



2026

PRODUCT CATALOG
WATERWORKS SPECIALTY PRODUCTS

CALL OUR SALES TEAM
877.504.1507

Product	Page(s)
A Keys and Tools	
Double Socket Ratchet Wrenches	A-1
Double Socket Ratchet Wrenches, Pivoting Handle	A-2
Manhole Cover Hooks	A-3
Hydrant Wrenches	A-4
Hydrant Wrench, Adjustable	A-5
Hydrant Wrench, Adjustable Storz	A-6
Outside Diameter Tapes	A-7
Handwheels for 2" Nuts	A-7
Main Valve Keys	A-8
Curb Box Rods	A-9
Curb Wrenches and Keys	A-9 to A-10
Pentagon Hand Keys	A-12
Valve and Curb Key Kits	A-13 to A-14
Soil Probe Rods	A-15
KnuckleSAVER™ 3-in-1 Flaring Tools	A-16
Shutoff Tool, for Polyethylene Water Tubing	A-16
Meter Wrench	A-17
Valve and Curb Box Cleaners	A-17
Distance Measuring Wheels	A-18
B Curb and Valve Box Products	
Valve Box Risers	B-1
"Rite-Hite" Adapters	B-2
Valve Box Lids	B-3
Valve Box Alignment Device	B-4
Curb Box Lids, Repair	B-5
Curb Box Lids	B-6
Service Box Extensions	B-6
C Joint Restraint Products	
Tie-Lugs	C-1
Tie-Bolts	C-1
Socket Clamps	C-2
Flange Lugs	C-3 to C-4
D Products for Corrosive Soils	
Polyethylene Encasement Tubing, "Polywrap"	D-1 to D-3
V-Bio® Enhanced Polyethylene Encasement	D-2
Polywrap Tape	D-3
Zinc Anode Caps	D-3 to D-4
Warning Tapes, Detectable and Non-Detectable	D-5 to D-6
Mechanical Joint Accessories	D-7
Mechanical Joint Accessory Packs	D-8
E Meter Box and Manhole Lids, Couplings, and Flanges	
Note: Meter Box and Manhole Lids section provided in our brochure format	
Data Sheet: Composite and Polymer Meter Box Lids	E-2
Polymer Meter Pit Frames	E-3 to E-5
Composite Lids for Coiled Pit Setters	E-6
Data Sheet: Counterbores for Through-the-Lid Antenna Mounting	E-7
Data Sheet: Neptune Counterbores, Blue Color Lids, and Custom Lid Options	E-8
Data Sheet: Antenna Mounting	E-9
Data Sheet: Lid Fastening Styles	E-10
Composite Oval Remote Antenna Boxes	E-11 to E-12
10" x 6.5" Polymer Yokebox Lids	E-13 to E-15
Meter Pit Insulating Discs	E-16
Ductile Iron Meter Box Covers	E-16
Order Form: Field Survey Form	E-17

Product	Continued from the previous page . . .	Page(s)
Chart: All Composite and Polymer Lids marked "WATER METER"		E-18 to E-28
Data Sheet: Proof Testing Per AASHTO M-306		E-29
Data Sheet: Composite Manhole Lids		E-30
Composite Manhole Frame and Cover Assemblies, 21-1/2" Clear Opening		E-31 to E-32
Composite Manhole Frame and Cover Assemblies, Full Clear Opening		E-33 to E-39
Additional Security for Meter and Manhole Lids		E-40
Composite Manhole Frame and Covers, for 25-1/2" x 1-1/4" Covers		E-41 to E-42
Composite Manhole Frame and Covers, for 23-3/4" x 1" Covers		E-43 to E-44
Chart: All Composite and Polymer Lids marked "SANITARY SEWER"		E-45 to E-46
Meter Adapters		E-49
Meter Couplings		E-50
Meter Flanges		E-50
Cast Iron Meter Yokes		E-51 to E-52
Expansion Connections		E-51 to E-52

F

Valve Position Indicators

Position Indicators, Buried Service with 1-1/4" Square Extension Stems	F-1 to F-2
Position Indicators, Buried Service with Telescopic Extension Stems	F-3 to F-4
Position Indicators, Buried Service with Round Extension Stems	F-5 to F-6
Position Indicators, Installation in Floor	F-7 to F-8
Position Indicators, Installation with Wall Bracket	F-9 to F-10
Data Sheet: Housing Adapter for Position Indicators	F-11
Position Indicators, Installation with Floorstands	F-12

G

Treatment Plant Products

Data Sheet: Overview of Trumbull Treatment Plant Products	G-1
Valve Extension Stems, Round	G-2
Valve Extension Stems, Square	G-3
Top Nuts & Bottom Couplings	G-4
Handwheels	G-4
OS&Y Adapters	G-5
Data Sheet: Ordering Information for Valve Stem Extensions	G-5
Miter Gears	G-6
Universal Joints	G-7 to G-8
Floor Boxes, Cast Iron	G-9 to G-10
Floor Boxes, 6" Sealed	G-11 to G-12
Floor Boxes, 11-1/8" Sealed	G-13 to G-14
Extended Bonnets	G-15 to G-16
Order Form: Extended Bonnet Assembly	G-16
Adjustable Stem Guides	G-17 to G-18
Adjustable Stem Guides for Larger Diameter Stems, Removable End Cap	G-19 to G-20
Adjustable Stem Guides for Larger Diameter Stems, Wall Bracket Design	G-21 to G-22
Wall Brackets	G-23 to G-24
Mud Valves, Cast Iron	G-25 to G-27
Data Sheet: Why Choose Type 316 Stainless Steel Mud Valves?	G-28
Mud Valves, Cast 316 Stainless Steel	G-29 to G-31
Data Sheet: Optional Mud Valve Installations	G-32
Hydrostatic Tank Pressure Relief Valves, Floor-Type	G-33 to G-34
Hydrostatic Tank Pressure Relief Valves, Wall-Type and Wallpipes	G-35 to G-36
Data Sheet: "QuadroSeal" Gaskets, for Tank Pressure Relief Valves	G-37
Data Sheet: Strainers, for Tank Pressure Relief Valves	G-38
Telescoping Valves	G-39 to G-40
Order Form: Telescoping Valve	G-40
Data Sheet: Floorstand Options	G-41
32" Pedestals	G-42
30" Indicating Floorstand, Ductile Iron	G-43 to G-44
36" Indicating Floorstand, Ductile Iron	G-45 to G-46
36" Non-Indicating Floorstand, Ductile Iron	G-47 to G-48

Product	Continued from the previous page . . .	Page(s)
36" Indicating Floorstand, Stainless Steel		G-49 to G-50
Hand Levers for Quarter-Turn Above Ground Valves		G-51
Chain Levers for Quarter-Turn Elevated Valves		G-52
Chainwheels, Ductile Iron		G-53
Chainwheels, Aluminum.....		G-54
Chainwheels, Stainless Steel.....		G-55
Chainwheels, Carbon Steel		G-56
Data Sheet: Chainwheel Dimensions Chart.....		G-57
Connecting Links and Chain, for Chainwheels		G-58
Data Sheet: Clamping Hardware, for Chainwheels.....		G-59
"Star Adapters", for Direct Mounting of Chainwheels.....		G-60
TR Series Connecting Links, for Sprocket-Type Chainwheels		G-61
"Chain-Up" Device, for Chainwheels.....		G-62
Secondary Safety Restraint System		G-63 to G-64
Adjustable Pipe Supports, Saddle Style		G-65
Adjustable Pipe Supports, Flange Style.....		G-66
Link-Seal® Modular Seals		G-67
Wall Sleeves		G-68

H Hydrant Parts and Accessories

Brass Hydrant Adapters.....	H-1
Fire Hydrant Nozzle Caps.....	H-2
Hydrant Valve Rubbers	H-3
Data Sheet: Parts for Obsolete Hydrants.....	H-4

DOUBLE SOCKET RATCHET WRENCHES / WRENCH SETS

COLOR-CODED GRIPS
are cushioned and
ergonomically contoured
for comfortable use

**HEAVY-DUTY
RATCHET MECHANISM**
is sandwiched between
steel plates for strength
and protection

O.D. TAPE
included with set



3-Wrench Set

- One 1-1/4" x 1-1/16" wrench
- One 1-1/8" x 15/16" wrench
- One 7/8" x 3/4" wrench
- One outside diameter tape
- Sturdy carrying case

i Custom logos can
be molded on the
grips of our Double
Socket Ratchet
Wrenches. Inquire
how we can
put YOUR logo on
the wrenches.

Item No	Weight
364-9986	9.35 lbs.

Trumbull's heavy-duty Double Socket Ratchet Wrenches can tighten nuts on long bolts or all-thread rod without bottoming out and have a simple lever-operated reverse feature.

To assure long service life and reliable operation, clean & oil mechanism regularly.

Wrenches - Sold Individually

Grip Color	Large Socket	Small Socket	Item No	Large Socket Fits Hex Size	Small Socket Fits Hex Size	EXAMPLES OF LARGE SOCKET APPLICATIONS	EXAMPLES OF SMALL SOCKET APPLICATIONS
BLUE	1-1/4"	1-1/16"	364-9982	3/4" Heavy	5/8" Heavy	4" thru 24" MJ Ftgs., 3/4" Hex Bolts with Heavy Hex	3" MJ Ftgs., Cast Couplings, Clamps, Tapping Sleeves
GREEN	1-1/8"	15/16"	364-9985	3/4" Standard	5/8" Standard	3/4" Flange Bolts with Standard Hex	5/8" Flange Bolts with Standard Hex, 14" thru 24" Hymax® Couplings
YELLOW	7/8"	3/4"	364-9983	9/16" Standard & 1/2" Heavy	1/2" Standard & 7/16" Heavy	6" thru 12" Hymax® & other Couplings with 1/2" Heavy Hex	1-1/2" thru 4" Hymax® Couplings, 1-1/2" thru 24" MaxiFit™

PIVOTING HANDLE DOUBLE SOCKET RATCHET WRENCHES



ADJUSTABLE HANDLE HELPS GET TO THOSE HARD-TO-REACH NUTS AND BOLTS!



ADJUSTABLE HANDLE ILLUSTRATION.



DOUBLE SOCKET DESIGN

Small socket fits heavy hex nuts on 5/8" bolts used on clamps, couplings, saddles and 3" Mechanical Joints. Large Socket fits heavy hex nuts on 3/4" bolts, used on 4" through 24" Mechanical Joints.

- Heavy-duty double socket incorporates a through design which can tighten nuts on long bolts or all-thread rod without bottoming out.
- Double socket permits use on either 5/8" or 3/4" Heavy Hex Nuts without changing sockets. Also eliminates common misplacement of loose sockets and introduction of dirt into the mechanism while changing sockets in the field.
- Mechanism design allows short stroke operation.
- Heavy-duty ratchet mechanism is lubricated and enclosed in a sealed ductile iron casting to prevent debris from jamming.
- Wrench is 16" OAL.
- Painted black.



Item No	Large Socket	Small Socket	Large Socket Fits Hex Size	Small Socket Fits Hex Size	EXAMPLES OF LARGE SOCKET APPLICATIONS	EXAMPLES OF SMALL SOCKET APPLICATIONS	Weight
364-9984	1-1/4"	1-1/16"	3/4" Heavy	5/8" Heavy	4" thru 24" MJ Ftgs., 3/4" Hex Bolts with Heavy Hex	3" MJ Ftgs., Cast Couplings	4.75 lbs.
364-9955	36mm	30mm	M24	M20	400mm - 500mm Pipe Flanges	200mm - 350mm Pipe Flanges	2.15 KG

MANHOLE COVER HOOKS



MANHOLE HOOKS ENGAGE PICK HOLES.



MANHOLE HOOKS ALSO ENGAGE VENT HOLES.

Trumbull Manhole Cover Hooks are made of 5/8" hexagonal steel. The 1/2" point engages the lid of the manhole cover.

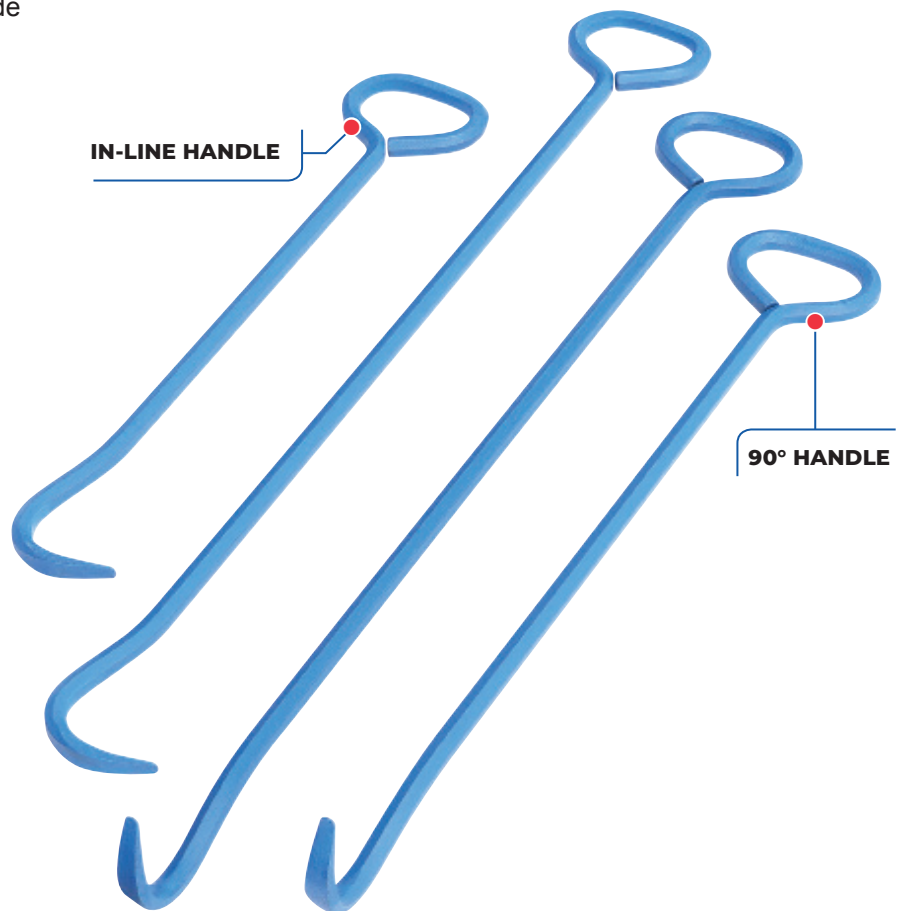
Hooks are painted in Safety Blue enamel paint for safety and durability.

In-Line Handle

Item No	Overall Length	Weight
367-4286	24"	3.35 lbs.
367-4290	36"	4.50 lbs.

90° Handle

Item No	Overall Length	Weight
367-4288	30"	3.85 lbs.
367-4289	36"	4.45 lbs.





INTERNAL CORE WORKS ON PIN-TYPE HOSE COUPLINGS OR HYDRANT ADAPTERS.



WORKS ON LUG-TYPE HOSE COUPLINGS OR HYDRANT ADAPTERS.

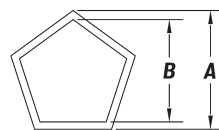


GRIPS AND RETAINS PENTAGON OR SQUARE OPERATING NUTS.

HYDRANT OPERATING WRENCHES

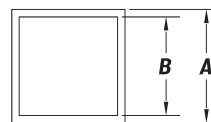
One-piece (non-adjustable) ductile iron casting, available with square or pentagon opening to fit specific operating nut sizes. These wrenches won't round the corners of operating nuts as other wrenches tend to do.

Also serves as a spanner wrench to attach or remove hose couplings (both pin-type and lug-type).
15" overall length.
Enamel finish.



Pentagon Nuts

Item No	Size	Model Number	"A" at base	"B" at top	Weight
377-5952	1-1/2"	B41	1-5/8"	1-1/2"	2.45 lbs.
377-5953	1-1/4"	B18	1-3/8"	1-1/4"	2.55 lbs.

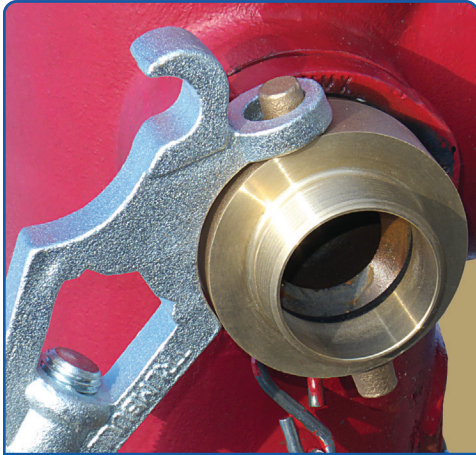


Square Nuts

Item No	Size	Model Number	"A" at base	"B" at top	Weight
377-5951	1"	A12	1-1/8"	1"	2.60 lbs.
377-5947	7/8"	A3	1"	7/8"	2.70 lbs.

Other sizes and shapes available upon special request. Please give dimensions measuring "point to flat" for pentagon nuts or across center from "flat to flat" for square and hexagon nuts.

See separate literature on Adjustable Hydrant Wrenches and Hydrant Wrenches for Storz connections.



**WORKS ON PIN-TYPE HOSE COUPLINGS
OR HYDRANT ADAPTERS.**



**WORKS ON LUG-TYPE HOSE COUPLINGS
OR HYDRANT ADAPTERS.**



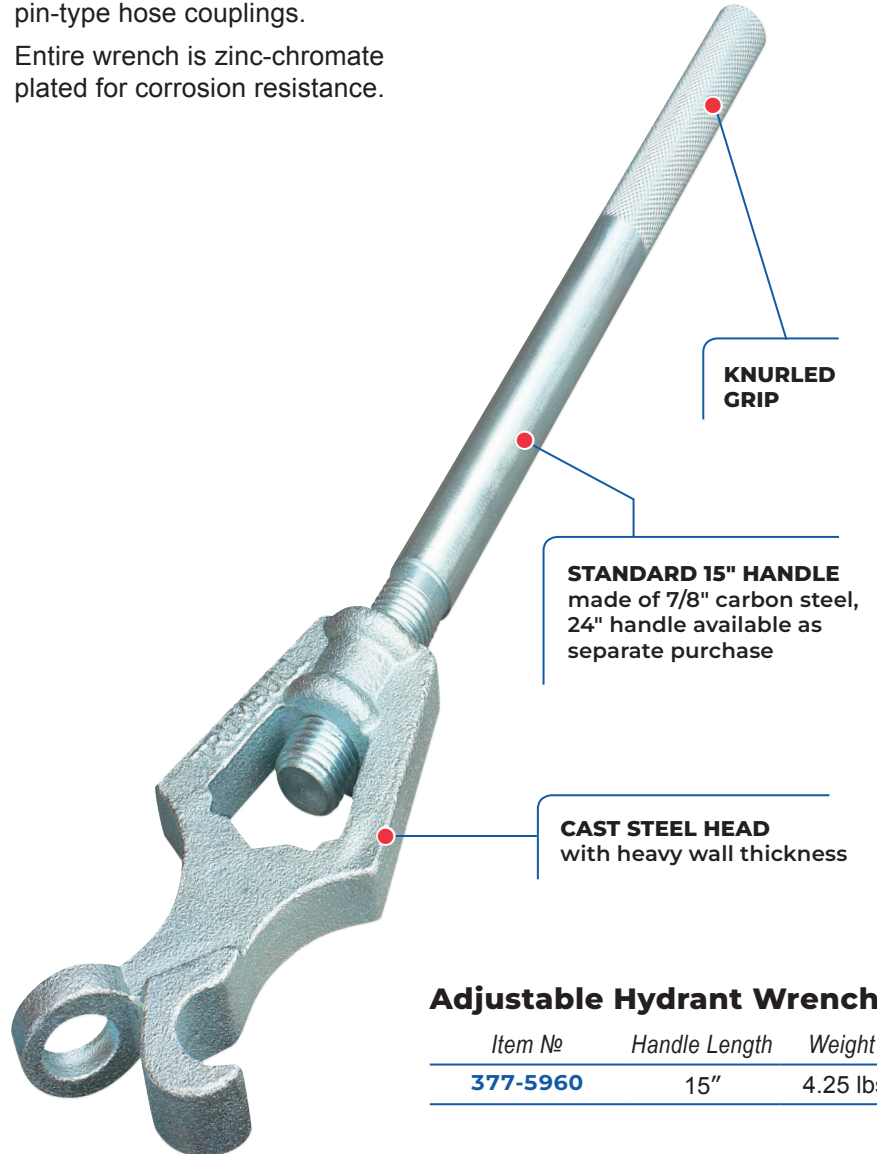
**GRIPS AND RETAINS PENTAGON OR
SQUARE OPERATING NUTS.**

ADJUSTABLE HYDRANT WRENCH

Fits pentagon nuts up to 1-1/2" (point to flat)
and square nuts up to 1-1/4" (flat to flat).

Spanner fits both lug-type and
pin-type hose couplings.

Entire wrench is zinc-chromate
plated for corrosion resistance.



Adjustable Hydrant Wrench

Item No	Handle Length	Weight
377-5960	15"	4.25 lbs.

24" Handle Only

Item No	Handle Length	Weight
100-380-00040	24"	0.60 lbs.



WORKS ON 4" AND 5" STORZ CAPS.



WIDE BEARING SURFACE ON WEDGE NUT GRIPS & RETAINS OPERATING NUTS BETTER THAN CONVENTIONAL THREADED HANDLES.



WORKS ON HYDRANT ADAPTERS AND HOSE COUPLINGS, BOTH PIN AND LUG TYPE.

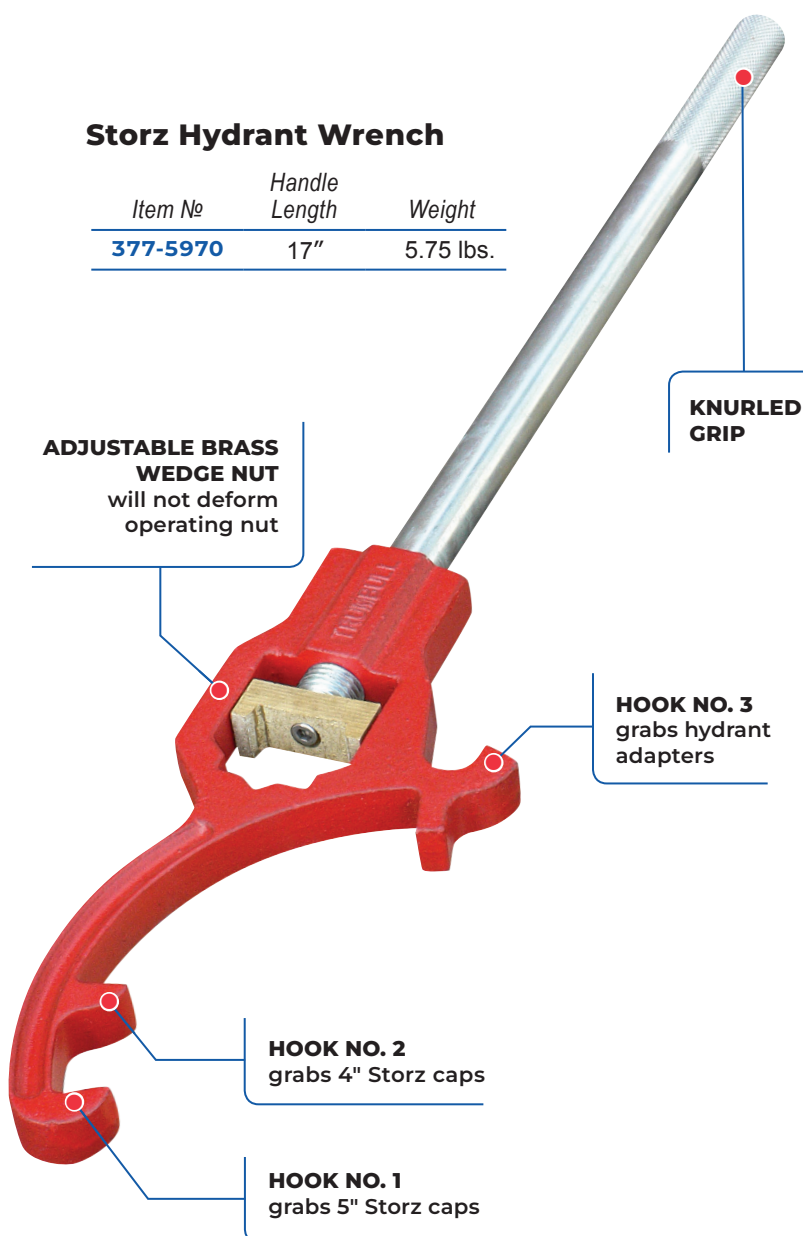
STORZ ADJUSTABLE HYDRANT WRENCH

This Trumbull hydrant wrench works on 4" and 5" Storz caps, rocker lug and pin-type fittings, as well as hydrant adapters.

Adjustable brass wedge nut grips a variety of sizes and shapes of operating nuts, up to 1-3/4" pentagon and 1-1/4" square. Head is made of cast steel; handle made of high-tensile steel.

Storz Hydrant Wrench

Item No	Handle Length	Weight
377-5970	17"	5.75 lbs.



OUTSIDE DIAMETER TAPES

Available in Both
Inch and Metric
Models

10 ft.
OD TAPE

3m
OD TAPE



Pipe OD Chart
on reverse

Most competitive models
of diameter tapes can only
measure up to 20" or 24" pipe...
Trumbull's tape will measure
diameters up to and including
36" ductile iron pipe.

Used for identification of pipe,
NOT for precision measurements.

Outside Diameter Tapes

- A necessity for any water utility or waterline contractor. Know your pipe diameters in order to size your clamps, couplings and tapping sleeves accurately!
- Automatically converts circumference of a pipe to its diameter.
- Yellow tape with black markings.
- 10 ft. (3 Meter) length, see note on left.
- Spring action returns blade to case.
- Gift boxed.

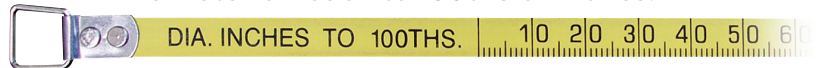
LINEAR MARKINGS

First 12 inches of front measures to 1/32nds.
Balance of front measures to 1/16ths.



DIAMETER MARKINGS

Diameter on back to 100ths of inches.



Item No	Measurement Scales	Weight
217-6653	Linear Inch x Diameter Inch	0.20 lbs.
217-6656	Linear Metric x Diameter Metric	0.20 lbs.
217-6659	Diameter Inch x Diameter Metric	0.20 lbs.

i Inquire of how we can place your logo on the label



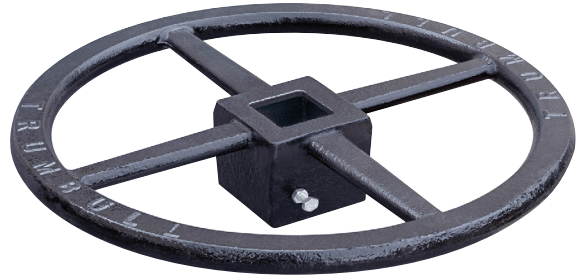
TRUMBULL'S 10 FOOT TAPES CAN MEASURE THE OUTSIDE
DIAMETER OF 36" DUCTILE PIPE (38.30" O.D.)

HANDWHEEL FOR 2" NUT

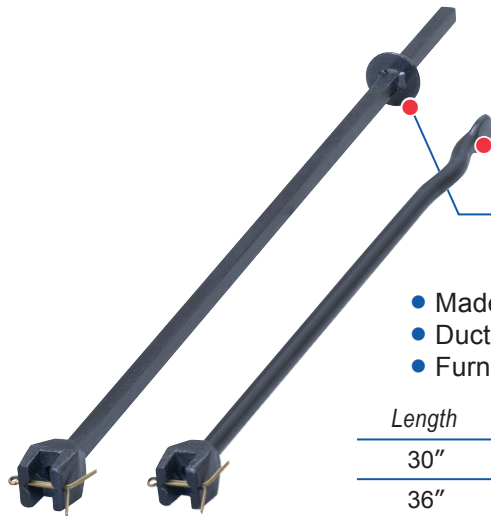
Constructed with cast iron handwheel and a socket that fits 2" square AWWA nuts.

Item No	Material	O.D.	Weight
367-4962	Cast Iron	14"	15.15 lbs.

Also Shown on
Page G-4.



CURB BOX RODS



**Buffalo Type
Curb Box Rods**

- Made of 1/2" square carbon steel
- Ductile iron end casting
- Furnished with brass cotter pin

Length	Item No	Weight
30"	367-4230	3.00 lbs.
36"	367-4232	3.50 lbs.

Buffalo Erie/Minneapolis

**Erie/Minneapolis Type
Curb Box Rods**

Furnished with brass cotter pin

Length	Item No	Weight
24"	367-4084	3.10 lbs.
30"	367-4085	3.20 lbs.
36"	367-4087	3.70 lbs.
42"	367-4090	4.20 lbs.
48"	367-4092	4.70 lbs.

STAINLESS STEEL CURB BOX RODS

Buffalo Type Curb Box Rods

Furnished with brass cotter pin

Length	Item No	Weight
30"	100-230-00430	4.70 lbs.
36"	100-230-00435	5.10 lbs.

304 Stainless Steel Models

Length	Item No	Weight
30"	100-230-00440	4.70 lbs.
36"	100-230-00445	5.10 lbs.

Erie/Minneapolis Type Curb Box Rods

Furnished with brass cotter pin

Length	Item No	Weight
24"	100-230-00410	2.50 lbs.
30"	100-230-00415	3.10 lbs.
36"	100-230-00420	3.50 lbs.
42"	100-230-00425	4.20 lbs.

CURB WRENCHES AND KEYS



The numbers shown here correspond with the numbers above each of the "Item №" columns.

Items № 3 through № 6 are shown on the following page.

No. 1302 Curb Stop Wrenches

- Designed to shut off 3/4" through 2" curb stops
- Made of 5/8" round carbon steel rod
- Ductile iron bottom casting



Length	¹ Item №	Weight
3 ft.	367-4293	4.00 lbs.
4 ft.	367-4294	6.00 lbs.
5 ft.	367-4360	7.00 lbs.
6 ft.	367-5025	8.00 lbs.
7 ft.	367-4362	9.00 lbs.
8 ft.	367-4296	10.00 lbs.

Telescoping Curb Stop Wrenches

- Available in two size ranges
- Thumb screw allows for infinitely variable adjustment within the size range of each model
- Inner shaft is 1/2" solid square rod
- Outer shaft is 5/8" square tubing
- Combination socket bottom casting (see details of casting on page A-10)

Length Range	² Item №	Weight
4'6" through 8'	367-4370	4.00 lbs.
6' through 10'	367-4371	10.00 lbs.

Curb Wrenches and Keys are continued on page A-10.

CURB WRENCHES AND KEYS, CONTINUED

No. 1305 and No. 1321 Combination Curb Box Keys

For BUFFALO Type Boxes

Made of 5/8" round carbon steel with cast steel combo casting.

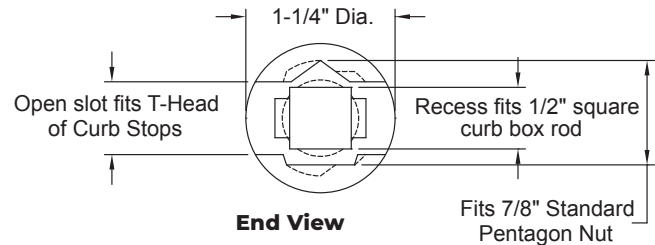
No. 1305		No. 1321	
Plain Tee handle		POINT END for digging dirt or ice away from lid	CHISEL END
Length	Weight	3 No. 1305 Item No	4 No. 1321 Item No
1 ft.	3.00 lbs.	367-4295	367-5295
3 ft.	5.00 lbs.	367-4291	367-5291
4 ft.	6.00 lbs.	367-4292	367-5290
6 ft.	8.00 lbs.	367-4297	367-5297
8 ft.	10.00 lbs.	367-4302	spec/ord.

i NOT for use with 1" Erie Style Boxes.



THE COMBINATION SOCKET

is a multi-purpose tool. It can be used on a pentagon nut as well as a 1/2" square rod, and will fit directly on the t-head of a curb or meter stop through 2". When used on pentagon bolt of meter box covers, automatically attaches to lift and hold the lid. Non-slotted version is also available upon request.



No. 1306 and No. 1322 Curb Box Keys

For ERIE & MINNEAPOLIS Type Boxes

Made of 5/8" carbon steel.

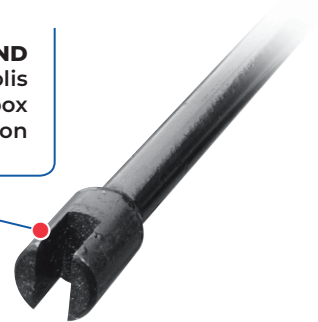
No. 1306		No. 1322	
FORK END of both keys fits in a curb box lid with 2 holes	SOCKET END of No. 1306 key fits the plug in a curb box lid with a pentagon nut. See close-up of Combination Socket on top of page.	PICK END is used to clear ice and dirt from the box lid	



For special lengths not shown here, please inquire.

SLOTTED END

For use on Erie & Minneapolis style rods. Will fit inside a curb box with a 1" pipe upper section



		No. 1306		No. 1322	
Length	Weight	Plain Handle	5 Item No	6 Item No	
2 ft.	5.00 lbs.	----	367-4277	spec/ord.	
3 ft.	7.00 lbs.	----	367-4278	367-5278	
4 ft.	9.00 lbs.	367-4264	367-4280	367-5280	
5 ft.	11.00 lbs.	367-4265	367-4276	spec/ord.	
6 ft.	13.00 lbs.	367-4266	367-4275	spec/ord.	
7 ft.	15.00 lbs.	367-4267	367-4274	spec/ord.	
8 ft.	17.00 lbs.	367-4268	spec/ord.	spec/ord.	

MAIN VALVE KEYS



T-Handle Main Valve Keys

- Handles & shafts fabricated from 1" Sch 40 steel pipe
- Cast steel socket that fits 2" square operating nut

Length	Item №	Weight
2 ft.	367-5016	9.15 lbs.
3 ft.	367-5017	10.70 lbs.
4 ft.	367-5018	12.10 lbs.
5 ft.	367-5019	13.35 lbs.
6 ft.	367-5020	15.30 lbs.
7 ft.	367-5021	17.10 lbs.
8 ft.	367-5023	18.80 lbs.



For special lengths not shown here, please inquire.

Gate Valve Speed Wrench

- Allows use of both hands for extra leverage
- Revolving handle allows quick opening & closing

Item №	Handle Length	Weight
367-9981	18"	6.20 lbs.

Ideal for operating valves with 2" AWWA nut in the trench or in the yard.

Ring Handle Main Valve Keys

- Features a forged steel top ring
- 1" Sch 40 steel pipe shafts
- Cast steel socket fits 2" square operating nut

Length	Item №	Weight
4 ft.	367-5124	11.40 lbs.
5 ft.	367-5125	13.00 lbs.
6 ft.	367-5126	14.30 lbs.
7 ft.	367-5127	15.50 lbs.
8 ft.	367-5128	18.00 lbs.



Telescoping Main Valve Keys

- Adjustable to fit valve depths of 6' through 10'
- 1-1/2" square upper shaft, 1-1/4" square lower shaft
- Steel socket cast with open top mud relief
- Socket fits 2" square operating nut
- Adjustable in one foot increments with wire lock pin

Item №	Length	Weight
367-5129	6 ft. through 10 ft.	38.50 lbs.

PENTAGON HAND KEYS

Medium Carbon Steel Investment Casting – Plated Finish



Model HK-0 Our Classic Original Model

Fits standard pentagon heads. The socket cavity retains the head during removal, for ease in lifting the lid of a meter box from the frame. The hammer and pick ends assist in breaking ice and clearing debris. A square shank is provided on the socket for applying extra torque.

Item No	Model	Weight
367-4298	HK-0	0.85 lbs.
367-4331	HK-1	0.60 lbs.
367-4332	HK-2	0.90 lbs.
367-4333	HK-3	1.00 lbs.

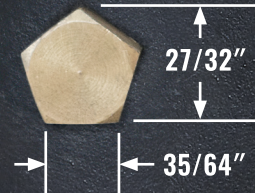
See pages A-9 through A-10
for Valve and Curb Keys.



Model HK-1

Fits standard pentagon heads. Slot in socket operates T-heads of curb and meter stops. Socket cavity also retains the head during removal, for ease in lifting the lid of a meter box from the frame. The tee-handle has a blunt rounded end for pounding, and a curved, tapered end to assist in breaking ice and clearing debris.

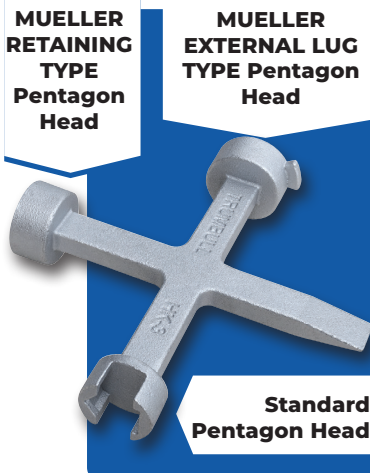
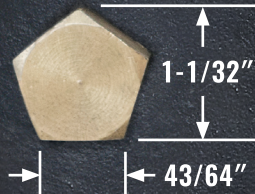
STANDARD WATERWORKS PENTAGON HEAD



Model HK-2

The HK-2 has two pentagon sockets, plus a tapered-end prying blade. Socket 1 fits standard pentagon heads, and has a slot to operate T-head of curb and meter stops. Socket 2 fits large pentagon heads. Both sockets have cavities to retain the pentagon head during removal, for ease in lifting the lid of a meter box from the frame. The tapered blade end is designed for prying, or for use as a chisel.

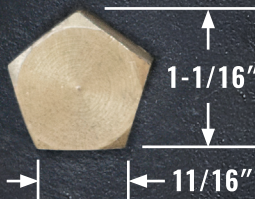
LARGE WATERWORKS PENTAGON HEAD



Model HK-3

The HK-3 has three pentagon sockets, plus a tapered-end prying blade. Socket 1 fits standard pentagon heads, and has a head-retention cavity. It also has a slot to operate T-heads of curb and meter stops. The other two sockets both fit the 1-1/16 inch pentagon head used on Mueller meter boxes. One socket has the head-retention cavity to retain the pentagon head during removal; the other socket has the external lug which engages the lid recess. Both methods assist in lifting the lid of a meter box from the frame. The tapered blade end is designed for prying, or for use as a chisel.

MUELLER METER BOX COVER PENTAGON HEAD



VALVE AND CURB KEY KIT

Trumbull Valve Key Kit and Adapters operate main valves, curb and meter stops, and a variety of curb box rods and lids. Tool collapses to compact length for convenient storage in utility vehicles. Carrying case included.

Base Unit

Item No	Product Description	Weight
367-9100	Base Unit	20.65 lbs.

TEE HANDLE
doubles as
20" extension

Illustration of Tee Handle
fitting in Base Unit.

MULTI-PURPOSE ADAPTER
fits on 3/4" - 2" curb and meter
stops (illustration B below), operates
standard waterworks pentagon
(illustration C below), & 1/2" curb box rod

KEY FOR MAIN VALVES With AWWA Socket

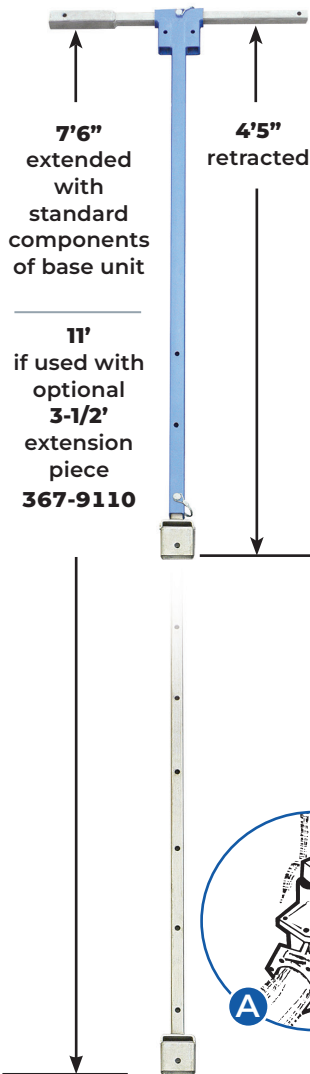
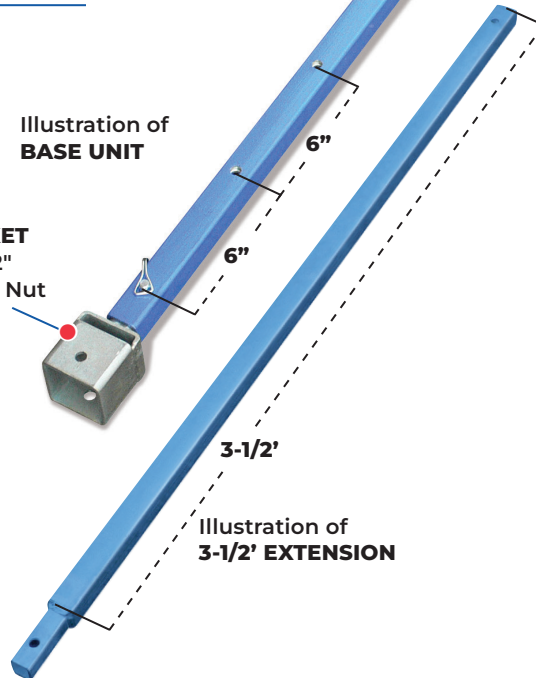


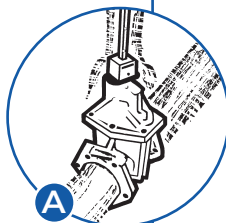
Illustration of
BASE UNIT

SOCKET
for 2"
AWWA Nut

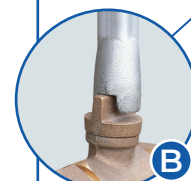
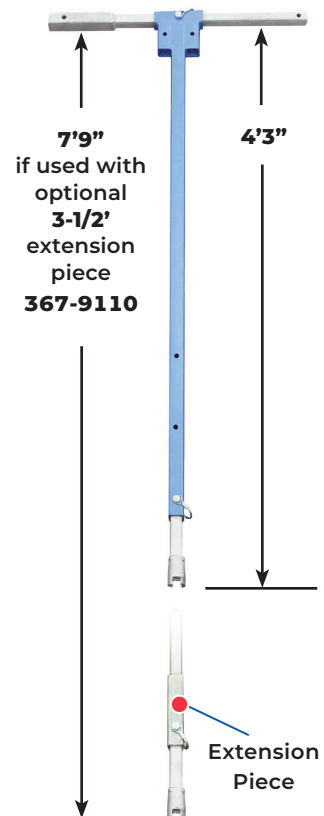


Optional Accessories

Item No	Product Description	Weight
367-9110	3-1/2 ft. Extension Piece	7.00 lbs.
367-9111	Replacement Stem & Socket	5.55 lbs.
367-9106	Replacement Tee Handle	2.80 lbs.



KEY FOR CURB/METER STOPS With Multi-Purpose Adapter



VALVE AND CURB KEY KIT – OPTIONAL ACCESSORIES

2-HOLE LID ADAPTER & HANDWHEEL ADAPTER



367-9102 - operates 2-hole lids of Erie and Minneapolis curb boxes (illustration D below)

367-9104 - operates small handwheels (illustration E)

367-9115 - 3/8" x 1-1/2" snap pin, included

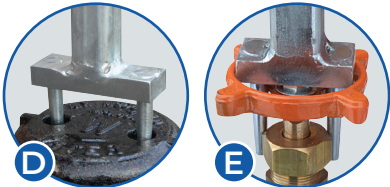
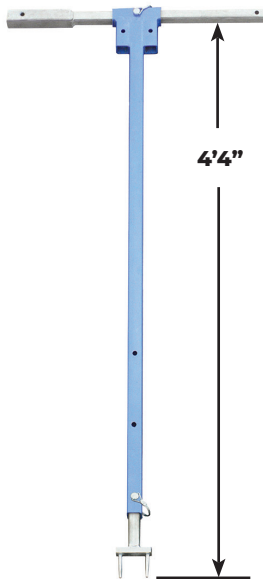
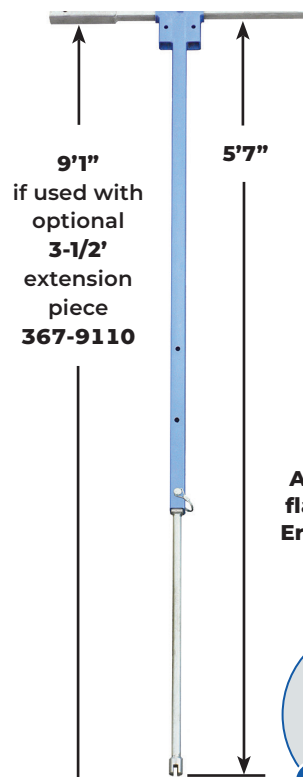


Illustration	Item No	Weight
D	367-9102	1.15 lbs.
E	367-9104	1.00 lbs.

ERIE/MINNEAPOLIS ADAPTER



Adapter fits inside 1" pipe of Erie and Minneapolis curb boxes to operate curb box rods (illustration F below)
367-9115 - 3/8" x 1-1/2" snap pin, included



Adapter fits on flattened top of Erie Minneapolis rods



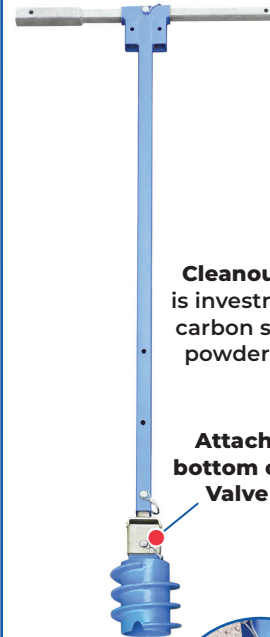
Item No	Weight
367-9101	2.25 lbs.

CLEANOUT AUGER



Ideal for cleaning out mud and dirt in 5-1/4" valve boxes

367-9116 - 3/8" x 2-1/2" snap pin, included



Cleanout Auger is investment cast carbon steel with powder coating

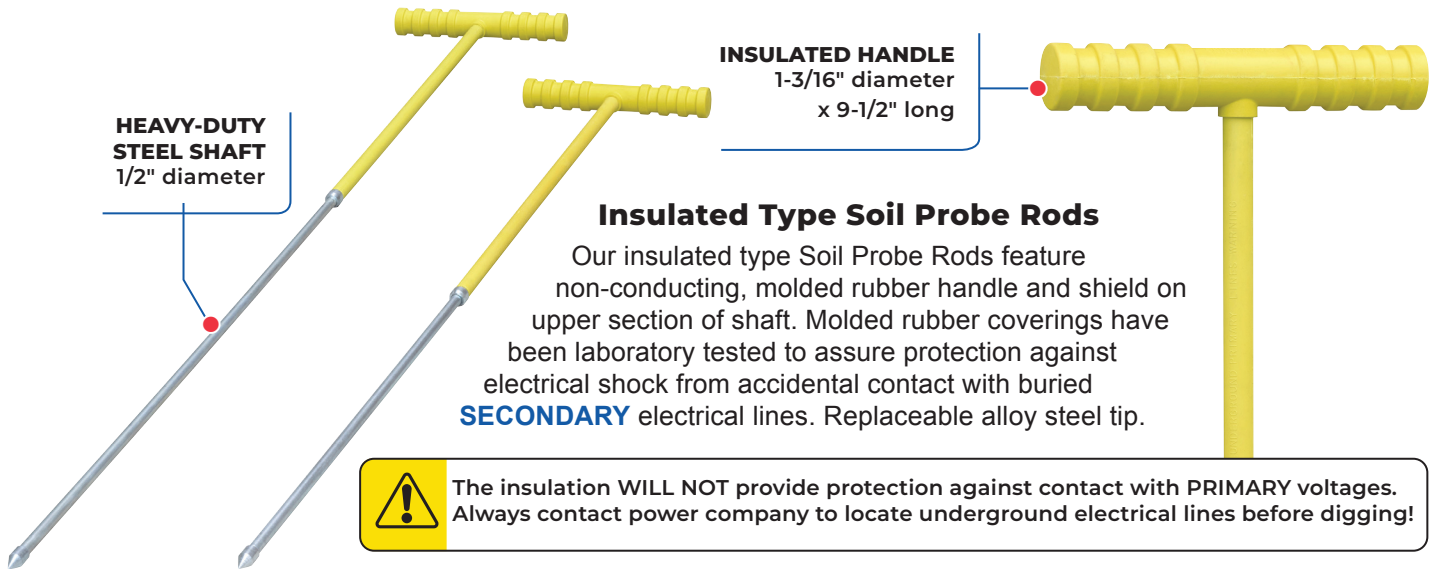
Attaches to bottom of Main Valve Key



Item No	Weight
367-9103	6.95 lbs.

SOIL PROBE RODS

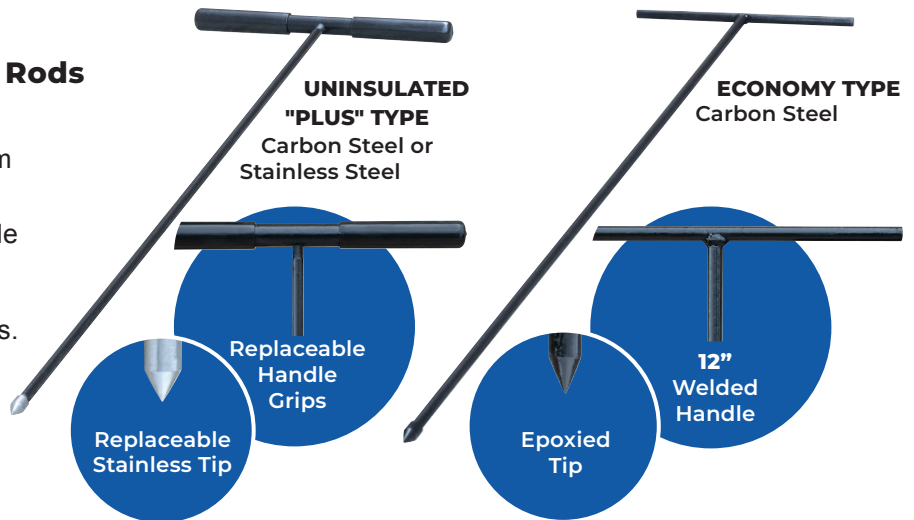
Used for Locating Buried Lines – Insulated and Uninsulated Types



Uninsulated Type Soil Probe Rods

Our economy type Soil Probe Rods feature a shaft and handle made from 1/2" rod and an epoxy-applied tip.

Our "Plus" model features replaceable tips and handle grips and are made from 3/8" rod. Handle grips **DO NOT** provide insulation from electrical lines. Available in both carbon steel and stainless steel models.



Overall Length	Insulated Type		Uninsulated Types					
	Rubber Handle		Carbon Steel "Plus"		Stainless Steel "Plus"		Economy Type	
	Item No	Weight	Item No	Weight	Item No	Weight	Item No	Weight
3 ft.	----	----	367-9082	2.50 lbs.	367-9086	2.50 lbs.	----	----
4 ft.	367-9080	4.00 lbs.	367-9083	2.80 lbs.	367-9087	2.80 lbs.	367-9081	4.00 lbs.
5 ft.	367-9090	4.25 lbs.	367-9084	3.25 lbs.	367-9088	3.25 lbs.	367-9091	4.25 lbs.
6 ft.	----	----	367-9085	3.60 lbs.	367-9089	3.60 lbs.	----	----

REPLACEMENT PARTS

Alloy Steel Tip - for Insulated Type Probe Rods	367-9095	0.05 lbs.
Stainless Tip - for SS & CS Uninsulated Type Probe Rods	367-9097	0.10 lbs.
Grips - for SS & CS Uninsulated Type Probe Rods (2-pack)	367-9096	0.10 lbs.

The KnuckleSAVER™ 3-IN-1 FLARING TOOLS



ALWAYS use a brass hammer and also safety glasses when using any striking tools.

3-in-1 Flaring Tools:

- 1 - FLARES Type K copper
- 2 - RE-ROUNDS kinked or bent copper
- 3 - RELIEVES pressure when used under pressure

Whether you are flaring Type K soft copper, or using it to “re-round” copper for use with compression fittings, the KnuckleSAVER™ flaring tool provides safety from injuries.

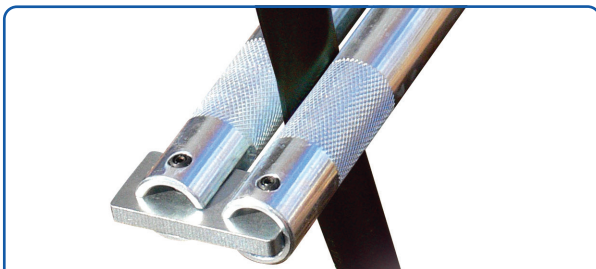
The shank of the flaring tool is drilled out and provided with a pressure relieving hole, to allow for use with lines that cannot be shut down.



Item No	Size	Model Number	Weight
368-0500	3/4"	FRP-075	2.25 lbs.
368-0502	1"	FRP-100	2.65 lbs.
368-0504	1-1/2"	FRP-150	4.50 lbs.
368-0506	2"	FRP-200	6.50 lbs.

SHUTOFF TOOL

For Polyethylene Water Tubing



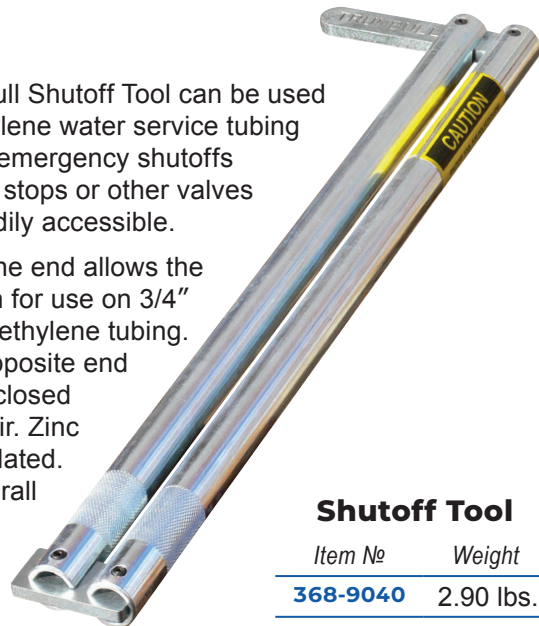
FOR USE ON 3/4" AND 1" POLYETHYLENE WATER TUBING ONLY.



LATCH KEEPS TOOL CLOSED DURING SHUTOFF AND IS EASILY UN-LATCHED WHEN FINISHED.

The Trumbull Shutoff Tool can be used on polyethylene water service tubing for making emergency shutoffs where curb stops or other valves are not readily accessible.

Hinge on one end allows the tool to open for use on 3/4" and 1" polyethylene tubing. Latch on opposite end keeps tool closed during repair. Zinc chromate plated. 17-7/8" overall length.



Shutoff Tool

Item No	Weight
368-9040	2.90 lbs.

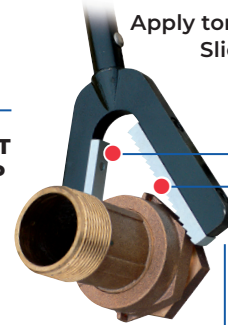
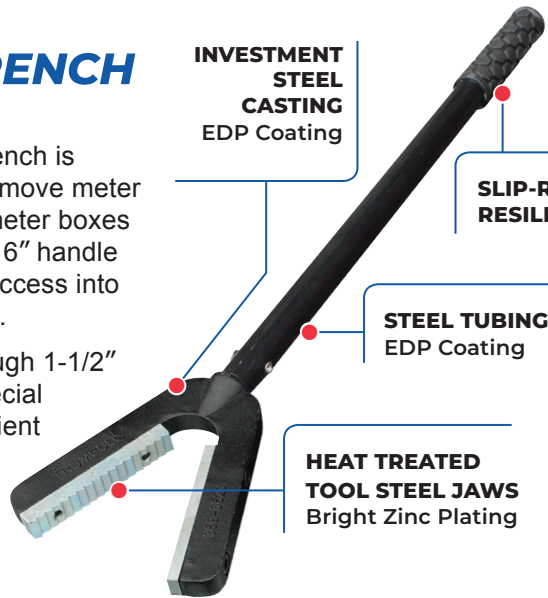


The Shutoff Tool IS NOT intended for use on gas tubing!

METER WRENCH

Trumbull's Meter Wrench is used to install and remove meter couplings in buried meter boxes and meter pits. The 16" handle allows worker easy access into these confined areas.

Works with 1/2" through 1-1/2" meter couplings. Special features include resilient grip on handle and replaceable jaws.



Apply torque through gripping jaw. Slide wrench against smooth anvil jaw to re-position for quick action.

Anvil Jaw
Gripping Jaw

Replacement Jaw Set

Includes set of jaws and screws

Meter Wrench

Item №	Weight
368-0620	2.50 lbs.

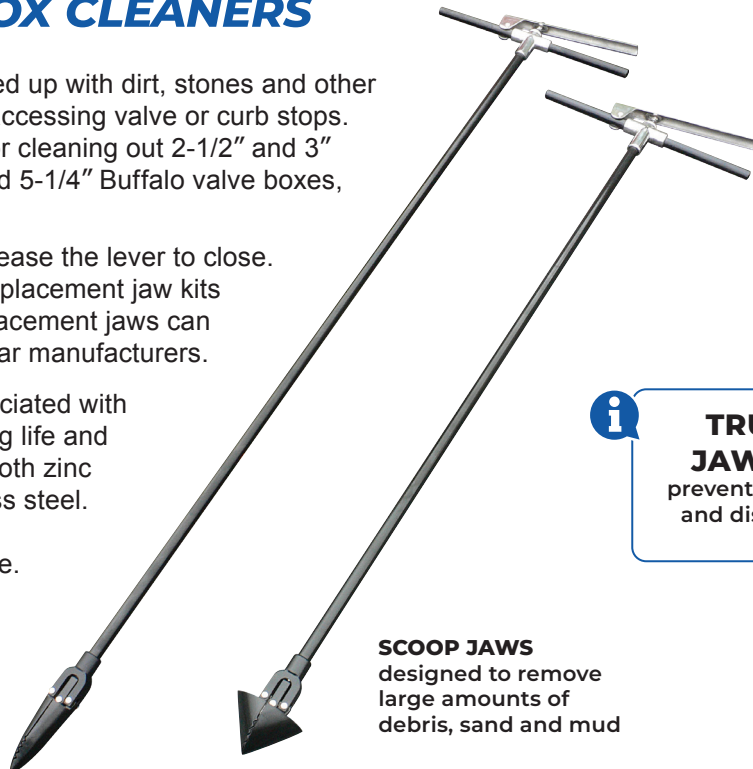
Item №	Weight
368-0625	0.35 lbs.

VALVE AND CURB BOX CLEANERS

Valve and curb boxes frequently get filled up with dirt, stones and other foreign objects that prevent keys from accessing valve or curb stops. These heavy-duty tools are designed for cleaning out 2-1/2" and 3" Buffalo curb boxes as well as 4-1/4" and 5-1/4" Buffalo valve boxes, without excavation.

Squeeze the lever to open the jaws; release the lever to close. Available in 5', 6', 7', and 8' lengths. Replacement jaw kits can easily be installed in the field. Replacement jaws can be interchanged on tools of other popular manufacturers.

