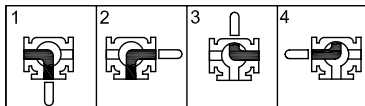




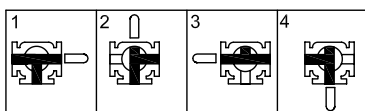
This investment cast 3-way valve can be an economical option for flow patterns that normally require multiple 2-way valves. Available in L or T port configurations, this valve is excellent for diverting flow within control loop processes. The ISO 5211 mounting pad optimizes quick & easy automation. Available only in 316 stainless steel with RTFE seat trim.

VALVE SIZE	VALVE Cv "L"	VALVE Cv "T"
1/4"	3	3.5
3/8"	3.5	4
1/2"	4.2	5
3/4"	7	8
1"	14	20
1-1/4"	19	30
1-1/2"	35	40
2"	45	60

**Flow Patterns for L-Port**



**Flow Patterns for T-Port**



**Easy to Automate!**

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



**Series 38  
3-Way  
Ball Valve  
Threaded**

**Sizes 1/4" - 2"**

**1000 psi WOG**

**316SST**

**Regular Port Design**

**Threaded Ends**

**ISO 5211 Actuator Mounting Pad**

**Blowout Proof Stem**

**4 Seat Design (RTFE standard)**

**"L" or "T" Port Option**

**Lockable Manual Handle**

**STANDARDS**

Design EN -1983, EN-12516-3  
 End Connections ASME B1.20.1  
 Pressure Testing EN-12266-1  
 Mounting ISO 5211  
 Marking System for Valves EN 19  
 Material Certification EN 10204-3.1 MTR  
 Quality Assurance ISO 9001:2008

**HOW TO ORDER  
MANUAL VALVES**

SAMPLE PART #

**38-TH-0025-XXX-T**



See part number matrix for itemized options



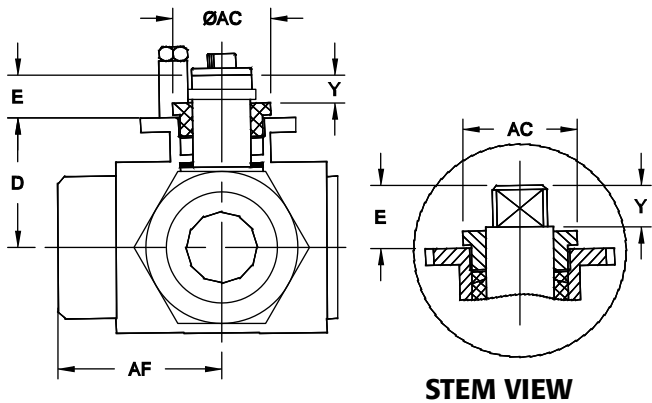
9955 International Blvd.  
 Cincinnati, Ohio 45246  
 www.atcontrols.com

PHONE (513) 247-5465  
 FAX (513) 247-5462  
 sales@atcontrols.com

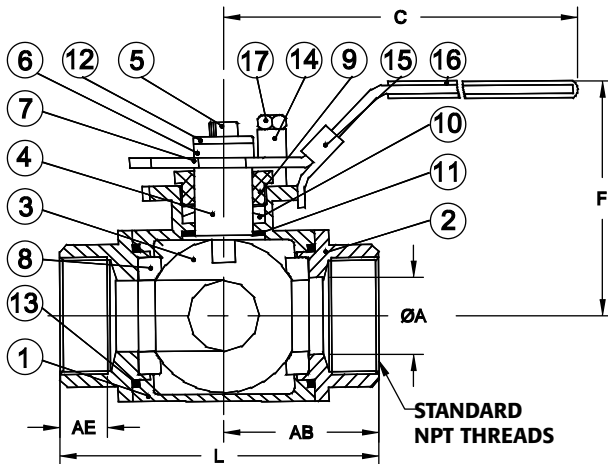
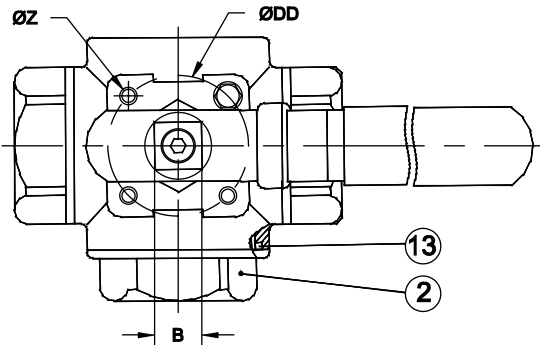
# Series 38

