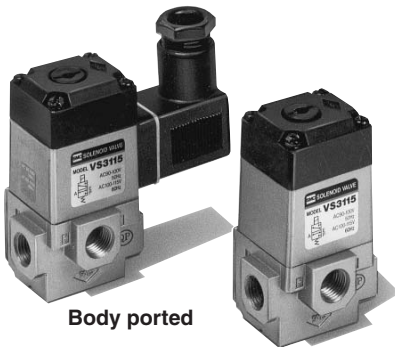


3 Port Direct Operated Solenoid Valve Metal Seal, Body Ported/Base Mounted **VS3115/3110**

Multiple pressure supply is possible with balanced spool sleeve.

Any given port can accept high or low pressure supply without affecting the system life or operation.

No-lubrication and dry-air operation possible.

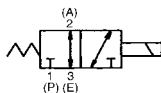


Body ported



Base mounted

JIS Symbol



Standard Specifications

Fluid		Air/Inert gas		
Operating pressure range		0 to 1.0 MPa		
Proof pressure		1.5 MPa		
Ambient and fluid temperature		-20 to 60°C (No freezing)		
Response time ⁽¹⁾		10 ms or less (AC), 45 ms or less (DC)		
Max. operating frequency ⁽²⁾		1,500 c.p.m. (AC), 180 c.p.m. (DC)		
Manual override		Non-locking		
Lubrication		Not required (Use turbine oil Class 1 ISO VG32, if lubricated.)		
Enclosure		Dustproof [Degrees of protection 0] ⁽⁴⁾		
Shock/Vibration resistance (m/s ²)		150/50 ⁽⁵⁾		
Electrical entry		Grommet, DIN terminal		
Coil rated voltage	Standard	100, 200 VAC, 50/60 Hz; 24 VDC		
	Option	220, 110, 48, and 24 VAC (50/60 Hz) 100, 48, and 12 VDC		
Allowable voltage fluctuation		-15 to -10% of rated voltage		
Coil insulation type		Class B or equivalent (130°C) ⁽⁶⁾		
Apparent power (VA) (Power consumption (W))	AC	Inrush	50 Hz	51
			60 Hz	45
	Holding	50 Hz	17 (5.3)	
		60 Hz	11 (2.9)	
Power consumption (W)	DC	5.5		
Accessory (Option)		Bracket (AXT338-11)/For body ported type		
		Indicator light		
		Manual override		

- Note 1) Based on JIS B 8375-1981. (at 0.5 MPa, without surge voltage suppressor)
- Note 2) Minimum operating frequency is once in 30 days. (Based on JIS B 8375.)
- Note 3) "Note 1)" and "Note 2)" are with controlled clean air.
- Note 4) Based on JIS C 0920.
- Note 5) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)
- Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Flow Characteristics/Weight

Body type	Valve model	Port size Rc	Flow characteristics						Weight (kg)	
			P → A			A → E			AC	DC
			C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv		
Body ported	VS3115-01□□	1/8	3.3	0.36	0.86	2.5	0.39	0.66	0.34	0.46
	VS3115-02□□	1/4	3.8	0.19	0.86	3.6	0.34	0.88	0.34	0.46
Base mounted	VS3110-02□□	1/4	4.0	0.12	0.93	3.2	0.31	0.76	0.40	0.52
	VS3110-03□□	3/8	4.0	0.15	0.94	3.6	0.18	0.82	0.40	0.52
For manifold use	VS3114-00□□		Without sub-plate						0.32	0.44

⚠ Caution

For Safety Instructions and Solenoid Valve Precautions, refer to pages 4-18-2 to 4-18-6.

How to Calculate the Flow Rate

For obtaining the flow rate, refer to page 4-1-6.

V100

SY

SYJ

VK

VZ

VT

VP

VG

VP

S070

VQ

VKF

VQZ

VZ

VS

VFN

Series VS3115/3110

How to Order

VS311 5 01 5 D L

Piping

5	Body ported
0	Base mounted
4	Manifold

Port size

01	Rc 1/8
02	Rc 1/4
03	Rc 3/8
00	Without sub-plate

Electrical entry

G	Grommet
D	DIN terminal

* DC: DL (With indicator light)

Coil rated voltage

1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
5	24 VDC
9	Other

Mounting

Nil	Without bracket
B	With bracket

* Bracket is available only on body ported style.