Carbon steel jaws avoid breakage associated with cast iron jaws, and are designed for long life and abusive handling. Handle and tee are both zinc chromate plated. Fasteners are stainless steel. All other components are carbon steel and EDP coated for corrosion resistance.



STANDARD JAWS
remove small objects, dirt, stones, sand and mud

SCOOP JAWS
designed to remove large amounts of debris, sand and mud



TRUMBULL JAW DESIGN
prevents over-opening and disengagement

Valve and Curb Box Cleaners

Length	Standard Jaws		Scoop Jaws	
	Item №	Weight	Item №	Weight
5 ft.	367-9150	10.50 lbs.	367-9170	10.60 lbs.
6 ft.	367-9151	12.10 lbs.	367-9171	12.20 lbs.
7 ft.	367-9152	13.70 lbs.	367-9172	13.80 lbs.
8 ft.	367-9153	15.30 lbs.	367-9173	15.40 lbs.

Jaw Replacement Kits

Includes 2 jaws and 2 pins

Item №	Jaw Type	Opens to	Weight
367-9162	Standard Jaws	5-1/4"	0.55 lbs.
367-9182	Scoop Jaws	5-1/4"	0.65 lbs.

DISTANCE MEASURING WHEEL

(Includes Storage Bag)

Trumbull's heavy-duty Distance Measuring Wheel is ideal for laying out and measuring utility lines, road work and other types of construction. Lightweight design makes it easy to use, reducing fatigue. Folding handle design requires minimal storage space and fits conveniently inside padded storage bag.

Internal axle bearings provide for long life under a wide variety of applications. Six-figure counter records long distances up to 100,000 ft. over most types of terrain. Large counter makes reading measurements easy. Hand-grip brake eliminates unwanted measurement at turns or when maneuvering around objects not to be measured.

Handle, front forks and kickstand are made of coated carbon steel. Wheel rim and hand grip brake made of ABS. Tire is made of 90-durometer black PVC.

Distance Measuring Wheels

Item No	Lettering	Color
217-1235	Feet	Green
217-1236	Meters	Red



MEASURING WHEEL SPECS

Wheel Diameter: 12-1/2"
 Extended Length: 3'8"
 Measuring Wheel Weight: 4.90 lbs.
 Carrying Bag Weight: 1.10 lbs.
 Wheel with Bag Weight: 6.00 lbs.

TRIGGER-OPERATED BRAKE



6-FIGURE COUNTER COUNTS FORWARD OR BACKWARD.

PUSH LEVER
resets numbers
to zero

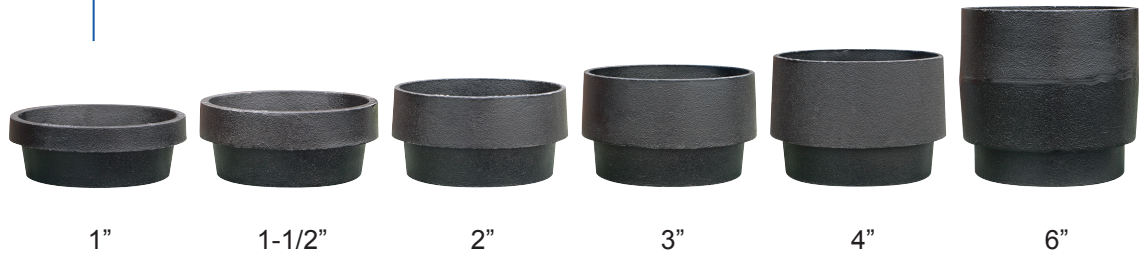


FOLDING HANDLE DESIGN . . .
FITS NEATLY INSIDE STORAGE BAG.

VALVE BOX RISERS

When you have to raise existing valve boxes to the new grade of a road to be paved, save time and money and avoid needless breaking-up of old concrete to raise the valve box. . . instead use Trumbull Valve Box Risers. Simply remove the existing valve box lid, insert the riser and place the existing lid into the riser.

- MUNICIPAL WATER DEPARTMENTS
- PRIVATE WATER COMPANIES
- PAVING & HIGHWAY CONTRACTORS



All sizes of Trumbull Valve Box Risers Accept standard 5-1/4\" lids; no need to purchase special 1\" riser lids. All six sizes (1\" through 6\") fit into the top sections of Tyler, Bingham & Taylor, Opelika, Foundry, Central Foundry and many other manufacturers' valve boxes, and accept most of their lids as well.



VALVE BOX

Use 1\", 1-1/2\" or 2\" Trumbull Riser inside 8\" SDR 35 or C900 PVC pipe to form a Valve Box. Then add choice of Lid, per page B-3.



“Rite-Hite” Paving Adapters, Valve Box Lids and Locking Valve Box Lids also available.

Item No	Size	Weight
367-5030	1"	6.00 lbs.
367-5031	1-1/2"	9.85 lbs.
367-5032	2"	9.75 lbs.
367-5034	3"	13.60 lbs.
367-5036	4"	19.20 lbs.
367-5038	6"	29.00 lbs.

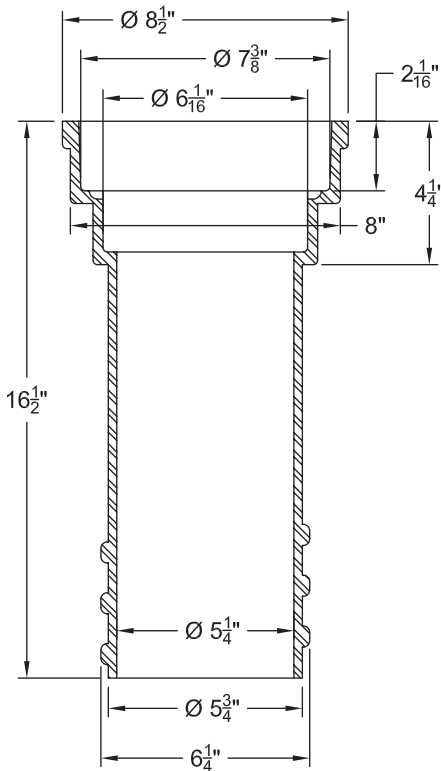
Valve Box Risers for special sizes and shapes of valve boxes are available by special order; minimum order quantities are required.



Due to changes in the design of some manufacturer's valve box lids, primarily Tyler's, their redesigned lid will not fit properly in our 1\" Riser. When it cannot be determined if the existing valve boxes being raised have the old or new style Tyler lid, we recommend purchasing Trumbull's Valve Box Lid (item #367-5044, shown on page B-3) with our 1\" Riser. All other sizes of Trumbull Risers should fit with either Tyler's old or new Lid.

“RITE-HITE” ADAPTERS

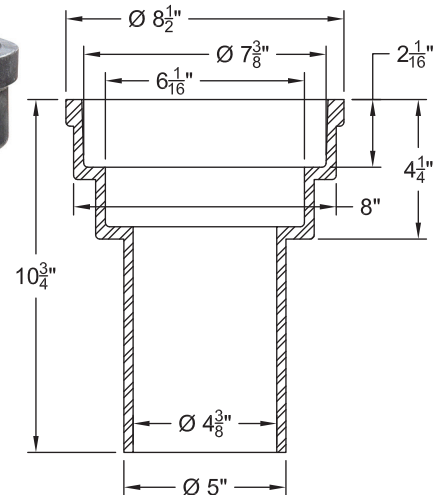
Available in Screw-Type and Slide-Type Models



Screw-Type “Rite-Hite” Adapter
Paving Adapter No. T-69

This type adapter screws into the top section of the valve box. They accept standard valve box covers, as made by Bingham & Taylor, Central Foundry, Tyler, etc.

Item No	Adjustment Range	Weight
367-5060	2-1/2" - 8"	25.00 lbs.



Slide-Type “Rite-Hite” Adapter

Provides a method for adjusting valve boxes to pavement level. They accept standard valve box covers, as made by Bingham & Taylor, Central Foundry, Tyler, etc.

Item No	Adjustment Range	Weight
367-5050	2-1/2" - 8"	16.00 lbs.

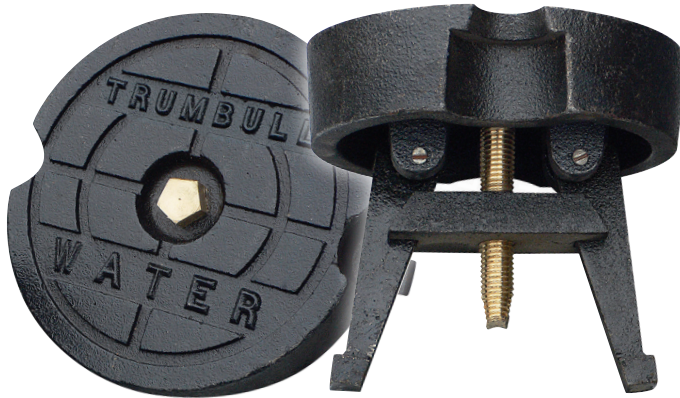


If the existing valve box is too low, place the “Rite-Hite” inside the existing box, pour stiff cement mortar around it and push down until the “Rite-Hite” is flush with the pavement surface.

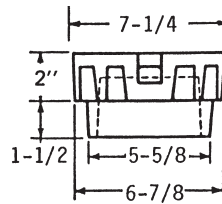
If the existing valve box is too high, break off the top of the valve box and insert the “Rite-Hite”. Then pour stiff cement mortar around it and push down until the “Rite-Hite” is flush with the pavement surface.

VALVE BOX LIDS

Available in Locking Type and Standard Type Models



LONG SKIRT
helps keep the lid
from popping out
of the valve box



Locking Valve Box Lid

Locking Lids discourage unauthorized access to valve boxes. Tightening the standard brass pentagon screw causes the jaws to expand, bearing against inside of valve box.

Designed for valve boxes and Trumbull Screw-Type "Rite-Hite" Adapters; NOT for use with our Slide-Type "Rite-Hite" Adapters.

Item No	Size	Lettering	Weight
367-5045	5-1/4"	WATER	12.00 lbs.

Standard Valve Box Lids

For 5-1/4" shaft Buffalo style valve boxes, Trumbull Risers, "Rite-Hite" adapters, and Housing Adapters for Trumbull Valve Position Indicators.

Item No	Lettering	Weight
530-225-00780	WATER	13.00 lbs.
367-5046	SEWER	11.00 lbs.
367-5048	GAS	12.85 lbs.
367-5049	NON-POTABLE WATER	12.85 lbs.

Special Lettering Available, Contact Us for More Details.



VALVE BOX ALIGNMENT DEVICE

- U.S. Patent No. 7575018 and 8430116.
- Eliminates shifting of valve box during backfill.
- Designed for use on all AWWA resilient wedge gate valves.
- Used with 5-1/4" 2-piece valve boxes.
- Avoids costly excavations when valve box shifts, preventing valve key from engaging the 2" square nut.

Ordering Instructions

1. Quantity required.
2. Order model required, using the charts below.

Model	Item No	Weight
No. 1	367-4850	0.30 lbs.
No. 2	367-4851	0.40 lbs.
No. 3	530-450-00790	0.30 lbs.
No. 4	530-150-00100	0.30 lbs.



CI Valve Box or 8" PVC Pipe

Valve Manufacturer	2"	3"	4"	6"	8"	10"	12"
AFC	2	2	2	2	2	1	1
AVK	1	1	1	1	1	1	1
Clow	2	2	2	2	2	K1	K1
East Jordan	2	2	2	2	2	2	1
Kennedy	2	2	2	2	2	K1	K1
M&H	2	2	2	2	2	K1	K1
Mueller	2	2	2	2	2	1	1
J&S Valve	2	2	2	2	2	2	1
US Pipe	2	2	2	2	2	2	1



6" PVC Pipe

AFC	4	4	4	4	4	3	3
AVK	3	3	3	3	3	3	3
Clow	4	4	4	4	4	K3	K3
East Jordan	4	4	4	4	4	4	3
Kennedy	4	4	4	4	4	K3	K3
M&H	4	4	4	4	4	K3	K3
Mueller	4	4	4	4	4	3	3
J&S Valve	4	4	4	4	4	4	3
US Pipe	4	4	4	4	4	4	3



CURB BOX REPAIR LIDS

Available in Inside Type and Outside Type Models



Trumbull Curb Box Repair Lids solve all these problems on 2-1/2" and 3" Buffalo style curb boxes.

Repair Lids should be ordered based on the style of curb box that you are using (inside or outside style). Please note that old (outside style) curb boxes are still in production.

To install, insert the two jaws into the shaft and tighten the screw. The jaws expand to bear against the inside of the curb box. Designed to fit most makes of curb boxes, both old and new. Outside Repair Lids also work on most makes of inside style Curb Boxes; however, inside Repair Lids only work on inside style Curb Boxes.

Also available, T-372 Repair Lid for recessed installation in outside style curb boxes.

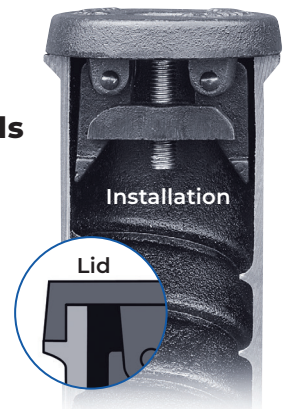
Tamper-Resistant Screw Type Repair Lids

Secure your curb boxes from vandalism or unauthorized access. The unique keyway can be operated only with a matching key available from Trumbull. The locking option offers a high level of security for your curb boxes, preventing unauthorized operation.

Inside Repair Lids New Style (T-373)



Outside Repair Lids Old Style (T-374 & T-375)



Item №	Model	Size	Screw Type	Weight
367-4281	T-373	2-1/2"	Brass Pentagon	2.45 lbs.
367-4400	T-373	2-1/2"	Tamper-Resistant*	2.45 lbs.

* Requires Lock Key 367-4403 to operate.



Lock Key

Item №	Weight
367-4403	0.15 lbs.

Item №	Model	Size	Screw Type	Weight
367-4282	T-374	2-1/2"	Brass Pentagon	2.30 lbs.
367-4401	T-374	2-1/2"	Tamper-Resistant*	2.30 lbs.
367-4283	T-375	3"	Brass Pentagon	3.45 lbs.
367-4402	T-375	3"	Tamper-Resistant*	3.45 lbs.

* Requires Lock Key 367-4403 (shown on left) to operate.



CURB BOX LIDS

Available for 1-1/2" and 2" Curb Boxes
Includes pentagon plug and stainless steel insert.

Size Curb Box	Item No	Weight
1-1/2"	367-4110	2.50 lbs.
2"	367-4115	4.55 lbs.

SERVICE BOX EXTENSIONS

For Erie/Minneapolis Pattern Curb Boxes

Used to increase the height of an existing 1", 1-1/4" or 1-1/2" Erie/Minneapolis curb box. They slide over the top of the curb box pipe and are secured with a set screw (included) and include threads that accommodate the curb box's lid, allowing for easy height extension.



Service Box Extensions for 1" Curb Boxes

Length	Item No	Weight
3"	367-0170	0.75 lbs.
6"	367-0171	1.25 lbs.
9"	367-0172	1.60 lbs.
12"	367-0173	1.90 lbs.
18"	367-0174	2.20 lbs.
24"	367-0175	2.50 lbs.

Service Box Extensions for 1-1/4" Curb Boxes

Length	Item No	Weight
3"	367-0176	1.05 lbs.
6"	367-0177	1.45 lbs.
9"	367-0178	2.25 lbs.
12"	367-0179	3.10 lbs.
18"	367-0180	3.85 lbs.
24"	367-0181	4.35 lbs.

Service Box Extensions for 1-1/2" Curb Boxes

Length	Item No	Weight
3"	530-200-00070	1.90 lbs.
6"	530-200-00075	2.50 lbs.
9"	530-200-00080	3.25 lbs.
12"	530-200-00085	3.95 lbs.
15"	530-200-00090	4.65 lbs.
18"	530-200-00095	5.10 lbs.
24"	530-200-00100	5.60 lbs.

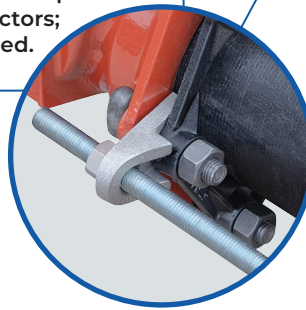
TIE-LUGS

Offset 3/4" Threaded Rod Away from Mechanical Joints to Span Across Valves, Fittings and Other Components

Cast from high strength ductile iron with a tensile strength of 80,000 psi and a yield strength of 55,000 psi. Intended for use between MJ bell and gland in sizes 4" through 24".

i Quantity that should be used on each joint depends on pipe diameter, line pressure and other factors; consult your Engineer for quantity required.

	Domestic	Non-Domestic
Description	Item №	Item №
Tie Lug	364-3395	364-9035



TIE-LUGS AND TIE-BOLTS ARE USED IN CONJUNCTION WITH SOCKET CLAMPS.

TIE-BOLT

For 4" through 12" Mechanical Joints



Used in place of T-head bolt. 3/4" threaded rod passes through eye and is retained with heavy hex nut, sold separately. Made of low carbon steel.

Item №	Product Description	Weight
364-4000	3/4" Tie-Bolt, less nut	0.95 lbs.

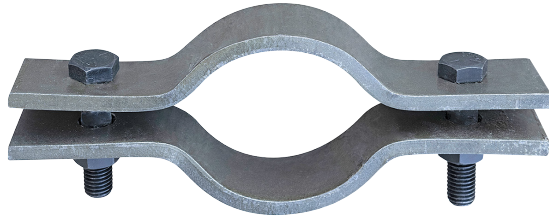
T-Head Bolts are Shown on Page D-7.



SOCKET CLAMPS

For Use in Preventing Underground Pipe Joints from Separating

Also known as “Retainer Clamps” or “Friction Clamps”. Designed for use on DI pipe. All Socket Clamps include two steel half clamps, two bolts and nuts and two washers. Used with all-thread rod and Trumbull Tie-Lugs or Tie-Bolts for joint restraint (shown on page C-1).



Carbon Steel Socket Clamps

Item No	Size*	Bolt Size	Stock Size	Pipe OD**	Weight
364-3401	3"	5/8" x 3"	3/8" x 2"	3.96	5.65 lbs.
364-3402	4"	5/8" x 3"	1/2" x 2"	4.80	7.15 lbs.
364-3403	6"	5/8" x 3"	1/2" x 2"	6.90	8.75 lbs.
364-3404	8"	5/8" x 3"	1/2" x 2"	9.05	10.60 lbs.
364-3405	10"	5/8" x 3"	1/2" x 2"	11.10	12.35 lbs.
364-3406	12"	5/8" x 3-1/2"	1/2" x 2"	13.20	13.80 lbs.
364-3428	14"	7/8" x 4"	3/4" x 3"	15.80	48.00 lbs.
364-3429	16"	1" x 4-1/2"	3/4" x 4"	17.40	70.00 lbs.
364-3430	18"	1-1/4" x 4-1/2"	3/4" x 4"	19.50	79.00 lbs.
364-3431	20"	1-1/4" x 4-1/2"	3/4" x 4-1/2"	21.60	91.00 lbs.
364-3432	24"	1-1/2" x 5"	3/4" x 5"	25.80	118.00 lbs.

Stainless Steel Socket Clamps

Item No	Size*	Bolt Size	Stock Size	Pipe OD**	Weight
803-3401	3"	5/8" x 3"	3/8" x 2"	3.96	5.75 lbs.
803-3402	4"	5/8" x 3"	1/2" x 2"	4.80	7.25 lbs.
803-3403	6"	5/8" x 3"	1/2" x 2"	6.90	8.90 lbs.
803-3404	8"	5/8" x 3"	1/2" x 2"	9.05	10.85 lbs.
803-3405	10"	5/8" x 3"	1/2" x 2"	11.10	12.65 lbs.
803-3406	12"	5/8" x 3-1/2"	1/2" x 2"	13.20	14.35 lbs.

* Sizes 3" through 12" are supplied with #585 cast washers which are shown on the right. Sizes 14" and larger are supplied with two fabricated carbon steel washers.

** Socket Clamps are designed for centrifugally-spun cast and ductile iron pipe with OD's as shown.



No. 585 Washers

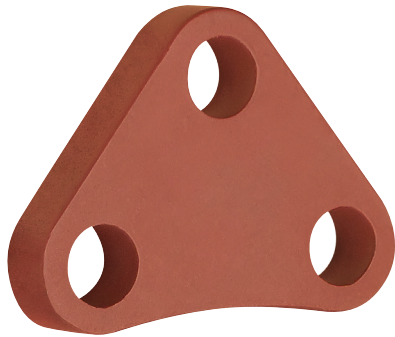
- For 3" - 12" Socket Clamps
- Usage for 3/4" rod
- Two washers are required for each Socket Clamp



Item No	Material	Bore Size	Weight
364-9000	CS	1"	0.80 lbs.
803-9000	SS	1"	0.80 lbs.

FLANGE LUGS

Used to Prevent Separation of Plain-End Piping Components



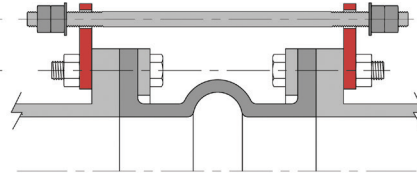
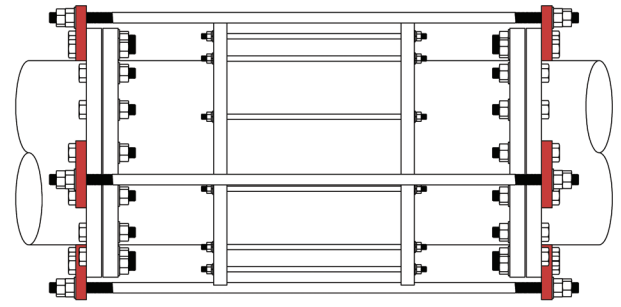
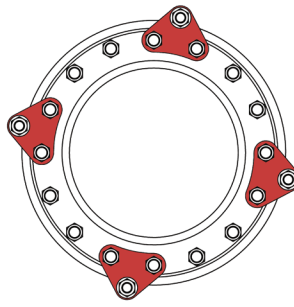
Also known in the field as “Thrust Plates”, “Harness Lugs” or “Gusset Plates”. They are installed on the back sides of ANSI Class 125 B16.1 and Class 150 B16.5 flanges to allow tie rods to span across an unrestrained piping component.

Trumbull flange lugs are also used with rubber expansion joints to limit their expansion. Uncontrolled expansion can lead to failure of rubber expansion joints.

When using threaded ductile iron flanges, check for clearance of the Flange Lug inner radius with the flange hub O.D.

Two flange lugs are used in conjunction with a tie rod, two flat washers and four hex nuts to comprise one set (tie rod, flat washers and hex nuts are NOT included). At least two sets are required per joint. Longer flange bolts are required at the flange lug to accept the plate thickness.

Available in ASTM A36 carbon steel plate and 304 stainless steel. Carbon steel lugs are supplied with a red oxide primer coating; other coatings and finishes are available upon request. Flange Lugs for Class 250 / 300 are available upon request.



Example of Flange Lug use with flexible coupling.

Carbon Steel	304SS	316SS	Flange Size	Plate Thickness	Tie-Rod Size	Weight
Item №	Item №	Item №				
364-4103	364-4123	----	3"	1/2"	5/8"	1.15 lbs.
364-4104	364-4124	500-875-00005	4"	1/2"	5/8"	1.00 lbs.
364-4106	364-4126	500-875-00018	6"	1/2"	5/8"	1.26 lbs.
364-4107	364-4127	500-875-00015	8"	1/2"	5/8"	1.56 lbs.
364-4108	364-4128	500-875-00021	10"	3/4"	3/4"	2.35 lbs.
364-4109	364-4129	500-875-00025	12"	3/4"	3/4"	2.75 lbs.
364-4110	364-4130	500-875-00027	14"	3/4"	3/4"	3.45 lbs.
364-4111	364-4131	500-875-00030	16"	1"	1"	4.25 lbs.
364-4112	364-4132	500-875-00033	18"	1"	1"	5.00 lbs.
364-4113	364-4133	500-875-00035	20"	1"	1"	4.50 lbs.
364-4114	364-4134	500-875-00037	24"	1-1/8"	1-1/8"	6.75 lbs.
364-4115	364-4135	500-875-00039	30"	1-1/8"	1-1/4"	6.90 lbs.
364-4116	spec/ord.	500-875-00040	36"	1-1/4"	1-1/4"	7.05 lbs.
364-4117	spec/ord.	spec/ord.	42"	1-1/4"	1-1/4"	8.80 lbs.
364-4118	spec/ord.	500-875-00042	48"	1-1/2"	1-1/2"	9.75 lbs.
364-4119	spec/ord.	spec/ord.	54"	1-3/4"	1-1/2"	15.60 lbs.
364-4120	spec/ord.	spec/ord.	60"	1-3/4"	1-1/2"	15.80 lbs.



The total number of Flange Lugs required should be determined by the project Engineer, or the expansion joint manufacturer.

Pipe Size	Pipe O.D.	Flange O.D.	Bolt Holes			Bolt Dia.	Lug Thickness	Tie Rods		Weight pounds
			Hole CL	Qty.	Hole D.			Hole D.	Rod D.	
3"	3.96"	7.5"	6"	4	3/4"	5/8"	1/2"	3/4"	5/8"	1.25
4"	4.80"	9"	7.5"	8	3/4"	5/8"	1/2"	3/4"	5/8"	1.00
6"	6.90"	11"	9.5"	8	7/8"	3/4"	1/2"	3/4"	5/8"	1.26
8"	9.05"	13.5"	11.75"	8	7/8"	3/4"	1/2"	3/4"	5/8"	1.56
10"	11.10"	16"	14.25"	12	1"	7/8"	3/4"	7/8"	3/4"	2.35
12"	13.20"	19"	17"	12	1"	7/8"	3/4"	7/8"	3/4"	2.75
14"	15.30"	21"	18.75"	12	1-1/8"	1"	3/4"	7/8"	3/4"	3.45
16"	17.40"	23.5"	21.25"	16	1-1/8"	1"	1"	1-1/8"	1"	4.25
18"	19.50"	25"	22.75"	16	1-1/4"	1-1/8"	1"	1-1/8"	1"	5.00
20"	21.60"	27.5"	25"	20	1-1/4"	1-1/8"	1"	1-1/8"	1"	4.50
24"	25.80"	32"	29.5"	20	1-3/8"	1-1/4"	1-1/8"	1-1/4"	1-1/8"	6.75
30"	32.00"	38.75"	36"	28	1-3/8"	1-1/4"	1-1/4"	1-3/8"	1-1/4"	6.90
36"	38.30"	46"	42.75"	32	1-5/8"	1-1/2"	1-1/4"	1-3/8"	1-1/4"	7.05
42"	44.50"	53"	49.5"	36	1-5/8"	1-1/2"	1-1/4"	1-3/8"	1-1/4"	8.80
48"	50.80"	59.5"	56"	44	1-5/8"	1-1/2"	1-1/2"	1-5/8"	1-1/2"	9.75
54"	57.56"	66.25"	62.75"	44	1-7/8"	1-3/4"	1-3/4"	1-5/8"	1-1/2"	15.60
60"	61.61"	73"	69.25"	52	1-7/8"	1-3/4"	1-3/4"	1-5/8"	1-1/2"	15.80

ANSI Class 125 B16.1 Drilling Template

Notes:

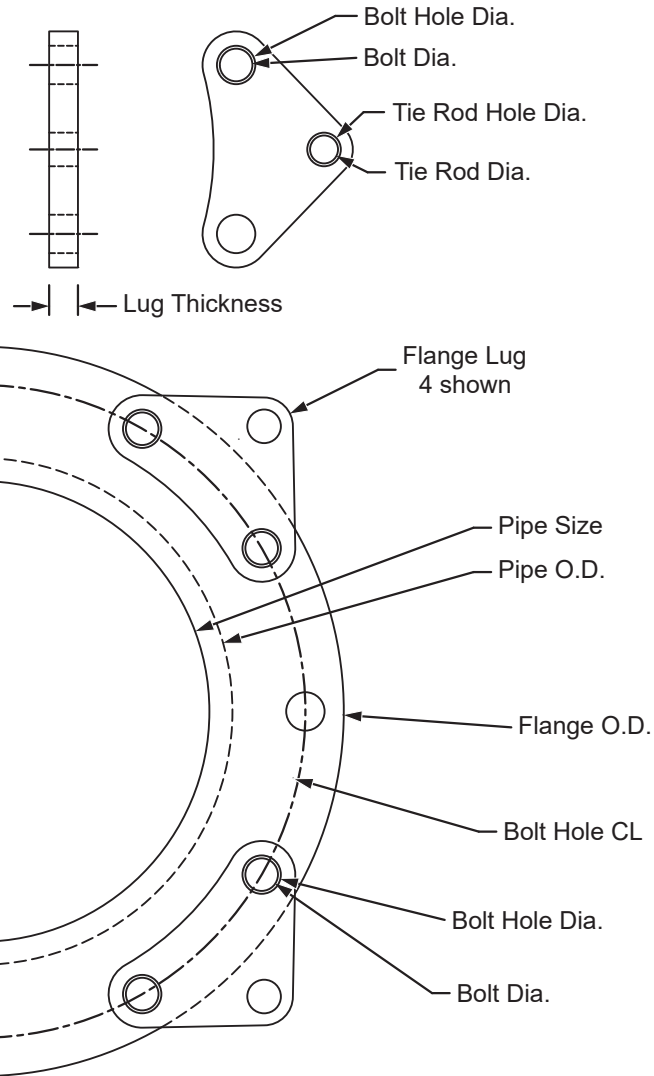
250 psi maximum pressure.

Type 304 stainless steel plate, or,

A36 structural steel plate with

TNEMEC red 37-77 primer.

Other finishes available.



FLANGE LUGS

Drawn to Scale

Drawn:

FCN

01/04/11

Revision:

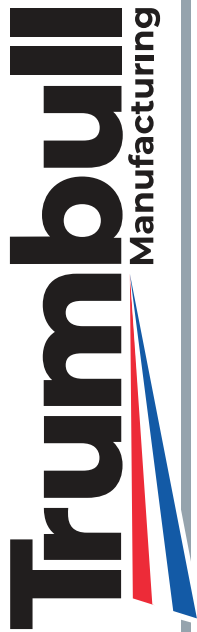
FCN

07/25/19



Trumbull Manufacturing

Youngstown, Ohio
www.trumbull-mfg.com



www.trumbull-mfg.com

POLYETHYLENE ENCASUREMENT TUBING

8 Mil Linear Low Density "POLYWRAP" for Ductile Iron Pipe

Made per

ANSI/AWWA C105/A21.5-18

Trumbull Polyethylene Encasement Tubing protects metallic pipe in corrosive soils. The tubing is slipped over the pipe, extended and taped. An overlap of two feet should be figured in calculating the total polywrap required. For example, 20 feet of polywrap is required for each 18 foot length, or 22 feet for each 20 foot length.



Tape
Rolls
Per
1,000'

			CONTINUOUS					PERFORATED every 20 FT.				PERFORATED every 22 FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
			BLACK		BLUE Water	GREEN Sewer	LAVENDER Reclaimed Water	BLACK		BLUE Water	BLACK		BLUE Water	BLACK		BLUE Water	GREEN Sewer	PURPLE Reclaimed Water																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
			Item №		Item №		Item №		Item №		Item №		Item №		Item №		Item №		Item №																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Pipe Size	Layflat Width	Weight lbs./ft.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

* Indicates other sizes, types and colors that are available as "special order"; 4,000 lbs. minimum per color or size.

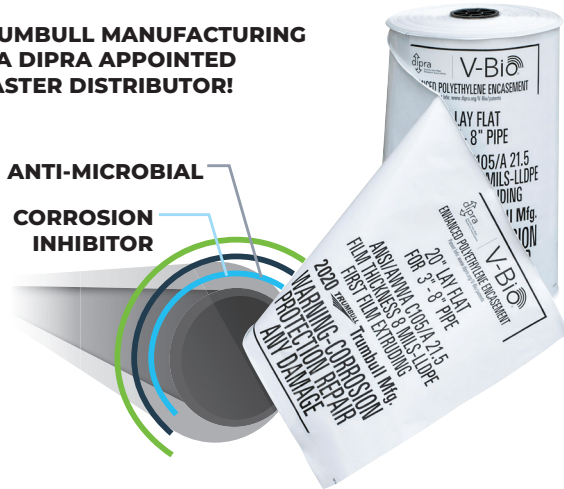
See Price Sheet for current sizes, colors & configurations stocked. 4 mil cross-laminated Polywrap also available.

** Lavender and purple Polywrap are printed with the text "Caution Reclaimed Water - Do Not Drink"

Polywrap Tape Shown on page D-2.

V-BIO® ENHANCED POLYETHYLENE ENCASEMENT

TRUMBULL MANUFACTURING
IS A DIPRA APPOINTED
MASTER DISTRIBUTOR!



V-Bio® Polyethylene is a minimum 8-Mil co-extruded linear low-density polyethylene film infused with additives that enhance ductile iron pipe's ability to provide the long service life that is the benchmark of ductile iron pipe. Meets all requirements of the American National Standards Institute and the American Water Works Association (ANSI/AWWA C105/A21.5) standard for polyethylene encasement.

V-Bio® Enhanced Polyethylene Encasement is an innovative product from DIPRA that expands on the success of traditional polyethylene encasement. The V-Bio® film is infused with a corrosion inhibitor and an anti-microbial additive to actively control external corrosion, helping ensure the long service life utilities have come to expect from ductile iron pipe, even in the most corrosive environments.

V-Bio® is a registered trademark of the Ductile Iron Pipe Research Association.

White V-Bio® Enhanced PE Encasement

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
3" - 8"	20"	22 ft.	388-7831	484 ft.
10" - 12"	27"	22 ft.	388-7833	374 ft.
16"	34"	22 ft.	388-7835	308 ft.
18" - 20"	41"	22 ft.	388-7837	264 ft.
24"	54"	22 ft.	388-7839	198 ft.
30"	67"	22 ft.	388-7841	154 ft.
36" - 42"	81"	22 ft.	388-7843	132 ft.
48"	95"	22 ft.	388-7845	110 ft.
54" - 60"	108"	22 ft.	388-7847	110 ft.
64"	121"	22 ft.	388-7849	110 ft.

Blue V-Bio® Enhanced PE Encasement

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
3" - 8"	20"	22 ft.	625-150-00305	484 ft.
10" - 12"	27"	22 ft.	625-150-00310	374 ft.
16"	34"	22 ft.	625-150-00315	308 ft.
18" - 20"	41"	22 ft.	625-150-00320	264 ft.
24"	54"	22 ft.	625-150-00325	198 ft.
30"	67"	22 ft.	625-150-00330	154 ft.
36" - 42"	81"	22 ft.	625-150-00335	132 ft.
48"	95"	22 ft.	625-150-00340	110 ft.
54" - 60"	108"	22 ft.	625-150-00300	110 ft.

Green V-Bio® Enhanced PE Encasement

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
3" - 8"	20"	22 ft.	625-150-00350	484 ft.
10" - 12"	27"	22 ft.	625-150-00355	374 ft.
16"	34"	22 ft.	625-150-00360	308 ft.
18" - 20"	41"	22 ft.	625-150-00365	264 ft.
24"	54"	22 ft.	625-150-00370	198 ft.
30"	67"	22 ft.	625-150-00375	154 ft.
36" - 42"	81"	22 ft.	625-150-00380	132 ft.
48"	95"	22 ft.	625-150-00385	110 ft.
54" - 60"	108"	22 ft.	625-150-00345	110 ft.

Lavender V-Bio® Enhanced PE Encasement

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
3" - 8"	20"	22 ft.	625-150-00395	484 ft.
10" - 12"	27"	22 ft.	625-150-00400	374 ft.
16"	34"	22 ft.	625-150-00405	308 ft.
18" - 20"	41"	22 ft.	625-150-00410	264 ft.
24"	54"	22 ft.	625-150-00415	198 ft.
30"	67"	22 ft.	625-150-00420	154 ft.
36" - 42"	81"	22 ft.	625-150-00425	132 ft.
48"	95"	22 ft.	625-150-00430	110 ft.
54" - 60"	108"	22 ft.	625-150-00390	110 ft.

For continuous or perforated every 20', please inquire.

OTHER POLYWRAP

Clear Polywrap 12 Mil

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
3" - 8"	20"	20 ft.	388-8605	200 ft.
10" - 14"	30"	20 ft.	388-8610	200 ft.

Sanitary Sewer Polywrap

8 Mil, for 4" cast iron soil pipe, black

Pipe Size	Layflat Width	Perf'd Every	Item No	Roll Length
4"	12"	12 ft.	364-9941	408 ft.

Multipurpose PVC Tape

IAPMO/UPC certified for AWWA and plumbing applications.

Item No	Roll Size	Thickness	Weight
364-9975	2" x 100'	10 mil	1.00 lbs.

General Purpose PE Tape

blue in color.

Item No	Roll Size	Thickness	Weight
364-9976	2" x 108'	9 mil	1.00 lbs.

ZINC ANODE CAPS

Sacrificial Zinc Anodes



Trumbull Anode Caps are designed for fighting corrosion of underground bolts and nuts, and iron pipe and fittings.

These threaded hex head caps, when secured to a bolt or stud, become the sacrificial anode, corroding, while the remaining metal parts are protected. This corrosion protection continues until Zinc is consumed.

See reverse side for drawing. Inquire about Anode Caps with different weights or shapes.



Typical Installation

Zinc Anode Caps

Description	2.5 oz.	6 oz.
	Item No	Item No
5/8"-11, N.C.	----	364-1008
3/4"-10, N.C.	----	364-1010
7/8"-9, N.C.	364-1004	spec/ord.
1"-8, N.C.	364-1006	364-1012

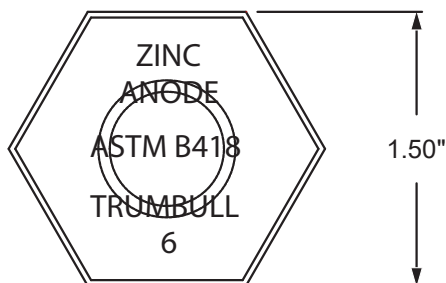
Trumbull Zinc Anode Caps are made from Special High Grade Zinc and third-party tested to confirm the maximums allowable in both ASTM B418-88, "Galvanic Zinc Anodes", and Military Specification Mil-18001K.

Material: High Grade Zinc
 Conforms to chemical requirements of
 ASTM B418-88, "Galvanic Zinc Anodes", and,
 U.S. Navy Specification, Mil-18001 H

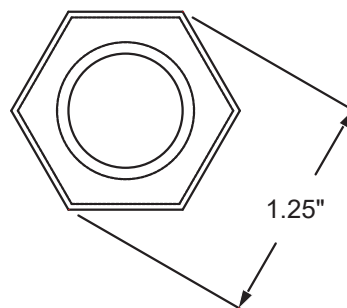
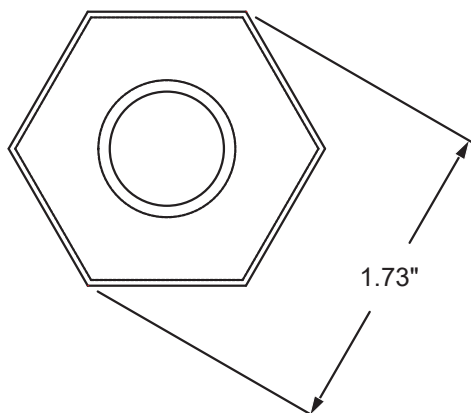
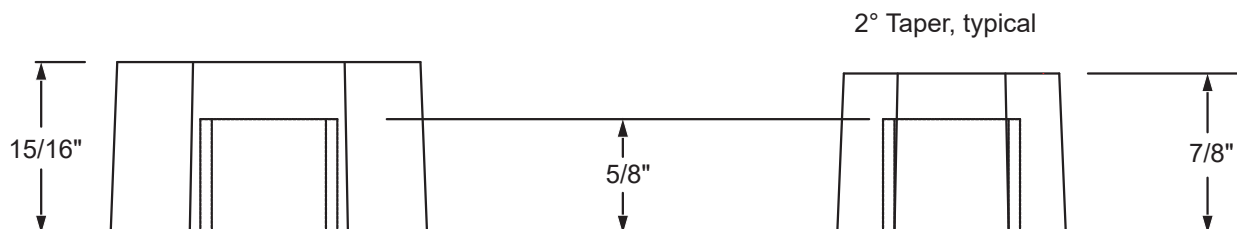
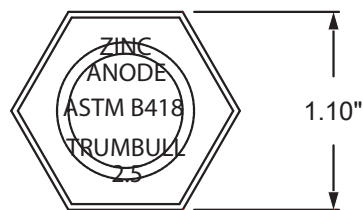
Item No.	Tapped	Weight (oz.)
364-1004	5/8"-11 NC	2-1/2
364-1006	3/4"-10 NC	2-1/2
364-1008	5/8"-11 NC	6
364-1010	3/4"-10 NC	6
364-1012	1"- 8 NC	6

Galvanic Corrosion Chart	
Metal Type	Volts
Zinc (Mil Spec Anodes)	-1.1
Commercially pure aluminum	-0.8
Mild steel, clean	-0.5 to -0.8
Mild steel, rusted	-0.2 to -0.5
Cast iron	-0.5
Lead	-0.5
Mild steel, in concrete	-0.2
Copper, brass, bronze	-0.2
High silicon cast iron	-0.2

Large Anode Cap
6 ounces



Small Anode Cap
2-1/2 ounces



ZINC ANODE CAPS
 Drawn to Scale

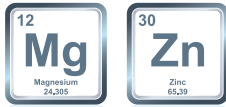
Drawn:
FCN
06/28/94

Revision:
FCN
J 09/26/18

Trumbull Manufacturing
 Youngstown, Ohio
www.trumbull-mfg.com

PREPACKAGED ANODE BAGS

Provides Cathodic Protection that Prevents Metal Degradation in Waterworks Infrastructure



Available in either
Magnesium or Zinc.

The prepackaged anode is a corrosion-prevention solution designed for waterworks applications. It consists of high-purity anode enclosed in a protective anode bag made from durable, chemical-resistant material. Each unit is securely packaged to maintain integrity and facilitate ease of installation.

The backfill is a precise mixture, which draws moisture for best performance and creates a uniform environment for the anode to consume itself evenly. The anode is formulated with minimal impurity levels, ensuring consistent performance in the harshest environments. They come in various sizes and dimensions tailored to meet specific system requirements.

The prepackaged anode is designed to be installed within cathodic protection systems for pipelines, tanks, and other submerged metal structures in the waterworks industry and fuel pipelines. The primary function of the anode bag is to provide effective cathodic protection. A simple method of protection connects protected metal to a more easily corroded "sacrificial metal" to act as the anode. The anode corrodes instead of the protected metal.

This anode operates with an open-circuit voltage of 1.05 (-V .Ag/AgCl), ensuring a consistent protective current. With an actual capacitance exceeding 780 Ah/Kg and a current efficiency above 95%, it delivers long-lasting and efficient corrosion control. By mitigating oxidation, the anode extends the lifespan of water pipes, fuel pipelines, storage tanks, and submerged metallic structures, reducing maintenance costs and improving system reliability. The prepackaged configuration simplifies installation while ensuring sustained performance, making it an essential component in water treatment and distribution networks.



Magnesium Prepackaged Anode Bags

Item №	Anode Size	Cable Length	Weight
625-200-00005	1 lbs.	25 ft.	11.00 lbs.
625-200-00010	3 lbs.	25 ft.	11.00 lbs.
625-200-00015	5 lbs.	25 ft.	15.00 lbs.
625-200-00020	9 lbs.	25 ft.	26.00 lbs.
625-200-00025	17 lbs.	25 ft.	44.00 lbs.
625-200-00030	20 lbs.	25 ft.	73.00 lbs.
625-200-00035	32 lbs.	25 ft.	66.00 lbs.
625-200-00040	48 lbs.	25 ft.	110.00 lbs.
625-200-00045	60 lbs.	25 ft.	128.00 lbs.

Zinc Prepackaged Anode Bags

Item №	Anode Size	Cable Length	Weight
625-200-00050	5 lbs.	25 ft.	15.00 lbs.
625-200-00055	12 lbs.	25 ft.	26.00 lbs.
625-200-00060	15 lbs.	25 ft.	33.00 lbs.
625-200-00065	18 lbs.	25 ft.	42.00 lbs.
625-200-00070	30 lbs.	25 ft.	59.00 lbs.
625-200-00075	45 lbs.	25 ft.	71.00 lbs.
625-200-00080	60 lbs.	25 ft.	95.00 lbs.

ANODE GROUND ROD

Completes the Electrical Circuit in Tracer Wire Systems



The 1.5 lbs. Magnesium Anode Ground Rod is an anode grounding rod designed for seamless integration into tracer wire systems to complete the electrical circuit necessary for enhanced signal detection. The anode ground rod has a diameter of 1.31 inches and a length of 18.5 inches, making it compact yet effective for its intended application. Its design ensures secure placement within backfill environments, optimizing electrical conductivity and signal transmission.

- High-purity **MAGNESIUM GROUND ROD**, with 20 feet of red 12 AWG wire, ensures flexibility in placement.
- **HDPE CAP** encases the ground rod for protection and ease of installation. It enhances durability, making the anode suitable for direct burial in various soil conditions.
- Waterproof, direct-bury **TWIST CONNECTOR**, allows for secure integration into underground systems and for easy splicing with tracer wire. Ensures a reliable electrical connection.

The anode ground rod has a high-potential magnesium composition, with Aluminum (2.5-3.5%), Zinc (0.6- 1.4%), Magnesium (0.2-1.0%), Iron (0.002% max), Copper (0.05% max), Nickel (0.005% max), and Silicon (0.10% max), ensures superior performance and longevity. Operating with an open circuit voltage of 1.57-1.67 (-V. Cu/CuSO₄) and an actual capacitance exceeding 1210 Ah/Kg, the anode efficiently enhances signal transmission. Its current efficiency surpasses 55%, making it an ideal component for utility locating in underground infrastructure. The configuration simplifies installation while ensuring long-term reliability, ultimately improving the accuracy and efficiency of tracer wire systems.

Anode Ground Rod

Item №	Anode Size	Cable Length	Weight
625-200-00100	1.5 lbs.	20 ft.	2.25 lbs.



1,000 FT ROLL DETECTABLE WARNING TAPES

Used for Locating Non-Metallic Pipes Buried Underground

- Tape consists of an aluminum core encased in plastic
- For installations 30" or shallower, 2" wide tape should be used
- For deeper installations, 3" tape should be used
- Use electronic pipe/cable locators for best results

Detectable Warning Tapes – 1,000 ft Rolls

	2" x 1,000'	3" x 1,000'	4" x 1,000'	6" x 1,000'	12" x 1,000'
Color and Marking	Item No	Item No	Item No	Item No	Item No
POTABLE WATER	100-600-00005	100-600-00075	100-600-00185	----	----
WATER LINE	100-600-00010	100-600-00090	100-600-00190	100-600-00210	100-600-00295
RAW WATER	----	100-600-00085	----	----	----
RESTRAINT JOINT WATER	----	100-600-00165	----	----	----
IRRIGATION WATER	----	100-600-00080	----	----	----
IRRIGATION LINE	----	----	----	100-600-00205	----
FORCE MAIN LINE	100-600-00015	100-600-00095	100-600-00195	100-600-00215	100-600-00300
SEWER LINE	100-600-00020	100-600-00105	100-600-00200	100-600-00225	100-600-00310
STORM DRAIN	100-600-00025	100-600-00110	----	100-600-00230	100-600-00305
IRRIGATION LINE	100-600-00060	100-600-00100	----	100-600-00220	----
WATER LINE	----	----	----	100-600-00260	----
FIBER OPTIC	100-600-00030	100-600-00115	----	100-600-00235	----
TELEPHONE LINE	100-600-00035	100-600-00120	----	100-600-00265	----
IRRIGATION LINE	100-600-00040	----	----	----	----
RESTRAINT JOINT WATER	100-600-00065	----	----	----	----
RECYCLED/RECLAIMED WATER	100-600-00045	100-600-00130	----	100-600-00240	100-600-00315
WATER LINE	----	----	----	100-600-00270	----
NON-POTABLE WATER	----	100-600-00125	----	----	----
LAND DRAIN	----	100-600-00155	----	----	----
ELECTRICAL LINE	100-600-00050	100-600-00135	----	100-600-00245	----
FIRE LINE	100-600-00070	100-600-00140	----	100-600-00250	----
RAW WATER	----	100-600-00145	----	100-600-00280	----
RESTRAINT JOINT WATER	----	----	----	100-600-00285	----
CAUTION	----	----	----	100-600-00275	----
GAS LINE	100-600-00055	100-600-00150	----	100-600-00255	----
RESTRAINT JOINT WATER	----	100-600-00160	----	----	----
CAUTION	----	100-600-00175	----	100-600-00290	----
FORCE MAIN LINE	----	100-600-00170	----	----	----

Other lengths of Detectable Warning Tapes are shown on the following page . . .

DETECTABLE WARNING TAPES - OTHER LENGTHS

Detectable Warning Tapes – Other Lengths

	3" x 300'	3" x 500'	6" x 100'	6" x 300'	6" x 500'
Color and Marking	Item №	Item №	Item №	Item №	Item №
WATER LINE	100-600-00320	----	----	100-600-00340	----
SEWER LINE	----	----	100-600-00330	100-600-00345	----
DANGER	----	100-600-00325	----	----	----
RESTRAINT JOINT WATER	----	----	100-600-00335	----	----
CAUTION	----	----	----	----	100-600-00350

NON-DETECTABLE WARNING TAPES

Used for Identifying Buried Pipes when Digging



Non-Detectable Warning Tapes – 1,000 ft Rolls

	2" x 1,000'	3" x 1,000'	4" x 1,000'	6" x 1,000'	12" x 1,000'
Color and Marking	Item №	Item №	Item №	Item №	Item №
POTABLE WATER	100-625-00005	100-625-00070	----	----	----
WATER LINE	100-625-00010	100-625-00085	----	----	----
WATER	100-625-00060	----	----	100-625-00175	100-625-00235
RAW WATER	----	100-625-00080	----	----	----
IRRIGATION WATER	----	100-625-00075	----	----	----
IRRIGATION LINE	----	----	----	100-625-00170	----
FORCE MAIN LINE	100-625-00015	100-625-00090	----	100-625-00180	100-625-00240
SEWER LINE	100-625-00020	100-625-00100	----	100-625-00190	100-625-00250
STORM DRAIN	100-625-00025	100-625-00105	----	100-625-00195	100-625-00245
IRRIGATION LINE	----	100-625-00095	----	100-625-00185	----
FIBER OPTIC	100-625-00030	100-625-00110	----	100-625-00200	----
TELEPHONE LINE	100-625-00035	100-625-00115	----	----	----
IRRIGATION LINE	100-625-00040	----	----	----	----
RECYCLED/RECLAIMED WATER	100-625-00045	100-625-00125	----	100-625-00205	100-625-00255
POTABLE WATER	----	100-625-00150	----	----	----
NON-POTABLE WATER	100-625-00065	100-625-00120	----	----	----
DANGER	----	100-625-00155	----	----	----
ELECTRICAL LINE	100-625-00050	100-625-00130	----	100-625-00210	----
FIRE LINE	----	100-625-00135	----	100-625-00215	----
RAW WATER	----	100-625-00140	----	----	----
CAUTION	----	----	----	100-625-00230	----
STORM DRAIN	----	100-625-00160	----	----	----
GAS LINE	100-625-00055	100-625-00145	----	100-625-00220	----
CAUTION	----	100-625-00165	----	100-625-00225	----

MECHANICAL JOINT ACCESSORIES

T-Head Bolts and Nuts

Size	Corten	304SS	316SS	Blue
	Item No	Item No	Item No	Item No
5/8" x 3"	100-510-00010	100-510-00140	100-510-00270	100-510-00400
5/8" x 3-1/2"	100-510-00020	100-510-00150	100-510-00280	100-510-00410
3/4" x 3-1/2"	100-510-00030	100-510-00160	100-510-00290	100-510-00420
3/4" x 4"	100-510-00040	100-510-00170	100-510-00300	100-510-00430
3/4" x 4-1/2"	100-510-00050	100-510-00180	100-510-00310	100-510-00440
3/4" x 5"	100-510-00060	100-510-00190	100-510-00320	100-510-00450
3/4" x 6"	100-510-00070	100-510-00200	100-510-00330	100-510-00460
3/4" x 7"	100-510-00080	100-510-00210	100-510-00340	100-510-00470
3/4" x 9"	100-510-00090	100-510-00220	100-510-00350	100-510-00480
1" x 6"	100-510-00100	100-510-00230	100-510-00360	100-510-00490
1" x 6-1/2"	100-510-00110	100-510-00240	100-510-00370	100-510-00500
1-1/4" x 6-1/2"	100-510-00120	100-510-00250	100-510-00380	100-510-00510
1-1/4" x 8-1/2"	100-510-00130	100-510-00260	100-510-00390	100-510-00520

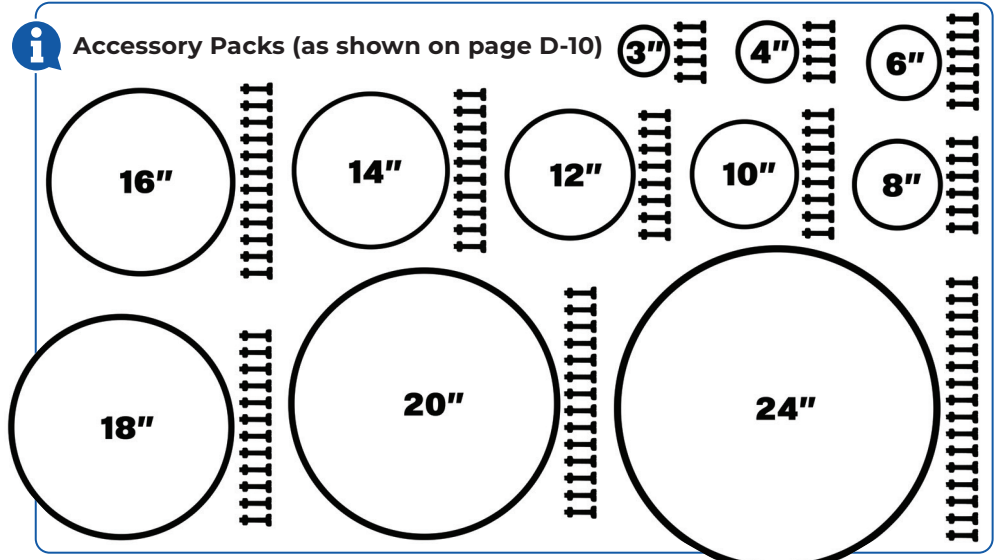
Anti-Rotation T-Head Bolts and Nuts

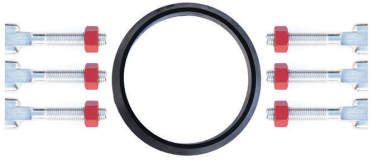
SQUARE NECK

Size	Corten	304SS	316SS	Blue
	Item No	Item No	Item No	Item No
5/8" x 3"	100-510-00530	100-510-00630	100-510-00680	100-510-00580
5/8" x 3-1/2"	100-510-00540	100-510-00640	100-510-00690	100-510-00590
3/4" x 4"	100-510-00550	100-510-00650	100-510-00700	100-510-00600
3/4" x 4-1/2"	100-510-00560	100-510-00660	100-510-00710	100-510-00610
3/4" x 5"	100-510-00570	100-510-00670	100-510-00720	100-510-00620

Gaskets (NSF Certified)

Size	Item No
2"	100-435-00010
3"	100-435-00020
4"	100-435-00030
6"	100-435-00040
8"	100-435-00050
10"	100-435-00060
12"	100-435-00070
14"	100-435-00080
16"	100-435-00090
18"	100-435-00100
20"	100-435-00110
24"	100-435-00120





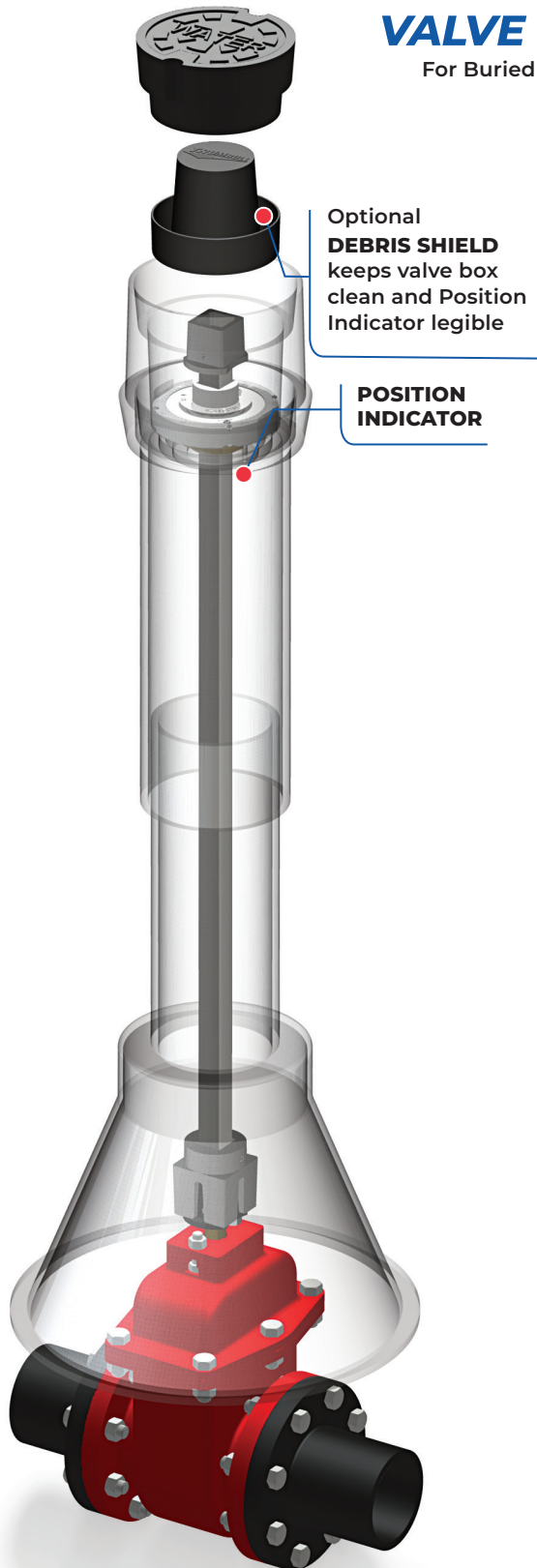
MECHANICAL JOINT ACCESSORY PACKS WITHOUT GLAND

Size	Corten T-Bolts	304SS T-Bolts	316SS T-Bolts	Blue T-Bolts
	Item №	Item №	Item №	Item №
3" Standard T-Bolts	100-430-00010	100-430-00120	100-430-00175	100-430-00065
4" Standard T-Bolts	100-430-00015	100-430-00125	100-430-00180	100-430-00070
6" Standard T-Bolts	100-430-00020	100-430-00130	100-430-00185	100-430-00075
8" Standard T-Bolts	100-430-00025	100-430-00135	100-430-00190	100-430-00080
10" Standard T-Bolts	100-430-00030	100-430-00140	100-430-00195	100-430-00085
12" Standard T-Bolts	100-430-00035	100-430-00145	100-430-00200	100-430-00090
14" Standard T-Bolts	100-430-00040	100-430-00150	100-430-00205	100-430-00095
16" Standard T-Bolts	100-430-00045	100-430-00155	100-430-00210	100-430-00100
18" Standard T-Bolts	100-430-00050	100-430-00160	100-430-00215	100-430-00105
20" Standard T-Bolts	100-430-00055	100-430-00165	100-430-00220	100-430-00110
24" Standard T-Bolts	100-430-00060	100-430-00170	100-430-00225	100-430-00115
3" Long T-Bolts	100-430-00230	100-430-00340	100-430-00395	100-430-00285
4" Long T-Bolts	100-430-00235	100-430-00345	100-430-00400	100-430-00290
6" Long T-Bolts	100-430-00240	100-430-00350	100-430-00405	100-430-00295
8" Long T-Bolts	100-430-00245	100-430-00355	100-430-00410	100-430-00300
10" Long T-Bolts	100-430-00250	100-430-00360	100-430-00415	100-430-00305
12" Long T-Bolts	100-430-00255	100-430-00365	100-430-00420	100-430-00310
14" Long T-Bolts	100-430-00260	100-430-00370	100-430-00425	100-430-00315
16" Long T-Bolts	100-430-00265	100-430-00375	100-430-00430	100-430-00320
18" Long T-Bolts	100-430-00270	100-430-00380	100-430-00435	100-430-00325
20" Long T-Bolts	100-430-00275	100-430-00385	100-430-00440	100-430-00330
24" Long T-Bolts	100-430-00280	100-430-00390	100-430-00445	100-430-00335
3" Anti-Rotation T-Bolts	100-430-00450	100-430-00560	100-430-00615	100-430-00505
4" Anti-Rotation T-Bolts	100-430-00455	100-430-00565	100-430-00620	100-430-00510
6" Anti-Rotation T-Bolts	100-430-00460	100-430-00570	100-430-00625	100-430-00515
8" Anti-Rotation T-Bolts	100-430-00465	100-430-00575	100-430-00630	100-430-00520
10" Anti-Rotation T-Bolts	100-430-00470	100-430-00580	100-430-00635	100-430-00525
12" Anti-Rotation T-Bolts	100-430-00475	100-430-00585	100-430-00640	100-430-00530
14" Anti-Rotation T-Bolts	100-430-00480	100-430-00590	100-430-00645	100-430-00535
16" Anti-Rotation T-Bolts	100-430-00485	100-430-00595	100-430-00650	100-430-00540
18" Anti-Rotation T-Bolts	100-430-00490	100-430-00600	100-430-00655	100-430-00545
20" Anti-Rotation T-Bolts	100-430-00495	100-430-00605	100-430-00660	100-430-00550
24" Anti-Rotation T-Bolts	100-430-00500	100-430-00610	100-430-00665	100-430-00555

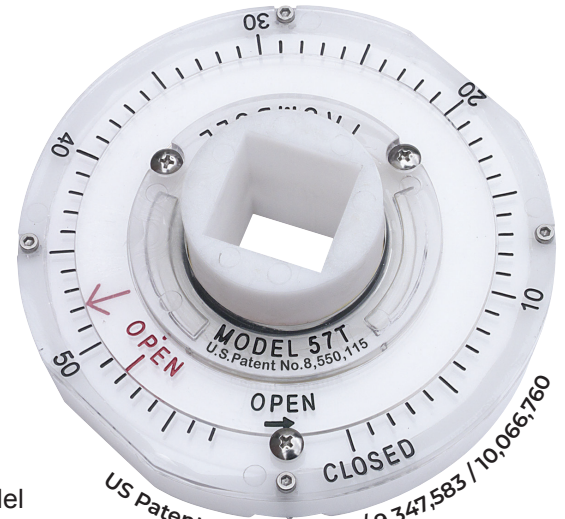
Anti-Rotation Bolt Packs only have 2 Anti-Rotation Bolts per pack

VALVE POSITION INDICATORS

For Buried Service with 1-1/4" Square Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive DuPont™ Delrin® polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- Third-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use above ground in the floor or with Wall Brackets (see pages F-9 to F-10)



Ordering Instructions

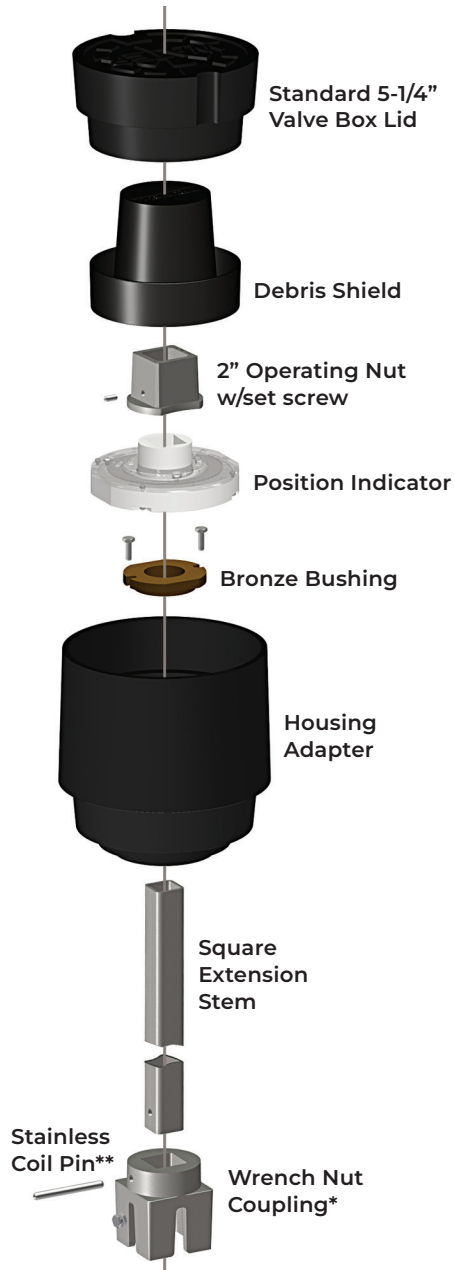
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Item No	Item No
57T	0 - 57	367-9394	367-9393
275T	0 - 275	367-9396	367-9395
870T	0 - 870	367-9400	367-9399

3. Extension Stem required (1-1/4" square)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page F-2)
 - b. Carbon steel or stainless steel
 - c. Tubing or solid bar
4. Debris Shield, item **367-9415** is recommended for buried service

EXPLODED VIEW

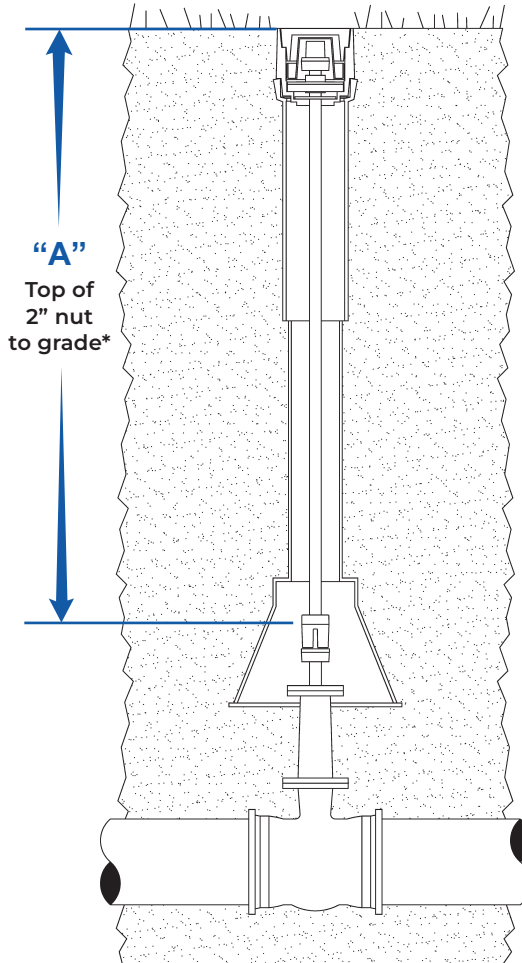
of Square Extension Stem
for Buried Service



SQUARE EXTENSION STEM

* Wrench nut coupling welded to stem at factory.

