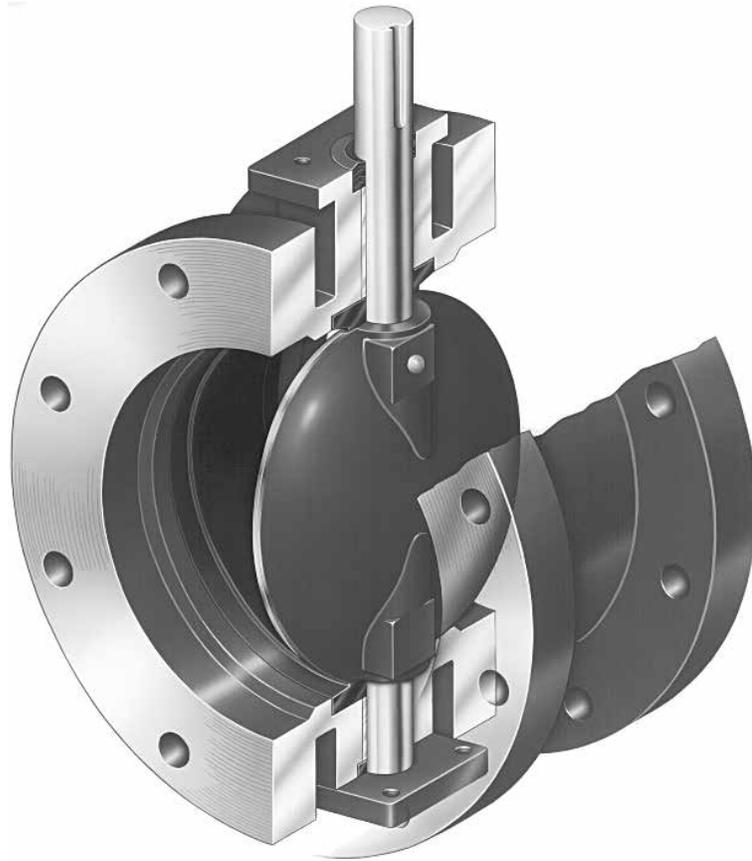


**Mueller LINESEAL III® (Class 150B), LINESEAL XP™\*, LINESEAL XP11®  
(Class 250B), and LINESEAL 350® (Class 350B) Butterfly Valve Features**



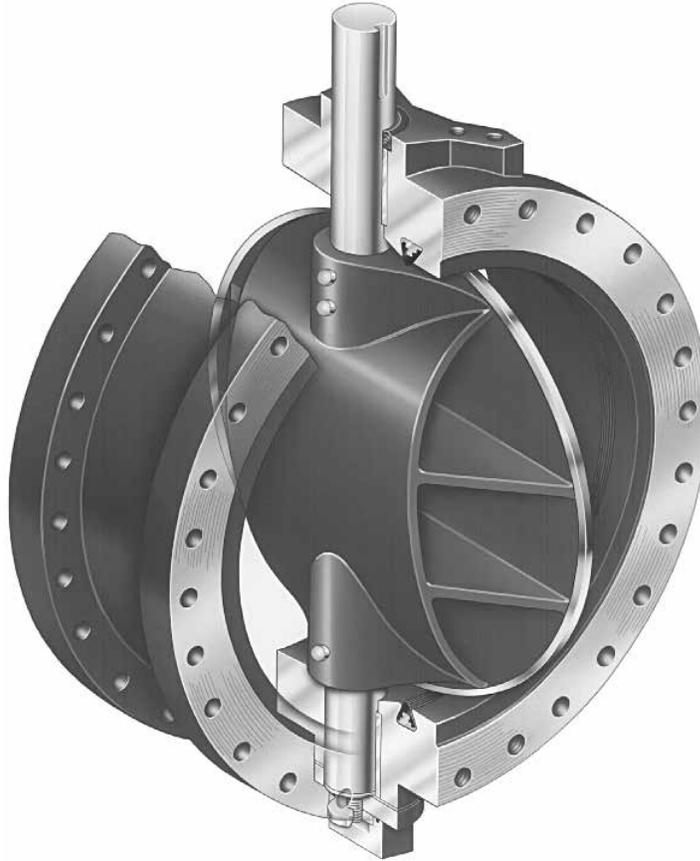
- **Chevron V-Type Packing** - is self-adjusting, long lasting and should never need replacement because quarter-turn valve operation causes little or no wear. Packing bears on turned, ground and polished stainless steel.
- **Corrosion Resistant Shaft** - is constructed of stainless steel. Shaft is one-piece, through-shaft construction sized to meet or exceed requirements of AWWA Standard C504 for Class 150B or Class 250B service.
- **Heavy-Duty Body** - is extra heavy with flanges fully faced and drilled per ANSI B16.1 Class 125 standard\*\*. Other ends available include integrally cast mechanical joint and slip-on (for DI and PVC C900). Operator mounting trunnion is machined and drilled for four-bolt connection.
- **Tamper-Proof Disc Centering** - provided by precision molded flats in the bonded seat at the body trunnion mate with machined flats on the disc to provide tamperproof centering of the disc in the body. Positive disc alignment, without play, assures long seat life.
- **Self-Lubricating Bearings** - are liberally sized, chemically inert bearings that are self-lubricating and should outlast the life of the pipeline.
- **Streamlined Disc** - has lens-shaped design to minimize pressure drop and turbulence. Full open valve creates no more friction loss than a 45° elbow. Disc is secured to the shaft by stainless steel pins sized to transmit torques required and withstand stresses imposed under severe operating conditions. Disc has stainless steel disc edge.
- **Elastomeric Body Seat** - is made of a special rubber compound (Buna N) that is bonded to the body by a patented process. The seat cannot be torn from the body under normal pipeline conditions. The precision molding process also ensures that the disc-seat indentation cannot cause excessive wear or abrasion upon closing.

