

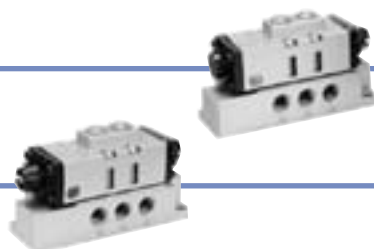
Best 1 Pneumatics Transmitters

Relay valve P. 1900

Dimensions
Side piping: 30 x 53 x 91
Bottom piping: 30 x 48 x 91

VR4151

VR4152



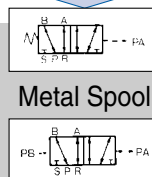
Effective area
(mm²)

Number
of ports

Function

7

5

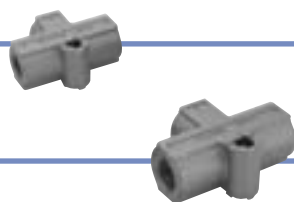


Shuttle valve P. 1902

Dimensions
VR1210: 17.2 x 38 x 29
VR1220: 21.2 x 50 x 38

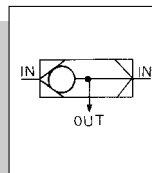
VR1210

VR1220



7

3

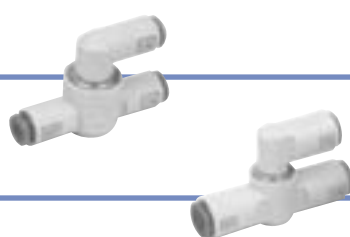


Shuttle valve P. 1903

Dimensions 71.6 x 44.8

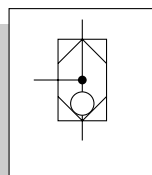
VR1210F

VR1220F



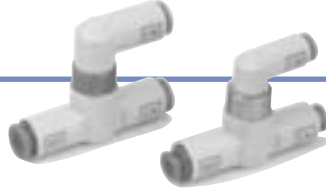
7.3

3



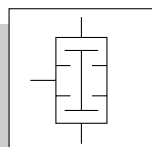
AND valve P. 1905

VR1211F



2.6

3



Time delay valve P. 1907

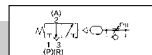
Dimensions 70 x 68 x 66

VR2110



2.5

3

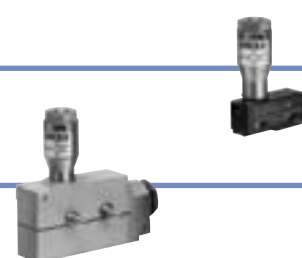


Pneumatic-electric relay P. 1909

Dimensions
VR3200: 17 x 49 x 71
VR3201: 25 x 86 x 89

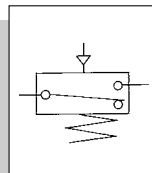
VR3200

VR3201



—

—



Pneumatic indicator P. 1911

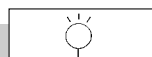
Dimensions ø26 x 66

VR3100



—

—



Miniature pneumatic indicator P. 1911

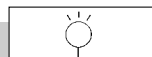
Dimensions ø12 x 17

VR3110



—

—



Transmitters: Relay Valve

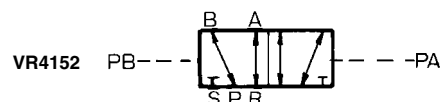
RoHS

Series VR4151/4152

Appropriate output sequences are affected according to the signal received from the mechanical valve. It is equivalent to the auxiliary relay of an electrical system.



JIS Symbol



⚠ Precautions

Be sure to read before handling. Refer to front matters 58 and 59 for Safety Instructions and pages 3 to 7 for 3/4/5 Port Solenoid Valve Precautions.

Environment

⚠ Caution

Operate the valve in an area in which the vibration does not exceed 5 G. Vibrations could cause the valve to malfunction.

Specifications

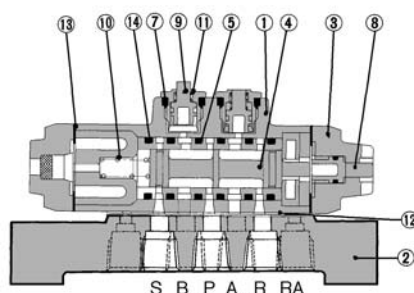
| | | |
|-------------------------------|---|-------|
| Fluid | Air | |
| Operating pressure | 0 to 1.0 MPa | |
| Pilot pressure | 0.15 to 1.0 MPa | |
| Ambient and fluid temperature | -5 to 60°C (No freezing) | |
| Effective area | 1/8 : 7mm ² | |
| Port size | 1/8 | |
| Mass | Side ported | 350 g |
| | Bottom ported | 300 g |
| Lubrication | Not required (Use turbine oil Class 1 ISO VG32, if lubricated.) | |

Model

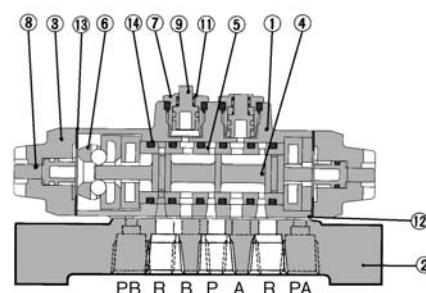
| Function | Sub-plate | Model | Indicator |
|--------------|---------------|--------------|-----------|
| Single pilot | W/o sub-plate | VR4151-00-0 | |
| | | VR4151-00-1 | ○ |
| | W/ sub-plate | VR4151-01A-0 | |
| | | VR4151-01A-1 | ○ |
| | | VR4151-01B-0 | |
| Double pilot | W/o sub-plate | VR4151-01B-1 | ○ |
| | | VR4152-00-0 | |
| | W/ sub-plate | VR4152-00-1 | ○ |
| | | VR4152-01A-0 | |
| | | VR4152-01A-1 | ○ |
| | W/ sub-plate | VR4152-01B-0 | |
| | | VR4152-01B-1 | ○ |