** When bottom coupling is purchased separately, pin is provided.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page F-1.

Extension Stem Torque Ratings

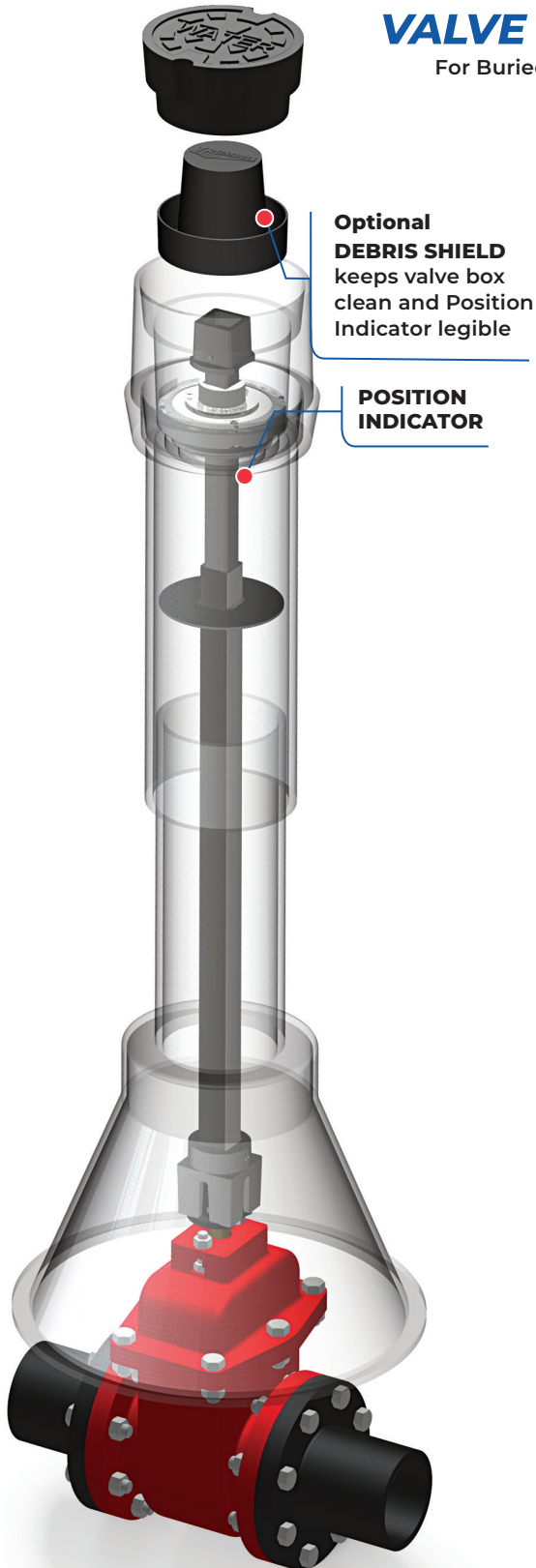
Extension Stems rated for a minimum of 300 ft-lb.
For higher torque capacity, consult Trumbull.



Installation animations online:
www.youtube.com/trumbullmfg

VALVE POSITION INDICATORS

For Buried Service with **Telescopic** Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive DuPont™ Delrin® polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- Third-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use above ground in the floor or with Wall Brackets (see pages F-7 to F-10)
- Telescopic stem eliminates the need for precise field measurement of extension stems and provides for ground movement caused by freezing and thawing



Ordering Instructions

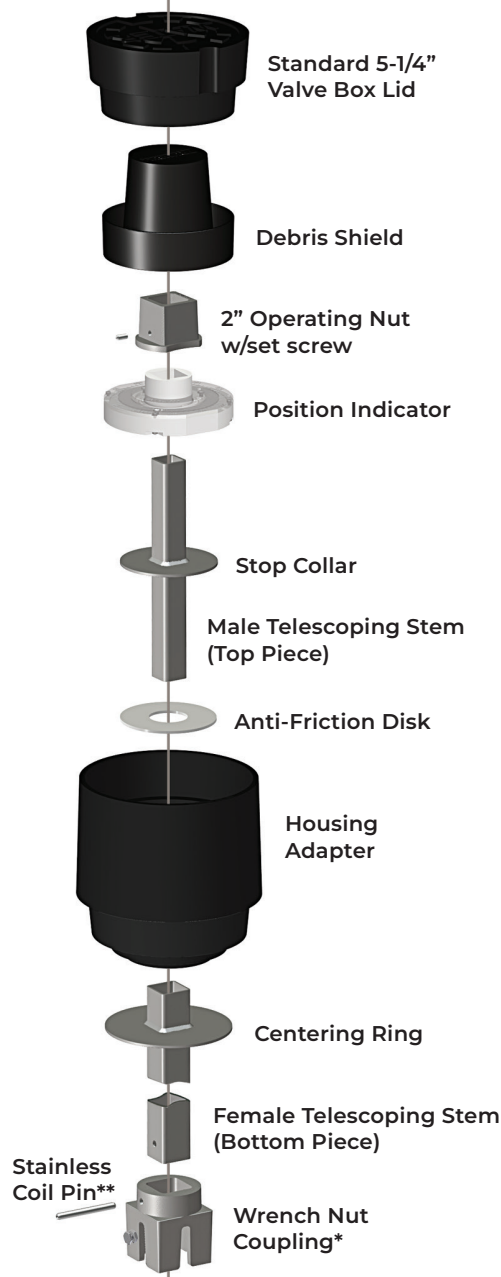
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Item No	Item No
57T	0 - 57	367-9394	367-9393
275T	0 - 275	367-9396	367-9395
870T	0 - 870	367-9400	367-9399

3. Extension Stem required (telescopic)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page F-4)
 - b. Carbon steel or stainless steel
4. Debris Shield, item **367-9415** is recommended for buried service

EXPLODED VIEW

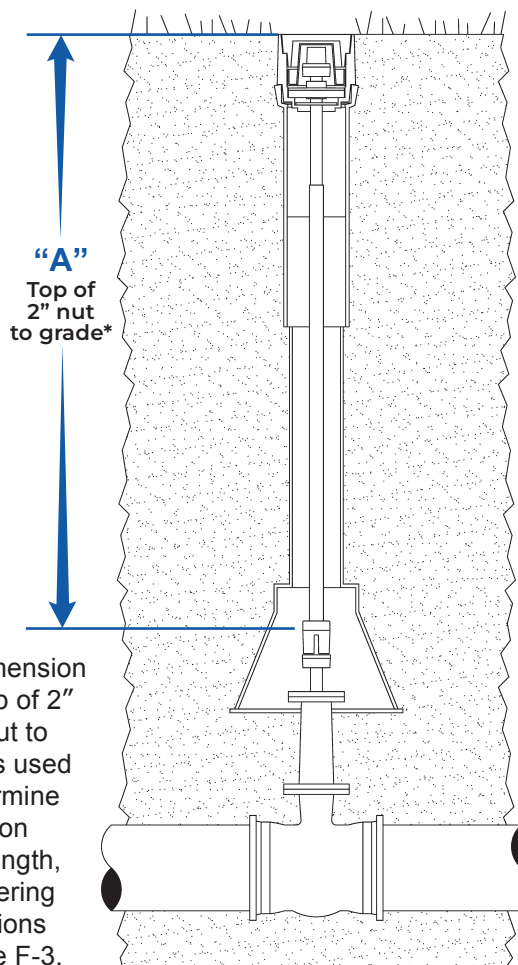
of Telescopic Extension Stem
for Buried Service



TELESCOPIC EXTENSION STEM

* Wrench nut coupling welded to stem at factory.

** When bottom coupling is purchased separately, pin is provided.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page F-3.

Extension Stem Adjustment Ranges and Torque Ratings

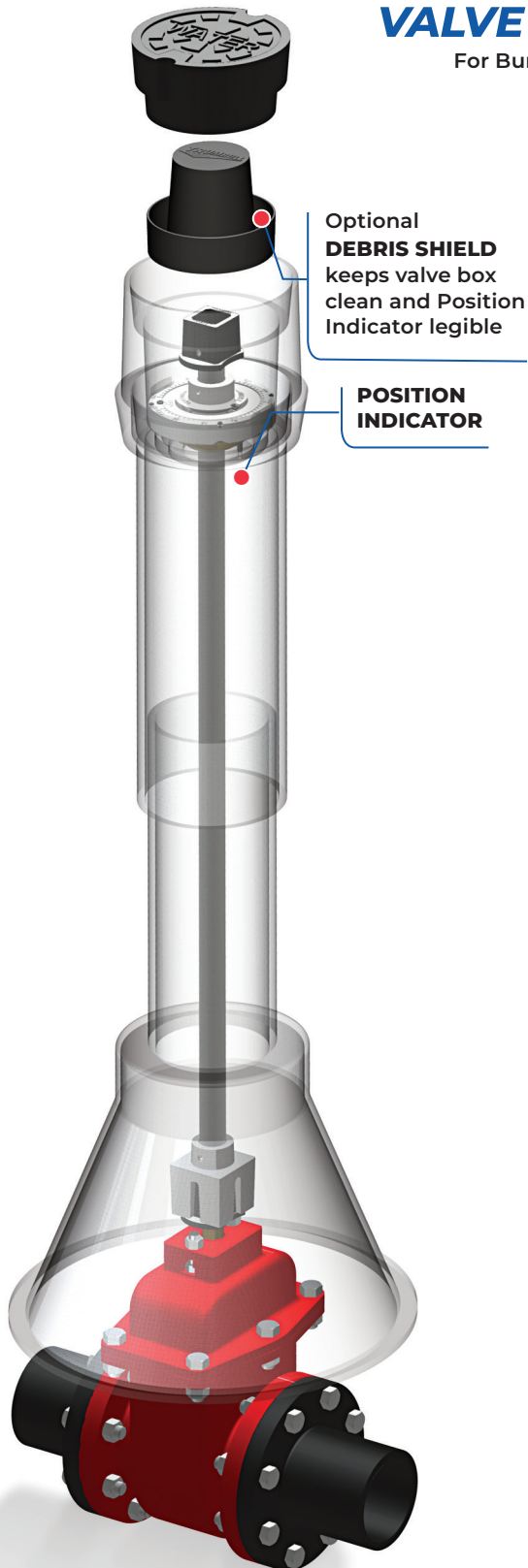
for Telescopic Extension Stems

Range of Dimension "A"		Square Telescopic Extension Stems		Torque In ft-lb
Minimum	Maximum	Length of 1-1/4" Top Part	Length of 1-1/2" Bottom Part	
3 ft.	4-1/2 ft.	30"	30"	300 ft-lb
4-1/2 ft.	6 ft.	30"	48"	300 ft-lb
6 ft.	7-1/2 ft.	30"	66"	300 ft-lb
7-1/2 ft.	9 ft.	30"	84"	300 ft-lb
9 ft.	10-1/2 ft.	30"	102"	300 ft-lb

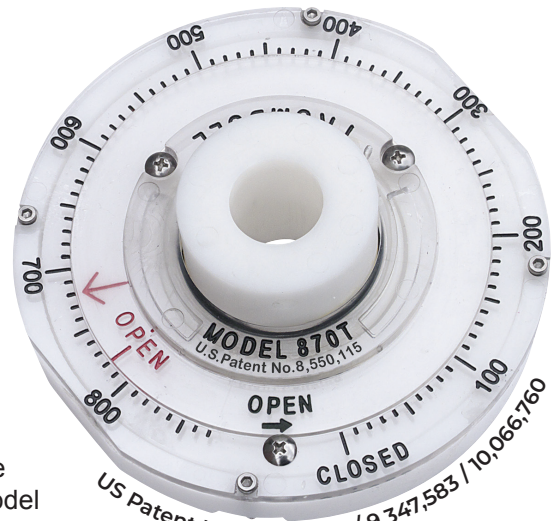
Other stem ranges available upon request.

VALVE POSITION INDICATORS

For Buried Service with **Round** Extension Stems



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive DuPont™ Delrin® polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- Third-party tested to over 1 million revolutions
- Provided with stainless steel hardware and pin
- Also available for use above ground in the floor or with Wall Brackets (see pages F-7 to F-10)



Ordering Instructions

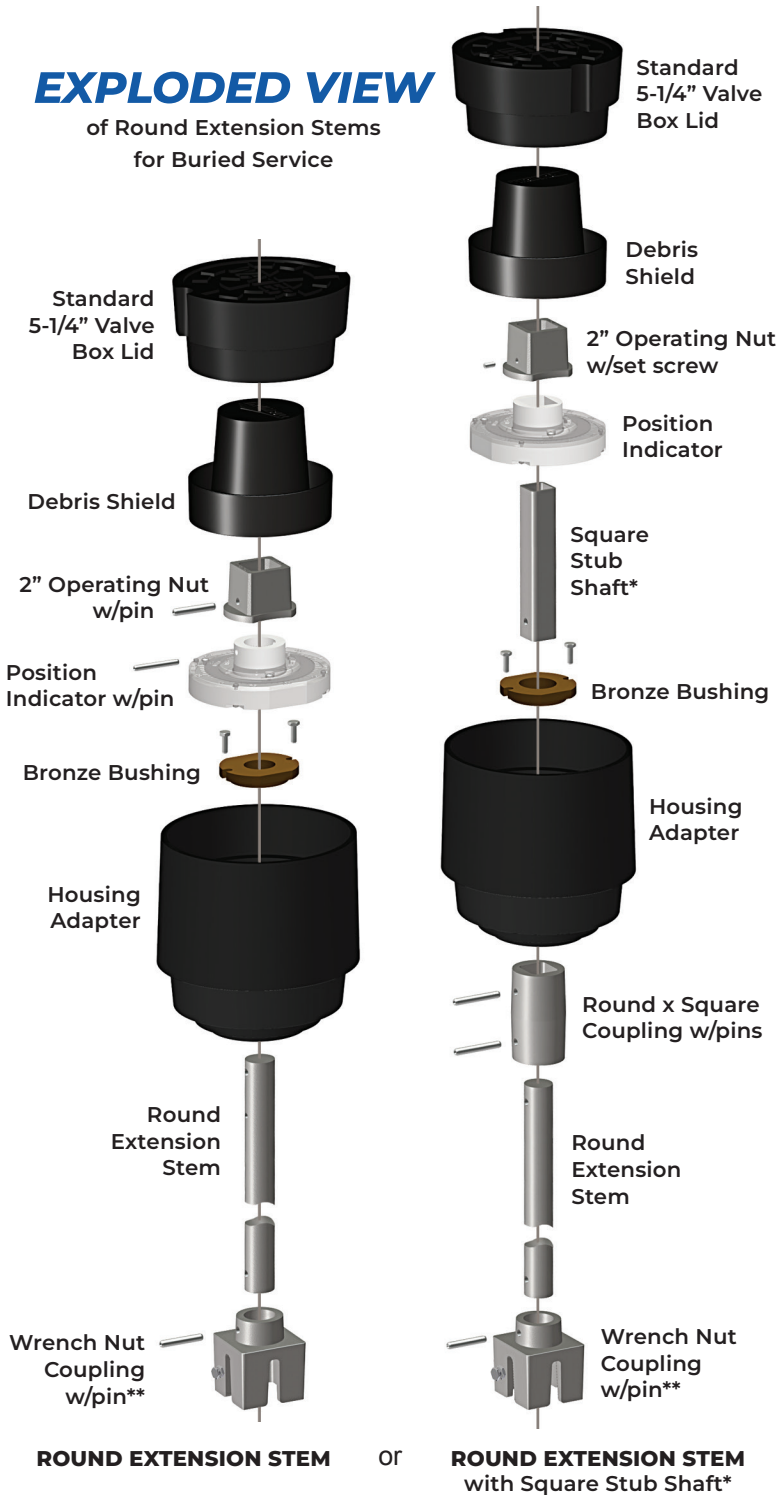
1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)

Model Number	Number of Turns	Open Left	Open Right
		Item No	Item No
57T	0 - 57	367-9404	367-9403
275T	0 - 275	367-9406	367-9405
870T	0 - 870	367-9410	367-9409

3. Extension Stem required (round)
 - a. Length required (provide "A" dimension on the illustration shown on right side of page F-6)
 - b. OD required (maximum OD of 1.75")
 - c. Carbon steel or stainless steel
4. Debris Shield, item **367-9415** recommended for buried service

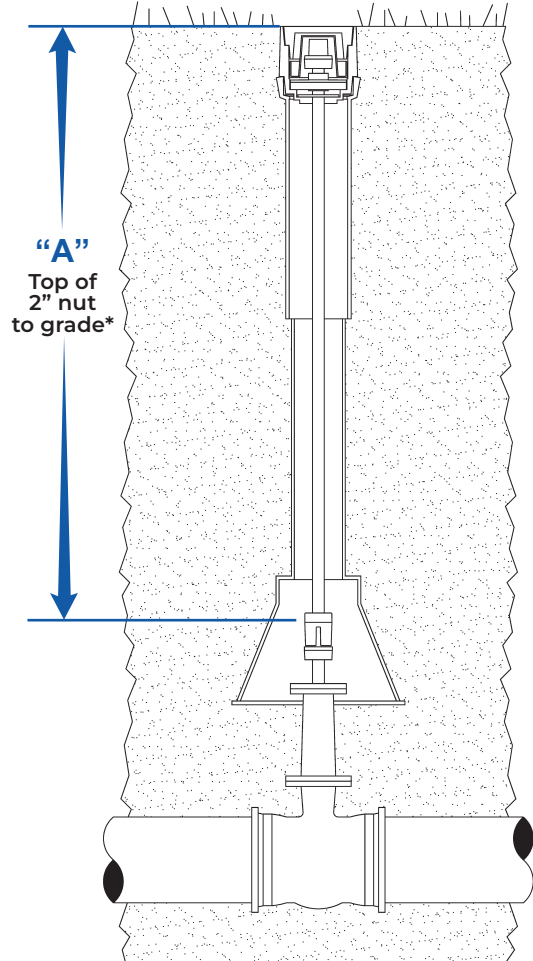
EXPLODED VIEW

of Round Extension Stems
for Buried Service



* Using a square stub shaft saves field drilling and installation of pins inside housing adapter.

** Wrench nut coupling normally furnished pinned to stem.



* The dimension from top of 2" valve nut to grade is used to determine Extension Stem length, per ordering instructions on page F-5.

Extension Stem Torque Ratings

Consult your Trumbull Rep for torque ratings.



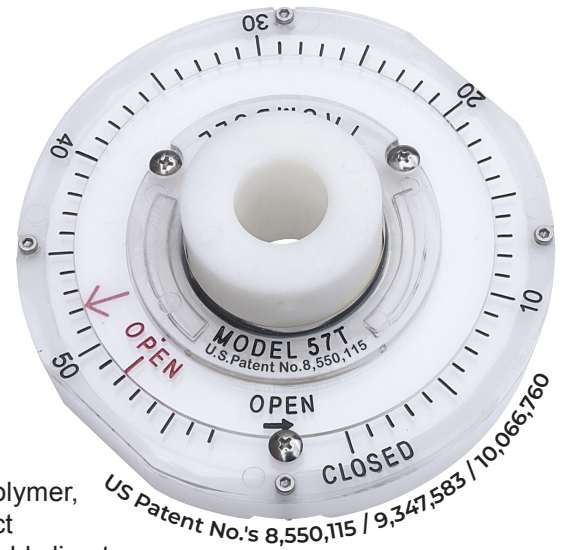
Installation animations online:
www.youtube.com/trumbullmfg

VALVE POSITION INDICATORS

Installation in Floor



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive DuPont™ Delrin® polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- Third-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available w/Wall Bracket for mounting to tank walls (pages F-9 to F-10), and in Valve Boxes for buried service (pages F-1 to F-6)



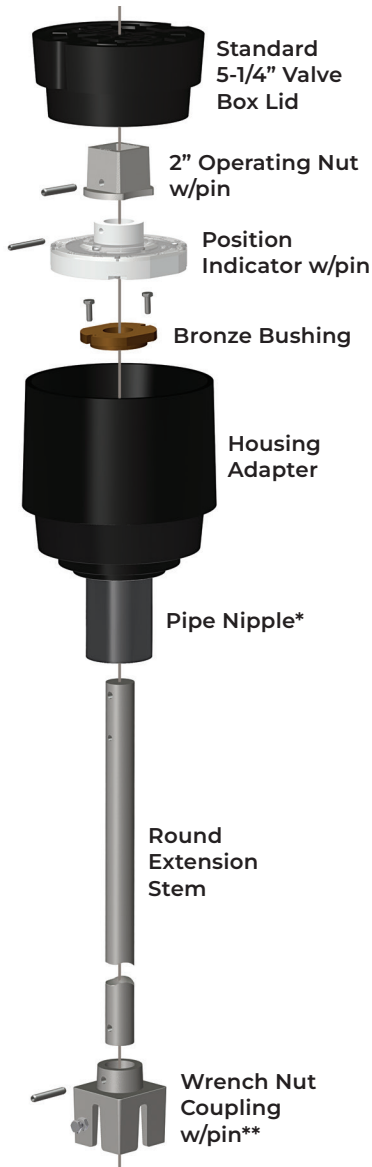
Ordering Instructions

1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns, shown below)
3. Extension Stem required
 - a. Length required
 - b. Round (maximum OD of 1.75"), 1-1/4" square, or round x square stem (see reverse for details)
 - c. Carbon steel or stainless steel
4. Housing Adapter - Floor Box style
 - a. Cast iron housing (unsealed), see page F-11
 - b. Carbon steel or stainless steel (sealed), see page G-13

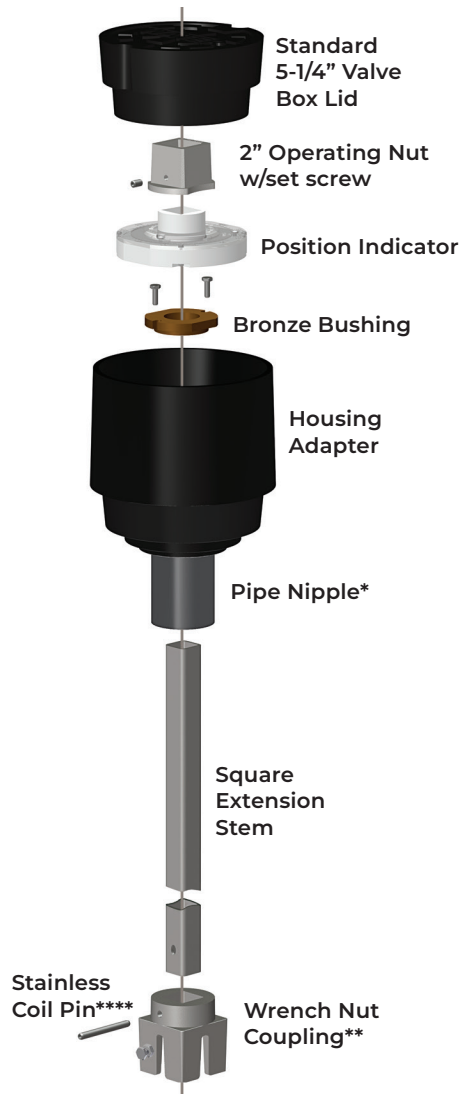
Model Number	Square Ext. Stem		Round Ext. Stem	
	Open Left Item No	Open Right Item No	Open Left Item No	Open Right Item No
57T	367-9394	367-9393	367-9404	367-9403
275T	367-9396	367-9395	367-9406	367-9405
870T	367-9400	367-9399	367-9410	367-9409

EXPLODED VIEW

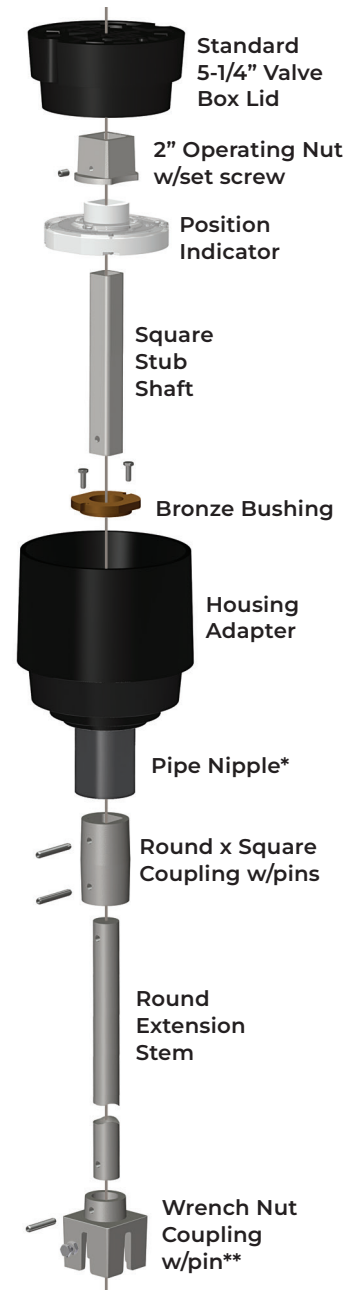
Extension Stem Installation in Floor



ROUND EXTENSION STEM



SQUARE EXTENSION STEM***



ROUND EXTENSION STEM*
with Square Stub Shaft**

* Use a pipe nipple 5/8" longer than the increase in floor slab thickness required, as the tapped thread is 5/8" deep.

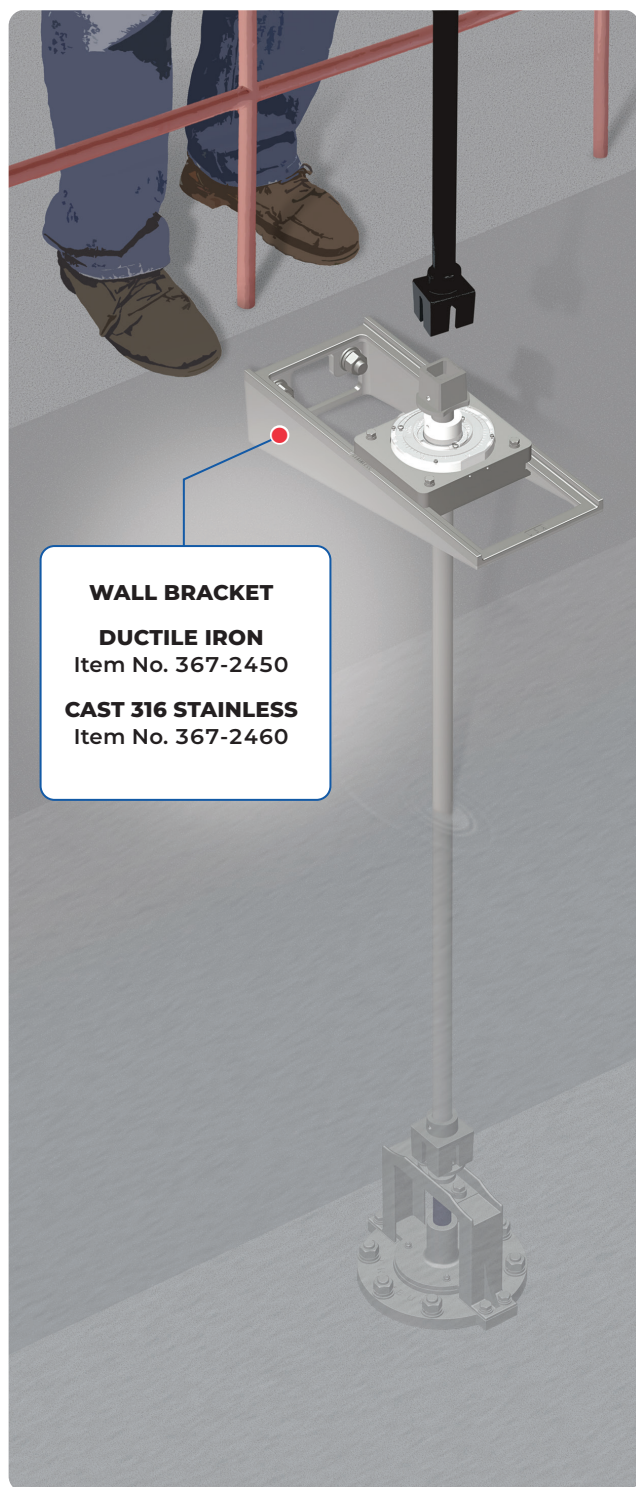
** Wrench nut coupling normally furnished pinned to round stems, and factory welded on square stems.

*** Using a square Extension Stem, or a round Extension Stem with a square stub shaft saves field drilling and installation of pins inside floor box.

**** When bottom coupling is purchased separately, pin is provided.

VALVE POSITION INDICATORS

Installation with Wall Bracket



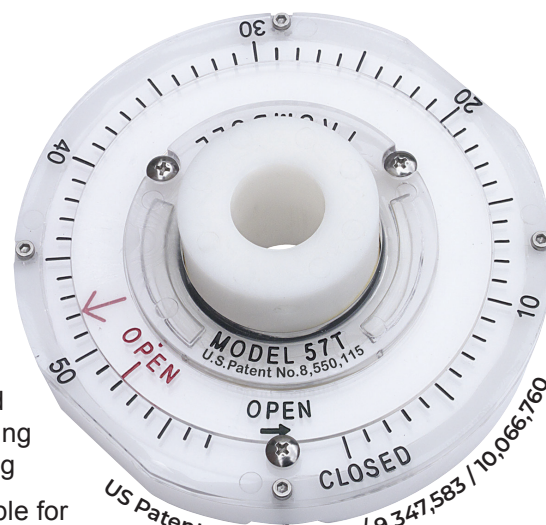
WALL BRACKET

DUCTILE IRON

Item No. 367-2450

CAST 316 STAINLESS

Item No. 367-2460



- Eliminates broken valve stems caused by over-opening or over-closing
- Field-adjustable for any number of turns within the range of each model
- Constructed of heavy-duty, non-corrosive DuPont™ Delrin® polymer, providing high-impact resistance even in cold climates
- Double O-ring seals keep out water and dirt
- Third-party tested to over 1 million revolutions
- Provided with stainless steel hardware
- Also available for use in the floor (pages F-7 to F-8), and in Valve Boxes for buried service (pages F-1 to F-6)

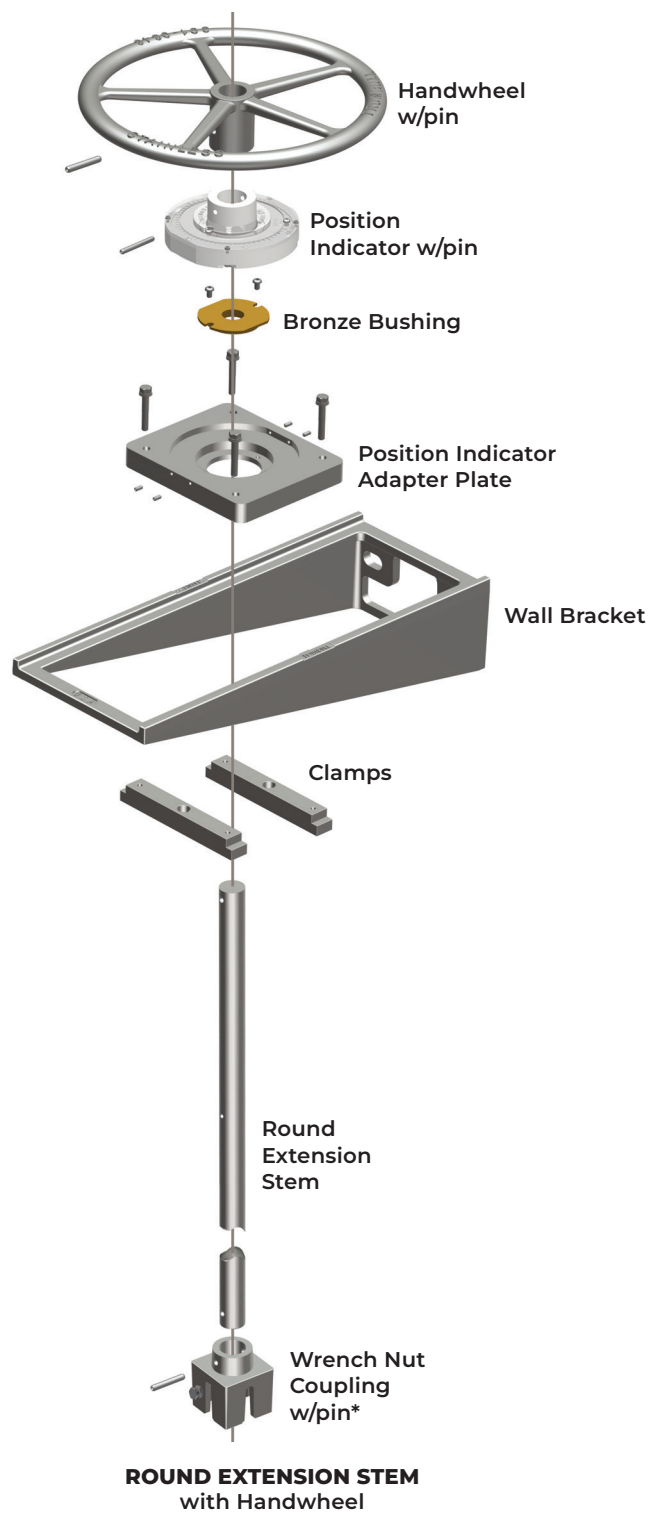
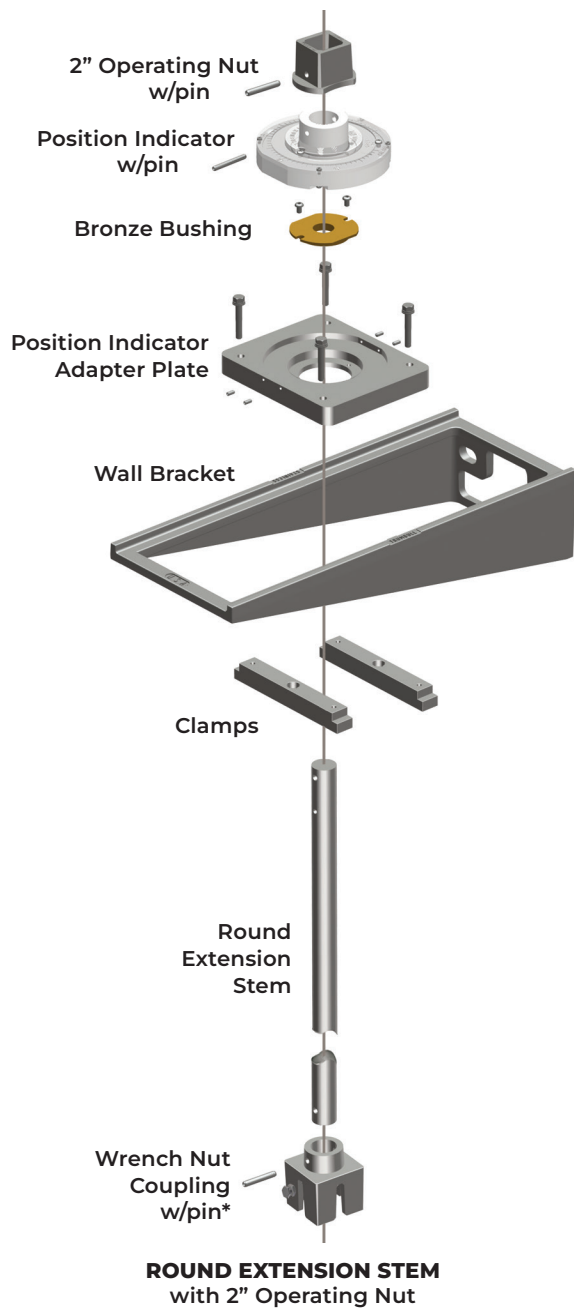
Ordering Instructions

1. Specify direction of open (open left or open right)
2. Model required (available in 57, 275 or 870 turns)
3. Extension Stem required
 - a. Length required
 - b. Round (maximum OD of 1.75") see next page for details
 - c. Carbon steel or stainless steel

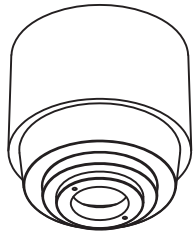
Model Number	Number of Turns	Open Left	Open Right
		Item No	Item No
57T	0 - 57	367-9404	367-9403
275T	0 - 275	367-9406	367-9405
870T	0 - 870	367-9410	367-9409

EXPLODED VIEW

Round Extension Stems
Installation with Wall Bracket



* Wrench nut coupling normally furnished pinned to stem.



Item Number:
Domestic: **367-9417**
Non-Domestic: **367-9416**

Coating: Black Enamel
Material: Grey Iron
Weight: 35 lbs

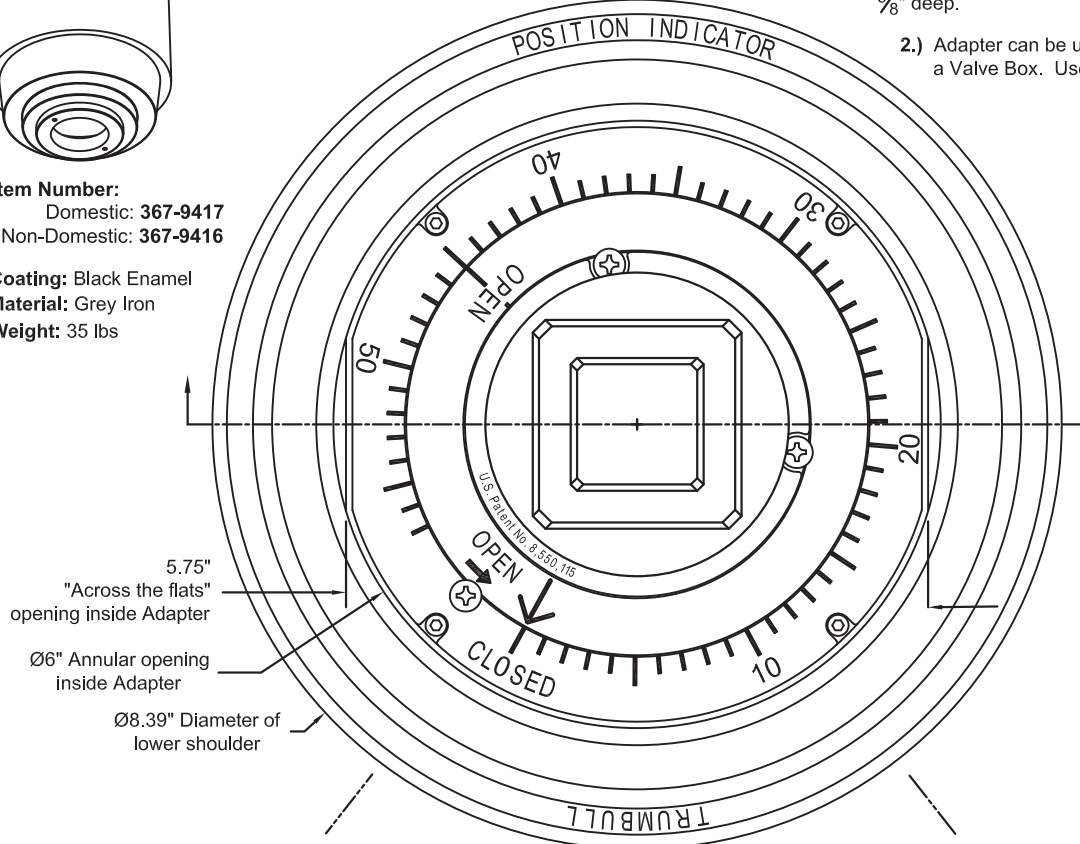
Typical top view
Position Indicator & Adapter
(shown w/out Lid & Debris Shield)

Notes:

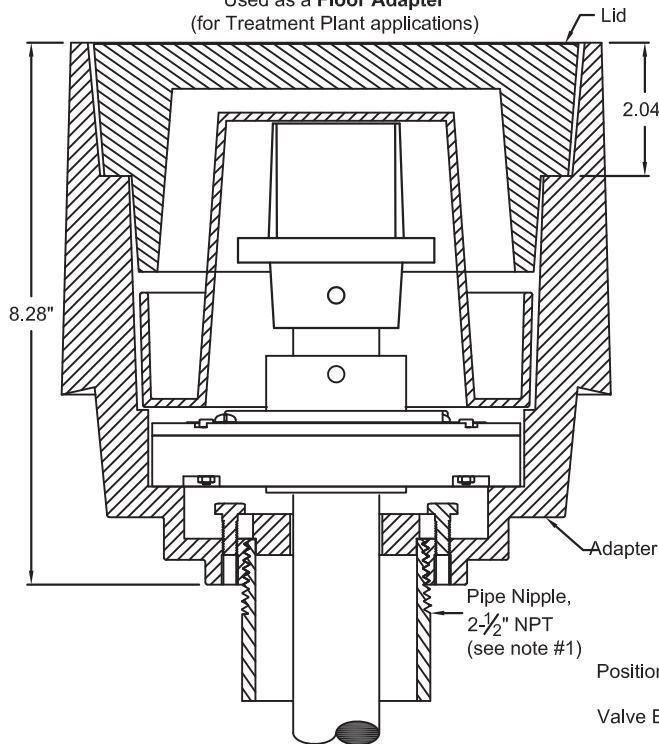
- 1.) Use Pipe Nipple $\frac{5}{8}$ " longer than the increase of floor slab required, as the threads on the underside of Adapter are $\frac{5}{8}$ " deep.
- 2.) Adapter can be used with PVC C900 Pipe to form a Valve Box. Use Pipe sizes 6" or 8" DR 14.

US Patent No.'s

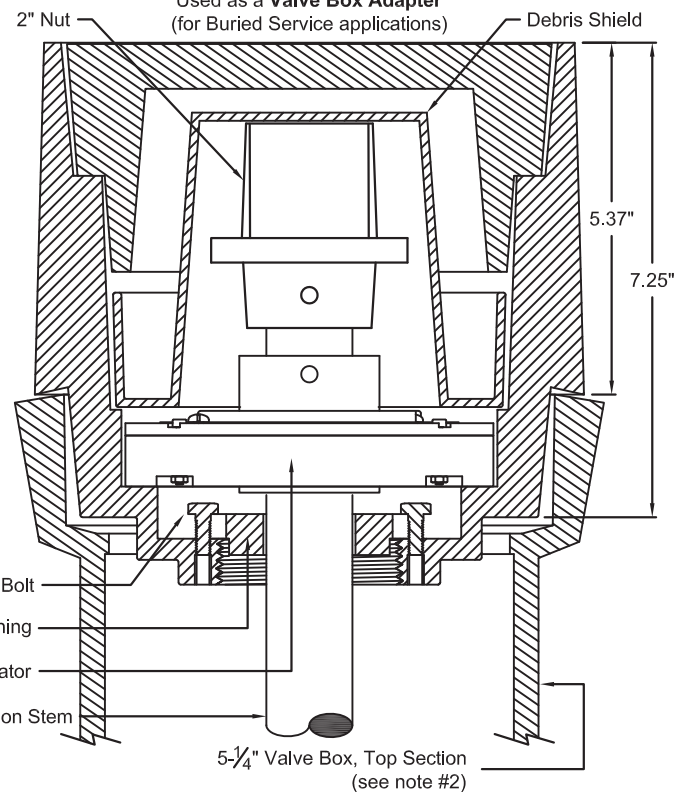
8,550,115
9,347,583
10,066,760



Typical section view
Used as a **Floor Adapter**
(for Treatment Plant applications)



Typical section view
Used as a **Valve Box Adapter**
(for Buried Service applications)



**HOUSING ADAPTER FOR
POSITION INDICATOR**
Drawn to Scale

Drawn:
BJE
02/08/11

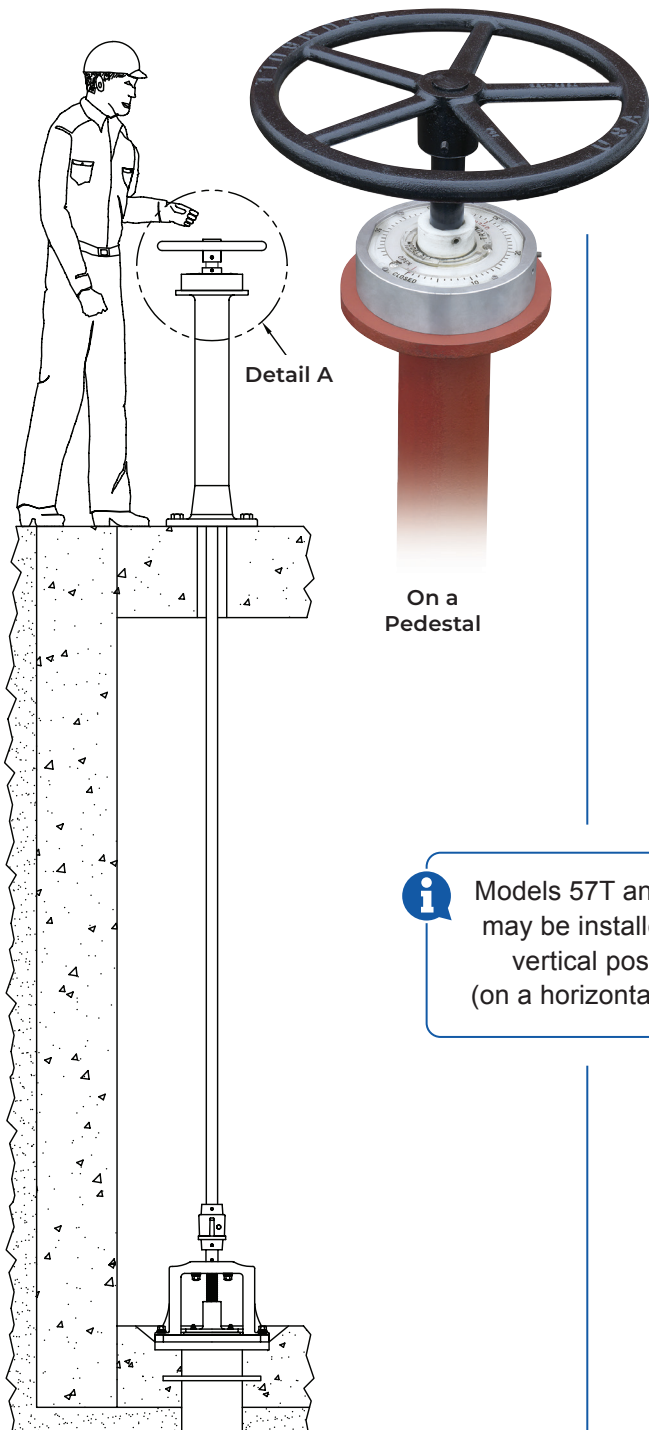
Revision:
BJE
© 09/10/18

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

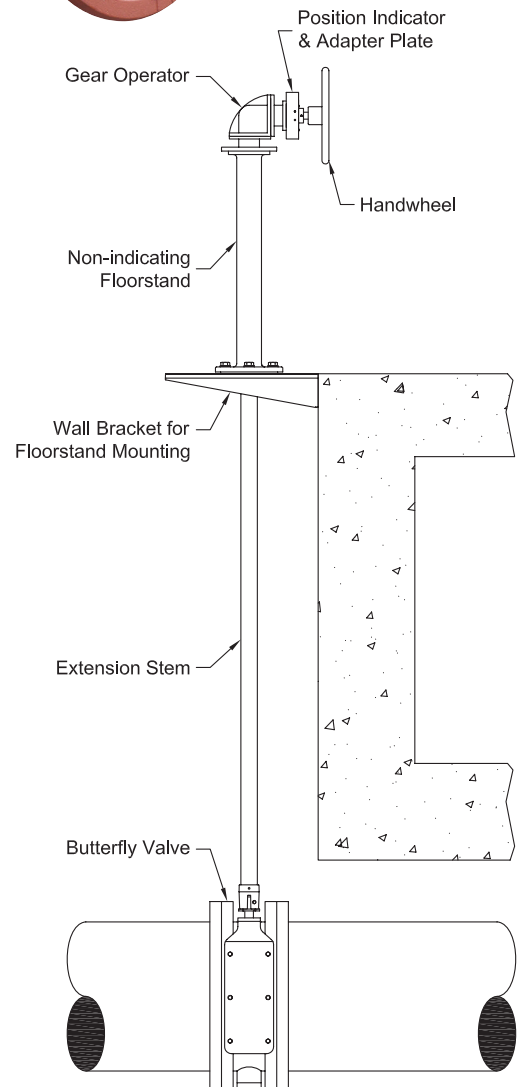
VALVE POSITION INDICATORS

Installation with Floorstands

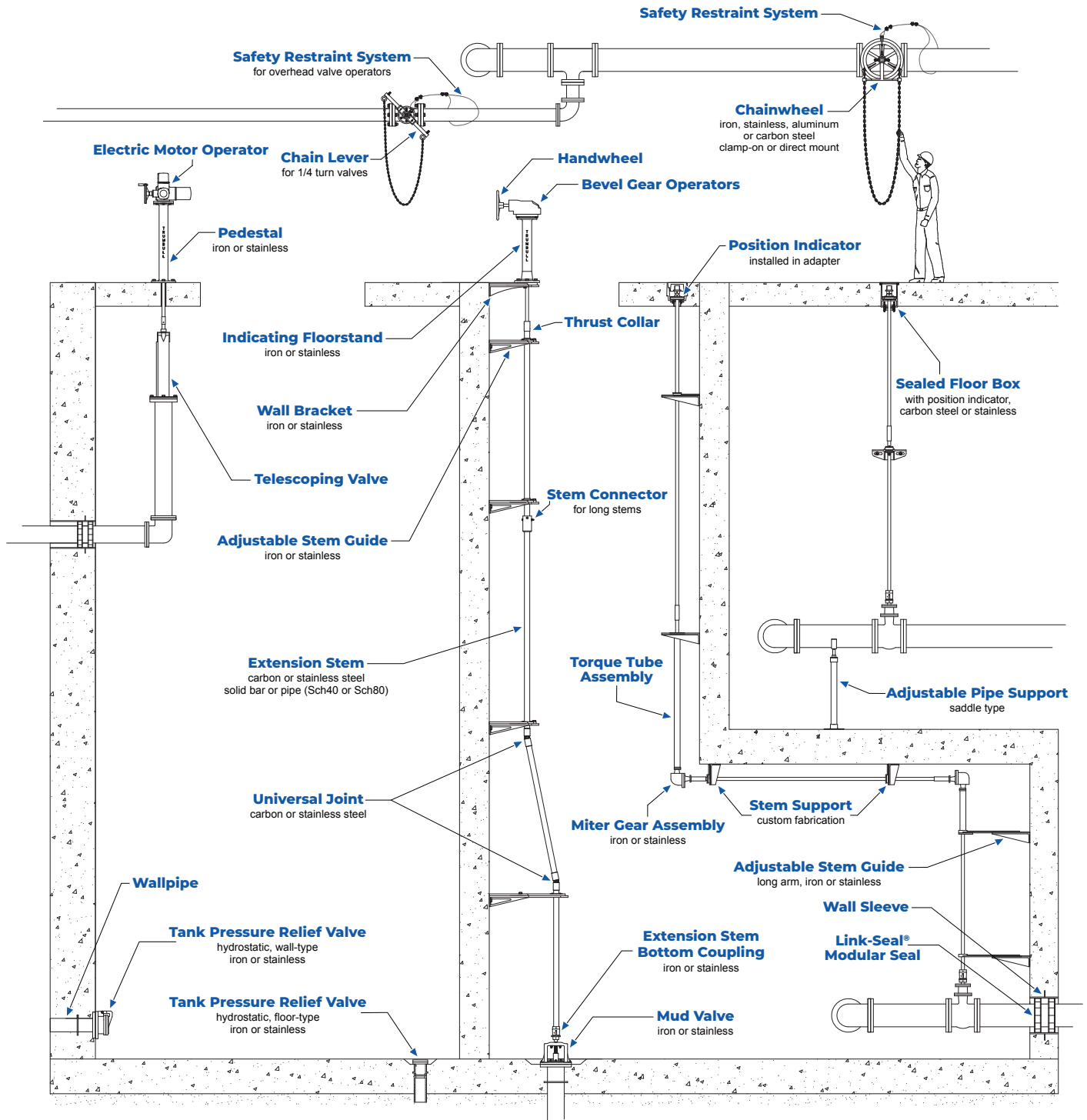
US Patent No.'s 8,550,115 / 9,347,583 / 10,066,760



i Models 57T and 275T may be installed in a vertical position (on a horizontal stem).