\*Line seal XP™ Valves 3" and 4" only.

\*\*Line seal XP™ and Line seal 350 Valve flanges drilled to ANSI B16.1 Class 250 standard.

Rev. 8-17 Shaded area indicates changes

## Mueller LINESEAL III® (Class 150B), LINESEAL XP™ , LINESEAL XP11® (Class 250B), & LINESEAL 350® (Class 350B) Butterfly Valve Features



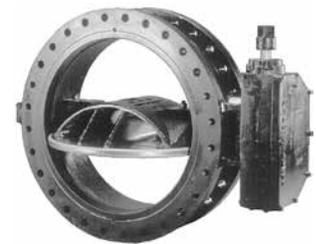
- **Corrosion Resistant Shaft** - is constructed of stainless steel. Two-piece, stub-type shafts are sized per AWWA Standard C504, Class 150B or Class 250.
- **Chevron V-Type Packing** - is self-adjusting packing in top trunnion of valve body where shaft protrudes.
- **Strong Disc & Shaft Connections** - with generously sized stainless steel pins designed to transmit torques required and withstand stresses imposed under severe operating conditions.
- **Preset Two-Way Thrust Bearing Assembly** - is preset at factory. On valves 30" and larger, assembly consists of stainless steel stud fastened to the bottom of the valve shaft. Stud extends beyond the bottom cover. Thrust collar is threaded to the stud and pinned. On 24" valves thrust collar is pinned to shaft and adjustment provided by bronze spacers. Thrust collar cavity is packed with grease and fully gasketed to prevent leakage.
- **Heavy-Duty Body** - is extra heavy with flanges fully faced and drilled per ANSI B16.1 Class 250 or Mechanical Joint ends are also available.
- **Self-Lubricating, Sleeve-Type Bearings** - are used in both trunnions of the valve body. PTFE lined with special non-metallic backing. Provide electrical insulation between disc and shaft to prevent galvanic corrosion. Lower coefficient of friction reduces operating torque requirements.
- **Flow-Through Disc\*** - provides less pressure drop in full-open position than conventional disc shapes. (On 24" size valves the arch side of disc is closed and the flat side is open, forming a slightly concave surface.) Disc structure has no internal cores that can shift during casting, no hollow chambers that can collect water, freeze and fracture the disc. Disc edge has stainless steel spherically shaped seating surface.
- **Elastomeric Body Seat** - is made of a special rubber compound (Buna N) that seals a full 360 against a stainless steel spherical disc edge. Unique grooved-seal design, coupled with the wide spherically shaped seating edge of the disc, allows greater disc closure tolerance (up to 1° off center in closed position without leakage). Seat is mechanically retained in body without metal hardware by a cast epoxy compound that ensures the seat conforms to the exact radius of the disc with uniform contact pressure. It is fully field adjustable and replaceable.

