



This 3-way ball valve offers diverting and mixing flow patterns, often eliminating the need for two valves. The full port design is easily automated and is available with various seat materials. The bolts on side flanges make for easy seat changes as necessary to accommodate your service. Available in L or T port configurations.

**Cv Values**

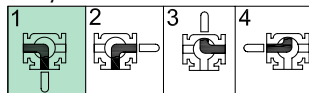
VALVE SIZE	T-PORT STRAIGHT THRU	L & T-PORT 90°
1-1/2"	213	54
2"	312	90
2-1/2"	688	159
3"	886	211
4"	1,891	386
6"	5,834	926

Class 300 Torque Values for RTFE Seats		
VALVE SIZE	BREAK IN* LBS.	RUN IN* LBS.
1-1/2"	494	246
2"	822	595
2-1/2"	1,846	846
3"	2,906	1,446
4"	3,259	2,190
6"	5,065	2,875

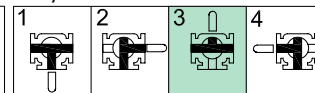
NOTE: For other seat material, consult factory

**FLOW PATTERNS**

**3-Way L-Port**



**3-Way T-Port**



Shaded boxes indicate standard flow path from factory unless otherwise specified by customer. Automated assemblies rotate counter-clockwise standard from the factory when energized. For L-Ports that would be L1 to L2 and T3 to T4 for T-ports. By specifying FCCV or DAR actuators, multiple flow patterns can be achieved to meet process requirements.

**Easy to Automate!**

See automated data sheets for pre-sized assemblies



**Pneumatic**



**Electric**



**Series 31-F3  
3-Way Flanged  
Direct Mount  
Ball Valve**

Sizes 1-1/2" thru 6"

316SST or WCB

Full Port Design

ANSI Class 300

1-pc Ball & Stem

Blowout Proof Stem

RTFE Seats Standard

"L" or "T" Port Option

Trunnion Ball Design

Lockable Manual Handle

ISO 5211 Actuator Mounting Pad

**STANDARDS**

- Design ANSI/ASME B16.34
- Flanged Ends ANSI/ASME B16.5
- Face-to-Face (per factory's standard)
- Pressure Testing API 598
- Mounting ISO 5211
- Safety Integrity IEC 61508:2010; SIL 3
- Marking System for Valves MSS SP-25
- Material Certification EN 10204-3.1 MTR
- Quality Assurance ISO 9001:2015

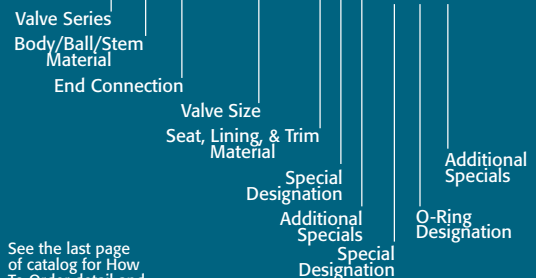


CRN

**HOW TO ORDER  
MANUAL VALVES**

SAMPLE PART #

**31C-F3-0300-XXX-**



See the last page of catalog for How To Order detail and options

Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.

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 31-F3

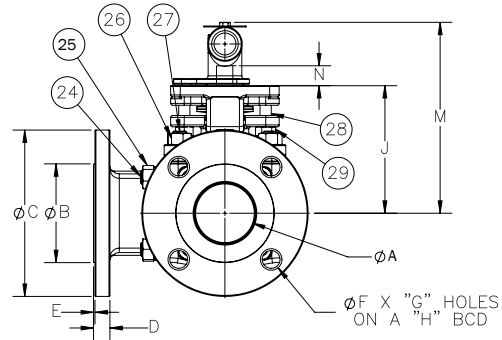
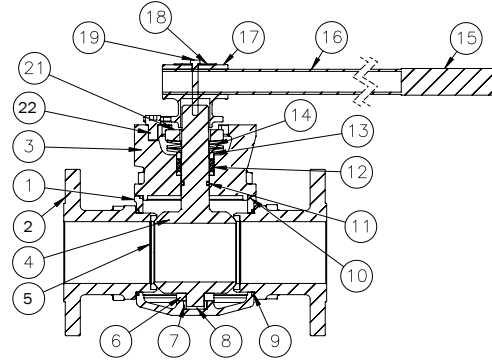
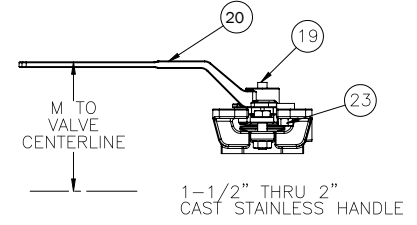
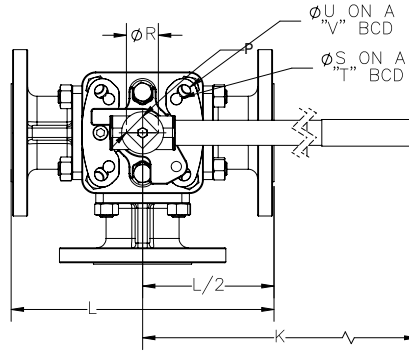
## 3-Way Flanged Ball Valve Full Port, L or T Option ANSI Class 300

