



LOGO! 12/24RC, LOGIC MOD., DISPL. PU/I/O: 12/24V DC/RELAY,  
8 DI (4AI)/4 DO;  
MEM 200 BLOCKS EXPANDABLE WITH EXTRA MODULES

Installation type/mounting	
<b>Mounting</b>	on 35 mm DIN rail, 4 spacing units wide
Supply voltage	
<b>12 V DC</b>	Yes
<b>24 V DC</b>	Yes
<b>permissible range, lower limit (DC)</b>	10.8 V
<b>permissible range, upper limit (DC)</b>	28.8 V
Time of day	
Time switching clocks	
<b>Number</b>	8
<b>Power reserve</b>	80 h
Digital inputs	
<b>Number of digital inputs</b>	8 ; Of which 4 can be used in analog mode (0 to 10 V)
Digital outputs	
<b>Number of digital outputs</b>	4 ; Relays
<b>Short-circuit protection</b>	No ; external fusing necessary
Relay outputs	
Switching capacity of contacts	

<b>with inductive load, max.</b>	3 A
<b>with resistive load, max.</b>	10 A
<b>EMC</b>	
<b>Emission of radio interference acc. to EN 55 011</b>	
<b>Emission of radio interference acc. to EN 55 011 (limit class B)</b>	Yes
<b>Degree and class of protection</b>	
<b>IP20</b>	Yes
<b>Standards, approvals, certificates</b>	
<b>CSA approval</b>	Yes
<b>UL approval</b>	Yes
<b>FM approval</b>	Yes
<b>Developed in accordance with IEC 61131</b>	Yes
<b>according to VDE 0631</b>	Yes
<b>Marine approval</b>	
<b>Marine approval</b>	Yes
<b>Ambient conditions</b>	
<b>Operating temperature</b>	
<b>Min.</b>	0 °C
<b>max.</b>	55 °C
<b>Dimensions</b>	
<b>Width</b>	72 mm
<b>Height</b>	90 mm
<b>Depth</b>	55 mm
<b>Status</b>	Jun 6, 2014

# Electric Capacitive Type

## Electric capacitive type proximity sensor

### ■ Features


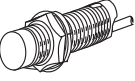
- Able to detect iron, metal, plastic, water, stone, wood etc
- Long life cycle and High reliability
- Built-in protection circuit of reverse power polarity, surge
- Easy to adjust of the sensing distance with built-in sensitivity adjuster
- Available to check the status of operation by Red LED indicator
- Easy to control of level and position




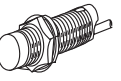
**⚠ Please read "Caution for your safety" in operation manual before using.**

### ■ Type

#### ○ DC 3-wire type

Appearances	Model
M18 	CR18-8DN
	CR18-8DP
	CR18-8DN2 ※
M30 	CR30-15DN
	CR30-15DP
	CR30-15DN2 ※

#### ○ AC 2-wire type

Appearances	Model
M18 	CR18-8AO
	CR18-8AC
M30 	CR30-15AO
	CR30-15AC

▶ ※ Mark is optional.

### ■ Specifications

Model	CR18-8DN CR18-8DP CR18-8DN2	CR30-15DN CR30-15DP CR30-15DN2	CR18-8AO CR18-8AC	CR30-15AO CR30-15AC
Sensing distance	8mm ±10%	15mm ±10%	8mm ±10%	15mm ±10%
Hysteresis	Max. 20% of sensing distance			
Standard sensing target	50×50×1mm (Iron)			
Setting distance	0 ~ 5.6mm	0 ~ 10.5mm	0 ~ 5.6mm	0 ~ 10.5mm
Power supply (Operating voltage)	12-24VDC (10-30VDC)		100-240VAC (85-264VAC)	
Current consumption	Max. 15mA		—	
Leakage consumption	—		Max. 2.2mA	
Response frequency(*1)	50Hz		20Hz	
Residual voltage	Max. 1.5V		Max. 20V	
Affection by Temp.	±10% Max. for sensing distance at +20°C within temperature range of -25 ~ +70°C			
Control output	Max. 200mA		Max. 5 ~ 200mA	
Insulation resistance	Min. 50MΩ (at 500VDC)			
Dielectric strength	1500VAC 50/60Hz for 1 minute			
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours			
Shock	500m/s <sup>2</sup> (50G) in X, Y, Z direction for 3 times			
Indicator	Operation indicator (Red LED)			
Ambient temperature	-25 ~ +70°C (at non-freezing status)			
Storage temperature	-30 ~ +80°C (at non-freezing status)			
Ambient humidity	35 ~ 95%RH			
Protection circuit	Surge protection circuit, Reverse polarity protection		Surge protection circuit	
Protection	IP66 (IEC standard)	IP65 (IEC standard)	IP66 (IEC standard)	IP65 (IEC standard)
Cable	∅ 4×3P, 2m		∅ 4×2P, 2m	
Unit weight	Approx. 72g	Approx. 212g	Approx. 63g	Approx. 220g

※ (\*1) The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

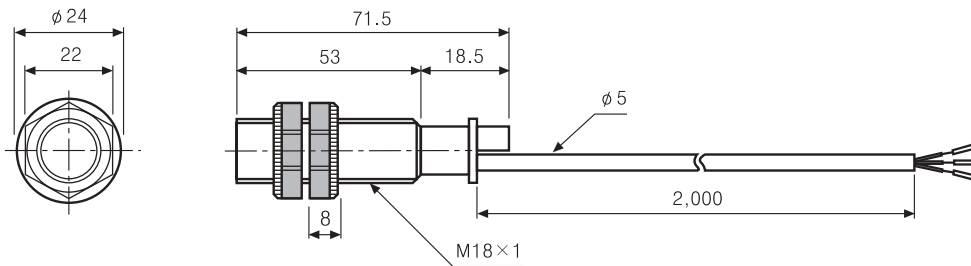
(P) Production stoppage models & replacement

# CR Series

## ■ Dimensions

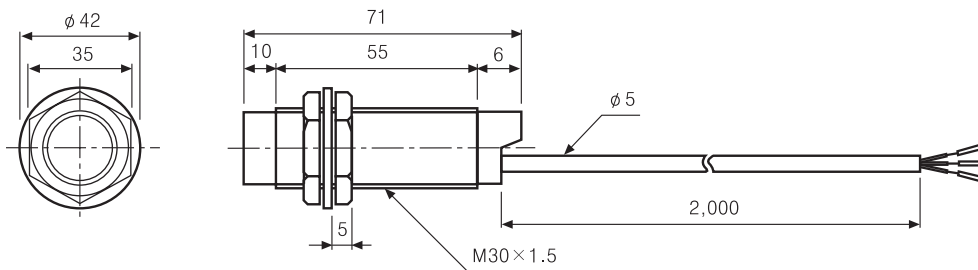
● CR18-8D□

● CR18-8A□



● CR30-15D□

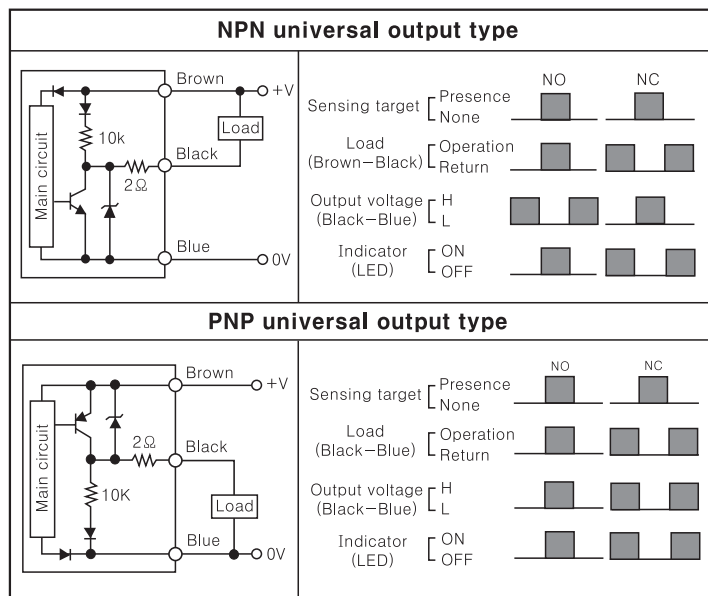
● CR30-15A□



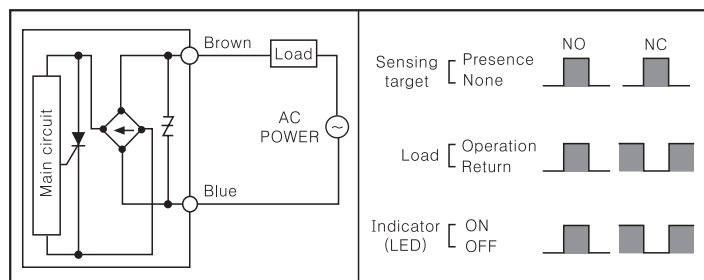
(Unit:mm)

## ■ Control output diagram

◎ DC 3-wire type

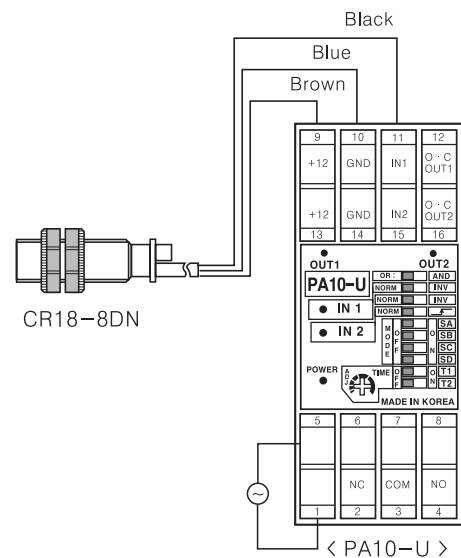


◎ AC 2-wire type

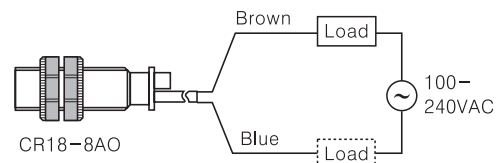


## ■ Connections

◎ DC 3-wire type



◎ AC 2-wire type



※ The load can be connected to either wire.

# Electric Capacitive Type

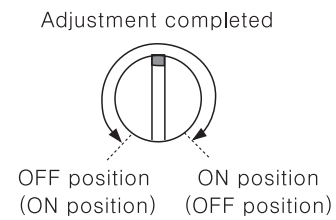
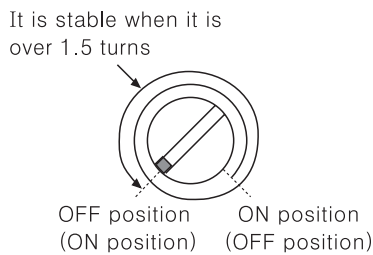
## ■ Sensitivity adjustment

Please turn potentiometer VR and set sensitivity as below procedure.

- Without a sensing object, turn the potentiometer VR to the right and stop at the proximity sensor is ON(OFF).
- Put the object in right sensing position, turn the potentiometer VR to the left and stop at the proximity sensor is OFF(ON).



- If the difference of the number of potentiometer VR revolution between the ON(OFF) point and the OFF(ON) point is more than 1.5 turns, the sensing operation will be stable.
- If it is set in sensitivity adjustment position of potentiometer VR at center between 1 and 2, sensitivity setting will be completed.



- ※ When there is distance fluctuation between proximity sensor and the target, please adjust 2 at the farthest distance from this unit.
- ※ Turning potentiometer toward clockwise, it will be Max. and turning toward counter clockwise, it will be Min. the number of adjustment should be  $15 \pm 3$  revolution and if it is turned to the right or left excessively, it will not stop, but it idles without breakdown.
- ※ ( ) is for Normal Close type.

## ■ Grounding

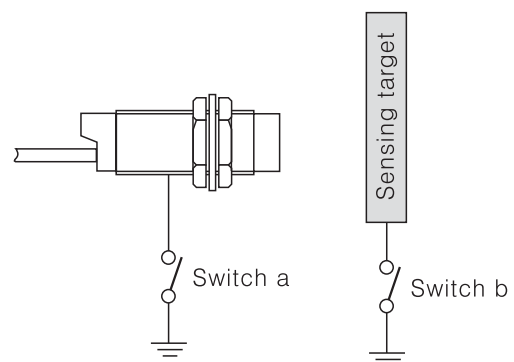
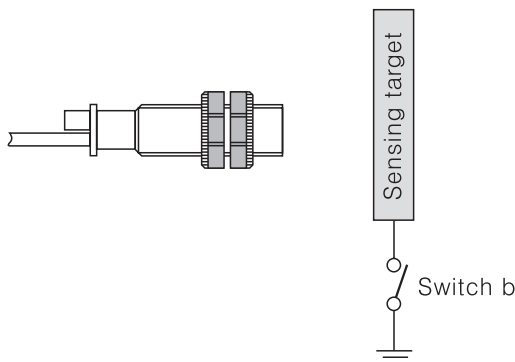
The sensing distance will be changed by grounding status of capacitive proximity sensor and the target [50×50×1mm(Iron)]. Please check the material when installing it on panel.

### ● CR18 Type

Ground condition (Switch b)	ON	OFF
Operating distance (mm)	8	4

### ● CR30 Type

Ground condition	Switch a	ON	OFF	ON	OFF
	Switch b	ON	ON	OFF	OFF
Operating distance(mm)		15	18	6	6



(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

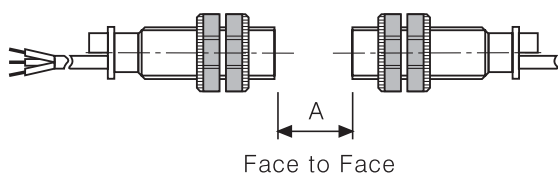
(O) Graphic panel

(P) Production stoppage models & replacement

# CR Series

## ■ Mutual-interference & Influence by surrounding metals

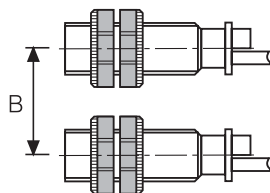
When several proximity sensors are mounted closely, malfunction of sensor may be caused due to mutual interference. Therefore, be sure to provide a minimum distance between the two sensors, as below charts.



Face to Face

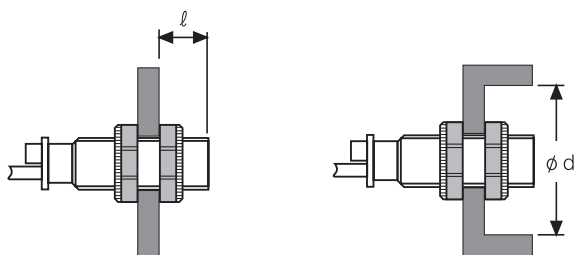
Model Item	CR18	CR30
A	48	90
B	54	90

(Unit:mm)



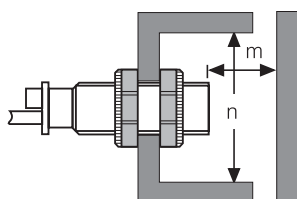
Parallel

When sensors are mounted on metallic panel, you must prevent the sensors from being affected by any metallic object except target. Therefore, provide minimum distance as shown.