\* Contact your Mueller representative for valves sizes larger than 48" and for Line seal XP and Line seal 350 Valves with Class 250 flanges, this page applies to 24"-48" sizes.

- Catalog number
  - 3211-6** Flanged Ends Class 125  
Sizes--3", 4", 6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36", 42", 48"
  - 3211-20** Mechanical joint ends (with mechanical joint unassembled accessories)  
Sizes--4", 6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36", 42", 48"
  - 3211-23** Mechanical joint ends (without mechanical joint accessories)  
Sizes--4", 6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36", 42", 48"
  - 3211-16** Flanged Class 125 by mechanical joint ends (with mechanical joint unassembled accessories)  
Sizes--6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36"
  - 3211-19** Flanged Class 125 by mechanical joint ends (without mechanical joint unassembled accessories)  
Sizes--6", 8", 10", 12", 14", 16", 18", 20", 24", 30", 36"
- Meets or exceeds all applicable requirements of ANSI/AWWA C504 Standard Class 150B; NSF 61 certified
- Buried service valves: I.D. and O.D. coated
- Body - Cast Iron ASTM A-126
- Flanges drilled per ANSI B16.1 Class 125
- Above ground valves (ordered with either a handwheel, position indicator on the actuator, or lever): minimum 8 mills epoxy coated interior and exterior; meets AWWA C504 standard.
- Seat-in-body design reduces seat failure due to corrosive buildup in the valve and pipeline
- Through-disc pinning provides a tight disc-to-shaft pin connection, greatly reducing the possibility of loosening through vibration
- Disc edge is 316 Stainless Steel
- Disc – Stainless Steel ASTM A-351 (3"-6"); Cast Iron ASTM A-126 (8"-20"); Ductile Iron ASTM A-536 (24"-48")
- Symmetrical disc for higher Cv and lower head loss
- Nonmetallic bearings prevent galvanic corrosion and provides lower coefficient of friction
- Chevron "V" type packing is self-adjusting to last the life of the valve
- 3"-24" Standard 304 SS hardware.



**3"-20"**



**30"-48"**

**Options**

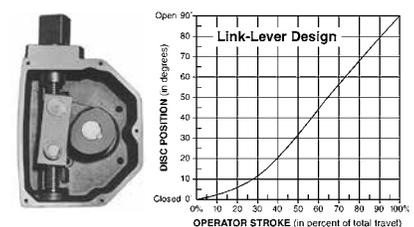
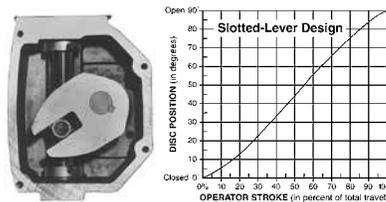
- MDT Actuator with handwheel or chainwheel and position indicator
- MDT Actuator with cylinder actuator (also available with manual override, handjack and 4-way solenoid valve)
- Hand lever for 3"-10" valves
- 200 psi test
- EPDM Rubber seat and seals
- 316 Stainless steel fasteners
- Additional mills available Epoxy interior and/or exterior
- Holiday testing
- Ground level position indicator

**Standard Buried Service Actuators**

*Note: Actuator size subject to change based on actual pipeline conditions.*

Valve size	Actuator	Number of turns
3"-12"	MDT-2S	32
14"-16"	MDT-3S	30
18"-24"	MDT-4S	40
30"-36"	MDT-5	44
42"	MDT-5S	136
48"	MDT-6S	215