### MATERIALS LIST

NO.	PART NAME	QTY	STAINLESS STEEL	CARBON STEEL	SPARE PART
1	BODY	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB	
2	END CAP	3	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB	
3	TOP COVER	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB	
4	BALL & STEM	1	ASTM A351 GRADE CF8M	ASTM A351 GRADE CF8M	
5	SEAT	3	RTFE	RTFE	*
6	THRUST WASHER	1	50/50 STFE	50/50 STFE	*
7	TRUNNION BEARING	1	PEEK	PEEK	*
8	ANTI-STATIC SPRING	1	AISI 316	AISI 316	*
9	JOINT GASKET	3	PTFE	PTFE	*
10	COVER GASKET	1	PTFE	PTFE	*
11	STEM O-RING	1	FKM	FKM	*
12	GLAND PACKING	1 SET	PTFE	PTFE	*
13	GLAND BUSHING	1	AISI 304	AISI 304	
14	BELLEVILLE WASHER	3 *	AISI 301	AISI 301	
15	HANDLE SLEEVE	1	VINYL	VINYL	
16	HANDLE BAR 2-1/2" - 3"	1	AISI 304	AISI 304	
16	HANDLE BAR 4" - 6"	1	CARBON STEEL	CARBON STEEL	
17	HANDLE HUB 2-1/2" - 4"	1	ASTM A351 GRADE CF8	ASTM A351 GRADE CF8	
17	HANDLE HUB 6"	1	WCB	WCB	
18	INDICATOR PLATE	1	AISI 304	AISI 304	
19	HANDLE BOLT	1	AISI 304	AISI 304	
20	HANDLE 1-1/2" - 2"	1	AISI 304	AISI 304	
21	PACKING GLAND	1	ASTM A351 GRADE CF8	ASTM A351 GRADE CF8	
22	HANDLE STOP BOLT	1	AISI 304	AISI 304	
23	NUT & WASHER	1	AISI 304	AISI 304	
24	BODY STUD	#	ASTM A193 GRADE B8	ASTM A193 GRADE B8	
25	BODY NUT	#	ASTM A194 GRADE 8	ASTM A194 GRADE 8	
26	COVER STUD	^	ASTM A193 GRADE B8	ASTM A193 GRADE B8	
27	COVER STUD	^	ASTM A194 GRADE 8	ASTM A194 GRADE 8	
28	PACKING GLAND BOLT	2	AISI 304	AISI 304	
29	PACKING GLAND NUT	2	AISI 304	AISI 304	

\* On 6" valve, qty is 8 pcs (4 on each packing gland bolt)  
 # 1-1/2" THRU 3" = Qty. 12 pcs | 4" = Qty. 18 pcs | 6" = Qty. 30 pcs  
 ^ 1-1/2" THRU 3" = 4 pcs, 4" = 6 pcs, 6" = 12 pcs

TFM™ is a trademark of Dyneon™, a 3M Company.  
 Kalrez® is a registered trademark of DuPont Performance Elastomers.  
 A-T Controls reserves the right to change product designs and technical/dimensional specifications without notice.



