STC
Manual & Actuated Process Valves

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STC Process Valve Numbering System

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

2W ..... **025** — **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 DIN Connection (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		
AIR PILOT VALVES		500	2		
NC Brass	QW				
NO Brass Air Pilot	QWO				

Ordering Part No. = eg. 2W200C-1

2W200C — **1**

COILS	MODEL	VOLTAGE
Coil for 2W & 2S 025 TO 250 series valves	2W200C	1 = 12 VDC 2 = 24 VDC 2A = 24 VAC 3 = 110 VAC 4 = 220VAC
Coil for 2W & 2S 350 TO 500 series valves	2W300C	
Coil for 2WO & 2SO 160 TO 500 series valves	2WO250C	
Coil for 2P & 2V Series Valves	200C	

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

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 63 83 105 140 160 210 280	90 180	S=Single Acting (Spring Return) D=Double Acting (Air Return

STC Solenoid Valve List Price

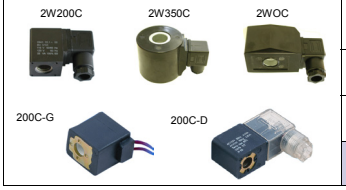
To Order, Please Specify: 1. Model No. 2. Voltage						
	Part No.	**List Price**	**Port Size** (NPT)	**Cv**	**Voltage**	**Features**
	2P025-1/8	$18.43	1/8	0.23	Voltage Options: 1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC	2 Way, Direct Acting, Normally Closed Operating Temp: –5 to 80 deg. C Operating Pressure: Vacuum to 115 PSI Coil: F Class, IP65, 100% ED, 12-15 watts Service: Air, Gas, Liquid Seals: NBR, (Viton Option) Body Material: 2P Series: Engineered Plastic 2V Series: Anodized Aluminum Body
	2P025-1/4	$18.43	1/4	0.23		
	2V025-1/8	$18.81	1/8	0.23		
	2V025-1/4	$18.81	1/4	0.23		
	2V025-1/4	$30.69	1/4	0.23		2 Way, Direct Acting, Normally Closed Operating Temp: –5 to 80 deg. C Operating Pressure: Vacuum to 150 PSI Coil: F Class, IP65, 100% ED, 12-15 watts Service: Air, Gas, Liquid Seals: NBR, (Viton Option) Body Material: 2S Series: 304 Stainless Steel Body 2W Series: Brass
	2S040-3/8	$42.57	3/8	0.6		
	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 150 PSI Coil: F Class, IP65, 100% ED, 12-15 watts Service: Air, Gas, Liquid Seals: NBR, (Viton High Temp. Option) Body Material: Brass
	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 150 PSI Coil: F Class, IP65, 100% ED, 20-30 watts Service: Air, Gas, Liquid Seals: NBR, (Viton High Temp. Option) Body Material: 304 Stainless Steel
	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 Body Material: Brass
	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	**Normally Open** 2 Way, Direct Acting/Lift, Operating Temp: –5 to 80 deg. C Operating Pressure: Vacuum to 150 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	**Normally Closed**, 2 Way, Direct Acting Brass Body, Seals: PTFE Operating Temp: –5 to 150 deg. C Operating Pressure: 215 PSI Coil: F Class, IP65, 100% ED Service: Air, Gas, 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		
	2V130-3/8	$58.80	3/8	4.8	Voltage Options: 1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC	**Normally Closed**, 2 Way, Direct Acting, Brass Body, Seals: VITON Operating Temp –5 to 150 deg. C Operating Pressure: 150 PSI Coil: F Class, IP65, 100% ED Service: Air, Gas, Water, Liquid
	2V130-1/2	$58.80	1/2	4.8		
	2V130-3/4	$113.40	3/4	8		
	2V130-1	$113.40	1	12		
	200U	$78.60	Explosion Proof Coil Option for all voltages w/ 1/2" conduit			
	VXF2120-1/8		1/8		Voltage Options: 1 = 12 VDC 2 = 24VDC 2A=24VAC 3 = 110VAC 4 = 220VAC	**Normally Closed**, 2 Way, Direct Acting, 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	**Normally Open** 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		D = DIN (with LED indicator) G = Grommet (12" Lead Wire)	3 to 6.5 W	For 2V & 2P025-035 & 2V1, 3V1 series valves

