

VALVE SIZE	VALVE Cv
1/2"	15
3/4"	45
1"	85
1-1/2"	275
2"	460
2-1/2"	700
3"	1,100
4"	2,200
6"	5,150
8"	10,000

RTFE seats are standard, but various options are available for seat materials. The 50/50 STFE seat option is excellent for services that call for higher temperatures and more difficult applications, including steam. Call us for details.

Easy to Automate!

See automated data sheets for pre-sized assemblies





Pneumatic

Electric

TRIAS

Series D9

Direct Mount Split Body Flanged Ball Valve

Sizes 1/2"-8" stock (Call factory for 10" & 12")

Available in 316SST or WCB

ANSI Class 150

Full Port Design

Superior Live Loaded Packing System

ISO 5211 Actuator Mounting Pad

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

Monel Ball & Stem Available **Lockable Manual Handle**

STANDARDS

DESIGN ANSI/ASME B16.34 FACE TO FACE ANSI/ASME B16.10 FLANGE DIMENSIONS ANSI/ASME B16.5 PIPELINE VALVES API 6D API 598 Pressure Testing MOUNTING ISO 5211

MARKING SYSTEM FOR VALVES MSS SP-25 SAFETY INTEGRITY

IEC 61508:2010; SIL EN 10204-3.1 MTR MATERIAL CERTIFICATION **OUALITY ASSURANCE** ISO 9001:2015

HOW TO ORDER MANUAL VALVES SAMPLE PART

D9C-F1-0300-XXX



See part number matrix for itemized options



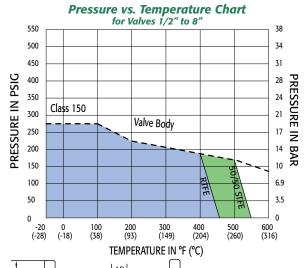
Series D9

(15)(24)

High Performance, Full Port Split Body Ball Valve Series D9 (ANSI Class 150)

VIEW Α ØAC

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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. Consult factory for other seat materials.

Break Away Torque for RTFE Seats						
SIZE	IN-LBS.					
1/2"	92					
3/4"	127					
1"	150					
1-1/2"	360					
2"	395					
2-1/2"	600					
3"	900					
4"	1,500					
6"	2,550					
8"	7,256					

NOTE: For other seat material, consult factory

MATERIALS LIST

NO.	PART NAME	QTY	STAINLESS STEEL	CARBON STEEL
1	BODY	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
2	END CAP	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
3	BALL	1	ASTM A351 GRADE CF8M	ASTM A351 GRADE CF8M
4	SEAT	2	RTFE	RTFE
5	JOINT GASKET	1	PTFE	PTFE
6	STEM	1	ASTM A276 SS316	ASTM A276 SS316
7	STEM SEAL	1	RTFE	RTFE
8	GLAND PACKING	1^	PTFE	PTFE
9	GLAND WASHER	1	RTFE	RTFE
10	GLAND BUSHING	1	AISI 304	AISI 304
11	BELLEVILLE WASHER	2	AISI 301	AISI 301
12	LOCK SADDLE	1	AISI 304	AISI 304
13	STEM NUT	1	AISI 304	AISI 304
14	STEM WASHER	1	AISI 304	AISI 304
15	HANDLE	1	AISI 304	AISI 304
16	HANDLE SLEEVE	1	VINYL	VINYL
17	BODY NUT	*	ASTM A194 GRADE 8	ASTM A194 GRADE 8
18	BODY STUD	*	ASTM A193 GRADE B8	ASTM A193 GRADE B8
19	STOP BOLT	1	AISI 304	AISI 304
20	STOP BOLT NUT	1	AISI 304	AISI 304
21	HANDLE LOCK	1	AISI 304	AISI 304
22	O-RING	1	VITON®	VITON®
23	ANTI-STATIC DEVICE	2	AISI 316	AISI 316
24	HANDLE NUT	1	AISI 304	AISI 304

- ^ PACKING SET * 1/2" THRU 2" QTY = 4 PCS * 2-1/2" THRU 4" QTY = 8 PCS
- *6" QTY =10 PCS *8" QTY = 12 PCS

2-1/2" PIPE HANDLE 2-1/2" SIZES 3" - 4" PIPE HANDLE SIZE 6" NOTE: A-T CONTROLS RECOMMENDS A GEAR FOR 6" VALVES AND LARGER **DIMENSIONS (IN)**

(16)

