# SERIES 2500 TAPPING VALVES & SERIES 2800 TAPPING SLEEVES BY AMERICAN FLOW CONTROL®

10



THE RIGHT WAY



### FEATURES

AMERICAN provides tapping valves for sizes 4"- 48" rated at 250 psig pressure.

Tapping valves 4"- 48" are furnished with an alignment ring on the end flange which fits into a recess on the AMERICAN Flow Control manufactured tapping sleeve. This fit helps assure proper alignment between the sleeve and valve, which permits passage of the cutter during the tapping procedure.

#### SAMPLE SPECIFICATION

Tapping valves shall be resilient wedge type with bodies and bonnets made of ductile iron for 250 psig working pressure.

The alignment ring dimensions of the tapping valve flange conform to MSS SP 60 to help ensure true alignment of the valve with the tapping sleeve. The outlet end of the valve shall be the mechanical joint type.

All tapping valves shall include a minimum 3/8" NPT pipe plug on the bonnet of the valve body to aid in the field testing of the valve. The Series 2500 is constructed of ductile iron and rated at 250 psig. The Series 2500 4"- 48" will accept full-size shell cutters.

All wedges shall be made from ductile iron and be fully encapsulated with EPDM rubber.

All wedges shall be provided with guide covers.

All interior and exterior ferrous surfaces shall be protected against corrosion by fusion-bonded epoxy coating. The coating shall be applied prior to assembly to assure coverage of all exposed areas, including bolt holes.

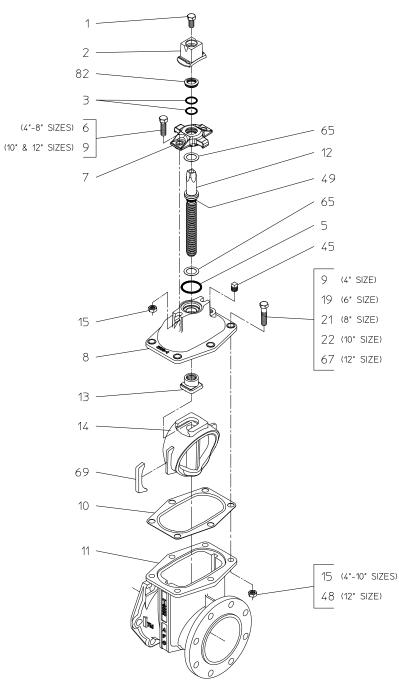
Tapping valves shall be AMERICAN 4"- 48" Series 2500 Ductile Iron with a 250 psig rating (accepts full-size shell cutter).



Notes:

- 1. 4"- 48" valves meet or exceed requirements of ANSI/AWWA C515.
- 2. 4"- 48" valves have 250 psig ANSI/AWWA rated working pressure.
- 3. 4"- 24" may be ordered in configurations that are UL Listed and FM Approved up to 250 psig rated working pressure.
- 4. Fusion-bonded epoxy coating meets or exceeds requirements of ANSI/AWWA C550.
- 5. Mechanical joint ends are in accordance with ANSI/AWWA C111/A21.11 and MSS SP-113.
- 6. Bolt patterns of Class 125 flanged ends are in accordance with ANSI/AWWA C110/A21.10 (ASME B16.1 Class 125).
- 7. Raised pilot dimensions of flanged ends on tapping valves are in accordance with MSS SP-60.
- 8. Tapping valves are supplied with flanged-end hardware, including bolts, nuts, ring-type gasket and flange protection kit.
- The flange-end bolting is furnished in the same material as specified for the valve body bolting.
- 9. 4"- 48" valves are Certified to NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.