Solenoid Valve Specifications

Valve Type	2P & 2V	2S/2SO	2W/2WO	2L Series	VX Series 06 to 08	VX Series 10-15	QW
Operating Pressure	-28" Hg to 115 PSI	-28" Hg to 150 PSI		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

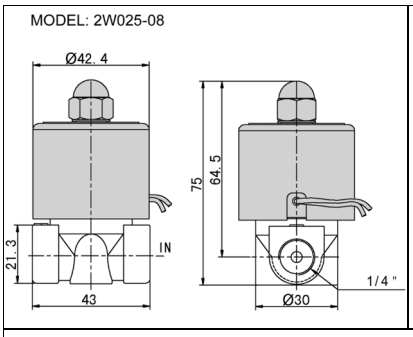
STC Valve List Price

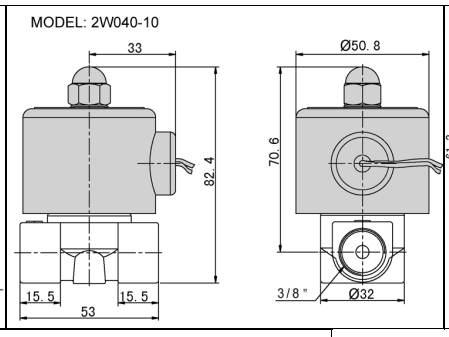
														
	Reduced Port Ball Valves		Full Port Ball Valves		Full Port Ball Valves		Full Port Ball Valves		Full Port Butterfly Valves		Needle Valves			
Model	V1		V2		V3		V3C		VBS01		VN01			
Material	316 SS		316 SS		316 SS		316 SS		316 SS		316 Stainless Steel			
Port	FNPT		FNPT		FNPT		Clamp		Clamp		NPT Female			
Size 1/4"	V1-1/4	$8.07	V2-1/4	$12.21	V3-1/4	$20.17					VNO1-1/4	$18.67		
3/8"	V1-3/8	$8.43	V2-3/8	$14.13	V3-3/8	$20.17					VNO1-3/8	$18.67		
1/2"	V1-1/2	$8.43	V2-1/2	$14.13	V3-1/2	$20.17					VNO1-1/2	$22.20		
3/4"	V1-3/4	$12.27	V2-3/4	$20.57	V3-3/4	$29.03					VNO1-3/4	$31.53		
1"	V1-1	15.83	V2-1	$28.67	V3-1	$37.13	V3C-1	$40.83	VBS01- 1	$67.39	VNO1-1	$41.80		
1 1/4"	V1-1 1/4	25.87	V2-1 1/4	$42.37	V3-1 1/4	$56.17								
11/2"	V1-1 1/2	$31.67	V2-1 1/2	$60.53	V3-1 1/2	$70.53	V3C-1 1/2	$79.20	VBS01- 1 1/2	$85.32				
2"	V1-2	40.23	V2-2	$73.70	V3-2	$100.90	V3C -2	$111.00	VBS01- 2	$107.59				
3"							V3C –3	$327.17						

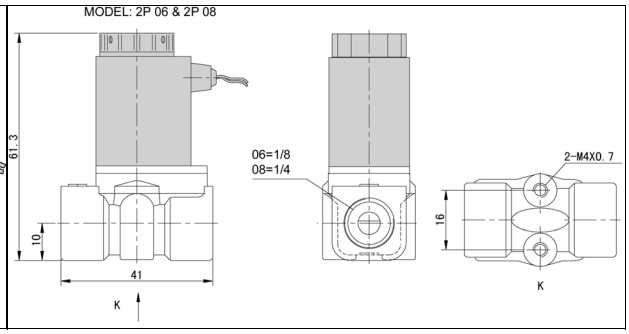
														
	Miniature Ball Valves		Miniature Ball Valves		Full Port		ROTARY PNEUMATIC VALVE ACTUATORS		Single Acting		Double Acting		Note	
Model	T400		T400FM		T101L				Rotation				Suitable for Ball Valve Size	
Material	Chrome-Plated Brass		Chrome-Plated Brass		Brass		Model	Bore (mm)	90 Degree	180 Degree	90 Degree	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		45	$149.36	$195.52	$114.00	$160.00	1"	
3/8"	T400-3/8	$2.48	T400FM-3/8	$2.48	T101-3/8		KT-DA	63	$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		83	$251.52	$330.00	$195.52	$273.60	2 1/2"	
3/4"					T101L-3/4	$6.33		105	$329.12	$431.52	$255.00	$358.00	3"	
1"					T101L-1	$10.46		125	$520.00	$681.60	$387.00	$542.52	4"	
11/2"					T101L-1 1/2	$21.89								
2"					T101L-2	$36.14								