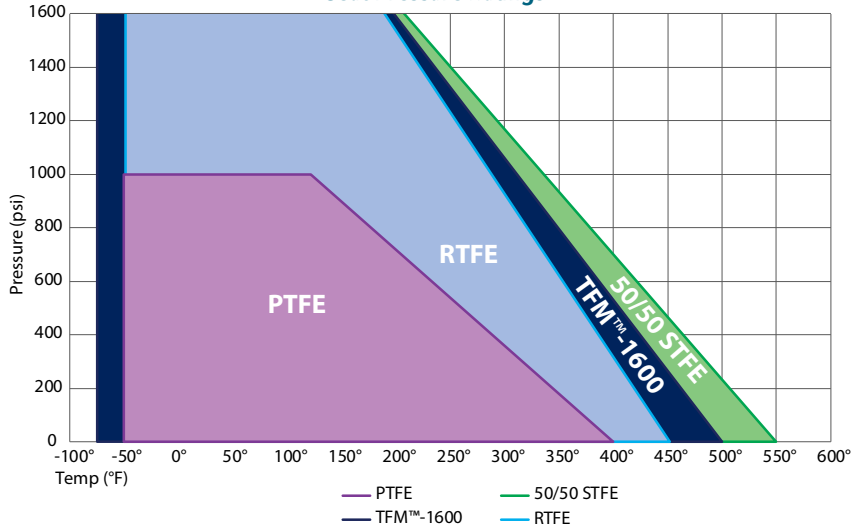
### DIMENSIONS For ANSI Class 300 (IN)

SIZE	VALVE DIMENSIONS												ACTUATOR MOUNTING DIMENSIONS								
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	ISO 5211	(LBS)
1-1/2"	1.57	2.88	6.12	0.81	0.06	0.87	4	4.50	4.13	10.31	8.62	6.16	0.75	0.748	0.93	0.39	2.756	0.47	4.016	F07/F10	35
2"	1.97	3.62	6.50	0.88	0.06	0.75	8	5.00	4.45	10.31	9.37	6.42	0.75	0.748	0.93	0.39	2.756	0.47	4.016	F07/F10	45
2-1/2"	2.60	4.12	7.50	1.00	0.06	0.87	8	5.88	5.37	14.37	11.22	8.07	0.83	0.866	1.10	0.47	4.016	0.55	4.921	F10/F12	68
3"	2.99	5.00	8.25	1.13	0.06	0.87	8	6.62	5.78	19.88	11.85	8.46	0.83	0.866	1.10	0.47	4.016	0.55	4.921	F10/F12	96
4"	3.98	6.19	10.00	1.25	0.06	0.87	8	7.88	7.52	27.76	15.35	11.06	1.14	1.063	1.38	0.55	4.921	0.71	5.512	F12/F14	158
6"	5.91	8.50	12.50	1.44	0.06	0.87	12	10.62	9.80	37.60	18.90	13.77	1.50	1.417	1.81	0.71	5.512	0.87	6.496	F14/F16	367

**3-Way Flanged Ball Valve  
Full Port, L or T Option  
ANSI Class 300**

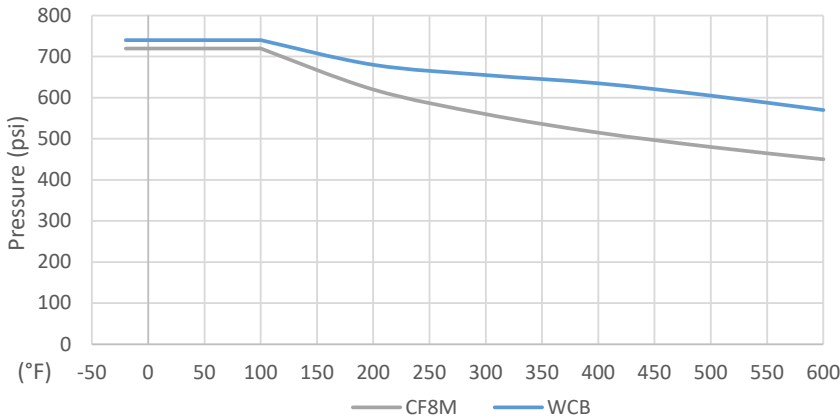
# Series 31

**Pressure vs. Temperature - Series 31**  
Seat Pressure Ratings



Temp	Pressure - Seat Material			
	RTFE	STFE	PTFE	TFM™-1600
-75°				2000
-50°	2000	2000	1000	2000
100°	2000	2000	1000	2000
122°	2000	2000	1000	2000
150°	1829	1869	899	1852
200°	1524	1636	719	1587
250°	1220	1402	540	1323
300°	915	1168	360	1058
350°	610	935	180	794
400°	305	701	0	529
450°	0	467		265
500°		234		0
550°		0		

**Pressure vs. Temperature - Series 31**



Temp	CF8M psi	WCB psi
-20°	720	740
50°	720	740
75°	720	740
90°	720	740
99°	720	740
100°	720	740
200°	620	680
300°	560	655
400°	515	635
500°	480	605
600°	450	570

