



Pneumatic Double Acting Automated Ball Valve Package

Series 22
Direct Mount

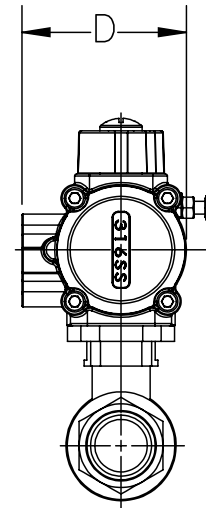
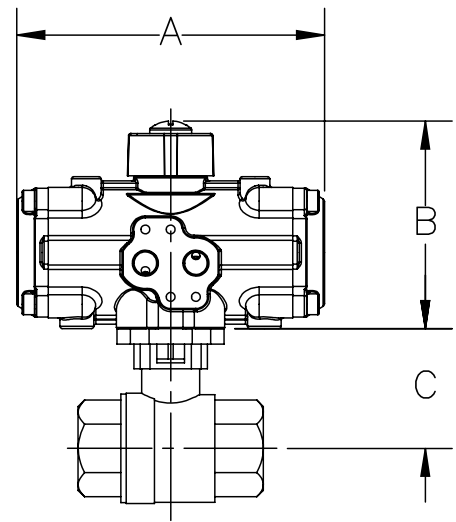
316SST Body, Ball & Stem
Sizes 1/4" – 3"
Full Port Valve
Threaded Ends
1000 psi
NACE MR-0175
2-piece High Cycle Design
Blowout Proof Stem w/ Dual
Anti-Static Devices
RTFE Seats Standard
Pyramidal Stem Seal Design

STANDARDS

DESIGN	ASME B16.34 (fully conforms)
END CONNECTIONS	ASME B1.20.1
SULFIDE STRESS PROTECTION	NACE MR0175
MOUNTING	ISO 5211
CE APPROVAL	2014/68/EU Module H
MARKING SYSTEM FOR VALVES	MSS SP-25, MSS SP-55
SAFETY INTEGRITY	SIL 3; IEC 61508:2010
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2015



Direct Mount to TRIAC® S2 Series
Stainless Steel Actuator



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/4"	5.75	3.62	1.53	3.07	7
3/8"	5.75	3.62	1.53	3.07	8
1/2"	5.75	3.62	1.60	3.07	15
3/4"	5.75	3.62	1.82	3.07	40
1"	5.75	3.62	2.24	3.07	70
1-1/4"	5.75	3.62	2.40	3.07	110
1-1/2"	6.81	4.25	3.06	3.58	250
2"	6.81	4.25	3.35	3.58	350
2-1/2"	8.03	5.04	4.31	4.42	600
3"	10.63	6.03	4.63	5.31	900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

SERIES 22 2-Piece Direct Mount "Painless Stainless"

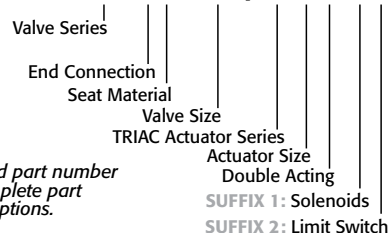
SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	22-TX-025/S2CD-XX
3/8"	22-TX-038/S2CD-XX
1/2"	22-TX-050/S2CD-XX
3/4"	22-TX-075/S2CD-XX
1"	22-TX-100/S2CD-XX
1-1/4"	22-TX-125/S2CD-XX
1-1/2"	22-TX-150/S2DD-XX
2"	22-TX-200/S2DD-XX
2-1/2"	22-TX-250/S2ED-XX
3"	22-TX-300/S2FD-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	22-TX-025/S2CD-XX
3/8"	22-TX-038/S2CD-XX
1/2"	22-TX-050/S2CD-XX
3/4"	22-TX-075/S2CD-XX
1"	22-TX-100/S2CD-XX
1-1/4"	22-TX-125/S2CD-XX
1-1/2"	22-TX-150/S2DD-XX
2"	22-TX-200/S2DD-XX
2-1/2"	22-TX-250/S2ED-XX
3"	22-TX-300/S2FD-XX

OPTIONS		
SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVCS-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVCS-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available - call for details
Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.

