

Compact Expanding Gate Valve



M&J Valve was founded in 1962 by Marvin Grove and has been a leader in the pipeline valve industry since its inception. Now part of SPX Flow Technology, M&J Valve meets or exceeds the quality standards of our customers and the valve industry. M&J Valve product offering includes slab and expanding through-conduit gate valves, axial surge valves and rotary control valves, piston, ball, and swing check valves. M&J Valve can provide a wide variety of flow control solutions for liquid and gas markets. This combination of products, technical know-how and field experience has allowed for a history of product innovation which has positioned M&J Valve in a leadership position within the valve industry.

Finding innovative ways to help the world meet its ever growing demand for energy is a key focus for SPX. As a multi industry Fortune 500 manufacturer, we provide creative solutions that serve global energy markets in a myriad of ways. SPX is helping to meet that demand with a broad range of high quality, custom-engineered systems and components that can also help improve efficiency and reduce the use of natural resources. We also supply a wide range of components — from air preheaters to filter systems. SPX off-the-shelf and customized solutions are supporting all phases of oil, gas and biofuel production, from exploration, extraction and processing to transport and storage.

Compact Expanding Gate Valves

The M&J Model CEG (Compact Expanding Gate) valves are full opening or reduced opening valves with rising stem and parallel expanding gate and segment for tight mechanical seal and positive shut-off, both upstream and downstream, and under both low and high differential pressure. This design has proven performance in critical applications all over the world, such as isolation valves in power plants, ESD valves in production, block valves in process systems, high temperature valves in refineries, and pipeline valves in critical areas.

The M&J Compact Expanding Gate Valve is a full opening non-thru-conduit design utilizing the proven features of the M&J Cast Expanding Gate Valve and M303 Fabricated Slab Gate Valve.

The Compact Expanding Gate Valve is constructed for increased reliability and ease of operation and maintenance. These valves are readily available in size 4" and larger, class 150 and class 300, for piping systems requiring the positive shut off. All valves, whether full opening or reduced port, meet the end to end and other requirements of API 6D.

PRODUCT BENEFITS AND FEATURES

- Superior sealability by utilization of a two-piece parallel expanding gate.
- Double Block And Bleed
- Traps pressure in the valve body cavity when the valve is in the closed position.
- Pressure Gauge Seating
- Long Seat Life
- Stem seal design utilizes chevron rings to insure sealing integrity.
- In-Line Maintenance



Typical product applications

OPERATION

While open and during opening and closing travel, the gate-segment assembly is collapsed with back angle surfaces in contact. The unique centralizer mechanism prevents relative movement between the gate and segment allowing the gate and segment assembly to travel freely without sticking or wedging.

Traveling to the final closed position, the back angles of the gate and segment remain in contact with each other. With further downward movement of the segment stopped by the downstop, the centralizer mechanism then allows the gate to continue downward causing the gate/segment to expand, sealing against both seats, forming a tight mechanical seal.

