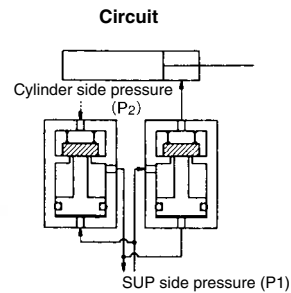
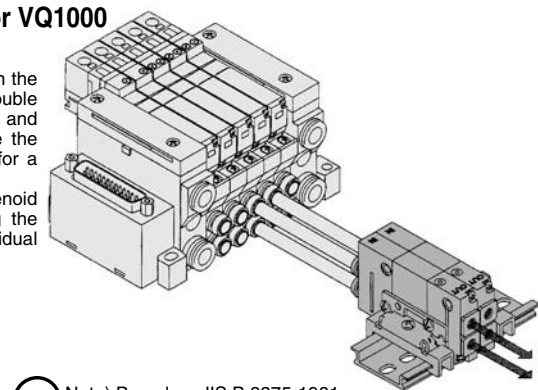


Double check block (Separated type): For VQ1000
VQ1000-FPG-□□

It is used on the outlet side piping to keep the cylinder in the intermediate position for a long time. Combining the double check block with a built-in pilot type double check valve and a 3 position exhaust center solenoid valve will enable the cylinder to stop in the middle or maintain its position for a long time.
 The combination with a 2 position single/double solenoid valve will permit this block to be used for preventing the dropping at the cylinder stroke end when the SUP residual pressure is released.

Specifications

Max. operating pressure	0.8MPa
Min. operating pressure	0.15MPa
Ambient and fluid temp.	-5 to 50°C
Flow characteristics: C	0.60dm ³ /(s·bar)
Max. operating frequency	180CPM

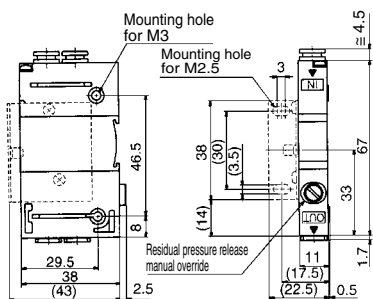
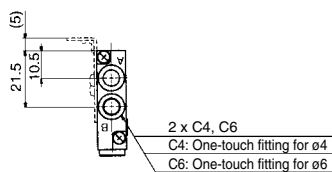


VVQ1000-FPG-02 1 set
 * VQ1000-FPG-C6M5-D 2 pcs.

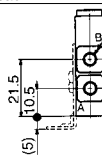
Note) Based on JIS B 8375-1981
 (Supply pressure: 0.5 MPa)

Dimensions

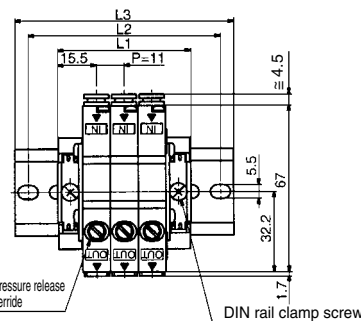
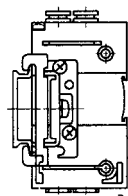
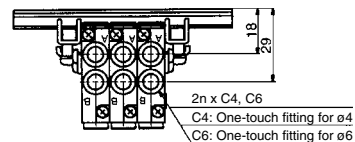
Single unit



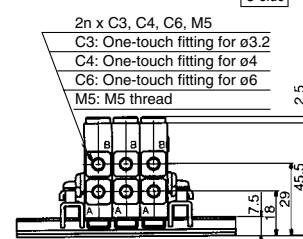
2 x C3, C4, C6, M5
 C3: One-touch fitting for ø3.2
 C4: One-touch fitting for ø4
 C6: One-touch fitting for ø6
 M5: M5 thread



Manifold



D side Stations ... 1 ... 2 ... 3 ... n U side



Dimensions

Formula L1 = 11n + 20 n: Station (Maximum 24)

