

SEGMENTED BALL VALVE ISO 5211 MOUNT

PED  



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Features & Benefits

MV1F Series

Class 150 Segmented Ball Design



*Class 150
1" thru 16"*

Certifications and Compliance

Sesto Valves are designed and manufactured to internationally recognized standards including but not limited to the following:

Testing: API 598, ISO 5208

Design: ASME B16.34, ASME B16.5, ASME B16.10

Markings: MSS-SP-25, PED

Certifications: PED

Features and Benefits

Class 150

Size Range 1" thru 16"

ISO 5211 Mount Pad

Body Material CF8M, WCB

Body Wall Thickness ASME B16.34

End Connections: RF Flanged

Anti-Static Device and Live-Loaded Packing

Bubble Tight Shut Off

Blowout Proof, Low Torque Guided Stem Design

Manual, Electric, Pneumatic Operators

Soft & Metal Seated Available

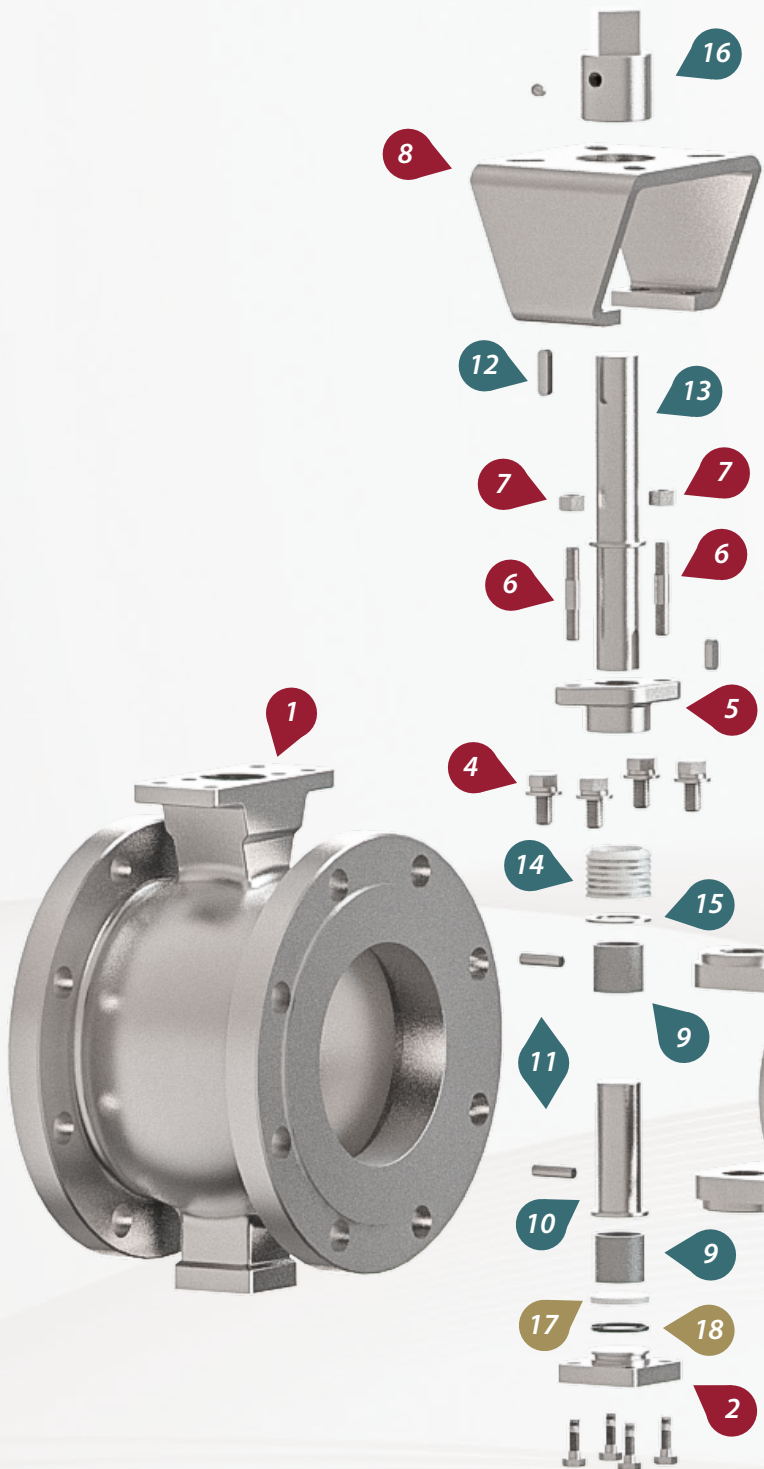
Versatility & Reliability

The Sesto Valves MV1F Series direct mount 1-pc segmented flanged ball valve design starts with a high quality cast body, designed and tested in compliance with ASME B16.34 