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	Time to to the time to the tim																						
SIZI	A	В	С	D	Е	F	- 1	J	L	N	Q	W	W1	Z1	Z2	AB	AC	AD	DD1	DD2	NN	ISO 5211	(LBS)
1/2	" 0.59	0.433	6.50	1.84	0.39	3.30	1.38	2.38	4.26	3.50	0.63	0.44	0.06	0.26	0.28	1.84	1.26	0.55	1.654	1.969	4	F04/F05	4.0
3/4	" 0.79	0.433	6.50	2.02	0.39	3.45	1.69	2.74	4.62	3.88	0.63	0.44	0.06	0.26	0.28	2.18	1.26	0.55	1.654	1.969	4	F04/F05	5.0
1"	0.98	0.433	6.50	2.31	0.41	3.81	2.00	3.12	5.00	4.25	0.63	0.44	0.06	0.26	0.28	2.21	1.26	0.55	1.654	1.969	4	F04/F05	7.0
1-1/2	2" 1.50	0.748	10.32	3.51	0.75	5.60	2.88	3.88	6.50	5.00	0.63	0.56	0.06	0.39	0.47	2.83	2.09	0.94	2.756	4.016	4	F07/F10	14.5
2"	1.97	0.748	10.32	3.80	0.75	5.78	3.62	4.75	7.02	6.00	0.75	0.63	0.06	0.39	0.47	3.38	2.09	0.94	2.756	4.016	4	F07/F10	20.5
2-1/	2" 2.56	0.748	10.32	4.57	0.75	6.75	4.12	5.50	7.48	7.00	0.75	0.69	0.06	0.39	0.47	3.06	2.09	0.94	2.756	4.016	4	F07/F10	31.0
3"	3.15	0.866	14.37	5.22	0.91	8.05	5.00	6.00	8.01	7.50	0.75	0.75	0.06	0.47	0.55	4.01	2.55	1.18	4.016	4.921	4	F10/F12	41.0
4"	3.94	0.866	14.37	6.18	0.91	9.00	6.19	7.50	9.00	9.00	0.75	0.94	0.06	0.47	0.55	4.07	2.55	1.18	4.016	4.921	8	F10/F12	67.5
6"	5.91	1.063	29.53	8.28	1.12	12.50	8.50	9.50	15.50	11.0	0.87	1.00	0.06	0.55	0.71	7.00	2.97	1.41	4.921	5.511	8	F12/F14	145.0
8"	7.91	1.417	37.60	10.43	1.58	12.83	10.62	11.75	18.00	13.5	0.88	1.12	0.06	0.71	0.87	9.00	NA	1.81	5.51	6.50	8	F14/F16	208.0

TRIAS

Pneumatic Double Acting

Automated Ball Valve Package

Series D9 ANSI Class 150 Flanged Ball Valve Direct Mount

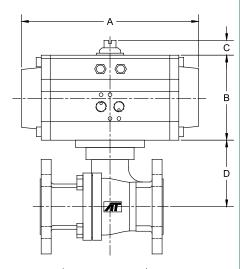
Sizes 1/2"-6" stock
(Call factory for 8", 10" & 12")
Available in 316SST or WCB
ANSI Class 150
Full Port Design
Superior Live Loaded
Packing System
Blowout Proof Stem w/ Dual
Anti-Static Devices
RTFE Seats Standard
Pyramidal Stem Seal Design
Monel Ball & Stem Available

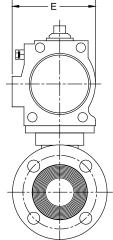
STANDARDS

ANSI/ASME B16.34 DESIGN ANSI/ASME B16.10 FACE TO FACE FLANGE DIMENSIONS ANSI/ASME B16.5 PIPELINE VALVES API 6D API 598 PRESSURE TESTING ISO 5211 MARKING SYSTEM FOR VALVES MSS SP-25 IEC 61508:2010; SIL 3 SAFETY INTEGRITY EN 10204-3.1 MTR MATERIAL CERTIFICATION QUALITY ASSURANCE ISO 9001:2008



150# Flanged Direct Mount







DIMENSIONS (IN)

VALVE SIZE	A		С	D	E	VALVE Cv
1/2"	5.98	2.76	0.79	1.84	2.58	15
3/4"	5.98	2.76	0.79	2.02	2.58	45
1"	7.95	3.43	0.79	2.31	3.29	85
1-1/2"	9.29	4.49	0.79	3.51	4.41	275
2"	9.29	4.49	0.79	3.80	4.41	450
2-1/2"	10.87	4.88	0.79	4.57	4.69	700
3"	13.90	6.18	0.79	5.22	5.91	1,100
4"	13.90	6.18	0.79	6.18	5.91	2,200
6"	20.95	8.31	1.18	8.28	6.89	5,150