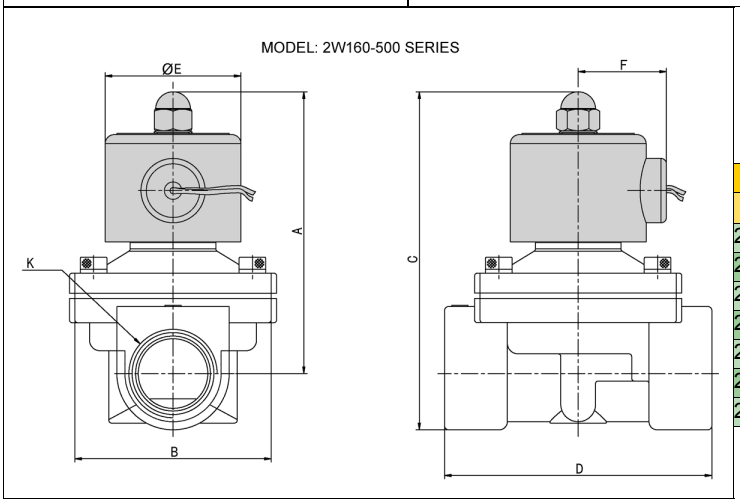
Tel: 650-856 8833; Website: StcValve.com

STC Valve Technical Data

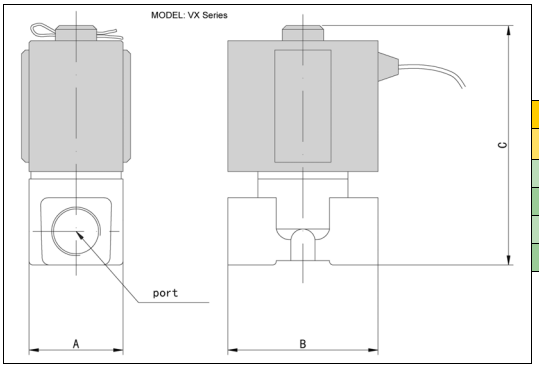




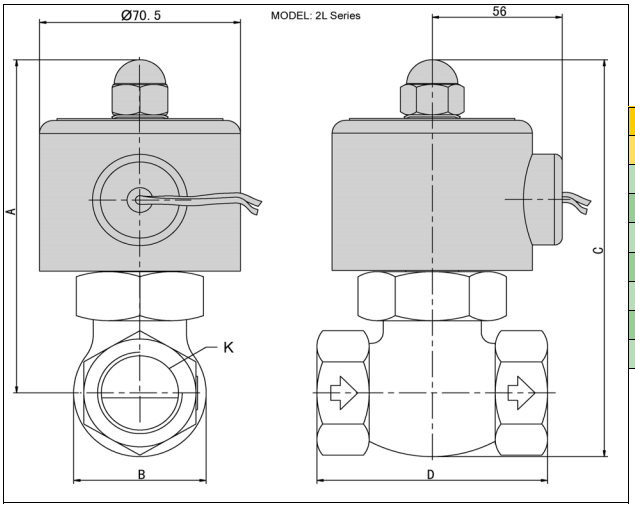




MODEL: 2S & 2W Series (MM)							
		A	B	C	D	E	F
2S160-3/8	2W160-3/8	101.5	57	117	69	50	36
2S160-1/2	2W160-1/2	101.5	57	117	69	50	36
2S200-3/4	2W200-3/4	107.0	57	124	73	50	36
2S250-1	2W250-1	111.5	74	135	99	50	36
2S350-1 1/4	2W350-1 1/4	142.0	95	172	123	70.5	56
2S400-1 1/2	2W400-1 1/2	142.0	95	172	123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



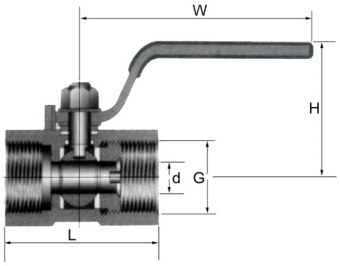
MODEL: VX Series (MM)				
	Port (NPT)	A	B	C
VX2120-1/8	1/8	25	40	64
VX2120-1/4	1/4	25	40	64
VX2120-3/8	3/8	48	68	110
VX2120-1/2	1/2	48	68	110