TRUMBULL TREATMENT PLANT PRODUCTS



ROUND VALVE EXTENSION STEMS

Solid Bar or Pipe – Carbon Steel or Stainless Steel

Trumbull Round Valve Extension Stems are used to raise the elevation of both buried and “in-plant” valves having a 2” square operating nut. We can also adapt to valves without 2” nut.

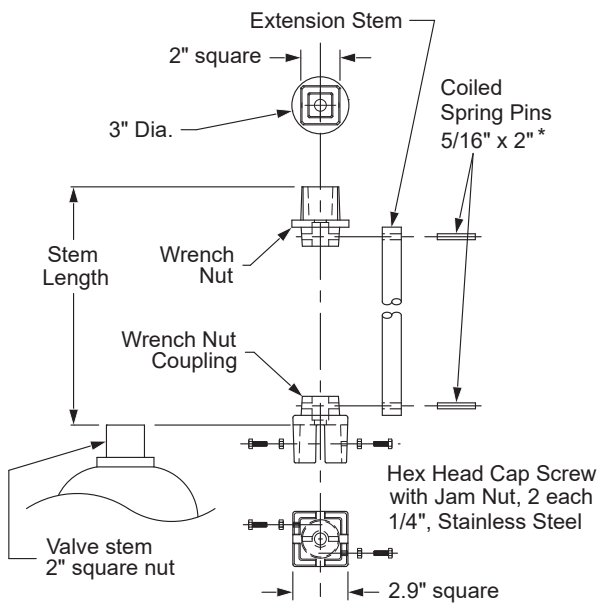
The extension stem is made up of an extension rod (or pipe), a 2” square top wrench nut (or handwheel), and a bottom wrench nut coupling. Wrench nut coupling fits over the 2” square nut of the valve stem being extended, held to the nut by two cap screws with jam nuts threaded in the bottom coupling.

The top nut (or handwheel) and bottom coupling are pinned to the extension rod (or pipe) which is drilled to receive stainless steel coil pins.

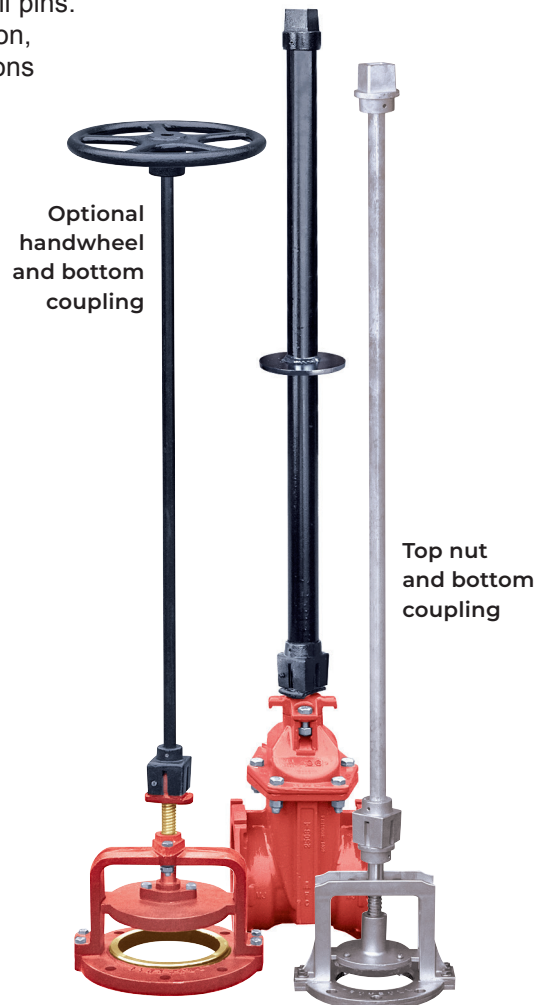
The top nuts and bottom couplings are available in either ductile iron, grade 65-45-12, or stainless steel, Type 316. The pinned connections permit the removal of the castings so the rod can slide through Trumbull Floor Boxes and Stem Guides. Extensions can easily be shortened by cutting the stem and re-drilling for the pin.

EXTENSION STEM ASSEMBLY

Using a Wrench Nut and Wrench Nut Coupling



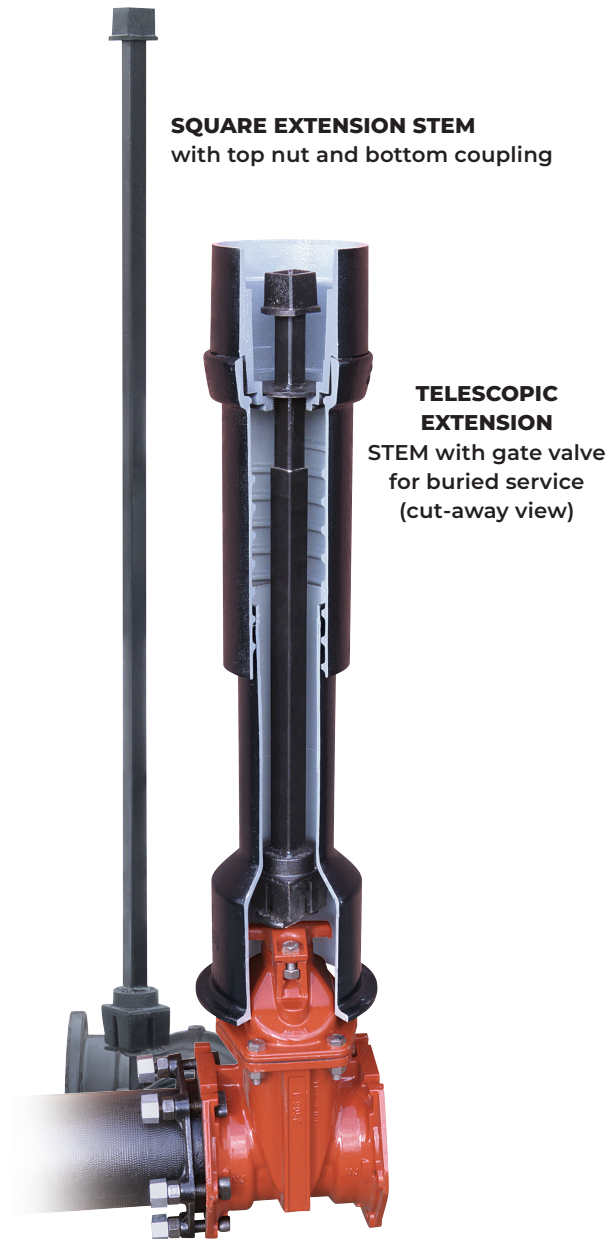
*Smaller diameter stems use 5/16" x 2" SS Coiled Spring Pins while larger stems use 5/16" x 3" SS Coiled Spring Pins.



Extension Stems are normally furnished complete with top nut (or handwheel), rod, bottom coupling, two cap screws with jam nuts and pins. Top nuts and bottom couplings are also available for separate sale (see page G-4). Universal Joints, Thrust Collars and Miter Gears are also available. See page G-6 for illustration of custom installations.

SQUARE VALVE EXTENSION STEMS

Telescopic and Non-Telescopic Types



i TELESCOPIC EXTENSION STEMS

Telescopic Stems are a useful option in the choice of Extension Stems, eliminating the need for time-consuming measurements. One of the additional advantages of Telescopic Stems is their ability to adapt to ground movements caused by freezing and thawing cycles. These stems can accommodate the natural shifts and changes in the environment. This solution simplifies the installation process and guarantees long-term durability and reliability. It can streamline operations, and offer peace of mind to professionals working with Extension Stems.

Telescopic Extension Stems can be furnished with Valve Position Indicators for buried service (US Patented), as illustrated on pages F-3 and F-4.

Telescopic Extension Stems are furnished only as complete units. They use a 1-1/4" square tubular upper section which slides inside a 1-1/2" square tubular bottom section. This style has an adjustment range, which saves the installer from field cutting the stem to the exact length required. The non-telescopic version uses 1-1/4" square stock, either solid or tubular, (shown on page F-1).

The top nuts and bottom couplings used with Square Extension Stems have an internal square cavity that fit the square stems. The flat sides inside the cavity bear against the flat sides of the stem, reducing the dependence on the drive pins used to connect the top nuts and bottom couplings of round extension stems. This enables the installer to cut Square Extension Stems in the field and attach the top coupling with two cap screws, as opposed to drilling for a drive pin. Because of its location, the bottom coupling should be welded or pinned, to provide a secure connection. The top nuts and bottom couplings are domestic ductile iron, grade 65-45-12, or Type 316 stainless steel. Carbon or stainless steel bar or tubing is domestic.

Trumbull can provide Square Extension Stems complete with the required length of square stock, top nut with set screw and welded bottom coupling with two stainless cap screws and jam nuts. Or, the components can be purchased separately for non-telescopic stems (page G-4).

See page F-3 for ordering information and page F-4 for adjustment ranges.

i When using Trumbull's Valve Position Indicator for buried service, Square Extension Stems are recommended. They eliminate the need to drill holes and pin the stem to attach the Position Indicator and the 2" nut in the field (see pages F-1 and F-2).

TOP NUTS AND BOTTOM COUPLINGS

For Round and Non-Telescopic Square Stems - Ductile Iron and Stainless Steel

DUCTILE IRON MODELS

Solid Rod	Max Torq* in ft-lb	Steel Pipe	Max Torq* in ft-lb	Bore Diameter	Top Nut Item No	Bottom Coupling Item No
7/8"	340	1/2"	325	0.905"	367-4953	367-4963
1"	390	3/4"	410	1.155"	367-4954	367-4964
1-1/4"	480	----	----	1.265"	367-4905	367-4915
----	----	1"	510	1.330"	367-4901	367-4910
1-3/8"	530	----	----	1.390"	367-4955	367-4965
1-1/2"	580	1-1/4"	640	1.675"	367-4956	367-4966
1-3/4"	680	1-1/2"	740	1.929"	367-4957	367-4967
2"	775	----	----	2.047"	367-4958	367-4968
----	----	2"	920	**	367-4959	367-4969
1-1/4" square stems		***	----	----	367-4930	367-4938

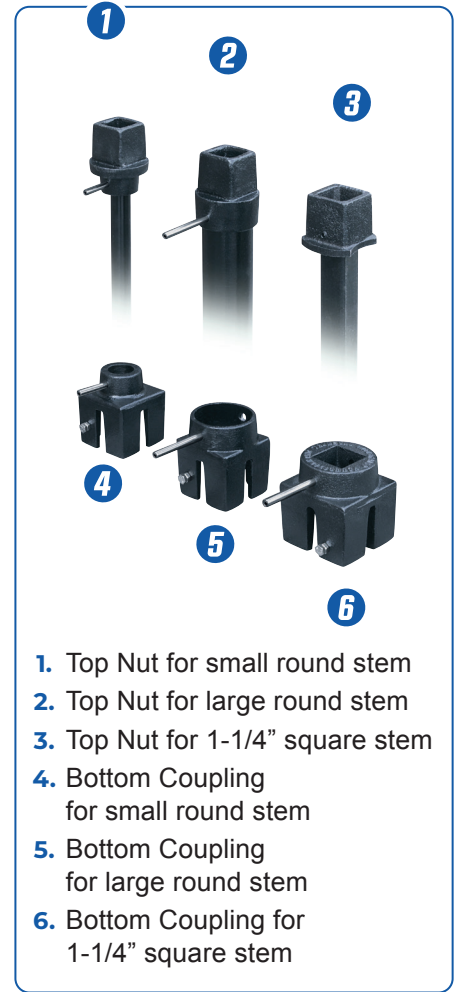
STAINLESS STEEL

3/4"	325	----	----	0.780"	367-4931	367-4941
1-1/4"	480	----	----	1.265"	367-4935	367-4945
----	----	1"	510	1.330"	367-4933	367-4943
1-1/2"	580	1-1/4"	640	1.675"	367-4934	367-4944
----	----	1-1/2"	740	1.929"	367-4932	367-4942
----	----	2"	920	**	367-4936	367-4947
1-1/4" square stems		***	----	----	367-4929	367-4937

* Maximum torque is based on the minimum load for 5/16" coil pin.
For higher torque capacity or for square stems, consult Trumbull.

** Nuts and Couplings have 2.030" hub diameter; fit inside 2" pipe.

*** Max torque is 250 ft-lb for 1-1/4" square tubing and 460 ft-lb for solid bar.



HANDWHEELS

Additional sizes and materials of handwheels are available. Contact Trumbull for more information.

Cast Handwheels

Item No	Material	O.D.	Description	Weight
367-4961	Cast Iron	14"	Bored to fit 1.188" rod or larger	11.60 lbs.
367-4962	Cast Iron	14"	Socket to fit 2" square AWWA nut	15.15 lbs.
367-2043	316 SS	14"	1" Rod, made of cast 316 SS	11.20 lbs.
367-2044	316 SS	14"	1" Pipe, made of cast 316 SS	11.20 lbs.
367-2046	316 SS	14"	1-1/4" Rod, made of cast 316 SS	11.20 lbs.
367-2047	316 SS	14"	1-1/4" Pipe, made of cast 316 SS	11.20 lbs.

Tubular Handwheels

Item No	Material	Dia.	Bore	Weight
367-2055	CS	8"	1.010"	3.40 lbs.
367-2054	CS	12"	1.010"	4.35 lbs.
367-2056	CS	18"	1.010"	5.45 lbs.
367-2057	CS	24"	1.010"	5.70 lbs.
367-2058	CS	30"	1.010"	10.30 lbs.
391-0941	SS	8"	1.010"	3.40 lbs.
391-0942	SS	14"	1.010"	4.90 lbs.
391-0943	SS	18"	1.010"	5.45 lbs.
391-0944	SS	24"	1.010"	5.70 lbs.

VALVE EXTENSION STEMS

ORDERING INFORMATION

COMPLETE ROUND EXTENSION STEMS

1. Quantity
2. Overall length — See “Stem Length” of drawing on page G-2.
3. Order using the following chart:

Material	Pipe or Solid Bar	Type	Operator	Coating
Carbon Steel	Pipe	Sch. 40	2" DI Square Nut, or 14" CI Handwheel*	Black Enamel**
		Sch. 80		
	Solid Bar	Hot Rolled		
		Cold Rolled		
Stainless Steel	Pipe (Sch. 40)	304	2" SS Square Nut, or 14" Handwheel, CI or SS	n/a
		316		
	Solid Bar	304		
		316		

4. Any special requirements, such as Handwheels, Valve Box Centering Rings, Universal Joints, Valve Position Indicators or Miter Gears.

EXTENSION STEM COMPONENTS ONLY

1. Specify quantity of top nuts, bottom couplings, handwheels and stem couplings. Top nut and handwheel furnished with stainless coil pin. Bottom coupling furnished w/stainless coil pin and two cap screws/jam nuts.
2. For ductile iron top nut and bottom coupling select from chart on page G-4, based on type and diameter of extension being used. Stainless steel top nut and bottom coupling are normally furnished to fit 1-1/4" solid rod or 1" Sch 40 pipe. Specify if larger bore sizes are required, up to a maximum of 2".

OS&Y ADAPTERS

“Outside Screw and Yoke” Adapters

OS&Y/Handwheel Adapters are designed to allow an extension stem to be added to a rising stem valve with an existing handwheel.

These adapters give the operator the flexibility of operating the valve from either the actual valve location, or at some elevation above the valve.

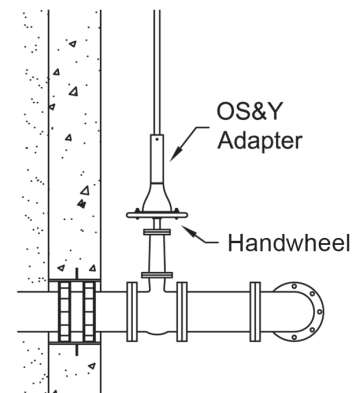
COMPLETE SQUARE EXTENSION STEMS

1. Quantity required
2. Overall length
3. Material type
 - a. carbon or stainless steel
 - b. solid bar or tubing

1-1/4" SQUARE ONLY

* Other handwheel diameters available (see page G-4).

** Tnemec 37H-77 & N140-1211 normally stocked and ready to ship. Additional coatings, such as powder coating, available as special order.



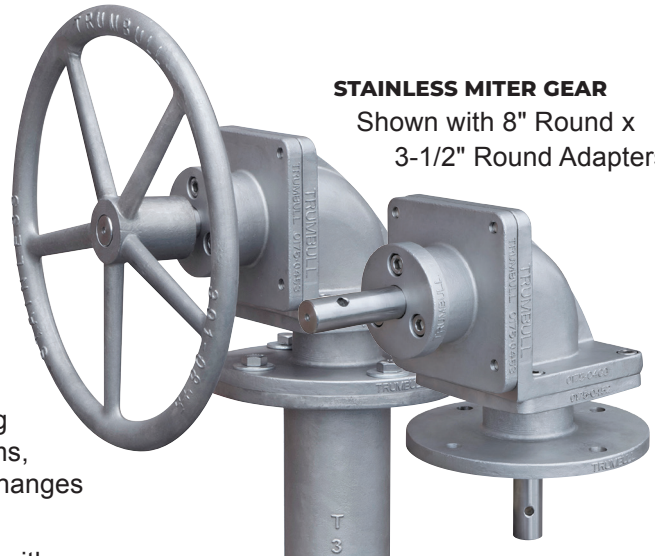
MITER GEARS

Gear Ratio = 1:1, Input/Output Shaft Diameter = 0.984"

Trumbull Miter Gears are heavy-duty, enclosed gear assemblies available in ductile iron and stainless steel models, and are designed to fulfill these primary functions:

- To be used as an add-on component to Trumbull Floorstands or Pedestals.
- To be mounted directly to valves where a 90° change in the input shaft direction is required.
- For use as a stand-alone component in a valve operating assembly with rotating elements, such as extension stems, where the installed conditions require one or more 90° changes of direction.

Housings are cast 316 stainless steel or ductile iron 65-45-12 with a Tnemec N140-1211 two-part epoxy, NSF-61 certified exterior coating. The gears are case hardened steel; the gear shafts and fasteners are 316 stainless steel. Trumbull Miter Gear Assemblies are provided standard with a recessed grease fitting for easy maintenance and Buna-N O-ring seals on each end adapter.



STAINLESS MITER GEAR

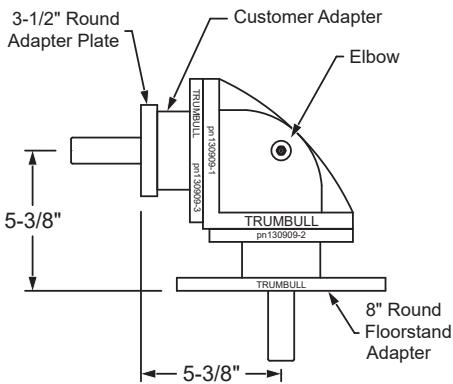
Shown with 8" Round x 3-1/2" Round Adapters



Trumbull Miter Gears have a recommended maximum working torque of 200 ft-lb (270 N-m). For applications with higher torque requirements, please consult Trumbull.

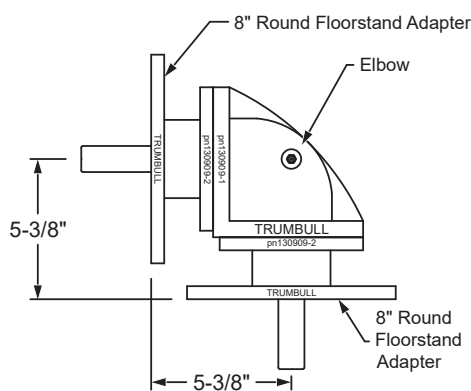
MG1A

8" Round x 3-1/2" Round



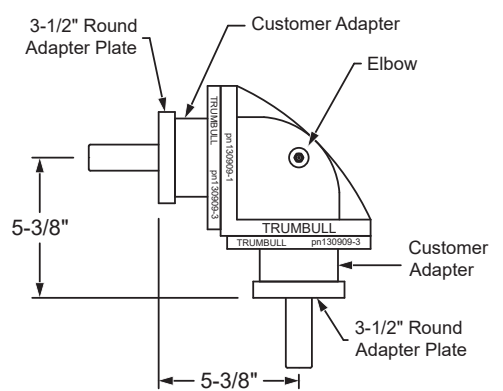
MG1C

8" Round x 8" Round



MG3A

3-1/2" Round x 3-1/2" Round



End Configurations	Model №	Weight	Typical Usage for Each End Adapter
8" Round x 3-1/2" Round	MG1A	39.00 lbs.	8" Round - mates to our Floorstands 3-1/2" Round - for use with handwheel or nut operators
8" Round x 8" Round	MG1C	46.00 lbs.	Both 8" Round ends mate to our Floorstands & other fabrications such as torque tubes
3-1/2" Round x 3-1/2" Round	MG3A	32.00 lbs.	Both 3-1/2" Round ends for use with either extension stem assemblies, handwheel, or nut operators

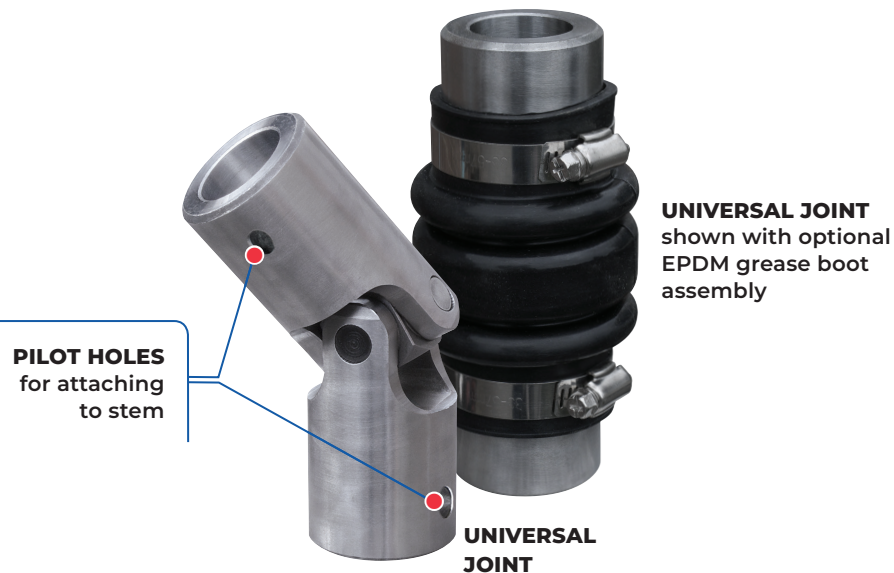
UNIVERSAL JOINTS

Used to Correct Misalignment of Valve Extension Stems

Trumbull Heavy-Duty Universal Joints are the answer to many common misalignment problems often encountered in valve applications.

Access to valves in treatment plants is often blocked by piping, equipment, or structural obstructions, requiring operation from a location that is not in line with the valve stem. The use of Universal Joints can help solve this situation, as shown by the typical application figure at right.

An optional resilient boot is recommended to seal and protect the Universal Joint, while still permitting full motion. The boot is packed with water-resistant grease on-site, keeping out contaminants and maximizing service life. The boot is furnished with stainless steel retainer clamps. Grease is supplied by customer.



Universal Joints*

Includes two 5/16" x 2" coil spring pins

Material	Item No	Weight
Carbon Steel	367-8352**	3.65 lbs.
T304 SS	367-8355**	3.70 lbs.
T316 SS	367-8356**	3.70 lbs.

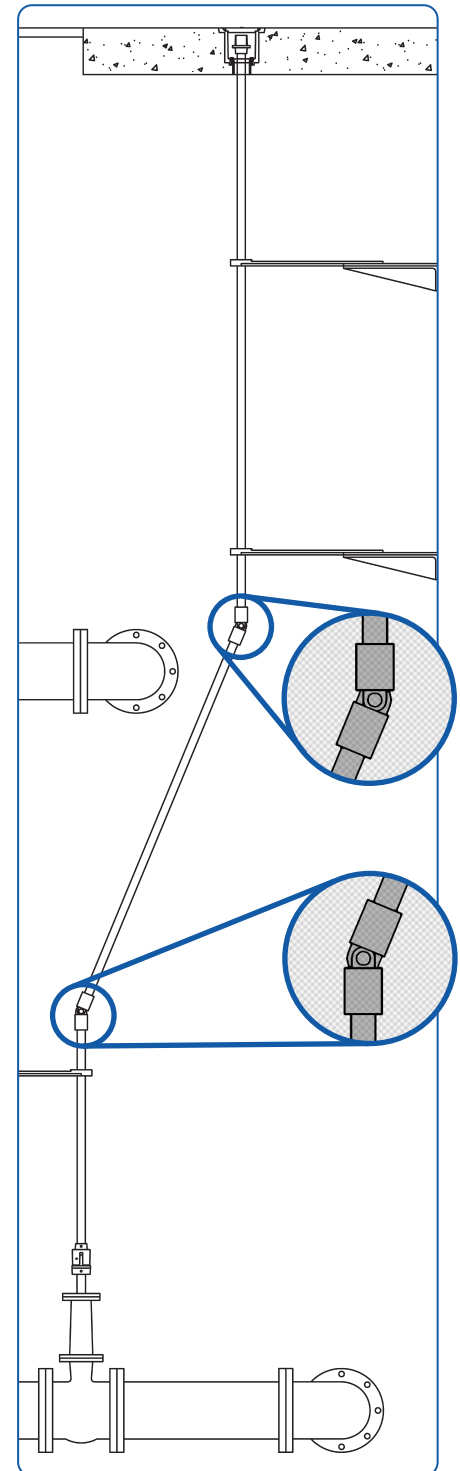
Boot Assembly

Includes two clamps

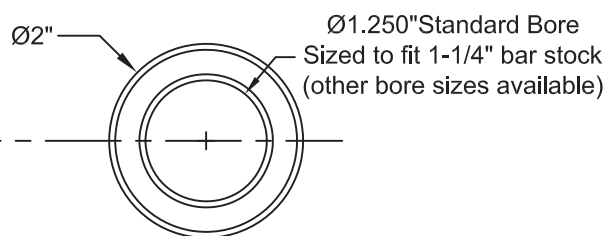
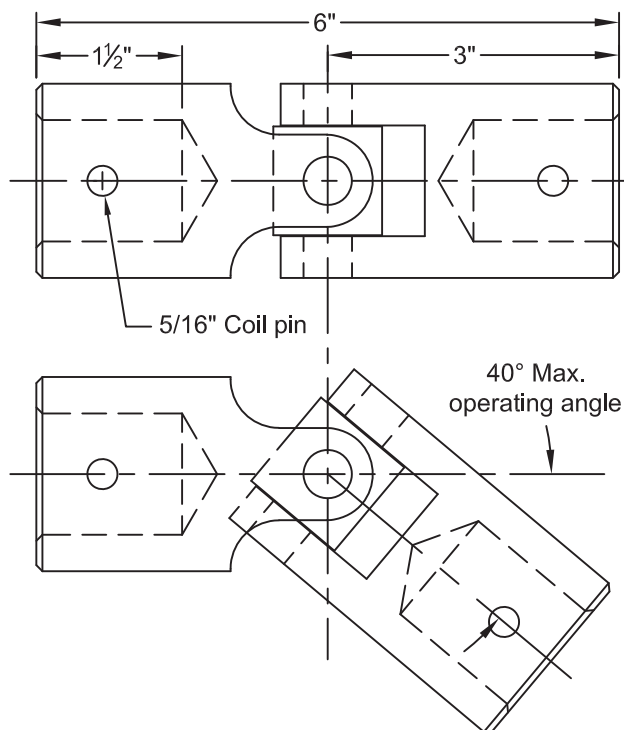
Item No	Weight
367-8360	0.20 lbs.

* Recommended maximum torque is 250 ft-lb. For applications with higher torque requirements, consult Trumbull. Maximum operating angle is 40°.

** Item numbers shown are bored to accept 1-1/4" rod. Other bore sizes are available upon request.



Typical installation



Notes:

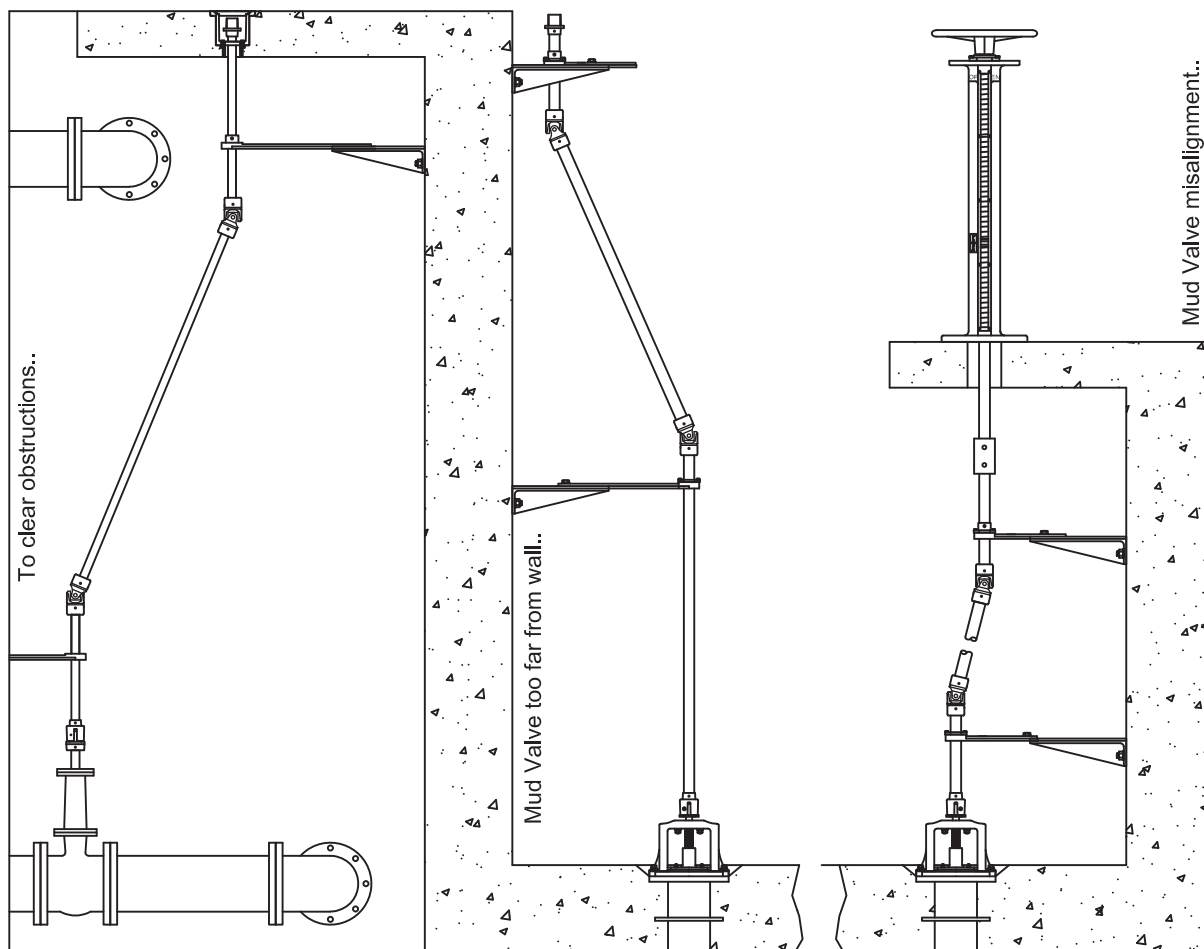
- 1.) Standard U-joint bore is sized to fit 1-1/4" bar stock.
- 2.) A EPDM Boot is recommended to protect the working knuckle of the joint, and can be packed with a water-proof lubricating grease for prolonged operating life. Grease by customer. The optional Boot includes a pair of stainless steel hose-type band clamps.
- 3.) The U-Joint is intended for manual operation. Contact Trumbull for use with electric actuators.

Material:

Carbon Steel, C1045 (Item no. 367-8352)
 Stainless Steel, 304 (Item no. 367-8355)
 Stainless Steel, 316 (Item no. 367-8356)

Load rating:

U-Joint is capable of withstanding torsional loads up to 300 ft-lb. Consult engineering if a greater torsional load is required.



UNIVERSAL JOINTS
CARBON STEEL & STAINLESS STEEL
 Drawn to Scale

Drawn:
 BJE
 05/21/14

Revision:
 BJE
 (B) 05/13/19

Trumbull Manufacturing
 Youngstown, Ohio
 www.trumbull-mfg.com

CAST IRON FLOOR BOX

Floor Boxes are designed for installation in concrete floors or slabs to provide support for extension stems for non-rising type valves, and to provide a cover over the operating nut on the extension stem.

The Trumbull Cast Iron Floor Box is designed for varying slab thicknesses. Overall length is 6", but the underside is tapped to accept 2-1/2" NPT steel pipe nipples for floors thicker than 6". When it's necessary to use a Floor Box with thicker floors, use a 2-1/2" pipe nipple, 1/2" longer than the increase required, as the threads on the underside of the Floor Box are 1/2" deep (see picture on lower right corner of page G-13). For example, for an 8" floor thickness use a 2-1/2" x 2-1/2" nipple. For a 10" floor, use a 2-1/2" x 4-1/2" nipple.

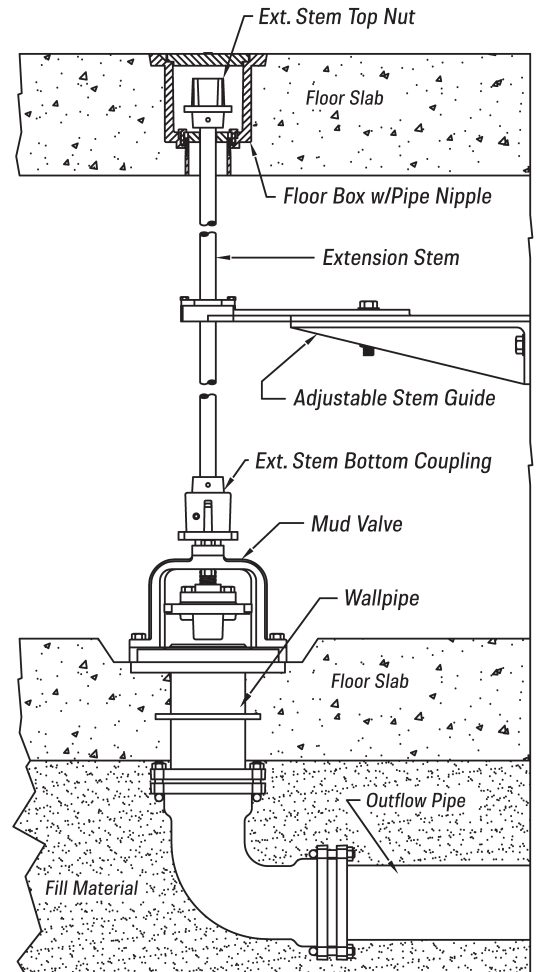
When a stem is required that is larger than the 2-1/2" pipe I.D., a 3" pipe nipple will be welded to the bottom of the Floor Box.

The Cast Iron Floor Box should be ordered with a removable brass bushing for which the maximum drilling is normally 2-3/8" diameter. For larger diameters, please contact Trumbull. However, when used with floors thicker than 6", clear opening is limited to the I.D. of the pipe nipple. See reverse side for drawing.

Item No	Weight
367-4620	25.65 lbs.



NOT for use with Valve Position Indicators.
See page G-15 for Sealed Floor Boxes for use with the Position Indicators.



Typical Floor Box installation

Bushings are available in:

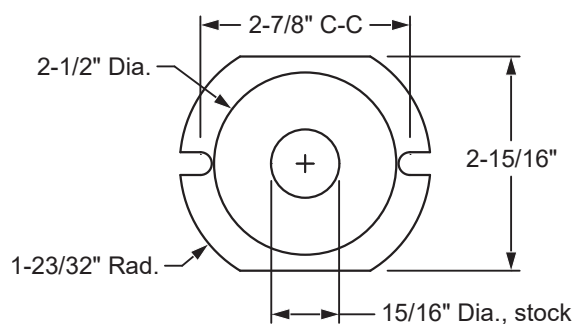
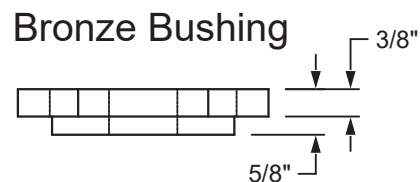
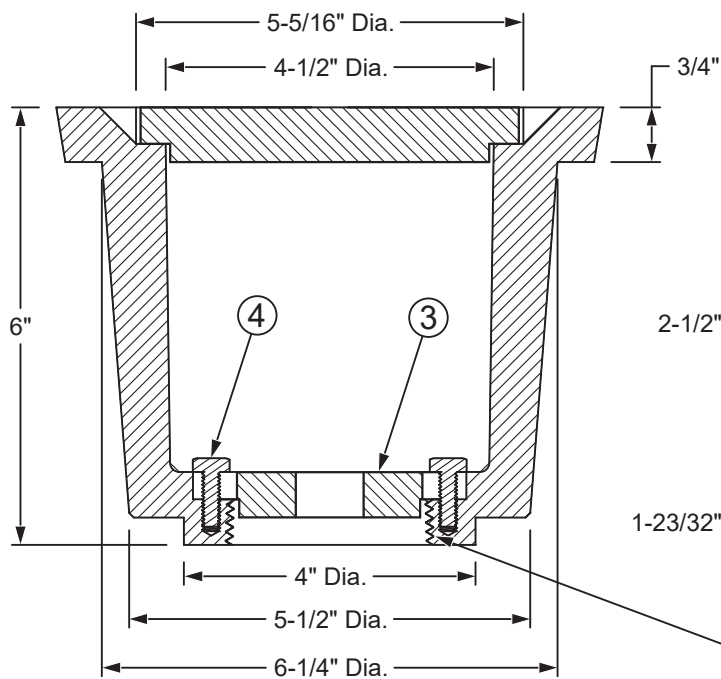
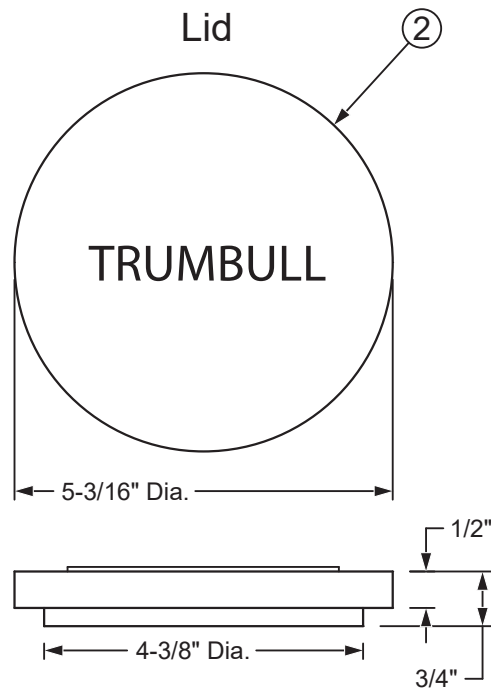
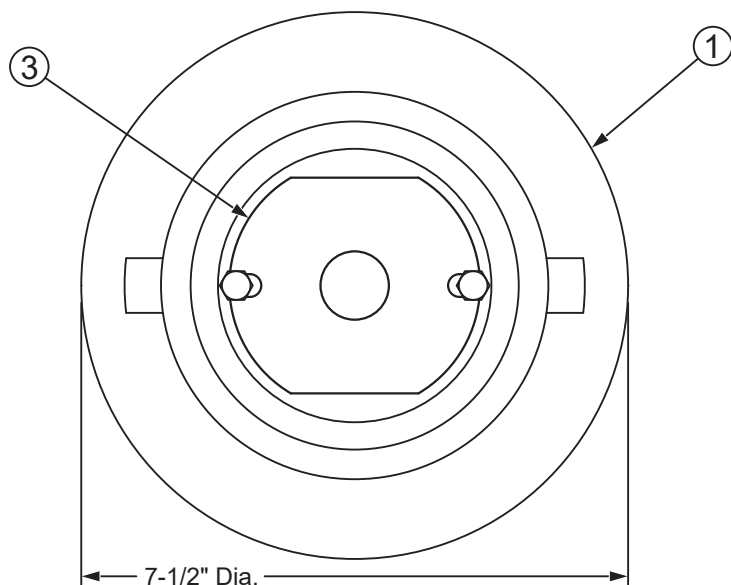
- Low-lead brass
- Ultra High Molecular Weight Polyethylene (UHMWPE)
- NSF 61 approved polymer (Ryton® R-4)

Ordering Instructions

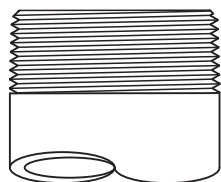
1. Quantity required
2. Thickness of floor slab, or length of pipe nipple required
3. O.D. of stem being used, or desired bushing material & hole size
4. Custom options available such as stainless steel construction, O-Ring lids, water-tight seals, tamper-resistant lids & anchoring collar

When Valve Position Indicator is installed in a floor, use the cast iron HOUSING ADAPTER illustrated on pages F-1 – F-8, or the SEALED FLOOR BOXES shown on pages G-13 – G-16.

Item	Component	Material
1	Body	Cast Iron, A126(B)
2	Lid	Cast Iron, A126(B)
3	Bushing	Low-Lead Brass
4	Screw, Hex Head	Stainless Steel, Type 316



The bottom of the Floor Box casting is tapped with a 2-1/2" NPT thread.



Use a pipe nipple 1/2" longer than the increase in floor slab thickness required, as the tapped thread is 1/2" deep.

Coated all over with black enamel rust preventative.

CAST IRON FLOOR BOX

Drawn to Scale

Drawn:
FCN
04/04/94

Revision:
FCN
04/07/15

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

6" SEALED FLOOR BOXES

Available in Cast Carbon Steel and Cast Stainless Steel



Trumbull Sealed Floor Boxes are ideal to prevent fluids or vapors from penetrating the floor slab from either direction. Top side is sealed by a Buna-N O-ring, and bottom side can be sealed by use of optional packing gland. Overall length is 6", but the underside is tapped to accept 2-1/2" NPT steel pipe nipples. When it's necessary to convert a Floor Box to thicker floors, use a 2-1/2" pipe nipple, 1/2" longer than the increase required, as the threads on the underside of the Floor Box are 1/2" deep.

NOT for use with Valve Position Indicators. See page G-15 for Sealed Floor Boxes for use with the Position Indicators.

i Tapped 2-1/2" threads also permit threading 2-1/2" pipe into underside of Floor Box, to provide an external casing for a smaller internal extension stem.

Floor Boxes

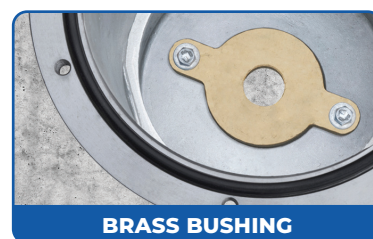
Material	Item No	Weight
Carbon Steel*	367-4623	24.20 lbs.
316 Stainless Steel	367-4624	23.50 lbs.

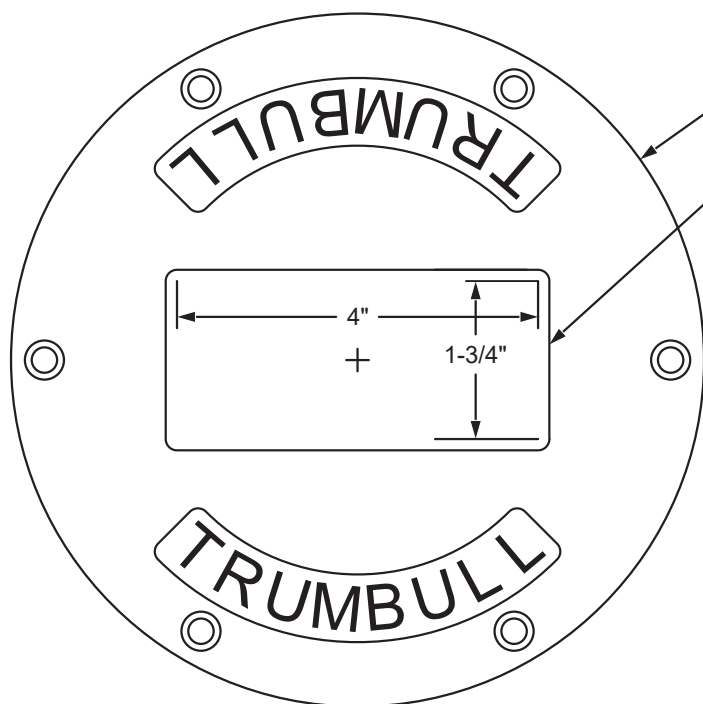
* Carbon steel models are EDP coated.

Optional Accessories

Available as special order

Description	Weight
Packing Gland	2.10 lbs.
Brass Bushing	1.75 lbs.

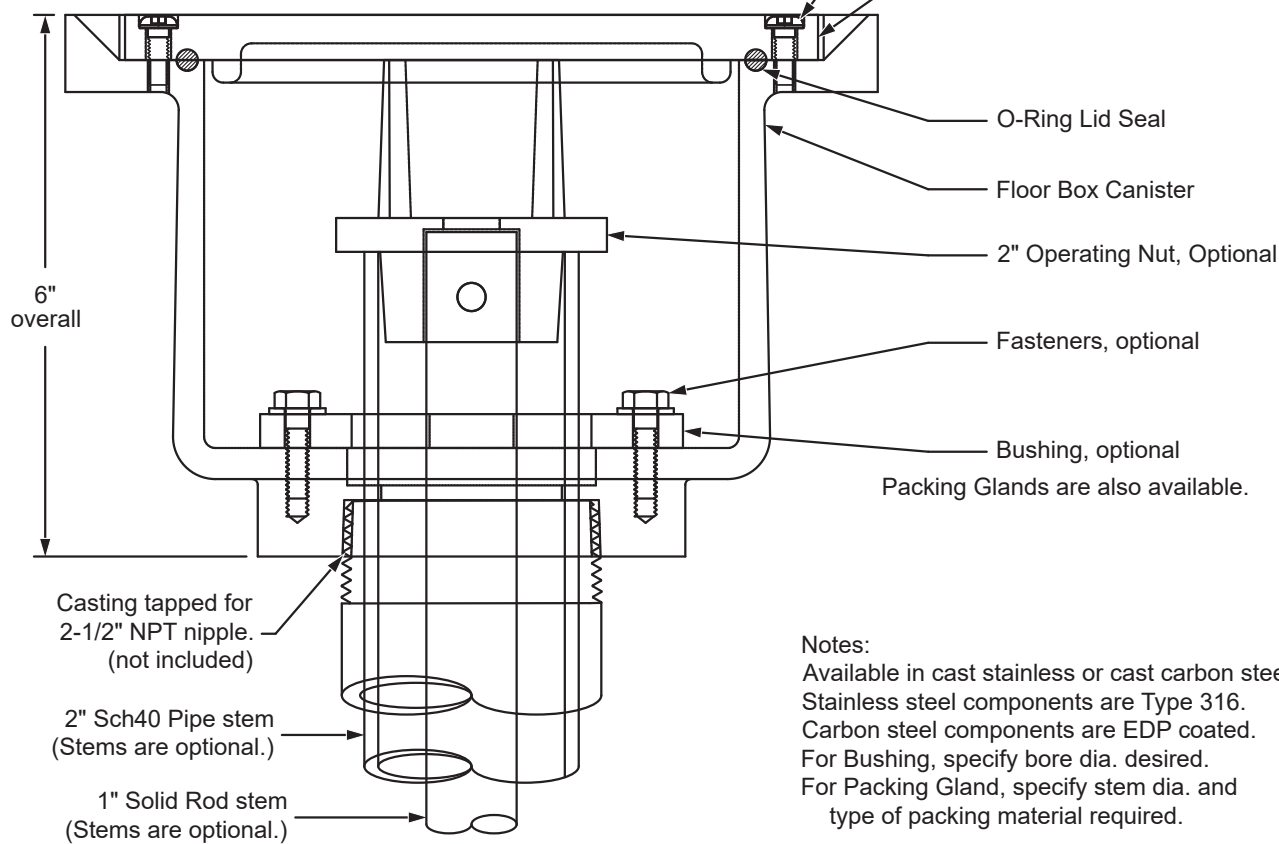




7-11/16", Lid diameter

Flat surface for custom nameplate
or valve tag; consult Trumbull.

Lid, Lid Fasteners, and O-Ring Lid Seal are included.



Notes:

Available in cast stainless or cast carbon steel.
Stainless steel components are Type 316.
Carbon steel components are EDP coated.
For Bushing, specify bore dia. desired.
For Packing Gland, specify stem dia. and
type of packing material required.

SEALED FLOOR BOX
CAST T316SS or CS - 6" OAH
Drawn to Scale

Drawn:
FCN
02/19/18

Revision:
FCN
A 02/19/18

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

11-1/8" SEALED FLOOR BOXES

Available in Cast Carbon Steel and Cast Stainless Steel

OVERALL HEIGHT
11-1/8" with lid



SOCKET HEAD CAP SCREWS

furnished standard (tamper-resistant fasteners and installation tools also available)

BUNA-N O-RING

Seals Floor Box at top of floor; furnished standard, other materials available upon request



Tapped 2-1/2" threads also permit threading 2-1/2" pipe into underside of Floor Box, to provide an external casing for a smaller internal extension stem.

Optional Accessories

Available as special order

PACKING GLAND

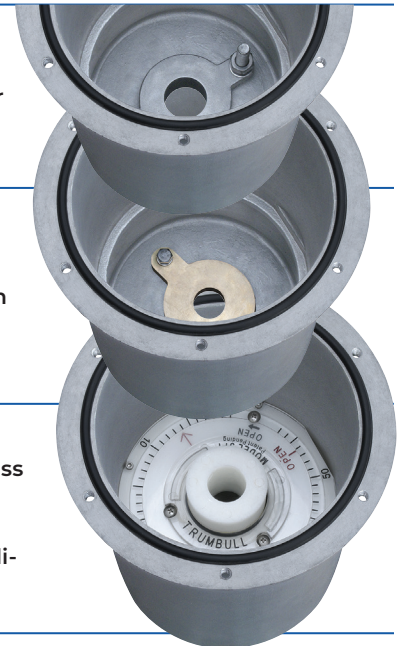
with stainless steel follower seals bottom of Floor Box

BRASS BUSHING

aligns extension stem when bottom seal is not utilized

POSITION INDICATOR

can be used with either brass bushing or packing gland, see Pages F-7 and F-8 for Trumbull Valve Position Indicator installation in floors.



Trumbull Sealed Floor Boxes are ideal to prevent fluids and vapors from penetrating the floor slab from either direction. Top side is sealed by a Buna-N O-ring, and bottom side can be sealed by use of optional packing gland. Overall length is 11-1/8", but the underside is tapped to accept 2-1/2" NPT steel pipe nipples for floors thicker than 11". When it's necessary to extend a Floor Box for thicker floors, use a 2-1/2" pipe nipple, 1/2" longer than the increase required, as the threads on the underside of the Floor Box are 1/2" deep.

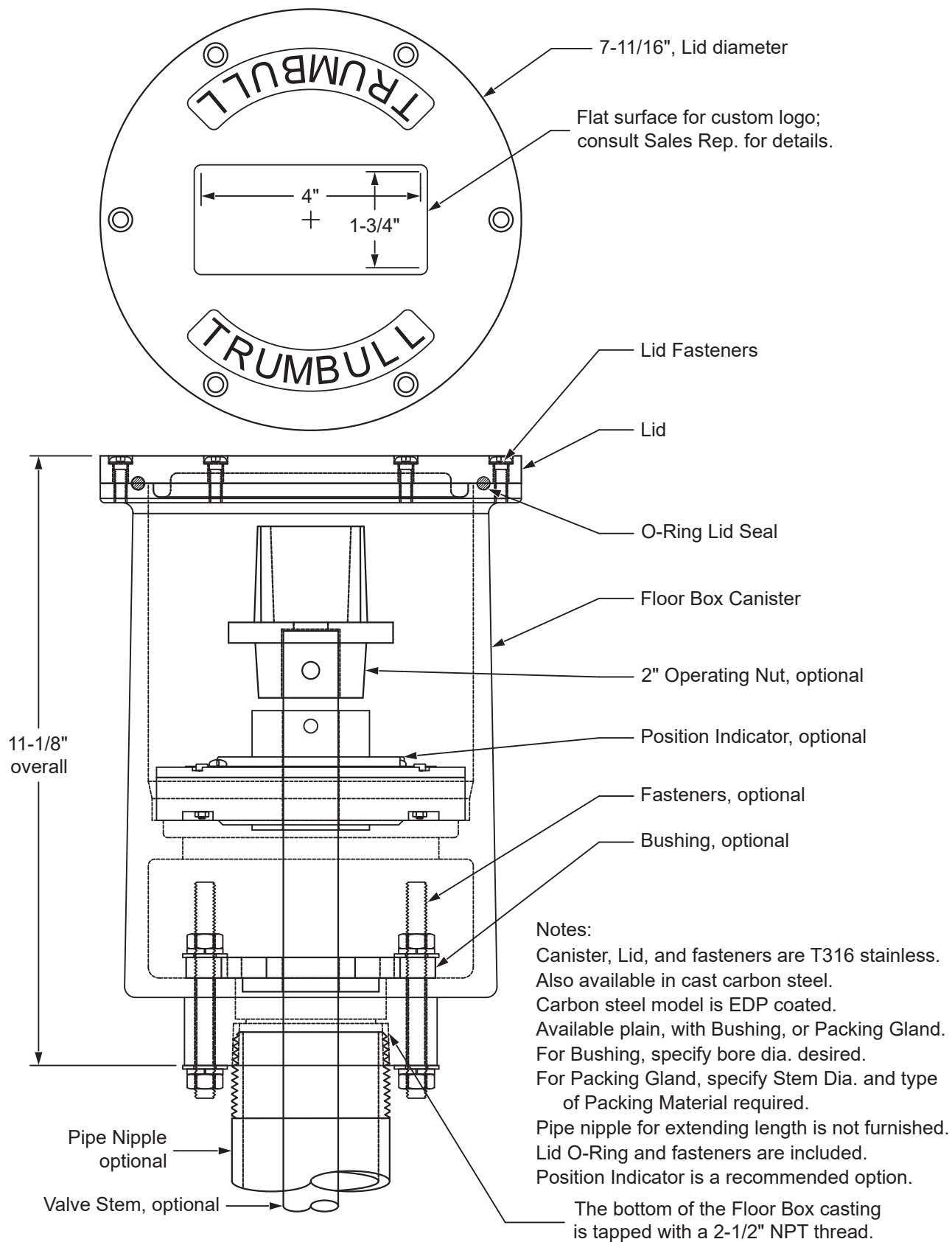
Floor Boxes

Material	Item No	Weight
Cast Carbon Steel *	367-4622	31.05 lbs.
Cast 316 Stainless Steel	367-4621	33.45 lbs.

* Carbon steel models are EDP coated.

Description	Weight
SS Packing Gland	2.10 lbs.
Brass Bushing	1.75 lbs.

See Page G-13 for other custom options.



SEALED FLOOR BOX
CAST T316SS or CS - 11" OAH
 Drawn to Scale

Drawn:
FCN
05/29/14

Revision:
FCN
① 04/25/15

Trumbull Manufacturing
 Youngstown, Ohio
www.trumbull-mfg.com

EXTENDED BONNETS

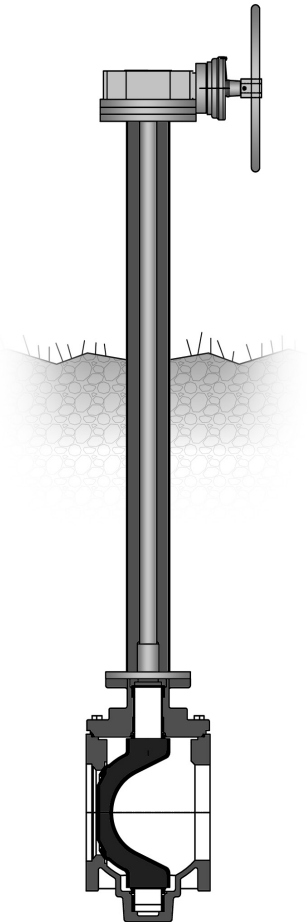
Extended Bonnets are typically provided on valves when there is a need to move the valve operator a set distance away from the valve body. Buried and submerged service installations are the most common Municipal applications.

An Extended Bonnet consists of an outer flanged pipe which connects the valve body to the valve operator housing, and an inner stem extension that connects the valve stem and operator drive.

See page G-18 for quoting information.

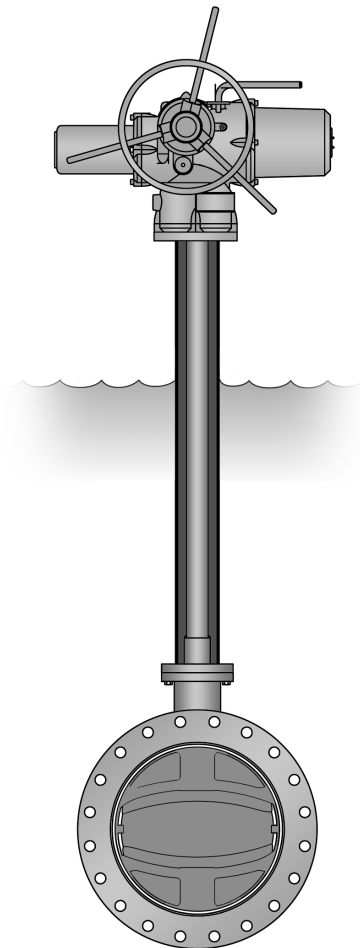
Buried Service

Extended Bonnets ideal for applications where the valve is located below ground with the operator above ground.



Submerged Service

Extended Bonnets are for applications where the valve is installed submerged in a tank and operated from above the water level.