Construction

VR4151



VR4152



Component Parts

| No. | Description | Material | No. | Description | Material |
|-----|-----------------|-----------------|-----|---------------|-----------------|
| 1 | Valve | ADC | 8 | Manual button | PE |
| 2 | Sub-plate | ZDC | 9 | Piston | PE |
| 3 | Pilot cover | ADC | 10 | Spring | Steel |
| 4 | Spool | Stainless steel | 11 | Spring | Stainless steel |
| 5 | Sleeve | Stainless steel | 12 | Gasket | NBR |
| 6 | Detent assembly | | 13 | Gasket | NBR |
| 7 | Piston cover | Brass | 14 | O-ring | NBR |

How to Order

VR41 5 1 - 01 A - 1

- Indicator light**

| | |
|---|-----|
| 0 | No |
| 1 | Yes |
- Sub-plate**

| | |
|---|---------------|
| A | Side piping |
| B | Bottom piping |
- Port size**

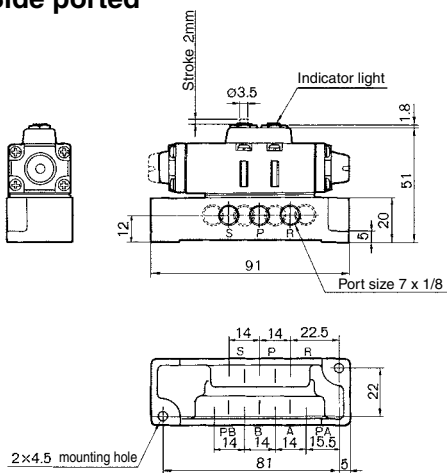
| | |
|-----|---------------|
| 00 | W/o sub-plate |
| 01 | Rc 1/8 |
| N01 | NPT 1/8 |
| F01 | G 1/8 |
- Number of pilot ports**

| | |
|---|--------------|
| 1 | Single pilot |
| 2 | Double pilot |
- Number of ports**

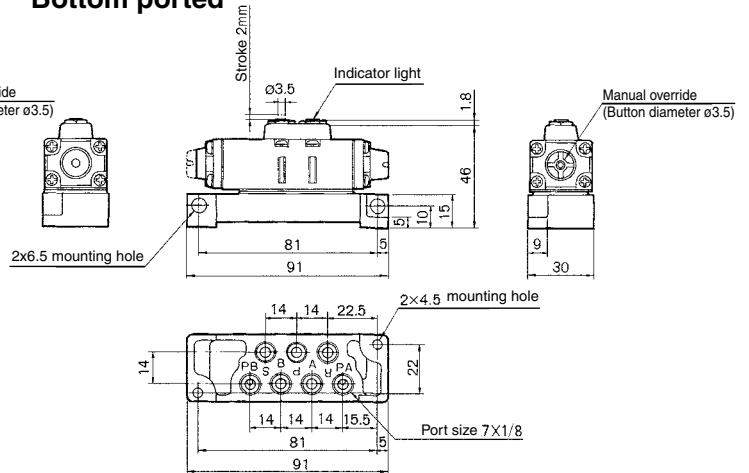
| | |
|---|--------|
| 5 | 5 port |
|---|--------|

Dimensions

Side ported



Bottom ported



VM□

VMG

VR□

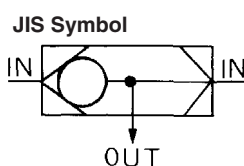
VH□

Transmitters: Shuttle Valve

RoHS

Series VR1210/1220

3 ported check valve with one output and 2 pneumatic signal input ports. Output always supplied by high pressure inlet.



Model/Specifications

| Model | VR1210-01 | VR1220-02 |
|-------------------------------|--------------------------|-------------------|
| Max. operating pressure | 1.0 MPa | |
| Min. operating pressure | 0.05 MPa | |
| Min. pressure differential | 0.05 MPa | |
| Ambient and fluid temperature | -5 to 60°C (No freezing) | |
| Effective area | 7mm ² | 15mm ² |
| Port size | 1/8 | 1/4 |
| Mass | 24 g | 45 g |

How to Order

VR12 **1** 0 - **01**

| Port size | Applicable model |
|-----------|------------------|
| 01 1/8 | VR 1210 |
| 02 1/4 | VR 1220 |

Thread type

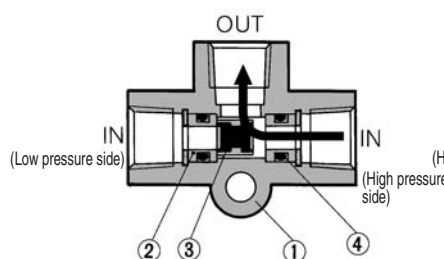
| | |
|-----|-----|
| Nil | Rc |
| N | NPT |
| F | G |

Body size

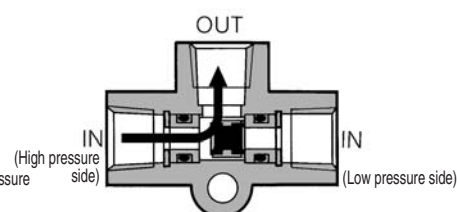
| | |
|---|--------------|
| 1 | 1/8 standard |
| 2 | 1/4 standard |

Construction

When right port has higher pressure



When left port has higher pressure

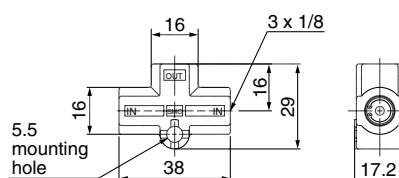


Component Parts

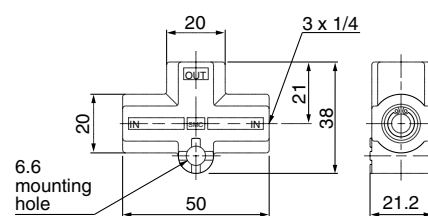
| No. | Description | Material | Note |
|-----|-------------|------------|-----------------|
| 1 | Body | ADC | Platinum silver |
| 2 | Valve seat | Brass | |
| 3 | Valve | Brass, NBR | |
| 4 | O-ring | NBR | |