SAMPLE PART # 22-TX-100/S2CD-XX



See automated part number matrix for complete part number and options.





Pneumatic Spring Return

Automated Ball Valve Package

Series 22 Direct Mount

316SST Body, Ball & Stem

Sizes 1/4" – 3"

Full Port Valve

Threaded Ends

1000 psi

NACE MR-0175

2-piece High Cycle Design

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

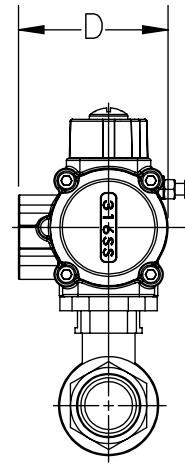
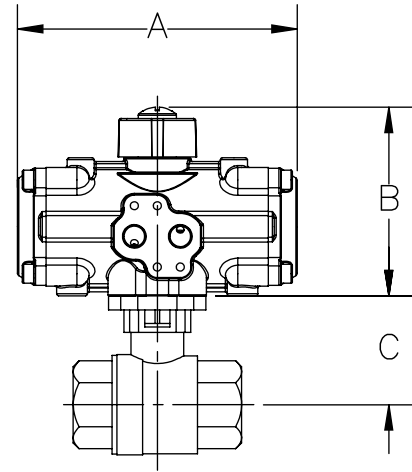
Pyramidal Stem Seal Design

STANDARDS

DESIGN	ASME B16.34
END CONNECTIONS	ASME B1.20.1
SULFIDE STRESS PROTECTION	NACE MR0175
MOUNTING	ISO 5211
CE APPROVAL	2014/68/EU Module H
MARKING SYSTEM FOR VALVES	MSS SP-25, MSS SP-55
SAFETY INTEGRITY	SIL 3; IEC 61508:2010
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2015



Direct Mount to TRIAC® S2 Series Stainless Steel Actuator



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/4"	5.75	3.62	1.53	3.07	7
3/8"	5.75	3.62	1.53	3.07	8
1/2"	5.75	3.62	1.60	3.07	15
3/4"	5.75	3.62	1.82	3.07	40
1"	6.81	4.25	2.24	3.58	70
1-1/4"	8.03	5.04	2.40	4.42	110
1-1/2"	8.03	5.04	3.06	4.42	250
2"	8.03	5.04	3.35	4.42	350
2-1/2"	10.63	6.03	4.31	5.31	600
3"	11.89	7.28	4.63	6.12	900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES 22 2-piece Direct Mount "Painless Stainless"

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	22-TX-025/S2CS-XX
3/8"	22-TX-038/S2CS-XX
1/2"	22-TX-050/S2CS-XX
3/4"	22-TX-075/S2CS-XX
1"	22-TX-100/S2DS-XX
1-1/4"	22-TX-125/S2ES-XX
1-1/2"	22-TX-150/S2ES-XX
2"	22-TX-200/S2ES-XX
2-1/2"	22-TX-250/S2FS-XX
3"	22-TX-300/S2GS-XX

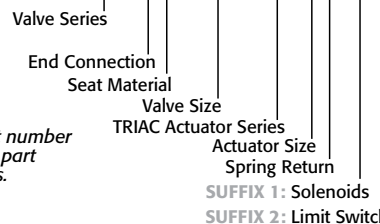
For spring return assemblies, all 80 psi assemblies will have 5 springs, and all 60 psi assemblies will have 4 springs (indicated by the 4-XX).

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	22-TX-025/S2C4-XX
3/8"	22-TX-038/S2C4-XX
1/2"	22-TX-050/S2C4-XX
3/4"	22-TX-075/S2D4-XX
1"	22-TX-100/S2E4-XX
1-1/4"	22-TX-125/S2E4-XX
1-1/2"	22-TX-150/S2E4-XX
2"	22-TX-200/S2F4-XX
2-1/2"	22-TX-250/S2G4-XX
3"	22-TX-300/S2H4-XX

OPTIONS		
SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVC6-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVC6-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available - call for details
Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.