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

Tel: 650-856 8833; Website: StcValve.com

STC Valve Technical Data



Model: V1 SPECIFICATIONS

One Piece Reduced Port 316 Stainless Steel Ball Valve

Maximum Operating Pressure: 1000 PSIG @ 100ºF WOG*

Operating Temperature Range: -60 to 450ºF*

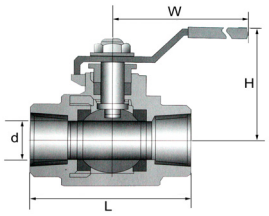
End Connections: NPT Threaded with Padlocking device

DIMENSIONS (mm)

SIZE	d	L	H	W	Wt (kg)
1/4"	5	39	35	64	0.07
3/8"	7	44	37	70	0.1
1/2"	9.2	56.5	43.5	90	0.16
3/4"	12.5	58	47	90	0.25
1"	15	70	50	103	0.43
1 1/4"	20	78	57	103	0.7
1 1/2"	24.5	83	69	127	0.83
2"	32	100	74.5	127	1.5

MAIN PARTS AND MATERIALS

NO	PART NAME	MATERIAL	QTY
1	SEAT	PTFE	2
2	BALL	SS316	1
3	JOINT GASKET	PTFE	1
4	CAP	SS316	1
5	BODY	SS316/ CF8M	1
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
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: V2 SPECIFICATIONS

Two Piece Full Port 316 Stainless Steel Ball Valve

Maximum Operating Pressure: 1/4" to 2" 1000 PSIG @ 100ºF WOG*
2 1/2" to 3" 800 PSIG @ 100ºF WOG*

Temperature Range: -60 to 450ºF*

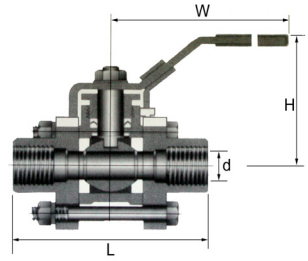
End Connections: NPT Threaded with Padlocking & panel mount device

DIMENSIONS (mm)

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
d	11.6	12.7	15	20	25.4	32	38	50.8	65	76
L	55	55	63.5	75	88	103	110	124	167	192
H	48	48	50	57	69	73	83	92	136	149
W	103	103	103	125	145	145	190	190	250	250

MAIN PARTS AND MATERIALS

NO	PART NAME	MATERIAL	QTY
1	SEAT	PTFE	2
2	BALL	SS316	1
3	JOINT GASKET	PTFE	1
4	CAP	SS316	1
5	BODY	SS316/ CF8M	1
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
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

Maximum Operating Pressure: 1/2" to 2" 1000 PSI @ 100ºF WOG*
2 1/2" to 3" 800 PSI @ 100ºF WOG*

Temperature Range: -60 to 450ºF*

Full Port

End Connections: FNPT

Mounting Options: Padlocking device and actuator mounting bracket

DIMENSIONS (mm)

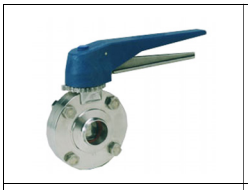
	SIZE	1/4"	3/8"	1/2"	3/4"	1"	11/4"	11/2"	2"	21/2"	3"	4"
d	mm	12.5	12.5	15	20	25	30	38	50	64	80	98
	in	0.49	0.49	0.59	0.79	0.98	1.18	1.5	1.97	2.52	3.15	3.86
H	mm	57	57	68	70	80	84	93	100	142	155	172
	in	2.24	2.24	2.68	2.76	3.15	3.31	3.66	3.94	5.59	6.1	6.77
W	mm	96	96	124	124	142	142	202	202	250	250	300
	in	3.78	3.78	4.88	4.88	5.99	5.99	7.95	7.95	9.84	9.84	11.81
L	mm	68	68	72	83	90	112	120	147	174	193	216
	in	2.56	2.56	2.84	3.35	3.62	4.33	4.48	5.59	6.85	7.6	8.5