Dimensions

VR1210



VR1220



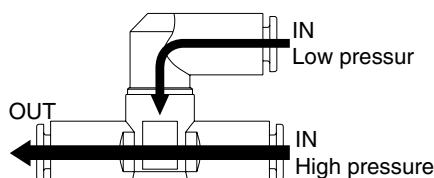
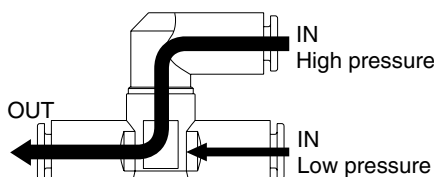
Transmitters: Shuttle Valve with One-touch Fittings Series *VR1210F/1220F*

RoHS

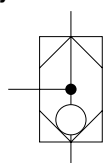
Relay valves for controlling pneumatic signal lines



The air of higher pressure side constantly flows to the OUT side.



JIS Symbol



Model

| Model | Applicable tubing O.D. | | | | | | | | | |
|---------|------------------------|---|---|---|----|-----------|-------|------|-------|------|
| | Metric size | | | | | Inch size | | | | |
| | 3.2 | 4 | 6 | 8 | 10 | 1/8" | 5/32" | 1/4" | 5/16" | 3/8" |
| VR1210F | ● | ● | ● | ● | | ● | ● | ● | ● | |
| VR1220F | | | ● | ● | ● | | | ● | ● | ● |

Specifications

| | |
|---|---------------------------------|
| Proof pressure | 1.5 MPa |
| Max. operating pressure | 1.0 MPa |
| Min. operating pressure | 0.05 MPa |
| Ambient and fluid temperature | −5 to 60°C (No freezing) |
| Applicable tubing material ⁽¹⁾ | Nylon, Soft nylon, Polyurethane |

Note 1) Use caution about the maximum operating pressure when soft nylon and polyurethane is used. (Refer to Best Pneumatics No. 6.)

Note 2) Brass components are all electroless nickel plated as standard.
(Copper-free and fluorine-free)

Flow Rate and Effective Area

| Model | | VR1210F | | | | VR1220F | | |
|------------------------|-----------------------------------|---------|--------|-------|--------|---------|--------|-------|
| Applicable tubing O.D. | Metric size | ø3.2 | ø4 | ø6 | ø8 | ø6 | ø8 | ø10 |
| | Inch size | ø1/8" | ø5/32" | ø1/4" | ø5/16" | ø1/4" | ø5/16" | ø3/8" |
| IN → OUT | Flow rate ℓ/min (ANR) | 150 | 210 | 420 | 480 | 440 | 680 | 1000 |
| | Effective area (mm ²) | 2.3 | 3.2 | 6.4 | 7.3 | 6.7 | 10.4 | 15.2 |

Note) Flow rate is the value measured under a pressure of 0.5 MPa and a temperature of 20°C.

How to Order

VR 12 1 0 F - 06

Body size

| | |
|---|--------------|
| 1 | 1/8 standard |
| 2 | 1/4 standard |

Shuttle valve

With One-touch fittings

Applicable tubing O.D.

| Metric size | | Inch size | |
|-------------|--------|-----------|--------|
| 23 | ø3.2 * | 01 | ø1/8" |
| 04 | ø4 | 03 | ø5/32" |
| 06 | ø6 | 07 | ø1/4" |
| 08 | ø8 | 09 | ø5/16" |
| 10 | ø10 | 11 | ø3/8" |

* For ø3.2, use ø1/8" tubing.

VM ☐

VMG ☐

VR ☐

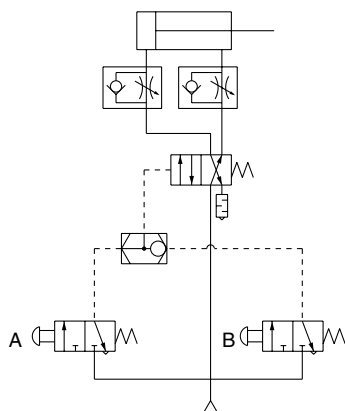
VH ☐

Series VR1210F/1220F

Example of Operating Circuit

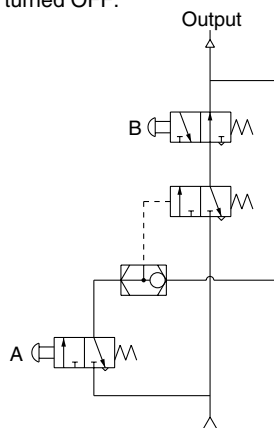
OR circuit

- If either A or B is turned ON, cylinder is actuated.



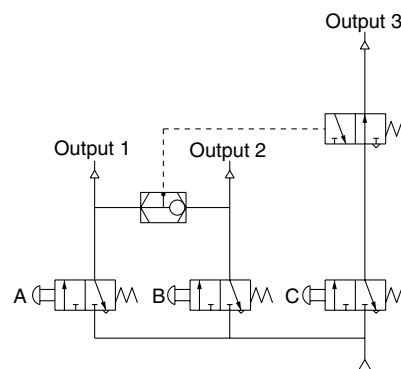
Self-hold circuit

- If A is turned ON, the output turns ON.
- Even though A is turned OFF, the output remains in ON state.
- If B is turned ON in 2. state, the output is turned OFF.

