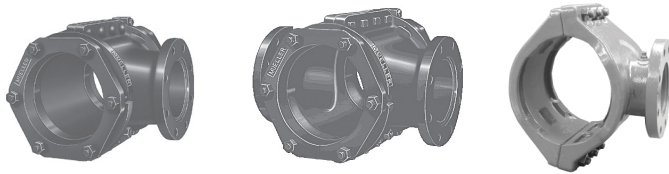
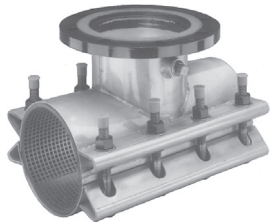


Mueller® Tapping Sleeves and Crosses



- Full range of Tapping Sleeves and Crosses to fit most types of pipe including cast iron, ductile iron, A-C, and cast iron O.D. PVC--Also outlet sealed Tapping Sleeves for cast iron O.D. PVC plastic pipe and all classes of ductile iron and cast iron pipe through Class D pit cast iron.
- Sizes range from 4"x4" to 24"x24".
- All sleeves have outlet flange with dimensions and drilling that comply with ANSI B16.1, class 125 and with MSS SP-60.
- Available with optional Mueller HP® Epoxy Coating A-C sleeves are coated with orange primer. T-28 sleeve has epoxy coating and 304SS nuts and bolts as standard.
- Maximum working pressures: see product listings.

Mueller Stainless Steel Tapping



- Sizes to fit iron pipe size PVC, C900 cast iron O.D. PVC, A-C, cast iron and ductile iron pipe.
- Sizes range from 4"x4" through 24"x12".
- Test plug standard.
- Fully passivated.
- Choice of FL or MJ integral outlet flange end connections
- "Waffle" 360° gasket with integral gap bridge.
- Maximum working pressures: see product listings.

Mueller Cut-In Sleeve and Valve



- Mueller Cut-In Sleeve and Valve are used to install a gate valve in an existing cast iron, ductile iron, or cast iron O.D. PVC plastic pipe main when water interruption is permissible.
- Cut-In Sleeves are marked with length of pipe that is to be cut from main.
- Mechanical Joint ends speed installation.

Mueller Tapping Valves



- Choice of Resilient Wedge or IBBM types.
- Sizes 2" through 48" Resilient Wedge 14" - 24" IBBM.
- One end flanged with alignment lip to attach to Tapping Sleeve, other end available with a variety of end connections with a special flange to permit attachment of Drilling Machine and Adapter.
- Meets all applicable parts of ANSI/AWWA C500, C509, or C515 Standards.
- Non-rising stem (NRS).
- 2" - 12" RWGV: maximum working pressure 350 psig (2400 kPa/24 barg) test pressure 700 psig (4800 kPa/48 barg)
- 14" - 48" RWGV: maximum working pressure 250 psig (1725 kPa/17 barg) test pressure 500 psig (3450 kPa/35 barg)
- IBBM: maximum working pressure 14"-24" 150 psig (1100 kPa/11 barg) - test pressure 300 psig (2100 kPa/21 barg).
- Mueller valves are designed for potable water applications

Mueller Split Repair Sleeves

- Heavy cast iron construction.

- Long length for support and rigidity.



- 4" thru 24" sizes.
- 4" - 12" sizes--250 psig (1725 kPa/17 barg) maximum working pressure .
- 14" - 24" sizes--150 psig (1100 kPa/11 barg) maximum working pressure.



WARNING: Use on A-C pipe, which contains a known carcinogen, requires appropriate protective equipment and procedures be employed.

Rev. 5-18 Shaded area indicates changes

- Catalog number
T-2361-16 mechanical joint x flanged ends (with mechanical joint unassembled accessories)
T-2361-19 mechanical joint x flanged ends (less mechanical joint accessories)
- Sizes - 3", 4", 6", 8", 10", 12"
- Meets or exceeds all applicable requirements of ANSI/AWWA C515 Standard, UL 262 Listed, FM 1120/1130 Approved, and certified to ANSI/NSF 61 & 372
- Flanged end drilling complies with ASME/ANSI B16.1 Class 125 and with MSS SP-60
- Mechanical joint outlet complies with ANSI/AWWA C111 Standard
- Iron body with nominal 10 mils Mueller Pro-Gard™ Fusion Bonded Epoxy Coated interior and exterior surfaces
- Epoxy coating meets or exceeds all applicable requirements of ANSI/AWWA C550 Standard
- Iron wedge, symmetrical and fully encapsulated with molded rubber; no exposed iron
- Non-rising stem (NRS)
- Triple O-ring seal (2 above the thrust collar and 1 below)
- 2" square wrench nut - open left or open right
- 350 psig (2400 kPa/24 barg) maximum working pressure, 700 psig (4800 kPa/48 barg) static test pressure
- UL Listed/FM Approved 350 psig (2400 kPa/24 barg)
- Designed for potable water applications