L/n	1	2	3	4	5	6	7	8	9	10	11	12
L1	31	42	53	64	75	86	97	108	119	130	141	152
L2	50	62.5	75	87.5	100	112.5	125	137.5	150	162.5	175	187.5
L3	60.5	73	85.5	98	110.5	123	135.5	148	160.5	173	185.5	198

L/n	13	14	15	16	17	18	19	20	21	22	23	24
L1	163	174	185	196	207	218	229	240	251	262	273	284
L2	187.5	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5
L3	198	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	322.5

How to Order

Double check block

VQ1000-FPG- C4 M5 - F

IN side port size

M5	M5 thread
C3	One-touch fitting for ø3.2
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
N3	One-touch fitting for ø5/32"
N7	One-touch fitting for ø1/4"

OUT side port size

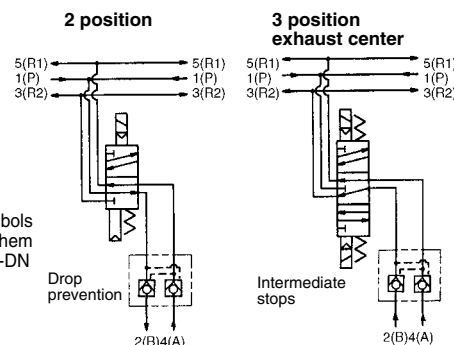
M5	M5 thread
C3	One-touch fitting for ø3.2
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
N3	One-touch fitting for ø5/32"
N7	One-touch fitting for ø1/4"

Option

Nil	None
F	With bracket
D	DIN rail mounting style (For manifold)
N	Name plate

Note) When two or more symbols are specified, indicate them alphabetically. Example) -DN

<Example>



Manifold (DIN rail mounting)

VVQ1000-FPG- 06

Stations

01	1 station
⋮	⋮
16	16 stations

When ordering a double check block, order the DIN rail mounting style [-D].

<Ordering Example>

VVQ1000-FPG-06...6 types of manifold
 *VQ1000-FPG-C4M5-D, 3sets } Double Check block
 *VQ1000-FPG-C6M5-D, 3sets }

Bracket Assembly

Part no.	Tightening torque
VQ1000-FPG-FB	0.22 to 0.25N·m

Caution

- Air leakage from the pipe between the valve and cylinder or from the fittings will prevent the cylinder from stopping for a long time. Check the leakage using neutral household detergent, such as dish washing soap. Also check the cylinder's tube gasket, piston packing and rod packing for air leakage.
- Since One-touch fittings allow slight air leakage, screw piping (with M5 thread) is recommended when stopping the cylinder in the middle for a long time.
- Combining double check block with 3 position closed center or pressure center solenoid valve will not work.
- M5 fitting assembly is attached, not incorporated into the double check block. After screwing in the M5 fittings, mount the assembly on the double check block. (Tightening torque: 0.8 to 1.2 N·m)
- If the exhaust of the double check block is throttled too much, the cylinder may not operate properly and may not stop intermediately.
- Set the cylinder load so that the cylinder pressure will be within two times that of the supply pressure.

Manifold Option

Double check block (Separated type) for VQ2000

VQ2000-FPG-□□-□

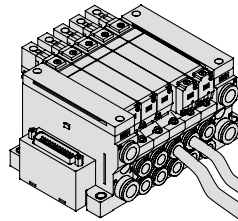
It is mounted on the outlet side piping to keep the cylinder in the intermediate position for a long time. Combining the double check block with a built-in pilot type double check valve and a 3 position exhaust center solenoid valve will enable the cylinder to stop in the middle or maintain its position for a long time. The combination with a 2 position single/double solenoid valve will prevent the dropping at the cylinder stroke end when the SUP residual pressure is released.