Model Item	CR18	CR30
$l$	20	10
$\phi d$	54	90
m	24	45
n	54	90

(Unit:mm)



## ■ Materials

### ○ Materials of sensing targets

Sensing distance may be different by electrical characteristic of sensing target (Conductivity, Non dielectric constant) and status of water absorption, size etc.

### ○ Effect by high frequency electrical field

It may cause malfunction by machinery which generate high frequency of electrical field such as a washing machine etc.

### ○ Surrounding environment

There is water or oil on surface of sensing part, it may cause malfunction.

If the bottle for detecting of level is coated by oil etc., it may cause malfunction.

Especially, 15mm type has high sensitivity for induced objects, please be careful of waterdrops.

### ○ Oil

Do not let the oil or oil liquid is flowed into the sensor, the case is made by plastic.

# STC Valves & Pneumatic Components

Push-In  
Fittings

Filter-  
Regulator-  
Lubricator

Solenoid &  
Air Pilot  
Valves

Process  
Valves

Manual Air  
Valves

Air  
Cylinders



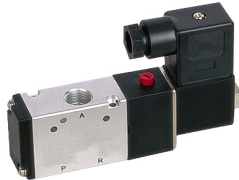


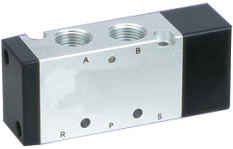



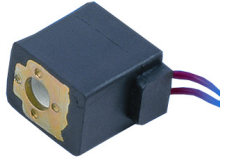




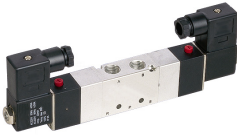




Polyurethane  
Tubing



connects fluid power to industrial automation™

Website: [StcValve.com](http://StcValve.com)

# STC Solenoid & Air Pilot Valves

				
	<p>Precision Engineered</p> <p>Fine Quality</p>  <p>Advanced Design</p> <p>Excellent Prices</p>			
				
				
				
				



connects fluid power to industrial automation™



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### STC Solenoid Valve Numbering System

Ordering Part No. = (eg. 4V110-06-1-D)

4V

1

10

06

1

D

Model	Valve Size	Solenoid/Position	Port Size (NPT)	Voltage	Elec. Terminal
3A = 3 way air pilot valve	1 = 0.67 Cv	10 = 1 solenoid 2 position	05 = 10-32	Blank = Standard	D = DIN
3V = 3 way solenoid valve	2 = 0.89 Cv	20 = 2 solenoid 2 position	06 = 1/8	B = Namur Mounting/ Actuator Mounting	G = Grommet
4A = 4 way air pilot valve	3 = 1.68 Cv	30 = 2 solenoid 3 position	10 = 3/8	1 = 12 VDC	E = Explosion Proof
4V = 4 way solenoid valve	4 = 2.78 Cv		15 = 1/2	2 = 24 VDC	
				2A = 24 VAC	
				3 = 110 VAC	
				4 = 220VAC	

### STC Valve Manifold Numbering System\*

Ordering Part No. = (eg. 4V100M-2)

4V100M

2

...

or

...

B

Model	No. of Stations	Blank Plate
3V100M = Manifold for 3V100 series valves	2	B = Blank plate G = Gasket and mounting hardware
3V200M = Manifold for 3V200 series valves	4	
3V300M = Manifold for 3V300 series valves	6	
3V400M = Manifold for 3V400 series valves	8	
4V100M = Manifold for 4V100 series valves	16	
4V200M = Manifold for 4V200 series valves		
4V300M = Manifold for 4V300 series valves		
4V400M = Manifold for 4V400 series valves		


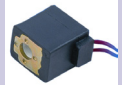
\* gasket and mounting hardware included



# STC Solenoid Valve List Price





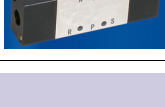
To Order, Please Specify: 1. Model No. 2. Voltage 3. Electrical Entry Options

	Part No.	Price	Voltage & Electrical Connection Options B. Electrical Connection	Port Size (NPT)	# Way/Port/Position/ Solenoid	Cv	Power
	2V025-1/8	\$18.81	A. Voltage Options: 1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC  B. Terminal Options: D = DIN (with LED indicator & Conduit Terminal) G = Grommet (12" Lead Wire) E = Explosion Proof	1/8	2/2/2/1 Direct Acting	0.23	3W to 6.5 W
	2V025-1/4	\$18.81		1/4			
	2V035-1/8	\$18.81		1/8	3/2/2/1 Direct Acting	0.1	
	2V035-1/4	\$18.81		1/4			
	2P025-1/8	\$18.43		1/8	2/2/2/1 Direct Acting	0.23	
	2P025-1/4	\$18.43		1/4			
	2P035-1/8	\$18.43		1/8	3/2/2/1 Direct Acting	0.1	
	2P035-1/4	\$18.43		1/4			
	2V1-1/8	\$18.81		1/8	2/2/2/1 Direct Acting	0.23	
	3V1-1/8	\$18.81		1/8	3/2/2/1 Direct Acting	0.1	
	3V110-1/8	\$24.26		1/8	3/3/2/1	0.67	2.5 W
	3V210-1/4	\$24.26		1/4, 1/8 (Exh)		0.89	3 W
	3V310-3/8	\$32.67		3/8, 1/4 (Exh)		1.68	3 W
	3V410-1/2	\$56.93		1/2		2.79	3 W
	3V120-1/8	\$37.16		1/8	3/3/2/2	0.67	2.5 W
	3V220-1/4	\$37.16		1/4, 1/8 (Exh)		0.89	3 W
	3V320-3/8	\$45.54		3/8, 1/4 (Exh)		1.68	3 W
	3V420-1/2	\$79.70		1/2		2.79	3 W
	4V110-1/8	\$25.25		1/8	4/5/2/1	0.67	2.5 W
	4V210-1/4	\$24.26		1/4, 1/8 (Exh)		0.89	3 W
	4V310-3/8	\$32.67		3/8, 1/4 (Exh)		1.68	3 W
	4V410-1/2	\$56.93		1/2		2.79	3 W
	3V310B-1/4	\$37.62		1/4	3/3/2/1	1.68	3 W
	4V310B-1/4	\$37.62		1/4	4/5/2/1	1.68	3 W
	4V310B-3/8	\$37.62		3/8, 1/4 (Exh)		1.68	3 W
	4V120-1/8	\$37.13		1/8	4/5/2/2	0.67	2.5 W
	4V220-1/4	\$37.13		1/4, 1/8 (Exh)		0.89	3 W
	4V320-3/8	\$45.54		3/8, 1/4 (Exh)		1.68	3 W
	4V420-1/2	\$79.70	1/2	2.79		3 W	
	4V130C-1/8	\$64.35	1/8	4/5/3/2 Closed Center	0.5	2.5 W	
	4V230C-1/4	\$64.35	1/4, 1/8 (Exh)		0.67	3 W	
	4V330C-3/8	\$88.61	3/8, 1/4 (Exh)		1	3 W	
	4V430C-1/2	\$113.85	1/2	1.68	3 W		
	4V130P-1/8	\$64.35	1/8	4/5/3/2 Pressure Center	0.5	2.5 W	
	4V230P-1/4	\$64.35	1/4, 1/8 (Exh)		0.67	3 W	
	4V330P-3/8	\$88.61	3/8, 1/4 (Exh)		1	3 W	
	4V430P-1/2	\$113.85	1/2	1.68	3 W		
	4V130E-1/8	\$64.35	1/8	4/5/3/2 Exhaust Center	0.5	2.5 W	
	4V230E-1/4	\$64.35	1/4, 1/8 (Exh)		0.67	3 W	
	4V330E-3/8	\$88.61	3/8, 1/4 (Exh)		1	3 W	
	4V430E-1/2	\$113.85	1/2	1.68	3 W		

	Part No.	Price	Voltage Options	Electrical Connection Options	Power Consumption	Specifications	To connect DIN coil: 1. Remove the Philip screw from the plastic housing and unplug it from the DIN coil. 2. From the screw opening, use the screw to push the terminal block out of the plastic housing. 3. Note the 1, 2 and ground markings on underside of DIN enclosure. 4. For DC DIN Coil, Connect 1 to Positive, 2 to Negative. 5. For AC DIN Coil, connect 1 to HOT wire, 2 to Neutral wire, and if required connect ground to ground wire. To connect Grommet coil: 1. For DC Coil, connect one of the two wires to Positive, and the other wire to Negative. 2. For AC Coil, connect one of the two wires to HOT wire,
	100C	\$7.92	Voltage Options: 1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC	D = DIN (with LED indicator, conduit terminal)	2.5 W	Insulation: F Class IP65;  Duty Cycle: 100% ED;  CE Certification	
	200C	\$7.92		G = Grommet (12" Lead Wire)	3W		
	100C	\$7.13		G = Grommet (12" Lead Wire)	2.5 W		
	200C	\$7.13		G = Grommet (12" Lead Wire)	3 W		





## Air Pilot Valve List Price

	Part No.	Price	Port Size (NPT)	# Ways/Port/ Position/Pilot	Cv		Part No.	Price	Port Size (NPT)	# Ways/Port/ Position/Pilot	Cv
	3A110-1/8	\$18.81	1/8	3/3/2/1	0.67		4A130C-1/8	\$49.01	1/8	4/5/3/2 Closed Center	0.5
	3A210-1/4	\$18.81	1/4, 1/8 (Exh)		0.89		4A230C-1/4	\$49.01	1/4, 1/8 (Exh)		0.67
	3A310-3/8	\$22.77	3/8, 1/4 (Exh)		1.68		4A330C-3/8	\$71.78	3/8, 1/4 (Exh)		1
	3A410-1/2	\$37.62	1/2		2.79		4A430C-1/2	\$85.36	1/2		1.68
	3A120-1/8	\$23.76	1/8	3/3/2/2	0.67		4A130P-1/8	\$49.01	1/8	4/5/3/2 Pressure Center	0.5
	3A220-1/4	\$24.26	1/4, 1/8 (Exh)		0.89		4A230P-1/4	\$49.01	1/4, 1/8 (Exh)		0.67
	3A320-3/8	\$28.71	3/8, 1/4 (Exh)		1.68		4A330P-3/8	\$71.78	3/8, 1/4 (Exh)		1
	3A420-1/2	\$49.01	1/2		2.79		4A430P-1/2	\$85.36	1/2		1.68
	4A110-1/8	\$18.81	1/8	4/5/2/1	0.67		4A130E-1/8	\$49.01	1/8	4/5/3/2 Exhaust Center	0.5
	4A210-1/4	\$18.81	1/4, 1/8 (Exh)		0.89		4A230E-1/4	\$49.01	1/4, 1/8 (Exh)		0.67
	4A310-3/8	\$22.77	3/8, 1/4 (Exh)		1.68		4A330E-3/8	\$71.78	3/8, 1/4 (Exh)		1
	4A410-1/2	\$37.62	1/2		2.79		4A430E-1/2	\$85.36	1/2		1.68
	4A120-1/8	\$23.76	1/8	4/5/2/2	0.67						
	4A220-1/4	\$24.26	1/4, 1/8 (Exh)		0.89						
	4A320-3/8	\$28.71	3/8, 1/4 (Exh)		1.68						
	4A420-1/2	\$49.01	1/2		2.79						

## Integrated Aluminum Base Mounted Manifolds\*

To Order, Please Specify: 1. Model No. 2. Voltage 3. Electrical Entry Options

	Part No.	Number of Stations	Description		Part No.	Number of Stations	Description
	3V-100M-2	\$11.00/2 stations	Integrated Base for Mounting 3V100 or 3A100 series Solenoid Valves		4V-100M-2	\$11.00/2 station	Integrated Base for Mounting 4V100 or 4A100 series Solenoid Valves
	3V-100M-4	\$22.00/4 stations			4V-100M-4	\$22.00/4 station	
	3V-100M-6	\$33.00/6 stations			4V-100M-6	\$33.00/6 station	
	3V-100M-8	\$44.00/8 stations			4V-100M-8	\$44.00/8 stations	
	3V-100M-16	\$88.00/16 stations			4V-100M-16	\$88.00/16 stations	
	3V-100M-B	\$4.84/blank plate			4V-100M-B	\$4.84/blank plate	
	3V-200M-2	\$11.00/2 stations	Integrated Base for Mounting 3V200 or 3A200 series Solenoid Valves		4V-200M-2	\$11.00/2 stations	Integrated Base for Mounting 4V200 or 4A200 series Solenoid Valves
	3V-200M-4	\$22.00/4 stations			4V-200M-4	\$22.00/4 stations	
	3V-200M-6	\$33.00/6 stations			4V-200M-6	\$33.00/6 stations	
	3V-200M-8	\$44.00/8 stations			4V-200M-8	\$44.00/8 stations	
	3V-200M-16	\$88.00/16 stations			4V-200M-16	\$88.00/16 stations	
	3V-200M-B	\$4.84/blank plate			4V-200M-B	\$4.84/blank plate	
	3V-300M-2	\$16.50/2 stations	Integrated Base for Mounting 3V300 or 3A300 series Solenoid Valves		4V-300M-2	\$16.50/2 stations	Integrated Base for Mounting 4V300 or 4A300 series Solenoid Valves
	3V-300M-4	\$33.00/4 stations			4V-300M-4	\$33.00/4 stations	
	3V-300M-6	\$49.50/6 stations			4V-300M-6	\$49.50/6 stations	
	3V-300M-8	\$66.00/8 stations			4V-300M-8	\$66.00/8 stations	
3V-300M-16	\$132.00/16 stations	4V-300M-16		\$132.00/16 stations			
3V-300M-B	\$4.84/blank plate	4V-300M-B		\$4.84/blank plate			
3V-400M-2	\$27.50/2 stations	Integrated Base for Mounting 3V400 or 3A400 series Solenoid Valves	4V-400M-2	\$27.50/2 stations	Integrated Base for Mounting 4V400 or 4A400 series Solenoid Valves		
3V-400M-4	\$55.00/4 stations		4V-400M-4	\$55.00/4 stations			
3V-400M-6	\$82.50/6 stations		4V-400M-6	\$82.50/6 stations			
3V-400M-8	\$110.00/8 stations		4V-400M-8	\$110.00/8 stations			
3V-400M-16	\$220.00/16 stations		4V-400M-16	\$220.00/16 stations			
3V-400M-B	\$4.84/blank plate		4V-400M-B	\$4.84/blank plate			