Oil & Refined Products

Tank Farm and Station Valves

Block & Bleed Valves

Manifold Valves

Meter Bypass Valves

Fiscal Metering Isolation Valves

Marine Loading



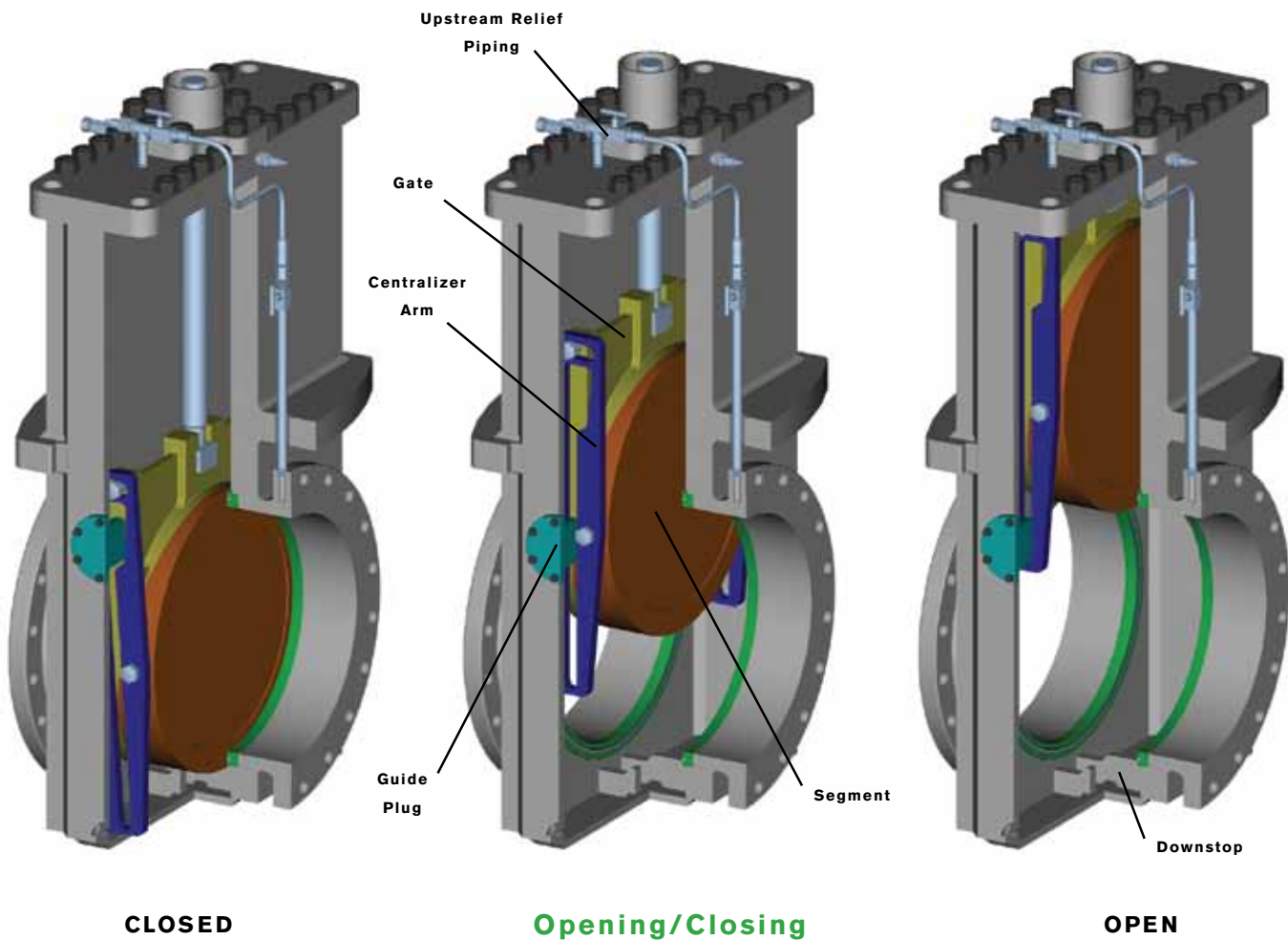
MECHANICAL SEALING

The Compact Expanding Gate Valve achieves its superior sealability by utilization of a two-piece parallel expanding gate. The pieces, called “gate” and “segment”, are connected by a unique centralizer mechanism which allows the gate to expand only in the closed position.

The mechanical advantage provided by the angled surfaces between the gate and segment multiplies the operating thrust to provide increased sealing forces for seat sealing. The higher the stem thrust, the tighter the seal. Increases or decreases of line pressure will not affect the tight mechanical seal.

PRESSURE RELIEF

The M&J Compact Expanding Gate Valve will trap pressure in the valve body cavity when the valve is in the closed position. High internal pressures can result from thermal expansion. To protect the valve from overpressure, the valve is provided with upstream relief piping which relieves excess body pressure to the upstream side of the valve.



DOUBLE BLOCK AND BLEED

The mechanical sealing performance of the M&J Compact Expanding Gate Valve makes it ideal for critical double block and bleed applications. The expanding gate provides high sealing forces between the gate and seat faces of both the upstream and downstream seats. In addition, the unique dual seal element (elastomer and plastic) design embedded in the metal seat insures sealing at all pressures while being resistant to damage and wear. With this combination there is no leakage into the body from upstream or downstream, providing a demonstrable positive seal.

PRESSURE GAUGE SEATING

The widely accepted "Pressure Gauge Seating Method" for proof of double block and bleed can be utilized with the Compact Expanding Gate Valve. At closing, the gate and segment expand compressing the seats and thereby increasing the volume between the gate and segment. This increase in volume reduces the pressure trapped in the body to a pressure less than initial line pressure. This feature can be incorporated into the upstream relief piping assembly to continually monitor block and bleed performance.

LONG SEAT LIFE

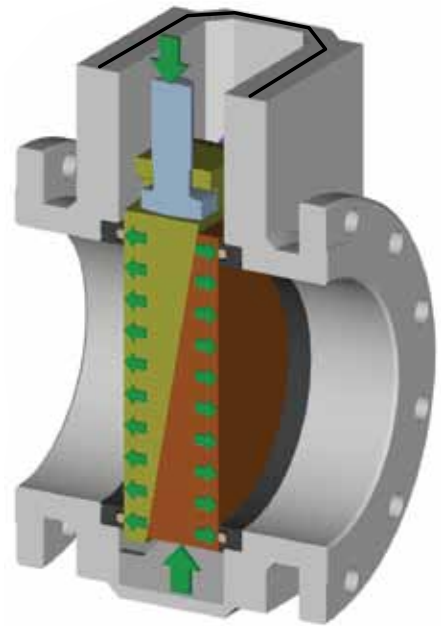
Extended seat/seal life is provided because the gate & segment are retracted/collapsed during opening and closing, minimizing drag on the seat and subsequent wear.

STEM FEATURES

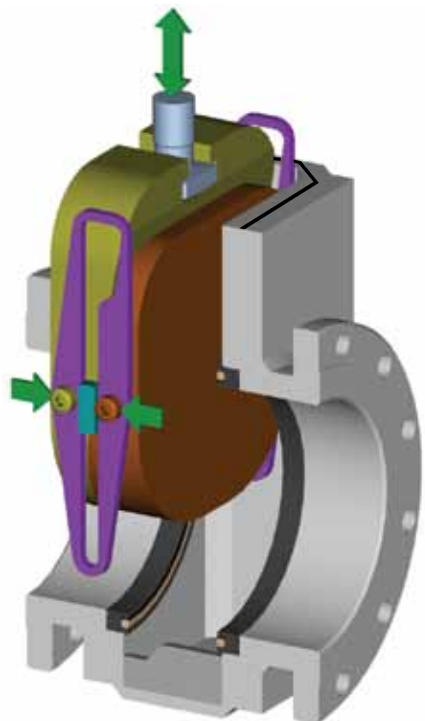
The stem seal design utilizes pressure rings to insure sealing integrity. The packing box seal configuration is a lantern ring design (two sets of seals separated by a lantern ring). The lantern ring allows emergency bulk packing injection between the chevron seals in the event of a stem leak.