**31 Series Component Temperature Ratings**

COMPONENT	MATERIAL	TEMPERATURE
Stem Packing	PTFE	-50°F to 450°F
	Graphite	-100°F to 1100°F
Gaskets	TFM™-1600	-75°F to 500°F
	PTFE (standard)	-50°F to 400°F
	Graphite	-100°F to 1100°F
Seats (Other Materials Available)	PTFE	-50°F to 400°F
	RTFE (standard)	-50°F to 450°F
	TFM™-1600	-75°F to 500°F
	50/50 STFE	-50°F to 550°F
O-Rings	FKM (standard)	-20°F to 450°F
	Markez® Z1028	5°F to 608°F
	Kalrez® 4079	30°F to 600°F
	Chemraz® 505	-22°F to 446°F
	Kalrez® 6375	-4°F to 527°F
	Perlast® G75M	5°F to 500°F
	Chemraz® 564	-40°F to 445°F
	Low Temp Buna	-65°F to 275°F
	EPDM	-70°F to 250°F
Silicone	-60°F to 400°F	

NOTE: At temperature, valves are limited by either the valve body/end cap pressure ratings, seat pressure ratings, or packing/stem seal/gaskets; whichever is lower.

**Cv Values**

VALVE SIZE	T-PORT STRAIGHT THRU	L & T-PORT 90°
1-1/2"	213	54
2"	312	90
2-1/2"	688	159
3"	886	211
4"	1,891	386
6"	5,834	926

**Class 300 Torque Values for RTFE Seats**

VALVE SIZE	BREAK IN* LBS.
1-1/2"	354
2"	613
2-1/2"	946
3"	1,353
4"	2,682
6"	5,348

Published torques are based on full differential pressure with clean water. Consult the Application Sizing Guide for assistance with sizing actuators.



# Pneumatic Double Acting

## Automated Ball Valve Package

### Series 31-F3 3-Way Flanged Ball Valve

- Sizes 1-1/2"-6"
- 316SST or WCB
- ANSI Class 300
- Full Port Design
- 1-pc Ball & Stem
- Blowout Proof Stem
- RTFE Seats Standard
- "L" or "T" Port Option
- Trunnion Ball Design
- ISO 5211 Actuator Mounting Pad

#### STANDARDS

Design	ANSI/ASME B16.34
Flanged Ends	ANSI/ASME B16.5
Face-to-Face	(per factory's standard)
Pressure Testing	API 598
Mounting	ISO 5211
Safety Integrity	IEC 61508:2010; SIL 3
Marking System for Valves	MSS SP-25
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



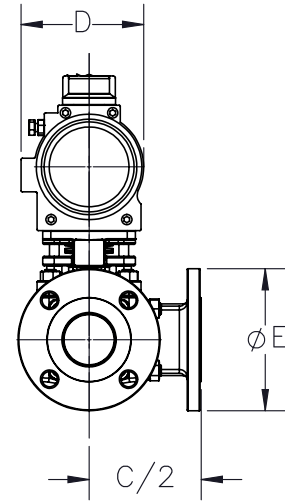
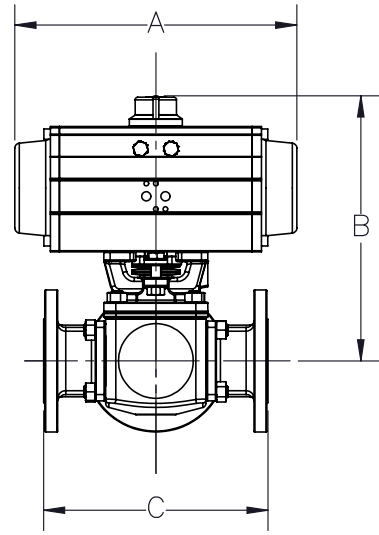
Flanged 3-Way

For operating temperatures in excess of 175° F with Buna-N seals in the actuator, an extended bracket is required. FKM seals in the actuator require an extended bracket for more than 300° F. Please consult factory for sizing information.