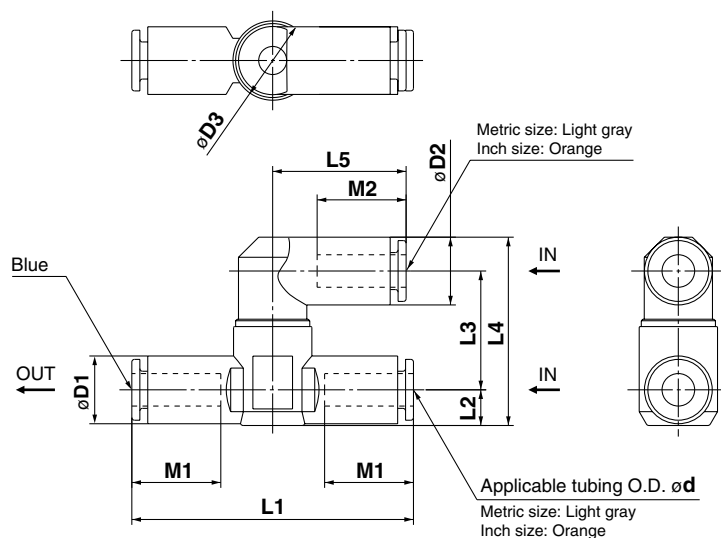


Interlock circuit

- When either A or B is turned ON, even though C turns ON, the output 3 will not be turned ON.
- Only when both A and B are in OFF state, if C turns ON, the output 3 is turned ON.



Dimensions



Metric Size

| Model | d | D1 | D2 | D3 | L1 | L2 | L3 | L4 | L5 | M1 | M2 | Mass (g) |
|------------|-----|------|------|------|------|-----|------|------|------|------|------|----------|
| VR1210F-23 | 3.2 | 11.4 | 8.4 | | 52 | 6.2 | 19.4 | 29.8 | 17.5 | 12.7 | 12.9 | 21.4 |
| VR1210F-04 | 4 | 11 | 10.4 | 14.8 | 53 | 6 | 20.3 | 31.5 | 21.9 | 16.5 | 15.8 | 15.6 |
| VR1210F-06 | 6 | 12.8 | 12.8 | | 53.2 | 6.8 | 22.5 | 35.6 | 25.2 | 16.8 | 16.8 | 23.0 |
| VR1210F-08 | 8 | 15.2 | 15.2 | | 60.4 | 8.1 | | 38.2 | 28.2 | 18.7 | 18.7 | 24.0 |
| VR1220F-06 | 6 | 12.8 | 12.8 | | 59 | 7.4 | 23.9 | 37.7 | 25.2 | 16.8 | 16.8 | 27.2 |
| VR1220F-08 | 8 | 15.2 | 15.2 | 19.8 | 65 | 8.2 | | 39.7 | 28.2 | 18.7 | 18.7 | 31.9 |
| VR1220F-10 | 10 | 18.5 | 18.5 | | 71.6 | 9.8 | 25.8 | 44.8 | 31 | 20.8 | 20.8 | 43.2 |

Inch Size

| Model | d | D1 | D2 | D3 | L1 | L2 | L3 | L4 | L5 | M1 | M2 | Mass (g) |
|------------|-------|------|------|------|------|-----|------|------|------|------|------|----------|
| VR1210F-01 | 1/8" | 11.4 | 8.4 | | 52 | 6.2 | 19.4 | 29.8 | 17.5 | 12.7 | 12.9 | 21.4 |
| VR1210F-03 | 5/32" | 11 | 10.4 | 14.8 | 53 | 6 | 20.3 | 31.5 | 21.9 | 16.5 | 15.8 | 15.6 |
| VR1210F-07 | 1/4" | 13.2 | 13.2 | | 54.4 | 7.1 | 22.5 | 36.2 | 25.6 | 16.8 | 16.8 | 23.5 |
| VR1210F-09 | 5/16" | 15.2 | 15.2 | | 60.4 | 8.1 | | 38.2 | 28.2 | 18.7 | 18.7 | 24.0 |
| VR1220F-07 | 1/4" | 13.2 | 13.2 | | 59 | 7.4 | 23.9 | 37.9 | 25.6 | 16.8 | 16.8 | 31.4 |
| VR1220F-09 | 5/16" | 15.2 | 15.2 | 19.8 | 65 | 8.2 | | 39.7 | 28.2 | 18.7 | 18.7 | 31.9 |
| VR1220F-11 | 3/8" | 17.9 | 18.5 | | 69.8 | 9.5 | 25.8 | 44.5 | 31 | 20.8 | 20.8 | 53.0 |

Transmitters: AND Valve with One-touch Fittings Series **VR1211F**

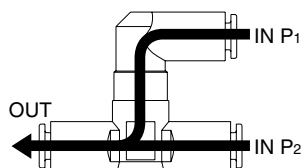
RoHS

Relay valves for controlling pneumatic signal lines

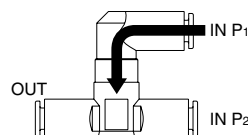
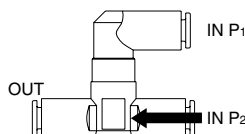


Only when air is supplied to both P₁ and P₂ does air flow to the OUT side.

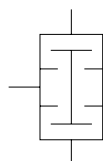
When air pressure differs, pressure in the lower amount flows to the OUT side.



If air is supplied only to either P₁ or P₂, it does not flow to the OUT side.



JIS Symbol



Model

| Model | Applicable tubing O.D. | | | | | |
|---------|------------------------|---|---|-----------|-------|------|
| | Metric size | | | Inch size | | |
| | 3.2 | 4 | 6 | 1/8" | 5/32" | 1/4" |
| VR1211F | ● | ● | ● | ● | ● | ● |

Specifications

| | |
|---|---------------------------------|
| Proof pressure | 1.5 MPa |
| Max. operating pressure | 1.0 MPa |
| Min. operating pressure | 0.05 MPa |
| Ambient temperature and operating fluid temperature | −5 to 60°C (No freezing) |
| Applicable tubing material ⁽¹⁾ | Nylon, Soft nylon, Polyurethane |

Note 1) Use caution about the maximum operating pressure when soft nylon and polyurethane is used. (Refer to Best Pneumatics No. 6.)

Note 2) Brass components are all electroless nickel plated as standard.
(Copper-free and fluorine-free)

Flow Rate and Effective Area

| Model | | VR1211F | | | |
|------------------------|-----------------------------------|---------|--------|-----|-------|
| Applicable tubing O.D. | Metric size | ø3.2 | ø4 | ø6 | — |
| | Inch size | ø1/8" | ø5/32" | — | ø1/4" |
| IN→OUT | Flow rate ℓ/min (ANR) | 100 | 120 | 150 | 170 |
| | Effective area (mm ²) | 1.5 | 1.8 | 2.3 | 2.6 |

Note) Flow rate is the value measured under a pressure of 0.5 MPa and a temperature of 20°C.

