

Relay valves for controlling pneumatic signal lines



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



JIS Symbol

Model

		Applicable tubing diameter									
Model		Ν	Aetric siz	ze	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	5 MPa				

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 ⁽¹⁾	Nylon, Soft nylon, Polyurethane					
منبيوهم وطلبان وطور موالاند ومرالا للمعام	aum operating process when soft pulses and polyurathenes is					

Note 1) Use caution about the maximum operating pressure when soft nylon and polyurethane is used. (Refer to "Best Pneumatics Vol. 15".)
 Note 2) Brass components are all electroless nickel plated as standard.

(Copper-free)

Flow Rate and Effective Area

		VR1	210F	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"
$\text{IN} \rightarrow \text{OUT}$	Flow rate (/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

∮ Ap Met	oplicable tu	ubing Inch	diameter
00	~2.0*	01	~1/0"
23	03.2	01	01/8
04	ø4	03	ø5/32"
06	ø6	07	ø1/4"
08	a 8	00	a5/16"

With One-touch fittings

 ø8
 09
 ø5/16

 ø10
 11
 ø3/8"

* For ø3.2, use ø1/8" tubing.

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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.
- **3.** 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.







Dimensions



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	00.0	37.7	25.2	16.8	16.8	27.2
VR1220F-08	8	15.2	15.2		65	8.2	23.9	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	Weight (g)
VR1210F-01	1/8"	11.4	8.4	- 14.8	52	6.2	19.4	29.8	17.5	12.7	12.9	21.4
VR1210F-03	5/32"	12.8	10.4		56	6.8	20.3	32.2	21.9	15.7	15.8	25.2
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	19.8	59	7.4	02.0	37.9	25.6	16.8	16.8	31.4
VR1220F-09	5/16"	15.2	15.2		65	8.2	23.9	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