standards. Precision machined surfaces and tighter manufacturing tolerances allow for precise assembly and fitting of body components and seals. Every valve is factory tested and serialized for quality control and traceability.

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Exploded View

MV1F - Class 150 Design (Metal Seated design shown)



MV1F - Class 150 Design

#	PARTS	CF8M STAINLESS STEEL (BODY CODE "S")	WCB CARBON STEEL (BODY CODE "C")
1	BODY	ASTM A351 CF8M	ASTM A216 WCB
2	COVER	ASTM A351 CF8M	ASTM A216 WCB
3	BALL	ASTM A351 CF8M + HCR	ASTM A351 CF8M + HCR
4	BOLT	ASTM A193 B8M	ASTM A193 B7
5	PACKING GLAND	ASTM A351 CF8M	ASTM A216 WCB
6	STUD	ASTM A193 B8M	ASTM A193 B7
7	NUT	ASTM A194 8M	ASTM A194 2H
8	YOKE	ASTM A3	ASTM A3
9	BUSHING	SS316 + PTFE	SS316 + PTFE
10	SHAFT	SS316	SS316
11	PIN	SS316	SS316
12	KEY	SS316	SS316
13	STEM	17-4H	17-4H
14	PACKING	PTFE	PTFE
15	WASHER	SS316	SS316
16	STEM ADAPTER	SS316	SS316
17	GASKET	PTFE	PTFE
18	O-RING	FKM	FKM
19	SPRING	17-7PH	17-7PH
20	SEAT	REFER TO SEAT GUIDE	REFER TO SEAT GUIDE
21	O-RING	FKM	FKM