SAMPLE PART # 22-TX-100/S2DS-XX



See automated part number matrix for complete part number and options.

SUFFIX 1: Solenoids
SUFFIX 2: Limit Switch





Pneumatic Double Acting Automated Ball Valve Package

Series 77
Sanitary End
3-Piece Ball Valve

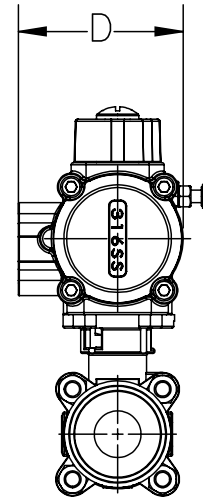
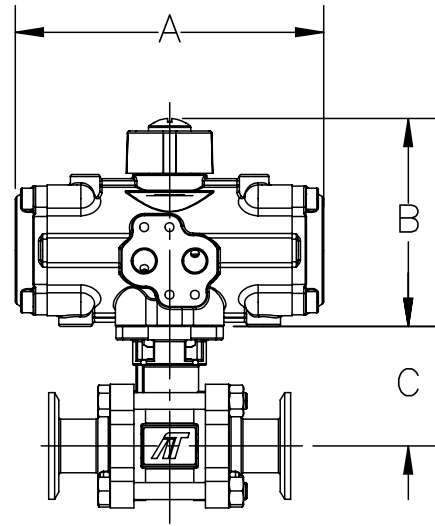
- Sizes 1/2"-4"
- 393 to 1000 psi (by size)
- Available in 316L
- Cavity Filled and Non-Cavity Filled
- Sanitary Clamp Ends or Tube OD Ends
- Tube Pipe Design
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- PTFE Seats standard
- Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
Mounting	ISO 5211
Marking System for Valves	MSS SP-25, ISO 5209
CE Approval	2014/68/EU Module H
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



Direct Mount to TRIAC® S2 Series
Stainless Steel Actuator



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/2"	5.75	3.62	1.66	3.07	10
3/4"	5.75	3.62	1.89	3.07	30
1"	5.75	3.62	2.23	3.07	65
1-1/2"	6.81	4.25	3.05	3.58	200
2"	6.81	4.25	3.35	3.58	410
2-1/2"	8.03	5.04	4.28	4.42	600
3"	10.63	6.03	4.63	5.31	1,050
4"	10.63	6.03	5.22	5.31	1,900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

SIZED FOR 80 psi AIR SUPPLY

SIZE	MODEL
1/2"	77-C1-050/S2CD-XX
3/4"	77-C1-075/S2CD-XX
1"	77-C1-100/S2CD-XX
1-1/2"	77-C1-150/S2DD-XX
2"	77-C1-200/S2DD-XX
2-1/2"	77-C1-250/S2ED-XX
3"	77-C1-300/S2FD-XX
4"	77-C1-400/S2FD-XX

SIZED FOR 60 psi AIR SUPPLY

SIZE	MODEL
1/2"	77-C1-050/S2CD-XX
3/4"	77-C1-075/S2CD-XX
1"	77-C1-100/S2CD-XX
1-1/2"	77-C1-150/S2DD-XX
2"	77-C1-200/S2ED-XX
2-1/2"	77-C1-250/S2FD-XX
3"	77-C1-300/S2FD-XX
4"	77-C1-400/S2GD-XX

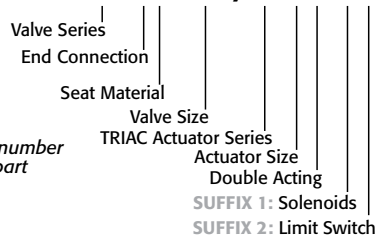
OPTIONS

SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVC6-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVC6-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000

SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available. Call for details.
Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.

SAMPLE PART # 77-C1-150/S2DD-XX



See automated part number matrix for complete part number and options.