## Three-Way Threaded Ball Valve Regular Port, L or T Option

1000 psi WOG  
1/4" to 2"



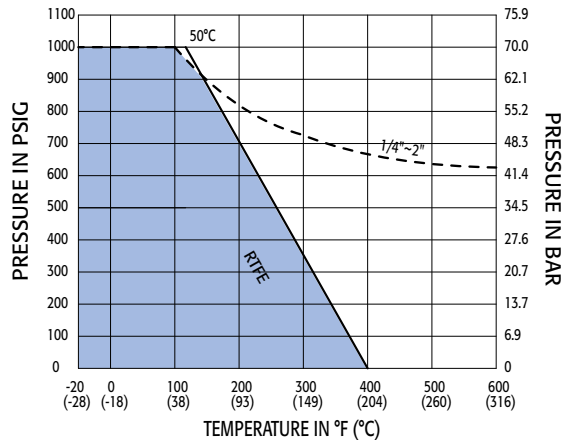
STEM VIEW



### DIMENSIONS (IN)

SIZE	A	B	C	D	E	F	L	Y	Z	AB	AC	AE	AF	DD	ISO 5211	LBS
1/4"	0.43	0.354	5.25	1.06	0.42	2.39	2.73	0.20	M5	1.37	0.87	0.61	1.37	1.654	F04	1.32
3/8"	0.43	0.354	5.25	1.06	0.42	2.39	2.73	0.20	M5	1.37	0.87	0.61	1.37	1.654	F04	1.32
1/2"	0.49	0.354	5.25	1.20	0.42	2.52	2.98	0.19	M5	1.49	0.87	0.68	1.49	1.654	F04	1.54
3/4"	0.63	0.433	7.03	1.45	0.55	3.24	3.41	0.28	M6	1.70	1.22	0.76	1.70	1.969	F05	2.42
1"	0.79	0.433	7.03	1.60	0.79	3.39	4.03	0.45	M6	2.02	1.22	0.85	2.02	1.969	F05	3.86
1-1/4"	0.98	0.433	8.26	1.85	0.94	3.60	4.65	0.63	M6	2.33	1.22	0.93	2.33	1.969	F05	5.33
1-1/2"	1.26	0.433	8.19	2.14	1.02	4.04	4.95	0.61	M8	2.48	1.22	0.92	2.48	2.756	F07	7.49
2"	1.50	0.551	9.05	2.48	1.00	4.36	5.87	0.61	M8	2.93	1.34	1.00	2.93	2.756	F07	12.00

### Pressure vs. Temperature Chart for Valves 1/4" to 2"



Break Away Torque for RTFE Seats	
SIZE	IN-LBS.
1/4"	65
3/8"	65
1/2"	90
3/4"	118
1"	200
1-1/4"	315
1-1/2"	440
2"	528

NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application.

### MATERIALS LIST

NO.	PART NAME	QTY	STAINLESS STEEL
1	BODY	1	ASTM A351 GRADE CF8M
2	END CAP	3	ASTM A351 GRADE CF8M
3	BALL	1	1/4" THRU 3/8" ASTM A276 SS316
3	BALL	1	1/2" THRU 2" ASTM A351 GR CF8M
4	STEM	1	ASTM A276 SS316
5	STEM NUT	2	AISI 304
6	STEM WASHER	1	AISI 304
7	HANDLE	1	AISI 304
8	SEAT	4	RTFE
9	GLAND NUT	1	AISI 304
10	GLAND PACKING	1	PTFE
11	THRUST WASHER	1	RTFE
12	STEM SPACER	1	AISI 304
13	JOINT GASKET	3	PTFE
14	SPACER	1	AISI 304
15	HANDLE LOCK	1	AISI 304
16	HANDLE SLEEVE	1	VINYL
17	STOP BOLT	1	AISI 304



# Pneumatic Double Acting

## Automated Ball Valve Package

### Series 38 3-Way Ball Valve

Sizes 1/4" - 2"  
1000 psi WOG  
316SS

Regular Port Design  
Threaded Ends  
Blowout Proof Stem  
4 Seat Design (RTFE standard)  
"L" or "T" Port Option

#### STANDARDS

Design EN -1983, EN-12516-3  
End Connections ASME B1.20.1  
Pressure Testing EN-12266-1  
Mounting ISO 5211  
Marking System for Valves EN 19  
Material Certification EN 10204-3.1 MTR  
Quality Assurance ISO 9001:2008