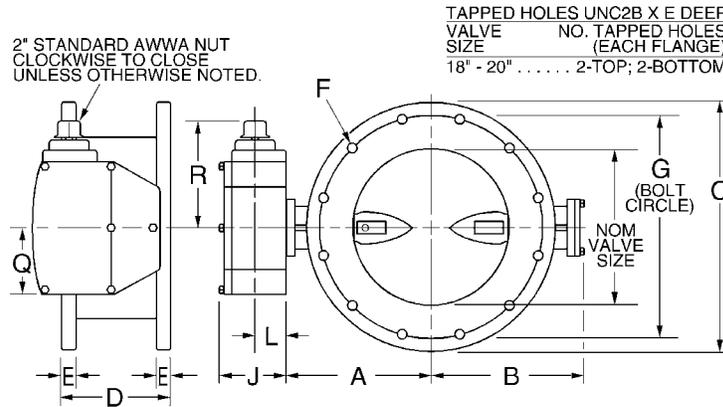
**Slotted-Lever (3"-12")**



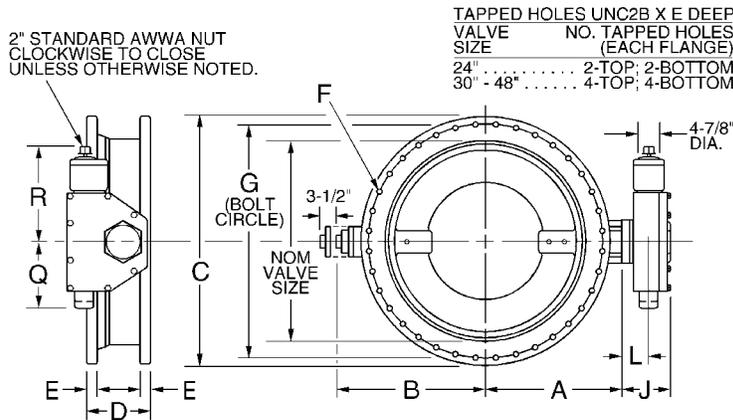
\*Contact your Mueller representative for valve sizes larger than 48".

Rev. 9-09 Shaded area indicates changes

### Dimensions - for Lineiseal III® Valves Flanged (Class 125) Ends, 3"-20" Sizes.



### Dimensions - for Lineiseal III® Valves Flanged (Class 125) Ends, 24"-48" Sizes.



**Notes:** These dimensions are correct at time of publication but are not to be construed as certified drawings. Certified drawings available upon request. Actuator size subject to change based on actual pipeline conditions.