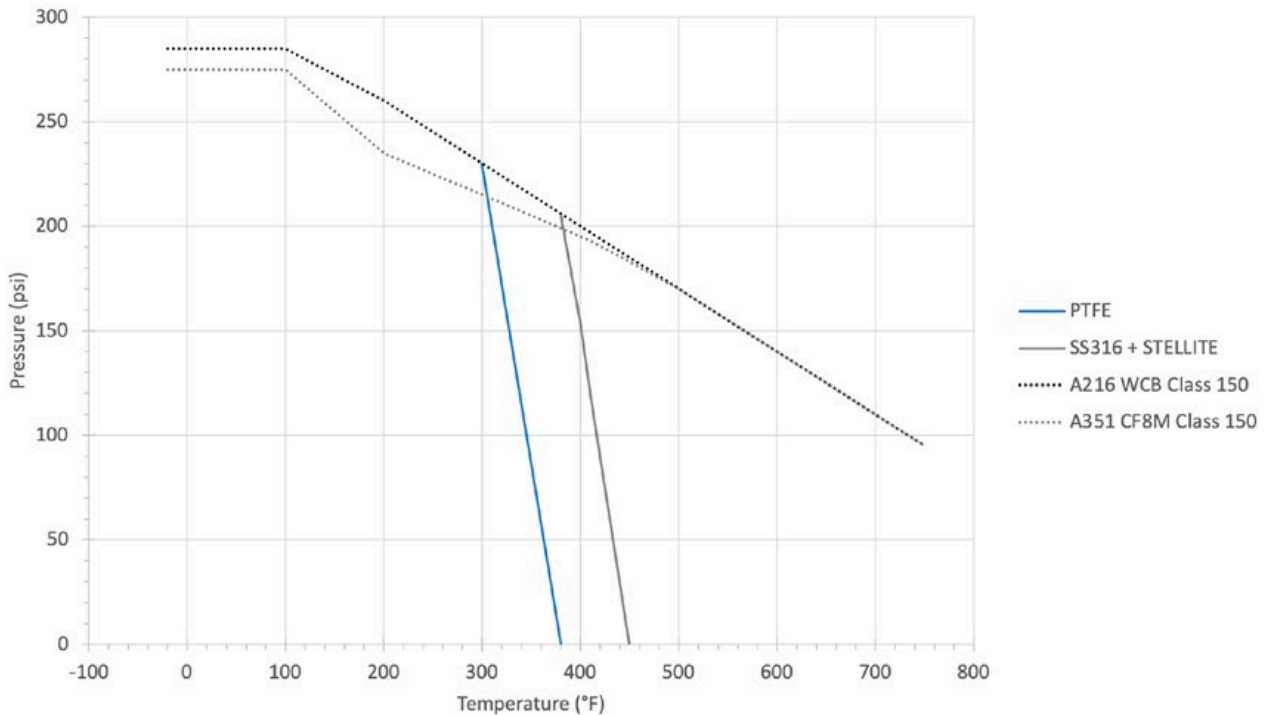
Seat Guide & PT Chart

Seat Guide*

PTFE (VIRGIN PTFE)	SS316 + STELLITE
RECOMMENDED	RECOMMENDED
Most Chemicals, Low to Moderate Cycling	High Temperatures, Extreme Abrasives, Harsh Flow Conditions
NOT RECOMMENDED	NOT RECOMMENDED
High Cycle Applications, Fluorinated Chemicals	Bubble Tight Shutoff Requirements
TEMPERATURE	TEMPERATURE
-45°C to +204°C (-50°F to +400°F)	-45°C to +232°C (-50°F to +450°F)
COLOR	COLOR
 White	 Dark Grey

* Seat material selection involves a large number of process variables and can be somewhat complex. If you do not have any experiential knowledge of what materials work well in your process, it is recommended that you contact Sesto Valves for guidance in selecting the appropriate materials. Selection of a non-optimal material can significantly shorten the valve's service life. This information is only provided as a general guideline of applications in which these seat materials are known to work well or are not recommended.

Pressure Temperature Chart



Example Part Number

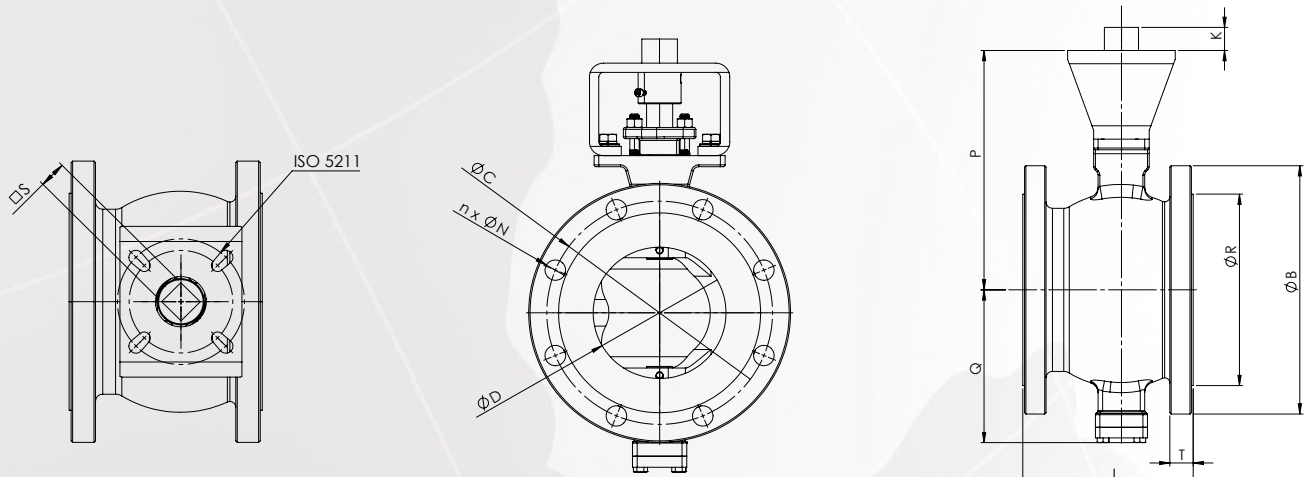
FIGURE	-	SIZE	-	BODY	TRIM	TYPE	SEATS	-	OPERATOR	-	SPECIAL
MV1F	-	01	-	S	7	V	T	-	L	-	

