

FIRESAFE 3-PC DIRECT MOUNT

PED   NACE  SIL2 Safety Integrity Level **API 607** **API 608**



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Features & Benefits

M32 Series

Class 800 (2000 WOG) 3-PC Design



2000 WOG
1/4" thru 2"

Certifications and Compliance

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

Fire Testing: API 607 Certified

Testing: API 598, API 6D, ISO 15848, ISO 5208

Design: ASME B16.34, ASME B16.5, ASME B16.10, NACE MR0175

Markings: MSS-SP-25, PED, NACE

Certifications: API 607, SIL, NACE, PED, ISO 15848, API 608

Features and Benefits

Class 800 (2000 WOG) Size Range 1/4" thru 2" Full Bore

ISO 5211 Direct Mount Pad

Body Wall Thickness ASME B16.34

End Connections: NPT, SW, BW, RF, Special

Fugitive Emissions ISO 15848

Firesafe Tested API 607

Anti-Static Device and Live-Loaded Packing

Bubble Tight Shut Off

Center Body Swing-Out Design

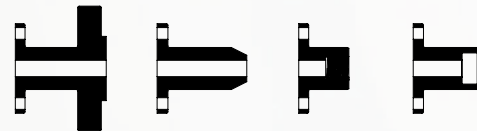
Blowout Proof, Low Torque Guided Stem Design

Wide Range of Soft and Metal Seated Options

Manual, Electric, Pneumatic Operators

Globally Certified and Approved

End Connections



Flanged
(RF)

Butt Weld
(BW)

Threaded
(NPT)

Socket Weld
(SW)

Flow Control & V-Ball Solutions



Fine-Tuned Design Details

(Four Unique Improvements to the Industry Standard)

1. Larger Stem

Higher margin of safety, more resistant to side loading and fatigue stress

2. Gaskets to Fill the Gaps

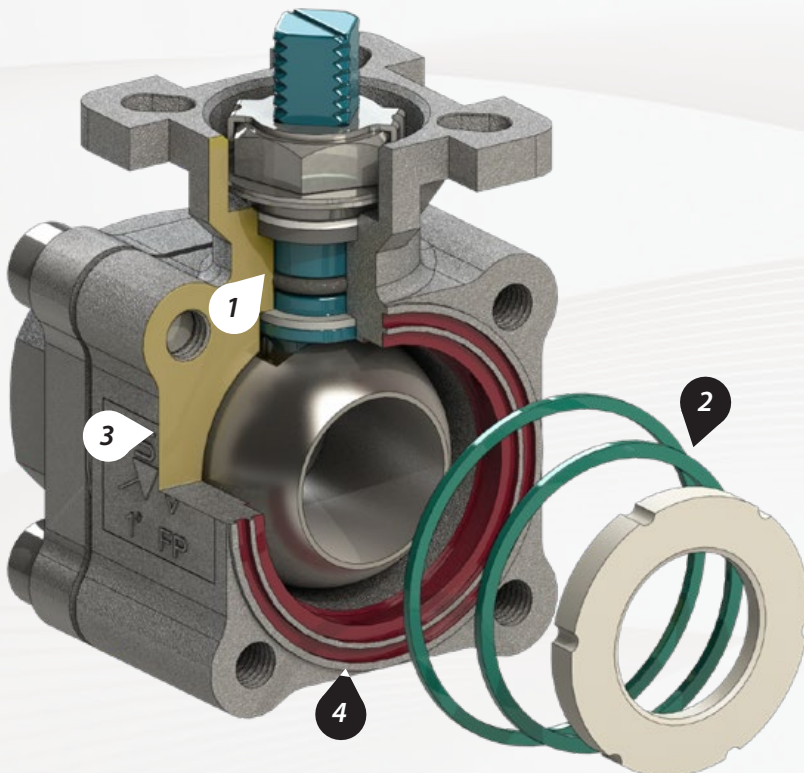
50% thicker than industry standard, dual material gaskets for high integrity sealing.

3. Thicker Center Body Wall

Class 900 body wall thickness provides extra safety factor in high pressure applications.