Accessory (Option)

L	With indicator light
P	With manual override

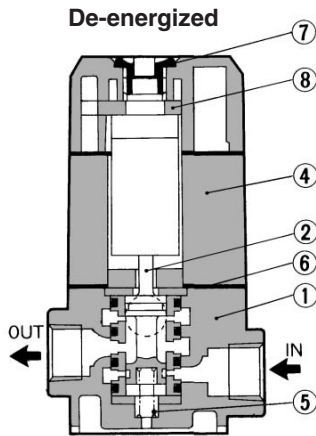
Thread type

Nil	Rc
N*	NPT
T*	NPTF
E*	G

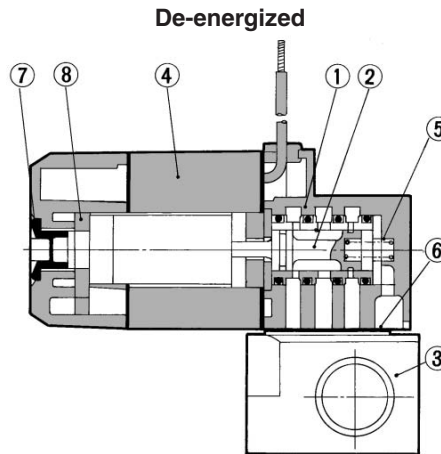
* Option

Construction

Body ported



Base mounted



Component Parts

No.	Description	Material	Note
①	Body	Aluminum die-casted	Platinum silver
②	Spool/Sleeve	Stainless steel	
③	Sub-plate	Aluminum die-casted	Platinum silver

Sub-plate Assembly Part No.: VS3110-S-⁰²/₀₃

* Mounting bolts and gaskets are not attached.

Part No. for Mounting Bolt and Gasket

BG-VS3010

Replacement Parts

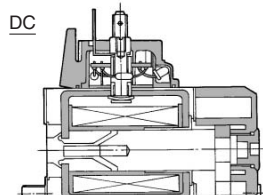
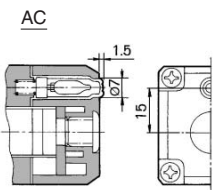
No.	Description	Material	Part no.			
			VS3115-□G	VS3115-□D	VS3110-□G	VS3110-□D
④	Solenoid capsule assembly	AC	SCA006-□	SCAD001-□	SCA006-□	SCAD001-□
		DC	SCA001-□	SCAD001-□	SCA001-□	SCAD001-□
⑤	Spring	Piano wire	AXT338-6			
		DC	AZ832-16			
⑥	Gasket	NBR	AXT333-14		AXT338-15	
⑦	Plug for cap	Resin	AXT333-16			
⑧	Stopper	Resin	AXT333-7-11			
		DC	AXT333-32-8			

□: Enter the operating voltage.

Accessory (Option)

Indicator light

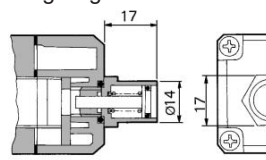
When solenoid is energized, indicator light illuminates, thus the electrical state of the solenoid can be seen from the outside.



Note) There is polarity of (1) +, (2) -.

Manual override

Remove the rubber plug on the top of the solenoid cap to mount the manual override. Push the override with a screwdriver to the required stroke and the valve will shift. Turn to the right or left at 90 degrees to lock it. Be sure to unlock the override before energizing the valve electrically.



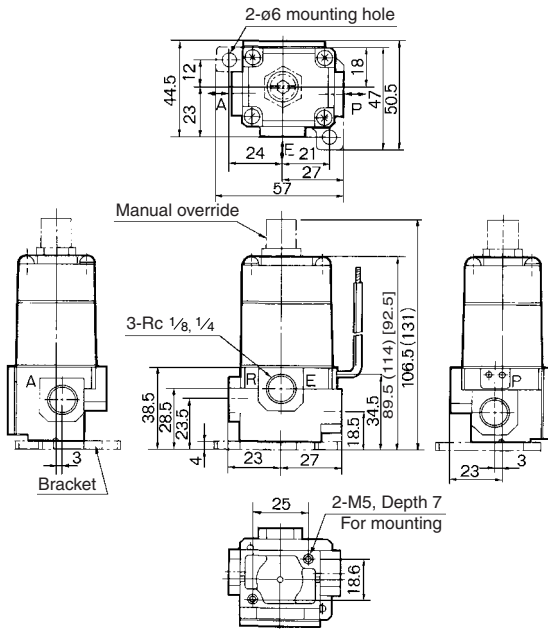
Description	Part no.	
	AC	DC
Manual override (With lock)	PB0111-3 (PB0111)	PB0111-1
Manual override (Non-locking)	PB0101	PB0101-1