### STANDARD 4"- 12" 2500 NRS PARTS LIST



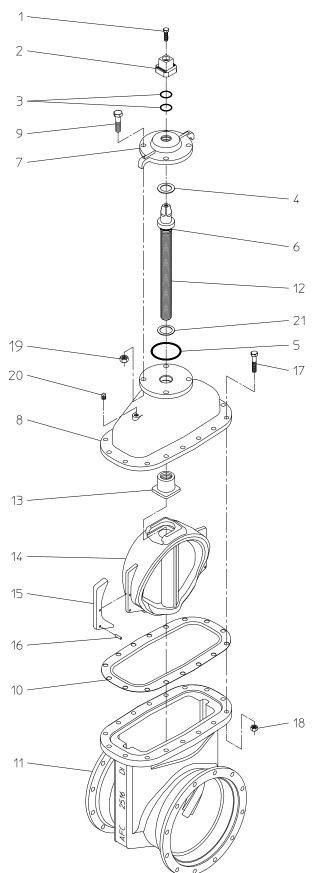
REF NO.	DESCRIPTION	MATERIAL	
1	Hex Head Bolt, 5/8-11 x 1"	Stainless Steel	
2	Operating Nut, 2" Square	Ductile Iron	
3	O-ring	Rubber	
5	Stuffing Box Gasket	Rubber O-ring	
6	Hex Head Bolt, 5/8-11 x 1-3/4"	Stainless Steel	
7	Stuffing Box	Ductile Iron	
8	Bonnet	Ductile Iron	
9	Hex Head Bolt, 5/8-11 x 2"	Stainess Steel	
10	Bonnet Gasket	Rubber	
11	Body	Ductile Iron	
12	Stem	Bronze	
13	Wedge Nut	Bronze	
14	Resilient Wedge	Ductile Iron, Encapsulated with EPDM Rubber	
15	Hex Nut, 5/8-11	Stainless Steel	
19	Hex Head Bolt, 5/8-11 x 2-1/4"	Stainless Steel	
21	Hex Head Bolt, 5/8-13 x 2-1/2"	Stainless Steel	
22	Hex Head Bolt, 5/8-13 x 2-3/4"	Stainless Steel	
45	Square Head Pipe Plug, 3/8" NPT	Stainless Steel	
48	Hex Nut, 3/4-10	Stainless Steel	
49	O-ring	Rubber	
65	Thrust Washer	Stainless Steel	
67	Hex Head Bolt, 3/4-10 x 3"	Stainless Steel	
69	Wedge Cover	Polymer	
82	Debris Seal	Rubber	



## STANDARD 14"- 24" 2500 NRS PARTS LIST

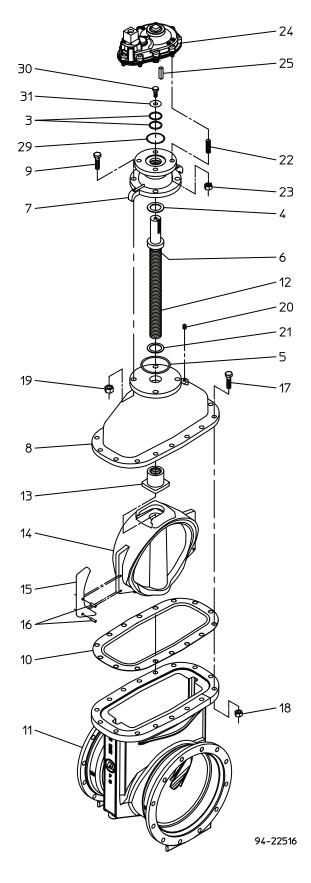
Ref	Description	Material	
1	Hex head bolt	Stainless steel	
<u> </u>			
2	Wrench nut	Ductile iron	
3	O-ring	Rubber	
4	Upper thrust washer	Delrin	
5	Stuffing box gasket	Rubber O-ring	
6	O-ring	Rubber	
7	Stuffing box	Ductile iron	
8	Bonnet	Ductile iron	
9	Hex head bolt	Stainless steel	
10	Throat flange gasket	Rubber	
11	Valve body	Ductile iron	
12	Stem	Bronze (Stainless steel optional)	
13	Wedge nut	Bronze	
14	Resilient wedge	Ductile iron with EPDM rubber	
15	Wedge cover	Polymer	
16	Wedge cover pin	Polymer	
17	Hex head bolt	Stainless steel	
18	Hex nut	Stainless steel	
19	Hex nut	Stainless steel	
20	Pipe plug	Stainless steel	
21	Lower thrust washer	Delrin	

Construction shown is with mechanical joint end connection and is illustrative only.