Pneumatic Spring Return Automated Ball Valve Package

Series 77
Sanitary End
3-Piece Ball Valve

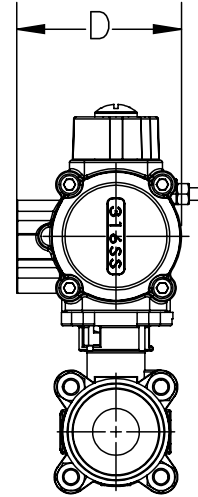
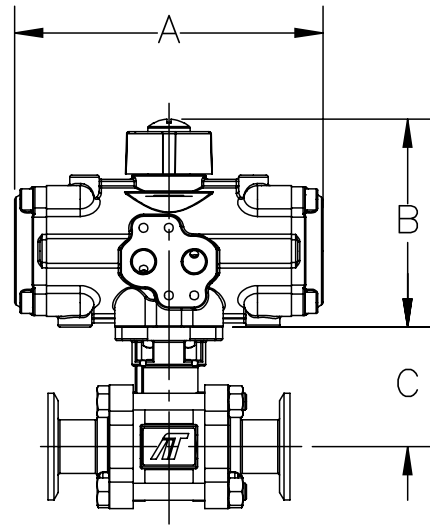
- Sizes 1/2"-4"
- 393 to 1000 psi (by size)
- Available in 316L
- Cavity Filled and Non-Cavity Filled
- Sanitary Clamp Ends or Tube OD Ends
- Tube Pipe Design
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- PTFE Seats standard
- Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
Mounting	ISO 5211
Marking System for Valves	MSS SP-25, ISO 5209
CE Approval	2014/68/EU Module H
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



Direct Mount to TRIAC® S2 Series
Stainless Steel Actuator



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/2"	5.75	3.62	1.66	3.07	10
3/4"	5.75	3.62	1.89	3.07	30
1"	6.81	4.25	2.23	3.58	65
1-1/2"	8.03	5.04	3.05	4.42	200
2"	10.63	6.03	3.35	5.31	410
2-1/2"	11.89	7.28	4.28	6.12	600
3"	11.89	7.28	4.63	6.12	1,050
4"	15.51	7.95	5.22	6.75	1,900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

SERIES 77 Sanitary Ends Direct Mount "Painless Stainless"

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/S2CS-XX
3/4"	77-C1-075/S2CS-XX
1"	77-C1-100/S2DS-XX
1-1/2"	77-C1-150/S2ES-XX
2"	77-C1-200/S2FS-XX
2-1/2"	77-C1-250/S2GS-XX
3"	77-C1-300/S2GS-XX
4"	77-C1-400/S2HS-XX

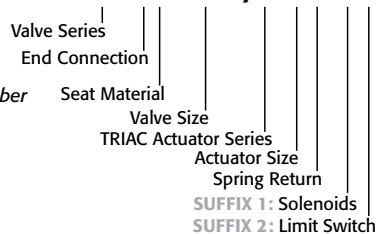
For spring return assemblies, all 80 psi assemblies will have 5 springs, and all 60 psi assemblies will have 4 springs (indicated by the 4-XX).

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/S2C4-XX
3/4"	77-C1-075/S2C4-XX
1"	77-C1-100/S2D4-XX
1-1/2"	77-C1-150/S2E4-XX
2"	77-C1-200/S2F4-XX
2-1/2"	77-C1-250/S2G4-XX
3"	77-C1-300/S2G4-XX
4"	77-C1-400/S2H4-XX

OPTIONS		
SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVC6-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVC6-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available. Call for details. Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.

SAMPLE PART # 77-C1-150/S2ES-XX



See automated part number matrix for complete part number and options.