IN LINE REPAIR/MAINTENANCE

Valves are top entry and all internal components may be removed, repaired and installed without removing the body from the line.



Double Block and Bleed
High sealing forces between the gate and seat faces of both the upstream and downstream seats



Long Seat Life
The gate & segment are retracted/collapsed during opening and closing, minimizing drag on the seat and subsequent wear.

Standard Product And Available Options

FEATURE		STANDARD	WHEN SPECIFIED
API-6D/Q1		X	
ISO 9001		X	
HANDWHEEL OPERATOR		4"	
BEVEL GEAR OPERATOR		6" & LGR	4"
POWER ACTUATOR			X
DOUBLE BLOCK & BLEED		X	
BURIED SERVICE	EXTENDED STEM		X
	EXTENDED VENT & DRAIN		X
LOCKING DEVICE			X
TRANSITION PIECE (PUPS)			X
EMERGENCY PACKING INJECTION		X	
EXTERNAL PIPING TO UPSTREAM		X	
BODY VENT FITTING		X	
BODY DRAIN		X	
LIFT LUGS	6" - 12"		X
	14" & UP	X	
STEM POSITION INDICATOR		X	
API MONOGRAM			X

FEATURE		STANDARD	WHEN SPECIFIED
API-6D TEST:	HYDRO-SHELL	X	
	HYDRO-SEAT	X	
	AIR SEAT		X
	DOUBLE BLOCK & BLEED	X	
	OPERATIONAL TORQUE TEST		X
	EXTENDED HYDRO TEST		X
NDE:	VISUAL (API 6D)	X	
	ULTRASONIC		X
	DYE PENETRANT		X
	MAGNETIC PARTICLE		X
	RADIOGRAPHY		X
DOCUMENTATION/ CERTIFICATION:	HYDROTEST REPORTS		X
	MATERIAL TEST REPORTS (MTRS)		X
	HYDROTEST CHARTS		X
	NDE REPORTS		X
	NACE		X
	CERTIFICATE OF COMPLIANCE		X
	OPERATIONAL TEST REPORTS		X

SERVICE

Every product sold by SPX is supported by our full staff. This staff is available to provide you with technical advice, backup documentation, spare parts and repair services, either in the plant or the field. Our well trained and experienced field service staff stands ready to support you and our products around the world.

RECOMMENDED SPARE PARTS

It is recommended that the following spare parts be inventoried in operations having numerous valves of a given size and an in-house maintenance program:

PART DESCRIPTION	NUMBER OF VALVES TO BE SUPPORTED			
	<10	11-20	21-30	31-40
GATE & SEGMENT ASSEMBLY	0	1	2	3
SEAT ASSEMBLY	0	2	4	6
STEM	0	1	2	3
BONNET & YOKE SEALS	1	2	3	4
PACKING SET	1	2	4	6
GEAR BOX	0	0	1	1
HANDWHEEL	0	1	2	2

NAMEPLATE DATA

Nameplates on M&J Compact Expanding Gate Valves provide all of the necessary information to identify the valve when contacting the factory for spares or assistance.

SPX[®]

M&J Valve

HOUSTON, TEXAS
PATENTED: 5,163,655 AND 6,164,622

SIZE	CLASS	MODEL	API	F/F
			6D	
BODY	GATE	SEAT	STEM	SEAL
TEMP				
MOP				
DATE MFG	LICENSE NO	SERIAL NUMBER		
6D-0079				

Exploded view

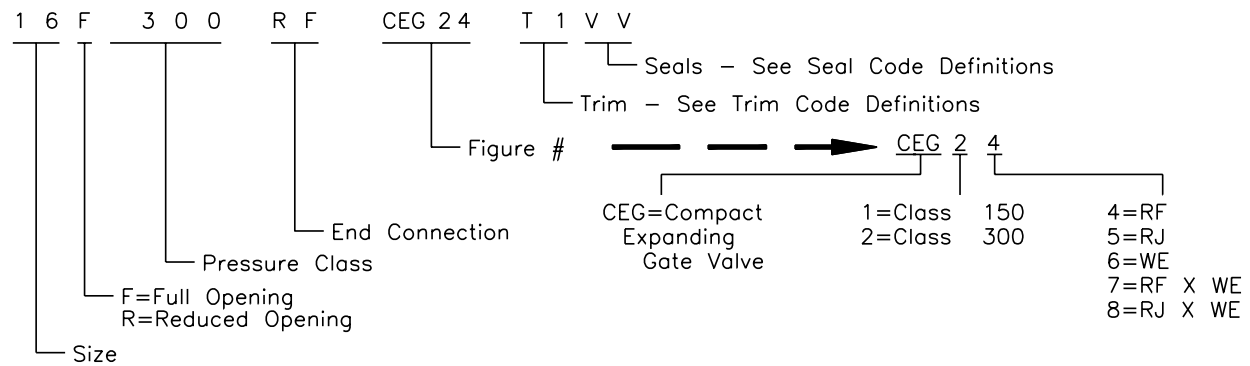
The diagram illustrates the exploded view of a mechanical assembly. The components are labeled as follows:

- Top Assembly (Dashed Box):** Includes a vertical shaft with a flange at the top (E1), a central body (A4, A3, S5, E3, E2, S4), and a base plate (F1, B4, S1). A horizontal shaft (A2, A1) is also shown.
- Right Assembly:** Includes a vertical shaft (O5, O4, O3, O1) with a flange (F4, F5) and a horizontal shaft (F2, O7, O6).
- Left Assembly:** Includes a vertical shaft (O2, T4) and a horizontal shaft (T1, T2, T3).
- Bottom Assembly:** Includes a large rectangular block (B1) with a circular opening (S2, B2, B3, F3) and a flange (S3, T5, T1).
- Right Assembly (Lower):** Includes a horizontal shaft (U5, U2, U1, U3, U4, U6) and a vertical shaft (U8, U7).