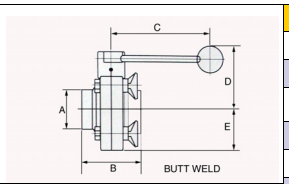
MAIN PARTS AND MATERIALS

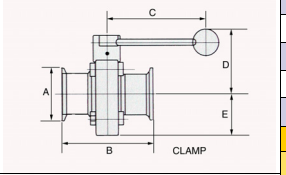
NO	PART NAME	MATERIAL	QTY
1	SEAT	PTFE	2
2	BALL	SS316	1
3	JOINT GASKET	PTFE	1
4	CAP	SS316	1
5	BODY, BODY CONNECTOR	SS316/ CF8M	1, 2
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND NUT	SS304	1
10	STEM WASHER	SS304	1
11	STEM NUT	SS304	1
12	HANDLE COVER	PLASTIC	1
13	HANDLE	SS304	1
14	BODY CONNECTOR BOLT	SS304	4
15	BODY CONNECTOR NUT & WASHER	SS304	4

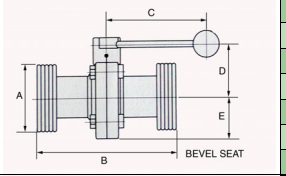
* Refer to Maximum Operating Pressure -Temperature Data on Page 8 for more information

STC Valve Technical Data









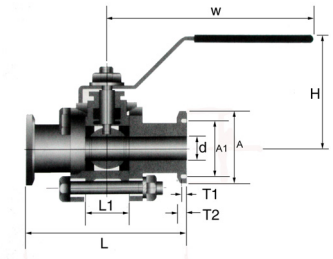
Model: VBS01 SPECIFICATIONS
Size: 1/2" to 4"
Full Port
Connection Options: Butt weld, Clamp, or Male Thread, Female Ends (RJT, IDF, DIN, SMS) .
Operating Pressure: -13 PSIG to 150 PSIG WOG*
Temperature Range: -10ºC to 150ºC with Silicone, or Viton*
Disc Head Size: 9.4 mm (to fit actuator)
Operator Options: Lever, Actuators
Body Material Options: 316SS, or 316L SS
Handle: 304 SS/Plastic
Seat Options :Silicone, EPDM or Viton

DIMENSIONS (mm)

A	B	B	B	C	D	E
Size	Weld	Clamp	Bevel			
1"	47.63	88.9	122.24	100	74	39
1 1/2"	47.63	88.9	134.94	110	47	39
2"	52.39	95.25	163.51	110	83.5	49.5
2 1/2"	53.98	96.84	174.63	110	93	58.5
3"	61.91	104.78	196.26	159	98	66
4"	79.38	122.24	228.6	159	118	84.5

MAIN PARTS AND MATERIALS

NO	PART NAME	MATERIAL
1	BODY	SS316 or SS316L
2	STEM WASHER	SS304
3	STEM NUT	SS304
4	HANDLE	304 SS/Plastic
5	GASKET	Silicone, EPDM, or Viton
6	BODY CONNECTOR BOLT	SS304
7	BODY CONNECTOR NUT & WASHER	SS304
8	BUTTERFLY	SS316/SS316L



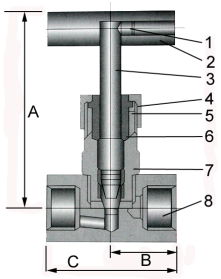
Model: V3C SPECIFICATIONS
Sanitary Stainless Steel Ball Valve: These valves are made with precision machined Teflon seat for use in Sanitary applications. They are three piece design and have four bolts that permit quick and easy access to service the valve without disrupting the pipe line connections.
Maximum Operating Pressure: 1/2" to 2" 1000 PSI @ 100ºF WOG* 2 1/2" to 4" 800 PSI @ 100ºF WOG*
Temperature Range: -60 to 450ºF*
Full Port
End Connections: Clamp End
Mounting Options: Padlocking device and actuator mounting bracket

DIMENSIONS (mm)

SIZE	PORT (d)	L	A	A1	H	T1	T2	W
1/2"	9.6	75	25	20.24	64	--	3.63	125
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
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
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
3"	72.9	220	90	83.3	161	2.85	--	250
4"	97.4	270	118.9	110.3	180	2.85	--	250

MAIN PARTS AND MATERIALS

NO	PART NAME	MATERIAL	QTY
1	SEAT	PTFE	2
2	BALL	SS316	1
3	JOINT GASKET	PTFE	1
4	CAP	SS316	1
5	BODY, BODY CONNECTOR	SS316/ CF8M	1, 2
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
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
14	CONNECTOR BOLT	SS304	4
15	CONNECTOR NUT & WASHER	SS304	4