Threaded 3-Way

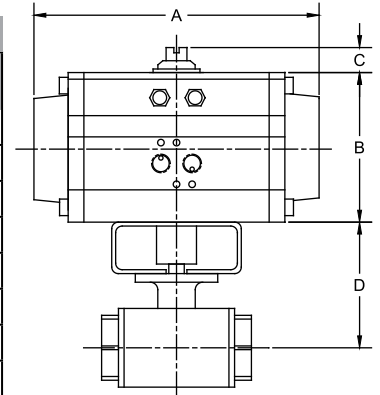
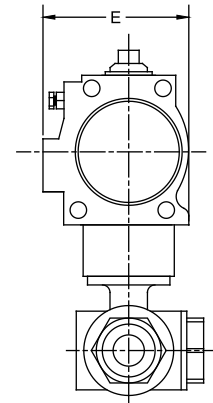
**SERIES 38 3-Way**

#### DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E
1/4"	5.98	2.76	0.79	2.54	2.58
3/8"	5.98	2.76	0.79	2.54	2.58
1/2"	5.98	2.76	0.79	2.68	2.58
3/4"	5.98	2.76	0.79	3.03	2.58
1"	7.95	3.43	0.79	3.18	3.29
1-1/4"	9.29	4.49	0.79	3.43	4.41
1-1/2"	9.29	4.49	0.79	3.72	4.41
2"	9.29	4.49	0.79	4.06	4.41

VALVE Cv	
T-PORT STRAIGHT THRU	L-PORT 90°
3	3.5
3.5	4
4.2	5
7	8
14	20
19	30
35	40
45	60

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



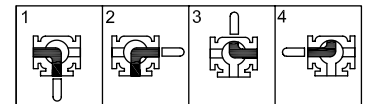
#### SIZED FOR 80 psi AIR SUPPLY

SIZE	MODEL
1/4"	38-TX-025/TR1D-XX-T
3/8"	38-TX-038/TR1D-XX-T
1/2"	38-TX-050/TR1D-XX-T
3/4"	38-TX-075/TR1D-XX-T
1"	38-TX-100/2R2D-XX-T
1-1/4"	38-TX-125/2R3D-XX-T
1-1/2"	38-TX-150/2R3D-XX-T
2"	38-TX-200/2R3D-XX-T

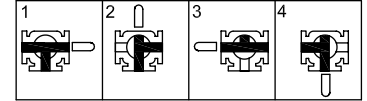
#### SIZED FOR 60 psi AIR SUPPLY

SIZE	MODEL
1/4"	38-TX-025/TR1D-XX-T
3/8"	38-TX-038/TR1D-XX-T
1/2"	38-TX-050/2R2D-XX-T
3/4"	38-TX-075/2R2D-XX-T
1"	38-TX-100/2R3D-XX-T
1-1/4"	38-TX-125/2R3D-XX-T
1-1/2"	38-TX-150/2R3D-XX-T
2"	38-TX-200/2R4D-XX-T

#### Flow Patterns for L-Port

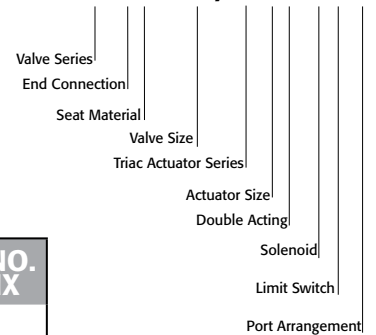


#### Flow Patterns for T-Port



#### SAMPLE PART #

**38-TX-050/2R2D-XX-T**



See part number matrix for itemized options

#### OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Intrinsically Safe Limit Switch	(C)

Other options available - call for details  
Specify flow pattern when ordering (see back)  
Actuators are sized based on clean/clear fluid.