STANDARD METALLIC TRIMS FOR SELECTED SERVICES

APPLICATION	TEMPERATURE	TRIM CODE	TRIM DEFINITIONS
NON-CORROSIVE	minus 20 to 250°F (minus 29 to 121°C)	T1	Carbon Steel
SWEET CRUDE/GAS & REFINED PRODUCT			
NON-CORROSIVE	minus 50°F (minus 46°C)	L1	Low Temp - Carbon Steel
SWEET CRUDE/GAS & REFINED PRODUCT			
LOW TEMP SERVICE			
MILD CORROSIVE	minus 20 to 250°F (minus 29 to 121°C)	T4	NACE Carbon Steel
SOUR CRUDE/GAS & REFINED PRODUCT			
NACE MR-01-75			
MILD CORROSIVE	minus 50°F (minus 46°C)	L4	Low Temp - NACE Carbon Steel
SOUR CRUDE/GAS & REFINED PRODUCT			
NACE MR-01-75 LOW TEMP SERVICE			

FIGURE NUMBER KEY



TRIM CODE DEFINITIONS

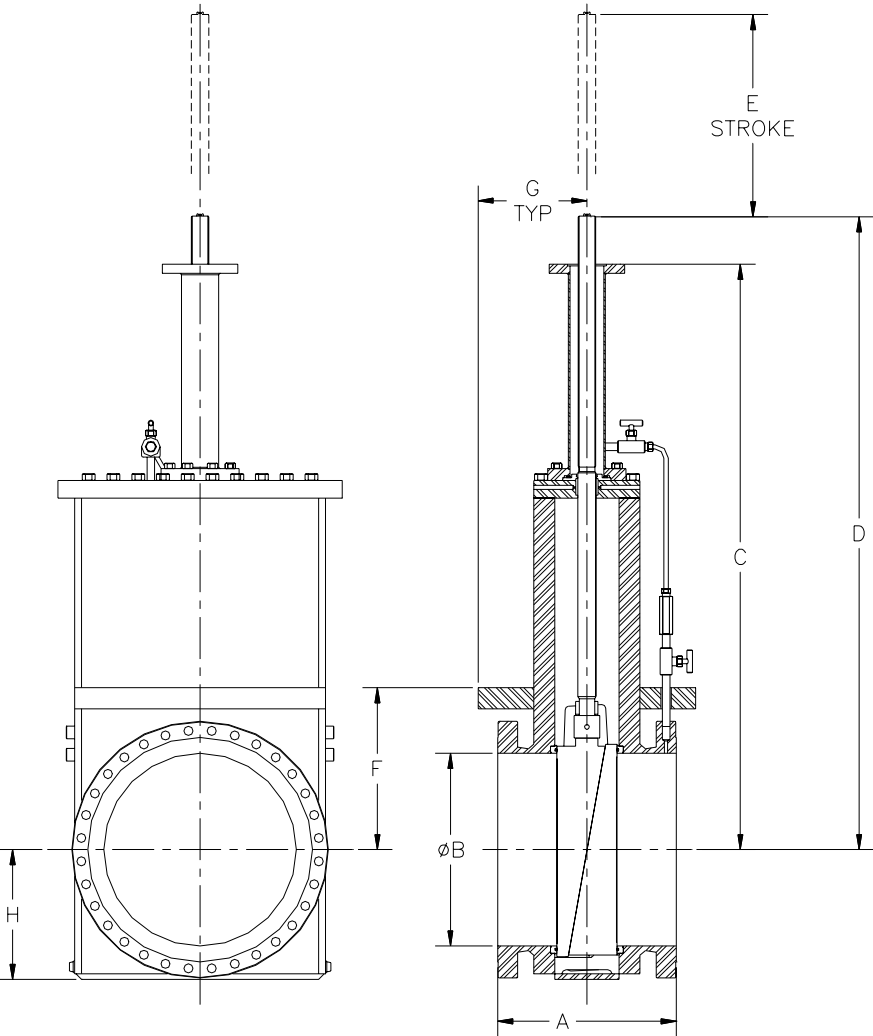
ITEM	DESCRIPTION	T1	L1	T4	L4
A1	Stud	ASTM A193 B7	ASTM A320 L7	ASTM A193B7M	ASTM A320 L7M
A2	Hex Nut	ASTM A194 2H	ASTM A194 GR7	ASTM A194 2M	ASTM A194 GR7M
A3	Stud	ASTM A193 B7	ASTM A193 L7	ASTM A193 B7M	ASTM A320 L7M
A4	Hex Nut	ASTM A194 2H	ASTM A194 GR7	ASTM A194 2HM	ASTM A194 2H GR 7M
B1	Body	ASTM A516-70	ASTM A516-70	ASTM A516-70	ASTM A516-70
B2	Guide Plug	AISI 4140	AISI 4140	AISI 4140	AISI 4140
B3	Hex Head Capscrew	ASTM A193 B7	ASTM A320L7	ASTM A193 B7M	ASTM A320L7M
B4	Bonnet	ASTM A516-70	ASTM A516-70	ASTM A516-70	ASTM A516-70
E1	Yoke	ASTM A516-70/API 5L	ASTM A516-70	ASTM A516-70/API 5L	ASTM A516-70
E2	Packing Retainer	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
E3	Hex Head Capscrew	ASTM A193 B7	316 SS	ASTM A193 B7	316 SS
F1	Stem Packing Injector	Steel	316 SS	Steel	316 SS
F2	Vent Valve	Steel	316 SS	Steel	316 SS
F3	Pipe Plug	ASTM A105	316 SS	ASTM A105	316 SS
F4	Pipe Plug	ASTM A105	316 SS	ASTM A105	316 SS
F5	Pipe Plug	ASTM A105	316 SS	ASTM A105	316 SS
T1	Gate & Segment	ASTM A516-70	ASTM A516-70	ASTM A516-70	ASTM A516-70
		WCC ENP/FC	WCC ENP/FC	WCC ENP/FC	WCC ENP/FC
T2	Centralizer Arm	ASTM A516-70/ENP	ASTM A516-70/ENP	ASTM A516-70/ENP	ASTM A516-70/ENP
T3	Alignment Pin	AISI 4140	AISI 4140	AISI 4140	AISI 4140
T4	Stem	AISI 4140/ENP	AISI 4140/ENP	AISI 4140/ENP	AISI 4140/ENP
T5	Seat Assembly	ASTM A516-70/A105 FC	ASTM A516-70/A105 FC	ASTM A516-70/A105 FC	ASTM A516-70/A105 FC
U1	Tubing	316 SS	316 SS	316 SS	316 SS
U2	Male Connector	316 SS	316 SS	316 SS	316 SS
U3	Female Connector	316 SS	316 SS	316 SS	316 SS
U4	Check Valve	316 SS	316 SS	316 SS	316 SS
U5	Needle Valve	316 SS	316 SS	316 SS	316 SS
U6	Pipe Nipple	ASTM A106 B	ASTM-A333-6	ASTM A106 B	ASTM-A333-6
U7	Pipe Nipple	ASTM A106 B	ASTM-A333-6	ASTM A106 B	ASTM-A333-6
U8	Pipe Tee	ASTM A105	316 SS	ASTM A105	316 SS