#### Class 300 Double Acting Assembly DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E
1-1/2"	10.87	10.06	8.62	4.83	6.12
2"	11.46	10.77	9.37	5.19	6.50
2-1/2"	13.90	13.06	11.22	6.05	7.50
3"	20.95	15.60	11.85	7.64	8.25
4"	20.95	17.34	15.35	7.64	10.00
6"	22.68	20.27	18.90	8.42	12.50

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES 31-F3 3-Way 300# Flanged Direct Mount

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1-1/2"	31-3X-150/2R4D-XX-*
2"	31-3X-200/2R5D-XX-*
2-1/2"	31-3X-250/2R6D-XX-*
3"	31-3X-300/2R8D-XX-*
4"	31-3X-400/2R8D-XX-*
6"	31-3X-600/2R9D-XX-*

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1-1/2"	31-3X-150/2R5D-XX-*
2"	31-3X-200/2R6D-XX-*
2-1/2"	31-3X-250/2R7D-XX-*
3"	31-3X-300/2R8D-XX-*
4"	31-3X-400/2R8D-XX-*
6"	31-3X-600/2R9D-XX-*

\* Must specify L or T port

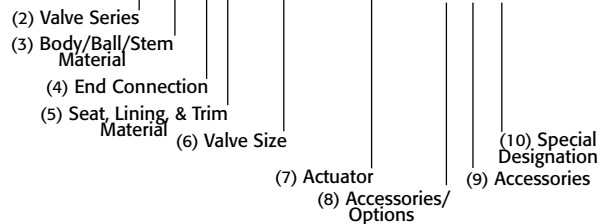
Actuators are sized for clean liquid surface with a specific gravity of 1 and at 70° F.

#### OPTIONS

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

Other options available - call for details  
Actuators are sized based on clean/clear fluid.

#### SAMPLE PART # 31C-3X-300/2R8D-



Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.

See the last page of catalog for How To Order detail and options.

See Automated Part Number Matrix for complete part number and options.



# Pneumatic Spring Return

## Automated Ball Valve Package

### Series 31-F3 3-Way Flanged Ball Valve

- Sizes 1-1/2"-6"
- 316SST or WCB
- ANSI Class 300
- Full Port Design
- 1-pc Ball & Stem
- Blowout Proof Stem
- RTFE Seats Standard
- "L" or "T" Port Option
- Trunnion Ball Design
- ISO 5211 Actuator Mounting Pad

#### STANDARDS

Design	ANSI/ASME B16.34
Flanged Ends	ANSI/ASME B16.5
Face-to-Face	(per factory's standard)
Pressure Testing	API 598
Mounting	ISO 5211
Safety Integrity	IEC 61508:2010; SIL 3
Marking System for Valves	MSS SP-25
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



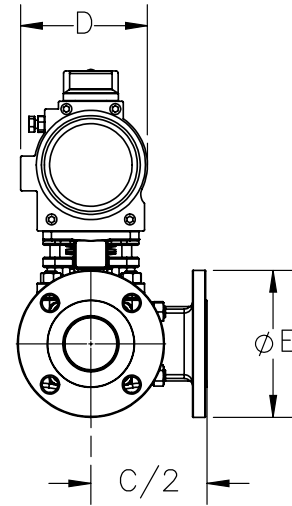
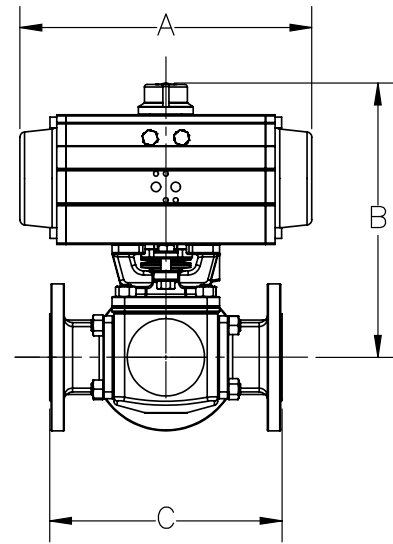
Flanged 3-Way

For operating temperatures in excess of 175° F with Buna-N seals in the actuator, an extended bracket is required. FKM seals in the actuator require an extended bracket for more than 300° F. Please consult factory for sizing information.

#### Class 300 Spring Return Assembly DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E
1-1/2"	11.46	10.45	8.62	5.06	6.12
2"	13.90	12.14	9.37	5.91	6.50
2-1/2"	13.90	13.47	11.22	5.91	7.50
3"	20.95	15.60	11.85	6.89	8.25
4"	22.68	18.18	15.35	7.60	10.00
6"	24.37	21.22	18.90	8.31	12.50

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES 31-F3 3-Way 300# Flanged Direct Mount

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1-1/2"	31-3X-150/2R5S-XX-*
2"	31-3X-200/2R6S-XX-*
2-1/2"	31-3X-250/2R6S-XX-*
3"	31-3X-300/2R8S-XX-*
4"	31-3X-400/2R9S-XX-*
6"	31-3X-600/2R0S-XX-*

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1-1/2"	31-3X-150/2R6S4-XX-*
2"	31-3X-200/2R6S4-XX-*
2-1/2"	31-3X-250/2R7S4-XX-*
3"	31-3X-300/2R9S4-XX-*
4"	31-3X-400/2R9S4-XX-^
6"	31-3X-600/2R0S-XX-#

\* Must specify L or T port.  
 ^ Actuator sized for 400 PSIG. For higher pressure, use a 2R0S4.  
 # Actuator sized for 400 PSIG. For higher pressure, use a 2RBSR60.

