

# Shuttle Valve

## Series **VR1210/1220**

### Features

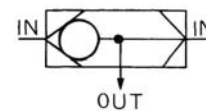
- ➔ 3 ported check valve with one output and 2 pneumatic signal input ports.
- ➔ Output always supplied by higher pressure inlet.



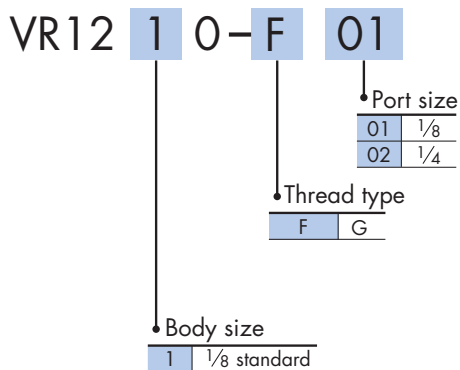
### Specifications

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	7 mm <sup>2</sup>	15 mm <sup>2</sup>
Port size	1/8	1/4
Weight	24 g	45 g

### Symbol

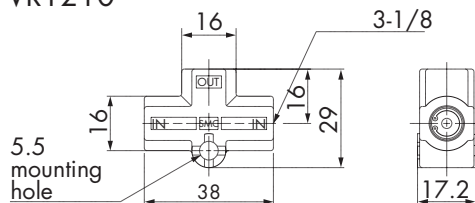


### How to Order

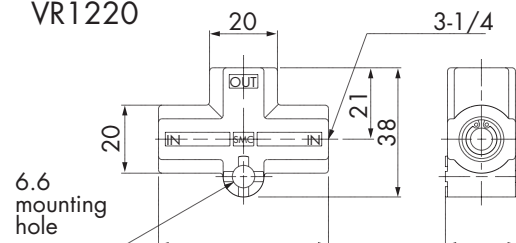


### Dimensions

VR1210



VR1220



# Shuttle Valve with One-Touch Fittings

## Series **VR1210F/1220F**

### Features

- ➔ Relay valves for controlling pneumatic signal lines.
- ➔ 'OR' logic function.



### Specifications

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

### Model

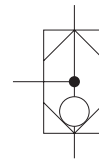
Model	Applicable tubing diameter				
	Metric size				
	3.2	4	6	8	10
VR1210F	●	●	●	●	
VR1220F			●	●	●

### Flow Rate and Effective Area

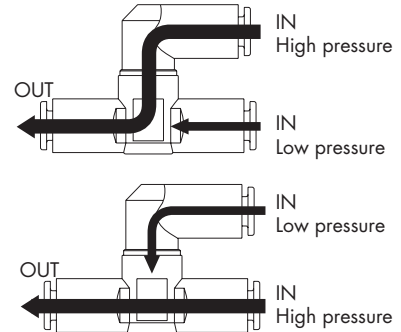
Model		VR1210F				VR1220F		
Applicable Tubing O.D.	Metric size	ø3.2	ø4	ø6	ø8	ø6	ø8	ø10
IN → OUT	Flow rate (l/min [ANR])	150	210	420	480	440	680	1000
	Effective area (mm <sup>2</sup> )	2.3	3.2	6.4	7.3	6.7	10.4	15.2

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

### Symbol



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



### 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 diameter

Metric size

04	ø4
06	ø6
08	ø8
10	ø10



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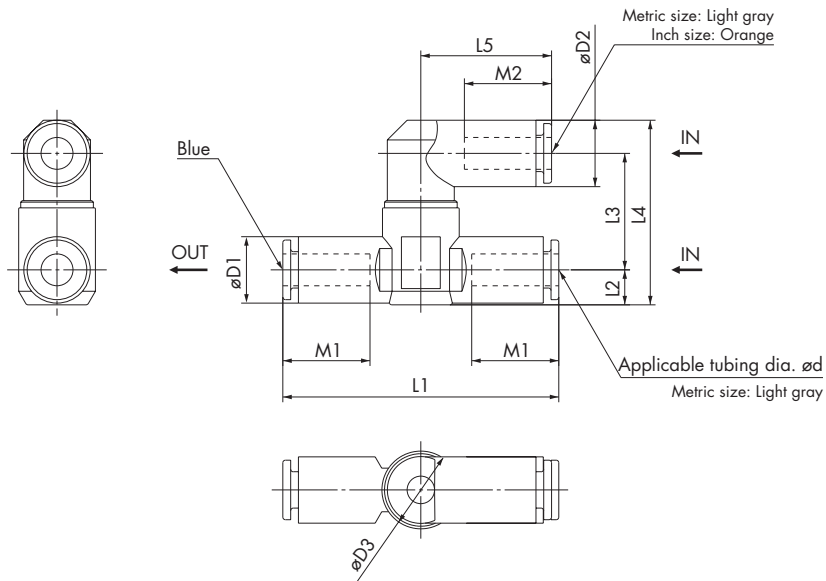