EHC - Engineering Hard Chrome
FC - Fluorocarbon Coating
ENP - Electroless Nickel Plating

SEAL CODE DEFINITIONS

ITEM	DESCRIPTION	N -50°F TO 150°F	V -20°F TO 150°F	A -20°F TO 250°F
S1	Gasket/Body Bonnet O-Ring	Graphoil/Fiber/Nitrile	Graphoil/Fiber/Viton	Graphoil/Fiber/Neoprene
S2	Gasket, Guide Plug	Graphoil/Fiber	Graphoil/Fiber	Graphoil/Fiber
S3	Seat Tail O-Ring	LT-Nitrile	Viton	Neoprene
S4	Stem Seal Assembly	Nitrile	Viton	Neoprene
S5	Stem Wiper Ring	Nitrile	Nitrile	Nitrile
-	Seat Face Seal	Nylon/Nitrile	Nylon/Viton	CTFE/Neoprene

4" - 48" Full Opening Compact Expanding Gate Valves



WEIGHT & FLOW

SIZE	CLASS		CV
	150	300	
4"	260	285	1320
100 mm	118	129	
6"	355	400	3110
150mm	161	181	
8"	620	675	5720
200 mm	281	306	
10"	880	1130	9100
250 mm	399	513	
12"	1240	1550	13350
300 mm	562	703	
14"	1620	1760	16600
350 mm	735	798	
16"	2200	2800	22450
400 mm	998	1270	
18"	2750	3960	29080
450 mm	1247	1796	
20"	3440	4640	36220
500 mm	1560	2105	
24"	4890	7190	53300
600 mm	2218	3261	
26"	*	*	62430
650 mm			
28"	*	*	72820
700 mm			
30"	7740	10140	84770
750 mm	3511	4599	
32"	*	*	95740
800 mm			
34"	*	*	109600
850 mm			
36"	11145	15660	122800
900 mm	5055	7103	
40"	*	*	153650
1000 mm			
42"	*	*	168750
1050 mm			
44"	*	*	185550
1100 mm			
48"	*	*	224800
1200 mm			

* Contact M&J Valve for details.