Pneumatic Double Acting Automated Ball Valve Package

Series 88 3-Piece Ball Valve

Sizes 1/4" - 4"

Full Port Design

Conforms to ASME B16.34 (2020)

- Classes up to 600
- 1000 to 2000 psi (BPVC) by size

316SST Body, Ball, & Stem

TH, SW, or BW Ends

Superior Live Loaded Packing System

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME B16.25, B1.20.1, B16.11
Pressure Testing	API 598
Mounting	ISO 5211
CE Approval	2014/68/EU Module H
Marking System for Valves	MSS SP-25, ISO 5209
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015

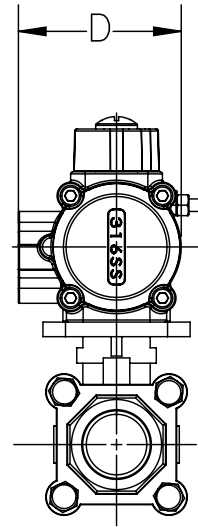
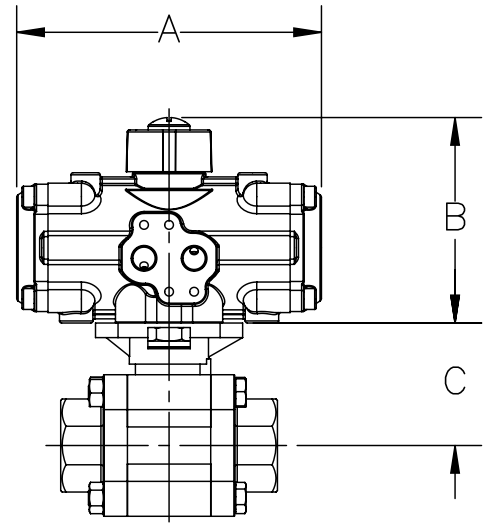


Direct Mount to TRIAC® S2 Series Stainless Steel Actuator

DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/4"	5.75	3.62	1.66	3.07	7
3/8"	5.75	3.62	1.66	3.07	8
1/2"	5.75	3.62	1.66	3.07	15
3/4"	5.75	3.62	1.83	3.07	40
1"	5.75	3.62	2.31	3.07	70
1-1/4"	6.81	4.25	2.46	3.58	110
1-1/2"	6.81	4.25	3.07	3.58	250
2"	8.03	5.04	3.42	4.42	430
2-1/2"	10.63	6.03	4.28	5.31	600
3"	10.63	6.03	4.63	5.31	1,100
4"	11.89	7.28	5.26	6.12	2,000

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



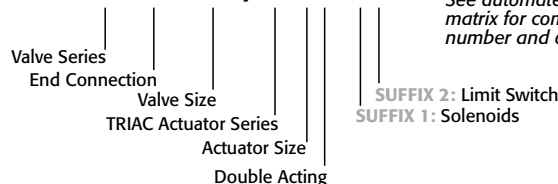
SERIES 88 3-Piece Direct Mount "Painless Stainless"

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	88-TX-025/S2CD-XX
3/8"	88-TX-038/S2CD-XX
1/2"	88-TX-050/S2CD-XX
3/4"	88-TX-075/S2CD-XX
1"	88-TX-100/S2CD-XX
1-1/4"	88-TX-125/S2DD-XX
1-1/2"	88-TX-150/S2DD-XX
2"	88-TX-200/S2ED-XX
2-1/2"	88-TX-250/S2FD-XX
3"	88-TX-300/S2FD-XX
4"	88-TX-400/S2GD-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	88-TX-025/S2CD-XX
3/8"	88-TX-038/S2CD-XX
1/2"	88-TX-050/S2CD-XX
3/4"	88-TX-075/S2CD-XX
1"	88-TX-100/S2CD-XX
1-1/4"	88-TX-125/S2DD-XX
1-1/2"	88-TX-150/S2DD-XX
2"	88-TX-200/S2ED-XX
2-1/2"	88-TX-250/S2FD-XX
3"	88-TX-300/S2FD-XX
4"	88-TX-400/S2GD-XX

OPTIONS		
SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVC6-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVC6-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

SAMPLE PART #
88-TX-050/S2CD-XX



See automated part number matrix for complete part number and options.



