

## Related Products

### Pressure Relief 3-Port Valve with Locking Hole VHS 20/30/40/50

Manually operated valve can be used to prevent accidents caused by residual pressure in pneumatic lines.

Can prevent accidents due to inadvertent air supply.

When in the exhaust position, the valve may be padlock secured, preventing accidental start-ups while personnel are cleaning or servicing equipment.

The supply/exhaust status of the air flow can be verified at a glance in the indicating window.



**SUP** : Supply  
**EXH** : Exhaust



For energy isolation purposes, the compressed air supply is disconnected, residual pressure is relieved, and the handle can either be locked or labeled with a warning tag.



Combination with a modular style FRL is possible.



An interface part is required if a spacer or spacer with bracket shown in the table below is attached to a modular FRL.

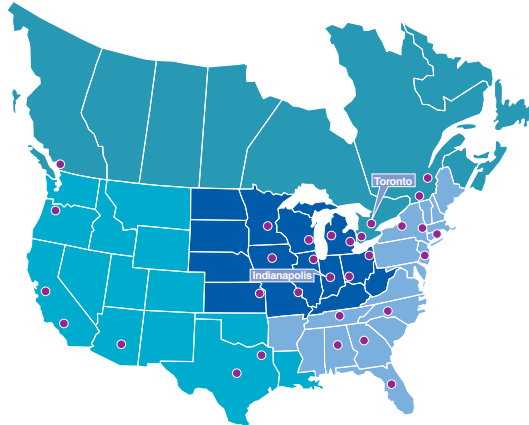
Pressure relief 3-port valve	Interface P/N	Spacer with bracket P/N	Applicable air preparation equipment
VHS20	Y200-A	Y200T-A	AC20
VHS30	Y300-A	Y300T-A	AC25, AC30
VHS40	Y400-A	Y400T-A	AC40
VHS40-06	Y500-A	Y500T-A	AC40-06
VHS50	Y600-A	Y600T-A	AC50, AC60 (Note)

Note) Although connection to AC60 is possible, the flow rate may decrease due to the mounting position.

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## Soft Start-Up Valve With Lock Out



### Series AVL2000/3000/4000/5000

# Soft start up valve with lock out

- Large effective area
- Low power consumption
- Manual/Manual solenoid lock out
- Modular design

## How to Order

AVL 20 00 - F 02 G - 5 DZM - R - X238-Q

Soft start valve with lock out

### Body size • Port thread •

Body size	Port thread
20	1/4
30	3/8
40	1/2
50	3/4, 1

### Port size •

Port size	Model
02	1/4 (AVL2000)
03	3/8 (AVL3000)
04	1/2 (AVL4000)
06	3/4 (AVL5000)
10	1 (AVL5000)

### Option •

Option	Description
Nil	No gauge
G	Pressure gauge (Unit: MPa)
P	Pressure gauge (Unit: MPa, psi)

### Air direction

Air direction	Description
Nil	Left to Right
R	Right to Left

### Button Color

Button Color	Description
Nil	Red button, manual or electrical lockout
X238	Black button, manual lockout
X238-Q	Black button, electrical lockout, CE marked

### Rated coil voltage

Rated coil voltage	Description
Nil	Manual lockout
1	100VAC (50/60Hz)
2	200VAC (50/60Hz)
3	110 to 120VAC (50/60Hz)
4	220VAC (50/60Hz)
5	24VDC
6	12VDC
9	Others

### Electric entry

Electric entry	Description
Nil	Manual lockout
D	D type DIN connector
DZ	D type DIN connector with indicator light & suppressor
DZM	D type DIN connector with M12 connector, indicator light & surge voltage suppressor

### Note:

The AVL is not an emergency stop device. It is an energy isolation unit.