# STANDARD 14"- 18" NRS PARTS LIST WITH GEARING

Ref	Description	Material	
3	O-ring	Rubber	
4	Upper thrust washer	Delrin	
5	Stuffing box gasket	Rubber	
6	O-ring	Rubber	
7	Stuffing box	Ductile iron	
8	Bonnet	Ductile iron	
9	Hex HD Bolt	Stainless steel	
10	Throat flange gasket	Rubber	
11	Valve body	Ductile iron	
12	Stem	Bronze (Stainless steel optional)	
13	Wedge nut	Bronze	
14	Resilient wedge	Ductile iron with EPDM rubber	
15	Wedge cover	Polymer	
16	Wedge cover pin	Polymer	
17	Hex head bolt	Stainless steel	
18	Hex nut	Stainless steel	
19	Hex nut	Stainless steel	
20	Pipe plug	Stainless steel	
21	Lower thrust washer	Delrin	
22	Stud	Stainless steel	
23	Hex nut	Stainless steel	
24	Gear actuator assembly	Rotork/AFC Gearing (2:1)	
25	Кеу	Hardened steel	
29	Actuator gasket	Rubber O-ring	
30	Hex head bolt	Plated steel	
31	Washer	Plated steel	



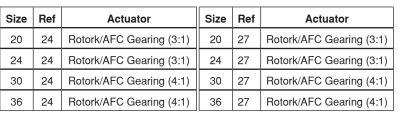
Construction shown is with mechanical joint end connection and is illustrative only.

Valve shown with spur gear actuator for illustrative purposes.

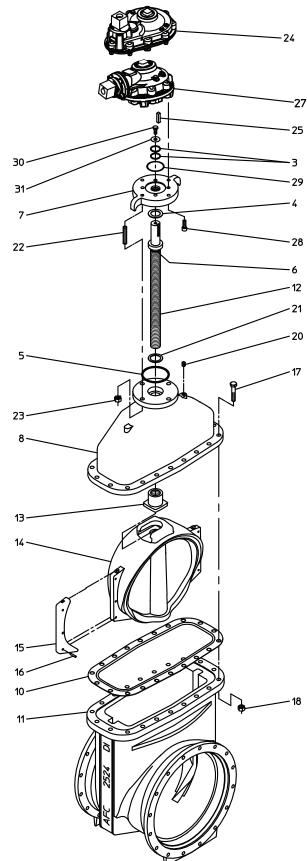


## STANDARD 20"- 36" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material
3	O-ring	Rubber
4	Upper thrust washer	Delrin
5	Stuffing box gasket	Rubber
6	O-ring	Rubber
7	Stuffing box	Ductile iron
8	Bonnet	Ductile iron
10	Throat flange gasket	Rubber
11	Valve body	Ductile iron
12	Stem	Bronze (Stainless steel optional)
13	Wedge nut	Bronze
14	Resilient wedge	Ductile iron with EPDM rubber
15	Wedge cover	Polymer
16	Wedge cover pin	Polymer
17	Hex head bolt	Stainless steel
18	Hex nut	Stainless steel
20	Pipe plug	Series stainless steel
21	Lower thrust washer	Delrin
22	Stud	Stainless steel
23	Hex nut	Stainless steel
24	Spur gear actuator	See table below
25	Key	Hardened steel
27	Bevel gear actuator	See table below
28	Socket head capscrew	Stainless steel
29	Actuator gasket	Rubber
30	Hex head bolt	Plated steel
31	Washer	Plated steel

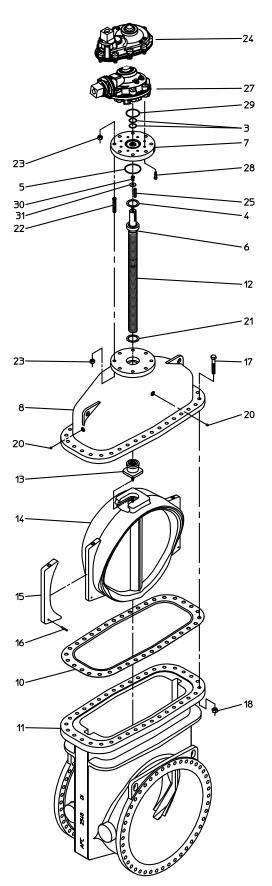


Construction shown is with mechanical joint end connection and is illustrative only. Illustration shown with bevel and spur gear actuator.