MK-#	Description	Qty/Assem.
1	Upper Stem Adapter	1 Piece
2	Centering Washer (See Options)	1 Piece
3	Top Flange (See Options)	1 Piece
4	Pedestal	1 Piece
5	Extension Stem	1 Piece
6	Lower Stem Adapter	1 Piece
7	Bottom Flange (See Options)	1 Piece

Extended Bonnet Data

Extension Stem:

Material:

Carbon Steel _____
 304SS _____
 316SS _____

Upper Stem Adapter:

Diameter _____
 Key Size _____
 Key Length _____
 Stem Projection, Dim "A" _____

Lower Stem Adapter:

Bore Diameter _____
 Key Size _____
 Key Length _____
 Stem Engagement, Dim "B" _____

Bonnet Extension:

Material:

Carbon Steel _____
 304SS _____
 316SS _____

Ext. Bonnet Length, Dim "C" _____

Upper Flange Pattern _____
 Centering Counterbore Req'd _____

Lower Flange Pattern _____
 Centering Shoulder Req'd _____

HDPE Centering Disc Req'd _____

Valve Information:

Valve Type _____
 Valve Size _____
 Max Operating Torque _____

Valve Operator Information:

Manual _____
 Electric _____
 Max Torque _____

Extended Bonnet Coating:

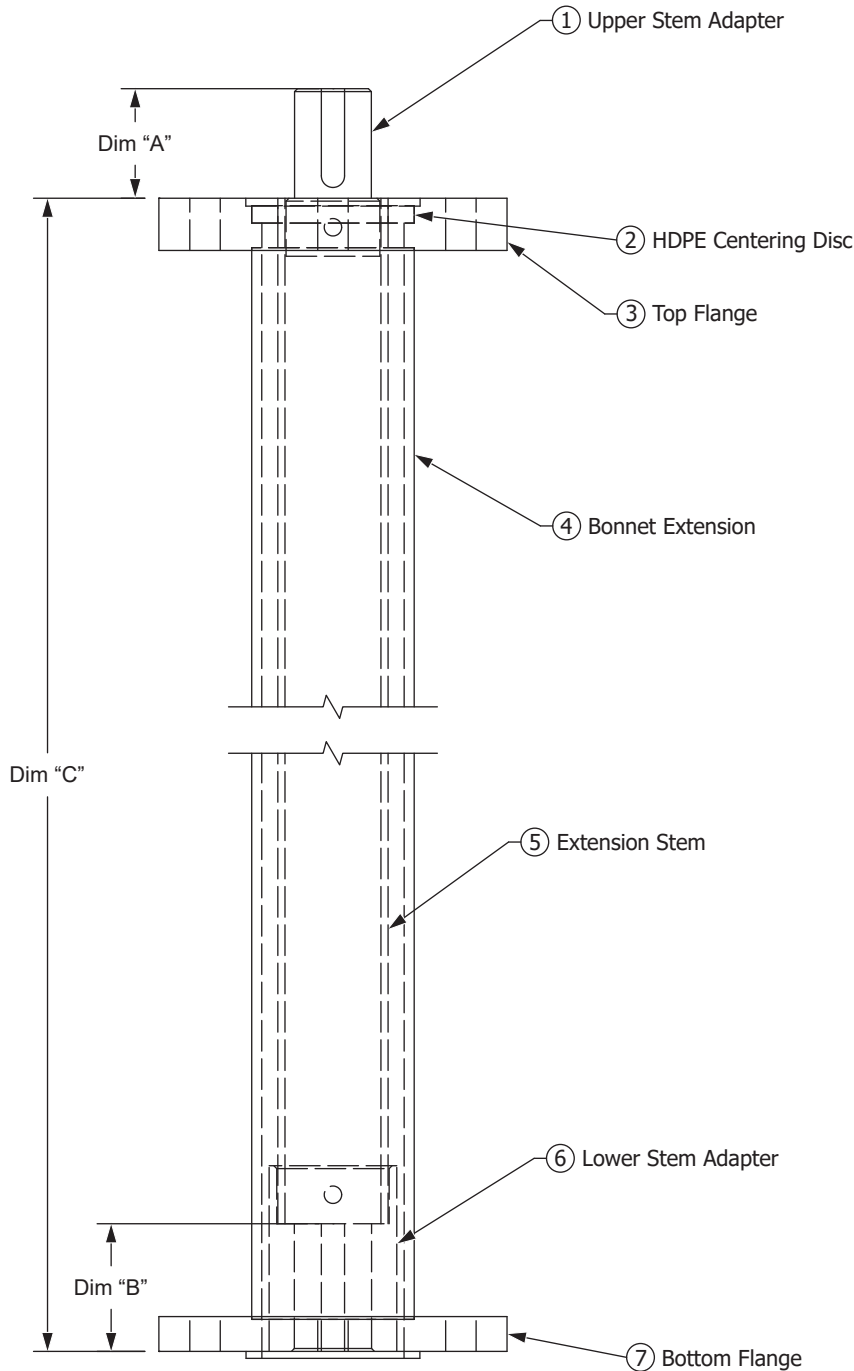
Red Oxide Primer (standard) _____
 Other (Please Specify Below) _____

Project Information

Project Name: _____
 Project City: _____
 Project State: _____
 Qty. Req'd: _____

Customer Information

Customer: _____
 Contact Name: _____
 Phone: _____
 Email: _____
 Reference #: _____



Extended Bonnet Assembly

Drawn to Scale

Drawn:
 NJC
 01/27/20

Revision:
 N/A

Trumbull Manufacturing
 Youngstown, Ohio
 www.trumbull-mfg.com

ADJUSTABLE STEM GUIDES

Available in Ductile Iron and Stainless Steel

Trumbull Stem Guides are designed for installation in treatment plants and pump stations to provide support for valve extension stems. These Stem Guides are adjustable for stems as close to the wall as 2", or as far away as either 26", 36" or 48".

All ductile iron castings coated with Tnemec N140-1211 epoxy (complies with NSF 61). See reverse side for drawing.



DUCTILE IRON MODEL
shown with 2" - 26" adjustment

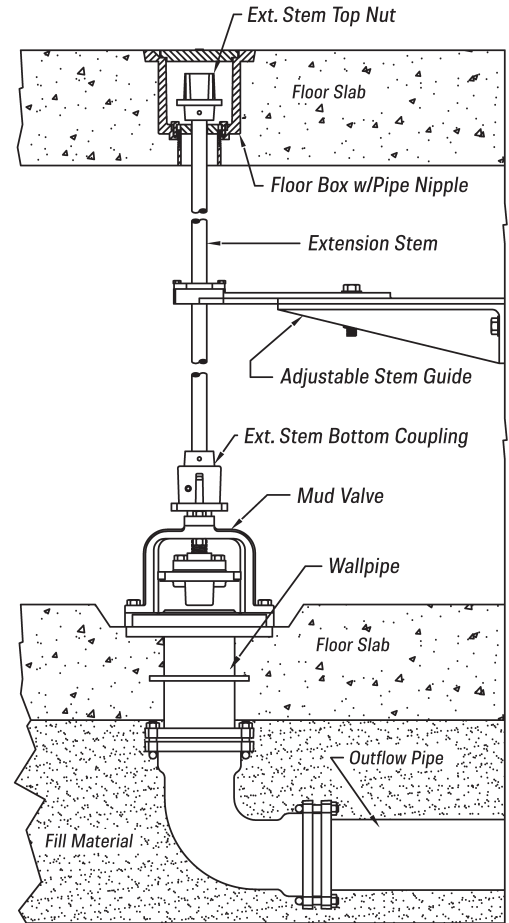
STAINLESS STEEL MODEL
shown with 2" - 36" adjustment

Adjustable Stem Guides **

Adjustment Range	Ductile Iron		316 Stainless Steel	
	Domestic Item No	Non-Domestic Item No	Domestic Item No	Non-Domestic Item No
2" to 26"	1367-4960	367-4960	1367-5960	367-5960
2" to 36"	1367-4970	367-4970	1367-5970	367-5970
36" to 48"	1367-4974*	367-4974*	1367-5974*	367-5974*

* Adjustable arm for 36" to 48" range will be fabricated. Stem Guides for stems up to 72" away from wall can be fabricated from either carbon steel or stainless steel, please inquire.

** For product weights, see drawing on Page G-20.



Typical Stem Guide installation

i Stem Guides are generally recommended at 6' to 8' intervals. Bronze bushings can be drilled up to a 2-1/8" bore diameter for 2" O.D. stems. By removing the bushing larger stems can be accommodated, up to 2-3/8" O.D. See pages G-21 – G-24 for Stem Guides for larger diameter stems.

Ordering Instructions

1. Quantity required
2. Provide the Trumbull item number for the model you require (shown above)
3. O.D. of stem being used, or desired bushing material (see note on right) & hole size

Bushings are available in:

- Low-lead brass
- Ultra High Molecular Weight Polyethylene (UHMWPE)
- NSF 61 approved polymer (Ryton® R-4)

Item	Part	Material
1	Base	Ductile Iron or Stainless Steel
2	Arm	Ductile Iron (carbon steel for 36" to 48" version) or Stainless Steel
3	Clamp	Ductile Iron or Stainless Steel
4	Bushing	Low-Lead Brass
5	Bolt	5/8" x 4", Hex Head, Stainless Steel
6	Washer	1-1/2" O.D., Stainless Steel
7	Nut	5/8", Hex, Stainless Steel
8	Screw	1/4"-20 UNC, Stainless Steel

Item No.	Size	Weight
----------	------	--------

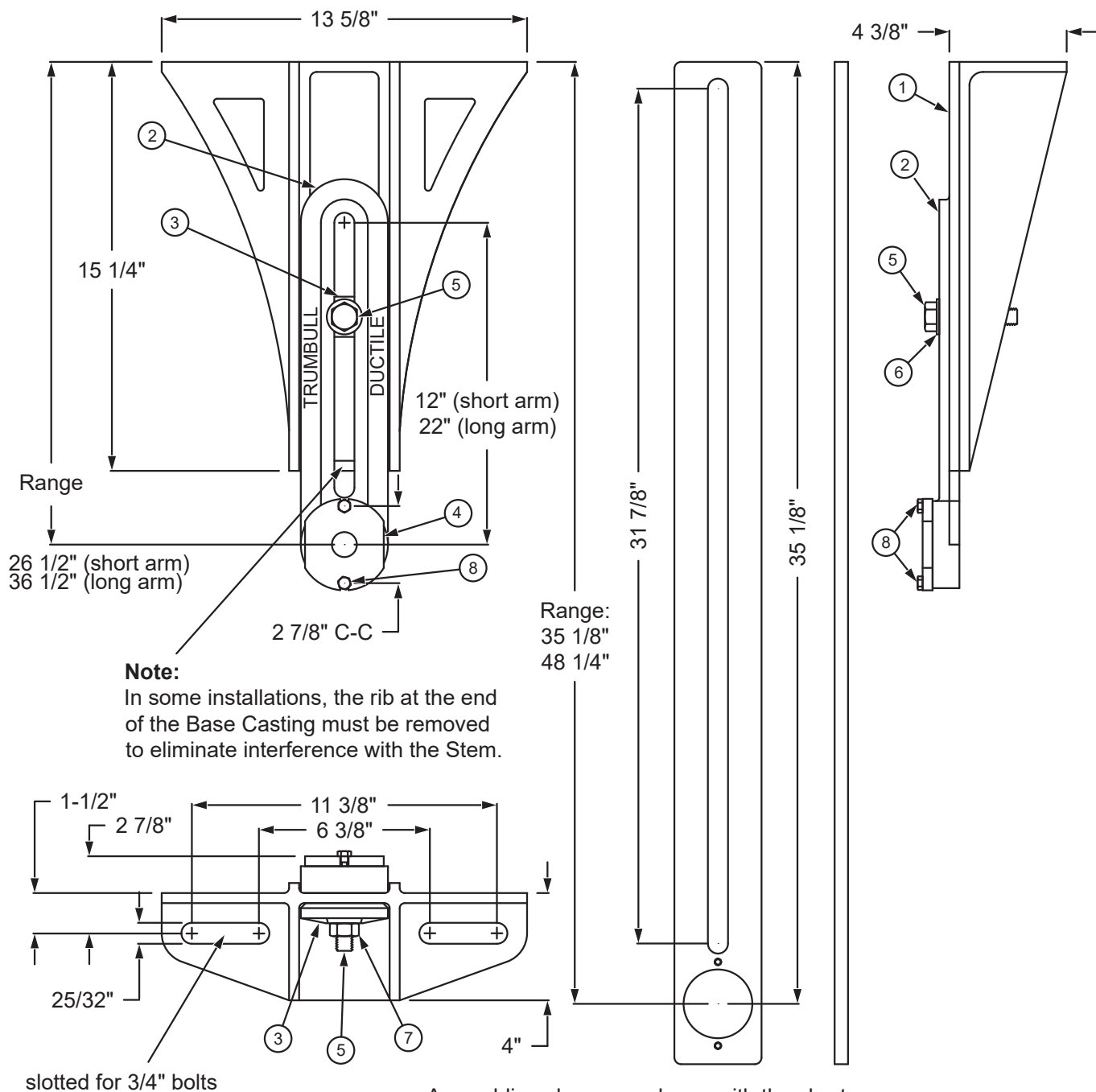
Ductile Iron Guides (65-45-12)

367-4960	2" - 26"	25 lbs.
367-4970	2" - 36"	28 lbs.
367-4974	36" - 48"	38 lbs.

Stainless Steel Guides (T316)

367-5960	2" - 26"	25 lbs.
367-5970	2" - 36"	29 lbs.
367-5974	36" - 48"	37 lbs.

All Ductile Iron and carbon steel components are coated with Tnemec N140-1211, NSF 61 compliant.



ADJUSTABLE STEM GUIDES

Drawn to Scale

Drawn:
FCN
04/25/15

Revision:
FCN
07/24/19

Trumbull Manufacturing

Youngstown, Ohio
www.trumbull-mfg.com

LARGER DIAMETER ADJUSTABLE STEM GUIDES

Removable End Cap Design

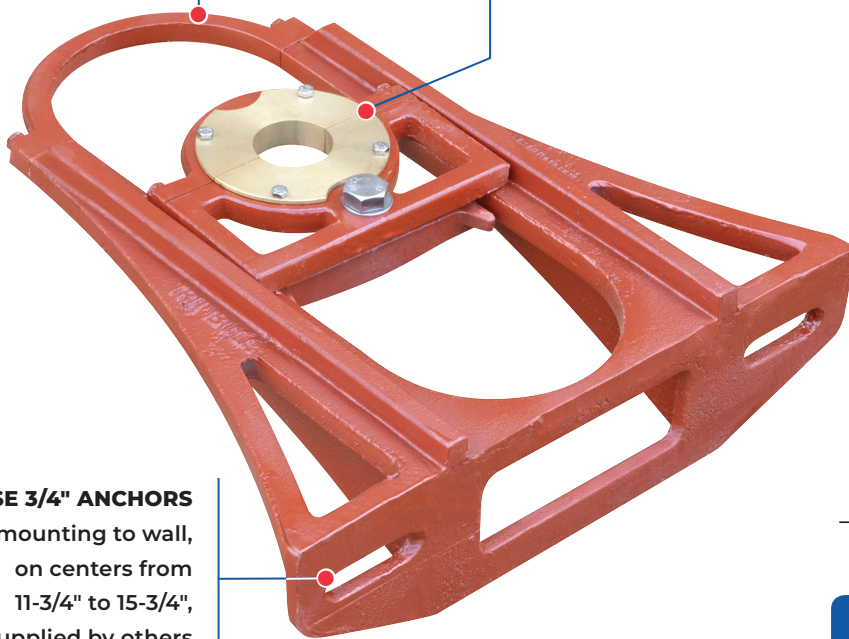
Trumbull Larger Diameter Stem Guides are designed for installation in treatment plants and pump stations to provide support for valve extension stems. They accommodate larger stem diameters, expanding the bore capacity up to 4". Coated with Tnemec N140-1211 epoxy (complies with NSF 61). See reverse side for drawing.

i Stem Guides are generally recommended at 6' to 8' intervals.

END CAP DESIGN
provides a safety restraint for large or unwieldy stems during installation or maintenance

SPLIT BUSHINGS
simplify the installation of larger diameter extension stems

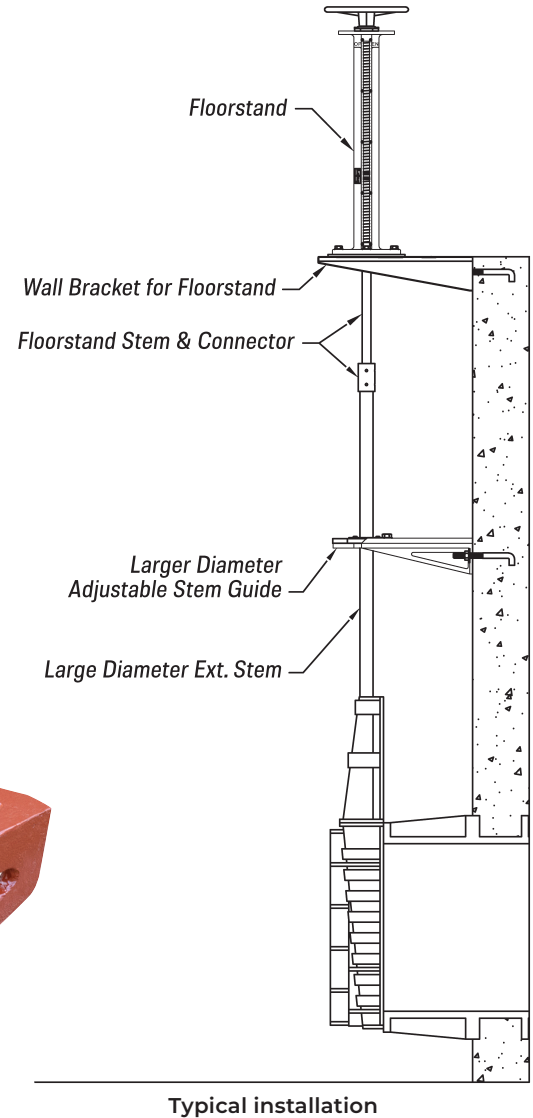
USE 3/4" ANCHORS
for mounting to wall,
on centers from
11-3/4" to 15-3/4",
supplied by others



Item No	Adjustment Range	For Stem Diameters	Weight
367-6960	2-3/4" to 17-1/4" *	2" to 4"	38.65 lbs.

* Adjustment range dependent on stem diameter

Stem Guides for 4" to 6-1/2" stem diameters, as well as stainless steel models without end caps are shown on pages G-23 and G-24.



Ordering Instructions

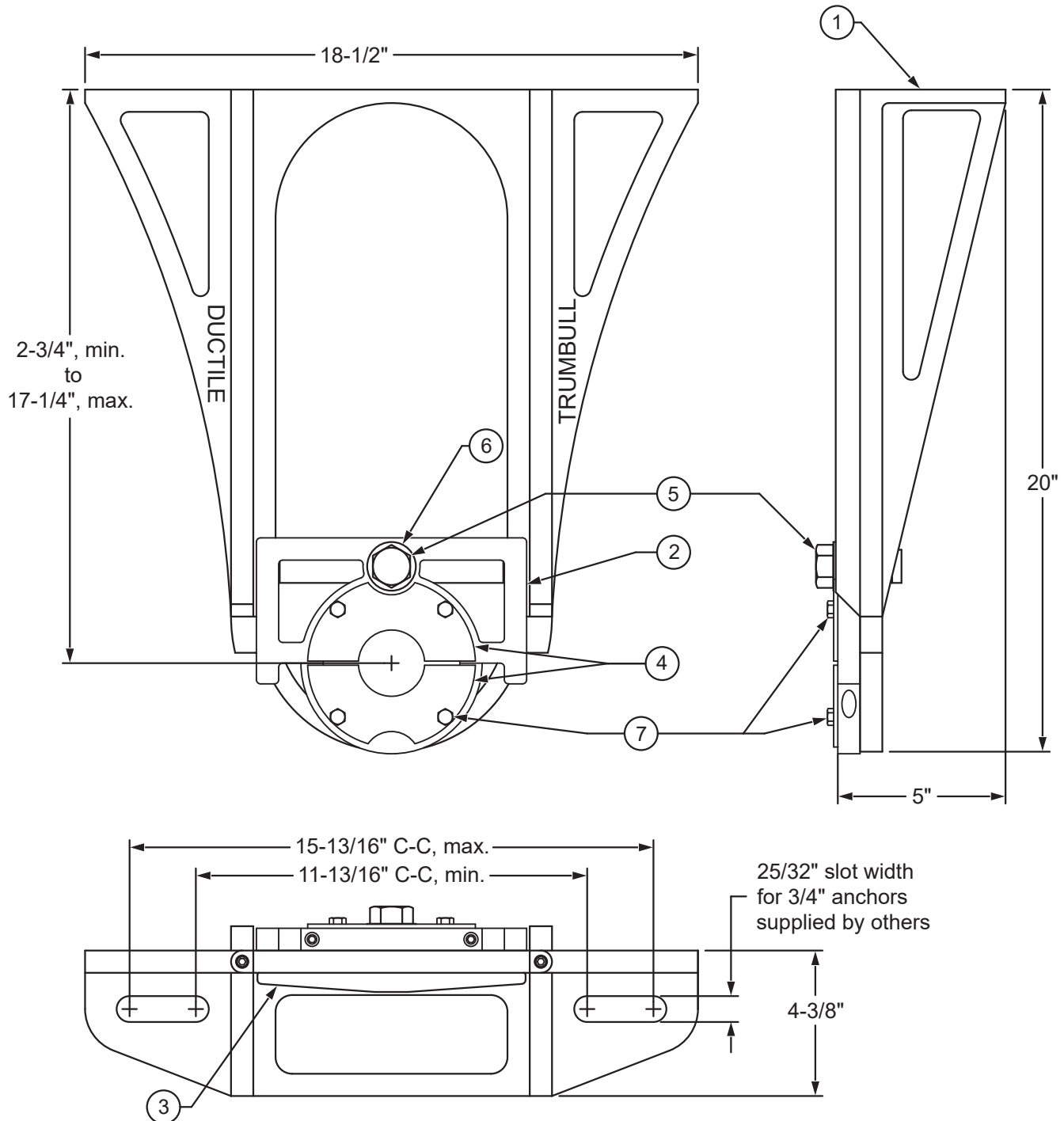
1. Quantity required
2. Trumbull item number
3. O.D. of stem being used, or desired bushing material & hole size

Note that a 2-1/8" bore diameter bushing supplied if size is not specified.

Item	Part	Material
1	Base	Ductile Iron
2	Arm	Ductile Iron
3	Clamp	Ductile Iron
4	Bushing	Bronze
5	Bolt	5/8" x 4", Hex Head, Stainless Steel
6	Washer	1-1/2" O.D., Stainless Steel
7	Screw	1/4"-20 U.N.C., Stainless Steel

All ductile iron components are coated with Tnemec 140-1211, NSF 61 compliant.

Weight of assembly: 43 lbs.



LARGE BORE STEM GUIDE

Drawn to Scale

Drawn:
FCN
08/23/99

Revision:
FCN
04/07/15

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

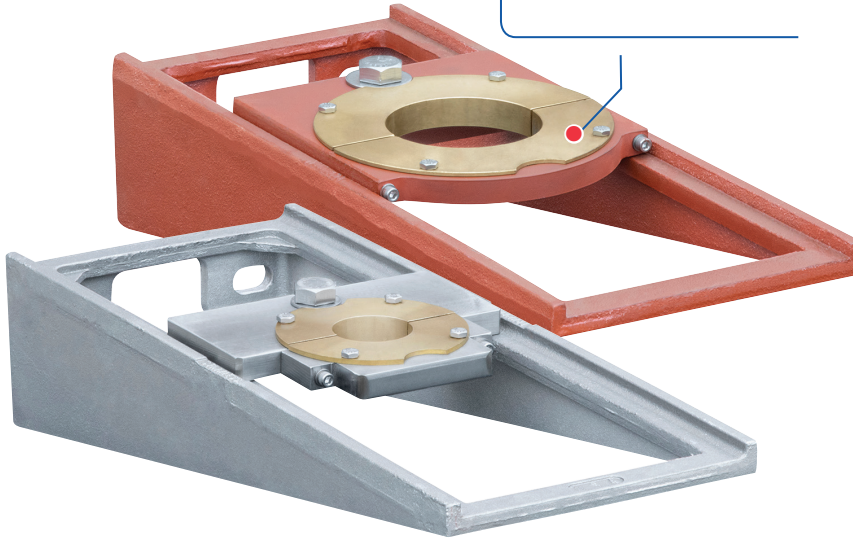
LARGER DIAMETER ADJUSTABLE STEM GUIDES

Wall Bracket Design

Trumbull Larger Diameter Stem Guides are designed for installation in treatment plants and pump stations to provide support for valve extension stems. They accommodate larger stem diameters, expanding the bore capacity up to 6-1/2". All ductile iron castings coated with Tnemec N140-1211 epoxy (complies with NSF 61). See reverse side for drawing.

i Stem Guides are generally recommended at 6' to 8' intervals.

SPLIT BUSHINGS
simplify the installation
of larger diameter
extension stems



Ductile Iron

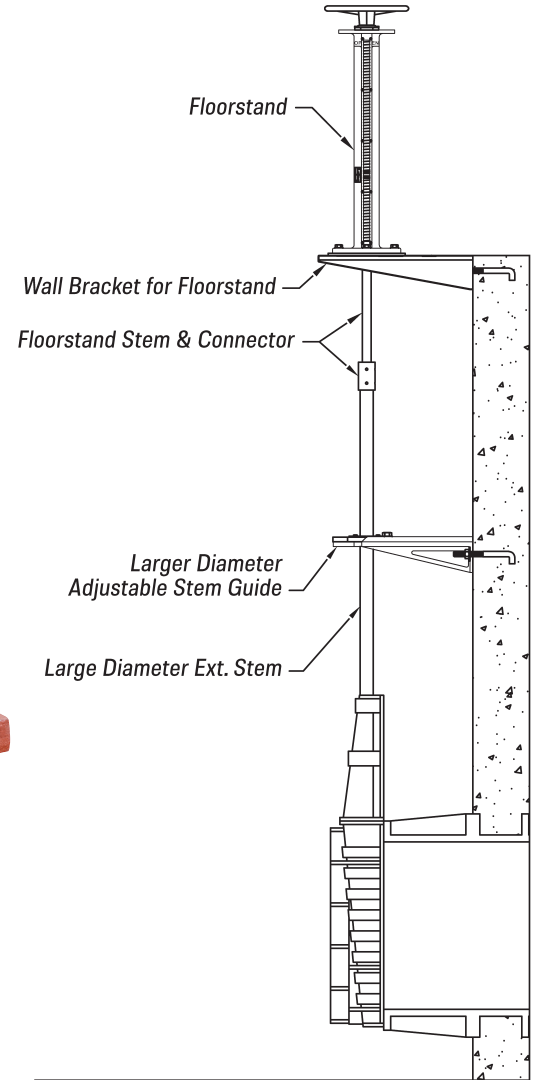
Item No	Adjustment Range	For Stem Diameters	Weight
367-2454	4" to 18" *	4" to 6-1/2"	38.65 lbs.

316 Stainless Steel

Item No	Adjustment Range	For Stem Diameters	Weight
367-2463	4" to 18" *	2" to 4"	38.50 lbs.
367-2464	4" to 18" *	4" to 6-1/2"	41.50 lbs.

* Adjustment range dependent on stem diameter

Stem Guides with 2-3/4" to 17-1/4" adjustment range and removable end cap design are shown on pages G-21 and G-22.



Typical installation

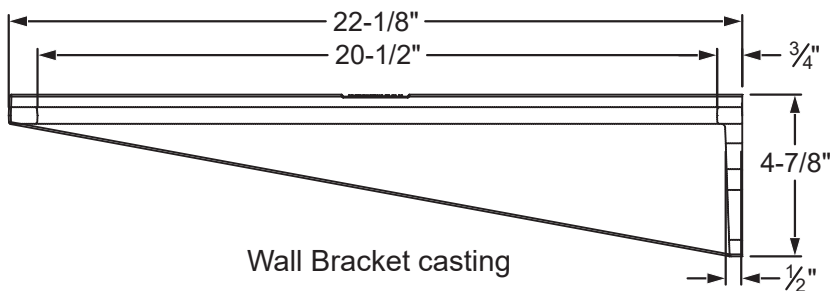
Ordering Instructions

1. Quantity required
2. Trumbull item number
3. O.D. of stem being used, or desired bushing material & hole size

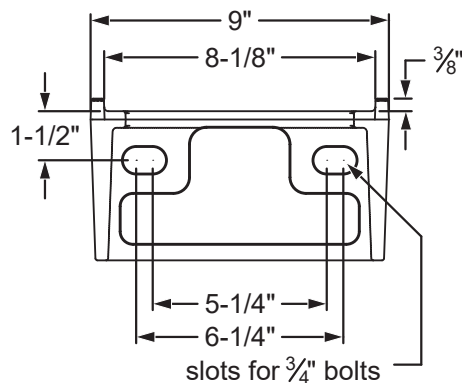
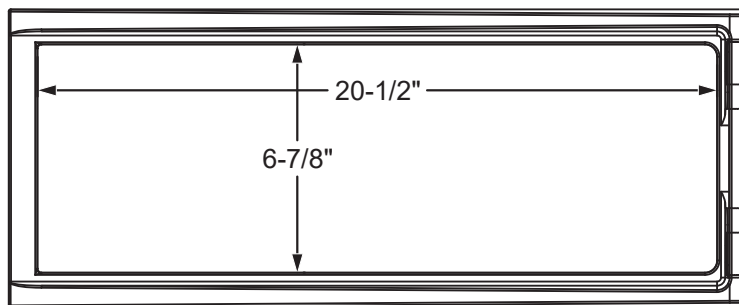
If size is not specified, the following bore diameter bushings are supplied:

2-1/8" for item **367-2463**

4-1/8" for items **367-2454** and **367-2464**



Wall Bracket casting



Wall Bracket with Large Bore Stem Guide Kit

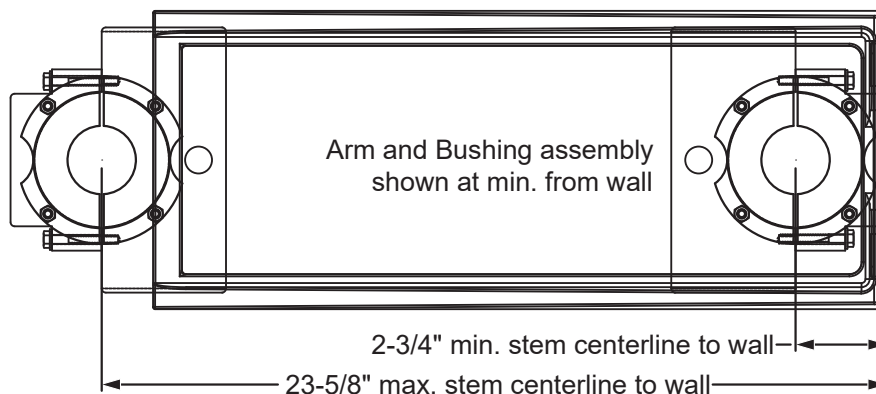
Wall Bracket SS, Stems 2" - 4" No. 367-2463

Wall Bracket SS, Stems 4" - 6-1/2" No. 367-2464

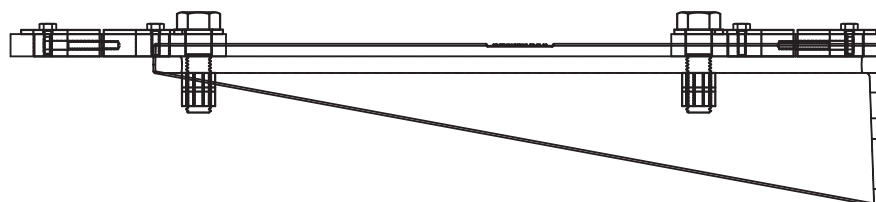
Mounting kit includes clamps and fasteners

Arm and Bushing assembly
shown at max. from wall

Arm and Bushing assembly
shown at min. from wall



Typical Arm and Bushing
Assembly

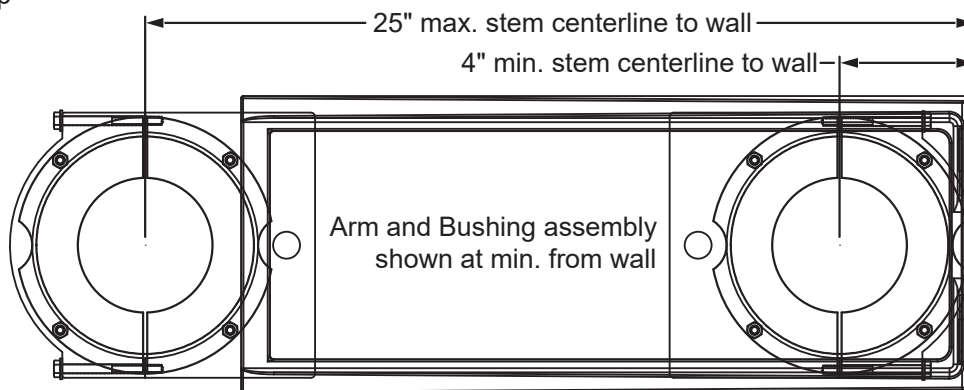


Typical
Arm Clamp
and Bolt



Arm and Bushing assembly
shown at max. from wall

Arm and Bushing assembly
shown at min. from wall



LARGE BORE STEM GUIDE WALL BRACKET STYLE

Drawn to Scale

Drawn:
FCN
07/26/19

Revision:
FCN
A 07/26/19

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

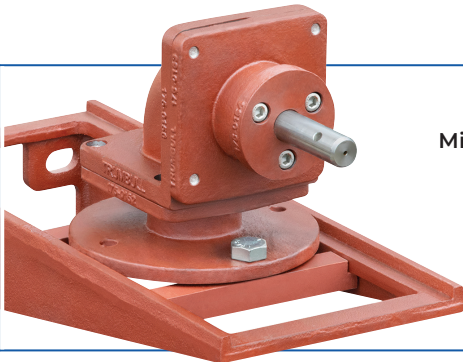
WALL BRACKETS

Designed to Accommodate a Variety of Different Applications

Trumbull Wall Brackets are used in conjunction with several of our other products such as Miter Gears, Valve Position Indicators, Pedestals, Floorstands and others. Cast from either ductile iron or 316 stainless steel. All ductile iron castings are coated with Tnemec N140-1211 epoxy (complies with NSF 61). Sold as kits with parts and hardware included to accommodate several other products, as shown below. Custom fabricated wall brackets also available upon request.



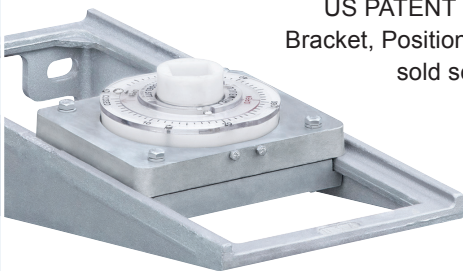
MITER GEAR APPLICATIONS



Kit includes Wall Bracket, Miter Gear MG1A, (2) clamps and hardware. Miter Gears shown on pages G-9 – G-10. Concrete anchors not included.

Item No	Material	Adjustment Range (stem to wall)	Weight
367-2452	Ductile Iron	4-1/2" to 17-1/2"	[varies]
367-2462	316 Stainless	4-1/2" to 17-1/2"	[varies]

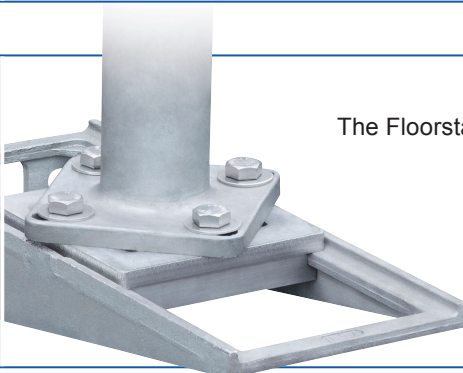
VALVE POSITION INDICATOR APPLICATIONS



US PATENT NO. 9,347,583 (See page F-9 for detailed illustration) Kit includes Wall Bracket, Position Indicator Housing, (2) clamps and hardware. The Position Indicator is sold separately, shown on pages F-9 – F-10. Concrete anchors not included.

Item No	Material	Adjustment Range (stem to wall)	Weight
367-2450	Ductile Iron	3-1/2" to 18"	[varies]
367-2460	316 Stainless	3-1/2" to 18"	[varies]

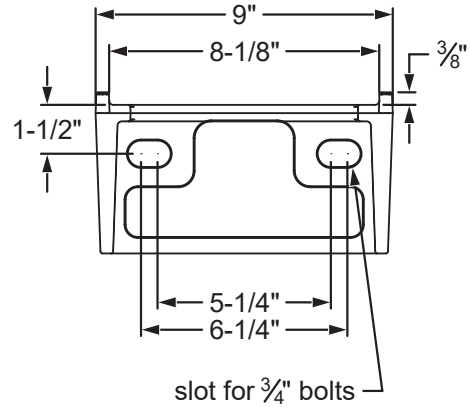
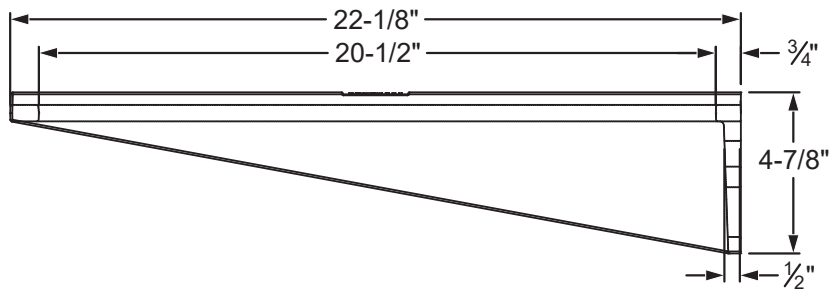
FLOORSTAND & PEDESTAL APPLICATIONS



Kit includes Wall Bracket, Mounting Plate, (2) clamps and hardware. The Floorstands and Pedestals are sold separately, shown on pages G-44 – G-52. Concrete anchors not included.

Item No	Material	Adjustment Range (stem to wall)	Weight
367-2451	Ductile Iron	4-7/8" to 17-1/8"	[varies]
367-2461	316 Stainless	4-7/8" to 17-1/8"	[varies]

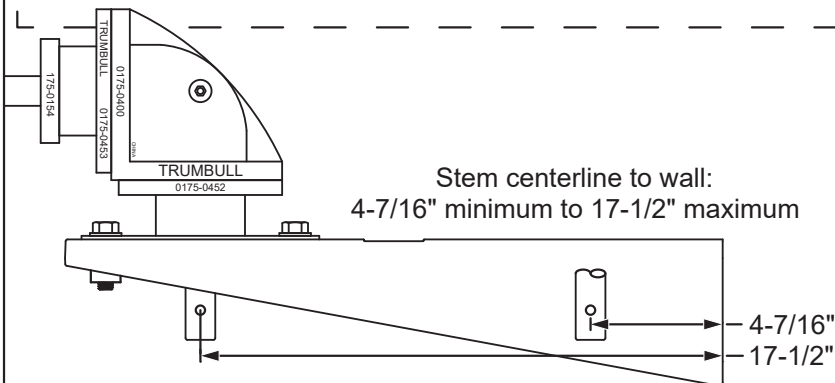
Wall Brackets are also used as a Larger Diameter Stem Guides, as shown on pages G-23 and G-24.



Wall Bracket Casting

Base unit, order with kits shown on the bottom of page

Wall Bracket (Ductile Iron) - No. 367-2440
Wall Bracket (Stainless) - No. 367-2426

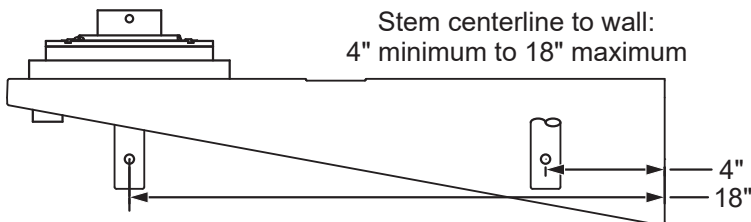


Wall Bracket with Miter Gear and Kit

Miter Gear Assembly included

Miter Gear/mounting kit (DI) - No. 367-2452
Miter Gear/mounting kit (SS) - No. 367-2462

Mounting kit includes clamps and fasteners

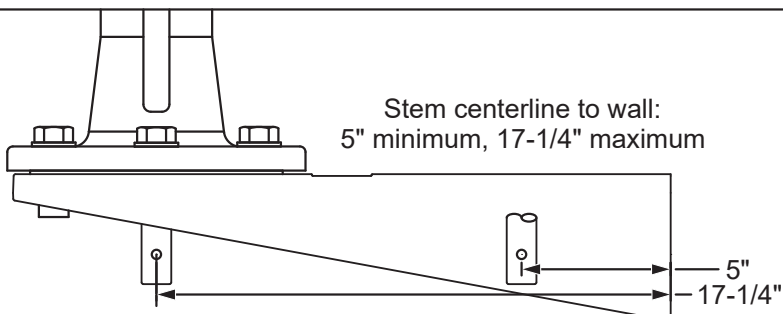


Wall Bracket with Position Indicator Kit

Position Indicator must be ordered separately

PI mounting kit (DI) - No. 367-2450
PI mounting kit (SS) - No. 367-2460

Mounting kit includes clamps and fasteners



Wall Bracket w/Floorstand Kit

Floorstand must be ordered separately

Floorstand mounting kit (DI) - No. 367-2451
Floorstand mounting kit (SS) - No. 367-2461

Mounting kit includes clamps and fasteners

WALL BRACKET and KITS

Drawn to Scale

Drawn:
FCN
08/23/99

Revision:
FCN
J 04/07/15

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

CAST IRON MUD VALVES

Certified to NSF-61 and NSF-372 in USA and Canada

Trumbull Mud Valves are designed primarily for use in settling tanks of water and wastewater treatment plants. Their intended use is to drain tanks for maintenance or cleaning. They are for low pressure applications only; consult Trumbull for special requirements.

Mud Valves are furnished with a 2" square operating nut; however, they can be supplied with optional extension stem or handwheel (see page G-5).

This valve series uses bronze seats in the body and gate (also available with resilient seat). The cast iron body assembly features manganese bronze stems and guides for use in submerged installations. The fasteners are furnished in stainless steel to prevent corrosion from years of submerged service.

Nuts, bolts and gaskets for mounting to floor pipe are NOT furnished but can be ordered separately. Ductile iron components are coated with Tnemec N140-1211 epoxy, per NSF 61.

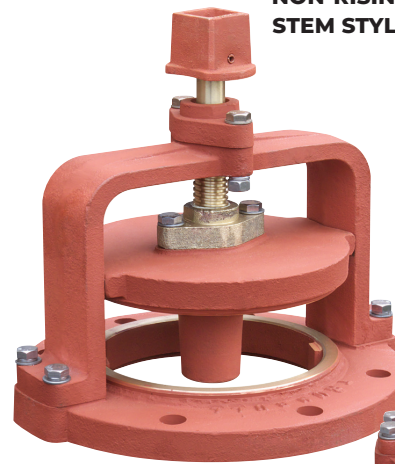
See pages G-28 and G-29 for drawings.

i The flange drilling is according to ANSI 125# STD. on all sizes; however, one hole under each leg of the yoke is not available for fastening to the mating flange.

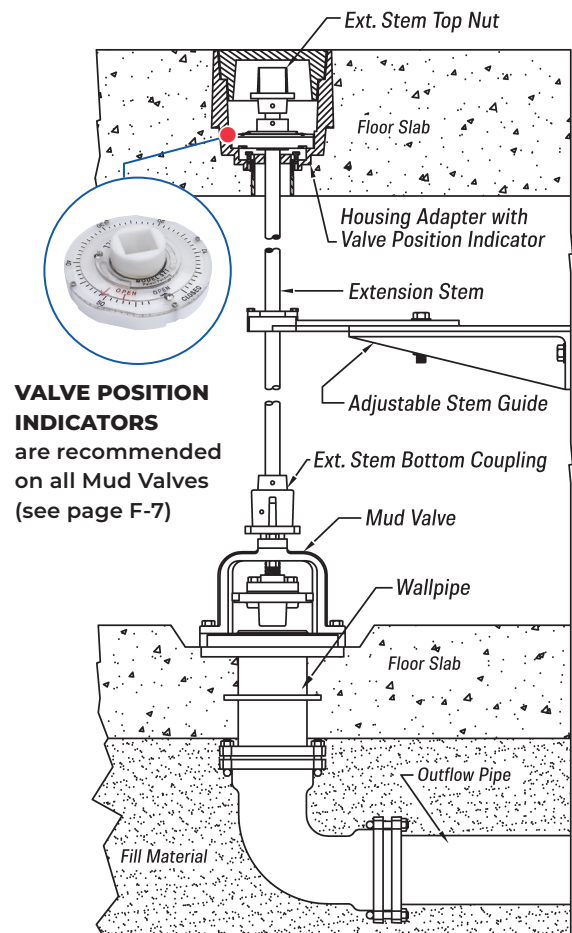
Size	Non-Rising Stem		Rising Stem	
	Item No	Weight	Item No	Weight
3"	367-1414	26.00 lbs.	367-1421	25.00 lbs.
4"	367-1415	31.00 lbs.	367-1420	30.00 lbs.
6"	367-1416	47.00 lbs.	367-1423	46.00 lbs.
8"	367-1418	76.00 lbs.	367-1425	73.00 lbs.
10"	367-1428	95.00 lbs.	367-1494	90.00 lbs.
12"	367-1430	130.00 lbs.	367-1495	130.00 lbs.
14"	367-1431	142.00 lbs.	Consult Trumbull for availability.	
16"	367-1432	169.00 lbs.		
18"	367-1433	256.00 lbs.		
20"	367-1434	281.00 lbs.		
24"	367-1435	450.00 lbs.		

See page G-34 for installation options.

**NON-RISING
STEM STYLE**



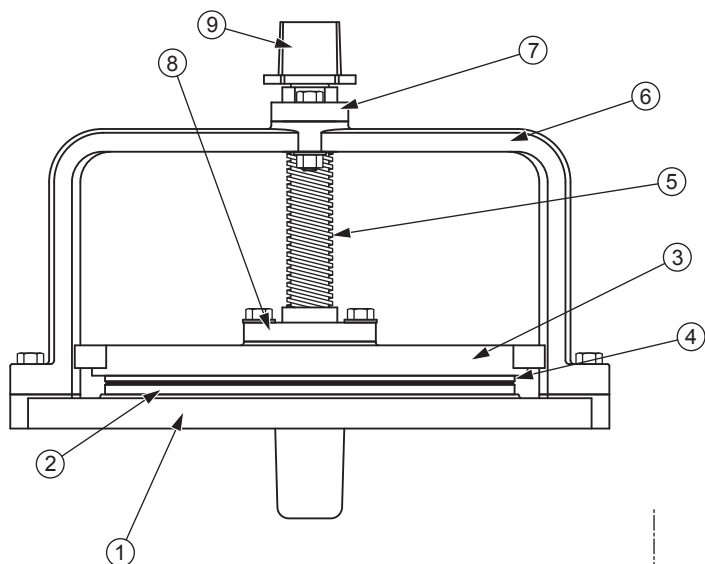
**RISING
STEM
STYLE**



**VALVE POSITION
INDICATORS**
are recommended
on all Mud Valves
(see page F-7)

Typical Mud Valve Installation

Valve Size (Bore Dia.)	3	4	6	8	10	12	14	16	18	20	24
A - Overall height	9-7/8	9-1/2	11-1/4	11-3/4	12-13/16	13	15	16-3/4	18-3/4	19-3/4	23-1/2
B - Width at Yoke	10	10	12-3/8	14-1/2	17	19-3/4	22-3/4	24-5/8	28-1/2	30-5/8	37
C - Valve opening	2-1/4	2	3-1/2	4	4-1/16	5	6-3/4	7-3/4	8-1/2	9-3/4	12-1/4
D - Basin depth in floor, min.	1-3/8	1-3/8	1-5/8	1-5/8	1-5/8	1-3/4	1-3/4	1-7/8	2-1/8	2-1/4	2-5/8
E - Flange Thickness	3/4	13/16	1	7/8	7/8	1	1-1/8	1-1/4	1-3/8	1-9/16	1-7/8
Flange O.D.	7-1/2	9	11	13-1/2	16	19	21	23-1/2	25	27-1/2	32
Bolt Circle	6.0	7.5	9.5	11.75	14.25	17.0	18.75	21.25	22.75	25.0	29.5
Bolt Hole Dia.	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4	1-3/8
Bolt Dia.	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4
Bolts in full Pattern* (except 3")	4	8*	8*	8*	12*	12*	12*	16*	16*	20*	20*
Stem Diameter	1	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/2	1-1/2	1-3/4	1-3/4	1-3/4
Turns to Open	10-1/2	11	17	20	21	25-1/2	34	40	43	49	63
Weight, pounds	26.3	27	47	73	110	130	139	167	243	280	453



Item	Part	Materials
1	Base Flange (Body)	Gray Iron, ASTM A126 (B)
2	Seat, Base Flange	Bronze, ASTM B62; B584
3	Gate	Ductile Iron, ASTM A536 (65-45-12)
4	Seat, Gate	Bronze, ASTM B62; B584
5	Stem	Bronze, ASTM B584
6	Yoke	Ductile Iron, ASTM A536 (65-45-12)
7	Guide, unthreaded	Ductile Iron, ASTM A536 (65-45-12)
8	Guide, threaded	Bronze, ASTM B584
9	Operating Nut, 2" sq.	Gray Iron, ASTM A126 (B)
All Fasteners are Stainless Steel		

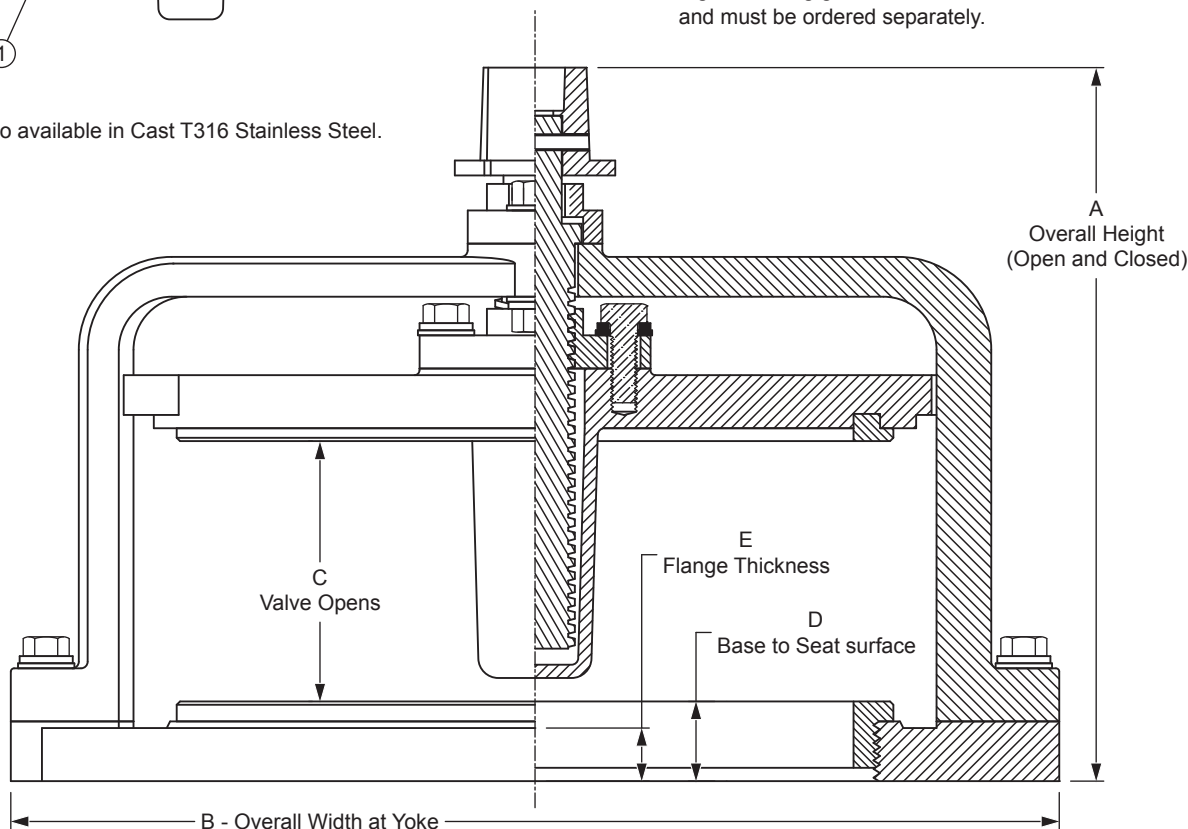
Standard 125 pound drilling template.

* Two of the bolts in the bolt pattern are under the yoke feet and not used (except for 3").

All cast iron surfaces, except machined surfaces, to be finished with NSF61 (TNEMEC N140-1211) coating.

Flange mounting gasket and fasteners are not included, and must be ordered separately.

Also available in Cast T316 Stainless Steel.



**CAST IRON MUD VALVES
NON-RISING STEM TYPE**
Drawn to Scale

Drawn:
FCN
10/16/17

Revision:
FCN
B 02/13/20

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

Valve Size (Bore Dia.)	3	4	6	8	10	12	14	16**	18**	20**	24**
A - Overall height, closed	9-3/4	9-3/4	11	11-3/4	12-3/4	13	14-1/2	16-3/4	18-3/4	19-3/4	23-1/2
A - Overall height, open	12	11-7/8	14-3/8	15-3/4	16-3/4	18	21-1/2	24-3/4	27-3/4	29-3/4	35-1/2
B - Width at Yoke	10	10	12-3/8	14-1/2	17	19-3/4	22-3/4	24-5/8	28-1/2	30-5/8	37
C - Valve opening	2-1/4	2-1/8	3-3/8	4	4	5	7	8	9	10	12
D - Basin depth in floor, min.	1-3/8	1-3/8	1-5/8	1-5/8	1-5/8	1-3/4	1-3/4	1-7/8	2-1/8	2-1/4	2-5/8
E - Flange Thickness	3/4	13/16	1	7/8	7/8	1	1-1/8	1-1/4	1-3/8	1-9/16	1-7/8
Flange O.D.	7-1/2	9	11	13-1/2	16	19	21	23-1/2	25	27-1/2	32
Bolt Circle	6.0	7.5	9.5	11.75	14.25	17.0	18.75	21.25	22.75	25.0	29.5
Bolt Hole Dia.	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4	1-3/8
Bolt Dia.	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4
Bolts in full Pattern* (except 3")	4	8*	8*	8*	12*	12*	12*	16*	16*	20*	20*
Stem Diameter	1	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/2	1-1/2	1-3/4	1-3/4	1-3/4
Turns to Open	10-1/2	11	17	20-1/2	20	25	35	40	45	50	60
Weight, pounds	26.3	30	46	73	110	130	140	165	240	280	450

Standard 125 pound drilling template.

* Two of the bolts in the bolt pattern are under the yoke feet and not used.

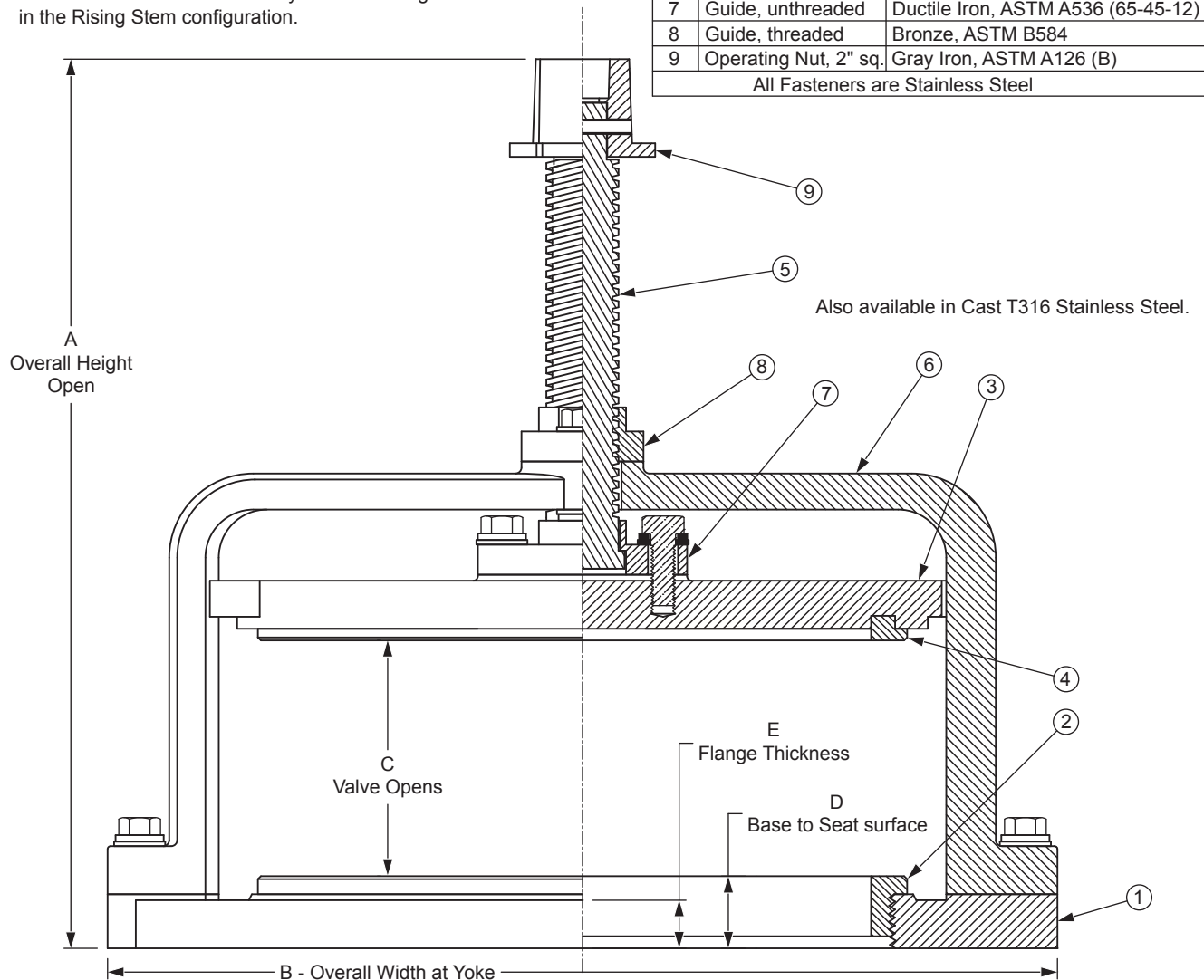
All cast iron surfaces, except machined surfaces, to be finished with NSF61 (TNEMEC N140-1211) coating.

Flange mounting gasket and fasteners are not included, and must be ordered separately.

** Consult Trumbull on the availability of 16" and larger sizes in the Rising Stem configuration.

Item	Part	Materials
1	Base Flange (Body)	Gray Iron, ASTM A126 (B)
2	Seat, Base Flange	Bronze, ASTM B62; B584
3	Gate	Ductile Iron, ASTM A536 (65-45-12)
4	Seat, Gate	Bronze, ASTM B62; B584
5	Stem	Bronze, ASTM B584
6	Yoke	Ductile Iron, ASTM A536 (65-45-12)
7	Guide, unthreaded	Ductile Iron, ASTM A536 (65-45-12)
8	Guide, threaded	Bronze, ASTM B584
9	Operating Nut, 2" sq.	Gray Iron, ASTM A126 (B)

All Fasteners are Stainless Steel



CAST IRON MUD VALVES RISING STEM TYPE

Drawn to Scale

Drawn:
FCN
10/16/17

Revision:
FCN
B 02/13/20

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

WHY CHOOSE TYPE 316 STAINLESS STEEL MUD VALVES?

Trumbull Mud Valves are manufactured in ductile iron and cast stainless steel. Stem designs include Non-Rising Stem (NRS), Rising Stem (RS), as well as sliding stem. A full line of accessories are offered to operate our Mud Valves, including Valve Position Indicators, Extension Stems, Stem Guides, Floorstands and Floor Boxes.

We stand behind our products with experienced Engineering and Field Service personnel. Our products are designed for long life, and are rigorously tested in-house and at independent labs.

EXTEND USEFUL LIFE OF CRITICAL VALVES AND COMPONENTS FOR AN AFFORDABLE PREMIUM!

Premium stainless Mud Valves use only cast stainless components. In addition to the superior corrosion resistance of the stainless steel material, our stainless Mud Valves include these features:

- Heavy-duty CAST stainless steel, type 316
 1. No-weld components
 2. Cast design eliminates problem of carbide precipitation from welding
 3. Stainless castings passivated per ASTM A-967
- Resilient seats are field-replaceable and mechanically retained; available in a variety of elastomers
- One-piece heavy-duty stem, 3rd party torque tested to over 500 ft-lb
- Permanently bonded coating on stainless stem prevents galling, 3rd party tested to over 15,000 cycles
- Rising stem, non-rising stem and sliding stem styles available
- “All stainless” installation available with stainless Extension Stem, Stem Guide and Floorstand

Graphics from a 2012 Trumbull Manufacturing advertisement.