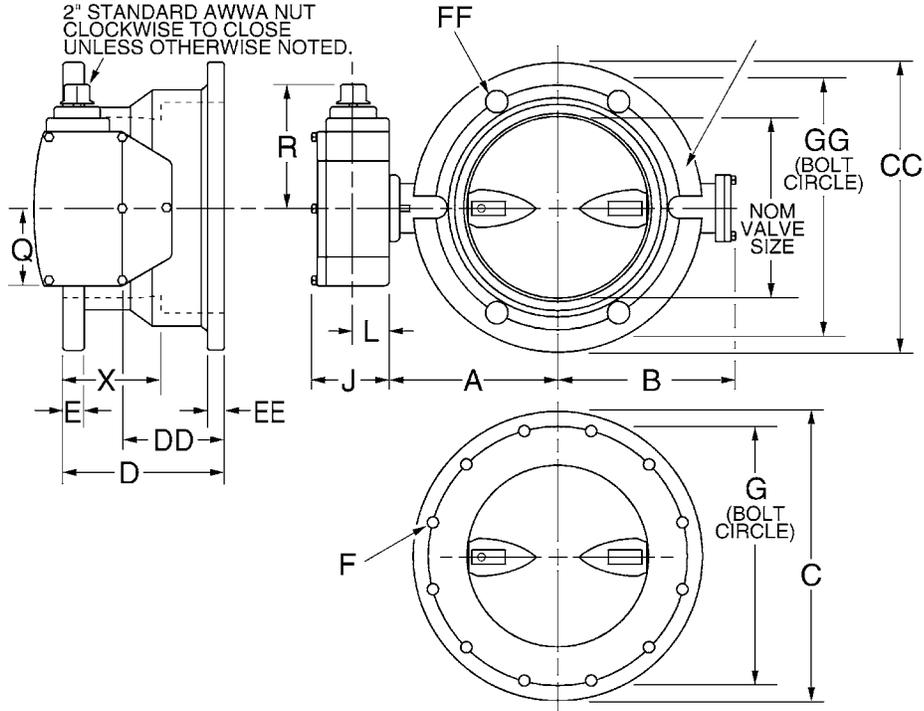
Dimension+	Nominal size*														
	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"
A	4.75	5.50	6.50	7.75	9.00	10.5	11.88	13.50	14.38	16.00	18.63	21.50	25.44	29.88	34.06
B	3.88	4.13	5.13	6.50	9.88	11.38	12.63	14.50	15.38	17.00	18.63	24.38	28.25	32.88	37.13
C	7.50	9.00	11.00	13.50	16.00	19.00	21.00	23.50	25.00	27.50	32.00	38.75	46.00	53.00	59.50
D†	5.00	5.00	5.00	6.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	12.00	12.00	12.00	15.00
E	.75	.94	1.00	1.13	1.19	1.25	1.38	1.44	1.56	1.69	1.88	2.13	2.38	2.63	2.75
F (number and size of holes)	4--.63	8--.63	8--.75	8--.75	12--.88	12--.88	12--1	16--1	16--1.13	20--1.13	20--1.25	28--1.25	32--1.50	36--1.50	44--1.50
G	6.00	7.50	9.50	11.75	14.25	17.00	18.75	21.25	22.75	25.00	29.50	36.00	42.75	49.50	56.00
J	4.69	4.69	4.69	4.69	4.69	4.69	5.63	5.63	6.38	6.38	6.38	7.56	7.56	8.31	9.88
L	2.00	2.00	2.00	2.00	2.00	2.00	2.44	2.44	2.84	2.84	2.84	3.47	3.47	3.94	5.06
Q	4.50	4.50	4.50	4.50	4.50	4.50	5.38	5.38	6.75	6.75	6.75	10.00	10.00	15.94	14.19
R	8.25	8.25	8.25	8.25	8.25	8.25	10.38	10.38	11.31	11.31	11.31	17.00	17.00	19.88	26.50
Turns to open	32	32	32	32	32	32	30	30	40	40	40	44	44	136	215
Actuator (see notes)	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-3S	MDT-3S	MDT-4S	MDT-4S	MDT-4S	MDT-5	MDT-5	MDT-5S	MDT-6S

\* Larger sizes available upon request.

+ All dimensions are in inches.

† +1/16" for 10" valves, and +1/8" for 12"-48" valves per Flange Standard ANSI B16.1.

**Dimensions - for Lineseal III® Valves Mechanical Joint by Flange (Class 125) Ends, 6"-20" Sizes.**



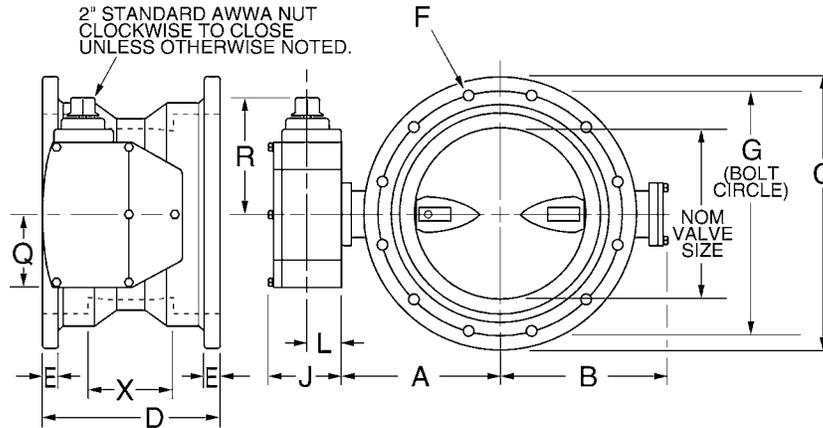
**Notes:** These dimensions are correct at time of publication but are not to be construed as certified drawings. Certified drawings available upon request. Actuator size subject to change based on actual pipeline conditions.