# STANDARD 42"- 48" NRS PARTS LIST WITH BEVEL/SPUR GEARING

Ref	Description	Material	
3	O-ring	Rubber	
4	Upper thrust washer	Delrin	
5	Stuffing box gasket	Rubber	
6	O-ring	Rubber	
7	Stuffing box	Ductile iron	
8	Bonnet	Ductile iron	
10	Throat flange gasket	Rubber	
11	Valve body	Ductile iron	
12	Stem	Bronze (Stainless steel optional)	
13	Wedge nut	Bronze	
14	Resilient wedge	Ductile iron with EPDM rubber	
15	Wedge cover	Polymer	
16	Wedge cover pin	Polymer	
17	Hex head bolt	Stainless steel	
18	Hex nut	Stainless steel	
20	Pipe plug	Series stainless steel	
21	Lower thrust washer	Delrin	
22	Stud	Stainless steel	
23	Hex nut	Stainless steel	
24	Spur gear actuator	Rotork/AFC Gearing (8:1)	
25	Кеу	Hardened steel	
27	Bevel gear actuator	Rotork/AFC Gearing (8:1)	
28	Socket head capscrew	Stainless steel	
29	Actuator gasket	Rubber	
30	Hex head bolt	Plated steel	
31	Washer	Steel	
32	Handwheel	Steel	



Construction shown is with flanged joint end connection and is illustrative only.

Illustration shown with bevel and spur gear actuator.



### **FEATURES**

AMERICAN Flow Control offers ductile iron tapping sleeves in sizes 4" x 4" through 24" x 24". AMERICAN tapping sleeves are designed to provide an efficient means of connecting branch piping to existing lines without interrupting water service in those lines.

The Series 2800 is available in sizes  $4" \times 4"$  through 24" x 24" with mechanical joint ends for use on cast iron or ductile iron pipe and  $4" \times 4"$  through 12" x 12" with mechanical joint ends for use on A-C pipe.

The Series 2800 sleeves feature full-length, heavyduty ductile iron construction for durability and strength. Their compact construction makes them lighter and easier to handle. They are made of ductile iron, which has twice the strength of most gray cast-iron sleeves with a rated working pressure of 250 psig.

#### SAMPLE SPECIFICATION

Tapping sleeves shall be of ductile iron construction meeting ASTM A536. Side flange seals shall be O-ring type of either round, oval or rectangular cross-sectional shape.

All sleeves to include the end joint accessories and split glands necessary to assemble sleeve to pipe. No

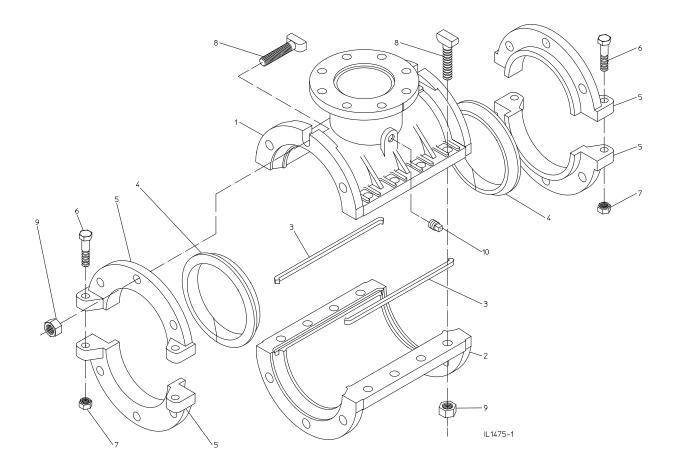
It is recommended that the tapping sleeve and tapping valve be manufactured by the same manufacturer to help achieve proper fit of the alignment ring on the tapping valve with the recess on the tapping sleeve. special tools are required other than a standard socket wrench.

Flange end pilot dimensions to be in compliance with MSS-SP-60.

WARNING: Use only water to test the tapping valve and sleeve assembly. Under no circumstance should air ever be used to conduct this test. Testing with air could result in serious injury or death.