EXAMPLE PART NUMBER: MV1F-01-S7VT-N

EXAMPLE DESCRIPTION: 1" MV1F SERIES SEGMENTED BALL VALVE, CLASS 150, 100 DEGREE V-NOTCH, FLANGED ENDS, ISA 75.04 FACE-TO-FACE, ASTM A351 GR CF8M BODY, ASTM A351 GR CF8M + HCR PLATED BALL, 17-4 PH STEM, PTFE SEAT, VITON O-RING, PTFE PACKING, BARE STEM

FIGURE	-	SIZE	-	BODY	
MV1F - CLASS #150 FLANGED SEGMENTED BALL VALVE	-	0Q - 1/4" 0R - 3/8" 0M - 1/2" 0T - 3/4" 01 - 1"	1Q - 1 1/4" 1M - 1 1/2" 02 - 2" 2M - 2 1/2" 03 - 3"	04 - 4" 05 - 5" 06 - 6" 08 - 8" 10 - 10"	C - ASTM A216 - WCB S - ASTM A351 CF8M 9 - SPECIAL

TRIM	TYPE	SEATS	-	OPERATOR	-	SPECIAL
7 - 316 SS + HCR BALL / 17-4PH STEM 9 - SPECIAL	V - 100° V-NOTCH BALL	T - PTFE X - 316SS + STELLITE 9 - SPECIAL	-	N - BARE STEM 9 - SPECIAL	-	CONSULT FACTORY



MV1F Dimensions

SIZE (in)	D (in)	L (in)	T (in)	R (in)	C (in)	B (in)	P (in)	N (in)	n	S (in)	K (in)	ISO 5211	CV	WEIGHT (lb)	TFM 1600 Torque	316 SS Torque
1"	0.79	4.02	0.46	2.00	3.13	4.33	5.16	0.63	4	0.43	0.71	F05-F07	27	11.2	230	319
1 1/4"	1.77	4.02	0.52	2.50	3.50	4.53	5.55	0.63	4	0.43	0.71	F05-F07	46	14.6	266	398
1 1/2"	1.97	4.49	0.58	2.87	3.87	4.92	5.43	0.63	4	0.43	0.71	F05-F07	69	16.5	460	602
2"	2.44	4.88	0.64	3.63	4.75	5.91	5.83	0.75	4	0.43	0.71	F05-F07	109	19.8	611	797
2 1/2"	3.03	5.71	0.70	4.13	5.50	7.09	6.42	0.75	4	0.43	0.71	F05-F07	168	27.8	673	885
3"	3.66	6.50	0.77	5.00	6.00	7.48	8.07	0.75	4	0.55	0.81	F07-F10	277	36.4	947	1239
4"	4.53	7.64	0.96	6.19	7.50	9.06	8.46	0.75	8	0.55	0.81	F07-F10	466	46.3	1018	1328
5"	5.28	7.64	0.96	7.31	8.50	10.04	9.06	0.87	8	0.67	0.98	F07-F10	694	88.2	1354	1770
6"	6.46	9.02	1.02	8.50	9.50	11.02	10.63	0.87	8	0.75	1.18	F10-F12	772	*	2036	2655
8"	8.11	9.57	1.14	10.63	11.75	13.58	11.89	0.87	8	0.87	1.18	F10-F12	1703	117.9	3399	4425
10"	10.24	11.69	1.20	12.75	14.25	15.94	14.37	1.02	12	1.06	1.57	F12-F14	2081	194.0	5443	9199
12"	12.44	13.31	1.27	15.00	17.00	19.09	16.14	1.02	12	1.06	1.57	F14-F16	3764	*	9523	16094
14"	13.78	15.75	1.39	16.25	18.75	21.06	17.44	1.18	12	1.42	1.57	F14-F16	6375	*	13612	23005
16"	15.94	15.75	1.46	18.50	21.25	23.43	18.82	1.18	16	1.81	1.89	F16-F20	8430	*	19737	33356

Torques

Sesto Valves may change dimensions without any notice.

Raw torques shown in inch-pounds. Minimum 30% safety factor should be added for actuator sizing.



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