4. Precision Machined Sealing Areas

Less dimensional variation allows for less seat compression, resulting in lower and more consistent torques.



ASME B16.34, API 608, API 607, ISO 15848, NACE MR-0175, Sil 2
 Certified Torques and Tolerances Verified for Consistency



**** Other Options Available Upon Request**



Seats and seals replaceable without having to cut pipe or remove end caps from piping.



The Sesto Valves M32 Series direct mount 3-pc floating ball valve design starts with a high quality investment 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. Because of reduced dimensional variations, seats can be designed for minimal compression. This results in lower, more consistent torques and longer seat life. Every valve is factory tested and serialized for quality control and traceability.

Seat Guide & PT Chart

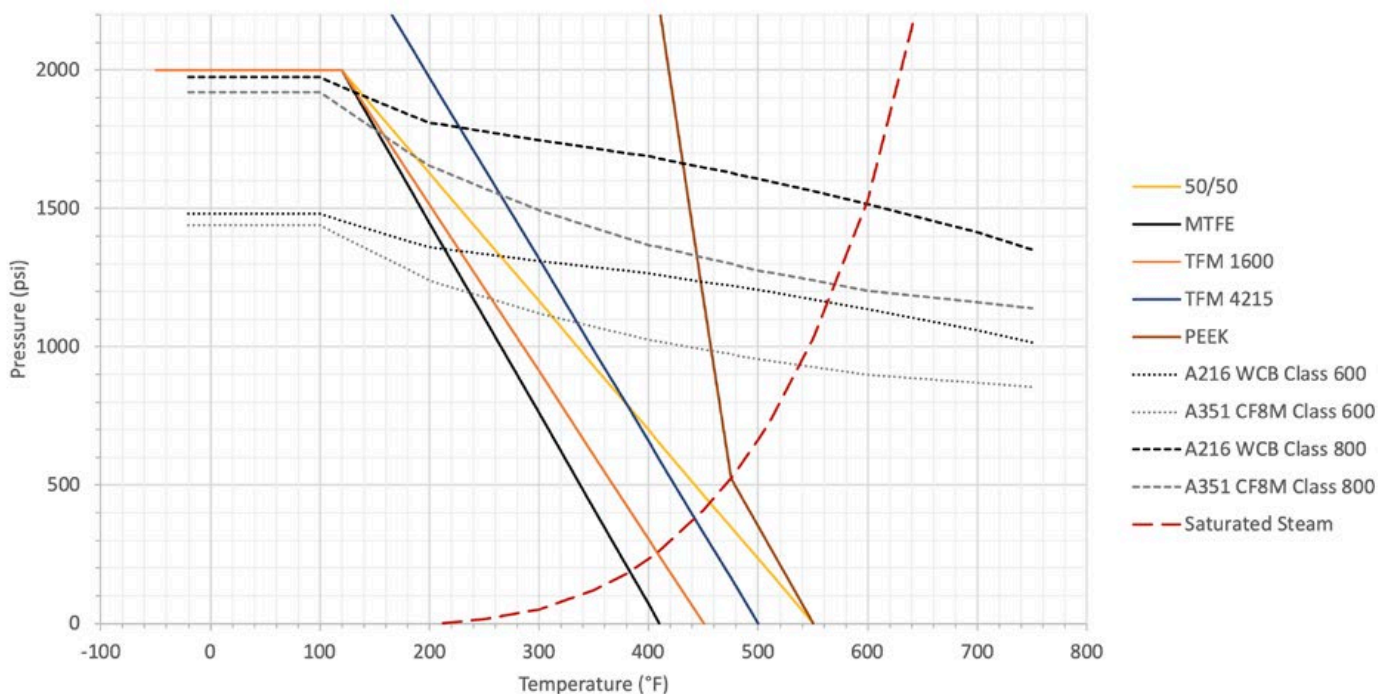
Seat Guide*

TFM 1600 (MODIFIED PTFE)	TFM 4215	50/50 (PTFE + 316SS)	MTFE (MINERAL FILLED PTFE)	PEEK
RECOMMENDED	RECOMMENDED	RECOMMENDED	RECOMMENDED	RECOMMENDED
Chemical Environments, Steam, Moderate Pressures	Higher Steam than standard TFM 1600. Moderate abrasives	Saturated Steam, High Temperatures, Abrasives	Steam Only	High Temperatures, High Pressures
NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
Fluorinated Chemicals	Fluorinated Chemicals	Chlorine Solutions	Other Applications	Low Torque Requirements, Some Acids
TEMPERATURE	TEMPERATURE	TEMPERATURE	TEMPERATURE	TEMPERATURE