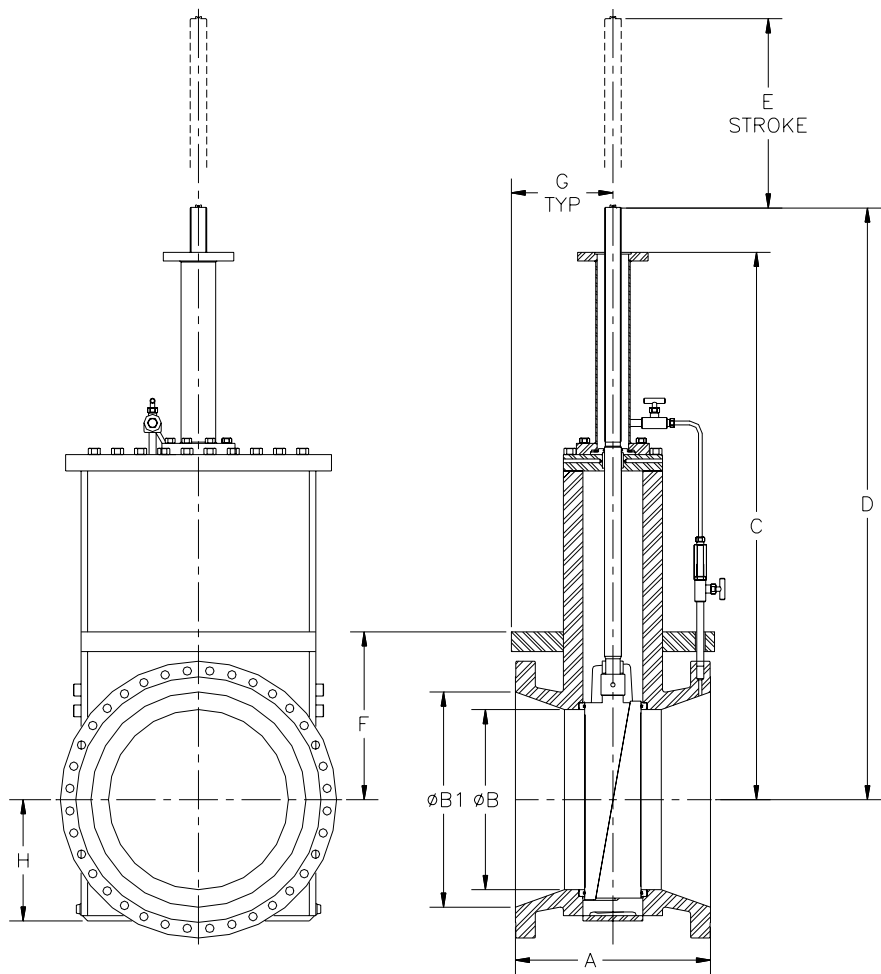
lb
kg

DIMENSIONS

		A	B	C	D	E	F	G	H
4" 100mm	150 PN 20	9.00 229	4.00	20.00	24.50	5.19	N/A	N/A	5.00 127
	300 PN50	12.00 305							
6" 150mm	150 PN20	10.50 267	6.00	24.56	29.13	7.13	N/A	N/A	6.25 159
	300 PN50	15.88 403							
8" 200mm	150 PN 20	11.50 292	8.00	30.00	36.75	9.25	N/A	N/A	7.00 178
	300 PN50	16.50 419							
10" 250mm	150 PN20	13.00 330	10.00	35.88	42.88	11.31	N/A	N/A	8.75 222
	300 PN50	18.00 457							
12" 300mm	150 PN20	14.00 356	12.00	41.13	48.13	13.56	N/A	N/A	10.25 260
	300 PN50	19.75 502							
14" 350mm	150 PN20	15.00 381	13.25	44.00	51.00	14.63	N/A	N/A	10.88 276
	300 PN50	30.00 762							
16" 400mm	150 PN20	16.00 406	15.25	53.25	60.25	17.50	N/A	N/A	12.75 324
	300 PN20	33.00 838							
18" 450mm	150 PN20	17.00 432	17.25	57.00	64.00	19.00	N/A	N/A	14.00 356
	300 PN50	36.00 914							
20" 500mm	150 PN20	18.00 457	19.25	63.25	70.50	21.00	N/A	N/A	14.75 375
	300 PN50	39.00 991							
24" 600mm	150 PN20	20.00 508	23.25	75.13	82.56	25.00	21.25	12.50	18.00 457
	300 PN50	45.00 1143							
26" 650mm	150 PN20	22.00 559	25.00	80.75	88.43	26.75	22.88	14.75	19.75 502
	300 PN50	49.00 1245							
28" 700mm	150 PN20	24.00 610	27.00	88.63	95.81	28.63	24.13	17.25	20.81 529
	300 PN50	53.00 1346							
30" 750mm	150 PN20	26.00 660	29.00	90.88	100.88	30.75	25.38	18.38	20.69 526
	300 PN50	55.00 1397							
32" 800mm	150 PN20	28.00 711	30.75	97.56	107.50	32.50	28.50	19.63	22.43 570
	300 PN50	60.00 1524							
34" 850mm	150 PN20	30.00 762	32.75	102.63	113.93	34.75	29.75	20.88	23.50 597
	300 PN50	64.00 1626							
36" 900mm	150 PN20	32.00 813	34.50	104.88	113.50	36.38	29.25	19.50	23.25 591
	300 PN50	68.00 1727							
40" 1000mm	150 PN20	35.00 229	38.50	116.62	127.43	40.19	32.13	21.00	27.50 699
	300 PN50	82.00 2083							
42" 1050mm	150 PN20	36.00 914	40.25	122.13	131.00	42.00	33.25	22.63	28.38 721
	300 PN50	84.00 2134							
44" 1100mm	150 PN20	38.00 965	42.00	129.00	138.75	44.13	34.38	24.38	29.75 756
	300 PN50	86.00 2184							
48" 1200mm	150 PN20	55.75 1416	46.00	138.63	148.25	48.38	36.00	27.88	32.00 813
	300 PN50	90.00 2286							

