

Models: 51M, 52M

Wafer and Full Lug Butterfly Valves Sizes: 14" - 36" (350 - 900mm)

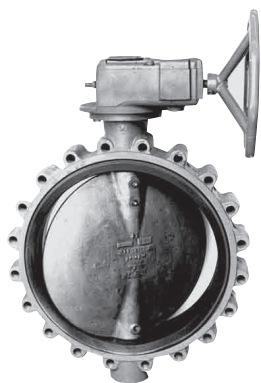
Pressure / Temperature - Non-Shock		
Model	Material	Rating
51M, 52M	Ductile Iron	150psi @ 150°F
51MA, 52MA	Cast Iron	150psi @ 150°F

In accordance with ANSI B16.1 or B16.5

Max. temp. is limited by seat material. See Elastomer Guide in Technical Data Section of the Mueller Steam Specialty Engineering Binder.



Model 51M



Model 52M

Typical Service

- These soft-seated butterfly valves are designed for a variety of general applications in the control of water, steam, air, oil, and gases.
- They are equally effective for on-off, throttling, isolation, and dead end requirements.
- They are especially well-suited for higher velocity service and vacuum service to 28" Hg.

Features

- Dual durometer seat features a tough wear resistant elastomer bonded to a phenolic backup ring.
 - The soft elastic seat portion provides positive sealing
 - The backup ring provides strength for vacuum or high velocity services
 - The combination eliminates the need for flange gaskets
- Stem seals include a primary seal between the disc hub and the seat hub, along with secondary O-ring seals at the top and bottom of the seat
 - This retains lubrication and prevents corrosion from outside elements.
- Stem is retained in the body for blowout proof design
- Many material options available, see S-MS-How to Order_BV in the Butterfly Valve section of the Mueller Steam Specialty Engineering Binder or consult factory
- A variety of operators can be supplied
 - Multi-position lever operator
 - Gear Operator
 - Pneumatic, hydraulic, or electric actuators with solenoids, limit switches, positioners and more, consult factory

Construction

- Wafer, Full Lug, and Semi-Lug designs
- Available from 2" to 12". See Models 51M, 52M for larger size valves
- Fit ANSI Class 125 and 150 flanges

Performance Considerations

- Seat and body material selections will limit temperature range
- Seat and body materials must be chosen carefully for compatibility with corrosive media applications.
- Guidelines for throttling service:
 - Liquids - Line velocity should not exceed 20 ft/sec
 - Gases - Line velocity should not exceed 15,000 ft/min.

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

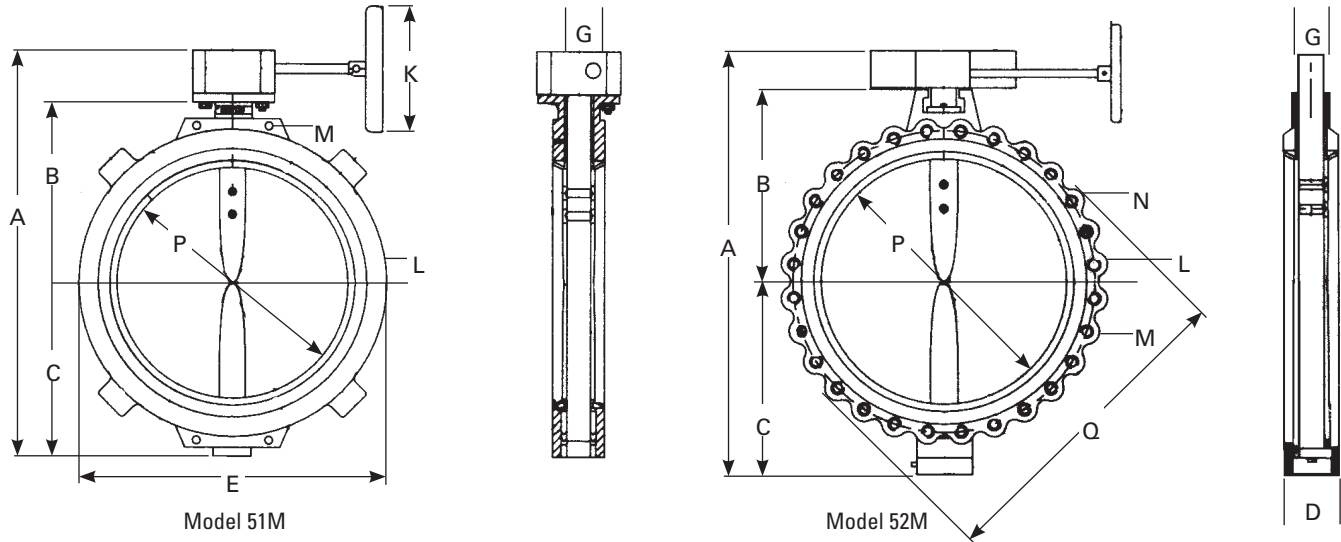
Approval _____

Representative _____

Materials

	51MI, 52MI	51MA, 52MA
Body:	Ductile Iron ASTM A126 Gr. B	Cast Iron ASTM A126 Gr. B
Stem	416 SS, 316 SS	416 SS, 316 SS
Disc	Ni Coated Ductile Iron 316 SS, Bronze	Ni Coated Ductile Iron 316 SS, Bronze
Seat	EDPM, Buna-N	EDPM, Buna-N
O-Ring Seals	EDPM, Buna-N	EDPM, Buna-N

