

## Specification

## Valve Specifications: Direct type

| Item                      | Model number | RB542N * HA                                                                       | RB542N * HB                                                                       | RB542N * HD                                                                       | RB542N * HC                                                                       | RB54EN * HD                                                                         | RB54EN * HC                                                                         |
|---------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| JIS symbol                |              |  |  |  |  |  |  |
| Port size                 |              | Rc1/4 · Rc3/8                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Effective sectional area  | Rc1/4        | 37 mm <sup>2</sup>                                                                |                                                                                   |                                                                                   | 35 mm <sup>2</sup>                                                                |                                                                                     |                                                                                     |
|                           | Rc3/8        | 40 mm <sup>2</sup>                                                                |                                                                                   |                                                                                   | 35 mm <sup>2</sup>                                                                |                                                                                     |                                                                                     |
| Working fluid             |              | Air                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Lubrication               |              | Unnecessary                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Working pressure range    |              | 0 to 0.7 MPa                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Proof test pressure       |              | 1 MPa                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Working temperature range |              | − 10 to +80°C (No freezing)                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Recommended lubricant     |              | Additive-free turbine oil ISO VG32 or its equivalent                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Weight                    | kg           | 1.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |

## Valve Specifications: Sub-plate type

| Model number              |       | RB542- * HD                                          | RB542- * HA | RB542- * HB | RB54C- * HD        | RB54C- * HC | RB54E- * HD | RB54E- * HC |
|---------------------------|-------|------------------------------------------------------|-------------|-------------|--------------------|-------------|-------------|-------------|
| JIS symbol                |       |                                                      |             |             |                    |             |             |             |
| Port size                 |       | Rc1/4 · Rc3/8 · Rc1/2                                |             |             |                    |             |             |             |
| Effective sectional area  | Rc1/4 | 40 mm <sup>2</sup>                                   |             |             | 35 mm <sup>2</sup> |             |             |             |
|                           | Rc3/8 | 50 mm <sup>2</sup>                                   |             |             | 40 mm <sup>2</sup> |             |             |             |
|                           | Rc1/2 | 60 mm <sup>2</sup>                                   |             |             | 50 mm <sup>2</sup> |             |             |             |
| Working fluid             |       | Air                                                  |             |             |                    |             |             |             |
| Lubrication               |       | Unnecessary                                          |             |             |                    |             |             |             |
| Working pressure range    |       | 0 to 0.7 MPa                                         |             |             |                    |             |             |             |
| Proof test pressure       |       | 1 MPa                                                |             |             |                    |             |             |             |
| Working temperature range |       | - 10 to +80°C (No freezing)                          |             |             |                    |             |             |             |
| Recommended lubricant     |       | Additive-free turbine oil ISO VG32 or its equivalent |             |             |                    |             |             |             |
| Weight                    | kg    | 1.6                                                  |             |             |                    |             |             |             |

## Manifold Specifications

| Model number            |         | FB54C                              | FB54S               |
|-------------------------|---------|------------------------------------|---------------------|
| Item                    |         |                                    |                     |
| Max. number of stations |         | 10 stations                        |                     |
| Number of stations      |         | 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 |                     |
| Exhaust type            |         | Common exhaust type                | Single exhaust type |
| Port size               | P·R1·R2 | Rc3/8·Rc1/2·Rc3/4                  |                     |
|                         | A·B     | Rc1/4·Rc3/8·Rc1/4                  |                     |

## Manifold Weight

Unit: kg

| Model number        | 2   | 3   | 4   | 5   | 6   | 7   | 8    | 9    | 10   |
|---------------------|-----|-----|-----|-----|-----|-----|------|------|------|
| Name                |     |     |     |     |     |     |      |      |      |
| Common exhaust type | 4.0 | 5.1 | 6.2 | 7.3 | 8.4 | 9.5 | 10.6 | 11.7 | 12.8 |
| Single exhaust type |     |     |     |     |     |     |      |      |      |

Note) Add the weight of the manifold type valve to the weight of the manifold.

## Weight of Valves for Manifold

Unit: kg

| Model number                                                                      | Weight |
|-----------------------------------------------------------------------------------|--------|
| RB542M*HD · RB542M*HA · RB542M*HB · RB54CM*HD · RB54CM*HC · RB54EM*HD · RB54EM*HC | 1.1    |

## How to Order

### How to order valve only

#### Direct type



RB54 2 N 2 HD

Series

#### Sub-plate type



RB54 2 - 2 HD

Series

#### Switching type

| Symbol | Switching type            |
|--------|---------------------------|
| 2      | 2-position                |
| C      | 3-position closed center  |
| E      | 3-position exhaust center |

#### Port size

| Symbol         | Port size |
|----------------|-----------|
| Direct type    |           |
| 2              | Rc1/4     |
| 3              | Rc3/8     |
| Sub-plate type |           |
| 2              | Rc1/4     |
| 3              | Rc3/8     |
| 4              | Rc1/2     |

#### Operating type

| Symbol | Operating type          |
|--------|-------------------------|
| HD     | Detent                  |
| HA     | Spring return extended  |
| HB     | Spring return retracted |
| HC     | Spring center           |

Notes) ● Spring return extended and spring return retracted valves come only in the 2-position type.  
● Spring center valves come only in the 3-position type.

## ■How to order manifold

FB54 C 03 02 - 04

Series

### • Exhaust type

| Symbol | Exhaust type            |
|--------|-------------------------|
| C      | Common exhaust manifold |
| S      | Single exhaust manifold |

### • Port size

| Symbol | Ports P, R <sub>1</sub> , and R <sub>2</sub> |
|--------|----------------------------------------------|
| 03     | Rc3/8                                        |
| 04     | Rc1/2                                        |
| 06     | Rc3/4                                        |

### • Port size

| Symbol | Ports A and B |
|--------|---------------|
| 02     | Rc1/4         |
| 03     | Rc3/8         |
| 04     | Rc1/2         |

Note) For the port size Rc1/2, only 04 and 06 can be specified as the symbol of ports P, R<sub>1</sub>, and R<sub>2</sub>.

### • No. of manifold stations

| Symbol | No. of stations |
|--------|-----------------|
| 02     | 2 stations      |
| 03     | 3 stations      |
| 04     | 4 stations      |
| 05     | 5 stations      |
| 06     | 6 stations      |
| 07     | 7 stations      |
| 08     | 8 stations      |
| 09     | 9 stations      |
| 10     | 10 stations     |

## ■How to order valve for manifold

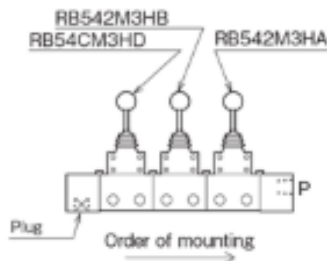
RB54 2 M 2 HD

Diameter of ports A and B  
2: Rc1/4, 3: Rc3/8, 4: Rc1/2

Note) Enter the same port diameter as the diameter of ports A and B of the manifold.

Note) For details, see "How to order valve only."

## ■How to order manifold



|                 |      |
|-----------------|------|
| • Manifold body | Qty. |
| FB54CD403-03    | 1    |
| • Valve block   | Qty. |
| RB54CM3HD       | 1    |
| RB542M3HB       | 1    |
| RB542M3HA       | 1    |

Note) Assemble the valves from left to right with port P on the right.