Specifications

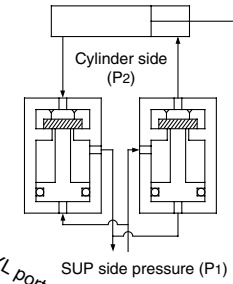
Max. operating pressure	0.8MPa
Min. operating pressure	0.15MPa
Ambient and fluid temp.	-5 to 50°C
Flow characteristics: C	3.0dm ³ /(s·bar)
Max. operating frequency	180 c.p.m



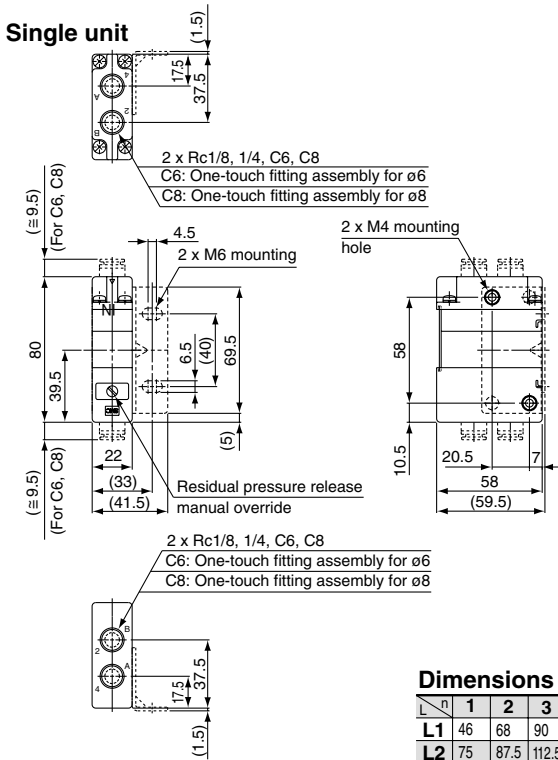
Note) Based on JIS B 8375-1981 (Supply pressure: 0.5 MPa)



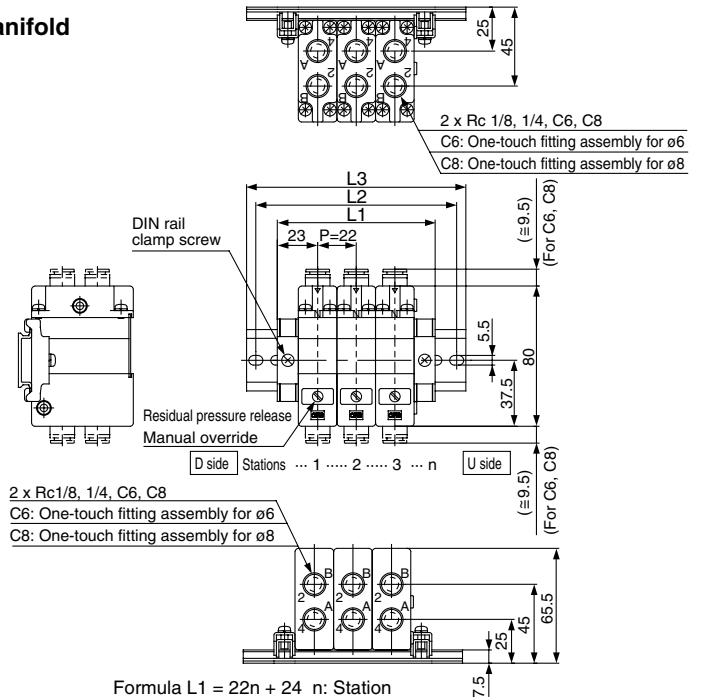
<Circuit diagram>



Dimensions



Manifold



Dimensions

Formula L1 = 22n + 24 n: Station

L n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	46	68	90	112	134	156	178	200	222	244	266	288	310	332	354	376
L2	75	87.5	112.5	137.5	162.5	175	200	225	250	262.5	287.5	312.5	337.5	362.5	375	400
L3	85.5	98	123	148	173	185.5	210.5	235.5	260.5	273	298	323	348	373	385.5	410.5