How to Order

VR 12 1 1 F - 06

Body size

1 1/8 standard

AND valve

With One-touch fittings

Applicable tubing O.D.

Metric size

| | |
|----|--------|
| 23 | ø3.2 * |
| 04 | ø4 |
| 06 | ø6 |

Inch size

| | |
|----|--------|
| 01 | ø1/8" |
| 03 | ø5/32" |
| 07 | ø1/4" |

* For ø3.2, use ø1/8" tubing.

VM□

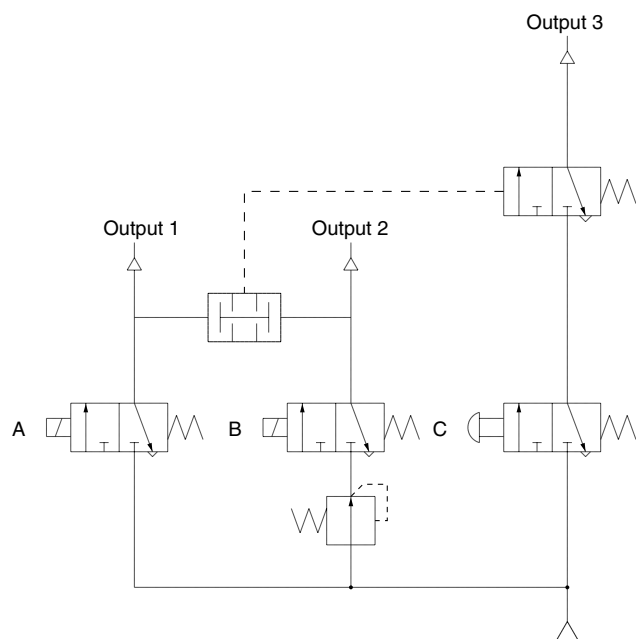
VMG

VR□

VH□

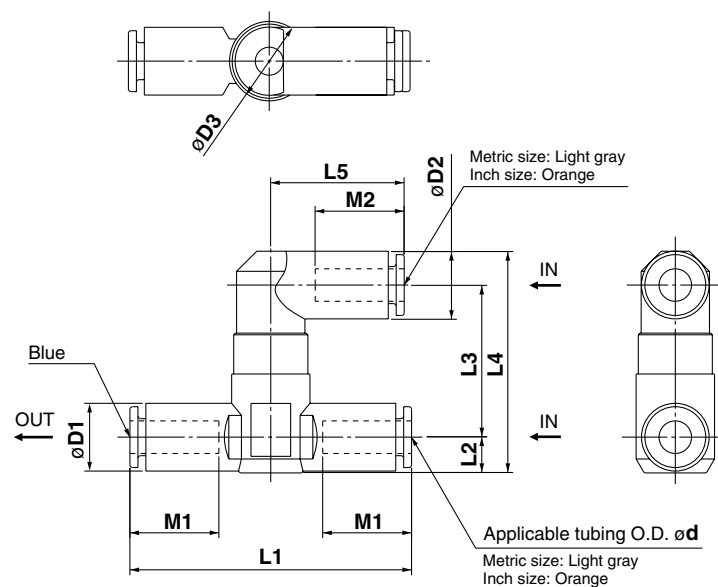
Series VR1211F

Example of Operating Circuit



- If both A and B are turned ON, which are in different pressure conditions, both output 1 and 2 will turn ON
- Only when output 1 and 2 are in the ON state, and C turns ON, will output 3 turn ON.
- If either A or B is turned OFF, output 3 will not be turned ON, even if C is turned ON.

Dimensions



Metric Size

| Model | d | D1 | D2 | D3 | L1 | L2 | L3 | L4 | L5 | M1 | M2 | Mass (g) |
|------------|-----|------|------|------|------|-----|------|------|------|------|------|----------|
| VR1211F-23 | 3.2 | 11.4 | 8.4 | | 52 | 6.2 | 25.7 | 36.1 | 17.5 | 12.7 | 12.9 | 26.4 |
| VR1211F-04 | 4 | 11 | 10.4 | 14.8 | 53 | 6.8 | 26.6 | 37.8 | 21.9 | 16.5 | 15.8 | 20.8 |
| VR1211F-06 | 6 | 12.8 | 12.8 | | 53.2 | | 28.8 | 41.9 | 25.2 | 16.8 | 16.8 | 25.0 |

Inch Size

| Model | d | D1 | D2 | D3 | L1 | L2 | L3 | L4 | L5 | M1 | M2 | Mass (g) |
|------------|-------|------|------|------|------|-----|------|------|------|------|------|----------|
| VR1211F-01 | 1/8" | 11.4 | 8.4 | | 52 | 6.2 | 25.7 | 36.1 | 17.5 | 12.7 | 12.9 | 26.4 |
| VR1211F-03 | 5/32" | 11 | 10.4 | 14.8 | 53 | 6.8 | 26.6 | 37.8 | 21.9 | 16.5 | 15.8 | 20.8 |
| VR1211F-07 | 1/4" | 13.2 | 13.2 | | 54.4 | 7.1 | 28.8 | 42.5 | 25.6 | 16.8 | 16.8 | 27.0 |

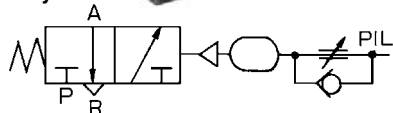
Transmitters: Time Delay Valve Series VR2110

RoHS

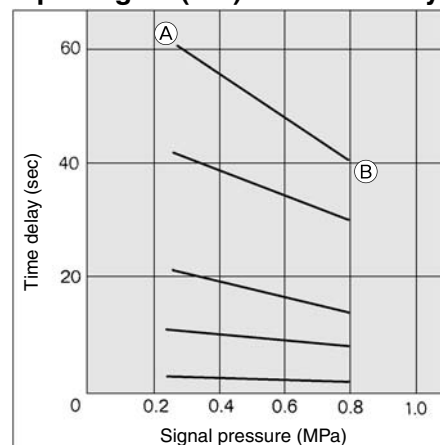
Combination of adjustable orifice and fixed flow allows transmission of a pneumatic signal after a fixed time period.