NOTE: A number following the actuator model (Ex: 2R6S4), indicates the number of springs per side. For a standard (5 spring per side) actuator, the spring designation is omitted from the automated part number.

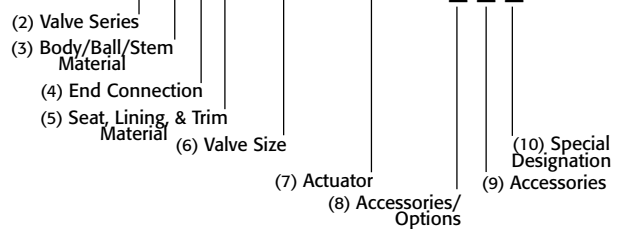
Actuators are sized for clean liquid surface with a specific gravity of 1 and at 70° F.

#### OPTIONS

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

Other options available - call for details. Actuators are sized based on clean/clear fluid. Specify flow pattern when ordering. See automated part number matrix for complete part number and options.

#### SAMPLE PART # 31C-3X-300/2R9S4-



Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.  
 See the last page of catalog for How To Order detail and options.  
 See Automated Part Number Matrix for complete part number and options.







# Electric

## Automated Ball Valve Package

### Series 31-F3 3-Way Flanged Ball Valve

- Sizes 1-1/2" - 6"
- 316SST or WCB
- Full Port Design
- ANSI Class 300
- 1-pc Ball & Stem
- Blowout Proof Stem
- RTFE Seats Standard
- "L" or "T" Port Option
- Trunnion Ball Design
- ISO 5211 Actuator Mounting Pad

#### STANDARDS

Design	ANSI/ASME B16.34
Flanged Ends	ANSI/ASME B16.5
Face-to-Face	(per factory's standard)
Pressure Testing	API 598
Mounting	ISO 5211
Safety Integrity	IEC 61508:2010; SIL 3
Marking System for Valves	MSS SP-25
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015

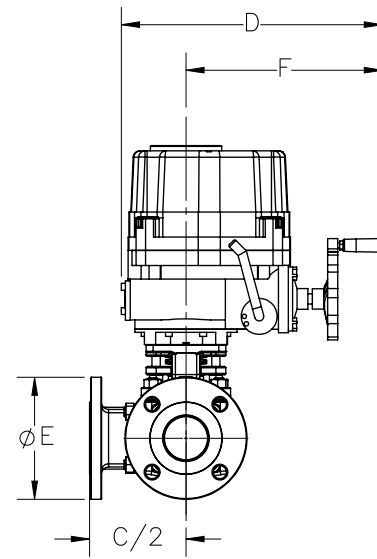
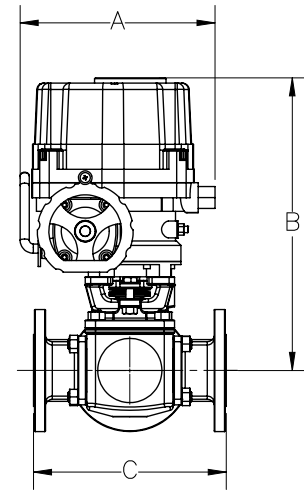


Flanged 3-Way

For operating temperatures in excess of 158° F with an electric actuator, an extended bracket is required. Please consult factory for sizing information.

#### Class 300 Electric Assembly DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E	F
1-1/2"	9.02	14.68	8.62	13.31	6.12	10.43
2"	9.02	15.00	9.37	13.31	6.50	10.43
2-1/2"	10.20	16.79	11.22	14.49	7.50	11.26
3"	10.20	17.20	11.85	14.49	8.25	11.26
4"	10.20	18.94	15.35	14.49	10.00	11.26
6"	11.69	22.60	18.90	16.14	12.50	12.09