Model: VN01 SPECIFICATIONS
End Connections: NPT threaded ASME b1.20.1
DIN 2999 & BS21; ISO 228/1 & ISO 7/1
Max. Operating Pressure: 6000 PSIG @ 100 ºF*
Operating Temperature Range: -60 to 450ºF*
Fire safe design

DIMENSIONS (mm)

SIZE	1/8"	1/4"	3/8"	1/2"	3/4"	1"
A	75	75	75	87	90	103
B	25	25	25	30	32.5	40
C	50	50	50	60	65	80
Cv	0.43	0.43	0.74	1.36	2.64	3.6

MAIN PARTS AND MATERIALS

NO	PART NAME	MATERIAL
1	SET SCREW	SS304
2	HANDLE	SS410
3	STEM	SS316
4	GLAND NUT	SS304
5	GLAND	SS304
6	PACKING	TEFLON
7	BONNET	SS316/CF8M
8	BODY	SS316/CF8M

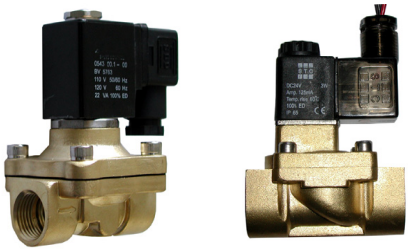
Valve Specifications

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

Tel: 650-856 8833; Website: StcValve.com

STC Process Valves
Installation and Operation Procedures

This Installation and Operation Procedures apply to the solenoid valves shown below.

Valve Type	Stainless Steel	Brass
Direct Acting Normally Closed Action: Plunger Type	2S025-2S040 SERIES 	2W025-2W040 SERIES 
Direct Acting/Lift Normally Closed Action: Diaphragm Type	2S160-2S500 SERIES 	2W160-2W500 SERIES 
Direct Acting/Lift Normally Open Action: Diaphragm Type	2SO160-2SO500 SERIES 	2WO160-2WO500 SERIES 
Direct Acting/Lift Normally Closed Action: Plunger Type	2LS170-2LS500 SERIES 	2L170-2L500 SERIES 

Electrical Connection of Solenoid Coils

To connect Grommet coil:

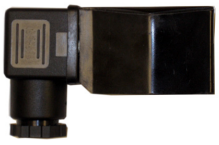
1. For DC Coil, connect the RED wire to Positive, and the BLACK wire to Negative.
2. For AC Coil, connect the BLACK wire to HOT wire, and the WHITE wire to Neutral wire.
3. Tighten the screw that secures the coil to the valve. If the screw nut if plastic, hand tighten only. If the screw nut is metal, hand tighten, and tighten 1/4 to 1/2 with a wrench. Do not over-tighten, it may damage the valve!

To connect DIN coil (refer to diagram shown below for more detail):

1. Remove the Philip screw from the plastic DIN housing and unplug it from the DIN coil and remove the gasket.
2. From the screw opening, use the screw to push the Terminal Block out of the plastic DIN housing.
3. Note the 1, 2 and ground markings on underside of Terminal Block.
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.
6. Thread the wires through and out off the strain-relief opening of the plastic DIN housing, and re-inert the Terminal Block into the plastic DIN house in the desire orientation.
7. Re-install the gasket onto the DIN coil, plug the wired DIN enclosure into the DIN coil, and reinstall the Philip screw.
8. Tighten the screw that secure the coil to the valve. If the screw if plastic, hand tighten only. If the screw is metal, hand tighten, and tighten 1/4 to 1/2 with a wrench. Do not over-tighten!

Coils with DIN connections



[1] Remove the Philip screw from the plastic DIN housing.

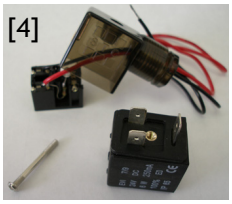
[2] Unplug the plastic DIN housing from the DIN coil.

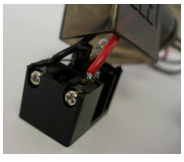
[3] From the screw opening, use the screw to push the terminal block out of the plastic DIN housing.

[4] Note the 1, 2, and ground markings on underside of DIN enclosure.

[5] For DC DIN coil, connect 1 to positive, 2 to negative.

[6] For AC DIN coil, connect 1 to HOT wire, 2 to neutral wire, and if required connect ground to ground wire.