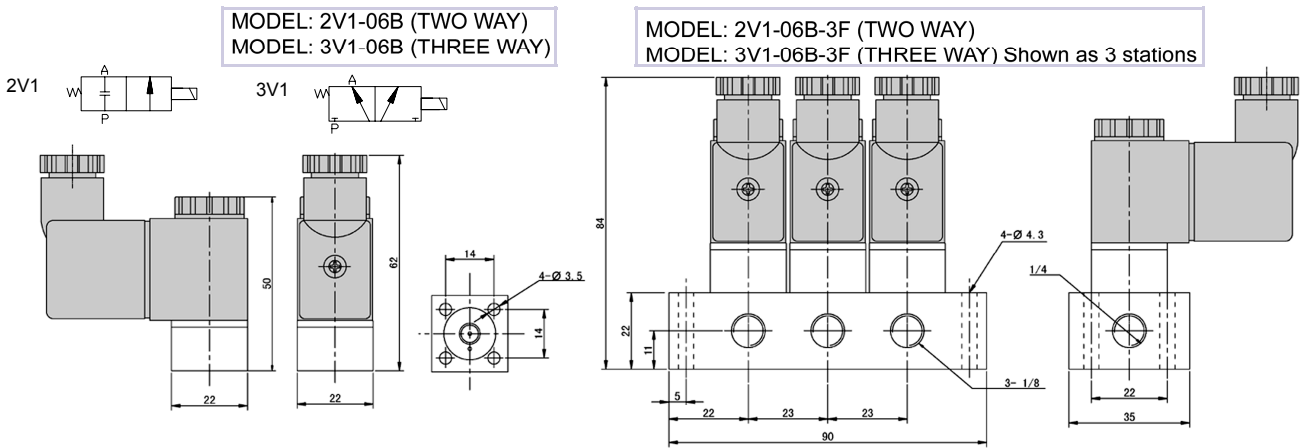
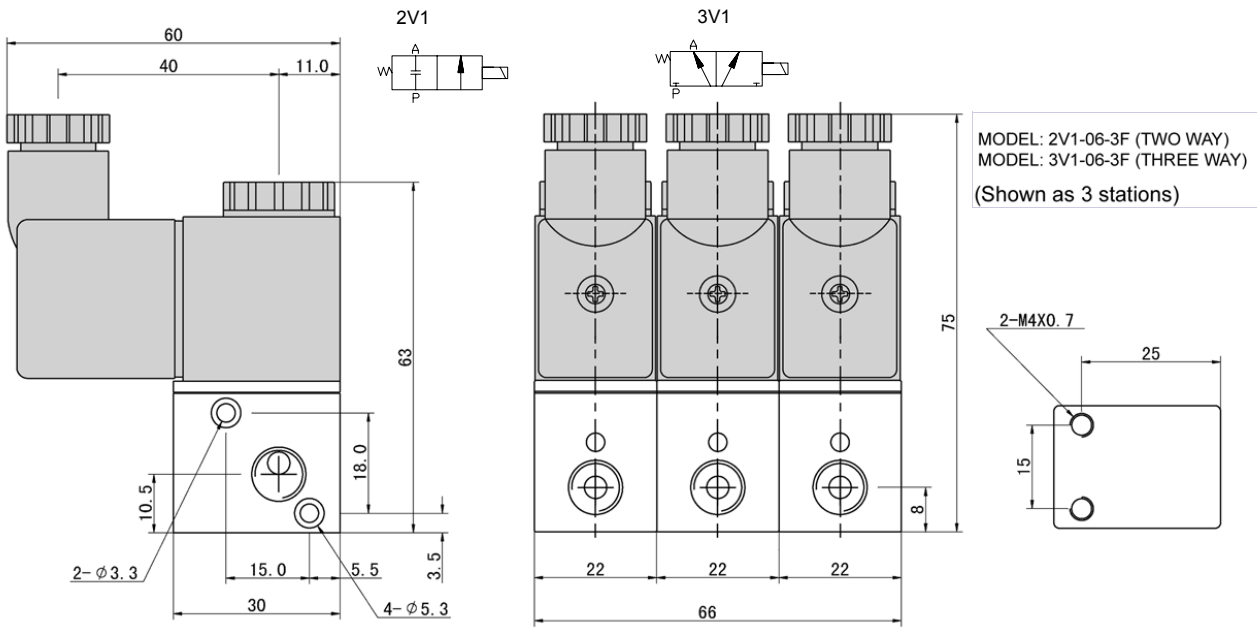
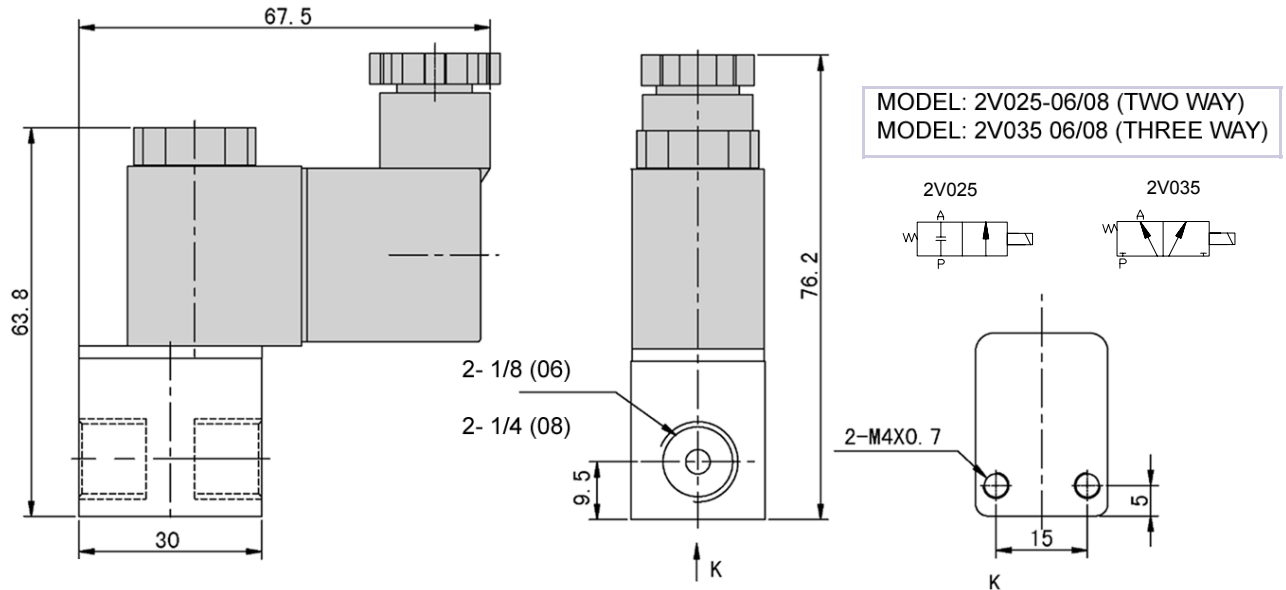
\* Includes mounting hardware and seals

## Specifications

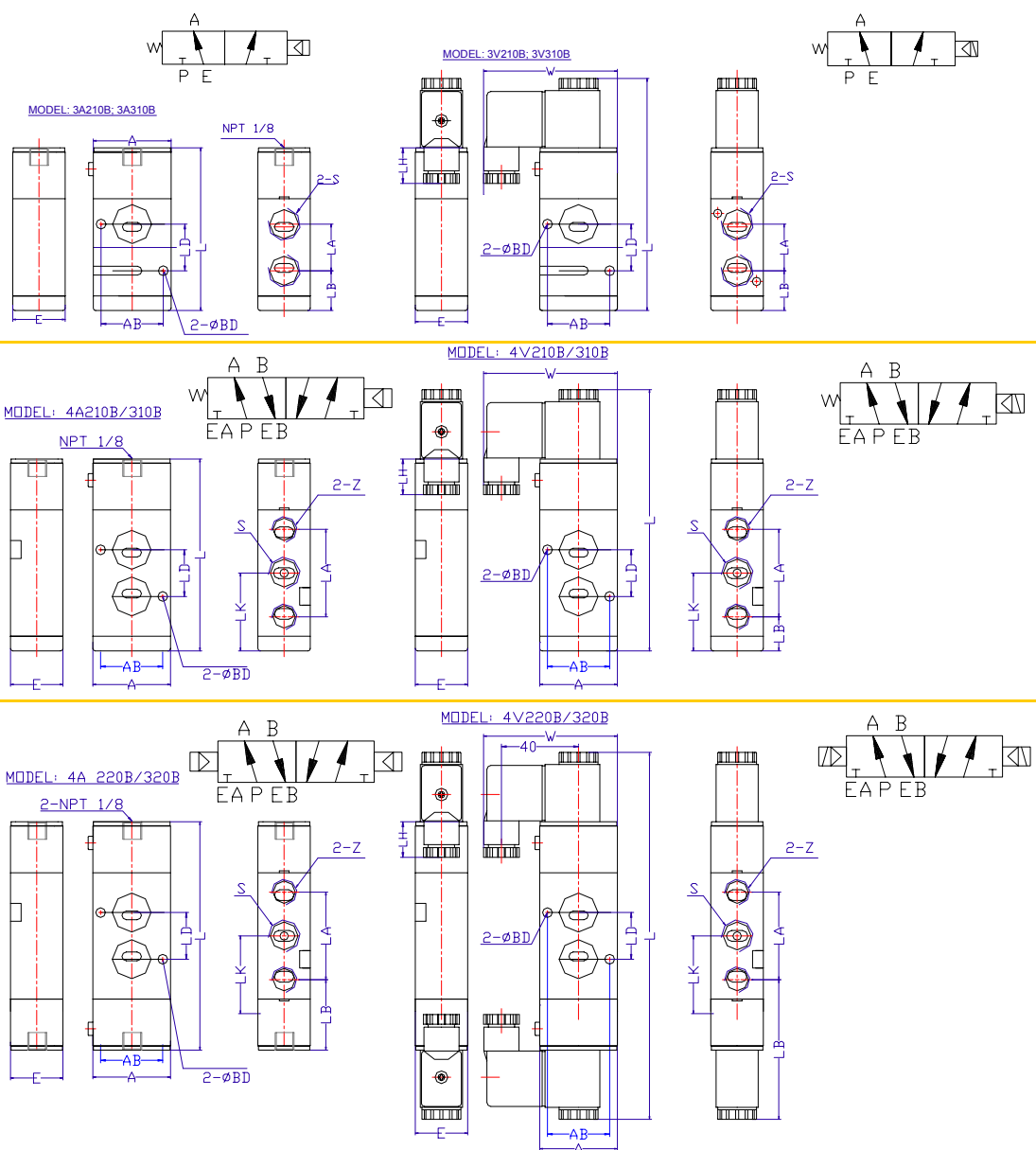
Valve Type	3V & 4V 100-400 Series Valves	2V1, 3V1, 2V025-035 2P025-035 Series Valves	3A & 4A 100-400 Series Valves
Port & Mounting	Body Ported, Manifold Mounted	Body Ported, Stacking or Manifold Mounted	Body Ported, Manifold Mounted
Action & Motion	Internal Pilot, Spool Design	Direct Acting	Air Pilot, Spool Design
Operating Pressure	21 to 115 PSI	Vacuum to 115 PSI	0 to 115 PSI
Coil Insulation & Protection Class	F Class, IP65 (CE Certification)	F Class, IP65 (CE Certification)	N/A
Coil Duty Cycle	100% ED	100% ED	100% ED
Manual Override	Non-Locking: 100 series,	Non-Locking	N/A
Electrical Connection	D = DIN (with LED indicator, conduit terminal)		N/A
Working Medium	40 micron filtered air or inert gas	40 micron filtered air, inert gas & liquid	40 micron filtered air or inert gas
Maximum Pressure	180 PSI		
Operating Temperature	14 to 140 Deg. F (-10 to 60 Deg. C)		
Body Material	Aluminum (Engineered Plastic for 2P Series)		
Seal Material	NBR (Buna N)		
Lubrication	Not Required		



# Solenoid Valve Dimensions



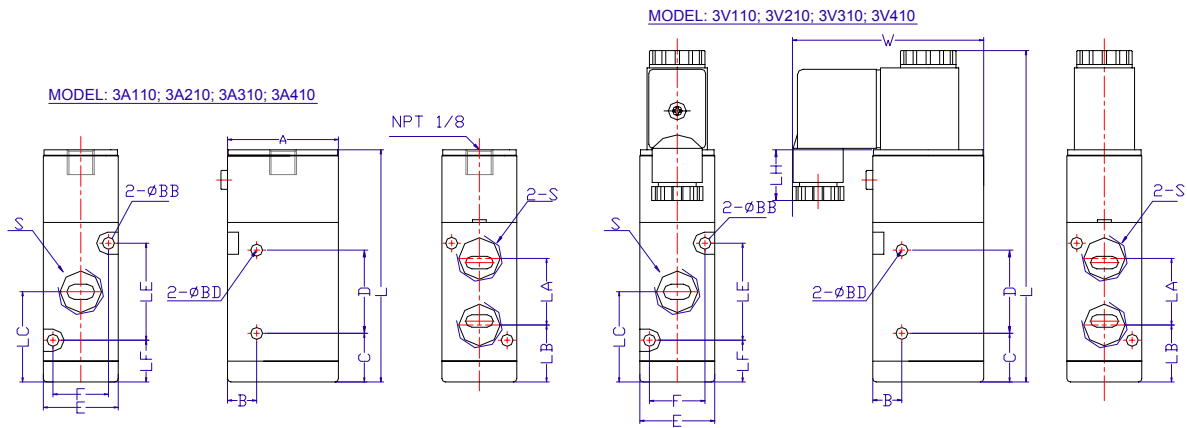
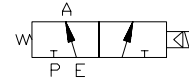
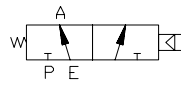
# Solenoid & Air Pilot Valves Dimensions