## AVL2000/3000/4000/5000

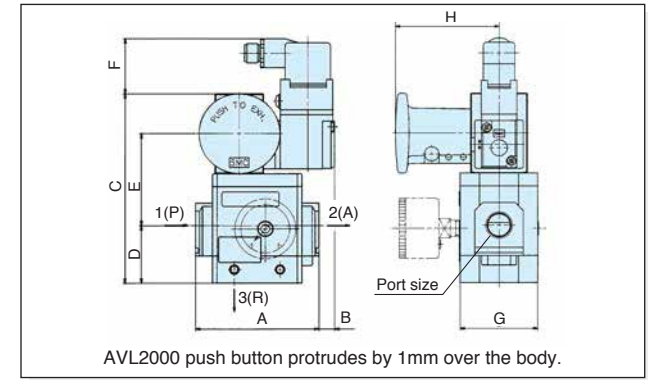
Lockable soft start valve.  
Gradual increase of supply pressure and rapid exhaust of system air when the supply is shut off.



## Dimension AVL2000 to AVL5000

(mm)

Model	Port size	A	B	C	D	E	F	G	H
AVL2000*02	1/4	67	-	111	31	55	-	40	64 (Max. 73)
AVL2000*02*DZM	1/4	67	20.5	111	31	55	34	40	64 (Max. 73)
AVL3000*03	3/8	76	-	118	36	57	-	48	64 (Max. 73)
AVL3000*03*DZM	3/8	76	12.5	118	36	57	34	48	64 (Max. 73)
AVL4000*04	1/2	98	-	133	47	61	-	52	64 (Max. 73)
AVL4000*04*DZM	1/2	98	-	133	47	61	34	52	64 (Max. 73)
AVL5000*06 to 10	3/4 & 1	128	-	161	59	77	-	74	64 (Max. 73)
AVL5000*06 to 10*DZM	3/4 & 1	128	-	161	59	77	34	74	64 (Max. 73)

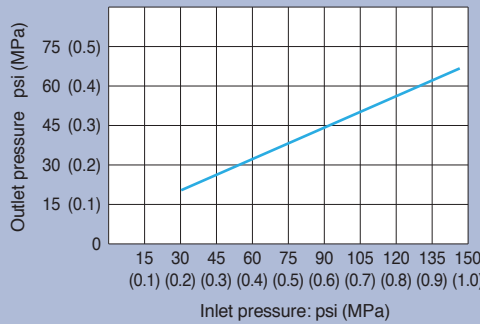


## Specifications

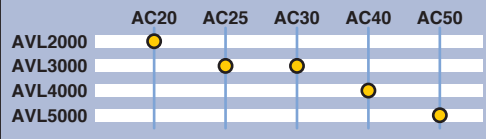
Model	AV2000	AV3000	AV4000	AV5000		
Port size	1/4	3/8	1/2	3/4	1	
Proof pressure	225 psi (1.5 MPa)					
Operating pressure range	30 to 150 psi (0.2 to 1 MPa)					
Ambient and fluid temp.	32 to 140°F (0 to 60°C)					
Effective area (mm²)	1(P) to 2(A)	20	37	61	113	122
	2(A) to 3(R)	24	49	76	132	141
Weight manual/solenoid lb (kg)	1.14 (0.64)	1.63 (0.74)	2.21 (1.00)	4.19 (1.90)	4.06 (1.84)	
Weight manual lb (kg)	1.15 (0.52)	1.37 (0.62)	1.94 (0.88)	3.93 (1.78)	3.79 (1.72)	

Electrical specification	Rated coil voltage		100, 200, 110 to 120, 220VAC (50/60 Hz), 12, 24VDC	
	Allowable voltage fluctuation		-15% to +10% of rated voltage	
	Coil insulation type		Equivalent to B type [266°F (130°C)]	
	Current consumption	AC	Inrush	5.6V (50 Hz), 5.0VA (60 Hz)
		AC	Energized	3.4VA (2.1W) 50 Hz, 2.3VA (1.5W) 60 Hz
Current consumption DC		1.8W		
Electric entry		Type D DIN Terminal, M12 connector		
Optional specification		Indicator light/Surge voltage suppressor		

## Piston B Switching Pressure (Close to Open)



## Combination with a modular style FRL is possible.



## Dimension AC20\* to AC60\*

(mm)

Model	A1	A2	A3
AC20*	41.5	43	67.5
AC25*	55	57	78
AC30*	55	57	78
AC40*	72.5	75	100.5
AC50*	93	96	131
AC55*	98	96	131
AC60*	98	101	131

