

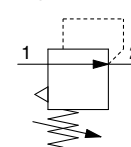
Regulator

AR20-B to AR60-B

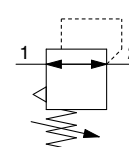
Regulator with Backflow Function

AR20K-B to AR60K-B

Symbol
Regulator



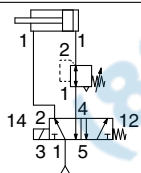
Regulator with
Backflow Function



- With the backflow function, it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

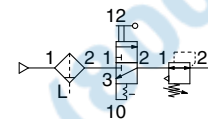
Example 1)

When the pressure in the rear and the front of the cylinder differs:



Example 2)

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.



How to Order

Refer to page 65 for size 10.

AR 30 K - 03 BE - - B -

1
2
3
4
5
6

- Option/Semi-standard: Select one each for **a** to **g**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) AR30K-03BE-1NR-B

- **Made to order**
(Refer to pages 77 to 79 for details.)

| | | Symbol | Description | ① | | | | | | |
|---|------------------------|---------------------------|---------------------------|--|----|----|----|----|----|---|
| | | | | Body size | | | | | | |
| | | | | 20 | 25 | 30 | 40 | 50 | 60 | |
| ② | With backflow function | Nil | Without backflow function | ● | ● | ● | ● | ● | ● | |
| | | K*1 | With backflow function | ● | ● | ● | ● | ● | ● | |
| + | | | | | | | | | | |
| ③ | Pipe thread type | Nil | Rc | ● | ● | ● | ● | ● | ● | |
| | | N | NPT | ● | ● | ● | ● | ● | ● | |
| | | F | G | ● | ● | ● | ● | ● | ● | |
| + | | | | | | | | | | |
| ④ | Port size | 01 | 1/8 | ● | — | — | — | — | — | |
| | | 02 | 1/4 | ● | ● | ● | ● | — | — | |
| | | 03 | 3/8 | — | ● | ● | ● | — | — | |
| | | 04 | 1/2 | — | — | — | ● | — | — | |
| | | 06 | 3/4 | — | — | — | ● | ● | — | |
| | | 10 | 1 | — | — | — | — | ● | ● | |
| + | | | | | | | | | | |
| ⑤ | a | Mounting | Nil | Without mounting option | ● | ● | ● | ● | ● | ● |
| | | | B*3 | With bracket | ● | ● | ● | ● | ● | ● |
| | | | H | With set nut (for panel mount) | ● | ● | ● | ● | — | — |
| | + | | | | | | | | | |
| | b | Pressure gauge*4 | Nil | Without pressure gauge | ● | ● | ● | ● | ● | ● |
| | | | E | Square embedded type pressure gauge (with limit indicator) | ● | ● | ● | ● | ● | ● |
| | | | G | Round type pressure gauge (with limit indicator) | ● | ● | ● | ● | ● | ● |
| | | | M | Round type pressure gauge (with color zone) | ● | ● | ● | ● | ● | ● |
| | | Digital pressure switch*5 | E1 | Output: NPN output, Electrical entry: Wiring bottom entry | ● | ● | ● | ● | ● | ● |
| | | | E2 | Output: NPN output, Electrical entry: Wiring top entry | ● | ● | ● | ● | ● | ● |
| | | | E3 | Output: PNP output, Electrical entry: Wiring bottom entry | ● | ● | ● | ● | ● | ● |
| | | | E4 | Output: PNP output, Electrical entry: Wiring top entry | ● | ● | ● | ● | ● | ● |

Regulator **AR20-B to AR60-B Series**

Regulator with Backflow Function **AR20K-B to AR60K-B Series**



AR20-B, AR20K-B AR40-B, AR40K-B

| | | Symbol | Description | ① | | | | | | |
|---|---|-------------------|-------------|---|------|------|------|------|------|------|
| | | | | Body size | | | | | | |
| | | | | 20 | 25 | 30 | 40 | 50 | 60 | |
| ⑥ | c | Set pressure *6 | Nil | 0.05 to 0.85 MPa setting | ● | ● | ● | ● | ● | ● |
| | | | 1 | 0.02 to 0.2 MPa setting | ● | ● | ● | ● | ● | ● |
| | + | | | | | | | | | |
| | d | Exhaust mechanism | Nil | Relieving type | ● | ● | ● | ● | ● | ● |
| | | | N | Non-relieving type | ● | ● | ● | ● | ● | ● |
| | + | | | | | | | | | |
| | e | Flow direction | Nil | Flow direction: Left to right | ● | ● | ● | ● | ● | ● |
| | | | R | Flow direction: Right to left | ● | ● | ● | ● | ● | ● |
| | + | | | | | | | | | |
| | f | Knob | Nil | Downward | ● | ● | ● | ● | ● | ● |
| | | | Y | Upward | ● | ● | ● | ● | ● | ● |
| | + | | | | | | | | | |
| | g | Pressure unit | Nil | Name plate and pressure gauge in SI units: MPa | ● | ● | ● | ● | ● | ● |
| | | | Z*7 | Name plate and pressure gauge in imperial units: psi | ○*9 | ○*9 | ○*9 | ○*9 | ○*9 | ○*9 |
| | | | ZA*8 | Digital pressure switch: With unit selection function | △*10 | △*10 | △*10 | △*10 | △*10 | △*10 |

*1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.

*2 Options B, G, H, M are not assembled and supplied loose at the time of shipment.

*3 Assembly of a bracket and set nuts (applicable to the AR20(K)-B to AR40(K)-B). Including 2 mounting screws for the AR50(K)-B and AR60(K)-B

*4 When the pressure gauge is attached, a 1.0 MPa pressure gauge will be fitted for standard (0.85 MPa) type. 0.4 MPa pressure gauge for 0.2 MPa type.

*5 When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring top entry" for the electrical entry. (Select "wiring bottom entry" when the semi-standard Y is chosen simultaneously.)

*6 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

*7 For pipe thread type: NPT.

This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)

Cannot be used with M: Round type pressure gauge (with color zone). Available by request for special.

The digital pressure switch will be equipped with the unit selection function, setting to psi initially.

*8 For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Act. (The SI unit is provided for use in Japan.)

*9 ○: For pipe thread type: NPT only

*10 △: Select with options: E1, E2, E3, E4.

Standard Specifications

| Model | AR20-B | AR25-B | AR30-B | AR40-B | AR40-06-B | AR50-B | AR60-B |
|----------------------------------|-------------------------------|----------|----------|---------------|-----------|--------|--------|
| Port size | 1/8, 1/4 | 1/4, 3/8 | 1/4, 3/8 | 1/4, 3/8, 1/2 | 3/4 | 3/4, 1 | 1 |
| Pressure gauge port size *1 | 1/8 | | | | | | |
| Fluid | Air | | | | | | |
| Ambient and fluid temperature *2 | -5 to 60°C (with no freezing) | | | | | | |
| Proof pressure | 1.5 MPa | | | | | | |
| Maximum operating pressure | 1.0 MPa | | | | | | |
| Set pressure range | 0.05 to 0.85 MPa | | | | | | |
| Construction | Relieving type | | | | | | |
| Weight [kg] | 0.16 | 0.21 | 0.29 | 0.44 | 0.47 | 1.17 | 1.22 |

*1 Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge or with a digital pressure switch.

*2 -5 to 50°C for the products with the digital pressure switch