CAST 316 STAINLESS STEEL MUD VALVES

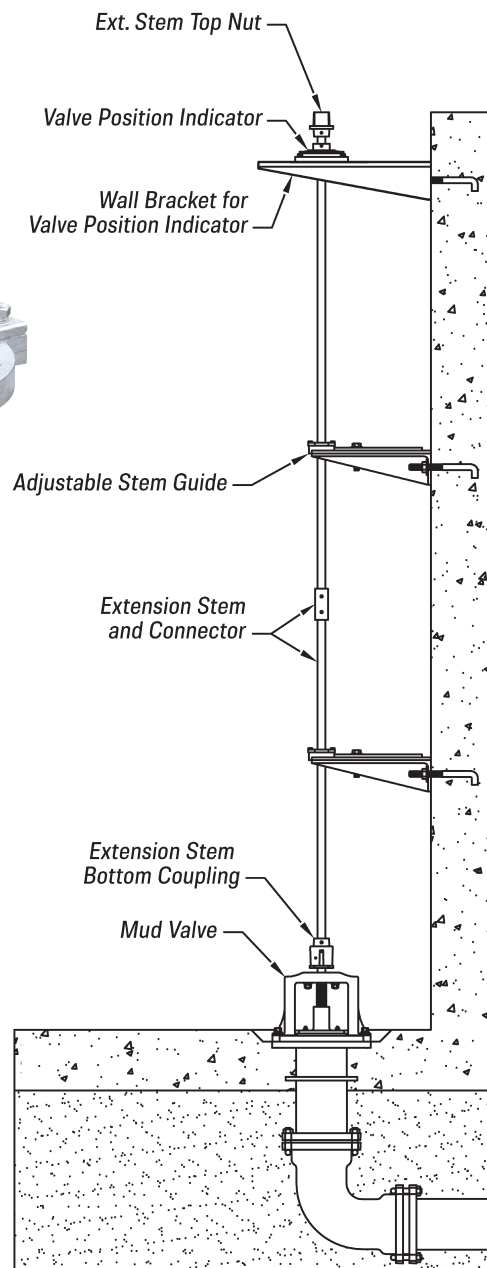
Heavy-Duty Design – Certified to NSF-61 and NSF-372 in USA and Canada

Trumbull Mud Valves are designed primarily for use in settling tanks of water and wastewater treatment plants. Their intended use is to drain tanks for maintenance or cleaning. They are for low pressure applications only; consult Trumbull for special requirements.

For applications requiring more corrosion protection than cast iron, the yoke, flange, guides and gate of these Mud Valves are cast from Type 316 stainless steel. The one-piece, Type 316 stem has a permanently bonded coating to protect against galling for a lifetime of maintenance-free operation.

Cast components eliminate corrosion problems frequently caused when stainless steel is welded. Castings are passivated after machining, per ASTM A-967. Heavy-duty design incorporates generous wall thicknesses and stem diameters for maximum strength and corrosion protection. Seat is SBR rubber for positive shutoff. Mechanically retained seat is field-replaceable. Fasteners are Type 316 stainless. See pages G-32 and G-33 for drawings.

Nuts, bolts and gaskets for mounting to floor pipe are NOT furnished but can be ordered separately.



Typical Mud Valve Installation
See page G-34 for installation options.

Size	Non-Rising Stem**		Rising Stem**	
	Domestic Item No	Non-Domestic Item No	Domestic Item No	Non-Domestic Item No
3"	1367-1349	367-1453	1367-1369 *	367-1469
4"	1367-1350	367-1454	1367-1370 *	367-1470
6"	1367-1351	367-1455	1367-1371 *	367-1472
8"	1367-1352	367-1456	1367-1372 *	367-1474
10"	1367-1353	367-1457	1367-1373 *	367-1480
12"	1367-1354	367-1458	1367-1374 *	367-1481
14"	1367-1355	367-1459	*	*
16"	1367-1356	367-1460		
18"	1367-1357	367-1461		
20"	1367-1358	367-1462		
24"	1367-1359	367-1463		

* Consult Trumbull for availability.

** For product weights, see drawings on Pages G-32 & G-33.

i Valve Position Indicators recommended on all Mud Valves (see page F-9).



Valve Size (Bore Dia.)	3	4	6	8	10	12	14	16	18	20	24
A - Overall height	9	8	10-1/2	12-1/2	14-1/2	17	23	21-1/4	23	25-3/4	34-5/8
B - Width at Yoke	8	10-1/4	12-5/8	15-1/8	17-3/8	19	25-3/4	25-3/4	27-3/4	27-1/2	32
C - Valve opening	1-1/2	1-3/4	2-3/4	3-1/2	4-3/4	6	7-3/8	7-1/2	8-1/4	9-1/4	12
D - Flange thickness	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Flange O.D.	7-1/2	9	11	13-1/2	16	19	21.0	23-1/2	25	27-1/2	32
Bolt Circle Diameter	6.00	7.50	9.50	11.75	14.25	17.00	18.75	21.25	22.75	25.00	29.5
Bolt Hole Dia.	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4	1-3/8
Bolt / Stud Size	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4
Bolts in full Pattern*	4	8	8	8	12	12	12	16	16	20	20
Stem Diameter	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-3/4	1-3/4	1-3/4
Turns to Open	7	9	15-1/2	20	26	30	37	20-1/2	23	48-1/2	60
Weight, pounds	19-1/2	24-1/2	33-1/2	48	65	88	125	142	186	206	230

* Standard 125 pound drilling template, with two holes covered by the Yoke (except for 3").

Flange mounting gasket and fasteners are not included, and must be ordered separately.

All items, except for the Seal and the sealing washers are Type 316 Stainless Steel.

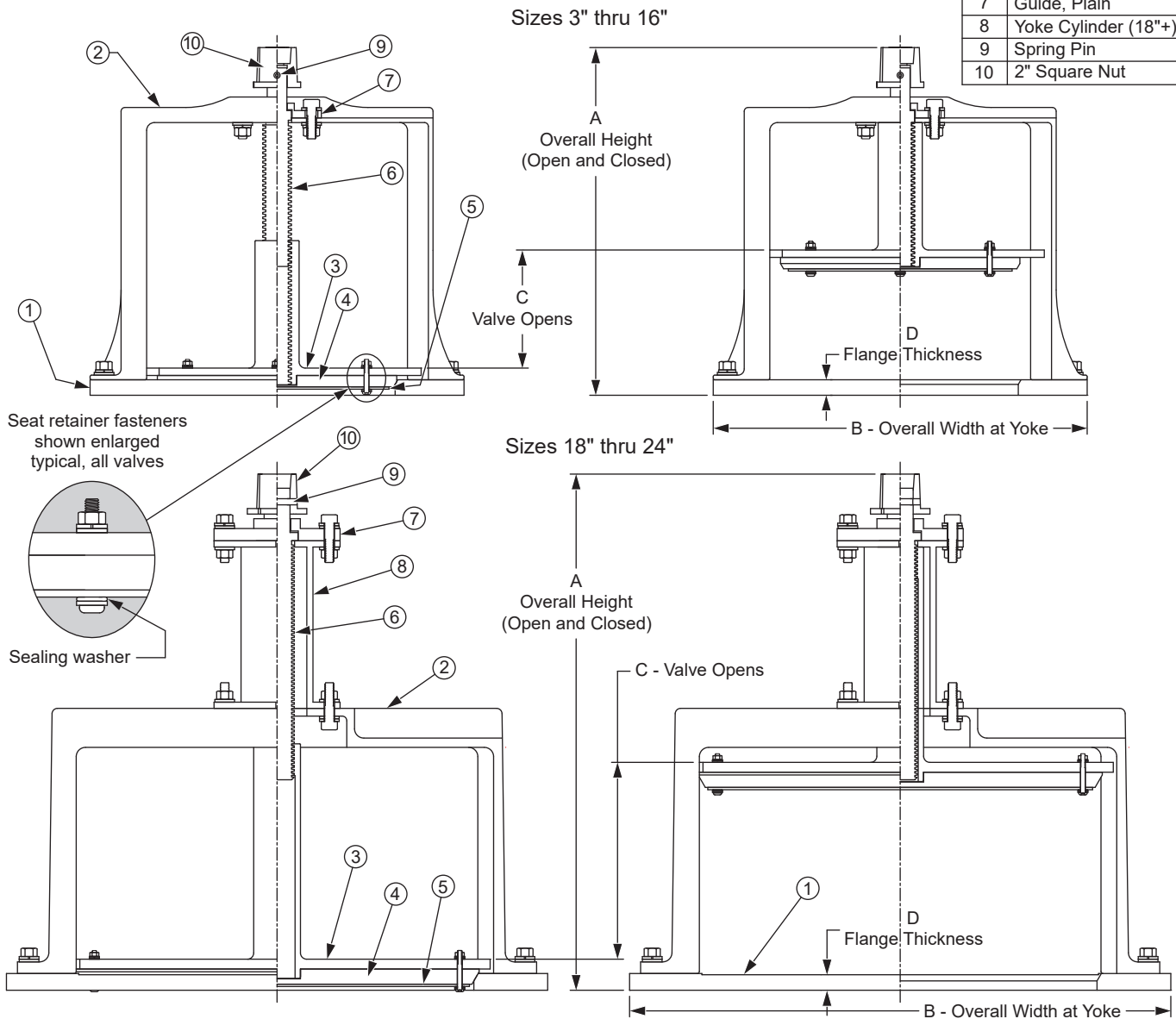
Seal and sealing washers are SBR.

All Fasteners are Stainless Steel, Type 316, ASTM A193, Grade B

Stem is coated and greased to prevent galling.

Basin depth in floor for complete draining, 1" minimum.

Part	Description
1	Base Flange (Body)
2	Yoke
3	Gate
4	Seat
5	Seat Retainer
6	Stem
7	Guide, Plain
8	Yoke Cylinder (18"+)
9	Spring Pin
10	2" Square Nut



CAST T316 SS MUD VALVES NON-RISING STEM TYPE

Drawn to Scale

Drawn:
FCN
07/24/07

Revision:
FCN
02/07/20

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

Valve Size (Bore Dia.)	3	4	6	8	10	12	14	16	18	20	24
A - Overall height, closed	9	8-3/4	10-1/2	12-1/2	14	17	23	23	18	18	23
A - Overall height, open	10-1/2	11-1/2	16	19-1/4	22-3/4	28-1/2	39	39	27	28	35
B - Width at Yoke	8	10-1/4	12-5/8	15-1/8	17-3/8	19	25-3/4	25-3/4	27-3/4	27-1/2	32
C - Valve opening	1-1/2	2-1/4	5	7	8-1/4	11-1/2	16	16	9	10	12
D - Flange thickness	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Flange O.D.	7-1/2	9	11	13-1/2	16	19	21.0	23-1/2	25	27-1/2	32
Bolt Circle Diameter	6.00	7.50	9.50	11.75	14.25	17.00	18.75	21.25	22.75	25.00	29.5
Bolt Hole Dia.	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4	1-3/8
Bolt / Stud Size	5/8	5/8	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4
Bolts in full Pattern*	4	8	8	8	12	12	12	16	16	20	20
Stem Diameter	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-3/4	1-3/4	1-3/4
Turns to Open	7	13-1/2	26-1/2	30-1/2	36-1/2	50-1/2	80	80	45	50	60
Weight, pounds	19-1/2	25	34	48	59	78	142	142	155	164	218

Standard 125 pound drilling template, with two holes covered by the Yoke.

Flange mounting gasket and fasteners are not included, and must be ordered separately.

All items, except for the Seal and the sealing washers are Type 316 Stainless Steel.

Seal and sealing washers are SBR.

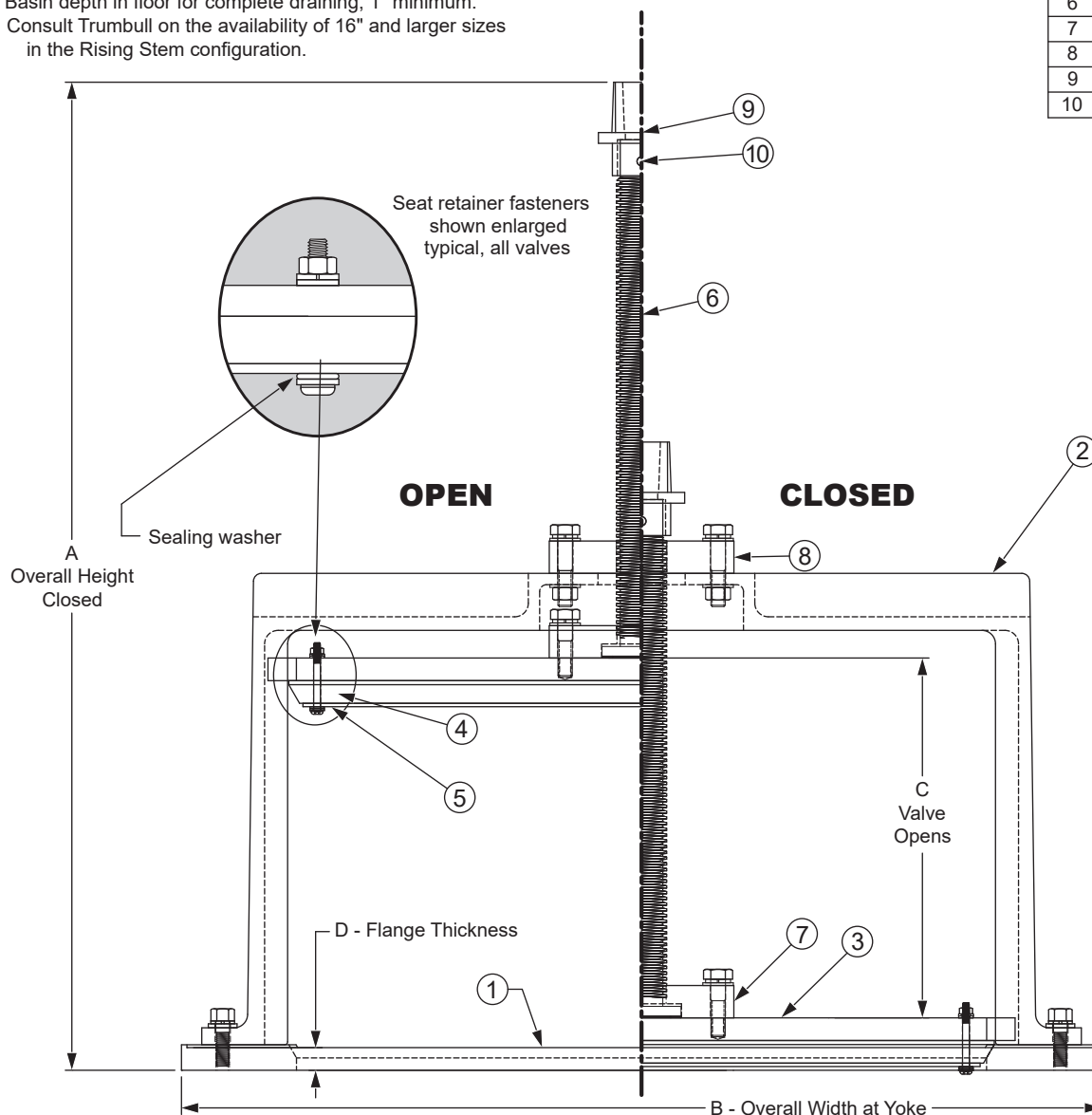
All Fasteners are Stainless Steel, Type 316, ASTM A193, Grade B

Stem is coated and greased to prevent galling.

Basin depth in floor for complete draining, 1" minimum.

Consult Trumbull on the availability of 16" and larger sizes in the Rising Stem configuration.

Part	Description
1	Base Flange (Body)
2	Yoke
3	Gate
4	Seat
5	Seat Retainer
6	Stem
7	Guide, Unthreaded
8	Guide, Threaded
9	2" Square Nut
10	Coil Type Spring Pin



CAST T316SS MUD VALVES RISING STEM TYPE

Drawn to Scale

Drawn:
FCN
10/16/17

Revision:
NJC
C 03/19/20

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

OPTIONAL MUD VALVE

INSTALLATIONS

Standard options shown on right

Mud Valve: Cast iron or cast 316 stainless steel

Stem Guide: Ductile iron or cast 316 stainless steel

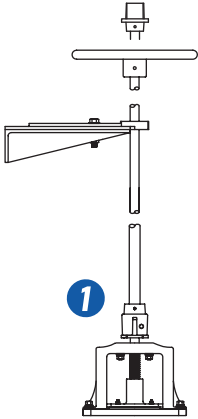
Floorstand: Ductile iron (30" or 36") or cast 316 SS (36")

Pedestal: Ductile iron or cast 316 SS

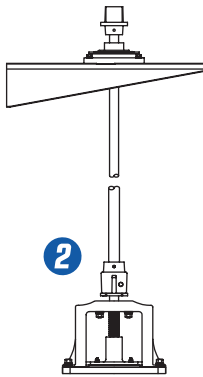
Extension Stem: Carbon steel or stainless steel

Wall Bracket: Ductile iron or cast 316 stainless steel

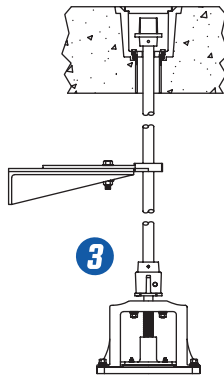
Floor Box: Sealed or unsealed, cast iron or cast SS



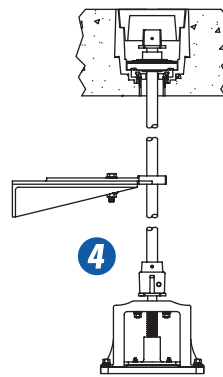
1
Stem Guide
with Handwheel
or 2" square nut



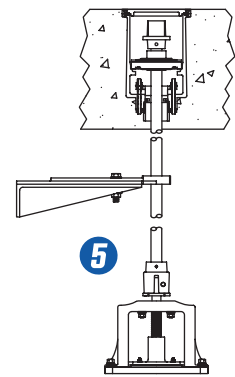
2
Wall Bracket with
Position Indicator



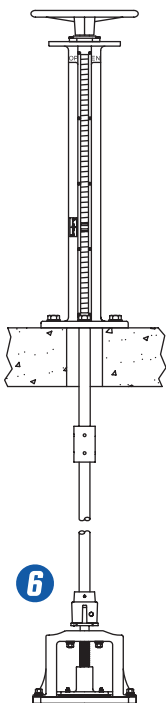
3
Floor Box w/out
Position Indicator



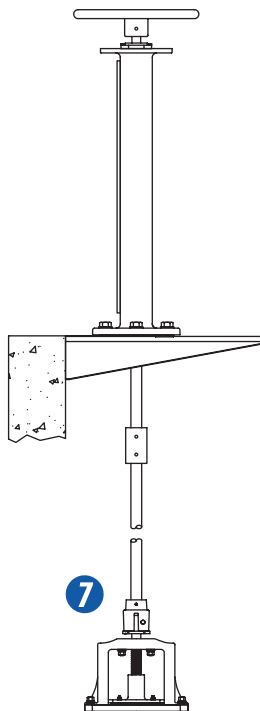
4
Floor Box with
Position Indicator



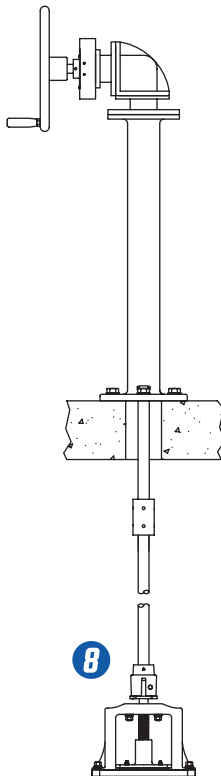
5
Cast Sealed
Floor Box with
Position Indicator



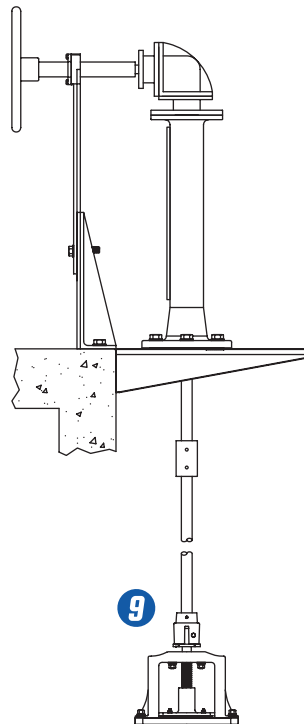
6
Indicating
Floorstand



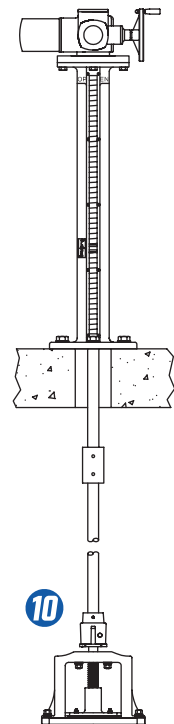
7
Indicating Floorstand
with Wall Bracket*



8
Pedestal with Miter Gear,
Crank Handwheel &
Position Indicator
(57T or 275T only)



9
Indicating Floorstand with
Wall Bracket, Miter Gear &
Horizontal Extension Stem*



10
Indicating
Floorstand
with Actuator

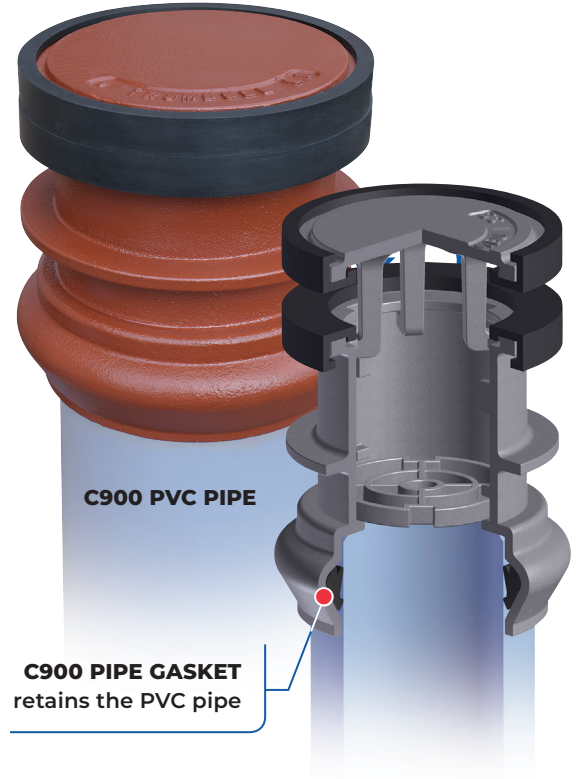
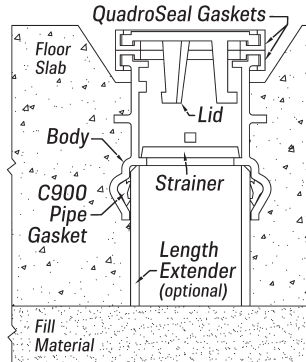
* Indicating slot faces operator and is not visible in installations 7 and 9.

FLOOR-TYPE HYDROSTATIC TANK PRESSURE RELIEF VALVES

QuadroSeal™ Gasket Design – Available in Ductile Iron and Type 316 Stainless Steel

Trumbull Floor-Type Tank Pressure Relief Valves are cast in the bottom of tanks in treatment plants to keep empty tanks from floating from an excess of groundwater beneath them. When this condition occurs, the hydrostatic pressure will open the cover of the valve allowing water to enter, thereby equalizing pressure inside and outside the tank and preventing it from floating. They will start to open at less than one foot of head. Lugs in the body prevent the cover or strainer from becoming separated from the body of the valve due to flow. Both can be removed when necessary, however, by turning to the right or left.

Both Floor-Type and Wall-Type Valves use two Neoprene seating surfaces so if particles of grit lodge on them, the head of liquid in the tank will force the valve closed. These valves are for low seating or unseating pressure applications only. Design uses C900 pipe gaskets in bell to securely retain PVC pipe to valve.



Floor-Type Pressure Relief Valves *

Size	Ductile Iron**		316 Stainless Steel	
	Domestic Item No	Non-Domestic Item No	Domestic Item No	Non-Domestic Item No
4"	1367-1558	367-1558	1367-1540	367-1540
6"	1367-1559	367-1559	1367-1544	367-1544

* For product weights, see drawing on Page G-36.

** Furnished with NSF-61, 2 part epoxy coating.



Floor-Type valves are cast in 4" and 6" sizes, in overall lengths of approx. 7-3/4". The lengths can be extended by inserting C900 PVC pipe into the underside of the valve. The PVC extensions can be furnished and inserted by Trumbull, to customer's exact length requirements, or in the field with customer supplied PVC pipe.

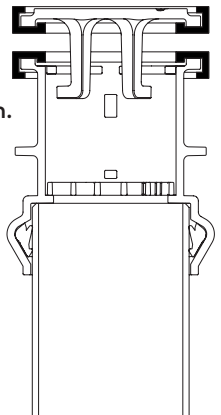


QUADROSEAL

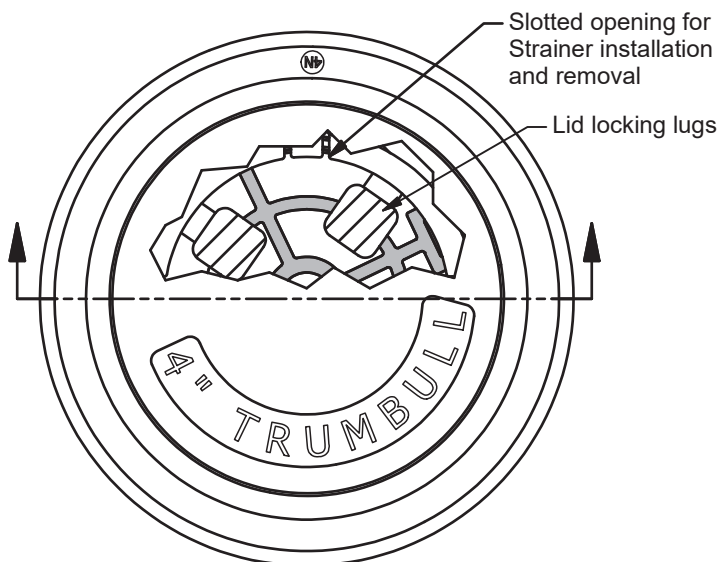
gaskets

Unique square design of QuadroSeal™ Gasket surrounds casting on four sides to prevent separation.

QuadroSeal™ design also prevents metal-to-metal contact that can cause seating surfaces of iron valves to corrode into a "frozen shut" position. See page G-39 for more information.



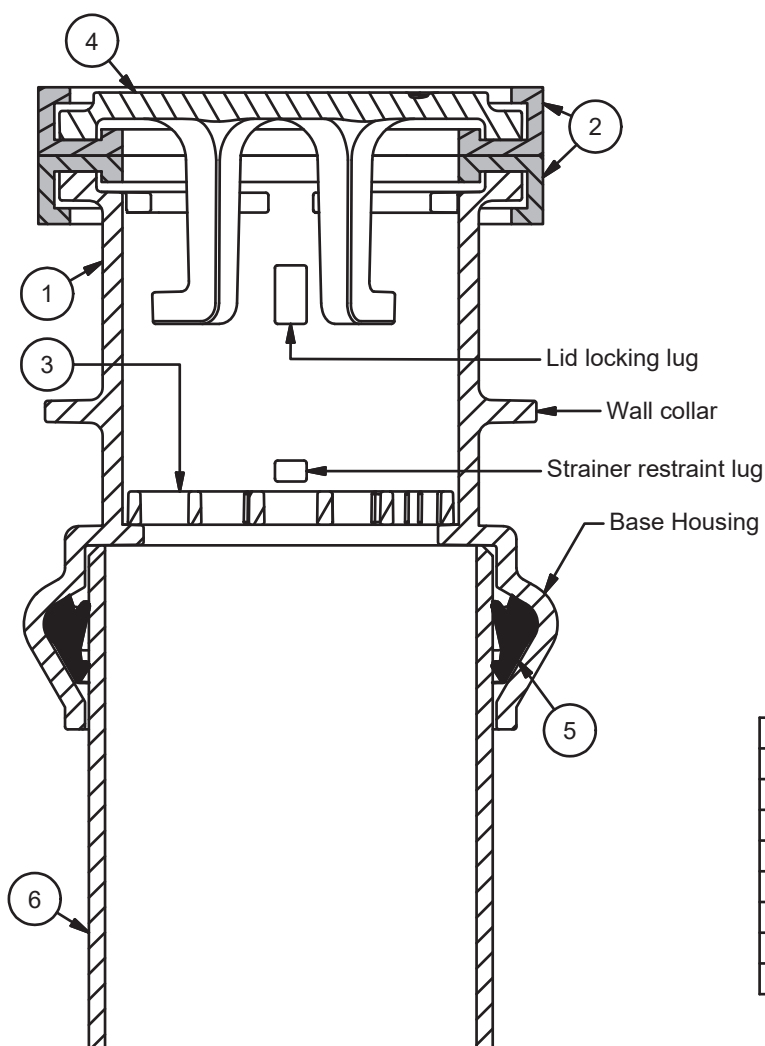
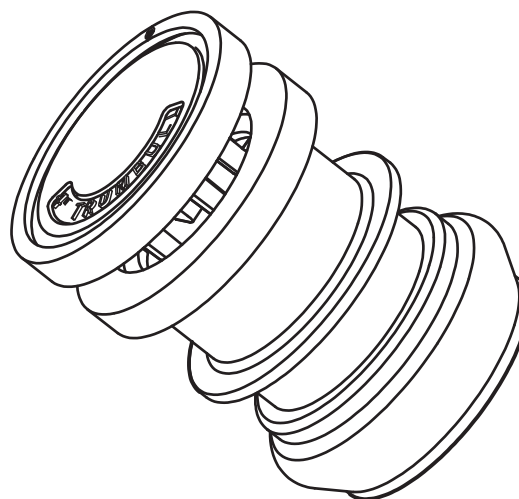
Wall-Type Pressure Relief Valves are shown on pages G-37 and G-38.



ITEM	DESCRIPTION	MATERIAL
1	Valve Body	Stainless Steel (T316) or Ductile Iron (65-45-12)
2	QuadroSeal Seat	Neoprene (40 durometer)
3	Strainer	Stainless Steel (T316) or Ductile Iron (65-45-12)
4	Lid	Stainless Steel (T316) or Ductile Iron (65-45-12)
5	Rieber Gasket	SBR
6	Length Extender	C900 PVC Pipe

Note:

Ductile Iron components are coated with Tnemec N140-1211 epoxy (complies with NSF 61).



Size	Material	Part Number	Weight
4"	DI	367-1556	13.2 lb
4"	SS	367-1540	14.5 lb
6"	DI	367-1578	23.1 lb
6"	SS	367-1544	22.3 lb

Valve size	4	6
Overall height - closed	7-5/8"	7-59/64"
Lid lift distance	1"	1"
Seat O.D.	6"	8"
Base Housing O.D.	6-11/32"	8-5/8"
Fits C900 pipe size	4"	6"
Wall collar O.D.	5-27/32"	8-1/8"
Body seat face to Collar CL	3"	2-7/8"
Strainer flow area	7.3 sq. in	18.9 sq. in

**TANK PRESSURE RELIEF VALVE
FLOOR TYPE**
Drawn to Scale

Drawn:
BJE
01/07/13

Original document

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

WALL-TYPE HYDROSTATIC TANK PRESSURE RELIEF VALVES

QuadroSeal™ Gasket Design – Available in Ductile Iron and Type 316 Stainless Steel

Trumbull Wall-Type Tank Pressure Relief Valves are designed for installation in side walls of tanks of treatment plants. They are intended for low unseating pressure applications and will start to open at less than one foot of head to relieve groundwater pressure from the exterior of tank wall. For low seating applications, contact Trumbull.

Trumbull Relief Valves use two Neoprene seating surfaces so if particles of grit lodge on them, the head of liquid in the tank will force the valve closed.

The valve has a flanged body for use with a wall pipe. The flange drilling is according to ANSI 125# STD on both sizes. The Wall-Type valve uses a removable stainless steel hinge pin and two stainless cotter pins.



Wall-Type Pressure Relief Valves *

Size	Ductile Iron**		316 Stainless Steel	
	Domestic Item No	Non-Domestic Item No	Domestic Item No	Non-Domestic Item No
4"	1367-1572	367-1572	1367-1560	367-1560
6"	1367-1573	367-1573	1367-1564	367-1564

* For product weights, see drawing on Page G-38.

** Furnished with NSF-61, 2 part epoxy coating.

Wallpipes

Wallpipes are 18" long (overall) with a collar 6" from the face of the flange; they can be furnished cut-to-length to meet your requirements. The flange is tapped for studs to allow the flange on the Wallpipe to be set flush with the wall. No flange accessories will be furnished unless ordered separately. Wallpipe & Wall PRV sold separately. In order for the Wall-Type Valve to operate properly, it must be installed so that the bolt holes straddle the centerline.

Size	Ductile Iron		316 Stainless Steel
	Item No	Weight	
4"	367-1000	33.50 lbs.	When stainless valves are used, Wallpipes are furnished in ductile iron or fabricated from stainless pipe.
6"	367-1002	68.50 lbs.	

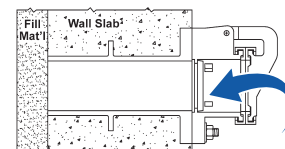
QUADROSEAL gaskets

Unique square design of QuadroSeal™ Gasket surrounds casting on 4 sides to prevent separation.

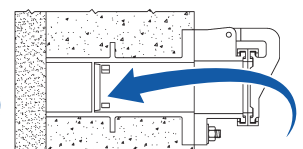
QuadroSeal™ design also prevents metal-to-metal contact that can cause seating surfaces of iron valves to corrode into a "frozen shut" position. See page G-39 for more information.

Easy access to strainer helps prevent blockage of flow that could lead to structural tank damage. Wallpipes are frequently provided by ductile pipe suppliers and don't have strainers. The accumulation of debris on seating surfaces can lead to leakage from the tank.

To prevent that condition: Specify a valve with an internal strainer.



Strainer in Trumbull valve is easily accessed for maintenance



Strainer installation of other designs

Floor-Type Pressure Relief Valves are shown on pages G-35 & G-36.

Pressure Relief Valve, Wall Type
Flange drilling per ANSI 125#

Size	Flange	Bolt Circle	Bolt Hole	Seat O.D.	Bore
4"	9" x 7/16"	7-1/2"	3/4"	6"	4"
6"	11" x 1/2"	9-1/2"	7/8"	8"	6"

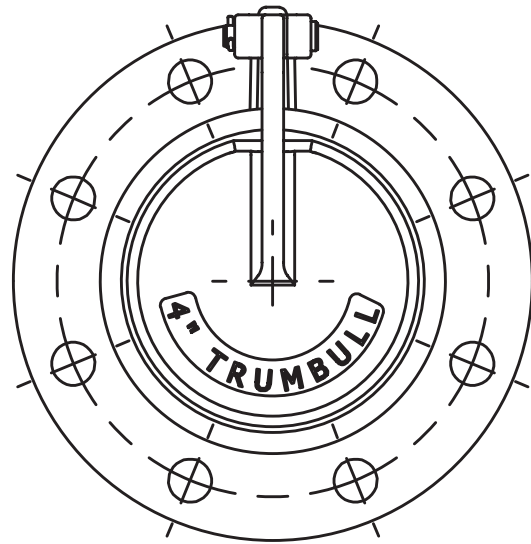
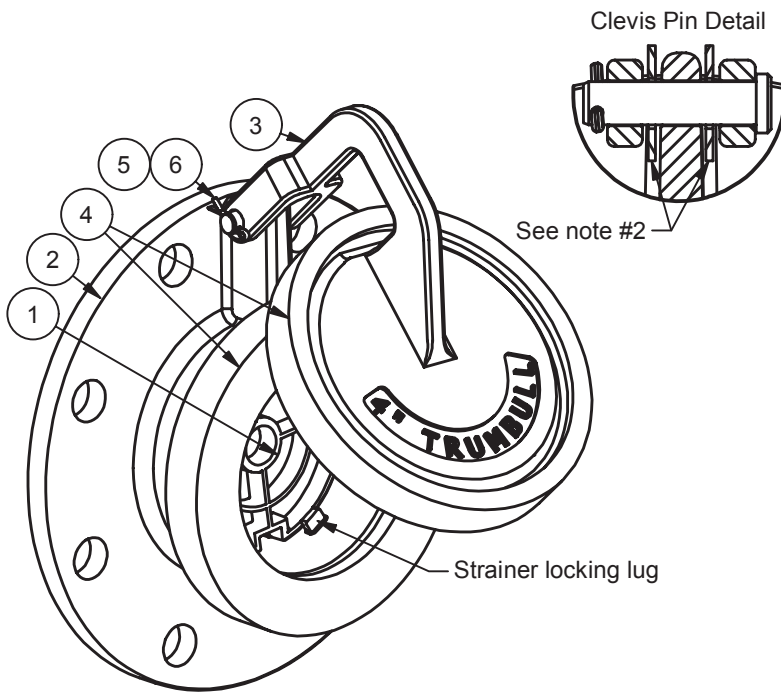
Item	Description	Material
1	Strainer	Stainless Steel (T316) or Ductile Iron (65-45-12)
2	Body	Stainless Steel (T316) or Ductile Iron (65-45-12)
3	Lid Flap	Stainless Steel (T316) or Ductile Iron (65-45-12)
4	QuadroSeal Seat	Neoprene (40 durometer)
5	Clevis Pin	Stainless Steel
6	Cotter Pin	Stainless Steel

Size	Material	Part Number	Weight
4"	DI	(1)367-1572	14.25 lb
4"	SS	(1)367-1560	14.65 lb
6"	DI	(1)367-1573	21.45 lb
6"	SS	(1)367-1564	22.05 lb

Note:

1.) Ductile Iron components are coated with Tnemec N140-1211 epoxy (complies with NSF 61).

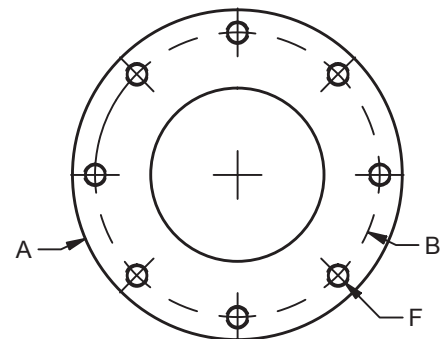
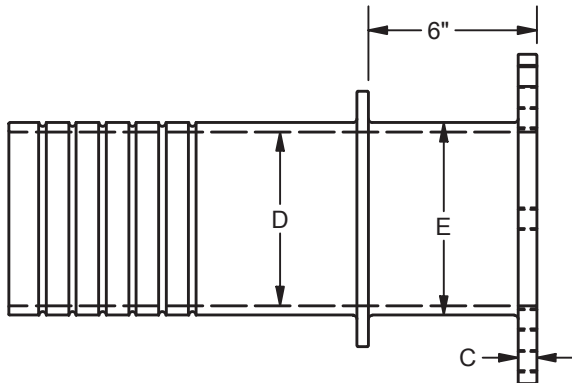
2.) Ductile Iron valves have Isolating washers made of UHMWPE installed on the Clevis pin between the lid and body, preventing metal to metal contact.



Size	Trumbull #	A	B	C	D	E	F	Weight
4"	367-1000	9"	7-1/2"	5/8"	4-3/16"	4.8"	5/8"-11 UNC	32 lbs
6"	367-1002	11"	9-1/2"	5/8"	6-5/16"	6-29/32"	3/4"-10 UNC	49 lbs

Wall Pipe

Flange drilling per ANSI 125#
Material: Ductile Iron (65-45-12)
Coating: Tnemec N140-1211 epoxy



TANK PRESSURE RELIEF VALVE
WALL TYPE
Drawn to Scale

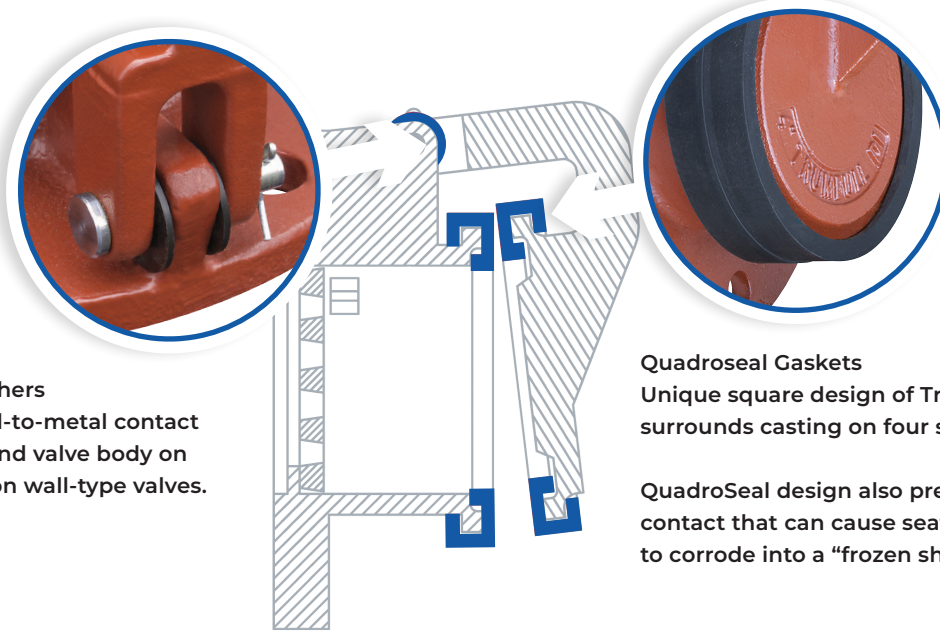
Drawn:
BJE
01/07/13

Revision:
BJE
06/04/25

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

PRESSURE RELIEF VALVES

NO METAL-TO-METAL CONTACT



UHMWPE

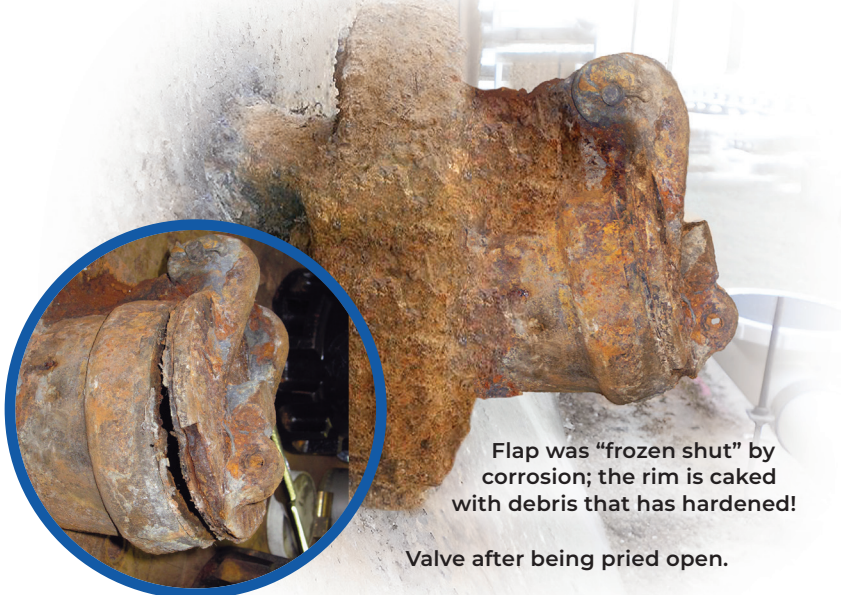
Isolating Washers
prevent metal-to-metal contact
between lid and valve body on
our ductile iron wall-type valves.

Quadroseal Gaskets

Unique square design of Trumbull QuadroSeal Gasket
surrounds casting on four sides to prevent separation.

QuadroSeal design also prevents metal-to-metal
contact that can cause seating surfaces of iron valves
to corrode into a "frozen shut" position.

Example of Alternate Design
as Shown in Service



Flap was "frozen shut" by
corrosion; the rim is caked
with debris that has hardened!

Valve after being pried open.

Trumbull Mfg. Design



RESULT:

Inoperable valves cannot relieve groundwater
pressure, leading to structural damage to tanks.

Metal-To-Metal Contact

RESULT:

Metal-to-metal contact is not possible
between Trumbull seating surfaces!

It's because of our **QUADROSEAL**
gaskets

THE STRAINER

In Trumbull Pressure Relief Valves

This is a strainer, the type used in wall-type and floor-type tank pressure relief valves. You may not think about it very much, but it's actually an important part.

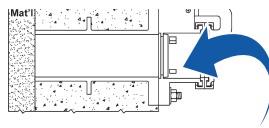
Its job is to keep rock or gravel from the tank exterior from interfering with the seating surface. You need to remove and clean it periodically, otherwise the valve can get plugged up and the groundwater won't be able to find its way through the valve into the tank. If that happens, the pressure relief valve can't do its job by opening. Then, the hydrostatic pressure of the groundwater might damage the tank's wall or cause the tank to float out of its setting.

When you install one of these strainers in a wall-type valve, put it in the valve... not in the wall pipe. If you put it in the pipe, sometimes workers can't get their arms through the valve and into the wall pipe. They have to occasionally remove the valve to be able to reach the strainer!

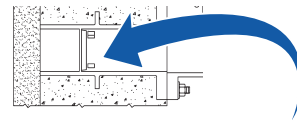


Easy access to strainer helps prevent blockage of flow that could lead to structural tank damage. Wallpipes are frequently provided by ductile pipe suppliers and don't have strainers.

The accumulation of debris on seating surfaces can lead to leakage from the tank. To prevent that condition . . . specify a valve with an internal strainer!



Strainer in Trumbull valve is easily accessed for maintenance



Strainer installation of other designs

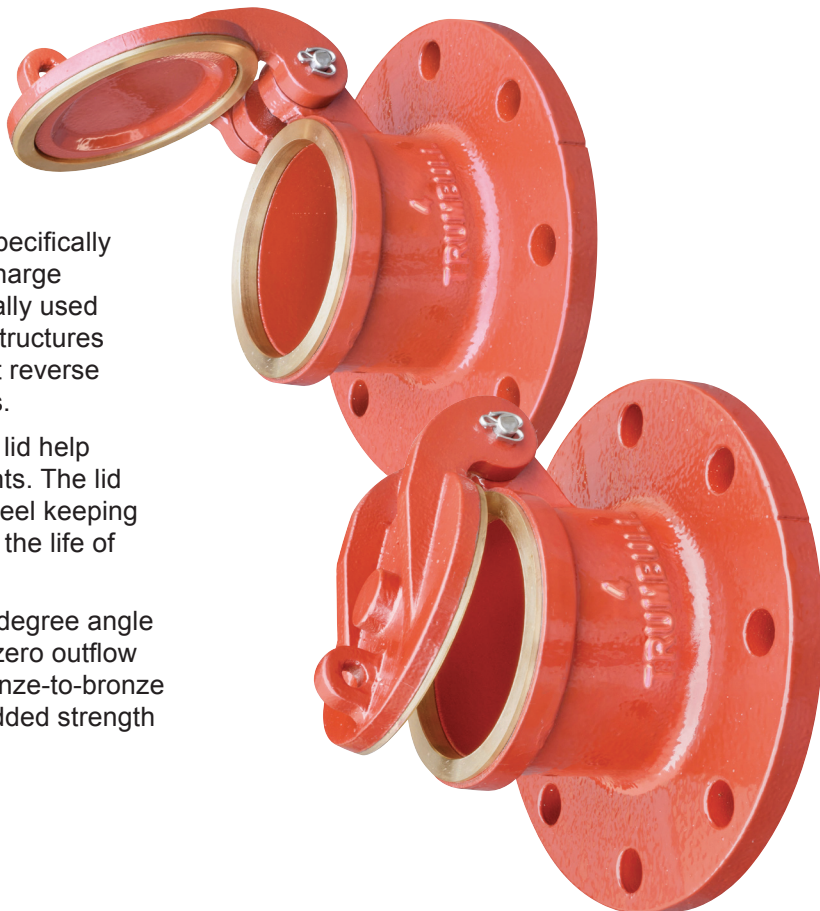
FLAP VALVES

Used to Facilitate Outflow Through a Pipe

Trumbull Flap Valves (or Flap Gates) are specifically designed to eliminate backflow in free discharge applications in pipes. Flap valves are typically used in drainage applications from plant outfall structures to rivers or other bodies of water to prevent reverse flow during flooding and high tide situations.

The fusion bonded epoxy coated body and lid help control corrosion of the cast iron components. The lid hinge components are made of stainless steel keeping free of corrosion for smooth operation over the life of the flap valve.

The valve body outlet is designed with a 6 degree angle from vertical keeping the lid closed during zero outflow conditions. The valve uses a machined bronze-to-bronze seating to seal in severe applications for added strength and durability against debris.



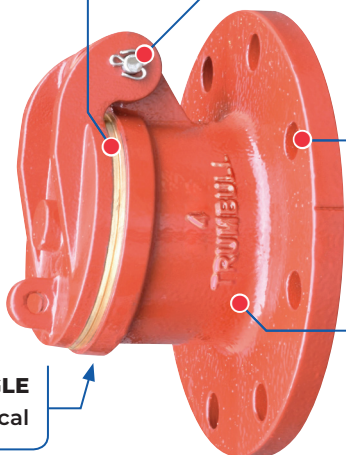
MACHINED BRONZE-TO-BRONZE SEATS
for added strength and durability

STAINLESS STEEL HINGE PIN AND COTTER PINS

ANSI 125# STD FLANGE DRILLING

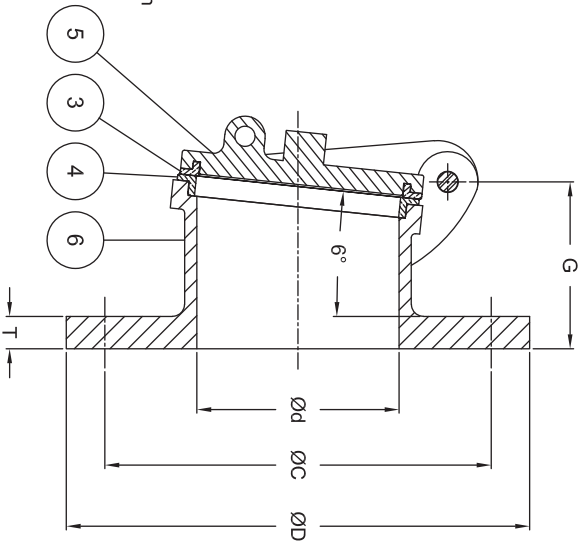
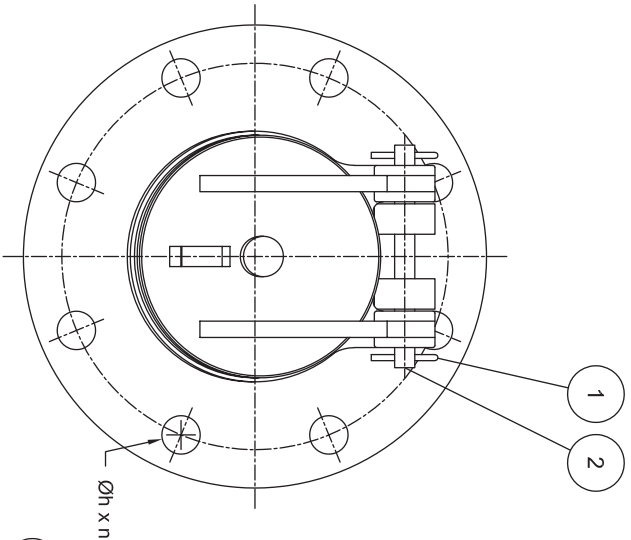
FUSION BONDED EPOXY COATING

6° ANGLE
from vertical



Flap Valves

Size	Item No	Weight
4"	700-610-00010	14.10 lbs.
6"	700-610-00020	24.90 lbs.
8"	700-610-00030	37.50 lbs.
10"	700-610-00040	55.10 lbs.
12"	700-610-00050	92.60 lbs.
14"	700-610-00060	154.30 lbs.
16"	700-610-00070	232.60 lbs.
18"	700-610-00080*	*Consult Trumbull for availability.
20"	700-610-00085*	
24"	700-610-00090*	



NO.	PARTS	MATERIAL	QTY
1	Cotter Pin	Stainless Steel ASTM A276 Type 304	2
2	Hinge Pin	Stainless Steel ASTM A276 Type 304	1
3	Lid Seat Ring	Bronze ASTM B62 C83600	1
4	Body Seat Ring	Bronze ASTM B62 C83600	1
5	Lid	Gray Iron ASTM A126 Class B	1
6	Body	Gray Iron ASTM A126 Class B	1

- Notes:
- 1.) Flange drilled to ANSI B 16.1 Class 125
 - 2.) Dimensions in inches
 - 3.) Iron components are coated with Fusion Bonded Epoxy, Red

SIZE Ød	ØD	ØC	Øh	n	T	G
4	9	7½	¾	8	⅝	¾
6	11	9½	⅞	8	1⅛	¾
8	13½	11¾	⅞	8	¾	4
10	16	14¼	1	12	1⅜	4½
12	19	17	1	12	⅞	4½
14	21	18¾	1⅛	12	1⅜	4⅝
16	23½	21¼	1⅛	16	1¼	4½
18	25	22¾	1¼	16	1⅛	7½
20	27½	25	1¼	20	1⅛	6
24	32	29½	1⅜	20	1⅜	6⅞

4"-24" Flap Valves

Drawn to Scale

Drawn:
BJE
05/31/24

Revision:
--

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

TELESCOPING VALVES

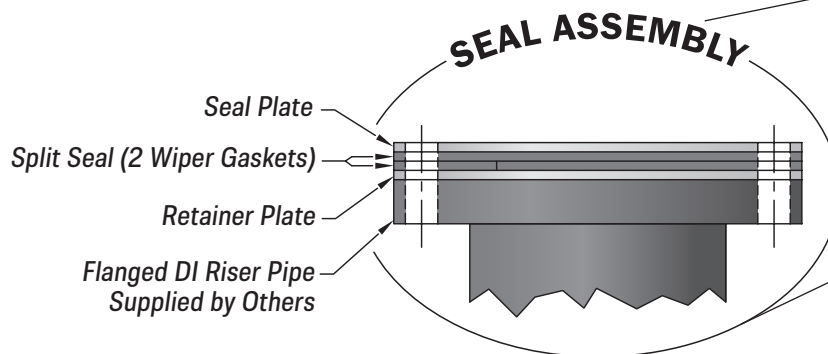
Trumbull Telescoping Valves are designed to regulate the level of fluids in containment structures such as holding chambers, tanks, ponds & lagoons. An example of an application might be to regulate the effluent level in a settling basin. Also known as “Sludge Draw-off Valves” or “Decanting Valves”, the valve assembly consists of a lifting mechanism (operator), connecting stem and a slip (drain) tube which travels vertically inside a fixed vertical pipe. Utilizing the operator, the slip tube is raised or lowered to maintain the desired fluid level within the containment structure.

Trumbull offers Telescoping Valves in either Rising or Non-Rising Stem designs. A variety of operators are available such as, handwheel, rack & pinion, bevel gear and electric motor operators. The slip tubes are available in a variety of sizes and materials, the most common materials being 304 stainless steel and Sch 40 PVC. Other materials are available upon application or request. Slip tubes are typically supplied with V-notch, plain end or funnel tops. Scum baffles can also be added to the top of the slip tube, if requested.

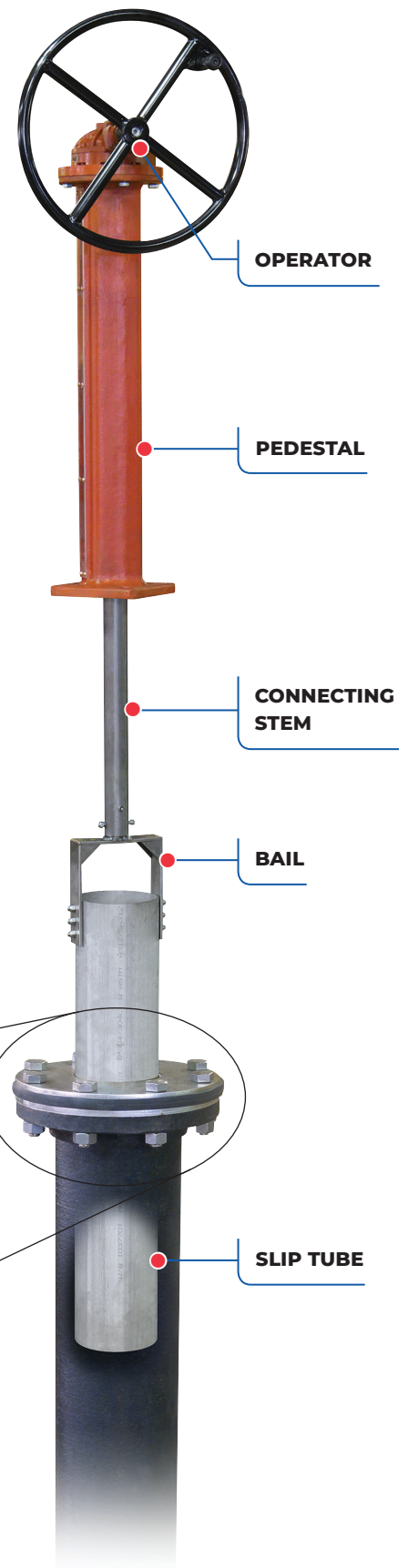
Trumbull’s seal assembly consists of a stainless steel retainer plate, a seal plate and two (2) Buna-N wiper gaskets. The assembly is designed so that the wiper gaskets can easily be replaced in the field without disassembling the Telescoping Valve. Additional seal elastomers available upon request.

Operator pedestals are available in 26” & 32” cast ductile iron Indicating Style, 32” cast ductile iron Non-Indicating Style and 32” cast stainless steel Indicating Style. Other custom-fabricated styles and materials are available upon request. Offset wall brackets are available in either cast ductile iron or cast 316 stainless steel.