Inches
Millimeters

10" - 42" Reduced Port Compact Expanding Gate Valves



WEIGHT & FLOW

SIZE	CLASS		CV
	150	300	
10X8 250X200	710 322	780 354	3020
12X10 300X250	980 445	1235 560	5655
14X12 350X300	1330 603	1600 726	12190
16X12 400X300	1480 671	1860 844	8600
18X16 450X400	2340 1061	3090 1402	18350
20X16 500X400	2510 1139	3260 1479	13640
24X20 600X500	3800 1724	5270 2390	23630
30X24 750X600	5600 2540	7930 3597	31750
36X30 900X750	8590 3896	11500 5216	59660
42X36 1050X900	13170 5974	16670 7561	83820

lb
kg

DIMENSIONS

		A	B1	B	C	D	E	F	G	H
10X8	150 PN 20	13.00 330	10.00	8.00	30.00	36.75	9.25	N/A	N/A	7.00
	300 PN50	16.50 419								
250X200			254	203	762	933	235			178
12X10	150 PN20	14.00 356	12.00	10.00	35.88	43.00	11.31	N/A	N/A	8.75
	300 PN50	19.75 502								
300X250			305	254	911	1092	287			222
14X12	150 PN20	15.00 381	13.25	12.00	41.13	48.13	13.56	N/A	N/A	10.25
	300 PN50	30.00 762								
350X300			337	305	1045	1223	344			260
16X12	150 PN20	16.00 406	15.25	12.00	41.13	48.13	13.56	N/A	N/A	10.25
	300 PN50	33.00 838								
400X300			387	305	1045	1223	344			260
18X16	150 PN20	17.00 432	17.25	15.25	53.25	60.25	17.50	N/A	N/A	12.75
	300 PN20	36.00 914								
450X400			438	387	1353	1530	445			324
20X16	150 PN20	18.00 457	19.25	15.25	53.25	60.25	17.50	N/A	N/A	12.75
	300 PN50	39.00 991								
800X400			489	387	1353	1530	445			324
24X20	150 PN20	20.00 508	23.25	19.25	63.25	70.50	21.00	N/A	N/A	14.75
	300 PN50	45.00 1143								
600X500			591	489	1607	1791	533			375
30X24	150 PN20	26.00 660	29.00	23.25	75.13	82.56	25.00	21.25	12.50	18.00
	300 PN50	55.00 1397								
750X600			737	591	1908	2097	635	540	318	457
36X30	150 PN20	32.00 813	34.50	29.00	90.88	100.88	30.75	25.38	18.38	20.69
	300 PN50	68.00 1727								
900X750			876	737	2308	2562	781	645	467	526
42X36	150 PN20	37.50 953	40.25	34.50	104.88	113.50	36.38	29.25	19.50	23.25
	300 PN50	68.00 1727								
1050X900			1022	876	2664	2883	924	743	495	591