How to Order

Double check block

VQ2000-FPG-01 01 - F

IN side port size

01	Rc 1/8
02	Rc 1/4
C6	One-touch fitting for ø6
C8	One-touch fitting for ø8
N7	One-touch fitting for ø1/4"
N9	One-touch fitting for ø5/16"

OUT side port size

01	Rc 1/8
02	Rc 1/4
C6	One-touch fitting for ø6
C8	One-touch fitting for ø8
N7	One-touch fitting for ø1/4"
N9	One-touch fitting for ø5/16"

Option

Nil	None
D	DIN rail mounting style (For manifold)
F	With bracket
N	Name plate

Note) When two or more symbols are specified, indicate them alphabetically.

Manifold (DIN rail mounting)

VVQ2000-FPG-06

Stations

01	1 station
⋮	⋮
16	16 stations

When ordering a double check block, order the DIN rail mounting style [-D].

<Ordering Example>

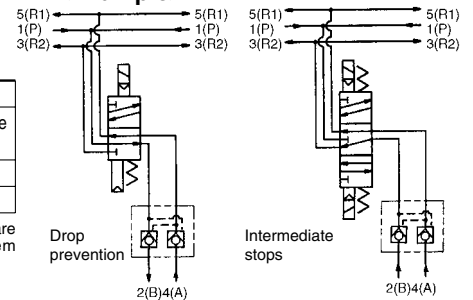
VVQ2000-FPG-06-6 types of manifold

*VQ2000-FPG-C6C6-D; 3set } Double Check block
*VQ2000-FPG-C8C8-D; 3set }

Bracket Assembly

Part no.	Tightening torque
VQ2000-FPG-FB	0.8 to 1.0 N·m

<Example>



Caution

- Air leakage from the pipe between the valve and cylinder or from the fittings will prevent the cylinder from stopping for a long time. Check the leakage using neutral household detergent, such as dish washing soap. Also check the cylinder's tube gasket, piston packing and rod packing for air leakage.
- Since One-touch fittings allow slight air leakage, screw piping is recommended when stopping the cylinder in the middle for a long time.
- Combining double check block with 3 position closed center or pressure center solenoid valve will not work.
- When fittings, etc. are being screwed to the double check block, tighten them with the torque below.
- If the exhaust of the double check block is throttled too much, the cylinder may not operate properly and may not stop intermediately.
- Set the cylinder load so that the cylinder pressure will be within two times that of the supply pressure.

Connection threads	Proper tightening torque (N·m)
Rc1/8	7 to 9
Rc1/4	12 to 14

Plug-in Unit
Base Mounted

90-VQ1000-X121 Series

90-VQ2000-X121 Series

Double Check Block (Separated Type)

How to Order

90-VQ1000

90 - VQ1000 - FPG - C6 C6 - X121

• Series compatible with secondary batteries

90 Material restriction

• For blanking manual specification

• OUT side port size

C4	One-touch fitting for ø4
C6	One-touch fitting for ø6

• IN side port size

C4	One-touch fitting for ø4
C6	One-touch fitting for ø6

*Specifications and dimensions for the 90-series are the same as standard products.

90-VQ2000

90 - VQ2000 - FPG - 01 01 - X121

• Series compatible with secondary batteries

90 Material restriction

• For blanking manual specification

• OUT side port size

01	Rc 1/8
----	--------

• IN side port size

01	Rc 1/8
----	--------

*Specifications and dimensions for the 90-series are the same as standard products.

Directional Control Valves

Actuators

Air Grippers

Air Preparation Equipment

Air Filters/Pressure Control Equipment

Flow Control Related Products

Vacuum Equipment

Detection Switches

Auto Switches