Pneumatic Spring Return Automated Ball Valve Package

Series 88 3-Piece Ball Valve

Sizes 1/4" - 4"

Full Port Design

Conforms to ASME B16.34 (2020)

- Classes up to 600
- 1000 to 2000 psi (BPVC) by size

316SST Body, Ball, & Stem

TH, SW, or BW Ends

Superior Live Loaded Packing System

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME B16.25, B1.20.1, B16.11
Pressure Testing	API 598
Mounting	ISO 5211
CE Approval	2014/68/EU Module H
Marking System for Valves	MSS SP-25, ISO 5209
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015

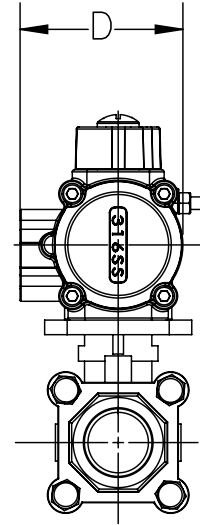
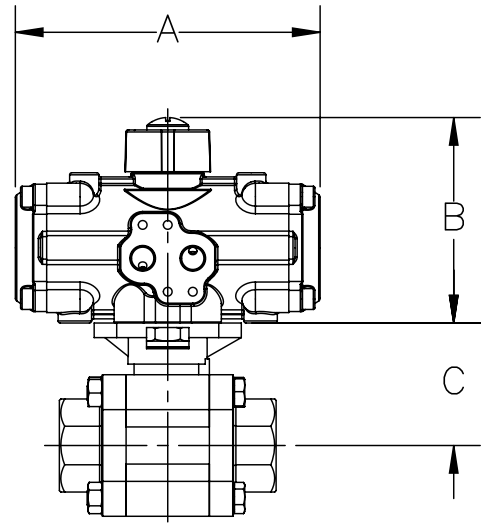


Direct Mount to TRIAC® S2 Series Stainless Steel Actuator

DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/4"	5.75	3.62	1.66	3.07	7
3/8"	5.75	3.62	1.66	3.07	8
1/2"	5.75	3.62	1.66	3.07	15
3/4"	6.81	4.25	1.83	3.58	40
1"	8.03	5.04	2.31	4.42	70
1-1/4"	8.03	5.04	2.46	4.42	110
1-1/2"	8.03	5.04	3.07	4.42	250
2"	10.63	6.03	3.42	5.31	430
2-1/2"	11.89	7.28	4.28	6.12	600
3"	11.89	7.28	4.63	6.12	1,100
4"	15.51	7.95	5.26	6.75	2,000

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES 88 3-Piece Direct Mount "Painless Stainless"

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	88-TX-025/S2CS-XX
3/8"	88-TX-038/S2CS-XX
1/2"	88-TX-050/S2CS-XX
3/4"	88-TX-075/S2DS-XX
1"	88-TX-100/S2ES-XX
1-1/4"	88-TX-125/S2ES-XX
1-1/2"	88-TX-150/S2ES-XX
2"	88-TX-200/S2FS-XX
2-1/2"	88-TX-250/S2GS-XX
3"	88-TX-300/S2GS-XX
4"	88-TX-400/S2HS-XX

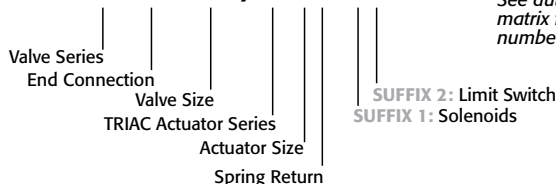
SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	88-TX-025/S2D4-XX
3/8"	88-TX-038/S2D4-XX
1/2"	88-TX-050/S2D4-XX
3/4"	88-TX-075/S2D4-XX
1"	88-TX-100/S2E4-XX
1-1/4"	88-TX-125/S2E4-XX
1-1/2"	88-TX-150/S2F4-XX
2"	88-TX-200/S2F4-XX
2-1/2"	88-TX-250/S2G4-XX
3"	88-TX-300/S2H4-XX
4"	88-TX-400/S2J4-XX

OPTIONS		
Suffix1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVC6-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVC6-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000

Suffix2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

For spring return assemblies, all 80 psi assemblies will have 5 springs, and all 60 psi assemblies will have 4 springs (indicated by the 4-XX).