(): With indicator light

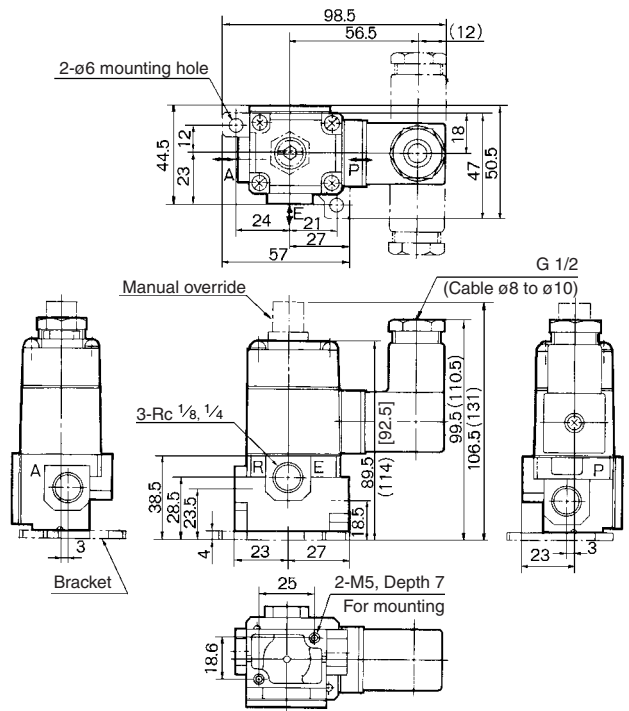
Series VS3115/3110


Dimensions

Body ported VS3115-□□G

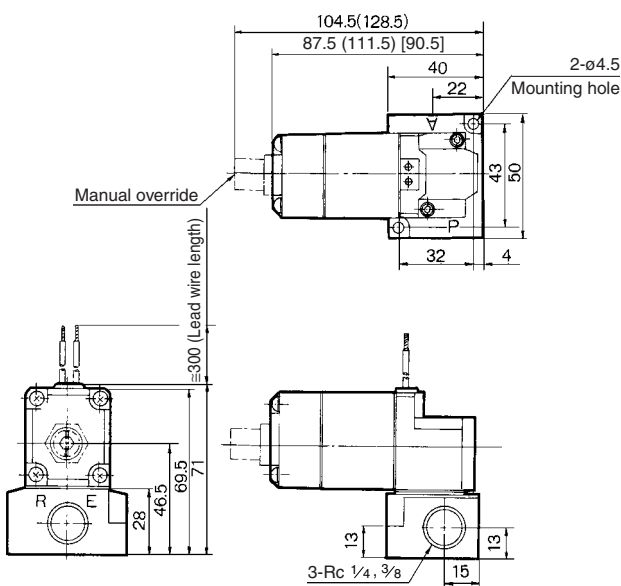


VS3115-□□D

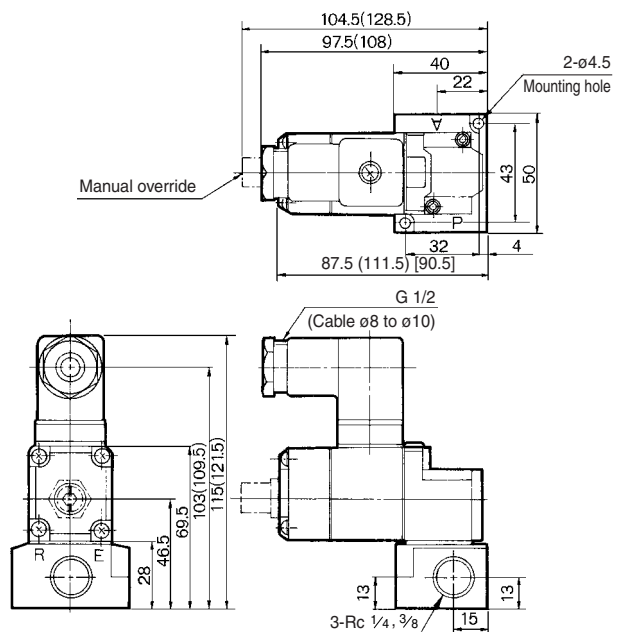



 (): DC
 []: AC, with indicator light

Base mounted VS3110-□□G



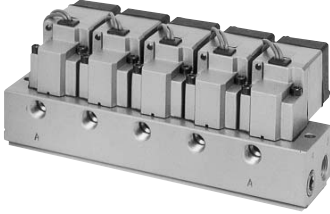
VS3110-□□D



 (): DC
 []: AC, with indicator light

- V100
- SY
- SYJ
- VK
- VZ
- VT
- VP
- VG
- VP
- S070
- VQ
- VKF
- VQZ
- VZ
- VS**
- VFN

Series VS3115/3110 Manifold Specifications



Specifications

Manifold type				B mount			
Max. number of stations				10 stations			
Exhaust type	Port location/Port size			Port direction			Applicable valve model
	P	A	E	P	A	E	