JIS Symbol

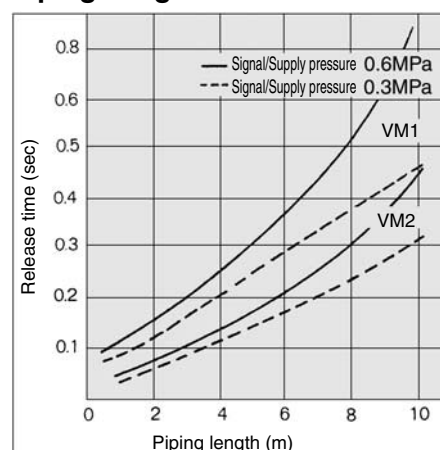


Input Signal (PIL) vs. Time Delay



Example) (A) is the point, which is set by the input signal pressure 0.25 MPa, with a delay time of 60 sec. With the same status, if the input signal pressure is increased to 0.8 MPa, the delay time varies to the (B) point (= 40 sec).

Piping Length vs. Release Time



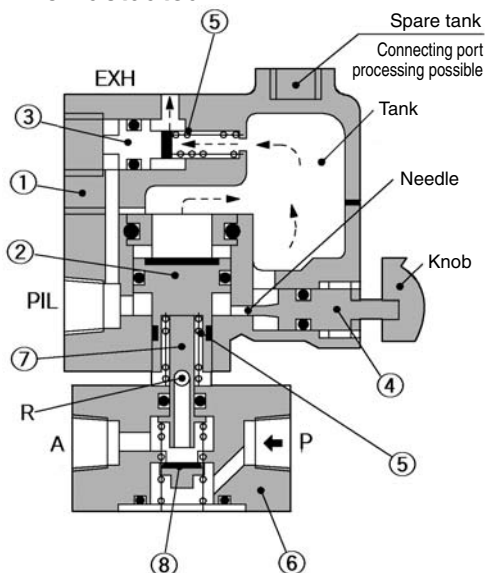
If the input signal (PIL) is turned OFF, the release time of the time delay valve changes depending upon the effective area of the valve and the length of piping. Please refer to the above graph for the standard values.

Model/Specifications

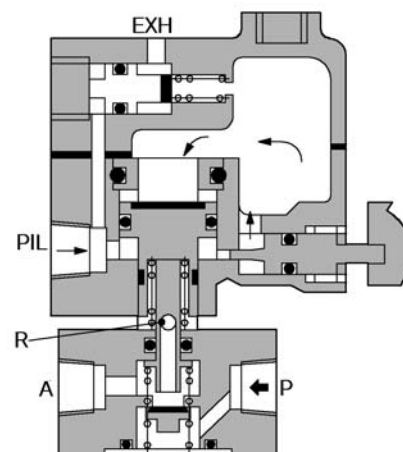
| Model | VR2110-01 |
|---------------------------------|--------------------------|
| Supply pressure | 0 to 1.0 MPa |
| Signal pressure | 0.25 to 0.8 MPa |
| Time delay | 0.5 to 60 s |
| Repeatability | ±10% F.S. |
| Operating and fluid temperature | -5 to 60°C (No freezing) |
| Effective area | 2.5 mm ² |
| Port size | 1/8 |
| Mass | 500 g |

Construction

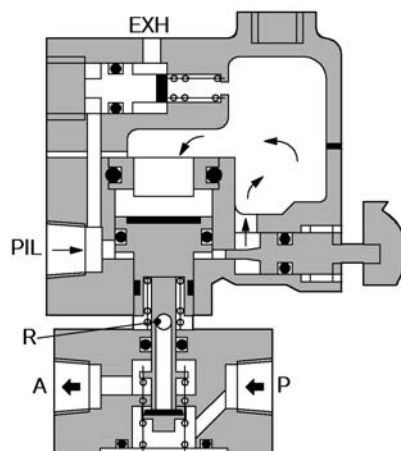
Non-actuated



Actuated before time set



Actuated after time set



Component Parts

| No. | Description | Material | Note | No. | Description | Material | Note |
|-----|-------------|------------|-----------------|-----|-------------|-----------------|-----------------|
| 1 | Body | ADC | Platinum silver | 5 | Spring | Steel | |
| 2 | Piston | Brass, NBR | Rubber lined | 6 | Body | ZDC | Platinum silver |
| 3 | Piston | Brass, NBR | Rubber lined | 7 | Plunger | Stainless steel | |
| 4 | Needle | Brass | | 8 | Valve | Brass, NBR | Rubber lined |

How to Order

VR2110 - **01** -

Option

| | |
|-------------|---|
| X3 | Secondary tank connection board Rc 1/4 |
| X102 | N.O. N.C. common type (With VM430) |