SAMPLE PART # 88-TX-050/S2CS-XX



See automated part number matrix for complete part number and options.





**Pneumatic
Double Acting**
**Automated
Ball Valve Package**

Series D9
ASME Class 150
Flanged Ball Valve
Direct Mount

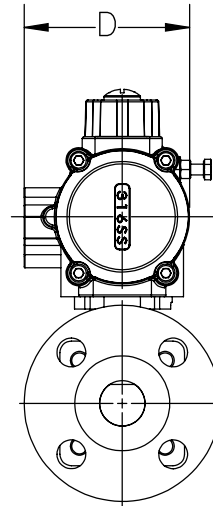
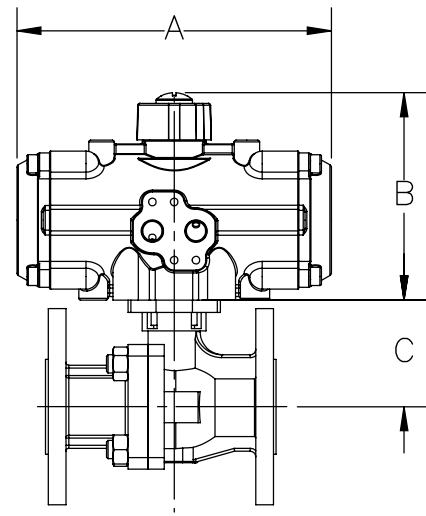
Sizes 1/2"-6" stock
316SST Body, Ball, & Stem
ASME Class 150
Full Port Design
Superior Live Loaded
Packing System
Blowout Proof Stem w/ Dual
Anti-Static Devices
RTFE Seats Standard
Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
Face to Face	ASME B16.10
Flange Dimensions	ASME B16.5
Pressure Testing	API 598
Mounting	ISO 5211
CE Approval	2014/68/EU Module H
Marking System for Valves	MSS SP-25
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



Direct Mount to TRIAC® S2 Series
Stainless Steel Actuator



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/2"	5.75	3.62	1.84	3.07	15
3/4"	5.75	3.62	2.02	3.07	45
1"	5.75	3.62	2.31	3.07	85
1-1/2"	8.03	5.04	3.51	4.42	275
2"	8.03	5.04	3.80	4.42	450
2-1/2"	8.03	5.04	4.57	4.42	700
3"	10.63	6.03	5.22	5.31	1,100
4"	10.63	6.03	6.18	5.31	2,200

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES D9 Split Body "Painless Stainless"

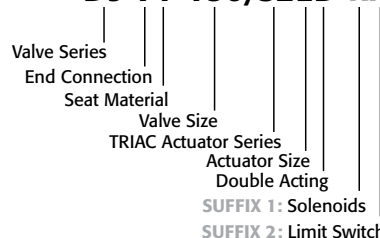
SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	D9-F1-050/S2CD-XX
3/4"	D9-F1-075/S2CD-XX
1"	D9-F1-100/S2CD-XX
1-1/2"	D9-F1-150/S2ED-XX
2"	D9-F1-200/S2ED-XX
2-1/2"	D9-F1-250/S2ED-XX
3"	D9-F1-300/S2FD-XX
4"	D9-F1-400/S2FD-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	D9-F1-050/S2CD-XX
3/4"	D9-F1-075/S2CD-XX
1"	D9-F1-100/S2CD-XX
1-1/2"	D9-F1-150/S2ED-XX
2"	D9-F1-200/S2ED-XX
2-1/2"	D9-F1-250/S2FD-XX
3"	D9-F1-300/S2FD-XX
4"	D9-F1-400/S2GD-XX

OPTIONS		
SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVCG-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVCG-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available - call for details.
Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.