Common	Base	Base	Base	Side	Side	Side	VS3114-00□□
	3/8	1/4	3/8	Side	Bottom	Side	
Accessory		Blanking plate (With gaskets and screw)				AXT338-17A	

How to order manifold

VVS31 **0** **05** **1** **□**

0: Port location/Port size
05: Valve stations
1: EXH port type
□: Thread type

	P	A	E
0	Side	Side	Side
1	Side	Bottom	Side

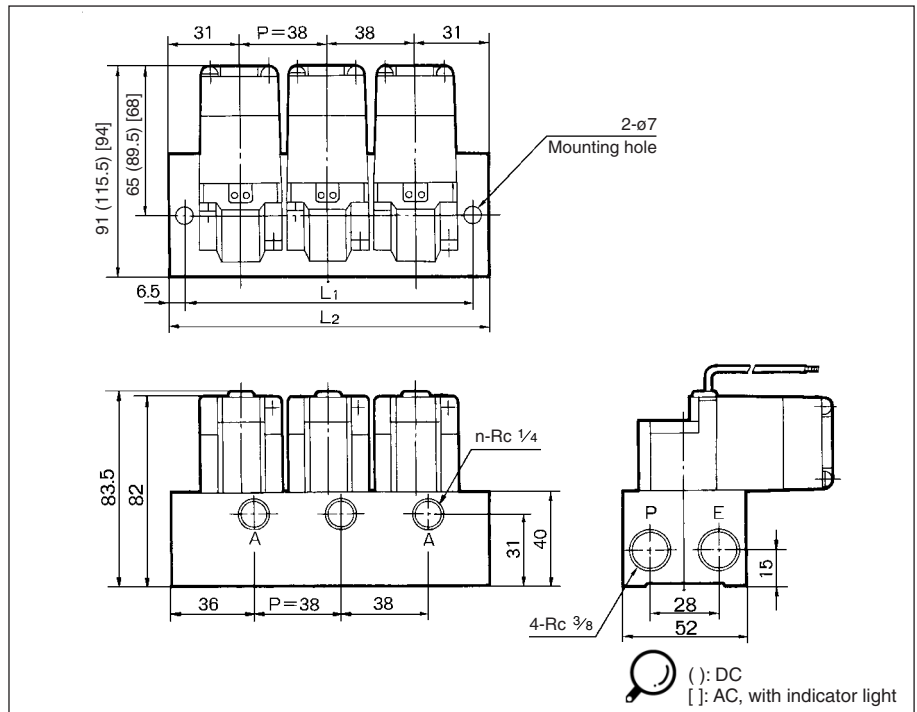
Valve stations	
05	5 stations
10	10 stations

EXH port type	
1	Common EXH

Thread type	
Nil	Rc
N*	NPT
T*	NPTF
F*	G

* Option

Dimensions



L	n	2	3	4	5	6	7	8	9	10
L ₁		87	125	163	201	239	277	315	353	391
L ₂		100	138	176	214	252	290	328	366	404

L₁ = 38n + 11, L₂ = 38n + 24 n: Station

Formula for manifold weight M = 0.16n + 0.1 (kg)