# Pneumatic Spring Return

## Automated Ball Valve Package

### Series 38 3-Way Ball Valve

Sizes 1/4" - 2"  
1000 psi WOG  
316SST

Regular Port Design  
Threaded Ends  
Blowout Proof Stem  
4 Seat Design (RTFE standard)  
"L" or "T" Port Option

#### STANDARDS

Design	EN -1983, EN-12516-3
End Connections	ASME B1.20.1
Pressure Testing	EN-12266-1
Mounting	ISO 5211
Marking System for Valves	EN 19
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2008



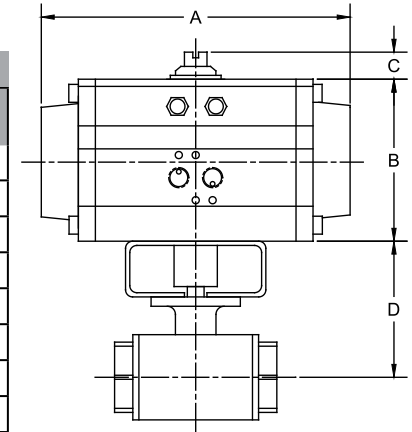
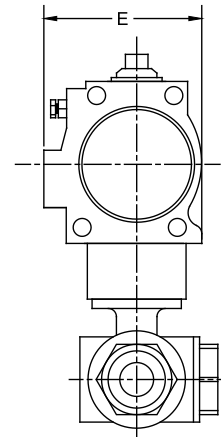
Threaded 3-Way

#### DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E
1/4"	7.95	3.43	0.79	2.54	3.29
3/8"	7.95	3.43	0.79	2.54	3.29
1/2"	7.95	3.43	0.79	2.68	3.29
3/4"	9.29	4.49	0.79	3.03	4.41
1"	9.29	4.49	0.79	3.18	4.41
1-1/4"	10.87	4.88	0.79	3.43	4.82
1-1/2"	11.46	5.28	0.79	3.72	5.20
2"	13.90	6.18	0.79	4.45	6.04

VALVE Cv	
T-PORT STRAIGHT THRU	L-PORT 90°
3	3.5
3.5	4
4.2	5
7	8
14	20
19	30
35	40
45	60

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

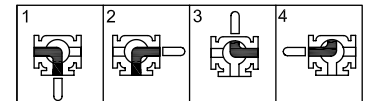


**SERIES 38 3-Way**

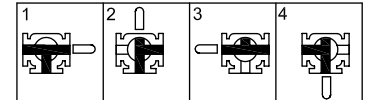
SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	38-TX-025/2R2S-XX-T
3/8"	38-TX-038/2R2S-XX-T
1/2"	38-TX-050/2R2S-XX-T
3/4"	38-TX-075/2R3S-XX-T
1"	38-TX-100/2R3S-XX-T
1-1/4"	38-TX-125/2R4S-XX-T
1-1/2"	38-TX-150/2R5S-XX-T
2"	38-TX-200/2R6S-XX-T

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	38-TX-025/2R2S-XX-T
3/8"	38-TX-038/2R2S-XX-T
1/2"	38-TX-050/2R2S-XX-T
3/4"	38-TX-075/2R3S-XX-T
1"	38-TX-100/2R3S-XX-T
1-1/4"	38-TX-125/2R4S-XX-T
1-1/2"	38-TX-150/2R5S-XX-T
2"	38-TX-200/2R6S-XX-T

#### Flow Patterns for L-Port

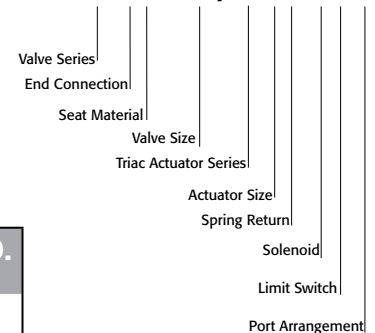


#### Flow Patterns for T-Port



#### SAMPLE PART #

### 38-TX-050/2R2S-XX-T



See part number matrix for itemized options

#### OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Intrinsically Safe Limit Switch	(C)

Other options available - call for details  
Specify flow pattern when ordering (see back)  
Actuators are sized based on clean/clear fluid.





# Electric

## Automated Ball Valve Package

### Series 38 3-Way Ball Valve

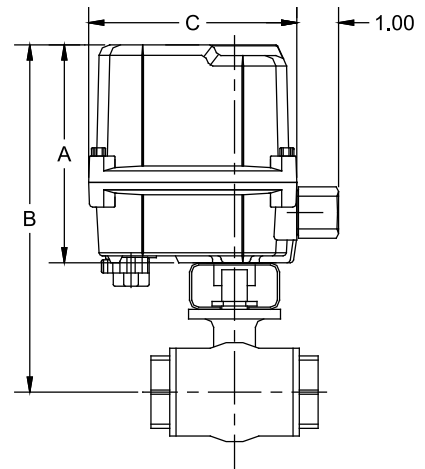
Sizes 1/4" - 2"  
1000 psi WOG  
316SST  
Regular Port Design  
Threaded Ends  
Blowout Proof Stem  
4 Seat Design (RTFE standard)  
"L" or "T" Port Option