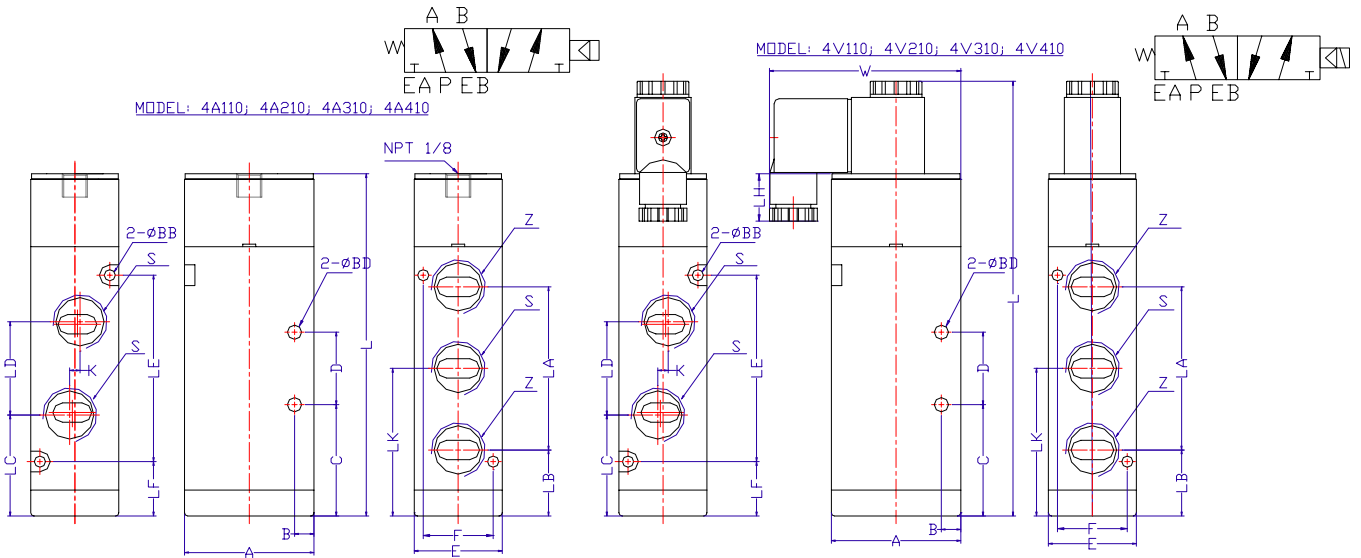
MODEL	A	E	L	S	W	Z	AB	BD	LA	LB	LD	LH	LK
3A210-1/4B	35	22	77.7	1/4	66.5		29	4.3	18	21			
<b>3A310-1/4B</b>	<b>40</b>	<b>27</b>	<b>80.5</b>	<b>3/8</b>	<b>69</b>		<b>32</b>	<b>5.5</b>	<b>24</b>	<b>20.5</b>			
3A310-3/8B	40	27	80.5	3/8	69		32	5.5	24	20.5			
3V210-1/4B	35	22	111.5	1/4	66.5		29	4.3	18	21		18	
<b>3V310-1/4B</b>	<b>40</b>	<b>27</b>	<b>119.4</b>	<b>1/4</b>	<b>69</b>		<b>32</b>	<b>5.5</b>	<b>24</b>	<b>20.5</b>		<b>18</b>	
3V310-3/8B	40	27	119.4	3/8	69		32	5.5	24	20.5		18	
<b>4A210-1/4B</b>	<b>35</b>	<b>22</b>	<b>77.7</b>	<b>1/4</b>	<b>66.5</b>	<b>1/8</b>	<b>29</b>	<b>4.3</b>	<b>36</b>	<b>13.5</b>	<b>23</b>		<b>31.7</b>
4A310-1/4B	40	27	95.5	1/4	69	1/4	32	5.5	45	17.5	24		40
4A310-3/8B	40	27	95.5	3/8	69	1/4	32	5.5	45	17.5	24		40
4V210-1/4B	35	22	116.5	1/4	66.5	1/8	29	4.3	36	13.5	23	18	32.5
<b>4V310-1/4B</b>	<b>40</b>	<b>27</b>	<b>134.5</b>	<b>1/4</b>	<b>69</b>	<b>1/4</b>	<b>32</b>	<b>5.5</b>	<b>45</b>	<b>17.5</b>	<b>24</b>	<b>18</b>	<b>40</b>
4V310-3/8B	40	27	134.5	3/8	69	1/4	32	5.5	45	17.5	24	18	40
4A220-1/4B	35	22	92	1/4	66.5	1/8	29	4.3	36	28	23		46
4A320-1/4B	40	27	111	1/4	69	1/4	32	5.5	45	33	24		55.5
4A320-3/8B	40	27	111	3/8	69	1/4	32	5.5	45	33	24		55.5
4V220-1/4B	35	22	169.8	1/4	66.5	1/8	29	4.3	36	66.9	23	18	84.9
<b>4V320-1/4B</b>	<b>40</b>	<b>27</b>	<b>188.8</b>	<b>1/4</b>	<b>69</b>	<b>1/4</b>	<b>32</b>	<b>5.5</b>	<b>45</b>	<b>71.9</b>	<b>24</b>	<b>18</b>	<b>94.4</b>
4V320-3/8B	40	27	188.8	3/8	69	1/4	32	5.5	45	71.9	24	18	94.4



# Solenoid & Air Pilot Valves Dimensions

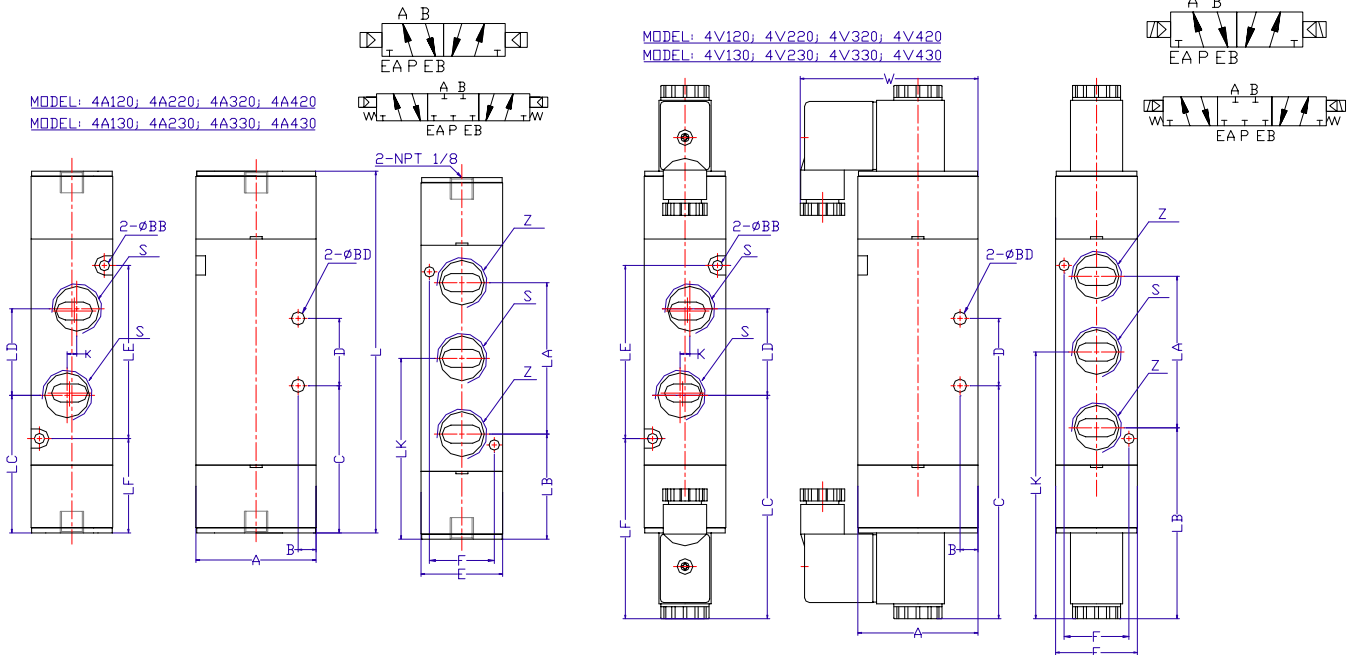


MODEL	A	B	D	E	F	L	S	W	BB	BD	LA	LB	LC	LE	LF	LH
3A110-1/8	27	7.7	21	18.0	13	56.5	1/8	53.5	3.3	3.3	16	14.0	23	19	12.5	
3A210-1/4	35	8.0	25	22.0	17	77.7	1/4	66.5	3.3	4.3	18	21.0	31	33	12.5	
3A310-3/8	40	10.5	30	27.0	20	80.5	3/8	69	4.3	4.3	24	20.5	32.5	35	15	
3A410-1/2	50	13.5	51	34.0	27	96.5	1/2	73.9	4.3	5.5	36	25.5	41.5	44	15.5	
3V110-1/8	27	7.7	21	18.0	13	85.8	1/8	53.5	3.3	3.3	16	14.0	23	19	12.5	10
3V210-1/4	35	8.0	25	22.0	17	111.5	1/4	66.5	3.3	4.3	18	21.0	31	33	12.5	18
3V310-3/8	40	10.5	30	27.0	20	119.4	3/8	69	4.3	4.3	24	20.5	32.5	35	15	18
3V410-1/2	50	13.5	51	34.0	27	137.0	1/2	73.5	4.3	5.5	36	25.5	41.5	44	15.5	18

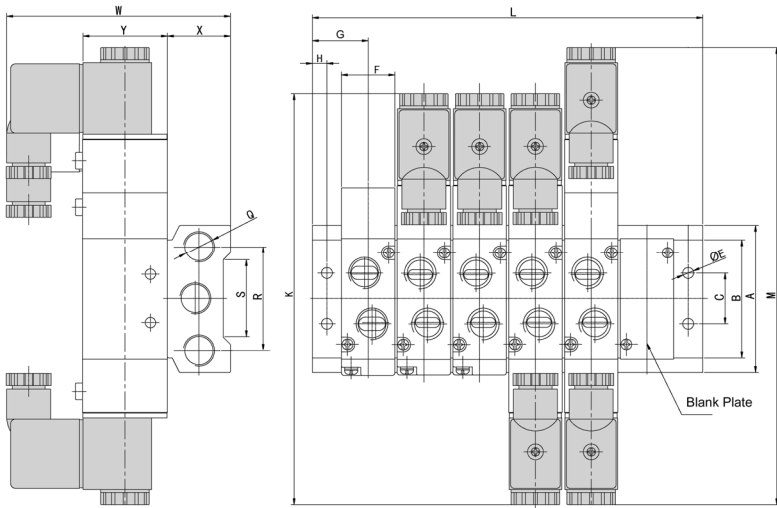


MODEL	A	B	C	D	E	F	K	L	S	W	Z	BB	BD	LA	LB	LC	LD	LE	LF	LH	LK
4A110-1/8	27	4.0	21.0	14	18	13	3	68.7	1/8	53.5	1/8	3.3	3.3	28	14.2	20.2	16	30	13.0		28.2
4A210-1/4	35	7.0	21.5	20	22	17	3	77.7	1/4	66.5	1/8	3.3	4.3	36	13.5	21.0	21	38	12.5		31.7
4A310-3/8	40	6.5	28.0	24	27	20	4	95.5	3/8	69	1/4	4.3	4.3	45	17.5	28.0	24	50	15.0		40.0
4A410-1/2	50	7.5	43.0	28	34	27	4	128	1/2	73.5	1/2	4.3	5.5	63	25.5	39.0	36	72	21.0		57.0
4V110-1/8	27	4.0	21.0	14	18	13	3	98	1/8	53.5	1/8	3.3	3.3	28	14.0	20.0	16	30	13.0	10	28.0
4V210-1/4	35	7.0	21.5	20	22	17	3	116.5	1/4	66.5	1/8	3.3	4.3	36	13.5	21.0	21	38	12.5	18	32.5
4V310-3/8	40	6.5	28.0	24	27	20	4	134.5	3/8	69	1/4	4.3	4.3	45	17.5	28.0	24	50	15.0	18	40.0
4V410-1/2	50	7.5	43.0	28	34	27	4	167.9	1/2	73.5	1/2	4.3	5.5	63	25.5	39.0	36	72	21.0	18	57.0

# Solenoid & Air Pilot Valves & Manifolds Dimensions



MODEL	A	B	C	D	E	F	K	L	S	W	Z	BB	BD	LA	LB	LC	LD	LE	LF	LH	LK
4A120-1/8	27	4.0	33.5	14	18	13	3	81	1/8	53.5	1/8	3.3	3.3	28	26.5	32.5	16	30	25.5		40.5
4A220-1/4	35	7.0	36.0	20	22	17	3	92	1/4	66.5	1/8	3.3	4.3	36	28.0	37.0	21	38	27.0		46.0
4A320-3/8	40	6.5	43.5	24	27	20	4	111	3/8	69	1/4	4.3	4.3	45	33.0	43.5	24	50	30.5		55.5
4A420-1/2	50	7.5	51.0	28	34	27	4	128	1/2	73.5	1/2	4.3	5.5	63	39.5	71.0	36	72	35.0		71.0
4V120-1/8	27	4.0	62.8	14	18	13	3	139.5	1/8	53.5	1/8	3.3	3.3	28	56.0	52.0	16	30	54.8	10	69.8
4V220-1/4	35	7.0	74.9	20	22	17	3	169.8	1/4	66.5	1/8	3.3	4.3	36	66.9	74.4	21	38	65.9	18	84.9
4V320-3/8	40	6.5	82.4	24	27	20	4	188.8	3/8	69	1/4	4.3	4.3	45	71.9	82.4	24	50	69.4	18	94.4
4V420-1/2	50	7.5	96.9	28	34	27	4	217.5	1/2	73.5	1/2	4.3	5.5	63	79.4	92.9	36	72	74.9	18	110.9
4A130-1/8	27	4.0	33.5	14	18	13	3	96	1/8	53.5	1/8	3.3	3.3	28	26.5	32.5	16	30	25.5		40.5
4A230-1/4	35	7.0	36.0	20	22	17	3	110	1/4	66.5	1/8	3.3	4.3	36	28.0	37.0	21	38	27.0		46.0
4A330-3/8	40	6.5	43.5	24	27	20	4	130	3/8	69	1/4	4.3	4.3	45	33.0	43.5	24	50	30.5		55.5
4A430-1/2	50	7.5	51.0	28	34	27	4	165	1/2	73.5	1/2	4.3	5.5	63	39.5	71.0	36	72	35.0		71.0
4V130-1/8	27	4.0	62.8	14	18	13	3	154.6	1/8	53.5	1/8	3.3	3.3	28	56.0	52.0	16	30	54.8	10	69.8
4V230-1/4	35	7.0	74.9	20	22	17	3	188.8	1/4	66.5	1/8	3.3	4.3	36	66.9	74.4	21	38	65.9	18	84.9
4V330-3/8	40	6.5	82.4	24	27	20	4	207.8	3/8	69	1/4	4.3	4.3	45	71.9	82.4	24	50	69.4	18	94.4
4V430-1/2	50	7.5	96.9	28	34	27	4	242.8	1/2	73.5	1/2	4.3	5.5	63	79.4	92.9	36	72	74.9	18	110.9



## 4V100-400M Manifold Dimensions

MODEL	A	B	C	E	F	G	H	K	L
100M	58	44	20	4.2	18.3	19	5	140	(N-1)*19+38
200M	61	51	21	4.3	22.4	23	6	170	(N-1)*23+46
300M	75	65	26	4.5	27.3	27	6	189	(N-1)*28+54
400M	104	95	32	5.5	34.3	31.5	7	222	(N-1)*35+63

MODEL	M	Q	R	S	T	W	X	Y
100M	155	1/4	40	30	M3x.5	78.5	25	27
200M	189	1/4	43	32	M3x.5	92.5	26	35
300M	208	3/8	53	48	M4x.7	99	30	40
400M	243	1/2	68	67	M4x.7	112	38	50



# STC

## Manual & Actuated Process Valves





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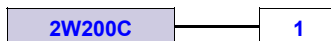
## STC Process Valve Numbering System

Ordering Part No. =  
eg. 2W025-1/4-1-G



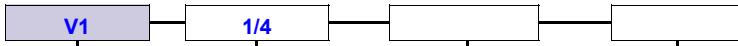
NC (Normally Closed) NO (Normally Open)	Model	BODY SIZE	PORT SIZE (NPT)	VOLTAGE	ELEC. CONNECTION
NC Brass High Pressure	2L	025	1/8	1 = 12 VDC 2 = 24 VDC 2A = 24 VAC 3 = 110 VAC 4 = 220VAC	BLANK = Standard <b>DIN</b> Con- nection (with Conduit Terminal )  G = Grommet Terminal (Options for 2P and 2V series valves)
NC Engineered Plastic	2P		1/4		
NC Anodized Aluminum	2V	040	3/8		
NC 304 Stainless Steel	2S	160	3/8		
NO 304 Stainless Steel	2SO		1/2		
NC Brass	2W	200	3/4		
NO Brass	2WO	250	1		
NC Brass	VX	350	1 1/4		
NC Anodized Aluminum	VXF	400	1 1/2		
<b>AIR PILOT VALVES</b>		500	2		
NC Brass	QW				
NO Brass Air Pilot	QWO				