Dimension+	Nominal size							
	6"	8"	10"	12"	14"	16"	18"	20"
A	6.50	7.75	9.00	10.50	11.88	13.50	14.38	16
B	5.13	6.50	9.88	11.38	12.75	14.38	15.25	16.88
C	11.00	13.50	16.00	19.00	21.00	23.50	25.00	27.50
CC	11.00	13.25	15.56	17.94	20.31	22.56	24.69	27.09
D†	6.75	7.31	8.62	8.63	9.75	10.00	10.13	10.25
DD	4.25	4.31	4.62	4.63	5.75	6.00	6.13	6.25
E	1.06	1.13	1.25	1.25	1.38	1.44	1.56	1.69
EE	1.06	1.13	1.19	1.25	1.31	1.38	1.44	1.50
F (number and size of holes)	8--.75	8--.75	12--.88	12--.88	12--1.00	16--1.00	16--1.13	20--1.13
FF (number and size of holes)	6--.75	6--.75	8--.75	8--.75	10--.75	12--.75	12--.75	14.75
G	9.50	11.75	14.25	17.00	18.75	21.25	22.75	25.00
GG	9.50	11.75	14.00	16.25	18.75	21.00	23.25	25.50
J	4.69	4.69	4.69	4.69	5.63	5.63	6.38	6.38
L	2.00	2.00	2.00	2.00	2.44	2.44	2.84	2.84
Q	4.50	4.50	4.50	4.50	5.38	5.38	6.75	6.75
R	8.75	8.25	8.25	8.25	10.38	10.38	11.31	11.31
X	4.25	4.81	6.13	6.13	6.25	6.50	6.63	6.75
Turns to open	32	32	32	32	30	30	40	40
Actuator (see notes)	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-3S	MDT-3S	MDT-4S	MDT-4S

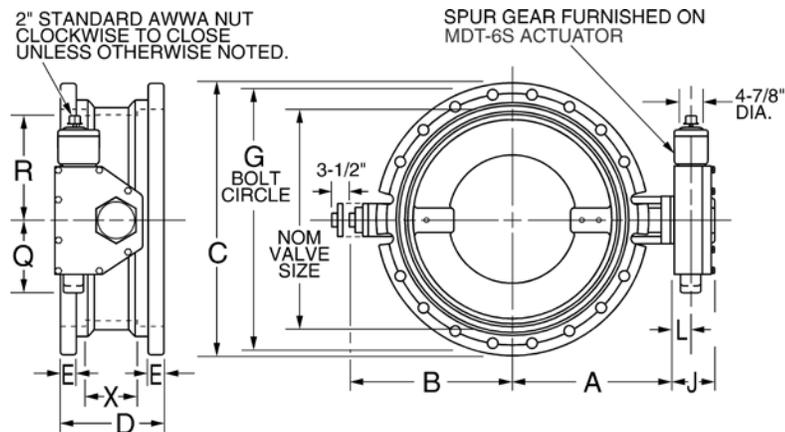
+ All dimensions are in inches.

Rev. 5-17 Shaded area indicates changes

### Dimensions - for Lineseal III® Valves M.J. Ends, 4"-20" Sizes.



### Dimensions - for Mueller Lineseal III® Butterfly Valves M.J. Ends, 24"-48" Sizes.



**Notes:** These dimensions are correct at time of publication but are not to be construed as certified drawings. Certified drawings available upon request. Actuator size subject to change based on actual pipeline conditions.