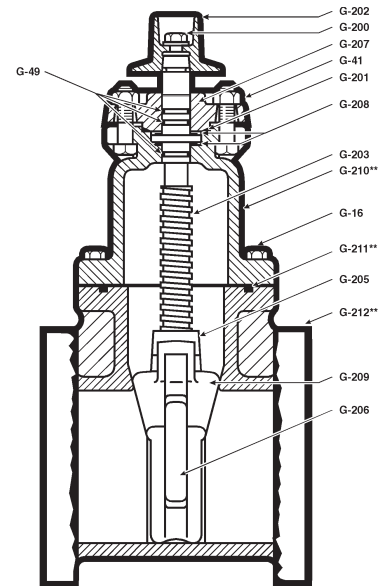
T-2361-16 shown
M.J. accessories shipped unassembled

Options

- Position indicators
- Stainless steel stem: type 304 and type 316
- EPDM disc and o-rings
- Low zinc, silicon bronze ASTM B98-C66100/H02 stem
- Handwheel

Resilient wedge gate valve parts

Catalog Part Number	Description	Material	Material standard
G-16	Bonnet bolts and nuts	316 Stainless steel	ASTM F593 (bolt) ASTM F594 (nut)
G-41	Stuffing box bolts and nuts	316 Stainless steel	ASTM F593 (bolt) ASTM F594 (nut)
G-49	Stem o-rings (3)	Nitrile	ASTM D2000
G-200	Wrench nut cap screw	316 Stainless steel	ASTM F593
G-201	Stuffing box seal	Nitrile	ASTM D2000
G-202	Wrench nut	Ductile Iron	ASTM A536 ▼
G-203	Stem	Bronze	ASTM B138
G-204	Handwheel (not shown)	Cast Iron +	ASTM A126 CL.B
G-205	Stem nut	Bronze	ASTM B584
G-206	Guide cap bearings	Acetal	-
G-207	Stuffing box with dirt seal	Ductile Iron Rubber	ASTM A536 ▼ ASTM D2000
G-208	Anti-friction washer (2)	Acetal	-
G-209	Wedge Rubber encapsulated	Ductile Iron* SBR	ASTM A536 ▼ ASTM D2000
G-210**	Bonnet	Ductile Iron	ASTM A536 ▼
G-211**	Bonnet O-ring ***	Nitrile	ASTM D2000
G-212**	Body	Ductile Iron	ASTM A536 ▼



* Fully encapsulated in molded rubber with no iron exposed.

** Previous to 1999 these parts on 4"-12" valves were designed with a gasket instead of an O-ring and with additional bolts. Confirm the type of seal when ordering a replacement gasket or O-ring.

▼ Material strength ASTM A536 65-45 minimum

^ Per ANSI/AWWA C111 working pressure above 250psi requires the use of a special gasket rated for higher pressure.