Ordering Part No. =  
eg. 2W200C-1



COILS	MODEL	VOLTAGE
Coil for 2W & 2S 025 TO 250 series valves	2W200C	1 = 12 VDC
Coil for 2W & 2S 350 TO 500 series valves	2W300C	2 = 24 VDC
Coil for 2WO & 2SO 160 TO 500 series valves	2WOC	2A = 24 VAC
Coil for 2P & 2V Series Valves	200C	3 = 110 VAC
		4 = 220VAC

Ordering Part No. =  
eg. V1-1/4



MANUAL BALL VALVES	MODEL	PORT SIZE (NPT)	Mounting	
Reduced port 316 SS ball valve (1 Piece)	V1	1/4	Blank = No mounting Option  A=Actuator Mount  P= Panel Mount	
Full port 316 SS ball valve (2 Piece)	V2	3/8		
Full port 316 SS ball valve (3 Piece)	V3	1/2		
Full port 316 SS ball valve (3 Piece, Tri-Clamp)	V3C	3/4		
Full port brass ball valve (2 Piece)	T101L	1		
Reduced port chrome plated brass ball valve (FXF port)	T400	1 1/4		
Reduced port chrome plated brass ball valve (FXM port)	T400FM	1 1/2		
316 SS Needle valve	VNO1	2		
VALVE ACTUATORS	MODEL	Actuator Bore Size (mm)	Rotation	Action
ROTARY PNEUMATIC VALVE ACTUATORS	KT	45	90  180	S=Single Acting (Spring Return)  D=Double Acting (Air Return)
		63		
		83		
		105		
		140		
		160		
		210		
280				



# STC Solenoid Valve List Price

To Order, Please Specify: 1. Model No. 2. Voltage

	Part No.	List Price	Port Size (NPT)	Cv	Voltage	Features		
	2P025-1/8	\$18.43	1/8	0.23	Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	2 Way, Direct Acting, Normally Closed  Operating Temp: -5 to 80 deg. C  Operating Pressure: Vacuum to 115 PSI  Coil: F Class, IP65, 100% ED  Service: Air, Gas, Liquid  Seals: NBR, (Viton Option)  <b>Body Material:</b>  2P Series: Engineered Plastic  2S Series: 304 Stainless Steel Body  2V Series: Anodized Aluminum Body  2W Series: Brass		
	2P025-1/4	\$18.43	1/4	0.23				
	2S025-1/4	\$30.69	1/4	0.23				
	2S040-3/8	\$42.57	3/8	0.6				
	2V025-1/8	\$18.81	1/8	0.23				
	2V025-1/4	\$18.81	1/4	0.23				
	2W025-1/4	\$27.50	1/4	0.23				
	2W040-3/8	\$34.16	3/8	0.6				
	2W160-3/8	\$54.45	3/8	4.8			Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	2 Way, Direct Acting/Lift, Normally Closed  Operating Temp: -5 to 80 deg. C  Operating Pressure: Vacuum to 115 PSI  Coil: F Class, IP65, 100% ED  Service: Air, Gas, Liquid  Seals: NBR, (Viton Option)  <b>Body Material: Brass</b>
	2W160-1/2	\$54.45	1/2	4.8				
	2W200-3/4	\$62.87	3/4	7.6				
	2W250-1	\$76.73	1	12				
	2W350-1 1/4	\$169.29	1 1/4	24				
	2W400-1 1/2	\$188.10	1 1/2	29				
	2W500-2	\$273.24	2	48				
	2S160-3/8	\$103.46	3/8	4.8	Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	2 Way, Direct Acting/Lift, Normally Closed  Operating Temp: -5 to 80 deg. C  Operating Pressure: Vacuum to 115 PSI  Coil: F Class, IP65, 100% ED  Service: Air, Gas, Liquid  Seals: NBR, (Viton Option)  <b>Body Material: 304 Stainless Steel</b>		
	2S160-1/2	\$103.46	1/2	4.8				
	2S200-3/4	\$117.32	3/4	7.6				
	2S250-1	\$131.18	1	12				
	2S350-1 1/4	\$239.71	1 1/4	24				
	2S400-1 1/2	\$255.75	1 1/2	29				
	2S500-2	\$399.56	2	48				
	QW-1/2	\$123.20	1/2	4.8	Pilot Pressure: 80-150 PSI	2 Way, Direct Acting, NC  Operating Temp -5 to 80 deg. C  Operating Pressure: 100 PSI  Service: Air, Water, Oil, Gas  Seals: Teflon  <b>Body Material: Brass</b>		
	QW-3/4	\$132.00	3/4	7.6				
	QW-1	\$162.00	1	12				
	QW-1 1/2	\$266.37	1 1/2	29				
	QW-2	\$332.97	2	48				




# STC Solenoid Valve List Price

To Order, Please Specify: 1. Model No. 2. Voltage

	Part No.	List Price	Port Size (NPT)	Cv	Voltage	Features		
	2WO 160-3/8	\$91.58	3/8	4.8	Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	<b>Normally Open</b>  2 Way, Direct Acting/Lift,  Operating Temp: -5 to 80 deg. C  Operating Pressure: Vacuum to 115 PSI  Coil: F Class, IP65, 100% ED  Service: Air, Liquid  Seals: NBR (Option: Viton, EPDM)  Body Material:  2S Series: 304 Stainless Steel  2W Series: Brass		
	2WO 160-1/2	\$91.58	1/2	4.8				
	2WO 200-3/4	\$99.88	3/4	7.6				
	2WO 250-1	\$116.55	1	12				
	2WO 350-1 1/4	\$183.10	1 1/4	24				
	2WO 400-1 1/2	\$203.42	1 1/2	29				
	2WO 500-2	\$295.50	2	48				
	2SO 160-3/8	\$119.00	3/8	4.8				
	2SO 160-1/2	\$129.84	1/2	4.8				
	2SO 200-3/4	\$151.51	3/8	7.6				
	2SO 250-1	\$238.00	1	12				
	2SO 350-1 1/4	\$335.41	1 1/4	24				
	2SO 400-1 1/2	\$372.69	1 1/2	29				
	2SO 500-2	\$541.37	2	48				
	2L170-3/8	\$87.95	3/8	4.8	Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	<b>Normally Closed, 2 Way, Direct Acting</b>  Brass Body, Seals: PTFE  Operating Temp: -5 to 150 deg. C  Operating Pressure: 215 PSI  Coil: F Class, IP65, 100% ED  Service: Air, Liquid, Steam Installation: Vertical Coil Position		
	2L170-1/2	\$103.46	1/2	4.8				
	2L170-3/4	\$117.32	3/4	4.8				
	2L200-1	\$131.18	1	12				
	2L300-1 1/4	\$185.52	1 1/4	20				
	2L300-1 1/2	\$216.32	1 1/2	20				
	2L500-2	\$325.22	2	48				
	VX2120-1/8		1/8	0.33			Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	<b>Normally Closed, 2 Way, Direct Acting,</b> Brass Body, Seals: VITON Operating Temp -5 to 150 deg. C Operating Pressure: 140 PSI Coil: F Class, IP65, 100% ED Service: Air, Water, Steam
	VX2120-1/4		1/4	0.33				
	VX2120-3/8		3/8	4				
	VX2120-1/2		1/2	4				
	VXF2120-1/8		1/8				Voltage Options: 1 = 12 VDC 2 = 24VDC  2A=24VAC 3 = 110VAC 4 = 220VAC	<b>Normally Closed, 2 Way, Direct Acting,</b> Seals: NBR (Option: VITON) Operating Temp: -5 to 150 deg. C Operating Pressure: 150 PSI Coil: F Class, IP65, 100% ED Service: Air, Liquid Body Material: Aluminum
	VXF2120-1/4		1/4					
	VXF2120-3/8		3/8					
	VXF2120-1/2		1/2					
	QWO-1/2	\$112.00	1/2	4.8	Pilot Pressure: 80-150 PSI	<b>Normally Open</b> 2 Way, Direct Acting, Brass Body; Seals: Viton Operating Temp -5 to 80 deg. C Operating Pressure: 100 PSI Air Pilot Pressure: 80-150 PSI Service: Air, Water, Oil, Gas		
	QWO-3/4	\$132.00	3/4	7.6				
	QWO-1	\$162.00	1	12				
	QWO-1 1/2	\$242.15	1 1/2	29				
	QWO-2	\$302.70	2	48				



## Electrical Coil List Price

	Part No.	Price	Voltage Options	Electrical Connection	Power	Specifications
	2W200C	\$23.10	1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC  Insulation: F Class IP65 Duty Cycle: 100% ED	D = DIN (5/16" strain relief connector)	13 to 20W	For 2S/2W 025 to 250 series valves
	2W350C	\$35.75			25-65W	For 2/S2W 350-500 & 2L 170-500 series valves
	2WOC	\$29.70			40 W	For 2SO/2WO 160-500 series valves
	200C	\$7.92		3 to 6.5 W	For 2V & 2P025-035 & 2V1, 3V1 series valves	
				D = DIN (with LED indicator) G = Grommet (12" Lead Wire)		

## Solenoid Valve Specifications

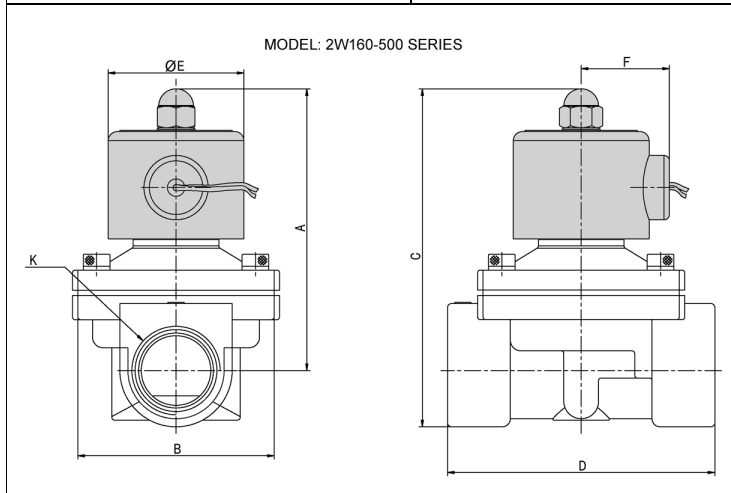
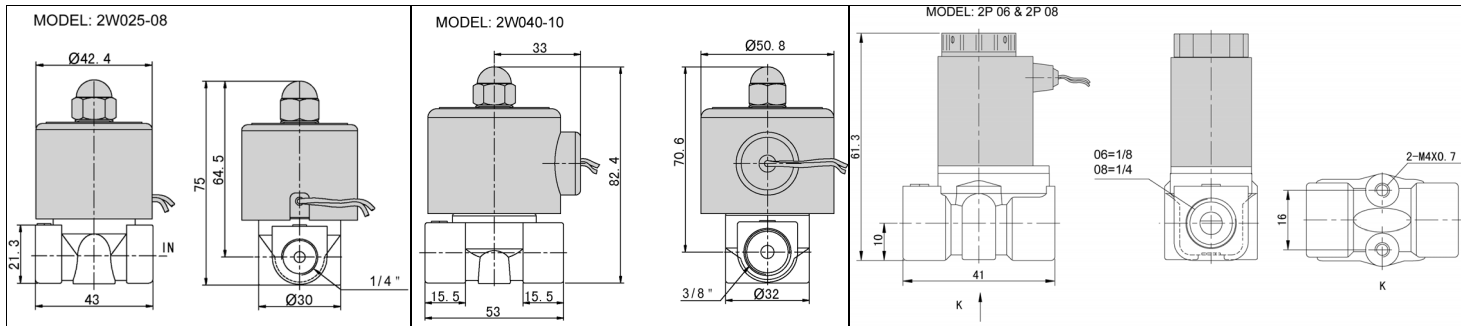
Valve Type	2P	2S/2SO	2W/2WO	2L Series	VX Series 06 to 08	VX Series 10-15	QW
Operating Pressure	-28" Hg to 150 PSI @30 Deg. C			0 to 210 PSI	0 to 145 PSI	0 to 145 PSI	0 to 85 PSI
Operating Temperature	-5 TO 80 Deg. C			-5 TO 150 Deg. C	-5 TO 150 Deg. C	-5 TO 80 Deg. C	-5 TO 100 Deg. C
Body Materials	Engineered Plastic	304 Stainless	Brass	Brass	Brass	Brass	Brass
Seal Materials	NBR			PTFE	NBR		
Coil Protection Insulation Class	F Class IP65						Air Pilot Operated
Coil Duty Cycle	100% ED						
Electrical Connections	DIN (with 3/8" Strain Relief Connection)				Two 12" Lead Wires		N/A
Service	Vacuum, Air, Liquid (Reverse flow direction for vacuum applications)			Air, Liquid, Steam Installation -Vertical		Vacuum, Air, Liquid  Air, Liquid, Gas	

## STC Valve List Price

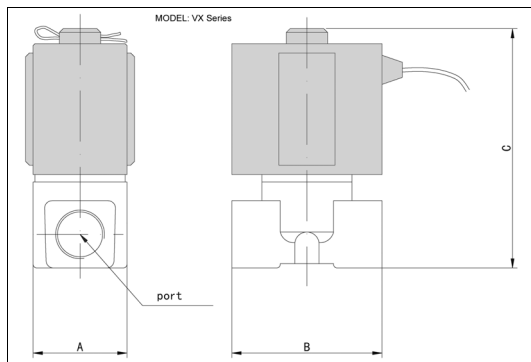
												
	Reduced Port Ball Valves	Full Port Ball Valves	Full Port Ball Valves	Full Port Ball Valves	Full Port Butterfly Valves	Needle Valves						
Model	V1	V2	V3	V3C	VBS01	VN01						
Material	316 SS	316 SS	316 SS	316 SS	316 SS	316 Stainless Steel						
Port	FNPT	FNPT	FNPT	Clamp	Clamp	NPT Female						
Size 1/4"	V1-1/4	\$8.07	V2-1/4	\$12.21	V3-1/4	\$20.17						
3/8"	V1-3/8	\$8.43	V2-3/8	\$14.13	V3-3/8	\$20.17						
1/2"	V1-1/2	\$8.43	V2-1/2	\$14.13	V3-1/2	\$20.17						
3/4"	V1-3/4	\$12.27	V2-3/4	\$20.57	V3-3/4	\$29.03						
1"	V1-1	15.83	V2-1	\$28.67	V3-1	\$37.13	V3C-1	\$40.83				
1 1/4"	V1-1 1/4	25.87	V2-1 1/4	\$42.37	V3-1 1/4	\$56.17						
1 1/2"	V1-1 1/2	\$31.67	V2-1 1/2	\$60.53	V3-1 1/2	\$70.53	V3C-1 1/2	\$79.20				
2"	V1-2	40.23	V2-2	\$73.70	V3-2	\$100.90	V3C-2	\$111.00				
3"							V3C-3	\$327.17				
												