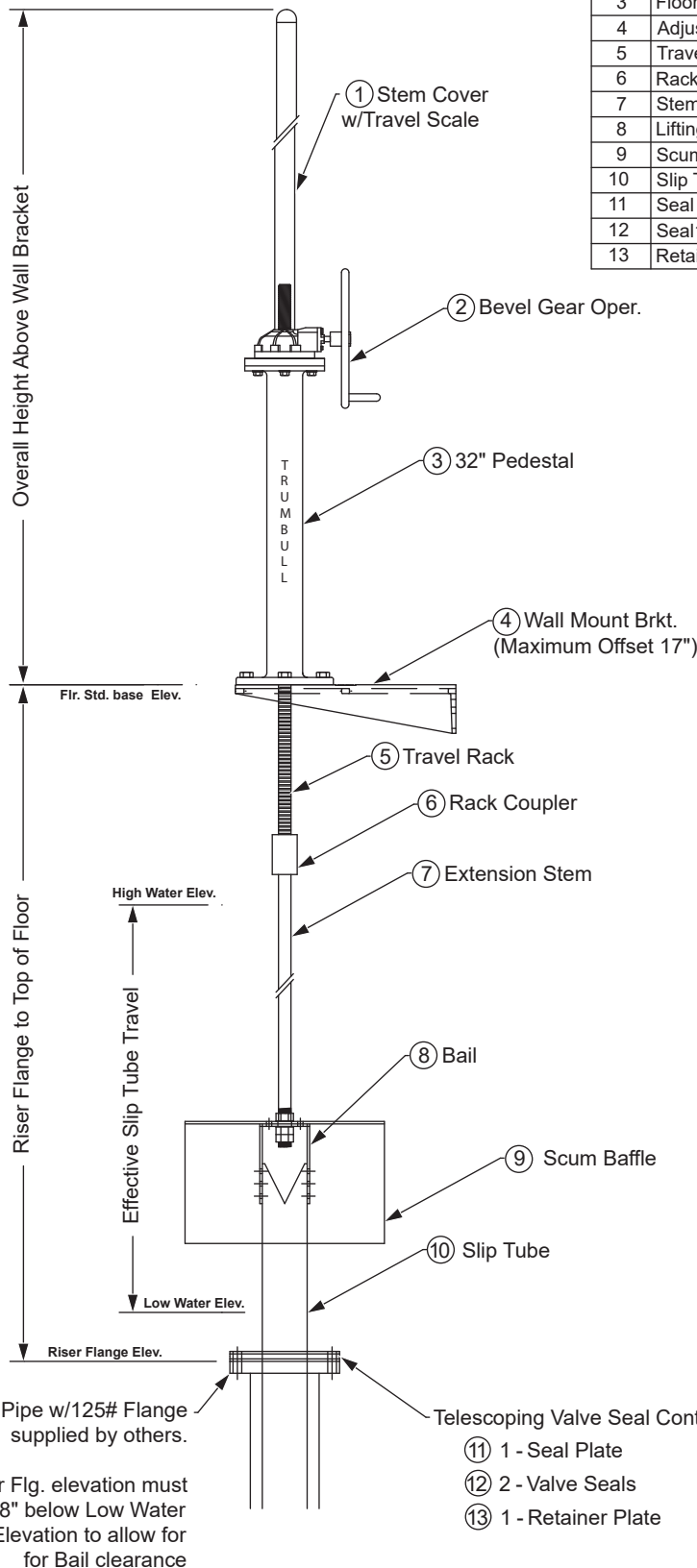
Lifting bails are fabricated from 304 stainless steel material, and are mounted to the slip tubes with stainless steel fasteners. Threaded operating stems and extension stems are made from 304 stainless steel material unless otherwise specified.



The above information requirements are available in drawing form on the following pages.



MK-#	Description	Qty/Assem.	Std. Mat'l
1	Clear Stem Cover	Varies	PVC
2	Operator, Bevel Gear (See Options)	1 Piece	Carbon Stl.
3	Floorstand Non-Indicating 32"	1 Piece	Ductile Iron
4	Adjustable Wall Mount Brkt 17-1/8" Max	1 Piece	Ductile Iron
5	Travel Rack 3/4" Dia	Varies	303 SS
6	Rack Coupling Round	1 Piece	304 SS
7	Stem Extension Solid Rod	Varies	304 SS
8	Lifting Bail	1 Piece	304 SS
9	Scum Baffle (See Options)	1 Piece	304 SS
10	Slip Tube (See Options)	Varies	304 SS
11	Seal Plate 125# Drilling, 3/8" Thk	1 Piece	304 SS
12	Seal 125# Drilling, 1/4" Thk, Dove Tailed	2 Pieces	Buna-N
13	Retainer Plate 125# Drilling, 1/4" Thk	1 Piece	304 SS



Telescoping Valve Options

Operators:

Handwheel Rising Stem _____
 Handwheel Non-Rising Stem _____
 Bevel Gear Rising Stem _____
 Bevel Gear Non-Rising Stem _____
 Electric Motor Actuator _____

Scum Baffle:

20" Dia. x 12" Tall x .062" Thk _____
 Other Sizes- Dia. - _____
 Height - _____
 Thickness - _____

Slip Tube Options:

Material:

304SS _____
 316SS _____
 PVC S40 _____

Tube Top Configurations:

Plain End _____
 "V" Notch _____
 12" Dia. Funnel _____
 Other (Describe Below) _____

Wall Mount Bracket Material:

Ductile Iron _____
 Stainless Steel _____
 Not Required _____

Customer Provided Dimensions

Valve Size : _____

Elevations:

Floor Stand Base Elevation _____
 High Water Elevation _____
 Low Water Elevation _____
 Riser Flange Elevation _____

Customer Provided Project Info.

Project Name: _____
 Project City: _____
 Project State: _____

Qty. Req'd: _____

Customer Information

Customer: _____
 Branch: _____
 Contact Name: _____
 Phone: _____
 Email: _____
 Reference #: _____

Note: Wall Brkt. anchors & Flg Bolts Supplied by others.
 Note: Slip Tube & Bail fasteners, supplied by Trumbull
 will be 304ss

Telescoping Valve

Drawn to Scale

Drawn:
 FCN
 11/20/13

Revision:
 NJC
 (B) 01/20/20

Trumbull Manufacturing
 Youngstown, Ohio
 www.trumbull-mfg.com

FLOORSTAND OPTIONS



**Non-Indicating
Floorstand**



Electric Motor



**Floorstand
+
Position Indicator**



**Miter Gear
+
Handwheel**



**Miter Gear
+
Position Indicator
+
Handwheel**



**Worm Gear
+
Spinner/Crank
Handwheel**



**Bevel Gear
+
Handwheel**



**Bevel Gear
+
Position Indicator
+
Handwheel**



**Bevel Gear
+
Position Indicator
+
2" Nut**



**Miter Gear
+
2" Nut**



**1/4 Turn
Handle**



**Rising Stem
Floorstand**

**30" INDICATING
FLOORSTANDS, 36" DI
AND SS INDICATING
FLOORSTANDS, DI AND
SS NON-INDICATING
FLOORSTANDS**



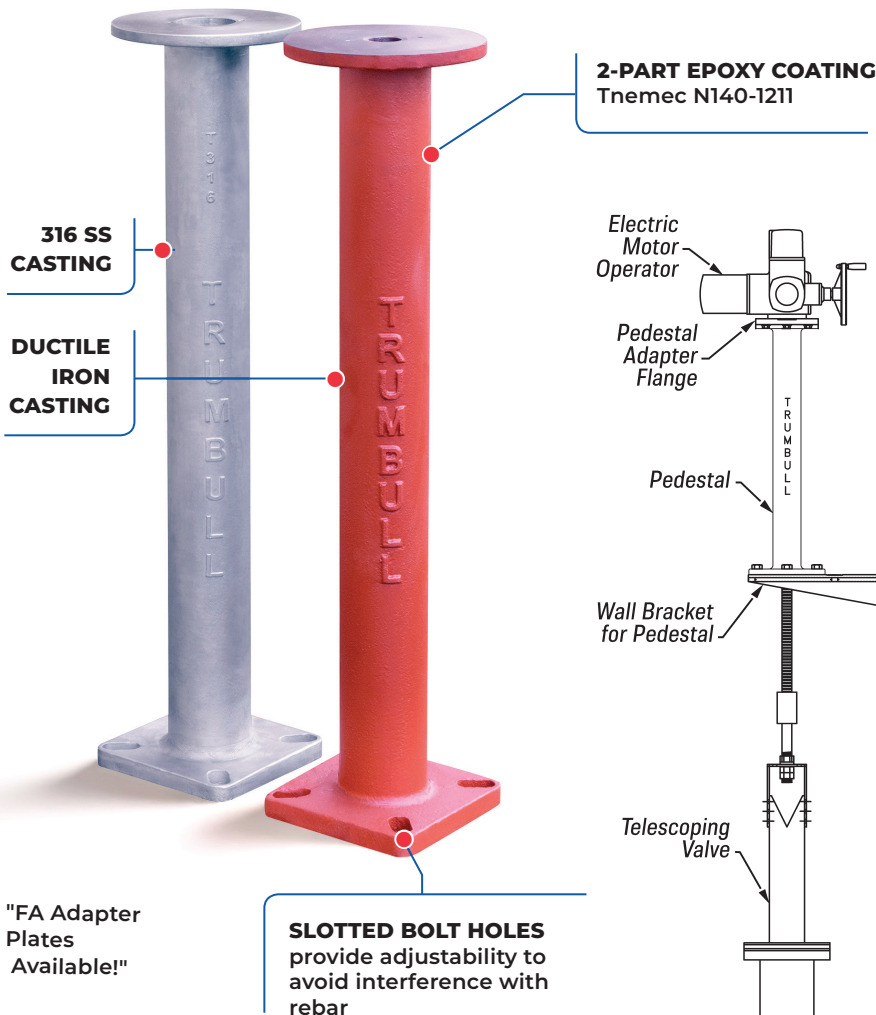
All Floorstand and Pedestal options can be supplied with a needle bearing stem support.

32" PEDESTALS

Ductile Iron and 316 Stainless Steel

Trumbull 32" Pedestals are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation.

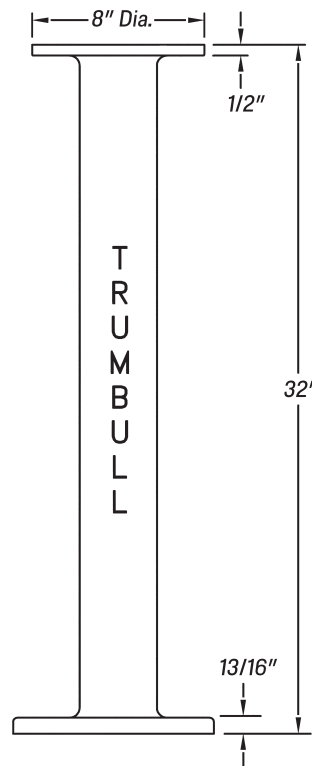
Pedestals can be adapted for various custom requirements such as mounting of electric motor operators, manual gear operators, or customer-supplied components. Also available in fabricated stainless steel or carbon steel for various applications.



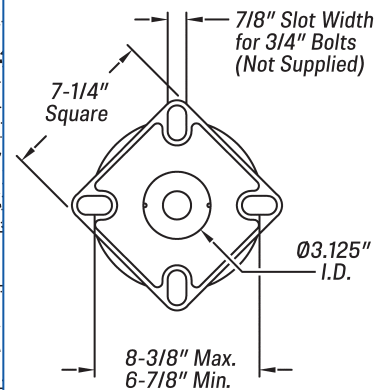
MULTI-PURPOSE . . .

Many Possibilities!

PEDESTAL DIMENSIONS



PEDESTAL BASE DIMENSIONS



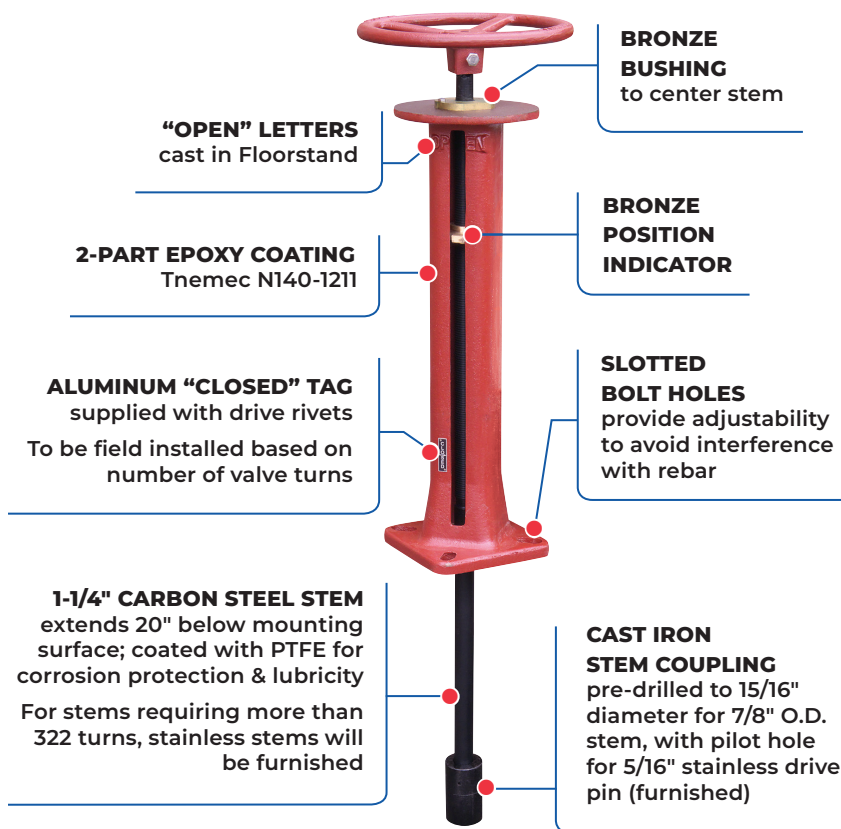
32" Pedestals

Model	Item No	Weight
Ductile Iron	367-2417	43.45 lbs.
316 Stainless Steel	367-2427	42.10 lbs.

Typical installation

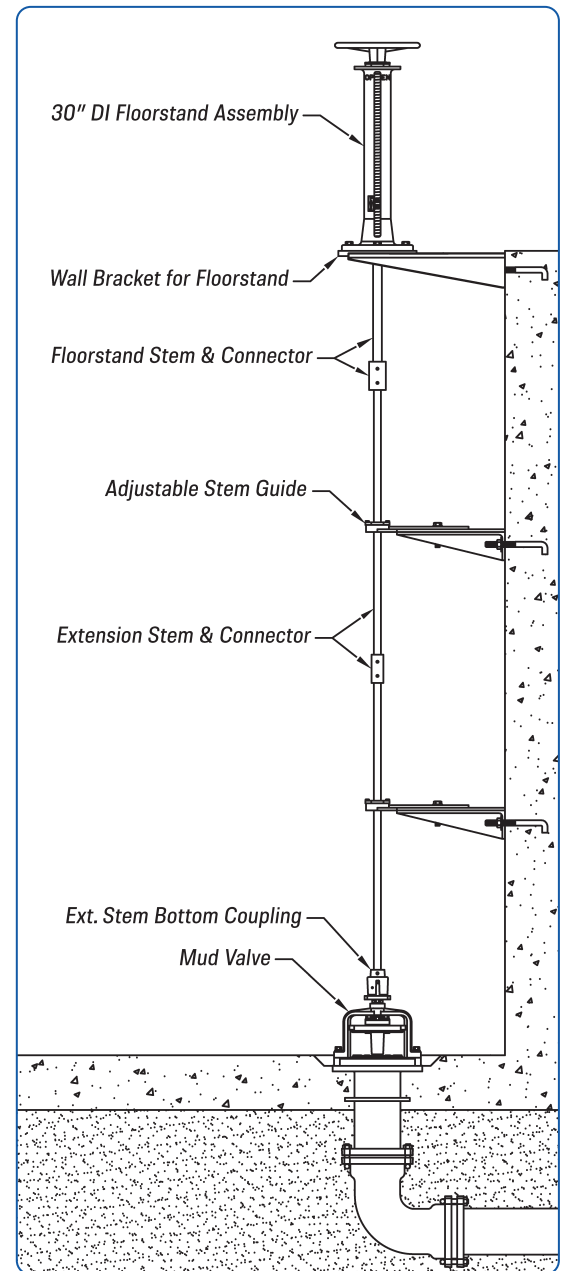
30" DUCTILE IRON INDICATING FLOORSTAND

Trumbull 30" Indicating Floorstands are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation. Floorstand body is ductile iron for increased torque capacity. Set screw secures handwheel to stem. Flange can be machined to facilitate mounting of actuator, if required (also available with gear operators). Our standard Floorstand is shown below (see page G-34 for custom Floorstand options). Stocked for "open left" valves; also available for "open right" valves. Standard stem threading allows up to 140 turns; optional threading allows up to 563 turns. Stainless drive pin supplied with assembly.

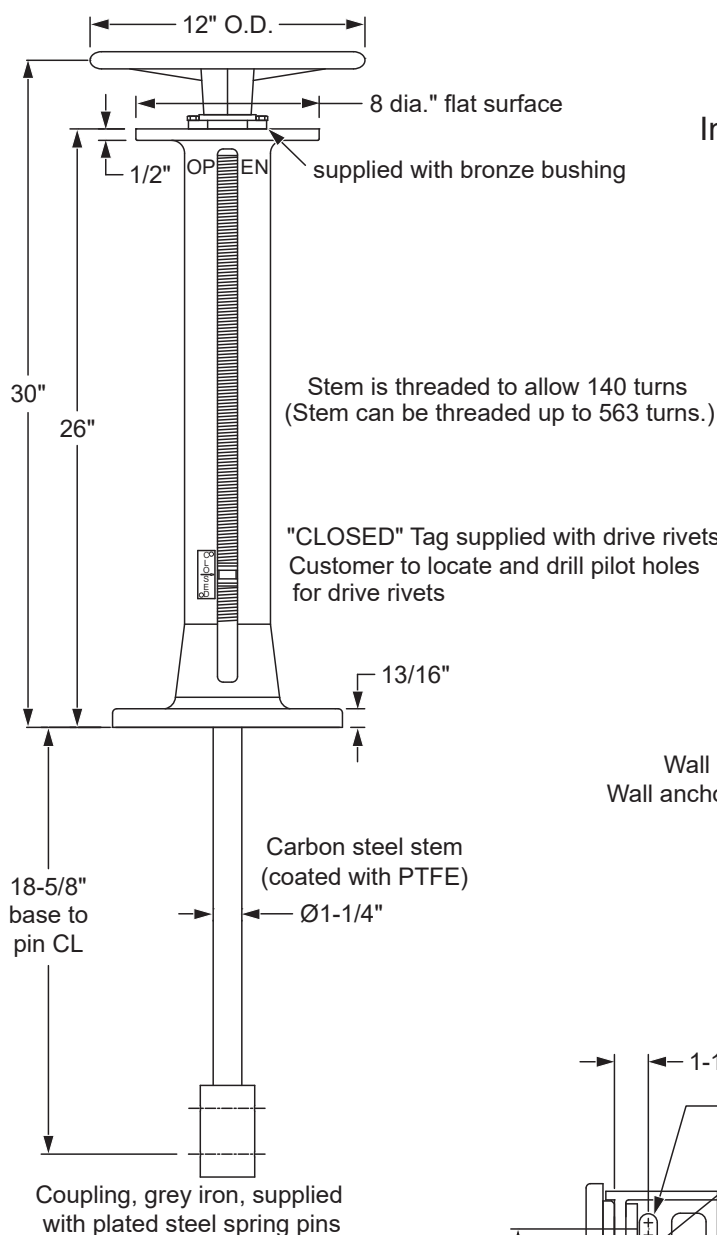


Ordering Instructions

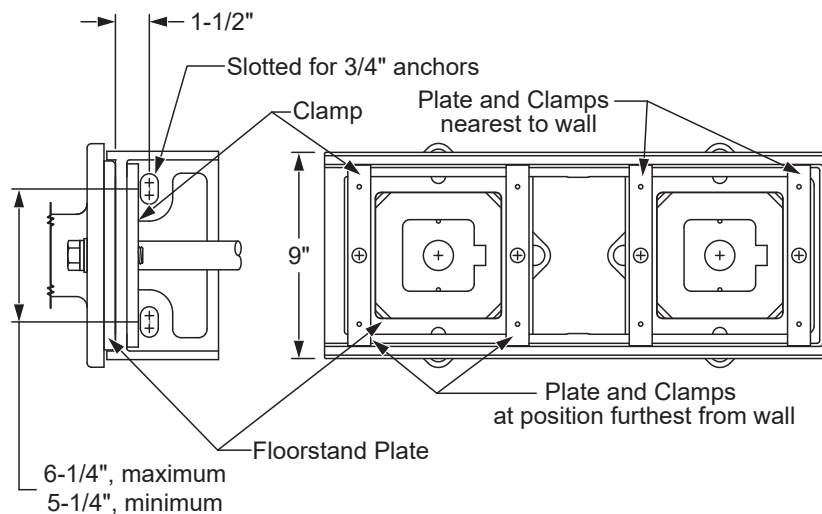
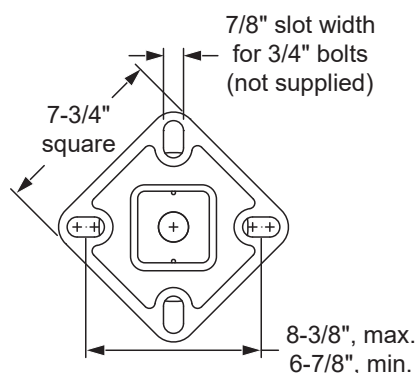
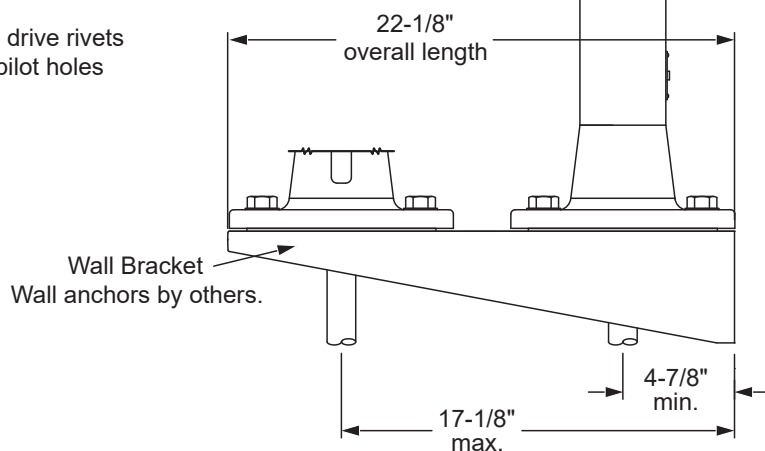
1. Quantity required
2. Floorstand item number: **367-2420**
3. O.D. of extension stem being used, for drilling of connecting couplings
4. Wall Bracket, if required
 - a. Ductile iron item number: **367-2451**
 - b. Stainless steel item number: **367-2461**



Typical Floorstand installation



Installation of Floorstand on Wall Bracket



The Floorstand and Handwheel are ductile iron and coated with red primer.
The Wall Bracket is ductile iron; coating is Tnemec 140-1211, NSF61 compliant.

Indicating Floorstand 30" Ductile Iron Drawn to Scale

Drawn:
FCN
05/20/08

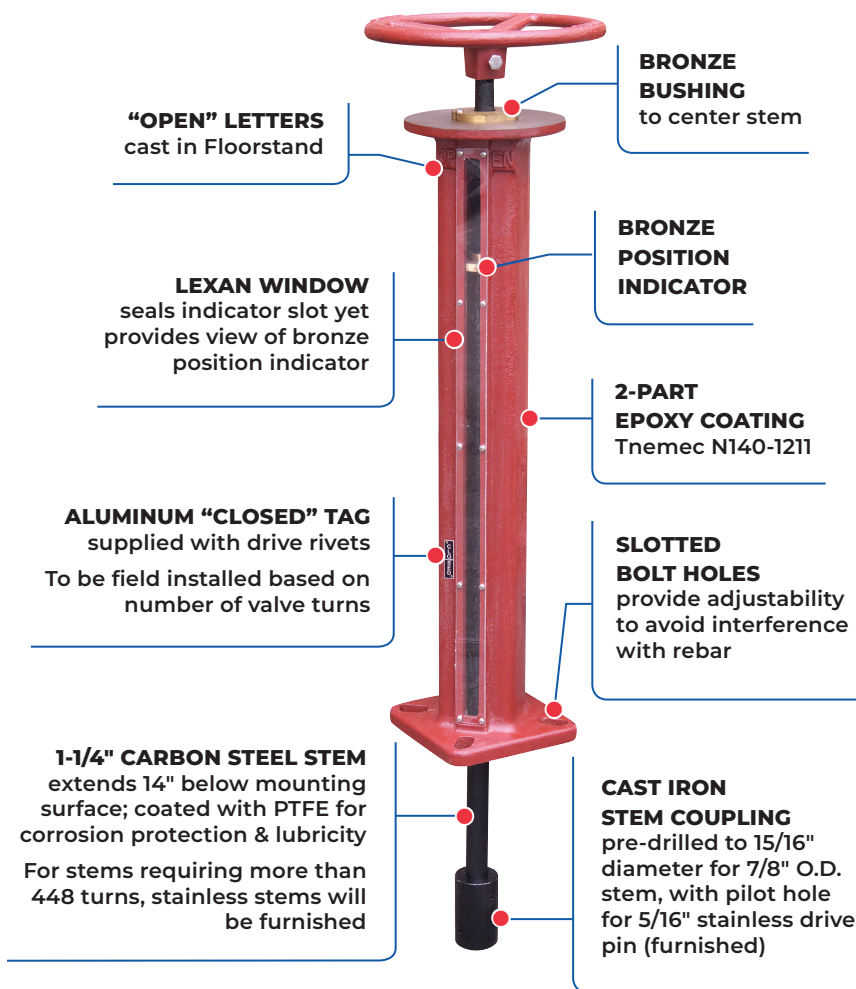
Revision:
FCN
01/03/11

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

36" DUCTILE IRON INDICATING FLOORSTAND

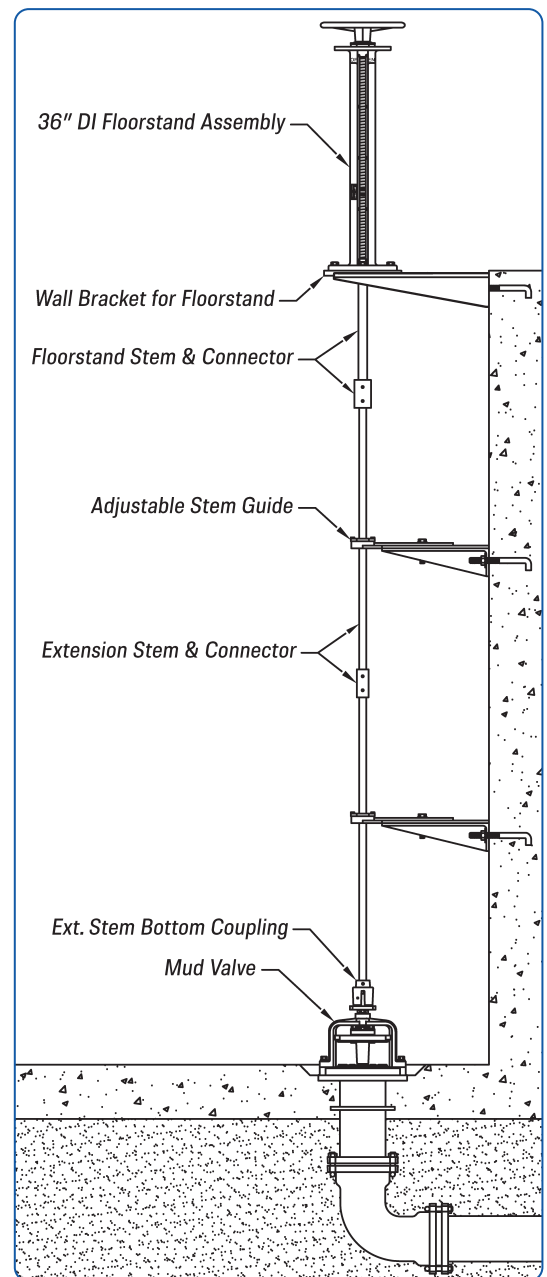
Includes a Sealed Indicator Slot

Trumbull 36" Ductile Iron Indicating Floorstands are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation. Set screw secures handwheel to stem. Flange can be machined to facilitate mounting of actuator, if required (also available with gear operators). Stocked for "open left" valves; also available for "open right" valves. Standard stem threading allows up to 196 turns; optional threading allows up to 784 turns. Stainless drive pin supplied with assembly. Also available in cast stainless steel (page G-51 & G-52). See page G-34 for custom Floorstand options.

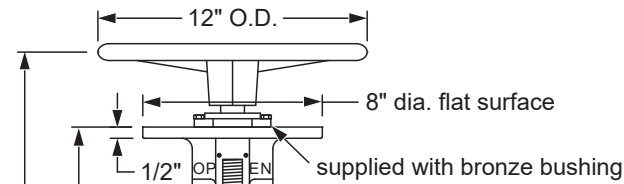


Ordering Instructions

1. Quantity required
2. Floorstand item number: **367-2421**
3. O.D. of extension stem being used, for drilling of connecting couplings
4. Wall Bracket, if required
 - a. Ductile iron item number: **367-2451**
 - b. Stainless steel item number: **367-2461**



Typical Floorstand installation



Installation of Floorstand on Wall Bracket

Stem is threaded to allow 196 turns
(Stem can be threaded up to 784 turns.)

36"
32"

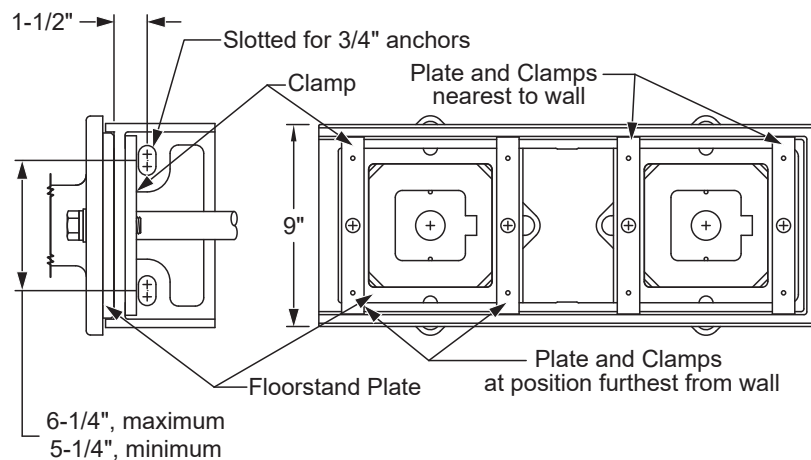
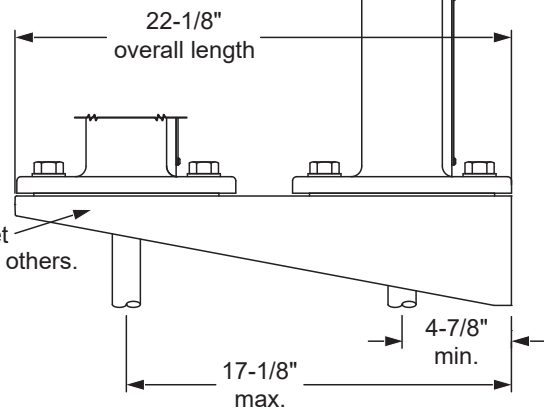
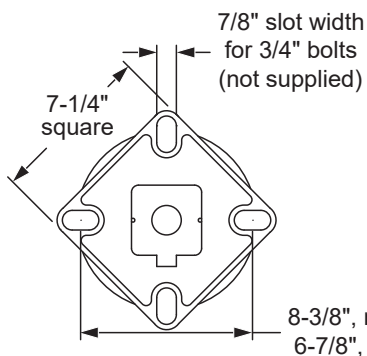
"CLOSED" Tag supplied with drive rivets
Customer to locate and drill pilot holes
for drive rivets

13/16"

14"
base to
pin CL

Carbon steel stem
(coated with PTFE)
Ø1-1/4"

Coupling, grey iron, supplied with
plated steel spring pins



The Floorstand and Handwheel are ductile iron and coated with red primer.
The Wall Bracket is ductile iron; coating is TNEMEC 140-1211, NSF61 compliant.
Also available in Cast T316 Stainless Steel.

**Indicating Floorstand
36" Ductile Iron**
Drawn to Scale

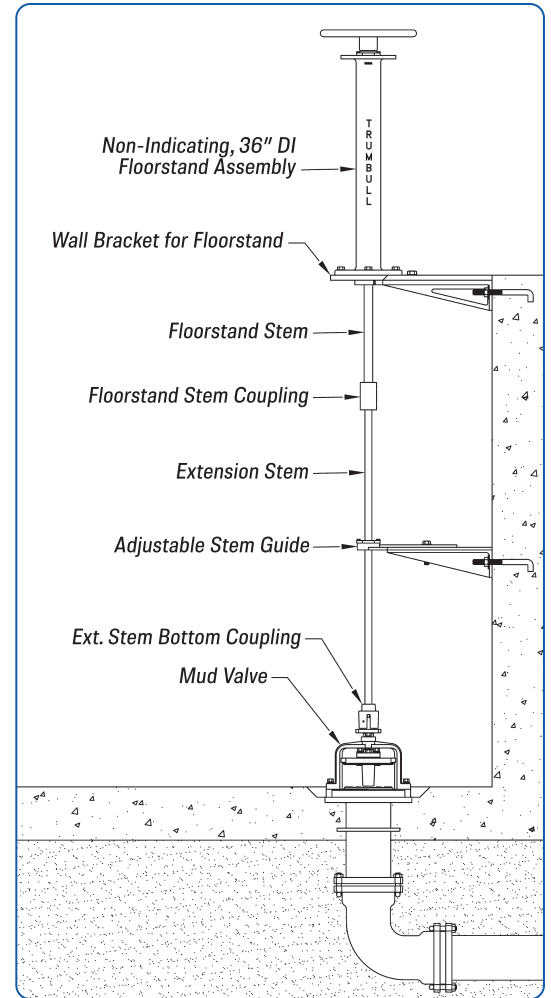
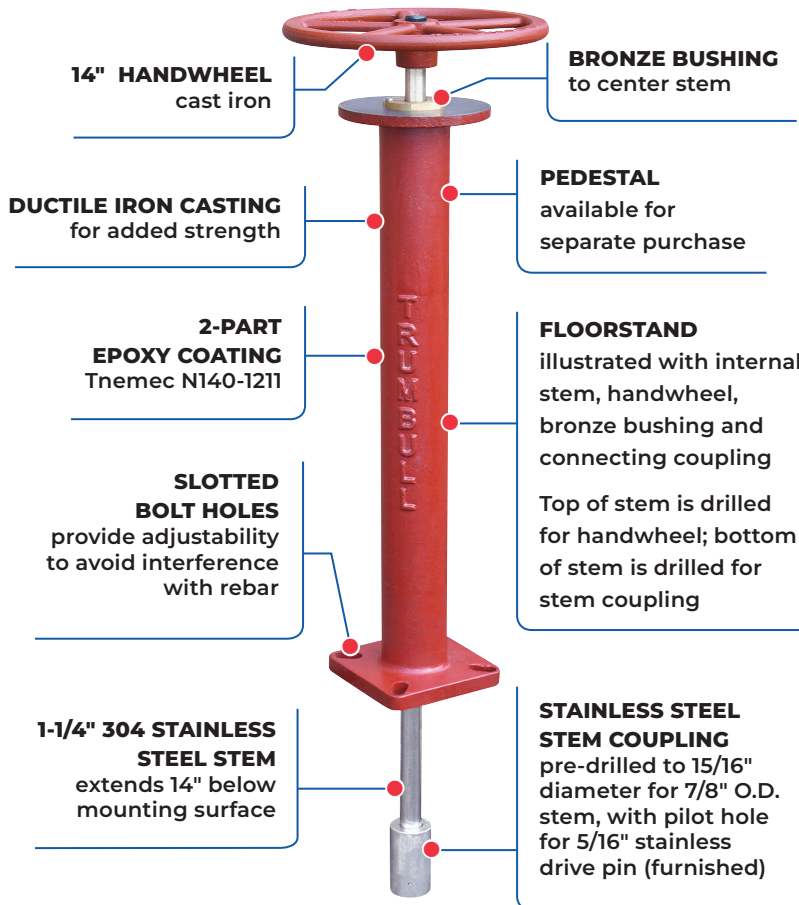
Drawn:
FCN
05/20/08

Revision:
FCN
11/11/12

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

36" DUCTILE IRON NON-INDICATING FLOORSTAND

Trumbull 36" Ductile Iron Non-Indicating Floorstands are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation.



Typical Floorstand installation

Ordering Instructions

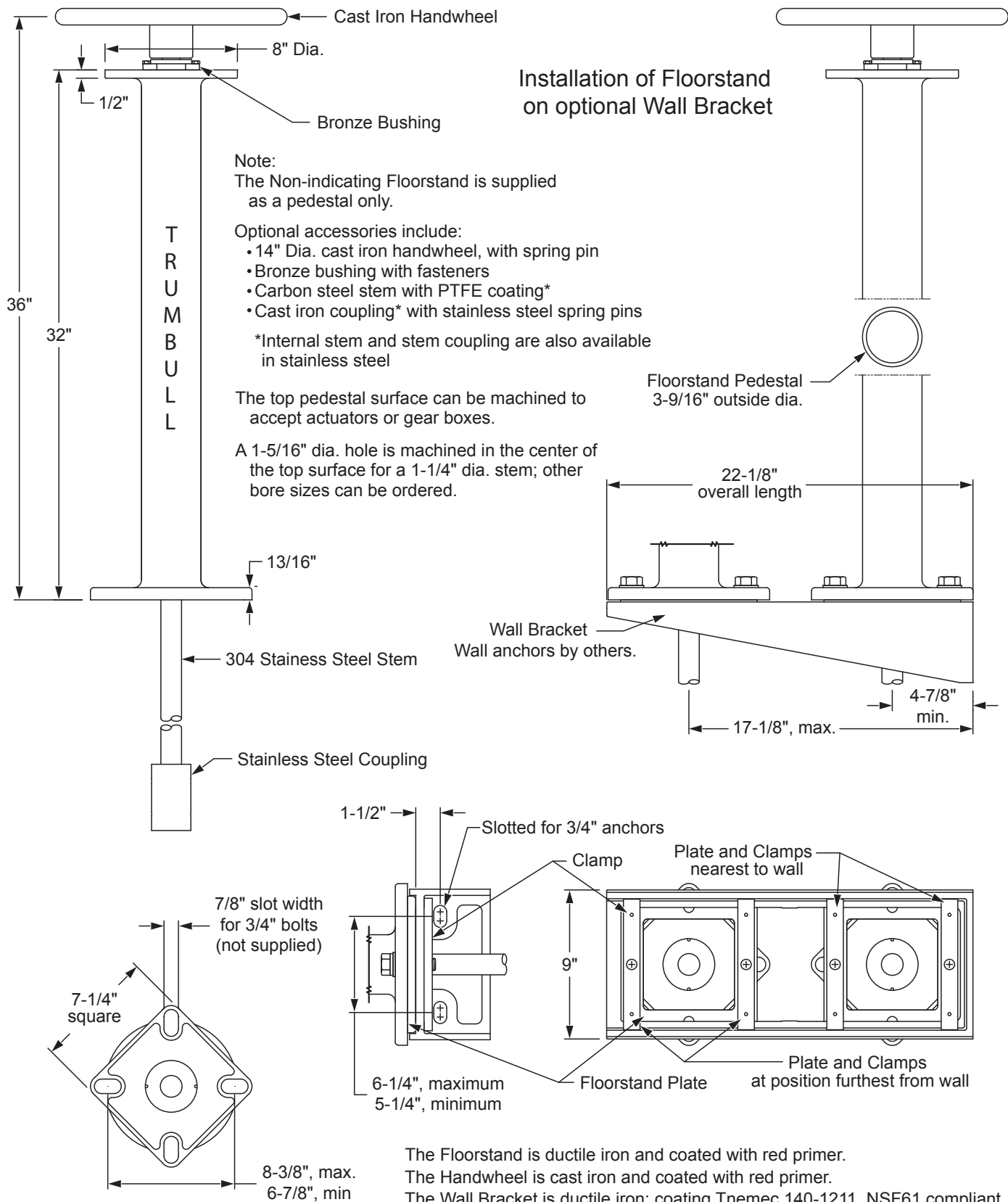
1. Quantity required
2. Floorstand item number: **367-2414** (pedestal, stem, handwheel & coupling)
3. If internal stem is required, state O.D. of extension stem being used, for drilling of connecting couplings
4. Wall Bracket, if required
 - a. Ductile iron item number: **367-2451**
 - b. Stainless steel item number: **367-2461**



Non-indicating Floorstands can be adapted for various custom requirements such as:

- Trumbull Valve Position Indicators, 57, 275 or 870 turns (mounted to top flange, with adapter)
- Adapter flange for actuator mounting
- Top flange drilled for customer-supplied actuator
- Gear operators

Also available in indicating styles in ductile iron (pages G-45 to G-48) and cast stainless steel (page G-51 to G-52). See page G-34 for custom Floorstand options.



Non-Indicating Floorstand 36" Ductile Iron Drawn to Scale

Drawn:
FCN
07/30/12

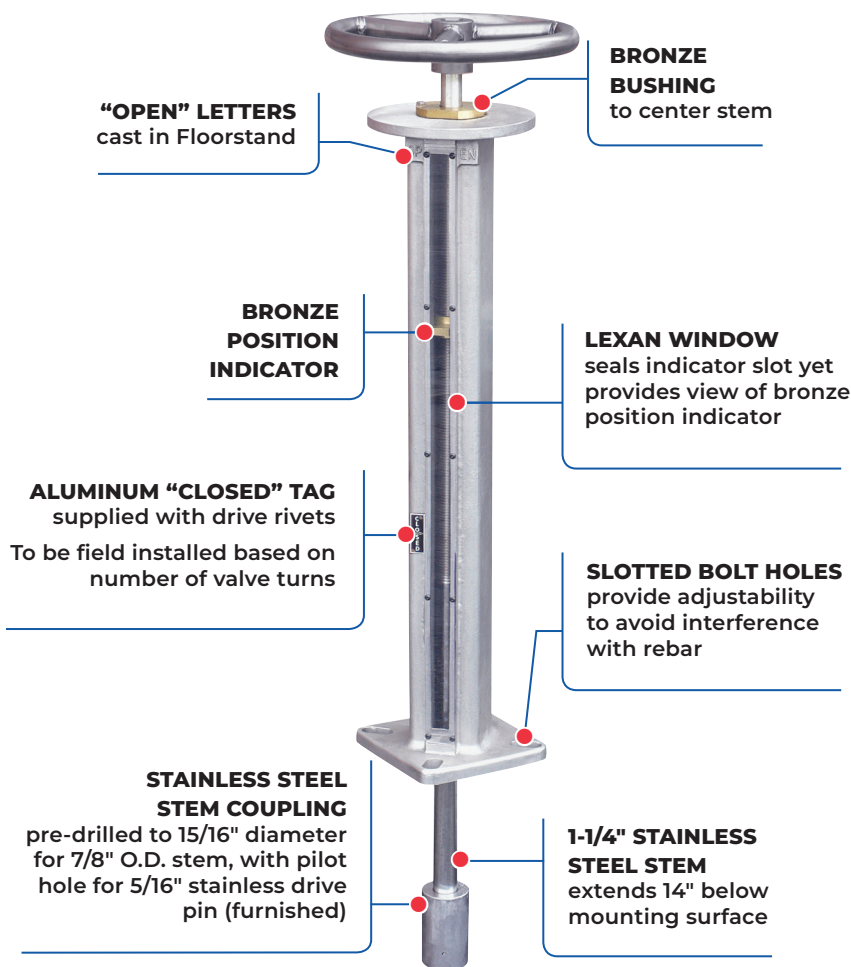
Revision:
FCN
G 08/15/12

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

36" STAINLESS STEEL INDICATING FLOORSTAND

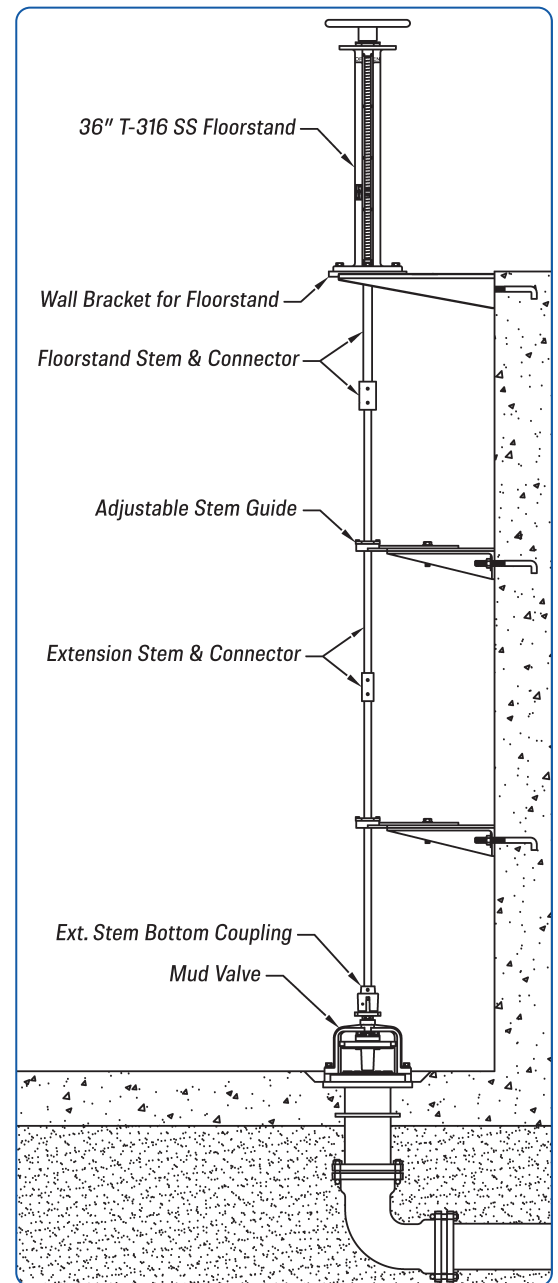
Includes a Sealed Indicator Slot

Trumbull 36" Stainless Steel Indicating Floorstands are designed for installation in treatment plants and pump stations to allow operation of valves at a lower elevation. Stainless steel drive pin secures handwheel to stem. Flange can be machined to facilitate mounting of actuator, if required (also available with gear operators). Stocked for "open left" valves; also available for "open right" valves. Standard stem threading allows up to 196 turns; optional threading allows up to 784 turns. Also available in ductile iron (see page G-47 and G-48). See page G-34 for custom Floorstand options.

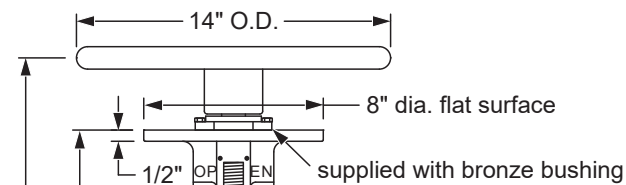


Ordering Instructions

1. Quantity required
2. Floorstand item number: **367-2431**
3. O.D. of extension stem being used, for drilling of connecting couplings
4. Stainless steel Wall Bracket, if required: item number: **367-2461**



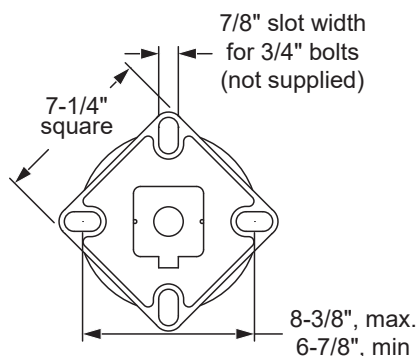
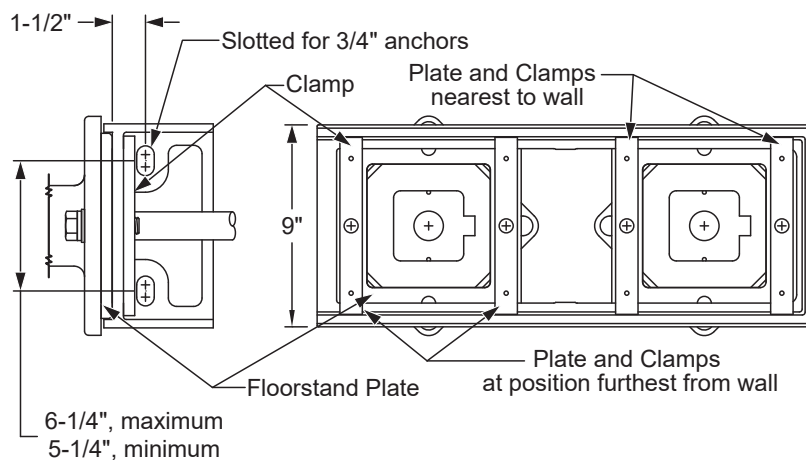
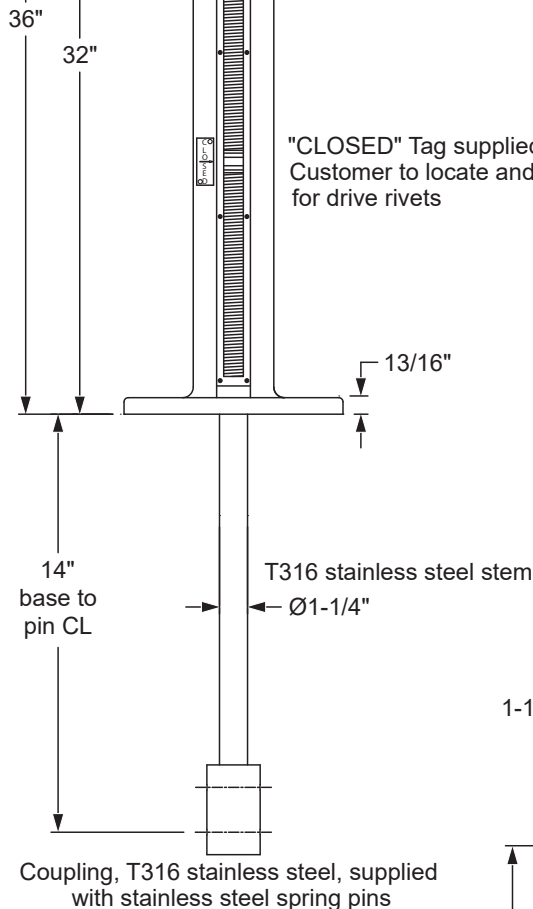
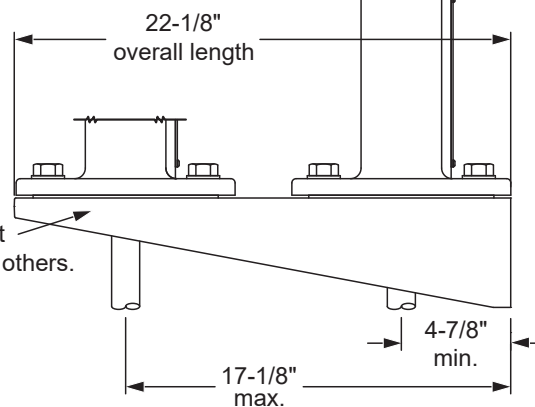
Typical Floorstand installation



Installation of Floorstand on Wall Bracket

Stem is threaded to allow 196 turns
(Stem can be threaded up to 784 turns.)

"CLOSED" Tag supplied with drive rivets
Customer to locate and drill pilot holes
for drive rivets



The Floorstand, Handwheel and Wall Bracket are T316 Stainless Steel castings.

**Indicating Floorstand
36" Stainless Steel**
Drawn to Scale

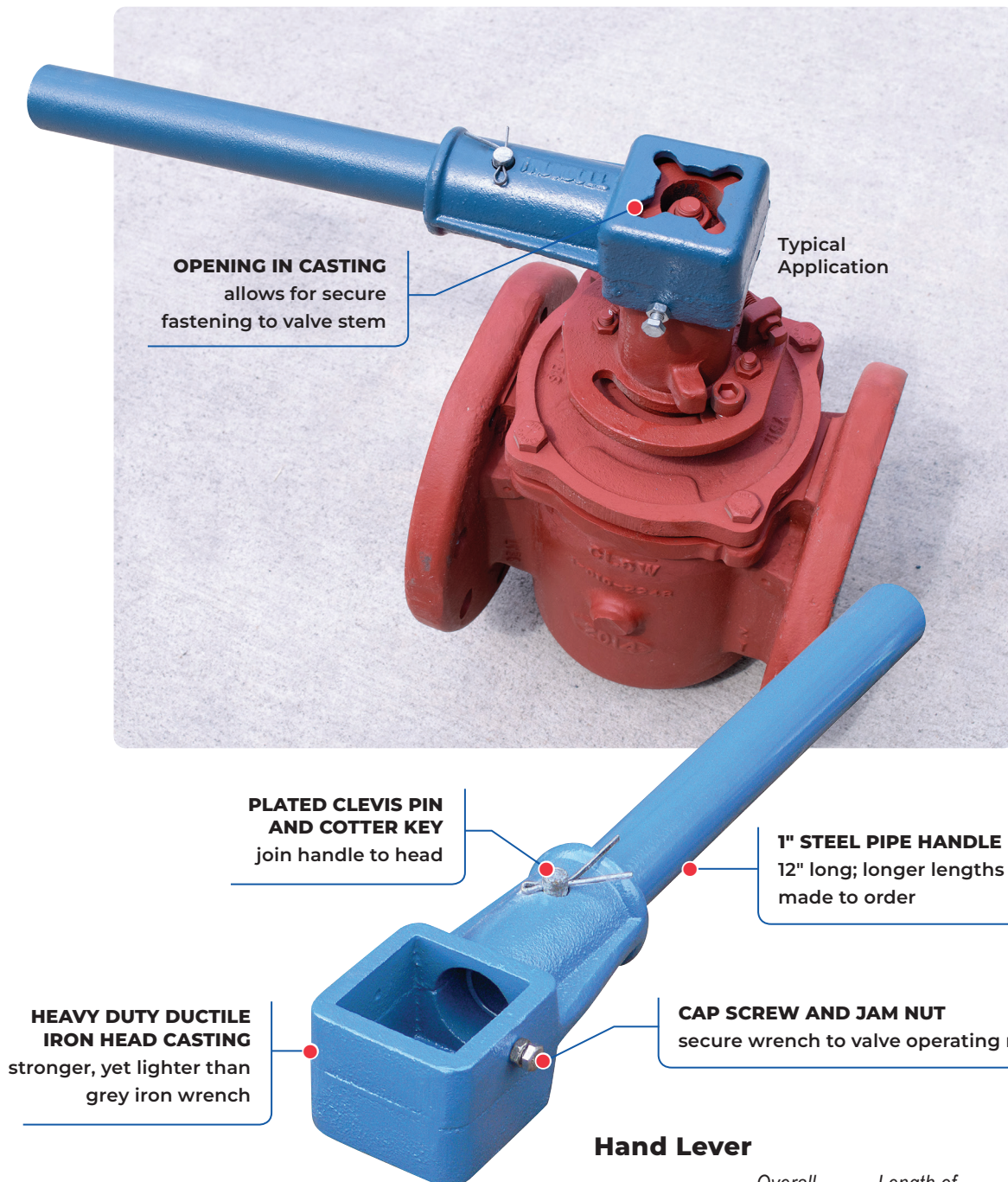
Drawn:
FCN
05/20/08

Revision:
FCN
11/11/12

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com

HAND LEVER

For Use with Quarter-Turn, Above Ground Valves

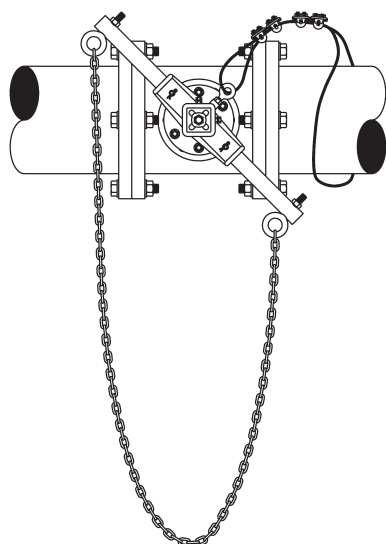


Hand Lever

Item No	Overall Length	Length of 1" Pipe	Weight
367-9986	14-3/4"	12"	5.00 lbs.

CHAIN LEVER

Used for Manual Operation of Quarter-Turn Valves Installed Overhead



Trumbull Chain Levers save the unnecessary expense of adding a gear and chainwheel to valves that don't require a gear to operate.

Handles are 1" sch 40 pipe. Stocked with an overall length of 24"; longer lengths made to order. Our Chain Levers are designed to fit on a 2" square nut whose flat sides are parallel to the flow line, when the valve is either fully open or closed (see illustration on left). To our knowledge, our Chain Lever will properly operate all plug valves, other than Milliken.

PLATED EYEBOLTS, HARDWARE AND CONNECTOR LINKS
furnished standard

HEAVY DUTY DUCTILE IRON HEAD CASTING
stronger, yet lighter than grey iron

TAPPED FOR STANDARD EYEBOLT
used for installation of our secondary safety restraint system which should be attached to an adjacent pipe or valve component (see pages G-65 and G-66)

i The Chain Lever should be bolted or pinned to the valve stem, then fastened to the 2" nut with cap screw and jam nut

PLATED CLEVIS PIN AND COTTER KEY
join handle to head

OPENING IN CASTING
allows for secure fastening to valve stem

Chain Lever

Includes handles and hardware.

Item No	Overall Length	Weight
367-9988	24"	8.50 lbs.

Chain Lever Accessories

For machine chain, order specific length required.

Description	Item No	Weight
Machine Chain, straight link, size 2/0	172-1219	0.32 lbs./ft.
Secondary Safety Restraint Kit, less eyebolt	367-1975	1.25 lbs.
Eyebolt, for Secondary Safety Restraint Kit	367-1974	0.25 lbs.

DUCTILE IRON CHAINWHEELS

Used to Operate Overhead Valves from the Floor

Ductile Iron Chainwheels allow operation of valves, actuators, or gear boxes in high, hard-to-reach locations by means of a slight pull on the chain. Universal design allows Chainwheel to be clamped to handwheel, or pinned directly to the stem. Ductile Iron Chainwheels are furnished with zinc-plated steel attachment hardware for clamping to a handwheel. When Chainwheel is to be pinned to the stem, direct mount adapters are available. The adapters require pinning to the stem as illustrated on page G-62. Adapter is pre-drilled with pin hole, and supplied with a stainless steel pin for customer mounting to the stem. Drilling of the stem by customer. To prevent serious injury, we recommend the use of our Secondary Safety Restraint System (see pages G-65 and G-66). All Trumbull Chainwheels are furnished with a threaded boss for the addition of our Safety Restraint System.



CHAINWHEEL OPERATION ILLUSTRATED.

Ordering Instructions

When ordering, indicate the Chainwheel and chain size numbers and the number of feet of chain required. Chain is provided in continuous lengths and easily cut in the field to exact length needed. Closing the loop is simple with Connecting Links (shown below), see page G-63 for more information.

Connecting Links

Chain Size	Galvanized		316 Stainless	
	Item №	Weight	Item №	Weight
1/0	367-1994	0.02 lbs.	367-1997	0.02 lbs.
4/0	367-1995	0.03 lbs.	367-1998	0.03 lbs.
5/0	367-1996	0.05 lbs.	----	----

Item №	Size No.	Diameter	Boxed Weight	Handwheel OD Range Chainwheel will Fit	Chain Size	Galvanized Chain	Stainless Chain	Chain Length (2X drop) plus...
						Item №	Item №	
367-1873	TR-0.0	4"	2.25 lbs.	2" to 4"	#2	172-1650	----	1 ft.
367-1874	TR-1.0	6"	5.40 lbs.	4-1/4" to 5-3/4"	1/0	367-1894	367-1897	1 ft.
367-1875	TR-1.5	7-1/2"	8.75 lbs.	6" to 7-1/2"	1/0			1 ft.
367-1876	TR-2.0	9"	13.40 lbs.	7-3/4" to 9"	1/0			1-1/2 ft.
367-1877	TR-2.5	12-1/2"	17.00 lbs.	9-1/4" to 12-1/2"	4/0	367-1895	367-1898	1-1/2 ft.
367-1878	TR-3.0	15-1/2"	21.60 lbs.	12-3/4" to 15-1/2"	4/0			2 ft.
367-1879	TR-3.5	19"	30.85 lbs.	15-3/4" to 19"	4/0			2-1/2 ft.
367-1880	TR-4.0	22"	42.75 lbs.	19-1/4" to 22"	5/0	367-1896	367-1901	3 ft.
367-1881	TR-4.5	26"	49.00 lbs.	22-1/2" to 26"	5/0			3-1/2 ft.
367-1882	TR-5.0	30"	63.40 lbs.	22-1/2" to 36"	5/0			4 ft.