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SIZED FOR 80 psi AIR SUPPLY					
SIZE	MODEL				
1/2"	D9-F1-050/TR1D-XX				
3/4"	D9-F1-075/TR1D-XX				
1"	D9-F1-100/2R2D-XX				
1-1/2"	D9-F1-150/2R3D-XX				
2"	D9-F1-200/2R3D-XX				
2-1/2"	D9-F1-250/2R4D-XX				
3"	D9-F1-300/2R6D-XX				
4"	D9-F1-400/2R6D-XX				
6"	D9-F1-600/2R8D-XX				

60 psi AIR SUPPLY					
SIZE	MODEL				
1/2"	D9-F1-050/TR1D-XX				
3/4"	D9-F1-075/2R2D-XX				
1"	D9-F1-100/2R2D-XX				
1-1/2"	D9-F1-150/2R3D-XX				
2"	D9-F1-200/2R3D-XX				
2-1/2"	D9-F1-250/2R5D-XX				
3"	D9-F1-300/2R6D-XX				
4"	D9-F1-400/2R6D-XX				
6"	D9-F1-600/2R9D-XX				

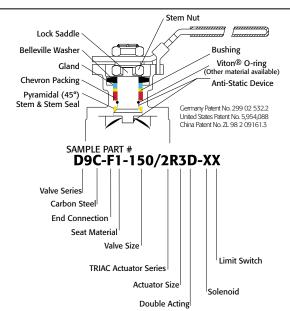
SIZED FOR

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)	Instrinsically Safe Limit Switch	(C)

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





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





Pneumatic Spring Return

Automated Ball Valve Package

Series D9 ANSI Class 150 Flanged Ball Valve Direct Mount

Sizes 1/2"-6" stock (Call factory for 8", 10" & 12")

Available in 316SST or WCB

ANSI 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 Monel Ball & Stem Available

STANDARDS

DESIGN
FACE TO FACE
FLANGE DIMENSIONS
PIPELINE VALVES
PRESSURE TESTING
MOUNTING
MARKING SYSTEM FOR N

QUALITY ASSURANCE

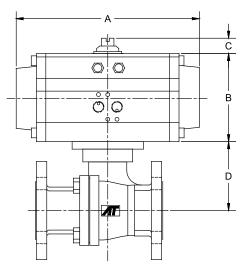
MOUNTING
MARKING SYSTEM FOR VALVES
SAFETY INTEGRITY
MATERIAL CERTIFICATION

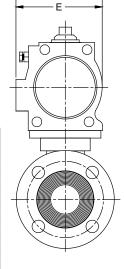
ANSI/ASME B16.34 ANSI/ASME B16.10 ANSI/ASME B16.5 API 6D API 598 ISO 5211 MSS SP-25

IEC 61508:2010; SIL 3 EN 10204-3.1 MTR ISO 9001:2008



150# Flanged Direct Mount







DIMENSIONS (IN)

VALVE SIZE	A	В	С	D	E	VALVE Cv
1/2"	7.95	3.43	0.79	1.84	3.29	15
3/4"	9.29	4.49	0.79	2.02	4.41	45
1"	9.29	4.49	0.79	2.31	4.41	85
1-1/2"	10.87	4.88	0.79	3.51	4.69	275
2"	10.87	4.88	0.79	3.8	4.69	450
2-1/2"	13.9	6.18	0.79	4.57	5.91	700
3"	13.9	6.18	0.79	5.22	5.91	1,100
4"	15.16	6.93	1.18	6.18	6.5	2,200
6"	24.37	10.12	1.18	8.28	8.31	5,150

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

SIZED FOR 80 psi AIR SUPPLY

SIZE	MODEL					
1/2"	D9-F1-050/2R2S-XX					
3/4"	D9-F1-075/2R3S-XX					
1"	D9-F1-100/2R3S-XX					
1-1/2"	D9-F1-150/2R4S-XX					
2"	D9-F1-200/2R4S-XX					
2-1/2"	D9-F1-250/2R6S-XX					
3"	D9-F1-300/2R6S-XX					
4"	D9-F1-400/2R7S-XX					
6"	D9-F1-600/2R0S-XX					

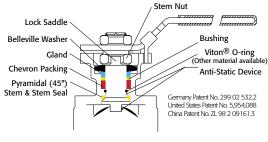
SIZED FOR 60 psi AIR SUPPLY

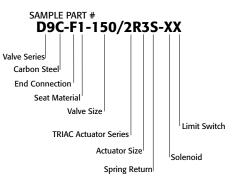
•					
SIZE	MODEL				
1/2"	D9-F1-050/2R3S-XX				
3/4"	D9-F1-075/2R3S-XX				
1"	D9-F1-100/2R3S-XX				
1-1/2"	D9-F1-150/2R4S-XX				
2"	D9-F1-200/2R5S-XX				
2-1/2"	D9-F1-250/2R6S-XX				
3"	D9-F1-300/2R6S-XX				
4"	D9-F1-400/2R7S-XX				
6"	D9-F1-600/2R0S-XX				