## 4"- 12" & 16"\* 2800 PARTS LIST

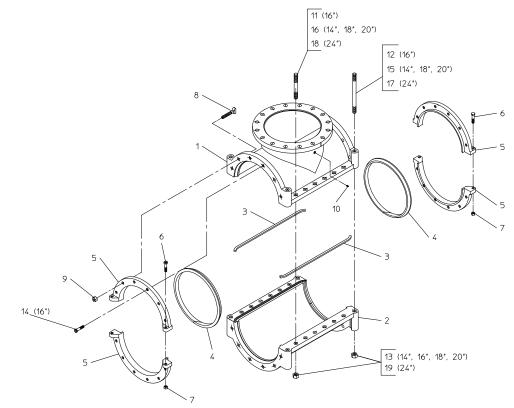


Ref No.	Description	Material		Quantity						
		Material	4"	6"	8"	10"	12"	16"*		
1	Tapping Sleeve Front	Cast Ductile Iron	1	1	1	1	1	1		
2	Tapping Sleeve Back	Cast Ductile Iron	1	1	1	1	1	1		
3	Side Gasket	Rubber	2	2	2	2	2	2		
4	MJ End Gasket	Rubber	2	2	2	2	2	2		
5	MJ Split Gland Half	Cast Ductile Iron	4	4	4	4	4	4		
6	Hex Head Bolt 1/2-13	Plated Steel	-	-	4	-	4	-		
6	Hex Head Bolt 5/8-11	Plated Steel	4	4	-	4	-	4		
7	Hex Nut 1/2-13	Plated Steel	-	-	4	-	4	-		
7	Hex Nut 5/8-11	Plated Steel	4	4	-	4	-	4		
8	T-Head Bolt 3/4-10	Cor-Ten Steel	14	20	20	26	26	38		
9	T-Head Nut 3/4-10	Cor-Ten Steel	14	20	20	26	26	38		
10	SQ Head Pipe Plug 1/2 NPT	Bronze	1	1	1	1	1	1		

\* Sizes 16" x 4" through 16" x 12"



## 14", 16"\* & 18"- 24" 2800 PARTS LIST



Ref No.	Description	Material	Quantity					
nei NO.			14"	16x16	18"	20"	24"	
1	Tapping Sleeve Front	Cast Ductile Iron	1	1	1	1	1	
2	Tapping Sleeve Back	Cast Ductile Iron	1	1	1	1	1	
3	Side Gasket	Rubber	2	2	2	2	2	
4	MJ End Gasket	Rubber	2	2	2	2	2	
5	MJ Split Gland Half	Cast Ductile Iron	4	4	4	4	4	
6	Hex Head Bolt 3/4-10 x 4-1/2	Plated Steel	4	-	4	4	4	
6	Hex Head Bolt 5/8-11 x 3	Plated Steel	-	4	-	-	-	
7	Hex Nut 3/4-10	Plated Steel	4	-	4	4	4	
7	Hex Nut 5/8-11	Plated Steel	-	4	-	-	-	
8	T-Head Bolt 3/4-10	Cor-Ten Steel	20	20	24	28	32	
9	T-Head Nut 3/4-10	Cor-Ten Steel	20	20	24	28	32	
10	SQ Head Pipe Plug	Stainless Steel	1	1	1	1	1	
11	Hex Head Bolt 1-8 x 4	Plated Steel	-	12	-	-	-	
12	Hex Head Bolt 1-8 x 13	Plated Steel	-	4	-	-	-	
13	Hex Nut 1-8	Plated Steel	See Note 1	16	See Note 1	See Note 1	-	
14	Hex Head Bolt 3/4-10 x 3-1/4	Cor-Ten Steel	-	4	-	-	-	
15	Stud 1-8 x 11	Plated Steel	4	-	4	4	-	
16	Stud 1-8 x 5-1/2	Plated Steel	See Note 1	-	See Note 1	See Note 1	-	
17	Stud 1-1/4 - 8 x 11	Plated Steel	-	-	-	-	4	
18	Stud 1-1/4 - 8 x 6	Plated Steel	-	-	-	-	See Note 1	
19	Hex Nut 1-1/4-8	Plated Steel	-	-	-	-	See Note 1	

\* Size 16" x 16" only

Notes:

1. Quantity varies by size.

#### NOTES



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Series 2800 Tapping Sleeve Product Information

Product literature may become outdated. AMERICAN is not responsible for out-of-date information, errors or omissions. Please contact AMERICAN for the most current product information.