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Dimensions: Shuttle Valve with One-Touch Fittings VR1210F/1220F



Metric Size

Model	d	D1	D2	D3	L1	L2	L3	L4	L5	M1	M2	Weight (g)
VR1210F-23	3.2	11.4	8.4	14.8	52	6.2	19.4	29.8	17.5	12.7	12.9	21.4
VR1210F-04	4	12.8	10.4		56	6.8	20.3	32.2	21.9	15.7	15.8	25.2
VR1210F-06	6	12.8	12.8		53.2	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	19.8	59	7.4	23.9	37.7	25.2	16.8	16.8	27.2
VR1220F-08	8	15.2	15.2		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

# AND Valve with One-Touch Fittings

## Series **VR1211F**

### Features

- ➔ Relay valves for controlling pneumatic signal lines.
- ➔ Logical 'AND' Function.



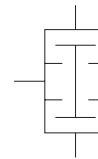
### Specifications

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

Note1) Use caution about the maximum operating pressure when soft nylon and polyurethane is used. (Refer to "Best Pneumatics Vol. 15".)

Note2) Brass components are all electroless nickel plated as standard. (Copper-free).

### Symbol

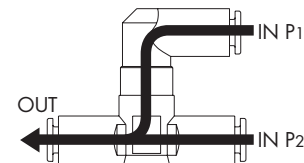


Only when air is supplied to both P1 and P2 does air flow to the OUT side. When air pressure differs, pressure in the lower amount flows to the OUT side.

Valves

### Model

Model	Applicable tubing diameter		
	Metric size		
VR1211F	3.2	4	6

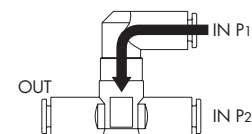
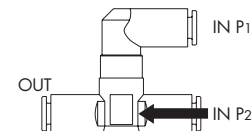


### Flow Rate and Effective Area

Model		VR1211F			
Applicable Tubing O.D.	Metric size	ø3.2	ø4	ø6	—
	IN → OUT	Flow rate (l/min (ANR))	100	120	150
Effective area (mm <sup>2</sup> )		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.

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



### How to Order

VR 12 1 1 F — 06

Body size  
1 | 1/8 standard

AND valve

With One-touch fittings

Applicable tubing diameter  
Metric size

04	ø4
06	ø6



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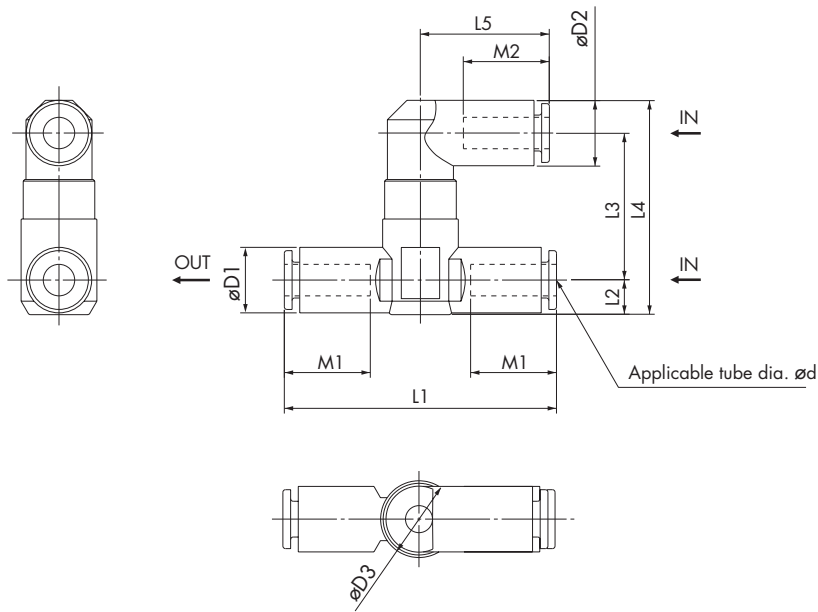


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Dimensions: AND Valve with One-Touch Fittings VR1211F



Metric Size

Model	d	D1	D2	D3	L1	L2	L3	L4	L5	M1	M2	Weight (g)
VR1211F-23	3.2	11.4	8.4	14.8	52	6.2	25.7	36.1	17.5	12.7	12.9	26.4
VR1211F-04	4	12.8	10.4		56							
VR1211F-06	6	12.8	12.8		53.2	6.8	28.8	41.9	25.2	16.8	16.8	25.0

Valves