SAMPLE PART #
D9-F1-150/S2ED-XX



See automated part number matrix for complete part number and options.



Pneumatic Spring Return

Automated Ball Valve Package

Series D9
ASME Class 150
Flanged Ball Valve
Direct Mount

Sizes 1/2"-6" stock
316SST Body, Ball, & Stem

ASME Class 150

Full Port Design

Superior Live Loaded
Packing System

Blowout Proof Stem w/ Dual
Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
Face to Face	ASME B16.10
Flange Dimensions	ASME B16.5
Pressure Testing	API 598
Mounting	ISO 5211
CE Approval	2014/68/EU Module H
Marking System for Valves	MSS SP-25
Safety Integrity	SIL 3; IEC 61508:2010
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015

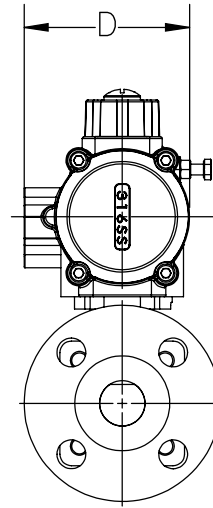
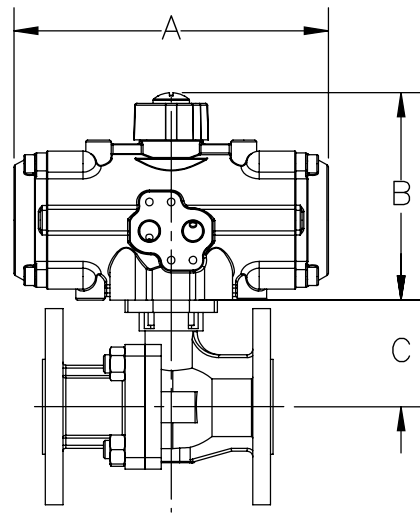


Direct Mount to TRIAC® S2 Series
Stainless Steel Actuator

DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	VALVE Cv
1/2"	5.75	3.62	1.84	3.07	15
3/4"	6.81	4.25	2.02	3.58	45
1"	6.81	4.25	2.31	3.58	85
1-1/2"	8.03	5.04	3.51	4.42	275
2"	10.63	6.03	3.8	5.31	450
2-1/2"	10.63	6.03	4.57	5.31	700
3"	11.89	7.28	5.22	6.12	1,100
4"	15.51	7.95	6.18	6.75	2,200

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



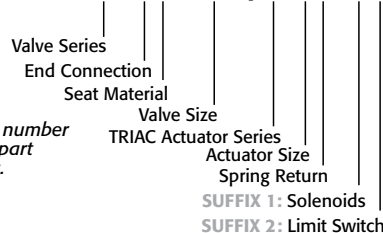
SERIES D9 Split Body "Painless Stainless"

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	D9-F1-050/S2CS-XX
3/4"	D9-F1-075/S2DS-XX
1"	D9-F1-100/S2DS-XX
1-1/2"	D9-F1-150/S2ES-XX
2"	D9-F1-200/S2FS-XX
2-1/2"	D9-F1-250/S2FS-XX
3"	D9-F1-300/S2GS-XX
4"	D9-F1-400/S2HS-XX

For spring return assemblies, all 80 psi assemblies will have 5 springs, and all 60 psi assemblies will have 4 springs (indicated by the 4-XX).

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	D9-F1-050/S2C4-XX
3/4"	D9-F1-075/S2D4-XX
1"	D9-F1-100/S2D4-XX
1-1/2"	D9-F1-150/S2F4-XX
2"	D9-F1-200/S2F4-XX
2-1/2"	D9-F1-250/S2G4-XX
3"	D9-F1-300/S2H4-XX
4"	D9-F1-400/S2H4-XX

SAMPLE PART #
D9-F1-150/S2ES-XX



See automated part number matrix for complete part number and options.

OPTIONS

SUFFIX 1	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVCS-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVCS-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000

SUFFIX 2	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S

Other options available - call for details.
Actuators are sized based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.