Installation of Solenoid Valves

Connection of Pipe to Solenoid Valve:

1. Follow the arrow mark on the solenoid valve for installation of inlet and outlet, for valve that can be used for vacuum applications and is to be connected for vacuum applications, reverse the direction inlet and outlet installation.
2. Apply the appropriate sealant to the pipe thread, screw the pipe into the solenoid valve, tighten the pipe by hand, then turn it 2 to 3 turns with a pipe-wrench until it reaches the desire torque listed.
3. For the 2L series valves, the coil/armature tube must be installed **vertically** and with flow in the **horizontal** direction.
4. The coil generate heat, install the solenoid valve in a well ventilated location and away from flammable materials.
5. Provide the solenoid valve with secure mechanical support through the piping structure.
6. Make sure the valve is installed properly and make sure there is no leak in all the connections.
7. Test the solenoid valve to make sure it operates properly before putting the solenoid valve into service.

Recommendation of Torque for Tightening Pipes		
Fitting Thread Size	Torque, lb-ft	Torque, kgf/cm
10-32, M5 –M6	1.0 -1.5	14 –21
NPT 1/8, R 1/8	5 -6.5	70 -90
NPT 1/4, R 1/4	8.5 -10	120 -140
NPT 3/8, R 3/8	16 -17.5	220 -240
NPT 1/2, R 1/2	20 -21.5	280 -300
NPT 3/4, R 3/4	Depends on user's requirements and applications	
NPT 1, R 1		
NPT 1 1/4, R 1 1/4		
NPT 1 1/2, R 1 1/2		
NPT 2, R 2		

Operation and Maintenance of Solenoid Valves

Operation:

1. Follow the current industrial safety standards when using the solenoid valve in pressurized air, gas or liquid, and when high electrical voltage is used to operate the solenoid valve.
2. Make sure the materials to be used are compatible with the solenoid valve.
3. Do not exceed the operation limits of the solenoid valve.
4. The coil generates heat, to prevent the coil from overheating, keep the solenoid valve well ventilated and away from flammable materials.
5. The opening or closing of solenoid valve is controlled by the electrical power supplied to the solenoid valve.

Maintenance:

1. Keep the valve clean, and inspect for leak after installation and on a regular interval.
2. If it is a diaphragm valve, the diaphragm needs to be replace on a regular interval - depending on the usage and the usage conditions.

Maintenance Spare Parts:

1. Solenoid Coil
2. Diaphragm for diaphragm valve
3. Plunger and Plunger Spring
4. O-ring

Safety Precautions:

1. Follow the current industrial safety standards when using the solenoid valves in pressurized air, gas or liquid, and when high electrical voltage is used to operate the solenoid valves.
2. Make sure the materials to be used are compatible with the solenoid valve.
3. Do not exceed the operation limits of the solenoid valves.
4. The coils generates heat, install the solenoid valves in well ventilated locations and away from flammable materials.

Terms and Conditions

SHIPMENTS:
All shipments are F.O.B. 892 Commercial Street, Palo Alto, CA 94303, USA. Most orders are shipped via UPS Standard Ground unless instructions accompany order. Outside the UPS zones, shipment will be made Best Way. The responsibility for goods delay, lost or damaged in transit rests with the carrier and purchaser. Purchaser may purchase shipping insurance to cover and lost or damage caused by shipping.

RETURN OF MERCHANDISE:
No merchandise accepted for return 30 days after delivery date. No credit allowed on merchandise shipped as ordered and returned without obtaining an authorization number IN ADVANCE. A 20% restocking charge applies to all returns, and transportation charges must be fully prepaid. We will pay **ground** transportation charges on re-sent or returned merchandise due to STC's error.
Shortages & Mis-Shipments: Any shortages or mis-shipment must be reported within 15 days.

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Credit Card Payments: Visa, MasterCard, Discover, or American Express Accepted
International Customers: Advance Payment Required via Bank Wire, Cashier's Check or Approved Credit Card.
Credit Application: To establish a net 30 day account, please mail or fax three trade references with complete mailing addresses and account numbers.

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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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All implied warranties, which may arise by implication of law or application of course of dealing or usage of trade, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose are expressly excluded. There are no warranties, which extend beyond the description of the faced hereof. The end user is solely responsible for the suitability and fitness of this product selected for a particular application.

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Sizto Tech Corporation
892 Commercial Street
Palo Alto, CA 94303 USA
TEL: 650-856 8833, FAX: 650-856 8811
Email: Sales@StcValve.com; www.StcValve.com