-45°C to +232°C (-50°F to + 450°F)	-40°C to +260°C (-40°F to +500°F)	-45°C to +288°C (-50°F to +550°F)	-30°C to +210°C (-22°F to +410°F)	-45°C to +288°C (-50°F to +550°F)
COLOR	COLOR	COLOR	COLOR	COLOR
 Translucent White	 Dark Grey	 Dark Grey	 Green	 Beige

*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

M32 Series - Pressure vs. Temperature



Example Part Number

FIGURE	-	SIZE	-	BODY	TRIM	TYPE	SEATS	-	OPERATOR	-	SPECIAL
M32N	-	01	-	C	6	0	F	-	N	-	

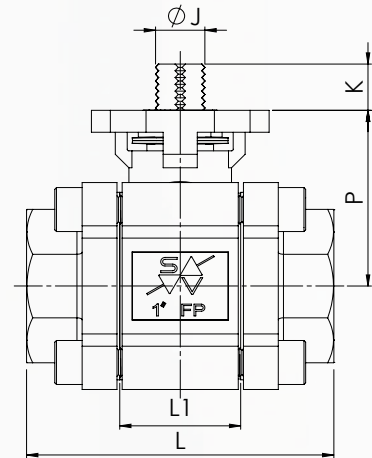
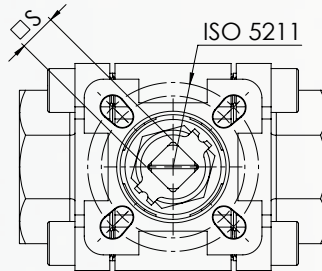
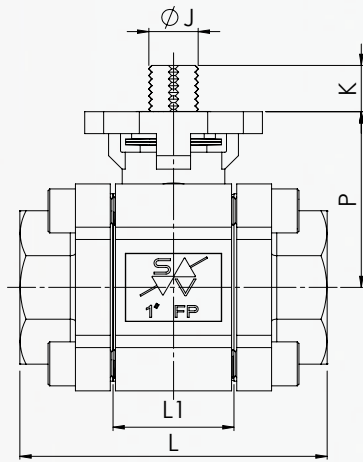
EXAMPLE PART NUMBER: M32N-01-C60F-N

EXAMPLE DESCRIPTION: 1" FLOATING 3-PC 2000 WOG FULL PORT BALL VALVE, SESTO M32 SERIES, NPT X NPT ENDS, ASTM A216 GR WCB BODY, ASTM A351 CF8M BALL, ASTM A276-316 STEM, STANDARD BALL TYPE, TFM 1600 SEATS, VITON O-RING, GRAPHITE FIRESAFE PACKING, AISI 304 SS BOLTS, API 607, NACE, BARE STEM

FIGURE	-	SIZE	-	BODY
M32N - FLOATING 3-PC 2000 WOG BALL VALVE, NPT X NPT ENDS, FULL BORE	-	0Q - 1/4"	1Q - 1 1/4"	C - ASTM A216 - WCB
M32S - FLOATING 3-PC 2000 WOG BALL VALVE, SW X SW ENDS, FULL BORE		0R - 3/8"	1M - 1 1/2"	S - ASTM A351 CF8M
M32T - FLOATING 3-PC 2000 WOG BALL VALVE, SW X NPT ENDS, FULL BORE		0M - 1/2"	02 - 2"	9 - SPECIAL
M32B - FLOATING 3-PC 2000 WOG BALL VALVE, BW X BW ENDS, FULL BORE		0T - 3/4"	2M - 2 1/2"	
M32X - FLOATING 3-PC 2000 WOG BALL VALVE, EXTENDED WELD ENDS, FULL BORE		01 - 1"	03 - 3"	

