-ring | NBR | JIS B 2401P6 |
| ⑧ | O-ring | NBR | 131545 |
| ⑨ | Handle | Polyacetal | 1315513 |
| ⑩ | Set nut | Zinc die-casted | 131532 |

Dimensions

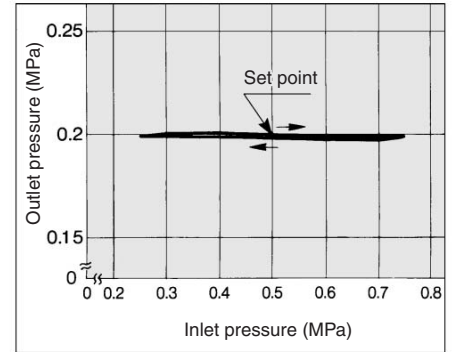


Set nut: Width across flats 50

* For products with pressure gauge, pressure gauge is shipped together with product.

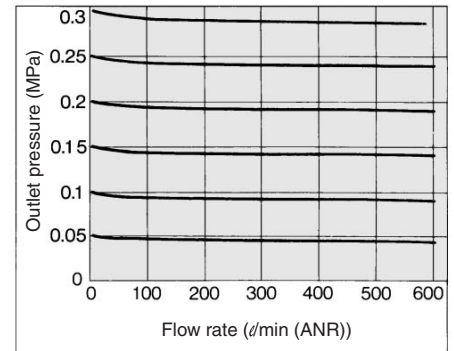
Pressure Characteristics

Inlet pressure: 0.5 MPa
Outlet pressure: 0.2 MPa
Flow rate: 0 l/min (ANR)



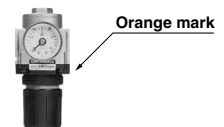
Flow Characteristics

Inlet pressure: 0.7 MPa



⚠ Caution

1. Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the outlet pressure to fluctuate.
 - 1) Pull the adjustment handle to release the lock. (An orange colored line is provided at the bottom of the adjustment handle for visual checking.) Push the adjustment handle to engage the lock. If it does not lock easily, turn the handle slightly clockwise or; then, push it until the orange colored line is no longer visible.



⚠ Precautions

Be sure to read before handling. Refer to pages 14-21-3 to 14-21-4 for Safety Instructions and Common Precautions.

Selection

⚠ Caution

1. Set the output pressure to 90% or less of the inlet pressure. Failure to observe this procedure could result in an excessive pressure drop.

Air Supply

⚠ Warning

1. Use a mist separator on the inlet side. If the air contains drain or debris, it could clog the bleed holes and lead to a malfunction.
2. Do not use a lubricator on the inlet side because it could clog the bleed holes and lead to a malfunction.

- 2) Install the valve guide (on the opposite side of the handle) 60 mm away from the ground surface. Maintenance and inspection will be facilitated.
- 3) Air is normally released from the bleed hole. This is necessary for direct-operated precision regulator construction.
- 4) Please contact SMC if this product is to be used between solenoid valve and actuator.
- 5) Fasten the main body with a set nut tightly and fix it. Recommended torque for set nut: 22.5 ± 4.5 N·m