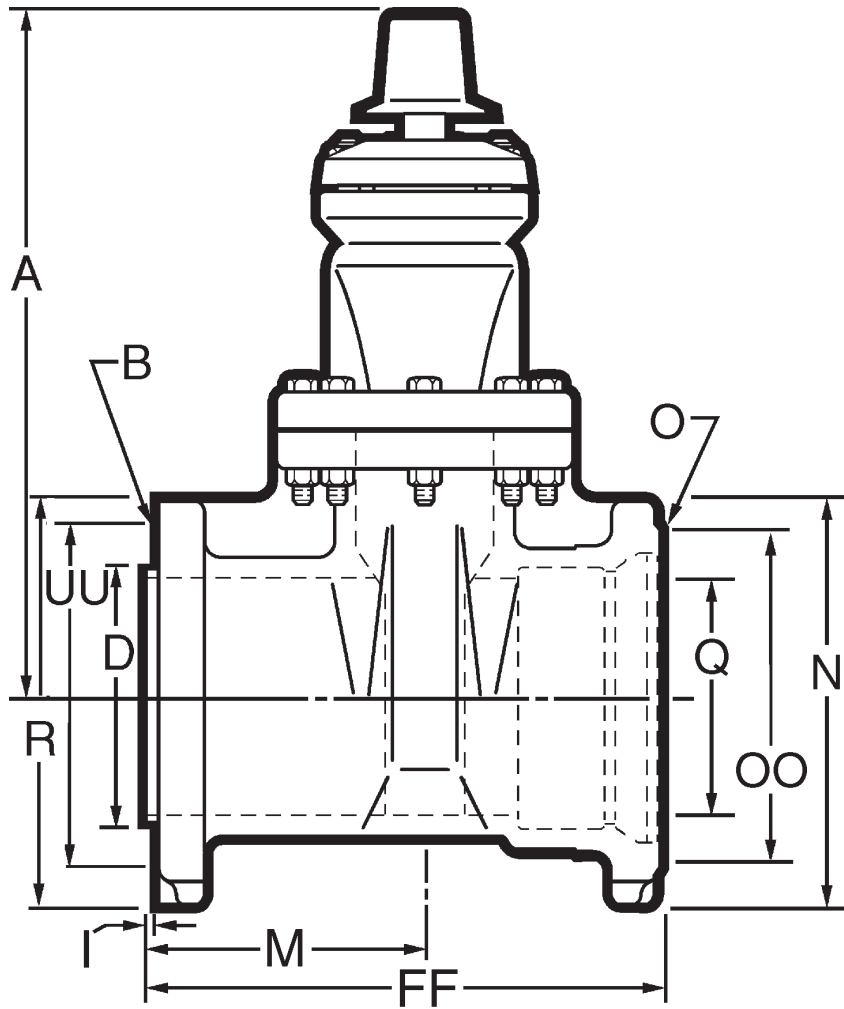
+ Manufacturer's option to change material to ductile iron ASTM A536

++ 3" valves meet or exceed all applicable requirements of ANSI/AWWA C509 standard

*** 3" valves use a bonnet gasket

3"-12" T-2361 RESILIENT WEDGE TAPPING VALVES - M.J. X FL. ENDS

Shaded area indicates change Rev. 5-18



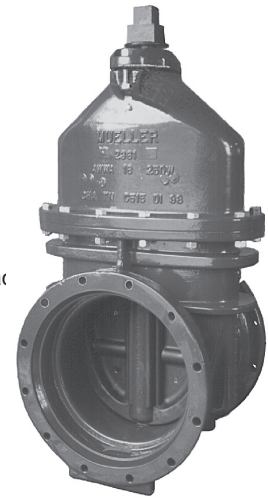
Dimensions

Dimensions*	Nominal Size					
	3"	4"	6"	8"	10"	12"
A	12.38	14.19	18.0	21.50	25.50	28.62
R	7.50	9.00	11.00	13.50	16.00	19.00
D	3.97	5.00	7.00	9.00	11.00	13.00
I	0.18	0.18	0.25	0.25	0.25	0.25
M	4.73	6.24	6.75	7.75	8.52	7.25
UU (bolt circle diameter)	6.19	7.50	9.50	11.75	14.25	17.00
N	7.50	9.12	11.12	13.38	15.68	17.94
B (number and size of holes for FL)	4--.75	8--.75	8--.88	8--.88	12--1.00	12--1.00
Q (bore)	3.30	4.30	6.30	8.30	10.30	12.30
FF	8.99	9.82	11.43	12.46	14.31	14.87
O (number and size of holes for MJ)	4--.75	4--.88	6--.88	6--.88	8--.88	8--.88
OO (bolt circle diameter)	6.19	7.50	9.50	11.75	14.00	16.25
Turns to open	11	14	20.5	26.5	33	38.5
Weight*	66	82	138	200	302	400

* All dimensions are in inches. All weights include accessories are in pounds and approximate.

Rev. 7-18 Shaded area indicates changes

- Catalog number--
T-2361-16 mechanical joint x flanged ends (with mechanical joint unassembled accessories)
T-2361-19 mechanical joint x flanged ends (less mechanical joint accessories)
- Size-- 14", 16"††, 18", 20", 24", 30", 36", 42", 48"
- Meets or exceeds all applicable requirements of ANSI/AWWA C515 Standard, UL 262 Listed, FM 1120/1130 Approved, and certified to ANSI/NSF 61 & 372
- Flanged end drilling complies with ASME/ANSI B16.1 Class 125 and with MSS SP-60
- Mechanical joint end complies with ANSI/AWWA C111 Standard
- Ductile iron body with nominal 10 mils Mueller Pro-Gard™ Fusion Bonded Epoxy Coated interior and exterior surface and 48" valves coated with HP epoxy
- Epoxy coating meets or exceeds all applicable requirements of ANSI/AWWA C550 Standard
- Ductile iron wedge, symmetrical and fully encapsulated with molded rubber; no exposed iron
- Non-rising stem (NRS)
- Triple O-ring seal (2 above the thrust collar and 1 below)
- 2" square wrench nut – open left or open right 30"-48" require a Spur Gear or Beval Gear
- 250 psig (1725 kPa/17 barg) maximum working pressure, 500 psig (3400 kPa/34 barg) static test pressure
- 14" and 16" UL Listed: FM Approved 250 psig (1725 kPa/17 barg)
- 18", 20" and 24" sizes – UL Listed/FM Approved: 175 psig (1200 kPa/12 barg); FM approved 250 psig (1725 kPa/ 17 barg)
- Designed for potable water applications