TRIM	TYPE	SEATS	-	OPERATOR	-	SPECIAL
6 - 316 SS BALL / 316 SS STEM	0 - STANDARD	F - TFM 1600	-	N - BARE STEM	-	CONSULT FACTORY
7 - 316 SS BALL / 17-4PH STEM	V - V-PORT BALL	G - TFM 4215		L - LOCKING LEVER		
8 - 304 SS BALL / 304 SS STEM	P - OPEN PORT BALL	S - 50/50		E - OVAL HANDLE		
9 - SPECIAL	S - SLOTTED BALL	M - MTFE		(2" & UNDER)		
	R - RELIEF VENTED BALL	P - PEEK		9 - SPECIAL		
	T - TEFLON IMPREGNATED BALL	9 - SPECIAL				
	9 - SPECIAL					

Dimensions



Dimensions (in)

SIZE (in)	BORE (in)	□ S (in)	Ø J (in)	K (in)	L (in)	L1 (in)	P (in)	ISO 5211	CV	WEIGHT (lb)
1/4"	0.43	0.35	0.47	0.35	2.62	0.90	1.65	F03-F04	7	1.7
3/8"	0.49	0.35	0.47	0.35	2.62	0.90	1.65	F03-F04	10	1.8
1/2"	0.59	0.35	0.47	0.35	2.76	0.90	1.65	F03-F04	15	1.9
3/4"	0.79	0.35	0.47	0.35	3.15	1.20	1.77	F03-F04	35	2.6
1"	1.00	0.43	0.55	0.55	3.54	1.39	2.05	F04-F05	68	4.2
1 1/4"	1.26	0.43	0.55	0.55	4.13	1.65	2.30	F04-F05	110	5.9
1 1/2"	1.50	0.55	0.75	0.71	4.72	2.10	2.68	F05-F07	155	9.0
2"	1.97	0.55	0.75	0.71	5.51	2.75	3.41	F05-F07	300	15.0
2 1/2"	2.5	0.67	0.94	0.87	6.61	3.71	4.39	F07-F10	500	27.7
3"	2.99	0.67	0.94	0.87	7.6	4.26	4.78	F07-F10	600	39.6

Sesto Valves may change dimensions without any notice.

Torques (in-lbs)

TFM 1600 Torque	TFM 4215 Torque	50/50 Torque	MTFE Torque	PEEK Torque
63	95	101	95	127
63	95	101	95	127
63	95	101	95	127
70	106	113	106	141
93	140	149	140	187
133	200	213	200	266
229	344	367	344	459
370	555	592	555	740
755	922	N/A	922	N/A
1083	1322	N/A	1322	N/A

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

Dimensions (mm)

SIZE (mm)	BORE (mm)	□ S (mm)	Ø J (mm)	K (mm)	L (mm)	L1 (mm)	P (mm)	ISO 5211	CV	WEIGHT (kg)
8	11	9	12	8.5	66.50	22.86	42	F03-F04	7	0.70
10	12.5	9	12	8.5	66.50	22.86	42	F03-F04	10	0.80
15	15	9	12	8.5	70.10	22.86	42	F03-F04	15	0.90
20	20	9	12	8.5	80.00	30.40	45.00	F03-F04	35	1.20
25	25.4	11	14	14	89.90	35.40	52.00	F04-F05	68	1.90
32	32	11	14	14	104.90	41.90	58.50	F04-F05	110	2.70
40	38	14	19	21	119.90	53.40	68.00	F05-F07	155	4.10
50	50	14	19	21	140.00	69.90	86.50	F05-F07	300	6.90

Sesto Valves may change dimensions without any notice.

Torques (Nm)

TFM 1600 Torque	TFM 4215 Torque	50/50 Torque	MTFE Torque	PEEK Torque
7	11	12	11	15
7	11	12	11	15
7	11	12	11	15
8	12	13	12	16
10.5	16	17	16	21
15	23	24	23	30
26	39	41	39	52
42	63	67	63	84

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



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