	Miniature Ball Valves	Miniature Ball Valves	Full Port	<b>ROTARY PNEUMATIC VALVE ACTUATORS</b>		Single Acting		Double Acting	Note			
Model	T400	T400FM	T101L	Model		Rotation		Suitable for Ball Valve Size				
Material	Chrome-Plated Brass	Chrome-Plated Brass	Brass	KT-DA		90 Degree	180 Degree	90 Degree	180 Degree			
Port	F NPT	F x M NPT	F NPT									
Size 1/4"	T400-1/4	\$2.15	T400FM-1/4	\$2.15	T101L-1/4	\$2.72	<b>45</b>	\$149.36	\$195.52	\$114.00	\$160.00	1"
3/8"	T400-3/8	\$2.48	T400FM-3/8	\$2.48	T101-3/8		<b>63</b>	\$175.52	\$230.00	\$135.00	\$189.24	1 1/2"
1/2"	T400-1/2	\$2.90	T400FM-1/2	\$2.90	T101L-1/2	\$4.22	<b>83</b>	\$251.52	\$330.00	\$195.52	\$273.60	2 1/2"
3/4"					T101L-3/4	\$6.33	<b>105</b>	\$329.12	\$431.52	\$255.00	\$358.00	3"
1"					T101L-1	\$10.46	<b>125</b>	\$520.00	\$681.60	\$387.00	\$542.52	4"
1 1/2"					T101L-1 1/2	\$21.89						
2"					T101L-2	\$36.14						



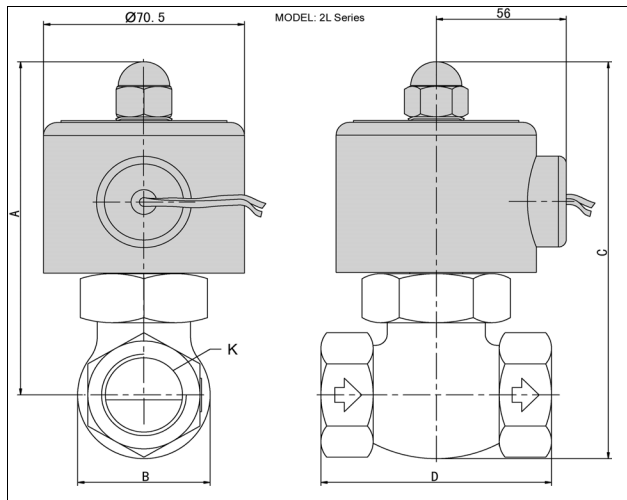
# STC Valve Technical Data



MODEL: 2S & 2W Series (MM)							
		A	B	C	D	E	F
2S160-3/8	2W160-3/8	101.5	57	117	69	50	36
2S160-1/2	2W160-1/2	101.5	57	117	69	50	36
2S200-3/4	2W200-3/4	107.0	57	124	73	50	36
2S250-1	2W250-1	111.5	74	135	99	50	36
2S350-1 1/4	2W350-1 1/4	142.0	95	172	123	70.5	56
2S400-1 1/2	2W400-1 1/2	142.0	95	172	123	70.5	56
2S500-2	2W500-2	172.0	123	209	168	70.5	56


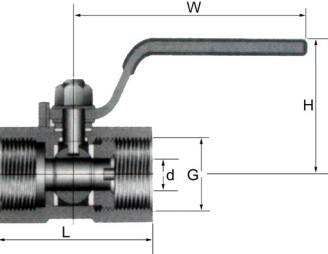

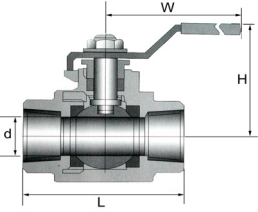

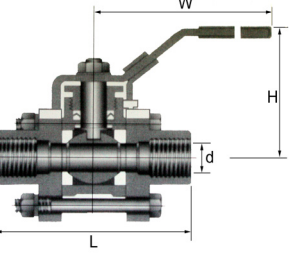


MODEL: VX Series (MM)				
	Port (NPT)	A	B	C
VX2120-1/8	1/8	25	40	64
VX2120-1/4	1/4	25	40	64
VX2120-3/8	3/8	48	68	110
VX2120-1/2	1/2	48	68	110



MODEL: 2L Series (MM)					
	A	B	C	D	K
2L170-3/8	125	42	146	82	3/8
2L170-1/2	125	42	146	82	1/2
2L170-3/4	125	42	146	82	3/4
2L200-1	136	52	162	91	1
2L300-1 1/4	148	74	185	111	1 1/4
2L300-1 1/2	148	74	185	111	1 1/2
2L500-2	176	86	223	163	2

# STC Valve Technical Data

		Model: V1 SPECIFICATIONS						MAIN PARTS AND MATERIALS									
		One Piece Reduced Port 316 Stainless Steel Ball Valve						NO	PART NAME	MATERIAL	QTY						
		Maximum Operating Pressure: 1000 PSIG @ 100°F WOG*						1	SEAT	PTFE	2						
		Operating Temperature Range: -60 to 450°F*						2	BALL	SS316	1						
		End Connections: NPT Threaded with Padlocking device						3	JOINT GASKET	PTFE	1						
		DIMENSIONS (mm)						4	CAP	SS316	1						
SIZE	d	L	H	W	Wt (kg)		5	BODY	SS316/CF8M	1							
1/4"	5	39	35	64	0.07		6	STEM	SS316	1							
3/8"	7	44	37	70	0.1		7	THRUST WASHER	PTFE	1							
1/2"	9.2	56.5	43.5	90	0.16		8	STEM PACKING	PTFE	1							
3/4"	12.5	58	47	90	0.25		9	GLAND NUT	SS304	1							
1"	15	70	50	103	0.43		10	STEM WASHER	SS304	1							
1 1/4"	20	78	57	103	0.7		11	STEM NUT	SS304	1							
1 1/2"	24.5	83	69	127	0.83		12	HANDLE COVER	PLASTIC	1							
2"	32	100	74.5	127	1.5		13	HANDLE	SS304	1							
		Model: V2 SPECIFICATIONS										MAIN PARTS AND MATERIALS					
		Two Piece Full Port 316 Stainless Steel Ball Valve										NO	PART NAME	MATERIAL	QTY		
		Maximum Operating Pressure: 1/4" to 2" 1000 PSIG @ 100°F WOG* 2 1/2" to 3" 800 PSIG @ 100°F WOG*										1	SEAT	PTFE	2		
		Temperature Range: -60 to 450°F*										2	BALL	SS316	1		
		End Connections: NPT Threaded with Padlocking & panel mount device										3	JOINT GASKET	PTFE	1		
		DIMENSIONS (mm)										4	CAP	SS316	1		
SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	NO	PART NAME	MATERIAL	QTY			
d	11.6	12.7	15	20	25.4	32	38	50.8	65	76	5	BODY	SS316/CF8M	1			
L	55	55	63.5	75	88	103	110	124	167	192	6	STEM	SS316	1			
H	48	48	50	57	69	73	83	92	136	149	7	THRUST WASHER	PTFE	1			
W	103	103	103	125	145	145	190	190	250	250	8	STEM PACKING	PTFE	1			
											9	GLAND NUT	SS304	1			
											10	STEM WASHER	SS304	1			
											11	STEM NUT	SS304	1			
											12	HANDLE COVER	PLASTIC	1			
											13	HANDLE	SS304	1			
		Model: V3 SPECIFICATIONS												MAIN PARTS AND MATERIALS			
		Maximum Operating Pressure: 1/2" to 2" 1000 PSI @ 100°F WOG* 2 1/2" to 3" 800 PSI @ 100°F WOG*												NO	PART NAME	MATERIAL	QTY
		Temperature Range: -60 to 450°F*												1	SEAT	PTFE	2
		Full Port												2	BALL	SS316	1
		End Connections: FNPT												3	JOINT GASKET	PTFE	1
		Mounting Options: Padlocking device and actuator mounting bracket												4	CAP	SS316	1
		DIMENSIONS (mm)												5	BODY, BODY CONNECTOR	SS316/ CF8M	1, 2
		SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6	STEM	SS316	1
d	mm	12.5	12.5	15	20	25	30	38	50	64	80	98	7	THRUST WASHER	PTFE	1	
	in	0.49	0.49	0.59	0.79	0.98	1.18	1.5	1.97	2.52	3.15	3.86	8	STEM PACKING	PTFE	1	
H	mm	57	57	68	70	80	84	93	100	142	155	172	9	GLAND NUT	SS304	1	
	in	2.24	2.24	2.68	2.76	3.15	3.31	3.66	3.94	5.59	6.1	6.77	10	STEM WASHER	SS304	1	
W	mm	96	96	124	124	142	142	202	202	250	250	300	11	STEM NUT	SS304	1	
	in	3.78	3.78	4.88	4.88	5.59	5.59	7.95	7.95	9.84	9.84	11.81	12	HANDLE COVER	PLASTIC	1	
L	mm	68	68	72	83	90	112	120	147	174	193	216	13	HANDLE	SS304	1	
	in	2.56	2.56	2.84	3.35	3.62	4.33	4.48	5.59	6.85	7.6	8.5	14	BODY CONNECTOR BOLT	SS304	4	
													15	BODY CONNECTOR NUT & WASHER	SS304	4	

\* Refer to Maximum Operating Pressure -Temperature Data on Page 8 for more information



# STC Valve Technical Data

Solenoid & Process Valves

Image	Diagram	Model: VBS01 SPECIFICATIONS						MAIN PARTS AND MATERIALS			
		NO	PART NAME	MATERIAL							
		Size: 1/2" to 4"						1	BODY	SS316 or SS316L	
		Full Port Connection Options: Butt weld, Clamp, or Male Thread, Female Ends (RJT, IDF, DIN, SMS)									
		Operating Pressure: -13 PSIG to 150 PSIG WOG*						2	STEM WASHER	SS304	
		Temperature Range: -10°C to 150°C with Silicone, or Viton*									
		Disc Head Size: 9.4 mm (to fit actuator)						3	STEM NUT	SS304	
		Operator Options: Lever, Actuators									
		Body Material Options: 316SS, or 316L SS						4	HANDLE	304 SS/Plastic	
		Handle: 304 SS/Plastic									
		Seat Options: Silicone, EPDM or Viton						5	GASKET	Silicone, EPDM, or Viton	
		<b>DIMENSIONS (mm)</b>									
		A	B	B	B	C	D	E			
		Size	Weld	Clamp	Bevel						
		1"	47.63	88.9	122.24	100	74	39	6		
		1 1/2"	47.63	88.9	134.94	110	47	39	7		
		2"	52.39	95.25	163.51	110	83.5	49.5	BODY CONNECTOR NUT & WASHER		
		2 1/2"	53.98	96.84	174.63	110	93	58.5	SS304		
		3"	61.91	104.78	196.26	159	98	66	8		
		4"	79.38	122.24	228.6	159	118	84.5	BUTTERFLY		
								SS316/SS316L			

Image	Diagram	Model: V3C SPECIFICATIONS						MAIN PARTS AND MATERIALS						
		NO	PART NAME	MATERIAL	QTY									
		Sanitary Stainless Steel Ball Valve: These valves are made with precision machined Teflon seat for use in Sanitary applications. They are three piece design and have four bolts that permit quick and easy access to service the valve without disrupting the pipe line connections.						1	SEAT	PTFE	2			
		Maximum Operating Pressure: 1/2" to 2" 1000 PSI @ 100°F WOG* 2 1/2" to 4" 800 PSI @ 100°F WOG*												
		Temperature Range: -60 to 450°F*						2	BALL	SS316	1			
		Full Port												
		End Connections: Clamp End						3	JOINT GASKET	PTFE	1			
		Mounting Options: Padlocking device and actuator mounting bracket												
		<b>DIMENSIONS (mm)</b>						4	CAP	SS316	1			
		SIZE	PORT (d)	L	A	A1	H					T1	T2	W
		1/2"	9.6	75	25	20.24	64	--	3.63	125	5	BODY, BODY CONNECTOR	SS316/CF8M	1, 2
		3/4"	15.9	90	25	20.24	67	--	3.63	125				
		1"	22.2	100	50.4	43.6	83	2.85	4.75	140	6	STEM	SS316	1
		1 1/4"	28.5	110	50.4	43.6	89	2.85	4.75	140				
		1 1/2"	34.9	125	50.4	43.6	100	2.85	--	200	7	THRUST WASHER	PTFE	1
		2"	47.5	150	63.9	56.3	108	2.85	--	200				
		2 1/2"	60.2	190	77.4	70.6	150	2.85	--	250	8	STEM PACKING	PTFE	1
		3"	72.9	220	90	83.3	161	2.85	--	250				
		4"	97.4	270	118.9	110.3	180	2.85	--	250	9	GLAND NUT	SS304	1
								10	STEM WASHER	SS304				
											11	STEM NUT	SS304	1
								12	HANDLE COVER	PLASTIC				
											13	HANDLE	SS304	1
								14	CONNECTOR BOLT	SS304				
											15	CONNECTOR NUT & WASHER	SS304	4

Image	Diagram	Model: VN01 SPECIFICATIONS						MAIN PARTS AND MATERIALS			
		NO	PART NAME	MATERIAL							
		End Connections: NPT threaded ASME b1.20.1 DIN 2999 & BS21; ISO 228/1 & ISO 7/1						1	SET SCREW	SS304	
		Max. Operating Pressure: 6000 PSIG @ 100 °F*									
		Operating Temperature Range: -60 to 450°F*						2	HANDLE	SS410	
		Fire safe design									
		<b>DIMENSIONS (mm)</b>						3	STEM	SS316	
		SIZE	1/8"	1/4"	3/8"	1/2"	3/4"				1"
		A	75	75	75	87	90	103	4	GLAND NUT	SS304
		B	25	25	25	30	32.5	40			
		C	50	50	50	60	65	80	5	GLAND	SS304
		Cv	0.43	0.43	0.74	1.36	2.64	3.6			
								6	PACKING	TEFLON	
											7
								8	BODY	SS316/CF8M	

Valve Specifications			
Valve Type	T400	T400FM	T101L
Operating Pressure	200-800 PSI @ 90 °F		800 PSI @ 90 °F
Operating Temperature	-5 TO 80 Deg. C		
Body Materials	Chrome Plated Brass		Brass
Seal Materials	PTFE		
Service	Air, Liquid		



# STC Manual Air Valves





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STC Manual Air Valves.....E3

STC Manual Air Valve Dimensions.....E4-8

## STC Manual Air Valve Numbering System































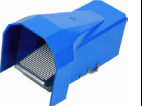
Ordering Part No. =	<b>4H</b>	<b>230C</b>	<b>S</b>	
	Model	# Way & # Position	PORT SIZE (NPT)	Options
Manual Air Valves	<b>MOV</b>	3 Way 2 Position	Blank =1/8	Blank = Plunger (Non-Detented), E = Palm Button (Detented), PB=Palm Button (Non-Detented), PPL = Push Button (Non-Detented), R = Roller Lever (Non-Detented), TB = Knob Switch (Detented),
Manual Air Valves	<b>MSV</b>	96322 = 3 Way 2 Position 86522 = 4 Way 2 Position	Blank =1/4	
Hand Lever Valves	<b>TSV</b>			M = DETENTED S = NON-DETENTED (Spring Return)
Hand Lever Valves	<b>4H</b>	230C = 4 Way 3 Position (Closed Center) 230E = 4 Way 3 Position (Exhaust Center) 230P = 4 Way 3 Position (Pressure Center)		
Pull/Push Valves	<b>3R</b>	210 = 3 Way 2 Position		Blank = Detented
	<b>4R</b>	210 = 4 Way 2 Position		
Hand Handle Valves	<b>HV</b>	400 = 4 Way 3 Position 410 = 4 Way 2 Position		Blank = Non-Detented
Foot Operated Valves	<b>FV</b>	220= 2 Way 2 Position 320= 3 Way 2 Position 420= 4 Way 2 Position	Blank = Non-Detented, L = Detented (with lock), G = Guard	
	<b>4F</b>	210= 4 Way 2 Position		