Inches
Millimeters

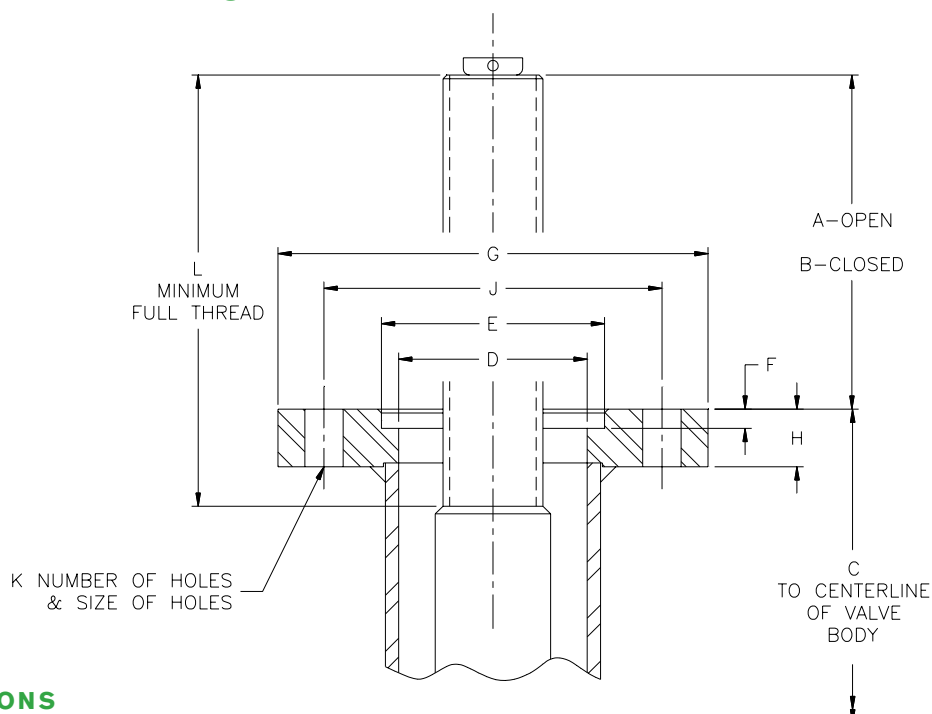
Stem Torque & Thrust

VALVE SIZE	CLASS	STEM THREAD DIAMETER	STEM SEALING DIAMETER	PITCH P(IN.)	LEAD L(IN.)	EFFICIENCY E	TOTAL THRUST (LBS)	STEM NUT TORQUE (FT-LB.)	TRAVEL	STEM NUT TURNS
4"	150	*	*	*	*	*	*	*	*	*
100 mm	300									
6"	150	*	*	*	*	*	*	*	*	*
150 mm	300									
8"	150	1.5	1.625	1/6	1/3	.43	6,500	90	9.31	28
200 mm	300						17,100	236		
10"	150	1.5	1.625	1/6	1/3	.43	9,300	128	11.31	34
250 mm	300						24,300	335		
12"	150	1.5	1.625	1/6	1/3	.43	11,100	153	13.31	40
300 mm	300						29,000	400		
14"	150	1.5	1.625	1/6	1/3	.43	14,600	201	15.00	45
350 mm	300						38,200	527		
16"	150	1.5	1.625	1/6	1/3	.43	20,000	276	17.00	51
400 mm	300						52,300	722		
18"	150	1.75	1.875	1/5	2/5	.43	25,600	399	19.00	48
450 mm	300						67,100	1045		
20"	150	2	2.125	1/4	1/2	.43	30,800	567	21.00	42
500 mm	300						80,700	1485		
24"	150	2.25	2.375	1/4	1/2	.43	42,600	881	25.00	50
600 mm	300						111,500	2307		
26"	150	*	*	*	*	*	*	*	*	*
650 mm	300									
28"	150	*	*	*	*	*	*	*	*	*
700 mm	300									
30"	150	2.625	2.75	1/3	2/3	.43	63,900	1566	30.75	46
750 mm	300						167,400	4101		
32"	150	*	*	*	*	*	*	*	*	*
800 mm	300									
34"	150	3.125	3.25	2/5	4/5	.43	85,900	2528	36.25	45
850 mm	300						224,800	6616		
36"	150	*	*	*	*	*	*	*	*	*
900 mm	300									
40"	150	*	*	*	*	*	*	*	*	*
1000 mm	300									
42"	150	*	*	*	*	*	*	*	*	*
1050 mm	300									
44"	150	*	*	*	*	*	*	*	*	*
1100 mm	300									
48"	150	*	*	*	*	*	*	*	*	*
1200 mm	300									

Notes:

1. Recommended operating thrust and torque values are the loads required to open and close the valve. These torques do not contain service or safety factors.
 2. Recommended operating torque and thrust values are based on maximum working pressure at ambient temperature. To obtain expected torques at lower temperatures, contact M&J Valve.
 3. Actuator selection should be made based on experience and appropriate service/safety factors.
- * For sizes/classes not listed, contact M&J Valve for details

Operator Mounting Detail



DIMENSIONS

SIZE	A	B	C	D	E	F	G	H	J	K	L
8"	14.31	7.00	28.75	3.06	3.755/3.765	0.31	7.00	0.94	5.50	(4) .69 DIA. ON (4) .69 DIA. STRADDLE CL	15.31
10 X 8	363	178	730	78	95	8	178	24	140		389
10"	18.31	7.00	35.88	3.06	3.755/3.765	0.31	7.00	0.94	5.50		19.31
12 X 10	465	178	911	78	95	8	178	24	140		490
12"	20.31	7.00	41.13	3.06	3.755/3.765	0.31	7.00	0.94	5.50		21.31
14 X 12/16 X 12	516	178	1045	78	95	8	178	24	140	(8) .75 DIA. STRADDLE CL	541
14"	22.00	7.00	51.50	3.06	3.755/3.765	0.31	7.00	0.94	5.50		23.00
	559	178	1308	78	95	8	178	24	140		584
16"	24.00	7.00	55.50	3.06	3.755/3.765	0.31	7.00	0.94	5.50		25.00
18 X 16/20 X 16	610	178	1410	78	95	8	178	24	140		635
18"	26.00	7.00	59.50	4.06	6.005/6.010	0.31	11.38	1.63	10.00	(8) .75 DIA. STRADDLE CL	27.00
	660	178	1511	103	153	8	289	41	254		686
20"	28.25	7.25	63.25	4.06	6.005/6.010	0.31	11.38	1.63	10.00		29.25
24 X 20	718	184	1607	103	153	8	289	41	254	(8) .87 DIA. STRADDLE CL	743
24"	32.44	7.44	75.13	10.00	6.005/6.010	0.31	11.38	1.63	10.00		33.44
30 X 24	824	189	1908	254	153	8	289	41	254		849
26"	*	*	*	*	*	*	*	*	*	*	*
28"	*	*	*	*	*	*	*	*	*	*	*
30	39.38	8.63	90.88	6.06	7.005/7.010	0.31	13.50	1.63	11.75	(8) .87 DIA. STRADDLE CL	40.38
36 X 30	1000	219	2308	154	178	8	343	41	298		1026
34"	*	*	*	*	*	*	*	*	*	*	*
36	44.88	8.63	104.88	6.06	7.005/7.010	0.31	13.50	1.63	11.75	(8) .87 DIA. STRADDLE CL	45.85
42 X 36	1140	219	2664	154	178	8	343	41	298		1164.59
40"	*	*	*	*	*	*	*	*	*	*	*
42	*	*	*	*	*	*	*	*	*	*	*
48 X 42	*	*	*	*	*	*	*	*	*	*	*
44"	*	*	*	*	*	*	*	*	*	*	*
48"	*	*	*	*	*	*	*	*	*	*	*

* Contact M&J Valve for details.

Inches
Millimeters

Compact Expanding Gate Valve