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)	Instrinsically Safe Limit Switch	(C)

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





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



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



Electric

Automated Ball Valve Package

Series D9 ANSI Class 150 Flanged Ball Valve Direct Mount

Sizes 1/2"-6" stock (Call factory for 8", 10" & 12") Available in 316SST or WCB ANSI 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 Monel Ball & Stem Available

STANDARDS

QUALITY ASSURANCE

ANSI/ASME B16.34 DESIGN FACE TO FACE ANSI/ASME B16.10 ANSI/ASME B16.5 FLANGE DIMENSIONS PIPELINE VALVES API 6D PRESSURE TESTING **API 598** ISO 5211 MOUNTING MARKING SYSTEM FOR VALVES MSS SP-25 SAFETY INTEGRITY IEC 61508:2010; SIL 3 EN 10204-3.1 MTR MATERIAL CERTIFICATION

ISO 9001:2008

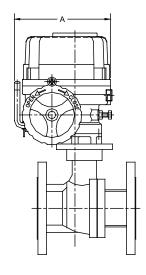


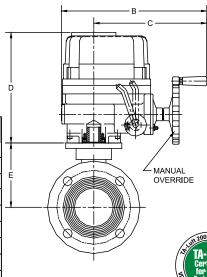
150# Flanged Direct Mount

DIMENSIONS (IN)

VALVE SIZE			С	D	E		VALVE Cv
1/2"	4.98	4.08	N/A	5.24	1.84	l	15
3/4"	4.98	4.08	N/A	5.24	2.02		45
1"	4.98	4.08	N/A	5.24	2.31		85
1-1/2"	4.98	4.08	N/A	5.24	3.51		275
2"	4.98	4.08	N/A	5.24	3.80		450
2-1/2"	9.02	13.31	10.43	10.55	4.57		700
3"	9.02	13.31	10.43	10.55	5.22		1,100
4"	10.20	14.49	11.26	11.42	6.18		2,200
6"	10.20	14.49	11.26	11.97	8.28		5,150
(D) DIMENSION IS EDOM CENTEDLINE TO END OF HANDWHEEL C							

(D) DIMENSION IS FROM CENTERLINE TO END OF HANDWHEEL ON 2-1/2" – 6" OR MODULATING ACTUATORS 1/2" – 2". FOR SPECIALS, CONSULT FACTORY





TA-Luft Certified for Low Emissions

ON-OFF					
SIZE	MODEL				
1/2"	D9-F1-050/WEA1-XX				
3/4"	D9-F1-075/WEA1-XX				
1"	D9-F1-100/WEA1-XX				
1-1/2"	D9-F1-150/WEA1-XX				
2"	D9-F1-200/WEA1-XX				
2-1/2"	D9-F1-250/WEC1-XX				
3"	D9-F1-300/WEC1-XX				
4"	D9-F1-400/WEE1-XX				
6"	D9-F1-600/WEF1-XX				

OPTIONS

DESCRIPTION

24 VAC/24 VDC/220VAC

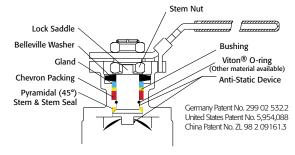
Feedback potentiometer

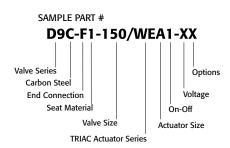
NOTE: Heater and thermostat standard (2) auxiliary switches standard

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

D9EL-20160512 Copyright 2013 A-T Controls, Inc.

MODULATING SIZE **MODEL** 1/2" D9-F1-050/WEA2-XX 3/4" D9-F1-075/WEA2-XX 1" D9-F1-100/WEA2-XX 1-1/2" D9-F1-150/WEA2-XX 2" D9-F1-200/WEA2-XX 2-1/2" D9-F1-250/WEC2-XX 3" D9-F1-300/WEC2-XX 4" D9-F1-400/WEE2-XX 6" D9-F1-600/WEF2-XX





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



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 SeatsBalls and Seal Designs



Floor Mounted Damper Drives



Fusible Link Assemblies



Lockout Mounting Kits



Special Multi-Port Valves



Steam Jacketed Valves



Limit Switches Mounted on Manual Valves



180° Actuators



Stem Extensions



Dual Valve Assemblies