## STC Air Valve Specifications

Specifications								
Model	MSV Series	MOV Series	TSV Series	4H Series	3-4R Series	HV Series	4F Series	FV Series
Description	Hand Valves	Hand Valves	Lever Valves	Lever Valves	Pull/Push	Hand Valves	Foot Valves	Foot Valves
Cv	0.89	0.67	1.0	0.89	0.89	1.68		
Operating Pressure	0 to 115 PSI							
Operating Temperature	23 to 140 Deg. F (-5 to 60 Deg. C)							
Action	Direct Acting							
Working Medium	40 micron filtered air or inert gas							
Body Material	Aluminum							
Seal Material	NBR							
Lubrication	Not Required							

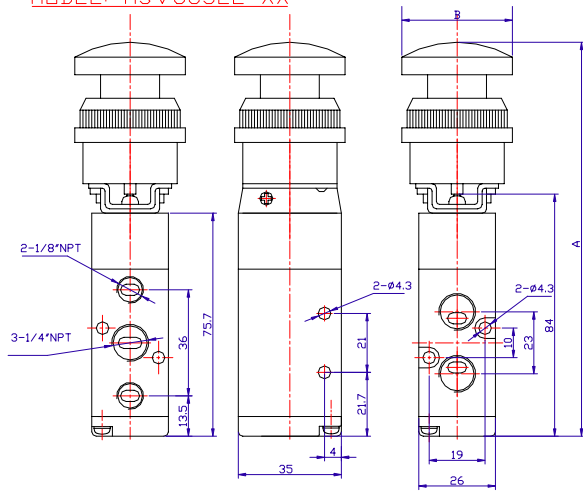
Specifications			
Model	ASC Series	QE Series	ST Series
Description	Flow Control Valves	Quick Exhaust Valves	Shuttle Valves
Operating Pressure	0 to 140 PSI		
Operating Temperature	32 to 140 Deg. F (0 to 60 Deg. C)		
Working Medium	40 micron filtered air or inert gas		
Body Material	Aluminum		
Seal Material	NBR		
Lubrication	Not Required		

## Manual Air Valves

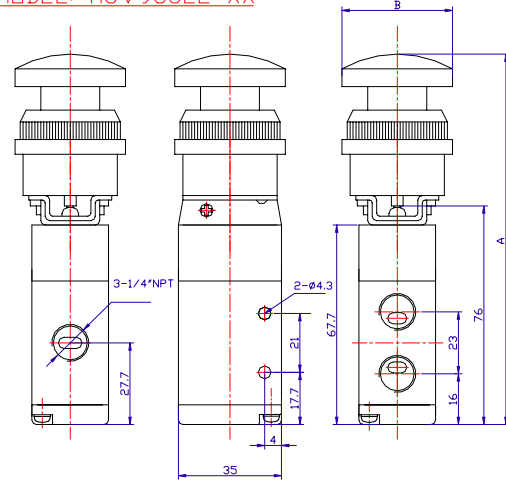
1/4" NPT 4 Way 5 Port 2 Position Air Valves								
Model Price	MSV86522TB \$28.71	MSV86522EB \$28.71	MSV86522PB \$28.71	MSV86522PP \$28.71	MSV86522R \$28.71	MSV86522 \$28.71	TSV86522 \$30.25	4R210 \$20.30
Description	Two Position Detented Switch Cv 0.89	Emergency Stop Detented Cv 0.89	Palm Button Momentary Cv 0.89	Push Button Momentary Cv 0.89	Roller Lever Cv 0.89	Pin Plunger Cv 0.89	Lever Detented Cv 1.0	Pull/Push Detented Cv 0.89
1/4" NPT 3 Way 3 Port 2 Position Air Valves								
Model Price	MSV98322TB \$27.23	MSV98322EB \$27.23	MSV98322PB \$27.23	MSV98322PP \$27.23	MSV98322R \$27.23	MSV98322 \$27.23	TSV98322-M \$28.71	3R210 \$19.80
Description	Two Position Switch Cv 0.89	Emergency Stop Detented Cv 0.89	Palm Button Momentary Cv 0.89	Push Button Momentary Cv 0.89	Roller Lever Momentary Cv 0.89	Pin Plunger Momentary Cv 0.89	Lever Detented Cv 1.0	Pull/Push Detented Cv 0.89
1/8" NPT 3 Way 2 Port 2 Position Air Valves					1/4" NPT Mechanical Air Valves			
Model Price	MOV-01 \$17.33	MOV-03 \$17.33	MOV-03A \$17.33	MOV-02 \$15.84	Model Price	QE \$15.44	ASC \$12.87	4R210-S \$20.30
Description	Two Position Switch Cv 0.67	Emergency Stop Detented Cv 0.67	Push Button Momentary Cv 0.67	Roller Lever Momentary Cv 0.67	Description	Quick Exhaust Valve	In-line Flow Control Valve	4 Way 2 Position Momentary Cv 0.89
1/4" NPT Air Valves								
Model Price	HV410 \$31.19	HV400 \$31.19	4H230C-S 56.94	FV320 \$33.17	FV420 \$33.17	4F210 \$40.10	4F210L \$51.48	4F210G \$62.87
Description	2 Position 4 Way Valve Cv 1.68	3 Position 4 Way Valve Closed Center Cv 1.68	3 Position 4 Way Cv 0.89 Closed Center Momentary	3 Way Momentary Foot Valve	4 Way Momentary Foot Valve	4 Way Momentary Foot Valve	4 Way Detented Foot Valve	4 Way Shielded Momentary Foot Valve

# Air Valve Dimensions

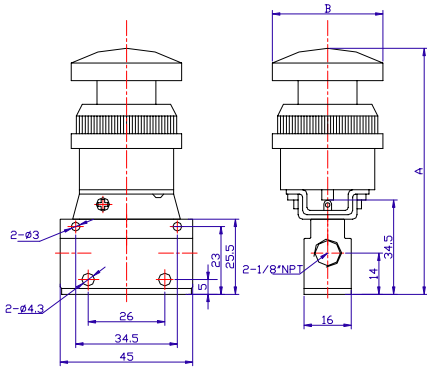
MODEL: MSV86522-XX



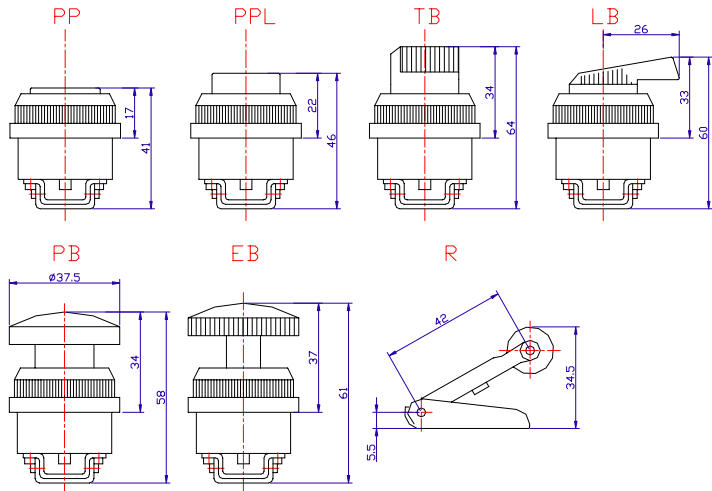
MODEL: MSV98322-XX



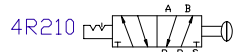
MODEL: MOV-XX



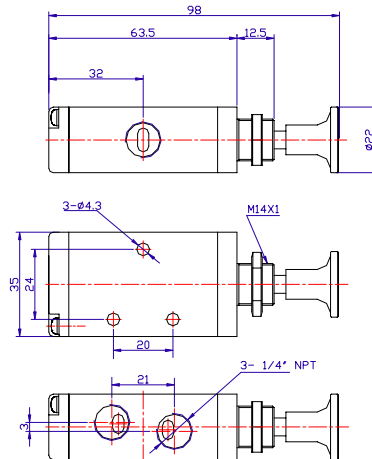
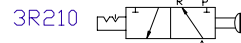
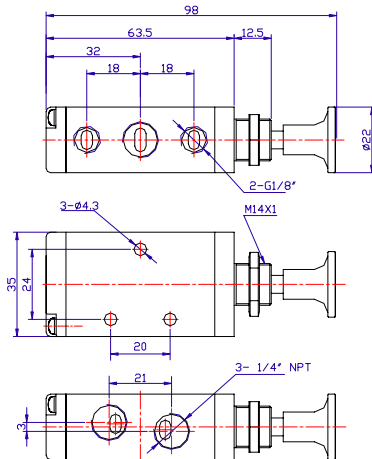
## BUTTON STYLE



PANEL MOUNT HOLE SIZE 1 3/16" (30 MM)

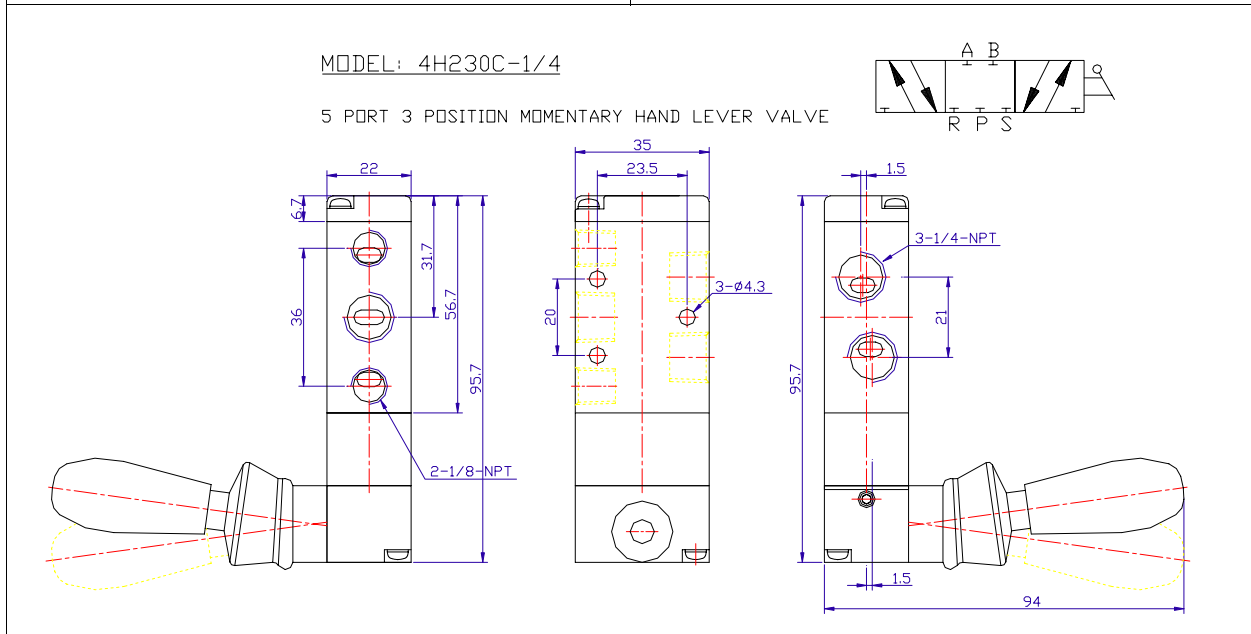
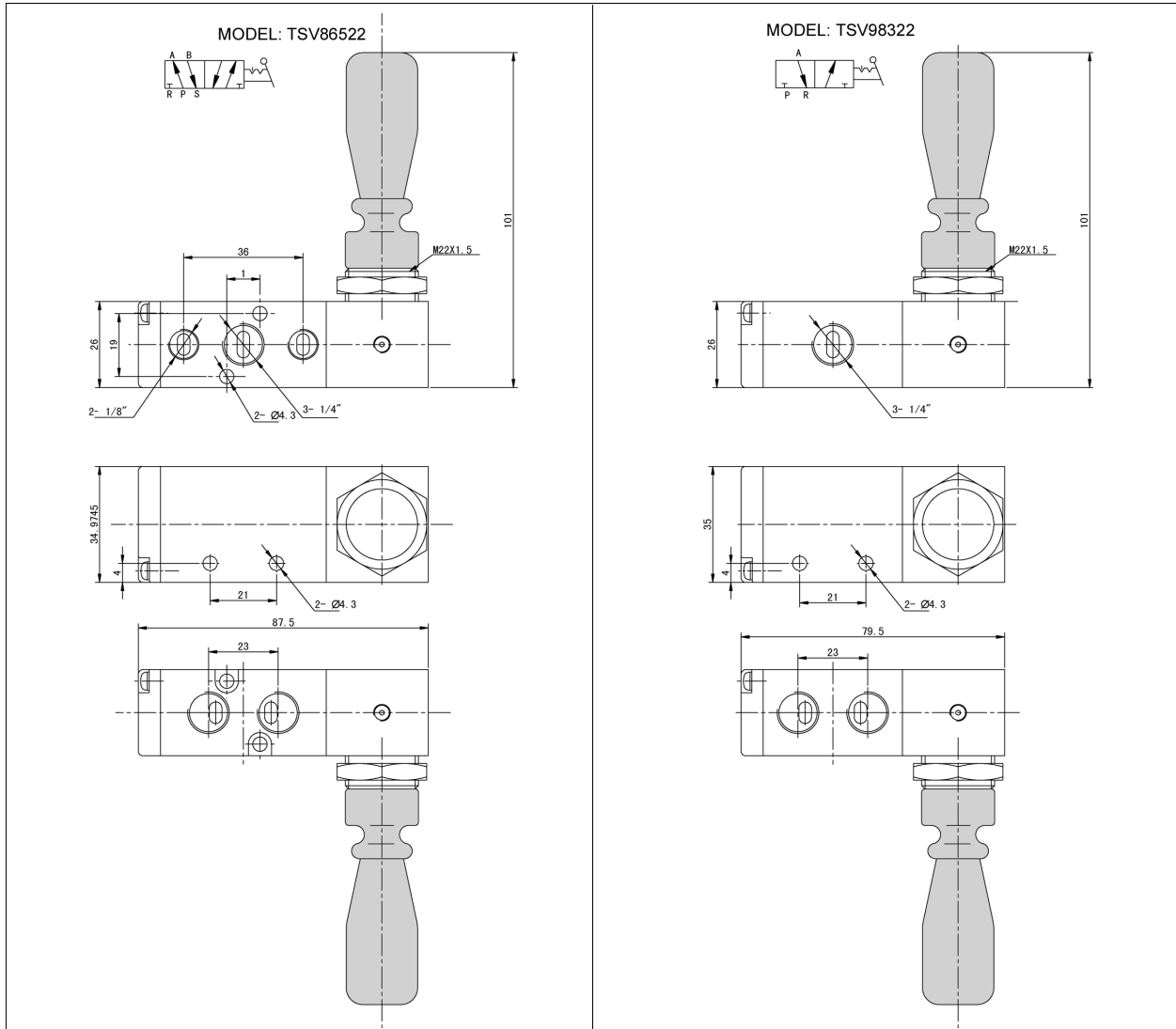