Dimension+	Nominal size													
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"
A	5.50	6.50	7.75	9.00	10.50	11.88	13.50	14.38	16.00	18.63	21.50	25.44	29.88	34.06
B	4.13	5.13	6.50	9.75	11.38	12.75	14.50	15.38	17.00	18.38	24.13	28.00	32.75	36.88
C	9.00	11.00	13.25	15.56	17.94	20.31	22.56	24.69	27.09	31.56	39.00	45.88	53.00	59.88
D	8.13	8.50	8.63	9.25	9.25	11.50	12.00	12.25	12.50	13.25	18.00	22.00	22.00	24.00
E	1.00	1.06	1.13	1.19	1.25	1.31	1.38	1.38	1.50	1.63	1.81	2.00	2.00	2.00
F (number and size of holes)	4--.75	6--.75	6--.75	8--.75	8--.875	10--.875	12--.875	12--.875	14--.875	16--.875	20--1.13	24--1.13	28--1.38	32--1.38
G	7.50	9.50	11.75	14.00	16.25	18.75	21.00	23.25	25.25	30.00	36.88	43.75	50.63	57.50
J	4.69	4.69	4.69	4.69	4.69	5.63	5.63	6.38	6.38	6.38	7.56	7.56	8.31	11.19
L	2.00	2.00	2.00	2.00	2.00	2.44	2.44	2.84	2.84	2.84	3.47	3.47	3.94	5.06
Q	4.50	4.50	4.50	4.50	4.50	5.44	5.44	6.75	6.75	6.75	10.13	10.13	15.94	18.56
R	8.25	8.25	8.25	8.25	8.25	10.38	10.38	11.31	11.31	11.31	17.00	17.00	19.88	26.50
X	3.12	3.50	3.63	4.25	4.25	4.50	5.00	5.25	5.50	6.38	10.00	14.00	14.00	16.00
Turns to open	32	32	32	32	32	30	30	40	40	40	44	44	136	215
Actuator (see notes)	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-2S	MDT-3S	MDT-3S	MDT-4S	MDT-4S	MDT-4S	MDT-5	MDT-5	MDT-5S	MDT-6S

+ All dimensions are in inches.

**Line seal III® Butterfly Valve Replacement Parts**

Catalog Part No.	Description	Material
BF100	Body	Cast iron ASTM A126 CL.B
BF101	Disc**	Cast iron ASTM A126, Class B with 316 Edge
BF102	Shaft	Stainless Steel Type 304 ASTM A-276
BF103	Squeeze pin	Stainless Steel Type 304 ASTM A-276
BF104	Bearing	Nylatron GS
BF105	Packing	Chevron V-Type
BF106	Key	Carbon Steel C-1045
BF107	Cover	Cast Iron ASTM A-48 Class 40
BF108	Lockwasher	Stainless Steel Type 304
BF109	Cap Screw	Stainless Steel Type 304
BF110	Seat	Buna N
BF111	Plug	Stainless Steel Type 304
BF112	Bearings	PTFE Lined, Fiberglass Backed
BF113	Disc	Ductile Iron ASTM A-536 Grade 65-45-12
BF114	Disc edge	Stainless Steel Type 316 ASTM A-240
BF115	Top stub shaft	Stainless Steel Type 304 ASTM A-276 (Standard) Stainless Steel Type 316 ASTM A-276
BF116	Bottom stub shaft	Stainless Steel Type 304 ASTM A-276 (Standard) Stainless Steel Type 316 ASTM A-276
BF117	Packing	Buna N
BF118	Bottom cover	Cast Iron ASTM A-48 Class 40
BF119	Cap screws	Carbon Steel
BF120	Squeeze pins	Stainless Steel Type 304 ASTM A-479
BF121	Thrust collar	Stainless Steel Type 420
BF122	Thrust collar shims	Bronze
BF123	Spring pin	Stainless Steel Type 420
BF124	O-ring	Buna N
BF125	Packing retainer	Nylon
BF126	Bearings	PTFE Lined, Fiberglass Backed
BF127	Disc	Ductile Iron ASTM A-536 Grade 65-45-12
BF128	Top stub shaft	Stainless Steel Type 304 ASTM A-276
BF129	Bottom stub shaft	Stainless Steel Type 304 ASTM A-276
BF130	Bottom cover	Cast Iron ASTM A-126 Class B
BF131	Bottom cover cap	Cast Iron ASTM A-126 Class B
BF132	Taper pins	Stainless Steel Type 630 ASTM A-564 Cond. H-1150
BF133	Lockwashers	Stainless Steel Type 304
BF134	Hex nuts	Stainless Steel Type 304
BF135	O-rings	Buna N
BF136	Thrust bearing stud	Stainless Steel Type 304
BF137	Thrust collar	Bronze ASTM B-505 Alloy C93200
BF138	Dowel pin	Alloy Steel
BF139	Bottom cover gasket	Blended Fiber, Cured Nitril Binder
BF140	O-ring	Buna N

\* Contact you Mueller representative for sizes larger than 48".  
\*\*3", 4", 6" is ASTM A-351 CF8M Stainless Steel.