Dimensions and Weights



SIZE	DIMENSIONS														WEIGHT													
	A		B		C		D		E		G		H		K		L		M (UNC)		N		P		Q (52)		lbs.	kg.
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm			
Models 51M																												
14	350	25 ³ / ₄	654	13 ¹ / ₈	333	10 ⁵ / ₈	264	—	—	17 ³ / ₄	451	1 ¹ / ₂	38	4 ³ / ₄	121	16	406	18 ³ / ₄	476	1-8	—	—	13 ³ / ₄	337	—	—	147	67
16	400	29 ¹ / ₁₆	738	14 ¹ / ₂	368	12 ¹ / ₈	308	—	—	20 ¹ / ₄	514	1 ¹ / ₂	38	6	152	16	406	21 ³ / ₄	540	1-8	—	—	15 ¹ / ₄	387	—	—	202	92
18	450	32	813	16	406	13	330	—	—	21 ⁵ / ₈	549	2	51	7 ¹ / ₂	191	16	406	22 ³ / ₄	578	1- ¹ / ₈ -7	—	—	17 ¹ / ₄	438	—	—	260	119
20	500	35 ³ / ₈	899	17 ¹ / ₂	445	15	381	—	—	23 ³ / ₈	606	2	51	7 ¹ / ₂	191	16	406	25	635	1- ¹ / ₈ -7	—	—	19 ¹ / ₄	489	—	—	303	152
24	600	40 ³ / ₁₆	1021	19	483	17 ¹ / ₁₆	443	—	—	28 ¹ / ₄	718	2 ¹ / ₄	57	7 ¹ / ₂	191	24	610	29 ¹ / ₂	749	1- ¹ / ₄ -7	—	—	23 ³ / ₄	591	—	—	511	233
30	750	51 ¹ / ₈	1305	22 ¹ / ₂	581	22 ³ / ₄	578	—	—	38 ³ / ₄	984	3	76	7 ¹ / ₂	191	24	610	36	914	1- ¹ / ₄ -7	—	—	29 ³ / ₄	743	—	—	—	—
36	900	59 ¹ / ₈	1502	28 ⁵ / ₈	727	24 ³ / ₄	629	—	—	46	1168	3 ¹ / ₂	89	7 ¹ / ₂	191	24	610	42 ³ / ₄	1086	1- ¹ / ₂ -6	—	—	35 ³ / ₈	899	—	—	—	—
Models 52M																												
14	350	25 ³ / ₄	654	13 ¹ / ₈	333	10 ⁵ / ₈	264	3 ¹ / ₂	89	—	—	1 ¹ / ₂	38	4 ³ / ₄	121	—	—	18 ³ / ₄	476	1-8	12	305	13 ³ / ₄	337	21	533	160	73
16	400	29 ¹ / ₁₆	738	14 ¹ / ₂	368	12 ¹ / ₈	308	4	102	—	—	1 ¹ / ₂	38	6	152	—	—	21 ³ / ₄	540	1-8	16	406	15 ¹ / ₄	387	23 ¹ / ₂	597	231	105
18	450	32	813	16	406	13	330	4 ¹ / ₂	114	—	—	2	51	7 ¹ / ₂	191	—	—	22 ³ / ₄	578	1- ¹ / ₈ -7	16	406	17 ¹ / ₄	438	25	635	286	131
20	500	35 ³ / ₈	899	17 ¹ / ₂	445	15	381	5	127	—	—	2	51	7 ¹ / ₂	191	—	—	25	635	1- ¹ / ₈ -7	20	508	19 ¹ / ₄	489	27 ¹ / ₂	699	378	173
24	600	40 ³ / ₁₆	1021	19	483	17 ¹ / ₁₆	443	5 ¹⁵ / ₁₆	151	—	—	2 ¹ / ₄	57	7 ¹ / ₂	191	—	—	29 ¹ / ₂	749	1- ¹ / ₄ -7	20	508	23 ³ / ₄	591	32	813	543	248
30	750	51 ¹ / ₈	1305	22 ¹ / ₂	581	22 ³ / ₄	578	6 ¹¹ / ₁₆	154	—	—	3	76	7 ¹ / ₂	191	—	—	36	914	1- ¹ / ₄ -7	28	711	29 ³ / ₄	743	—	—	—	—
36	900	59 ¹ / ₈	1502	28 ⁵ / ₈	727	24 ³ / ₄	629	8 ³ / ₃₂	206	—	—	3 ¹ / ₂	89	7 ¹ / ₂	191	—	—	42 ³ / ₄	1086	1- ¹ / ₂ -6	32	813	35 ³ / ₈	899	—	—	—	—

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