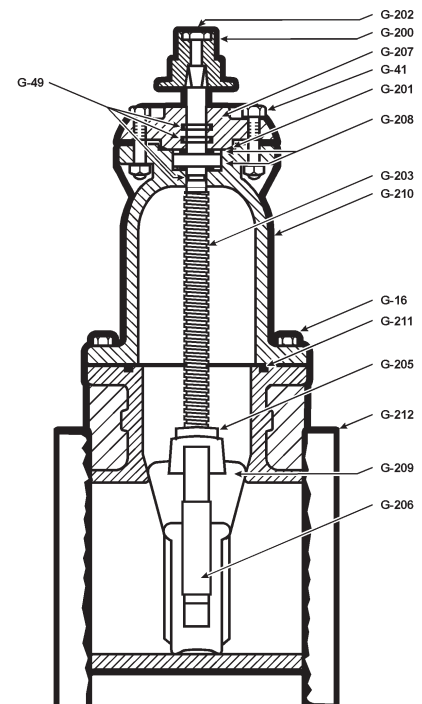
T-2361-16 shown
M.J. accessories shipped unassembled

Options

- Low zinc, silicon bronze ASTM B98-C66100/H02 stem; 14"-16" and ASTM B763-C99500; 18"-48"
- Bypass 18"-48" (2" on 18"-20"; 2.5" on 24"; 3" on 30"-48")
- Bypass 3" on 30"-36"; 4" on 42"-48"
- Position indicators
- EPDM disc and o-rings (14"-16" option, 18"-48" standard)
- Spur or Beval Geared actuator
- Stainless steel stem: Type 304, Type 316

Resilient wedge gate valve parts

Catalog Part Number	Description	Material	Material standard
G-16	Bonnet bolts and nuts***	316 Stainless steel	ASTM F593 (bolt) ASTM F594 (nut)
G-41	Stuffing box bolts and nuts***	316 Stainless steel	ASTM F593 (bolt) ASTM F594 (nut)
G-49	Stem o-rings (3)†	Nitrile †	ASTM D2000
G-200	Wrench nut cap screw	316 Stainless steel	ASTM F594
G-201	Stuffing box o-ring seal†	Nitrile †	ASTM D2000
G-202	Wrench nut	Cast Iron +++	ASTM A126 CL.B
G-203	Stem	Bronze	ASTM B138**
G-204	Handwheel (not shown)	Cast Iron +++	ASTM A126 CL.B
G-205	Stem nut	Bronze	ASTM B62
G-206	Guide cap bearings	Acetal	-
G-207	Stuffing box	Ductile Iron	ASTM A536 ▼
G-208	Anti-friction washer (2)	Acetal	-
G-209	Wedge Rubber encapsulated	Ductile Iron* SBR†	ASTM A536 ▼ ASTM D2000
G-210**	Bonnet	Ductile Iron	ASTM A536 ▼
G-211**	Bonnet o-ring†	Nitrile †	ASTM D2000
G-212**	Body	Ductile Iron	ASTM A536 ▼