SERIES 31-F3 3-Way 300# Flanged Direct Mount

ON-OFF	
SIZE	MODEL
1-1/2"	31-3X-150/WEC1-XX-*
2"	31-3X-200/WEC1-XX-*
2-1/2"	31-3X-250/WEE1-XX-*
3"	31-3X-300/WEF1-XX-*
4"	31-3X-400/WEF1-XX-*
6"	31-3X-600/WEH1-XX-*

MODULATING	
SIZE	MODEL
1-1/2"	31-3X-150/WEC2-XX-*
2"	31-3X-200/WED2-XX-*
2-1/2"	31-3X-250/WEF2-XX-*
3"	31-3X-300/WEG2-XX-*
4"	31-3X-400/WEG2-XX-*
6"	31-3X-600/WEJ2-XX-*

\* Must specify L or T port

Actuators are sized for clean liquid surface with a specific gravity of 1 and at 70° F.

#### OPTIONS

DESCRIPTION
24 VAC/24 VDC/220VAC
Feedback potentiometer

NOTE: Heater and thermostat standard  
(2) auxiliary switches standard

Other options available - call for details  
Actuators are sized based on clean/clear fluid.

SAMPLE PART #  
**31C-3X-300/WEF1-**

- (2) Valve Series
- (3) Body/Ball/Stem Material
- (4) End Connection
- (5) Seat, Lining, & Trim Material
- (6) Valve Size
- (7) Actuator
- (8) Accessories/Options
- (9) Accessories
- (10) Special Designation

Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.

See the last page of catalog for How To Order detail and options.

See Automated Part Number Matrix for complete part number and options.



# HOW TO ORDER: Manual Valves

# Series 31

2	Valve Series
31	3-Way Flanged, Direct Mount, Full Port

3	Body/Ball/Stem Material
Blank	Valve Series Standard (316SS)
C	Carbon Steel Body

4	End Connection
F1	150# Flanged Ends
F3	300# Flanged Ends
XX	Configurable End Connections

5	Valve Size
0150	1-1/2" 0300 3"
0200	2" 0400 4"
0250	2-1/2" 0600 6"

6	Seat, Lining & Trim Material
X	Reinforced TFE Seats (RTFE)
P	Virgin TFE Seats (PTFE)
S	50/50 STFE Seats
T	TFM™-1600 Seats
A	50% SS Powder/50% TFM™-1600 (STFM)
E	All TFM™-1600 Seats, Seals, & Packing
G	STFE Seats w/ Non-Standard Graphite Packing & Gaskets

7	Special Designation
X	No Specials/Series Standard
G	Gear Operator
H	Gear Operator with Lockout Plate
4	4" Lockable Stem Extension

8	Additional Specials
X	No Specials/Series Standard
O	Oxygen Cleaned
Z	Special End Configuration
V	Vented Ball
E	Bonnet Extension Lockable Handle
F	Fugitive Emissions Bonnet
D	Degreased & Bagged
A	Vented Ball, Degreased & Bagged
B	Vented Ball, Oxygen Cleaned

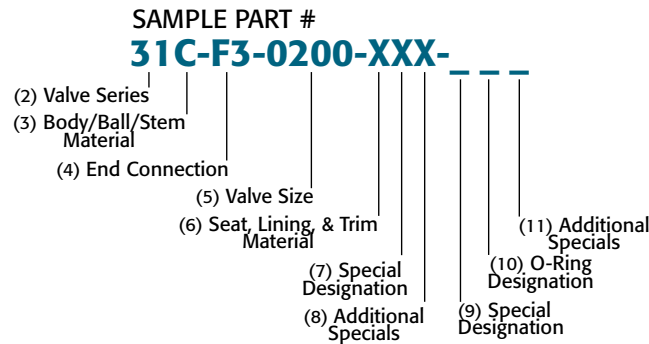
## OPTIONS:

9	Special Designation
L	L-Port, 3-Way arrangement
T	T-Port, 3-Way arrangement

10	O-Ring
Blank	Standard
X	Multiple Option Designation
2	Markez® Z1028
4	Karlez 4079
5	Chemraz® 505
6	Karlez 6375
7	Perlast® G75M
9	Chemraz® 564
B	Low Temp Buna
E	EPDM
S	Silicone

11	Additional Specials
Blank	Standard
X	Multiple Option Designation
B	B7M Bolting
M	Marine Epoxy Coating

17-4 PH® is a registered trademark of AK Steel Corporation.  
 Chemraz® is a registered trademark of Greene, Tweed & Co.  
 Markez® is a registered trademark of Marco Rubber & Plastic Products Inc.  
 Perlast® is a registered trademark of Precision Polymer Engineering Limited.  
 TFM™ is a trademark of Dyneon™, a 3M Company.



Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.



2	Valve Series
31	3-Way Flanged, Direct Mount, Full Port

3	Body/Ball/Stem Material
Blank	Valve Series Standard (316SST)
C	Carbon Steel Body

4	End Connection
F	150# Flanged Ends
3	300# Flanged Ends

5	Seat, Lining & Trim Material
X	Reinforced TFE Seats (RTFE)
P	Virgin TFE Seats (PTFE)
S	50/50 STFE Seats
T	TFM™-1600 Seats
A	50% SS Powder/50% TFM™-1600 (STFM)
E	All TFM™-1600 Seats, Seals, & Packing
G	STFE Seats w/ Non-Standard Graphite Packing & Gaskets

6	Valve Size		
150	1-1/2"	300	3"
200	2"	400	4"
250	2-1/2"	600	6"

7	Actuator - Pneumatic (DA)			
TRYD	TR10DA	2R7D	2R500DA	
TR1D	TR20DA	2R8D	2R850DA	
2R2D	2R40DA	2R9D	2R1200DA	
2R3D	2R80DA	2R0D	2R1750DA	
2R4D	2R130DA	2RAD	2R2500DA	
2R5D	2R200DA	2RBD	2R3500DA	
2R6D	2R300DA			

7	Actuator - Pneumatic (SR)			
TR1S	TR20SR	2R7S	2R500SR	
2R2S	2R40SR	2R8S	2R850SR	
2R3S	2R80SR	2R9S	2R1200SR	
2R4S	2R130SR	2R0S	2R1750SR	
2R5S	2R200SR	2RAS	2R2500SR	
2R6S	2R300SR	2RBS	2R3500SR	

7	Actuator - Pneumatic Stainless (DA)			
S21D	S2-052DA	S25D	S2-125DA	
S22D	S2-063DA	S26D	S2-140DA	
S23D	S2-083DA	S27D	S2-160DA	
S24D	S2-105DA	S28D	S2-210DA	

7	Actuator - Pneumatic Stainless (SR)			
S21S	S2-052SR	S25S	S2-125SR	
S22S	S2-063SR	S26S	S2-140SR	
S23S	S2-083SR	S27S	S2-160SR	
S24S	S2-105SR	S28S	S2-210SR	

7	Actuator - Electric (On-Off)			
WEX1	WE-350	WEG1	WE-5200	
WEA1	WE-500	WEH1	WE-6900	
WEB1	WE-690	WEJ1	WE-10500	
WEC1	WE-1350	WEK1	WE-17500	
WED1	WE-1700	WEL1	WE-25900	
WEE1	WE-2640	WEM1	WE-53000	
WEF1	WE-4400	WEN1	WE-80000	

7	Actuator - Electric (Modulating)			
WEA2	WEM-500	WEH2	WEM-6900	
WEB2	WEM-690	WEJ2	WEM-10500	
WEC2	WEM-1350	WEK2	WEM-17500	
WED2	WEM-1700	WEL2	WEM-25900	
WEE2	WEM-2640	WEM2	WEM-53000	
WEF2	WEM-4400	WEN2	WEM-80000	
WEG2	WEM-5200			

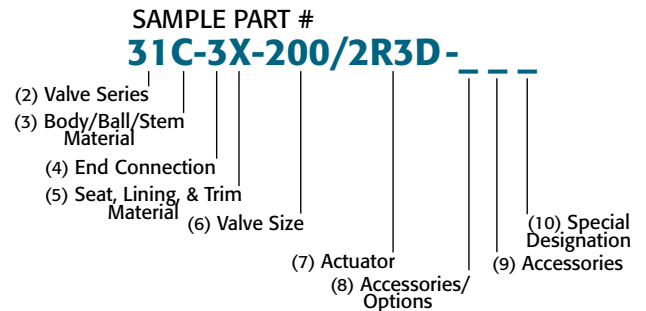
### OPTIONS:

8	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
R	24VDC Electric Actuator	
S	220VAC Electric Actuator	
T	Other Voltage Electric Actuator	
W	12VDC Electric Actuator	
Y	24VAC Electric Actuator	

*\* No voltage specified on electric assemblies denotes 120VAC*

9	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N/APL-310N
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
Z	180° Operation	
1	HS1 High Speed Electric	
2	HS2 High Speed Electric	

10	Special Designation
L	L-Port, 3-Way arrangement
T	T-Port, 3-Way arrangement



Refer to Series 31 IOM for all repair kit, seat and gasket part numbers.