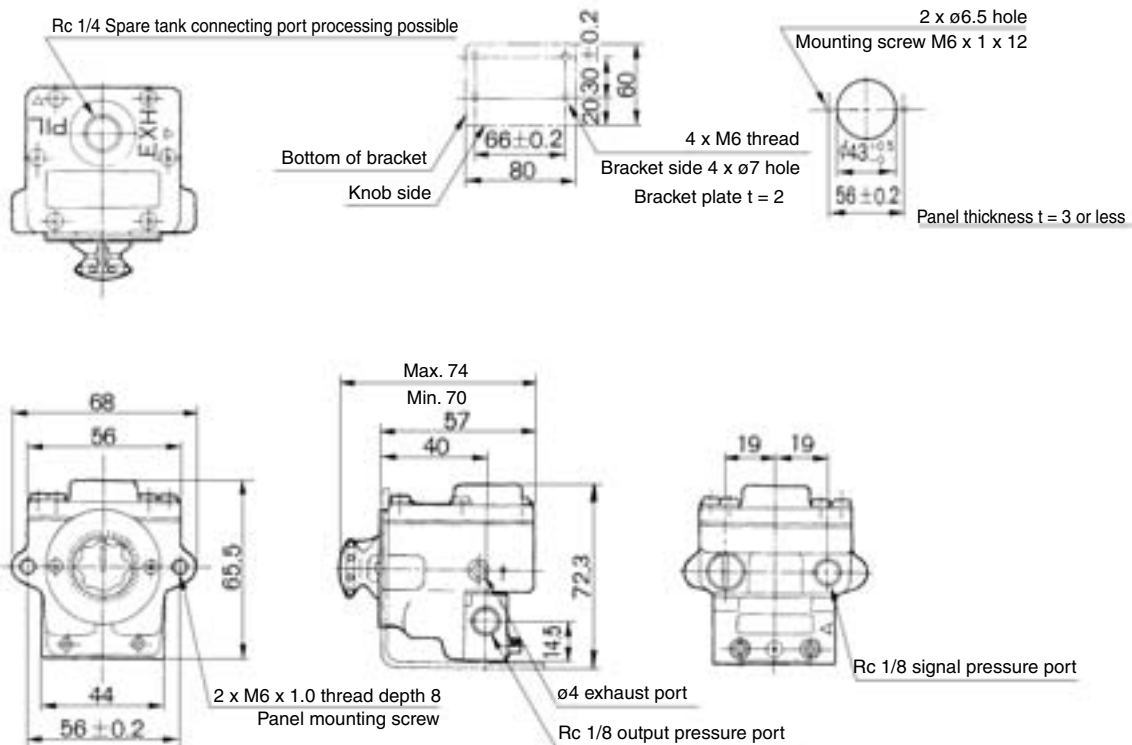
Port size

| | |
|------------|---------|
| 01 | Rc 1/8 |
| N01 | NPT 1/8 |
| F01 | G 1/8 |

Dimensions

Bracket mounted

Panel mounted



Transmitters: Pneumatic-electric Relay

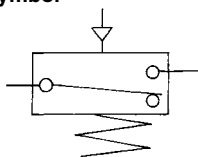
CE [Option] RoHS

Series VR3200/3201

Pneumatic-electric relay converts pneumatic signal to electric relay.



JIS Symbol



Model/Specifications

| Model | VR3200-01 | VR3201-01 |
|-------------------------------|---------------------------------------|-------------------------------|
| Construction | Open type | Splashproof (IP44 equivalent) |
| Weight | 130 g | 260 g |
| Operating pressure | 0.1 to 1.0 MPa | |
| Ambient and fluid temperature | -5 to 60°C (No freezing) | |
| Contacts | 1ab | |
| Port size | 1/8 | |
| Standard (CE-compliant) | EN60947-5-1:2004 <small>Note)</small> | |

Note) Voltage is up to 30 VDC. Voltage other than that will be inapplicable.

Microswitch Rating

| Voltage | Non-inductive load (A) | | | | Inductive load (A) | | | |
|---------|------------------------|------|------------|------|--------------------|------|---------------------|------|
| | Resistance load | | Light load | | Inductive load | | Electric motor load | |
| | N.C. | N.O. | N.C. | N.O. | N.C. | N.O. | N.C. | N.O. |
| 125 VAC | 15 | 15 | 3 | 1.5 | 15 | 15 | 5 | 2.5 |
| 250 VAC | 15 | 15 | 2.5 | 1.25 | 15 | 15 | 3 | 1.5 |
| 8 VDC | 15 | 15 | 3 | 1.5 | 15 | 15 | 5 | 2.5 |
| 14 VDC | 15 | 15 | 3 | 1.5 | 10 | 10 | 5 | 2.5 |
| 30 VDC | 6 | 6 | 3 | 1.5 | 5 | 5 | 5 | 2.5 |
| 125 VDC | 0.5 | 0.5 | 0.5 | 0.5 | 0.05 | 0.05 | 0.05 | 0.05 |
| 250 VDC | 0.25 | 0.25 | 0.25 | 0.25 | 0.03 | 0.03 | 0.03 | 0.03 |

How to Order

VR320

| | | | | |
|---|---|----|---|--|
| 0 | - | 01 | - | |
|---|---|----|---|--|

- CE-compliant

| | |
|-----|--------------|
| Nil | — |
| Q | CE-compliant |
- Port size

| | |
|-----|---------|
| 01 | Rc 1/8 |
| N01 | NPT 1/8 |
| F01 | G 1/8 |
- Construction

| | |
|---|-------------------------------|
| 0 | Open type |
| 1 | Splashproof (IP44 equivalent) |

⚠ Precautions

Be sure to read before handling. Refer to front matters 58 and 59 for Safety Instructions and pages 3 to 7 for 3/4/5 Port Solenoid Valve Precautions.

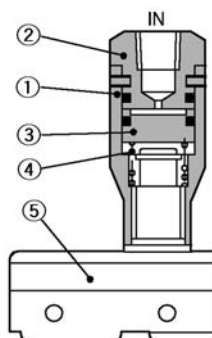
Piping

⚠ Warning

When connecting a pipe fitting to the IN port, place the wrench over the hexagon portion of the lid.

If the wrench is placed over the microswitch body, the neck of the microswitch could break.