* Fully encapsulated in molded rubber with no iron exposed

**18" - 48" ASTM B584

†18" - 48" EPDM standard

††Must use 1/2" under size shell cutter

+++ Manufacturers option to change material to Ductile Iron ASTM A536

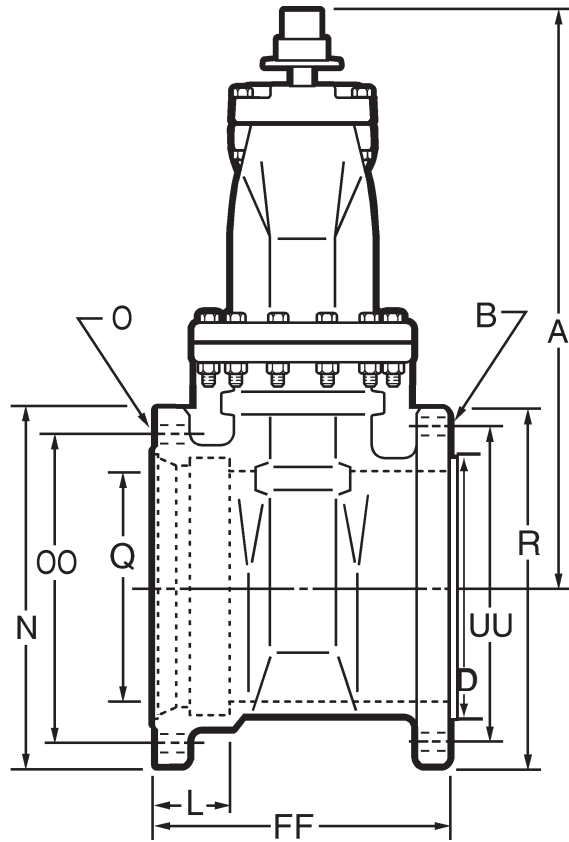
▼ Material strength ASTM A536 65-45 minimum

14" - 48" T-2361 RESILIENT WEDGE GATE VALVE - D.I. - M.J. X FL. ENDS



12.15

Shaded area indicates change Rev. 2-16



Dimensions

Dimensions*	Nominal Size								
	14"	16"	18"	20"	24"	30"†	36"†	42"†	48"†
A	32.75	37.88	44.19	48.25	53.88	See A for spur or bevel gear			
D	15.25	17.25	19.47	21.47	25.47	30.94	36.94	43.44	49.44
L	3.50	3.50	3.50	3.50	3.50	4.00	4.00	4.00	4.00
N	20.25	22.56	24.76	27.25	31.51	39.53	46.41	53.53	60.41
O (number and size of holes for MJ)	10--.88	12--.88	12--.88	14--.88	16--.88	20--1.25	24--1.25	28--1.38	32--1.38
Q (bore)	14.38	16.00	18.38	20.38	24.38	30.38	36.38	42.38	48.38
OO (bolt circle diameter for MJ)	18.75	21.00	23.25	25.50	30.00	36.88	43.75	50.62	57.50
R	21.00	23.50	25.00	27.50	32.00	38.75	46.00	53.00	59.50
UU (bolt circle diameter for FL)	18.75	21.25	22.75	25.00	29.50	36.00	42.75	49.50	56.00
FF	17.41	17.91	19.25	19.75	21.75	29.75	33.75	40.38	43.79
B	12--1.12	16--1.12	16--1.25	20--1.25	20--1.38	28--1.38	32--1.63	36--1.63	44--1.63
A - spur gear	38.50	43.58	49.41	53.01	59.51	70.81	83.08	97.84	109.70
A - bevel gear**	34.00	37.38	44.50	47.69	54.06	64.93	77.19	90.75	102.61
Turns to open (without gearing)	43.5	48	57	63	75	-	-	-	-
Turns to open (spur gearing)	178	201	234	258	308	381	455	524	596
Turns to open (bevel gearing)	174	196	228††	252††	300††	372	444	524	596
Weight*	655	875	1226	1500	2375	5100	8400	13300	19700

*All dimensions are in inches. All weights are in pounds and are approximate. Weights for 30"-48" valves are with gearing; for all others without gearing.

**Center line of operating nut to center line of valve.

†Spur or Bevel Gear must be used with 30", 36", 42", 48" valves.

††Turns shown for Master Gear bevel gearing. Valves with Limitorque bevel gearing: 18" - 227, 20" - 251, 24" - 300".

To order Tapping Valves specify:

Quantity

If more than one size, specify quantity of each

Size

Nominal size of valve

Catalog number

Direction of opening

Specify open left (counter-clockwise) or open right (clockwise). Wrench nuts on valves that open to the right are painted red for identification purposes.

Method of operation

Non-rising valves are available with either a 2" square wrench nut or a handwheel. Handwheels are standard on flanged x flanged valves; all other NRS valves have a 2" square wrench nut as standard (24" also has bevel gearing). When ordering NRS valves, specify wrench nut or handwheel.

Special requirements

Contact MUELLER Customer Service Center with special requirements such as special paints or coatings, low zinc bronze stems, stainless steel fasteners etc.

Tapping Valve Repair Parts

To order repair parts specify size of valve, direction of opening, year date on body, catalog part number, catalog number of valve if known, and type of ends if ordering body.