#### STANDARDS

Design	EN -1983, EN-12516-3
End Connections	ASME B1.20.1
Pressure Testing	EN-12266-1
Mounting	ISO 5211
Marking System for Valves	EN 19
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2008



Threaded 3-Way

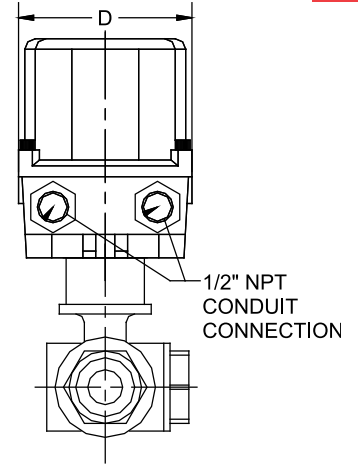


**SERIES 38 3-Way**

#### DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E
1/4"	5.24	7.78	4.94	4.08	2.58
3/8"	5.24	7.78	4.94	4.08	2.58
1/2"	5.24	7.92	4.94	4.08	2.58
3/4"	5.24	8.26	4.94	4.08	2.58
1"	5.24	8.42	4.94	4.08	3.29
1-1/4"	5.24	8.66	4.94	4.08	4.41
1-1/2"	9.25	13.36	6.69	10.16	4.41
2"	9.25	13.70	6.69	10.16	4.41

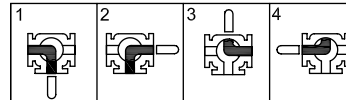
VALVE Cv	
T-PORT STRAIGHT THRU	L-PORT 90°
3	3.5
3.5	4
4.2	5
7	8
14	20
19	30
35	40
45	60



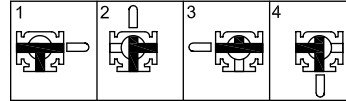
#### ON-OFF

SIZE	MODEL
1/4"	38-TX-025/WEA1-XX-T
3/8"	38-TX-038/WEA1-XX-T
1/2"	38-TX-050/WEA1-XX-T
3/4"	38-TX-075/WEA1-XX-T
1"	38-TX-100/WEA1-XX-T
1-1/4"	38-TX-125/WEA1-XX-T
1-1/2"	38-TX-150/WEB1-XX-T
2"	38-TX-200/WEB1-XX-T

#### Flow Patterns for L-Port

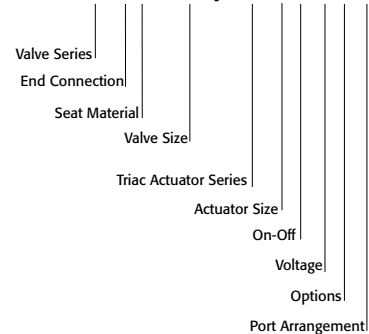


#### Flow Patterns for T-Port



#### SAMPLE PART #

**38-TX-050/WEA1-XX-T**



#### OPTIONS

DESCRIPTION
24 VAC/24 VDC/220VAC
Feedback signals

NOTE: Heater and thermostat standard  
(2) auxiliary switches standard  
Other options available - call for details  
Actuators are sized based on clean/clear fluid.



9955 International Blvd.  
Cincinnati, Ohio 45246  
www.atcontrols.com  
PHONE (513) 247-5465  
FAX (513) 247-5462  
sales@atcontrols.com

# Valve Options

## Various Seat Materials

PTFE, RTFE, 50/50 STFE, 25% CTFE, Delrin, PEEK, UHMWPE, TFM-1600

## Operator Options

Quarter-turn Gear Operators  
Spring Return "Deadman" Handles  
Oval handles, TEE Handles

## Specials and Solutions

Steam Jackets  
Stem Extensions  
V-ported Control Valves  
Multi-port Valve Solutions  
Fugitive Emissions Bonnets (TSM's)  
Oxygen Cleaning  
Lockout Brackets  
Vented Balls  
"No Play" Mounting Kits

## • FM Approved Valves and Assemblies



Manual and automated valve assemblies for gas burner management applications and safety shutoff

# Other Products

## Special Seats Balls and Seal Designs



## Steam Jacketed Valves



## Floor Mounted Damper Drives



## Limit Switches Mounted on Manual Valves



## Fusible Link Assemblies



## 180° Actuators



## Lockout Mounting Kits



## Stem Extensions



## Special Multi-Port Valves



## Dual Valve Assemblies