Construction



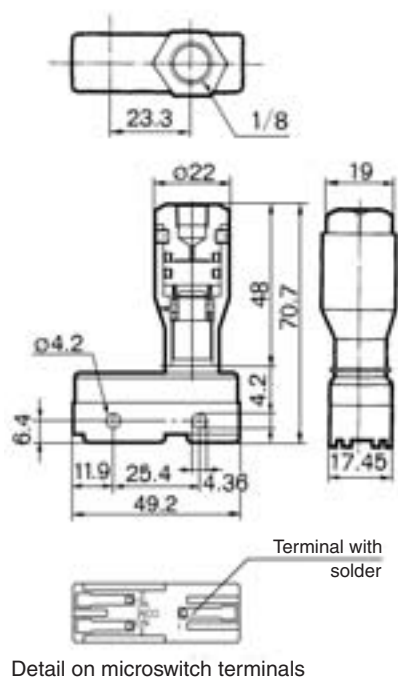
Component Parts

| No. | Description | Material | Note | No. | Description | Material | Note |
|-----|-------------|----------|------|-----|-------------|-----------------|---------------|
| 1 | Body | Brass | | 4 | Spring | Stainless steel | |
| 2 | Cap | Brass | | 5 | Microswitch | | Contacts 1 ab |
| 3 | Piston | POM | | | | | |

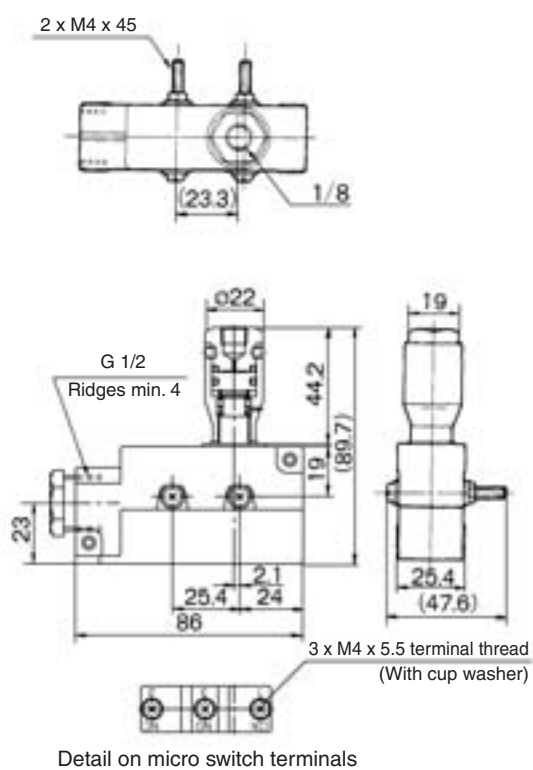
Series VR3200/3201

Dimensions

VR3200



VR3201



Transmitters: Pneumatic Indicator Series *VR3100*

RoHS

Indicates the presence of pneumatic pressure. It is equivalent to the pilot lamp of an electrical system.



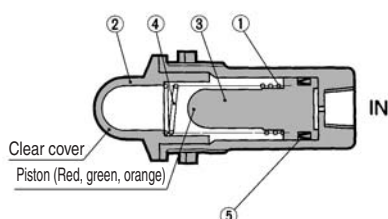
JIS symbol



Model/Specifications

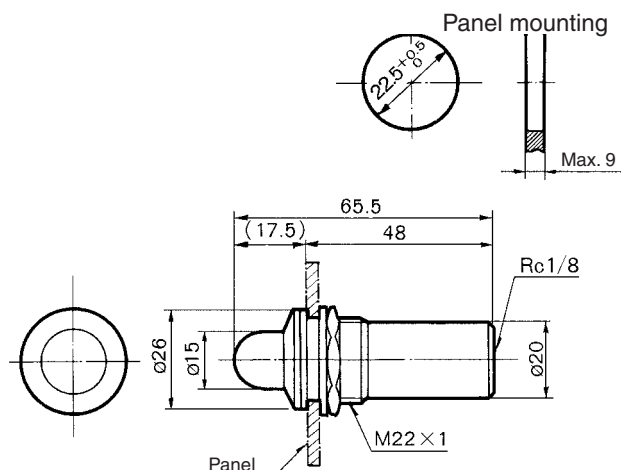
| Model | VR3100-01R | VR3100-01G | VR3100-01O |
|-------------------------|--------------------------|------------|------------|
| Operating pressure | 0.1 to 0.8 MPa | | |
| Ambient and fluid temp. | -5 to 60°C (No freezing) | | |
| Frequency | 100 c.p.m. or less | | |
| Color of indicator | Red | Green | Orange |
| Port size | Rc 1/8 | | |
| Mass | 40g | | |

Construction



| No. | Description | Material | Note |
|-----|-------------------------|-----------------|------|
| 1 | Body | Aluminum alloy | |
| 2 | Indicator window | Acrylic | |
| 3 | Piston | POM | |
| 4 | Spring | Stainless steel | |
| 5 | Seal | NBR | |

Dimensions



Transmitters: Miniature Pneumatic Indicator Series *VR3110*

RoHS

This is an ultra-compact air indicator light to monitor the presence of air pressure. It is equivalent to the pilot lamp of an electrical system.



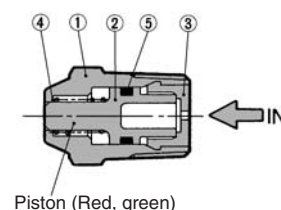
JIS symbol



Model/Specifications

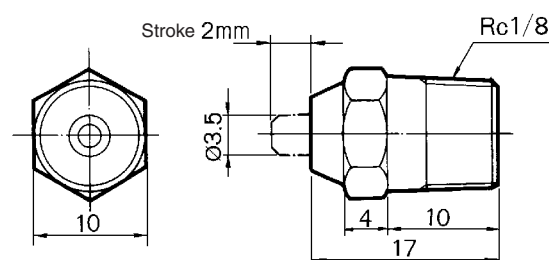
| Model | VR3110-01R | VR3110-01G |
|-------------------------|--------------------------|------------|
| Color of indicator | Red | Green |
| Operation | Piston style | |
| Operating pressure | 0.15 to 1.0 MPa | |
| Ambient and fluid temp. | -5 to 60°C (No freezing) | |
| Frequency | 300 c.p.m. or less | |
| Port size | R 1/8 | |
| Mass | 6g | |

Construction



| No. | Description | Material | Note |
|-----|-----------------|-----------------|------|
| 1 | Body | Brass | |
| 2 | Piston A | POM | |
| 3 | Plug | PE | |
| 4 | Spring | Stainless steel | |
| 5 | O-ring | NBR | |

Dimensions



VM□

VMG

VR□

VH□