Unit in mm



Unit in (mm)

# Air Valve Dimensions

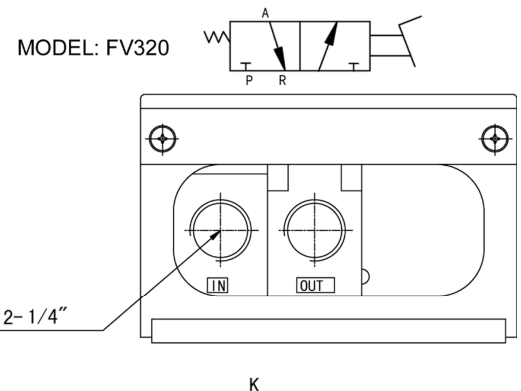
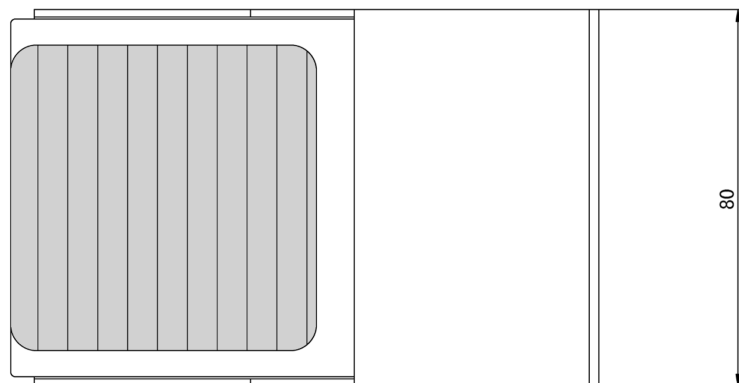
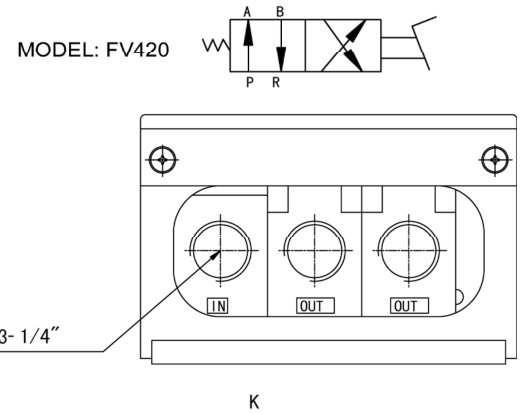
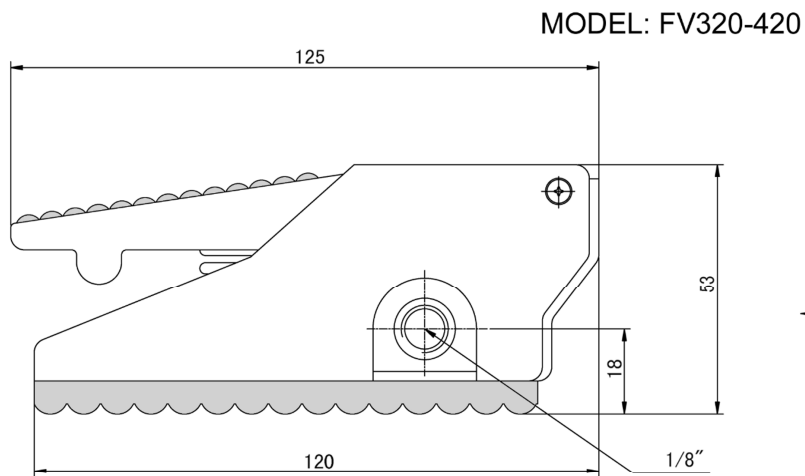
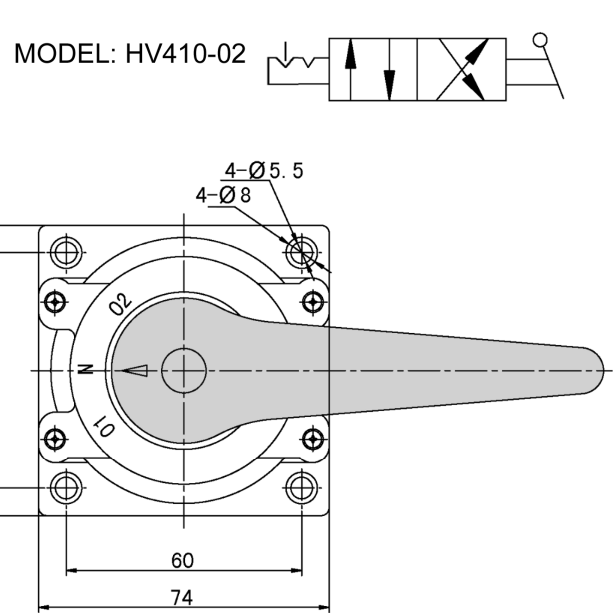
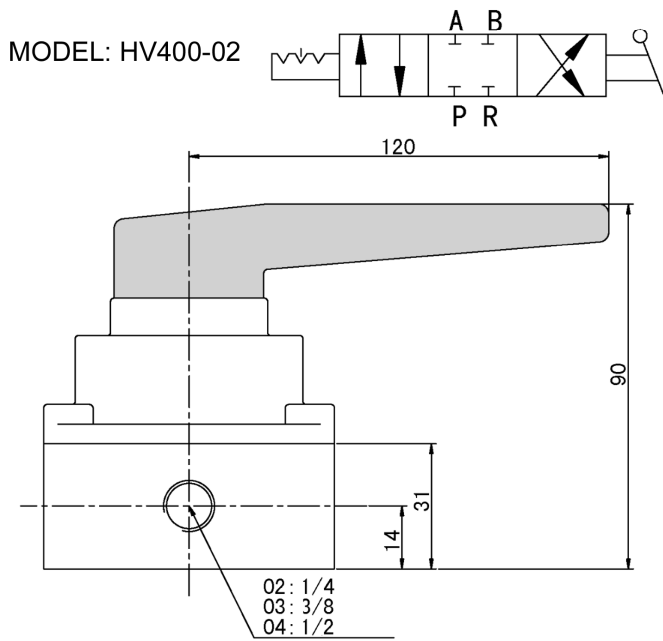


Unit in (mm)

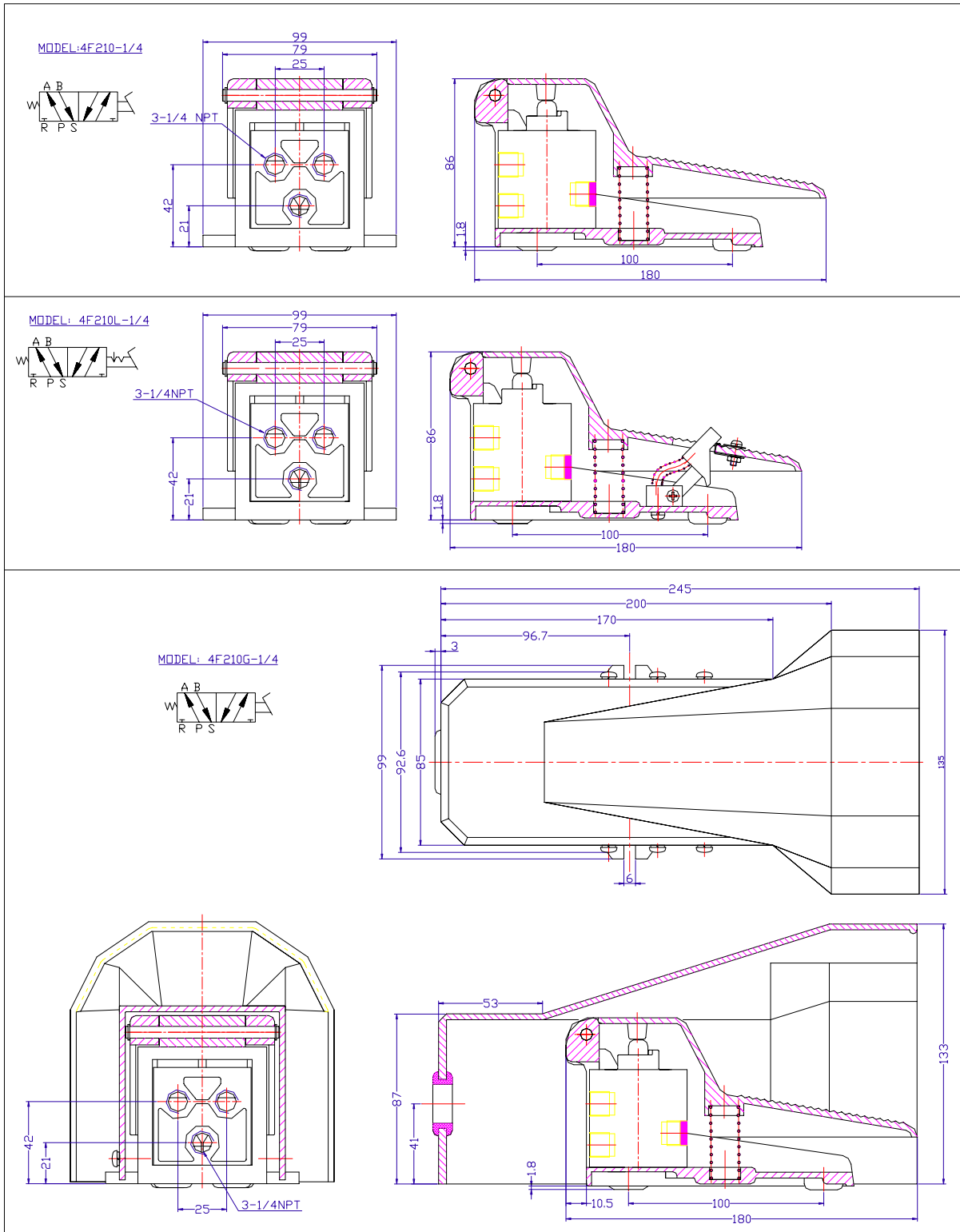


# Air Valve Dimensions

Manual Air Valves



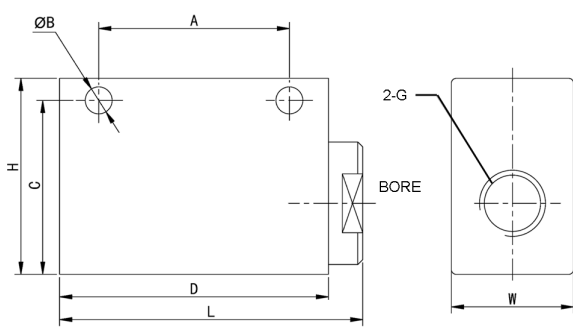
# Air Valve Dimensions



Unit in (mm)

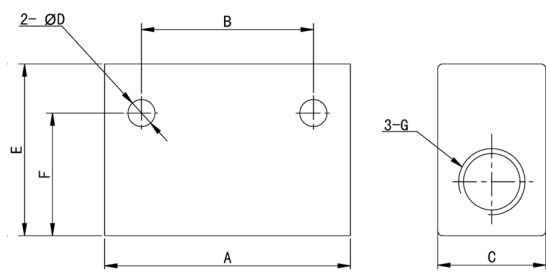
# Air Valve Dimensions

MODEL: QE



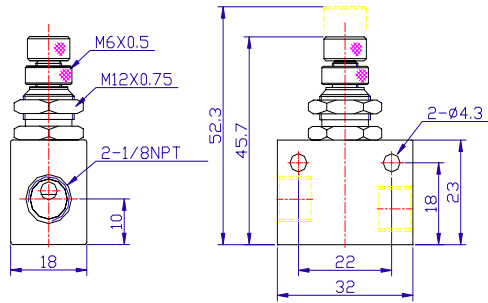
QUICK EXHAUST VALVE (MM)									
	BORE (NPT)	G (NPT)	L	W	H	A	B	C	D
QE-01	1/4	1/8	46	20	32	30	4.3	27.0	40
QE-02	3/8	1/4	62	25	40	39	5.6	33.5	55
QE-03	1/2	3/8	62	25	40	39	5.6	33.5	55
QE-04	3/4	1/2	98	38	64	60	8.5	51.0	90
QE-06	1	3/4	98	38	64	60	8.5	51.0	90

MODEL: ST

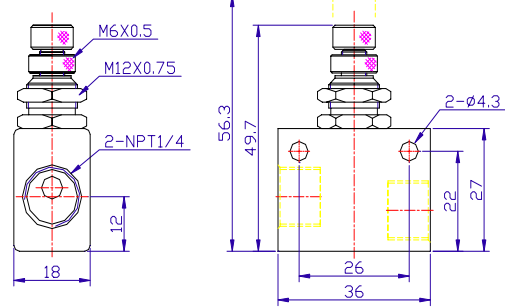


SHUTTLE VALVE (MM)							
	A	B	C	D	E	F	G (NPT)
ST-01	40	24	16	4.5	25	21	1/8
ST-02	50	35	22	5.5	35	25	1/4
ST-03	75	48	30	7.0	50	42	3/8
ST-04	75	48	30	7.0	50	42	1/2
ST-06	110	72	40	7.0	70	58	3/4
ST-08	110	72	40	7.0	70	58	1

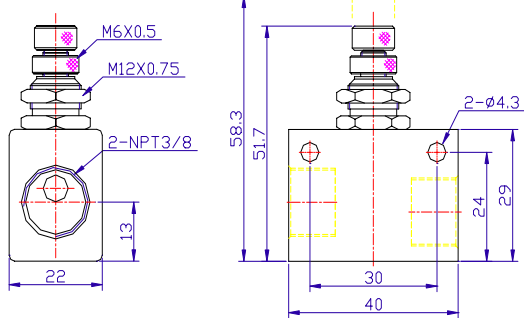
MODEL: ASC N1/8



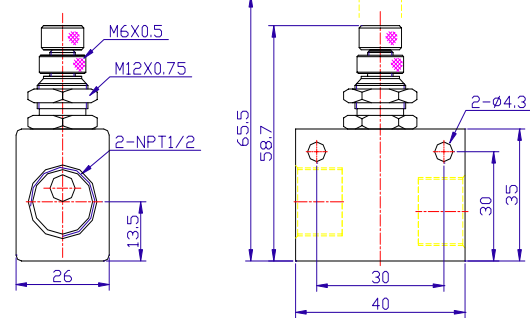
MODEL: ASC N1/4



MODEL: ASC N3/8



MODEL: ASC N1/2



Manual Air Valves

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Sizto Tech Corporation (STC) warrants only this product is be free from defects in materials and workmanship at the time of manufacture. This limited warranty expires one year after delivery to the end-user. STC's entire obligation to and the exclusive remedy of any party for breach of this limited warranty shall be limited to replacement of the defective product or refund of the original purchase price of this product, at STC's option. Purchaser has thirty (30) days to return the goods after STC has agreed to accept the return. All freight charges on returned material shall be paid by the Purchaser. STC's limited warranty shall not apply, however, to the product that have been subjected to misuse, alteration, accident or negligence during handling or storage.

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