Ductile Iron and Aluminum Chainwheels are sprocket-type, using single loop cut chain. Carbon Steel and Stainless Steel Chainwheels are pocket-type, using smooth welded link machine chain. See page G-59 for Chainwheel dimensions.



ALUMINUM CHAINWHEELS

Used to Operate Overhead Valves from the Floor

Aluminum Chainwheels allow operation of valves, actuators, or gear boxes in high, hard-to-reach locations by means of a slight pull on the chain. The light weight of aluminum Chainwheels is desirable to minimize the weight on the stems. Universal design allows Chainwheel to be clamped to a handwheel, or pinned directly to the stem.

All Aluminum Chainwheels are A356-T6 alloy and are provided with a protective coating.

Aluminum Chainwheels are furnished with stainless steel attachment hardware for clamping to a handwheel. When Chainwheel is to be pinned to the stem, direct mount adapters are available. The adapters require pinning to the stem as illustrated on page G-62. Adapter is pre-drilled with pin hole, and supplied with a stainless steel pin for customer mounting to the stem. Drilling of the stem by customer.

To prevent serious injury, we recommend the use of our Secondary Safety Restraint System (see pages G-65 and G-66 for more information). All Trumbull Chainwheels are furnished with a threaded boss for the addition of our Safety Restraint System.



Item No	Size No.	Diameter	Boxed Weight	Handwheel OD Range Chainwheel will Fit	Chain Size	Galvanized Chain	Stainless Chain	Chain Length (2X drop) plus...
						Item No	Item No	
367-2020	TRA-0.0	4"	1.05 lbs.	2" to 4"	#2	172-1650	----	1 ft.
367-2021	TRA-1.0	6"	2.65 lbs.	4-1/4" to 5-3/4"	1/0	367-1894	367-1897	1 ft.
367-2022	TRA-1.5	7-1/2"	4.15 lbs.	6" to 7-1/2"	1/0			1 ft.
367-2023	TRA-2.0	9"	5.30 lbs.	7-3/4" to 9"	1/0			1-1/2 ft.
367-2024	TRA-2.5	12-1/2"	7.90 lbs.	9-1/4" to 12-1/2"	4/0	367-1895	367-1898	1-1/2 ft.
367-2025	TRA-3.0	15-1/2"	10.40 lbs.	12-3/4" to 15-1/2"	4/0			2 ft.
367-2026	TRA-3.5	19"	13.30 lbs.	15-3/4" to 19"	4/0			2-1/2 ft.

When ordering, indicate the Chainwheel and chain size numbers and the number of feet of chain required. Chain is provided in continuous lengths and easily cut in the field to exact length needed. Closing the loop is simple with Connecting Links (shown on right), see page G-63 for more info.

Connecting Links



Chain Size	Galvanized		316 Stainless	
	Item No	Weight	Item No	Weight
1/0	367-1994	0.02 lbs.	367-1997	0.02 lbs.
4/0	367-1995	0.03 lbs.	367-1998	0.03 lbs.
5/0	367-1996	0.05 lbs.	----	----



Ductile Iron and Aluminum Chainwheels are sprocket-type, using single loop cut chain. See page G-59 for Chainwheel dimensions.



316 STAINLESS STEEL CHAINWHEELS

Used to Operate Overhead Valves from the Floor



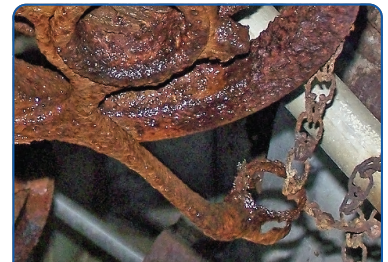
USED TO OPERATE OVERHEAD VALVES FROM THE FLOOR.

Stainless Steel Chainwheels allow operation of valves, actuators, or gear boxes in high, hard-to-reach locations by means of a slight pull on the chain. Universal design allows Chainwheel to be clamped to a handwheel, or pinned directly to the stem. Designed for corrosive environments, our Stainless Steel Chainwheels are Type 316 investment steel castings. Ideal in chemical processing, outdoor installations, or salt water environments.

Stainless Chainwheels are furnished with stainless steel attachment hardware for clamping to a handwheel. When Chainwheel is to be pinned to the stem, direct mount adapters are available. The adapters require pinning to the stem as illustrated on page G-62. Adapter is pre-drilled with pin hole, and supplied with a stainless steel pin for customer mounting to the stem. Drilling of the stem by customer.

To prevent serious injury, we recommend the use of our Secondary Safety Restraint System (see pages G-65 and G-66). Furnished with a threaded boss for the addition of Safety Restraint System.

i Trumbull smooth, welded link chain (shown below) is calibrated specifically for use on the full range of Trumbull pocket-type Chainwheels and is required for smooth operation.



CORRODED CI CHAINWHEEL SHOWS ADVANTAGE OF STAINLESS STEEL.

Item No	Size No.	Diameter	Boxed Weight	Handwheel Range Chainwheel will Fit**	Bore*** Diameter	Chain Length (2X Drop)
367-1825	TRS-4D*	4-1/8"	4.75 lbs.	1-1/2" I.D. to 4-1/2" O.D.	0.500	Plus 1 ft.
367-1830	TRS-6D*	5-7/8"	8.65 lbs.	2-1/8" I.D. to 6-1/4" O.D.	0.850	Plus 1 ft.
367-1833	TRS-8B	8"	14.40 lbs.	7-1/2" O.D. to 10-1/2" O.D.	1.500	Plus 1-1/2 ft.
367-1845	TRS-12B	11-5/8"	19.80 lbs.	8-1/2" O.D. to 13-1/2" O.D.	1.500	Plus 1-1/2 ft.
367-1850	TRS-15B	15-3/16"	23.90 lbs.	9-1/2" O.D. to 17-1/2" O.D.	1.500	Plus 2 ft.
367-1860	TRS-22B	22-1/4"	34.45 lbs.	13" O.D. to 25" O.D.	1.500	Plus 3 ft.
367-1870	TRS-29B	29-1/4"	48.00 lbs.	17-3/4" O.D. to 32" O.D.	1.500	Plus 4 ft.
367-1871	TRS-29C	29-1/4"	48.00 lbs.	22-1/2" O.D. to 37" O.D.	1.500	Plus 4 ft.

* D suffix denotes "Disc", used in lieu of standard clamping hardware; see page G-61 for illustration.

** The ranges above are for Size "B" attachment stampings, furnished standard with TRS-8 to TRS-29 Chainwheels. Chainwheels can fit handwheel diameters outside these ranges by using optional hardware (see chart page G-61). Consult your Trumbull Sales Rep for either shorter or longer attachment set stampings.

*** Consult factory if using OS&Y gate valves with stem diameters greater than bore diameters shown.

Trumbull Calibrated Machine Chain
Order length of chain required and connecting link.



Description	Item No	Weight
316L SS Machine Chain	367-1815	0.35 lbs./ft.
SS Connecting Link	367-1816	0.05 lbs.

Ductile Iron and Aluminum Chainwheels are sprocket-type, using single loop cut chain. Carbon Steel and Stainless Steel Chainwheels are pocket-type, using smooth welded link machine chain. See page G-59 for Chainwheel dimensions.

CARBON STEEL CHAINWHEELS

Used to Operate Overhead Valves from the Floor

Carbon Steel Chainwheels allow operation of valves, actuators, or gear boxes in high, hard-to-reach locations by means of a slight pull on the chain. Universal design allows Chainwheel to be clamped to a handwheel, or pinned directly to the stem.

Carbon Steel Chainwheels are furnished with stainless steel attachment hardware for clamping to a handwheel. When Chainwheel is to be pinned to the stem, direct mount adapters are available. The adapters require pinning to the stem as illustrated on page G-62. Adapter is pre-drilled with pin hole, and supplied with a stainless steel pin for customer mounting to the stem. Drilling of the stem by customer.

To prevent serious injury, we recommend the use of our Secondary Safety Restraint System (see pages G-65 and G-66). All Trumbull Chainwheels are furnished with a threaded boss for the addition of our Safety Restraint System.



Finished with e-coating.

i Trumbull smooth, welded link chain (shown below) is calibrated specifically for use on the full range of Trumbull pocket-type Chainwheels and is required for smooth operation.

Item No	Size No.	Diameter	Boxed Weight	Handwheel Range Chainwheel will Fit**	Bore*** Diameter	Chain Length (2X drop)
367-1829	TRCS-6PD*	5-7/8"	8.50 lbs.	2-1/8" I.D. to 6-1/4" O.D.	0.850	Plus 1 ft.
367-1832	TRCS-8PB	8"	14.35 lbs.	7-1/2" O.D. to 10-1/2" O.D.	1.500	Plus 1-1/2 ft.
367-1844	TRCS-12PB	11-5/8"	18.65 lbs.	8-1/2" O.D. to 13-1/2" O.D.	1.500	Plus 1-1/2 ft.
367-1849	TRCS-15PB	15-3/16"	24.75 lbs.	9-1/2" O.D. to 17-1/2" O.D.	1.500	Plus 2 ft.
367-1859	TRCS-22PB	22-1/4"	34.80 lbs.	13" O.D. to 25" O.D.	1.500	Plus 3 ft.
367-1869	TRCS-29PB	29-1/4"	45.05 lbs.	17-3/4" O.D. to 32" O.D.	1.500	Plus 4 ft.

* D suffix denotes "Disc", used in lieu of standard clamping hardware; see page G-61 for illustration.

** The ranges above are for Size "B" attachment stampings, furnished standard with TRCS-8 to TRCS-29 Chainwheels. Chainwheels can fit handwheel diameters outside these ranges by using optional hardware (see chart on page G-61). Consult your Trumbull Sales Rep for either shorter or longer attachment set stampings.

*** Consult factory if using OS&Y gate valves with stem diameters greater than bore diameters shown.

Trumbull Calibrated Machine Chain

Order length of chain required and connecting link.



Description	Item No	Weight
Plated CS Machine Chain	367-1818	0.35 lbs./ft.
316L SS Machine Chain	367-1815	0.35 lbs./ft.
SS Connecting Link	367-1816	0.05 lbs.

i Ductile Iron and Aluminum Chainwheels are sprocket-type, using single loop cut chain. Carbon Steel and Stainless Steel Chainwheels are pocket-type, using smooth welded link machine chain. See page G-59 for Chainwheel dimensions.



Sprocket-Type Chainwheel Dimensions

DUCTILE IRON	TR-0.0	TR-1.0	TR-1.5	TR-2.0	TR-2.5	TR-3.0	TR-3.5	TR-4.0	TR-4.5	TR-5.0
TRUMBULL ITEM NUMBER	367-1873	367-1874	367-1875	367-1876	367-1877	367-1878	367-1879	367-1880	367-1881	367-1882
BOXED WEIGHT (LBS.)	2.2	5.4	8.8	13.4	17.0	21.6	30.9	42.8	49.0	63.4

ALUMINUM	TRA-0.0	TRA-1.0	TRA-1.5	TRA-2.0	TRA-2.5	TRA-3.0	TRA-3.5	----	----	----
TRUMBULL ITEM NUMBER	367-2020	367-2021	367-2022	367-2023	367-2024	367-2025	367-2026	----	----	----
BOXED WEIGHT (LBS.)	1.0	2.7	4.2	5.3	7.9	10.4	13.3	----	----	----

CHAINWHEEL O.D.	4"	6"	7-1/2"	9"	12-1/2"	15-1/2"	19"	22"	26"	30"
C-WHEEL ASSEMBLY FITS HANDWHEEL O.D. RANGE	2" to 4"	4-1/4" to 5-3/4"	6" to 7-1/2"	7-3/4" to 9"	9-1/4" to 12-1/2"	12-3/4" to 15-1/2"	15-3/4" to 19"	19-1/4" to 22"	22-1/2" to 26"	22-1/2" to 36"
CHAIN SIZE	Size #2	Size 1/0			Size 4/0			Size 5/0		
ATTACHMENT SET SIZE	Disk #0 367-2005	Disk #1 367-2006	"A" 367-1810		"B" 367-1811	"C" 367-1812				"D" 367-1813
"D" (OVERALL DEPTH)	1-7/8"	2-3/8"	2-1/2"	2-1/2"	2-9/16"	2-9/16"	2-9/16"	2-5/8"	2-5/8"	3-5/16"
"H" (OVERALL HEIGHT)	5"	6-7/8"	8-3/4"	10-3/4"	12-5/8"	16"	19"	23"	27"	30"
"W" (OVERALL WIDTH)	4-1/4"	5-7/16"	8-1/4"	9-1/2"	11-5/16"	15-7/16"	18-7/16"	22-5/8"	26-1/2"	29-7/8"

STAR ADAPTER SIZE	Small		Medium			Large & X-Large see NOTE below				
MIN/MAX BORE DIA.	3/8" to 7/8"		1/2" to 1-3/8"			1/2" to 1-3/8" (Large); 1/2" to 2-1/8" (X-Large)				

Note: Chainwheel spokes must be drilled for the Star Adapter on the TR-4.0, TR-4.5 and TR-5.0.

Pocket-Type Chainwheel Dimensions

CARBON STEEL	----	TRCS-6	TRCS-8	TRCS-12	TRCS-15	TRCS-22	TRCS-29
TRUMBULL ITEM NUMBER	----	367-1829	367-1832	367-1844	367-1849	367-1859	367-1869
BOXED WEIGHT (LBS.)	----	8.5	14.4	18.7	24.8	34.8	45.0

STAINLESS STEEL	TRS-4	TRS-6	TRS-8	TRS-12	TRS-15	TRS-22	TRS-29
TRUMBULL ITEM NUMBER	367-1825	367-1830	367-1833	367-1845	367-1850	367-1860	367-1870
BOXED WEIGHT (LBS.)	4.8	8.7	14.4	19.8	23.9	34.5	48.0

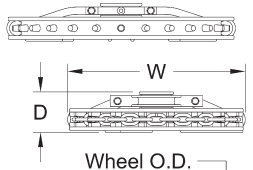
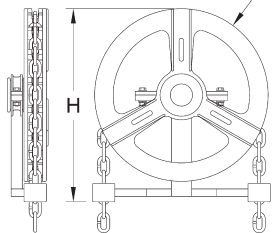
CHAINWHEEL O.D.	4-1/8"	5-7/8"	8"	11-5/8"	15-3/16"	22-1/4"	29-1/4"
C-WHEEL ASSEMBLY FITS HANDWHEEL O.D. RANGE	1-1/2" to 4-1/2"	2-1/8" to 6-1/4"	7-1/2" to 10-1/2"	8-1/2" to 13-1/2"	9-1/2" to 17-1/2"	13" to 25"	17-3/4" to 32"
ATTACHMENT SET SIZE	Disk #4	Disk #6	"B" Attachment Set (367-1808) provided as standard. Ranges can be expanded by optional sets "A" & "C" (see page G-55).				
"D" (OVERALL DEPTH)	2-3/8"	2-5/8"	2-3/4"	2-3/4"	2-3/4"	2-3/4"	2-7/8"
"H" (OVERALL HEIGHT)	6-1/4"	7-1/16"	9"	13-1/8"	16-1/4"	22-1/4"	29-1/4"
"W" (OVERALL WIDTH)	4-5/8"	6-3/16"	8-7/16"	12"	15-5/8"	22-5/8"	29-1/2"

STAR ADAPTER SIZE	Small		Large				
MIN/MAX BORE DIA.	3/8" to 7/8"		3/4" to 1-3/8"				



Dimensions

For both sprocket-type above and the pocket-type Chainwheels at left.

CHAINWHEEL CONNECTING LINKS AND CHAIN

Sprocket-Type Chainwheels

Ductile Iron & Aluminum Models

SINGLE LOOP CHAIN
engages with the teeth in the wheel.

Pocket-Type Chainwheels

Carbon Steel & Stainless Steel Models

WELDED LINK MACHINE CHAIN
fits in pockets in the wheel.

Smooth chain links provide more comfortable operation.



When ordering chain, indicate the Chainwheel and Chain size numbers, also the number of feet of chain required. Chain is provided in continuous lengths and easily cut in the field to exact length needed.

Closing the loop is simple with "Connecting Links".



TR Series Connecting Links

for sprocket-type Chainwheels
Installation instructions on page G-63!

Chain Size	Galvanized Item No.	Stainless Item No.
#2	----	----
1/0	367-1994	367-1997
4/0	367-1995	367-1998
5/0	367-1996	----

TRS Series Connecting Links

for pocket-type Chainwheels

316L Stainless Item No.	Zinc Plated Carbon Steel Item No.
367-1816	----

Single-Loop Chain

Chain Size	Galvanized Item No.	Stainless Item No.
#2	172-1650	----
1/0	367-1894	367-1897
4/0	367-1895	367-1898
5/0	367-1896	367-1901

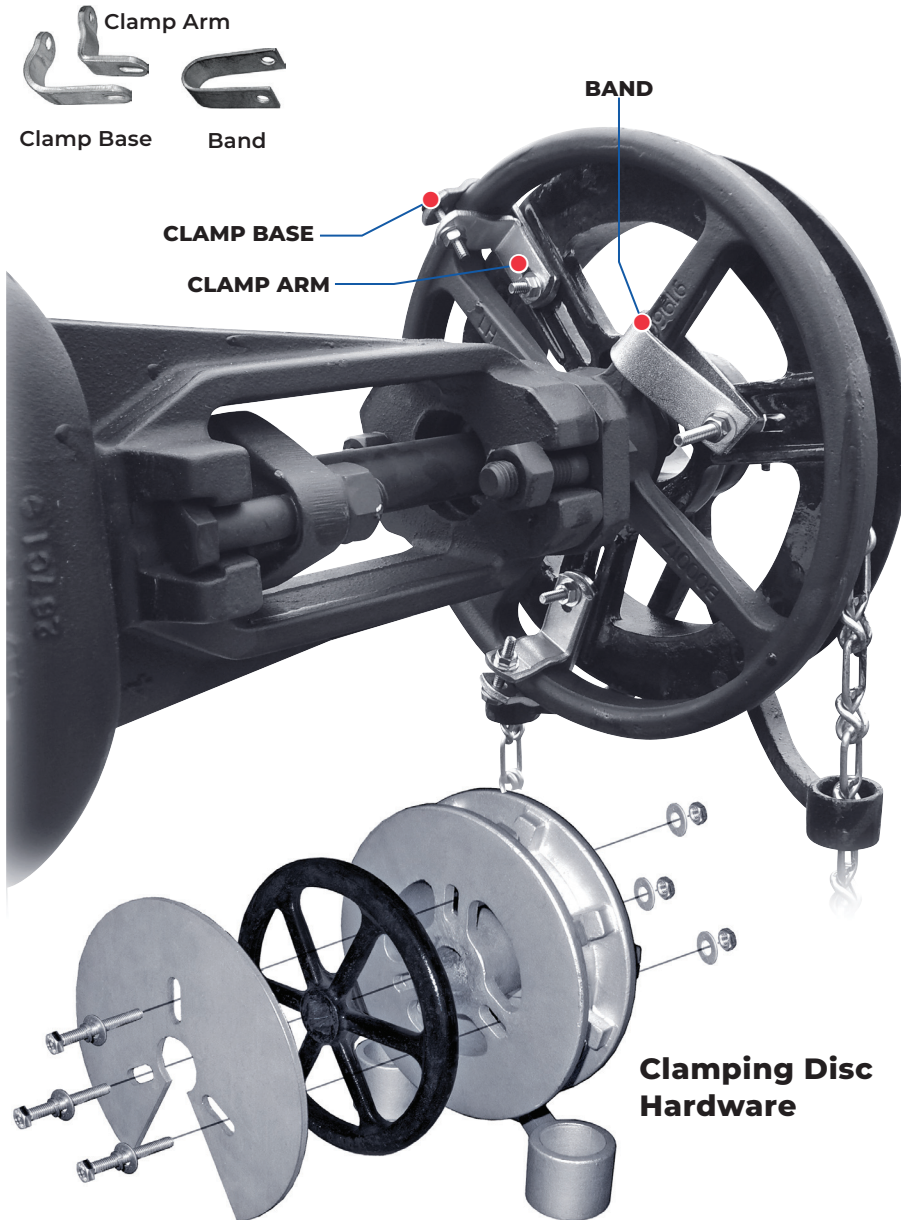
Welded Link Machine Chain

calibrated specifically for our
pocket-type Chainwheels

316L Stainless Item No.	Zinc Plated Carbon Steel Item No.
367-1815	367-1818

CLAMPING HARDWARE

Attachment sets and discs used to mount Chainwheels to handwheel



Each Trumbull Chainwheel is furnished standard with Clamp-On Attachment Hardware. The smaller sizes furnished with Clamping Discs, and larger sizes with Attachment Sets, as outlined below.

Sprocket-Type Chainwheels

- SIZES TR/A-0.0 AND TR/A-1.0 use Clamping Disc hardware.
- SIZES TR/A-1.5 TO TR/A-2.5 use two sets of Clamp Bases & Arms, plus one Band.
- SIZES TR/A-3.0 TO TR/A-5.0 use three sets of Clamp Bases & Arms and do not use a Band.

Pocket-Type Chainwheels

- SIZES TRS/CS-4 & TRS/CS-6 use Clamping Disc hardware.
- SIZES TRS/CS-8 TO TRS/CS-29 are furnished standard with size "B" Attachment Sets. Pocket Chainwheels can fit handwheel diameters outside these ranges by using optional Hardware Sets "A" and "C" as shown on chart below.

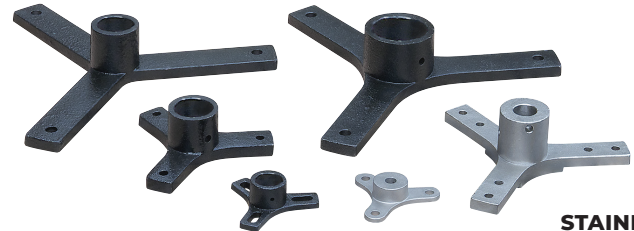
Pocket Handwheel O.D. Ranges	Size	"A" Attachment Set		"B" Attachment Set		"C" Attachment Set	
		Min. O.D.	Max. O.D.	Min. O.D.	Max. O.D.	Min. O.D.	Max. O.D.
	TRS/CS-8	6"	8"	7-1/2"	10-1/2"	12-1/2"	15-1/2"
	TRS/CS-12	7"	11"	8-1/2"	13-1/2"	13-1/4"	18-1/2"
	TRS/CS-15	8"	15"	9-1/2"	17-1/2"	14-1/8"	23"
	TRS/CS-22	11"	22-1/2"	13"	25"	17-1/2"	30"
	TRS/CS-29	16"	29"	17-3/4"	32"	22-1/2"	37"

"STAR ADAPTERS"

Direct Mounting of Chainwheels

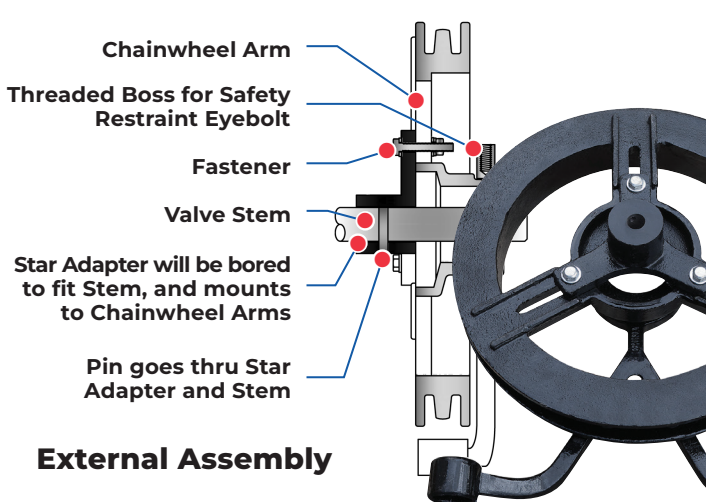
Star Adapters are available for direct mounting of Chainwheels to valve, gear box, or actuator stem.

These adapters require pinning to the stem. Pilot holes are pre-drilled in the adapter for ease of installation on-site; the drilling of the stem is by customer. Star Adapters will be furnished with fasteners necessary to attach to Chainwheel, in lieu of clamping hardware normally furnished with Chainwheel.

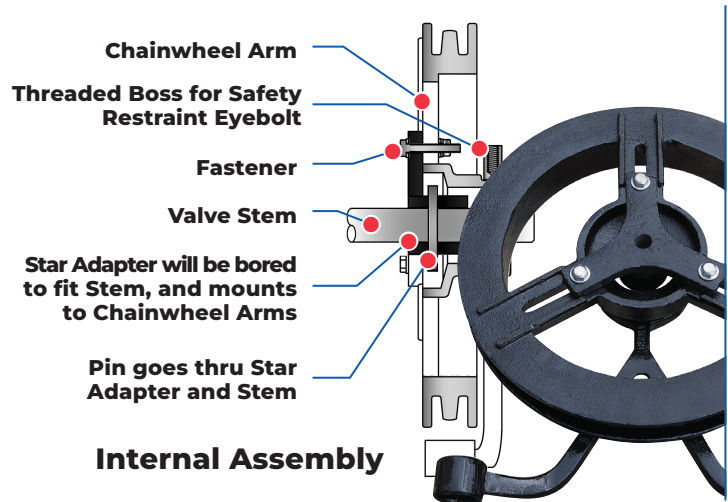


**DUCTILE IRON
STAR ADAPTERS**

**STAINLESS
STEEL STAR
ADAPTERS**



External Assembly



Internal Assembly

Ductile Iron "Star Adapters" for Sprocket-Type Chainwheels

CHAINWHEEL	Size 0.0	Size 1.0	Size 1.5	Size 2.0	Size 2.5	Size 3.0	Size 3.5	Size 4.0	Size 4.5	Size 5.0
DI STAR ADAPTER	S	S	M	M	M	L & XL	L & XL	L & XL	L & XL	L & XL
TRUMBULL ITEM NO.	167-3070		167-3072			167-3074 (L) & 167-3076 (XL)				
BORE SIZE, STANDARD	3/8"		1/2"			1/2"				
HUB O.D.	1-1/8"		1-5/8"			L – 1-5/8" / XL – 2-3/8"				
OPTIONAL BORE, MAX.	7/8"		1-3/8"			L – 1-3/8" / XL – 2-1/8"				
HUB HEIGHT	3/4"		1-3/16"			1-1/2"				

Stainless Steel "Star Adapters"

**FOR POCKET-TYPE
CHAINWHEELS**

CHAINWHEEL	Size 4	Size 6	Size 8	Size 12	Size 15	Size 22	Size 29
SS STAR ADAPTER	S	S	L	L	L	L	L
TRUMBULL ITEM NO.	167-3060			167-3062			
BORE SIZE, STANDARD	3/8"			3/4"			
HUB O.D.	1-1/16"			1-9/16"			
OPTIONAL BORE, MAX.	7/8"			1-3/8"			
HUB HEIGHT	1/2"			1-1/2"			

TR-SERIES CONNECTING LINKS

Used to Connect Chain for Use with Sprocket Chainwheels

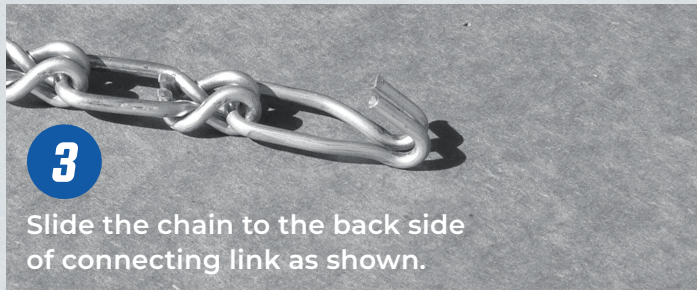
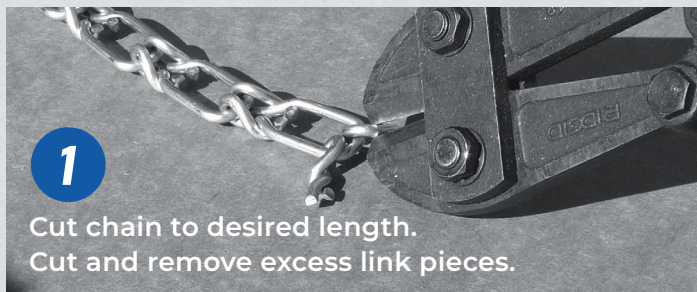
TR Series Connecting Links are used to connect single loop chain for use with Trumbull ductile iron and aluminum Sprocket-Type Chainwheels. Pre-formed Connecting Links eliminate the need to cut and bend chain to form a loop.

Available in three sizes; 1/0, 4/0 and 5/0.

**INSTALLATION IS EASY,
JUST FOLLOW THESE FIVE STEPS . . .**



Chain Size	Galvanized		316 Stainless Steel	
	Item No	Weight	Item No	Weight
1/0	367-1994	0.02 lbs.	367-1997	0.02 lbs.
4/0	367-1995	0.03 lbs.	367-1998	0.03 lbs.
5/0	367-1996	0.05 lbs.	---	---



“CHAIN-UP” DEVICE

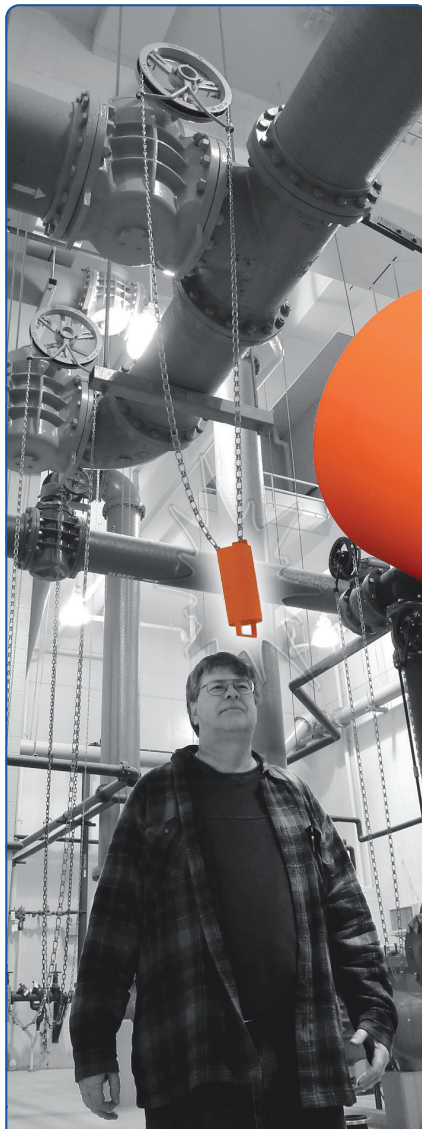
Eliminates a Potential Safety Hazard Presented by Overhead Chains

Chainwheels are installed to provide access to overhead valves and they frequently result in chain hanging into the pathway of workers, creating a kind of obstacle course or even a safety hazard.

Our “Chain-Up” Device stores chain overhead and safely above the pathway. Simply hook the clevis pin into a chain link at the desired overhead height and insert the chain into the device. Pull on the handle to release the chain for operation. After use, the chain is placed back into the “Chain-Up” and hooked at the desired height. Molded in Safety Orange color from high-strength thermoplastic polymer.



**CHAIN FROM OVERHEAD
CHAINWHEEL SHOWN IN
PATHWAY.**



**“CHAIN-UP” DEVICE STORES
THE CHAIN ABOVE PATHWAY.**



WATER DRAINS
prevent water from
building up inside

Item No	Overall Length	Weight
367-1890	11-3/4"	0.55 lbs.

i For additional Chainwheel safety, always use Trumbull's Chainwheel Safety Restraint System (see page G-65 & G-66 for more information).

SECONDARY SAFETY RESTRAINT

Safety Device System used with Trumbull Chainwheels



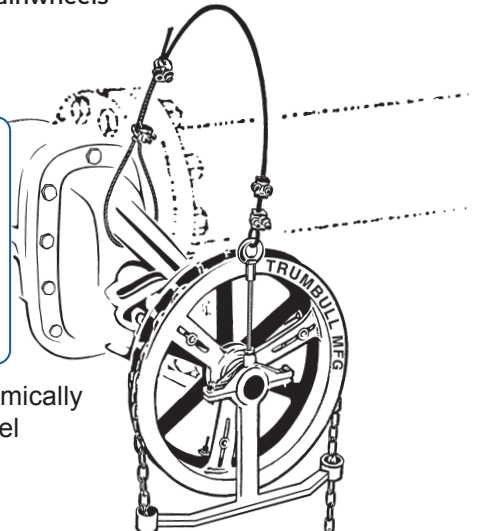
ALERT!

PREVENT SERIOUS INJURIES: KEEP YOUR CHAINWHEEL SECURE!

If a Chainwheel is properly installed, maintained and inspected, it should never separate from the valve and fall to the ground. Although the likelihood of a Chainwheel falling is small. . . the result could be a serious injury, or even a fatality.

Secondary Safety Restraints, also called "Safety Cable Kits", can be economically added to the Chainwheel installation. One end is attached to the Chainwheel and the other to a permanent part of the valve or an adjacent pipe.

Cable, clips and eyebolts are made from Type 316 stainless steel for long life in even the most corrosive environments.



1

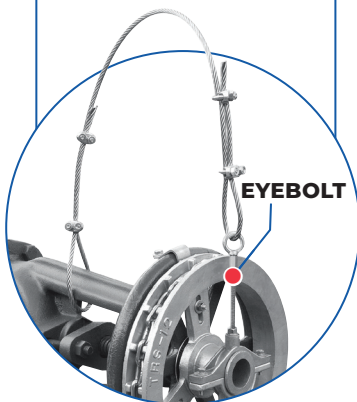
ORDER KIT

Item No

367-1975

Kit is furnished with 5 feet of safety cable and 4 cable clamps.

Eyebolts must be ordered separately, see chart on right...

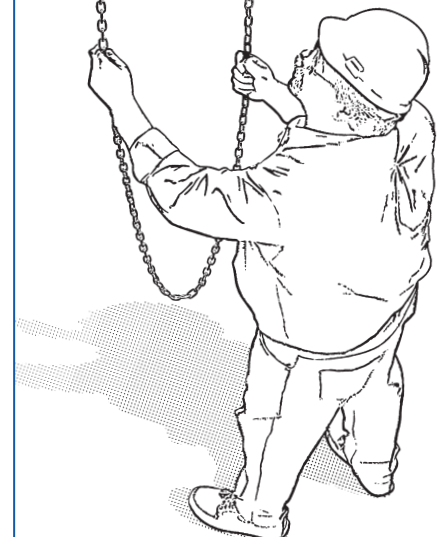


2

SELECT EYEBOLT

	Chainwheel Model No	Eyebolt Length	Item No
STAINLESS STEEL	TRCS-4	1"	367-1974
	TRCS-6	1"	367-1974
	TRCS-8	3"	367-1973
	TRCS-12	6"	367-1972
	TRCS-15	6"	367-1972
	TRCS-22	13"	367-1970
	TRCS-29B	16"	367-1969
	TRCS-29C	18"	367-1967
DUCTILE IRON	TRA-0.0	2"	367-1968
	TRA-1.0	2"	367-1968
	TRA-1.5	3"	367-1973
	TRA-2.0	3"	367-1973
	TRA-2.5	6"	367-1972
	TRA-3.0	9"	367-1971
	TRA-3.5	9"	367-1971
	TRA-4.0	9"	367-1971
	TRA-4.5	13"	367-1970
	TRA-5.0	18"	367-1967

Safety Restraints
PROTECT
WORKERS
from
POTENTIAL
INJURY!



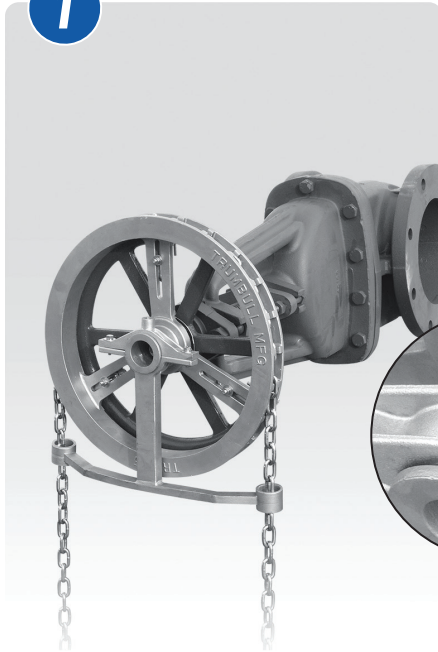
INSTALLATION OF SAFETY RESTRAINTS

INSTRUCTIONS

INSTALLATION IS EASY,
JUST FOLLOW THESE FOUR STEPS . . .

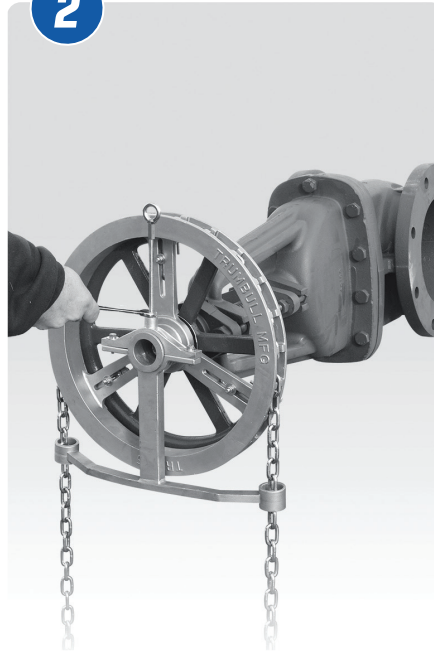


1



Typical chainwheel installation.
Safety cap is threaded to accept eyebolt.

2



Install safety cable eyebolt and use jam nut to secure in place.

3

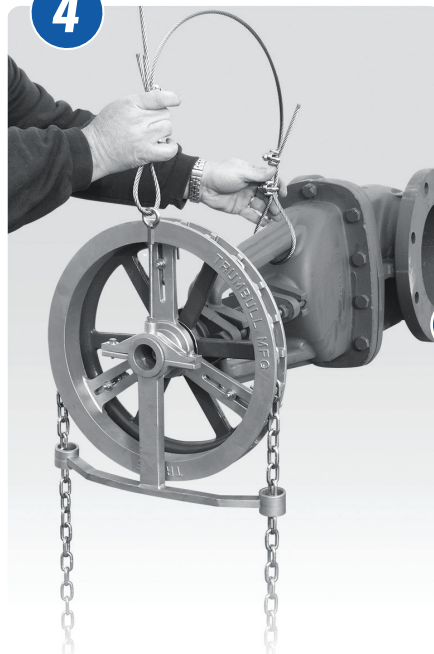


Loop cable through eyebolt leaving about 6" excess.

Install one cable clamp about 1" from end, and the second clamp as close to the eyebolt as possible.

i Eye of eyebolt must be parallel to Chainwheel and u-bolt nuts should face AWAY from the Chainwheel.

4



Loop other end of cable around a secure object. Cable can be attached to yoke of valve or an adjacent pipe.

i Tighten all four clamp nuts evenly to 15 ft-lb minimum.

SADDLE STYLE ADJUSTABLE PIPE SUPPORTS

Available in Galvanized Carbon Steel and ASTM 304 Stainless Steel



All Trumbull Pipe Support models have been tested to a 10,000 lb load, under typical installation conditions. We recommend Project Engineers consider a safety factor when determining the number of supports in their design.

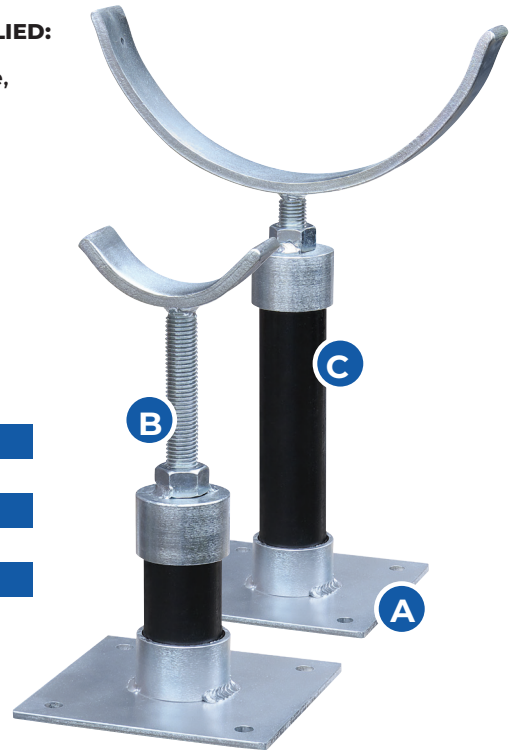


ASSEMBLY INCLUDES:

- A** Large base, 8" x 8"
- B** Saddle Assembly & Height-Adjustment Cap, which allows for up to 3" of final height adjustment

CUSTOMER SUPPLIED:

- C** Extension Pipe, at the length required*



	Carbon Steel	304 Stainless Steel
Base Plate:	ASTM A36 sheet steel	ASTM 304 sheet steel
Threaded Rod:	ASTM A307 rolled threads	ASTM 304 rolled threads
Base Cup:	ASTM A53 tubing	ASTM 304 tubing
Adjustment Cap:	ASTM A53 tubing	ASTM 304 tubing
Saddle:	ASTM A36	ASTM 304

Standard stock Saddles are formed to fit ductile iron pipe diameters, other pipe diameters available upon request;

- Optional 316 stainless steel supports available.
- Other coatings such as epoxy paint may be available, please inquire as to availability.

* Extension Pipe is furnished separately. If required, Trumbull can supply pipe that is cut-to-length.

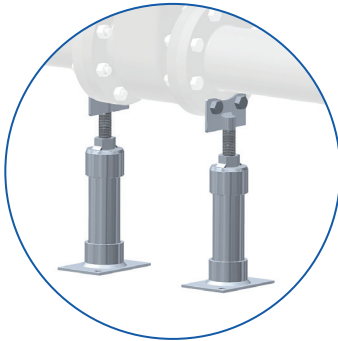
Pipe Size	Carbon Steel	304 Stainless	Saddle Size	Threaded Rod	Base Plate	Extension Pipe Size*	Min. Height from Floor
	Item №	Item №					
3"	364-5850	364-5830	1-1/2" x 3/8"	1"-8 NC x 6"	1/4" x 8" x 8"	2" Sch 40	7"
4"	364-5851	364-5831					
6"	364-5852	364-5832	2" x 1/2"				
8"	364-5853	364-5833					
10"	364-5854	364-5834					
12"	364-5855	364-5835					
14"	364-5856	364-5836	3" x 5/8"	1-1/2"-6 NC x 6"	1/2" x 8" x 8"	3" Sch 40	10"
16"	364-5857	364-5837					
18"	364-5858	364-5838	4" x 3/4"	2"-4 NC x 6"		4" Sch 40	
20"	364-5859	364-5839					
24"	364-5860	364-5840					

FLANGE STYLE ADJUSTABLE PIPE SUPPORTS

Available in Galvanized Carbon Steel and ASTM 304 Stainless Steel



All Trumbull Pipe Support models have been tested to a 10,000 lb load, under typical installation conditions. We recommend Project Engineers consider a safety factor when determining the number of supports in their design.



ASSEMBLY INCLUDES:

- A** Large base; 4" x 6" or 8" x 8"
- B** Flange Assembly & Height-Adjustment Cap, which allows for up to 3" of final height adjustment

CUSTOMER SUPPLIED:

- C** Extension Pipe, at the length required*



	Carbon Steel	304 Stainless Steel
Base Plate:	ASTM A36 sheet steel	ASTM 304 sheet steel
Threaded Rod:	ASTM A307 rolled threads	ASTM 304 rolled threads
Base Cup:	ASTM A53 tubing	ASTM 304 tubing
Adjustment Cap:	ASTM A53 tubing	ASTM 304 tubing
Flange Plate:	ASTM A36 sheet steel	ASTM 304 sheet steel

Standard stock flange supports are fabricated to fit ANSI Class 125 bolt pattern flanges, other flange bolt patterns classes available upon request;

- Optional 316 stainless steel supports available.

- Other coatings such as epoxy paint may be available, please inquire as availability.

* Extension Pipe is furnished separately. If required, Trumbull can supply pipe that is cut-to-length.

Class 125 Flange Size	Carbon Steel	304 Stainless	Flange Plate Dimensions	Threaded Rod	Base Plate	Extension Pipe Size*	Min. Height from Floor
	Item №	Item №					
3"	364-5870	364-5890	6" x 3-1/4" x 1/4"	1"-8 NC x 6"	1/4" x 4" x 6"	2" Sch 40	7"
4"	364-5871	364-5891	4-1/2" x 2-1/2" x 1/4"				
6"	364-5872	364-5892	5-1/4" x 2-1/2" x 1/4"				
8"	364-5873	364-5893	6-1/2" x 2-1/2" x 1/4"				
10"	364-5874	364-5894	6" x 2-1/2" x 1/4"				
12"	364-5875	364-5895	6-1/2" x 2-1/2" x 1/4"				
14"	364-5876	364-5896	7-1/2" x 3-1/2" x 3/8"	1-1/2"-6 NC x 6"	1/2" x 8" x 8"	3" Sch 40	10"
16"	364-5877	364-5897		2"-4 NC x 6"		4" Sch 40	
18"	364-5878	364-5898					
20"	364-5879	364-5899					
24"	364-5880	364-5900					

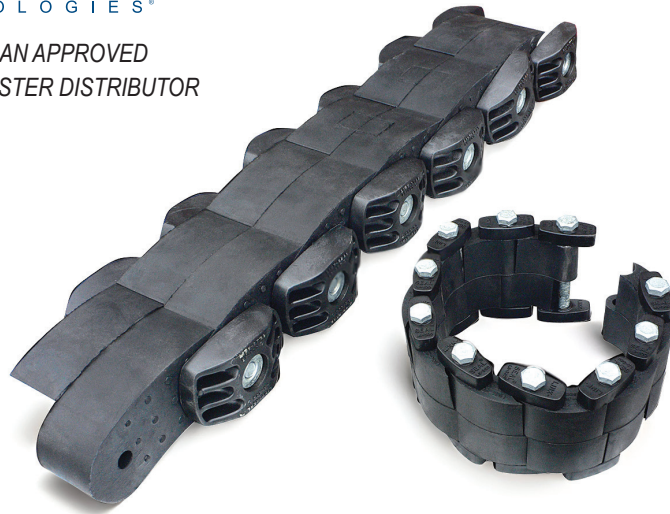
LINK-SEAL® MODULAR SEALS

The Premier Method for Permanently Sealing Pipe of Any Size
Passing Through Walls, Floors and Ceilings

Garlock

SEALING TECHNOLOGIES®

TRUMBULL MANUFACTURING IS AN APPROVED
LINK-SEAL® MODULAR SEAL MASTER DISTRIBUTOR



i If you are unsure of the correct size for your job, please contact your Trumbull Rep before ordering.

Link-Seal® Model No.	Model C Item №	Model S-316 Item №
LS-200	364-5602	364-5702
LS-275	364-5604	364-5704
LS-300	364-5606	364-5706
LS-315	364-5607	364-5707
LS-325	364-5608	364-5708
LS-340	364-5609	364-5709
LS-360	364-5613	364-5713
LS-400	364-5610	364-5710
LS-410	364-5611	364-5711
LS-425	364-5612	364-5712
LS-475	364-5614	364-5714
LS-500	364-5616	364-5716
LS-525	364-5618	364-5718
LS-575	364-5620	364-5720
LS-615	spec/ord.	364-5722
LS-650	364-5623	364-5724

16 INDUSTRY-LEADING SIZES

Nitrile seal elements, for oil, fuels, motor oil and kerosene, or for low durometer EPDM compound or silicone, see Link-Seal® Modular Seals catalog.

MODEL "C"

For use in water and waste water, EPDM Rubber. Bolts and nuts are carbon steel, zinc dichromated with a proprietary corrosion inhibiting coating.

MODEL "S-316"

For chemical processing and waste water treatment, EPDM Rubber. Bolts and nuts are 316 Stainless Steel.

i HOW LINK-SEAL® MODULAR SEALS WORK



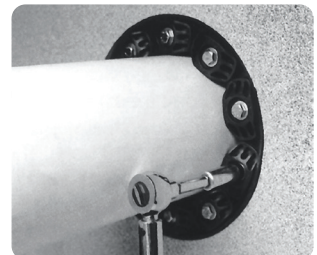
1 Link-Seal® modular seals are shipped as a belt of interconnecting rubber links.



2 Wrap the belt around the pipe and connect the first and last links together.

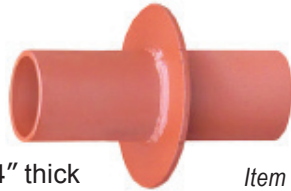


3 Slide the assembly into the space between the pipe and wall opening.

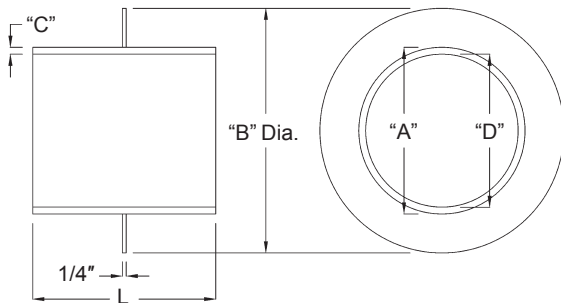


4 When the bolts are tightened, Link-Seal Modular Seals® expand to create a gas and water tight seal.

WALL SLEEVES



Trumbull Wall Sleeves consist of a 1/4" thick steel flange continuously welded, both sides, to a heavy steel cylinder. Wall Sleeves are supplied with a rust preventive coating on all surfaces; special coatings, including epoxy, are available upon request.



All Trumbull Wall Sleeves are made to order, and made to your particular specifications. They are coated with black enamel coating as standard. Other coatings also available, please inquire.

Item No	"A" Diameter	"B" Diameter	"C" Wall Thickness	"D" I.D.
TWS-0250-L	2.88"	6.88"	0.203"	2.47"
TWS-0300-L	3.50"	7.50"	0.216"	3.07"
TWS-0400-L	4.50"	8.50"	0.237"	4.03"
TWS-0600-L	6.63"	10.63"	0.280"	6.07"
TWS-0800-L	8.63"	12.63"	0.322"	7.98"
TWS-1000-L	10.75"	14.75"	0.365"	10.02"
TWS-1200-L	12.75"	16.75"	0.375"	12.00"
TWS-1400-L	14.00"	18.00"	0.375"	13.25"
TWS-1600-L	16.00"	20.00"	0.375"	15.25"
TWS-1800-L	18.00"	22.00"	0.375"	17.25"
TWS-2000-L	20.00"	24.00"	0.375"	19.25"
TWS-2200-L	22.00"	26.00"	0.375"	21.25"
TWS-2400-L	24.00"	28.00"	0.375"	23.25"
TWS-3000-L	30.00"	34.00"	0.375"	29.25"
TWS-3600-L	36.00"	40.00"	0.375"	35.25"
TWS-4200-L	42.00"	46.00"	0.375"	41.25"
TWS-4800-L	48.00"	52.00"	0.375"	47.25"

CENTURY-LINE™

PIPE PENETRATION SLEEVES

Used to create circular sleeved holes in concrete poured barriers including walls, floors, ceilings, structural supports and tank footings.

Molded from non-conductive, high-impact resistant HDPE, these sleeves are lightweight and easily installed by one construction worker. Standard sleeves are 16" in length, but in the event of a field or engineering change, they may be cut shorter at the job site using ordinary hand tools. Longer lengths available upon request.

- 1/8 the weight of steel wall sleeves.
- Resists water migration.
- Adjusts to wall thickness.
- Nailer end caps position sleeve precisely in form.



CENTURY-LINE™ ILLUSTRATED.

Item No	Model No.	Weight of 16" Length
spec/ord.	CS-2	0.70 lbs.
spec/ord.	CS-3	1.30 lbs.
spec/ord.	CS-3-1/2	1.50 lbs.
spec/ord.	CS-4	2.00 lbs.
spec/ord.	CS-5	2.80 lbs.
spec/ord.	CS-6	3.60 lbs.
spec/ord.	CS-8	4.80 lbs.
spec/ord.	CS-10	6.40 lbs.
spec/ord.	CS-12	7.20 lbs.
spec/ord.	CS-14	11.20 lbs.
spec/ord.	CS-16	12.00 lbs.
spec/ord.	CS-18	15.50 lbs.
spec/ord.	CS-20	17.50 lbs.
spec/ord.	CS-22	21.00 lbs.
spec/ord.	CS-24	22.00 lbs.
spec/ord.	CS-25	23.00 lbs.

BRASS HYDRANT ADAPTERS

"Low Lead" brass in compliance with
NSF/ANSI 61 and NSF/ANSI 372

Heavy-duty brass construction, comes complete with gasket.
Furnished with "pin-type" lugs. Available from stock with 2-1/2" NST
hose threads, however special threads are available upon request.



NST X MIP HYDRANT ADAPTERS

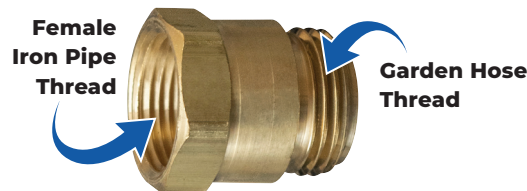
Item No	Female Thread	Male Thread	Weight
377-9001	2-1/2" NST	3/4" MIP	1.40 lbs.
377-9005	2-1/2" NST	1-1/2" MIP	1.40 lbs.
377-9009	2-1/2" NST	2" MIP	1.40 lbs.

NST X GARDEN HOSE HYDRANT ADAPTER

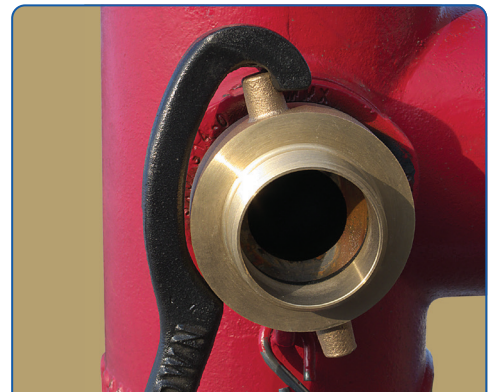
Item No	Female Thread	Male Thread	Weight
377-8981	2-1/2" NST	3/4" G.H.	1.45 lbs.

FIP X GARDEN HOSE ADAPTER

Used to connect
garden hose to
item 377-9001
(shown above).
Solid brass
construction.



Item No	Female Thread	Male Thread	Weight
151-1003	3/4" I.P.	3/4" G.H.	0.15 lbs.



HYDRANT OPERATING WRENCHES
ARE SHOWN ON PAGE A-4.



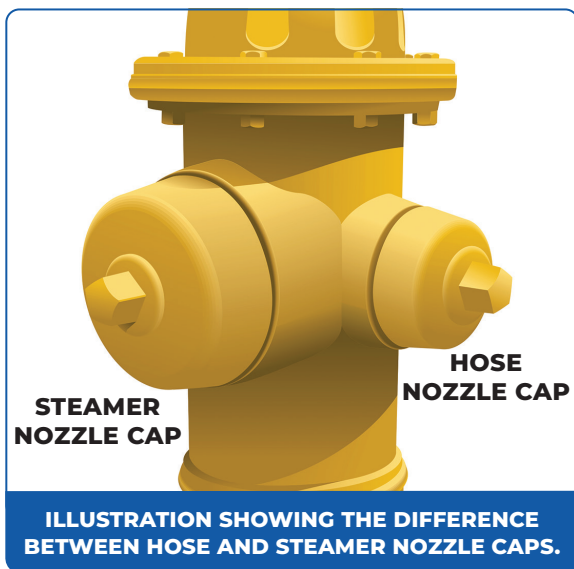
ADJUSTABLE HYDRANT WRENCHES
ARE SHOWN ON PAGE A-5.

FIRE HYDRANT NOZZLE CAPS

2-1/2" Hose Nozzle Caps and 4-1/2" Steamer Nozzle Caps

Hose & Steamer Nozzle Caps are stocked with National Standard Threads (NST), and a 1-1/2" pentagon nut, painted yellow. For caps with special threads and operating nuts, contact Trumbull for lead times.

For other sizes of Steamer Nozzle Caps, such as 4" or 4-1/4", please inquire.



Hose Nozzle Cap and Steamer Nozzle Cap

- NST threads* and 1-1/2" pentagon nut.**
- Includes gasket.

Item No	Product Description	Weight
392-0917	2-1/2" Hose Nozzle Cap	3.75 lbs.
392-0914	4-1/2" Steamer Nozzle Cap	8.10 lbs.

* For special threads, provide thread drawing or sample cap.

** For nut sizes other than 1-1/2" pentagon, provide size and shape or sample cap.



Hydrant Nozzle Cap Chain

- Includes 10" of chain, swivel and "S"-hook.
- 392-0860 is purchased separately, and does not include Nozzle Cap.

Item No	Weight
392-0860	0.20 lbs.

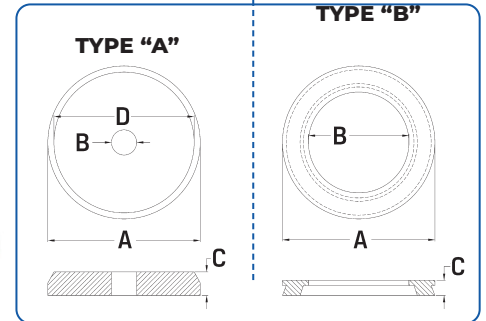
i Nozzle Cap purchased separately.



Gaskets for Hydrant Nozzle Caps

Item No	Size	O.D.	I.D.
392-0923	2-1/2"	3-1/4"	1-1/2"
392-0920	4-1/2"	5-3/4"	3-1/4"

HYDRANT VALVE RUBBERS



Hydrant Manufacturer	Model	Valve Opening	Item №	Type	"A"	"B"	"C"	"D"
Ludlow	L 75 & L 90	4"	392-0200	"B"	5-3/8"	3-1/4"	5/8"	----
	L 75 & L 90	4-1/2"	392-0201		5-3/4"	3-7/8"	5/8"	----
	L 75 & L 90	5"	392-0100		6-1/2"	4-1/8"	5/8"	----
Rensselaer	L 90A & L 90B	4"	393-0255	"A"	4-3/8"	2-3/8"	1"	3-7/8"
	L 90A & L 90B	5"	393-0260		5-5/8"	2-5/8"	1-1/4"	5-3/8"
Mueller* (Non-Reversible)	A421 (Centurion)	4-1/2"	377-5692		5"	1"	1-1/8"	4-1/4"
	Improved	4-1/4"	377-5694		4-7/8"	1"	1"	4-1/4"
	Improved	4-1/2"	377-5700		5"	1"	1-1/8"	4-1/2"
U.S. Pipe*	Smith* H200	4-1/2"	377-5702		5"	2-1/4"	3/4"	4-3/4"
American Darling*	B50B, 40-50-41	4"	377-4792		4-1/2"	2-1/16"	1"	4-1/8"
	B50B, 50-50-41	5"	377-5492		5-3/4"	2-1/16"	1-3/16"	5-3/16"
	B62B, 54-62-41	5-1/4"	377-6092		5-5/8"	1"	1"	5-3/16"
Kennedy*	K10, K11, K81, 1080, 1280	4-1/2"	378-0204		5"	15/16"	7/8"	4-5/8"
	K10, K11, K81	5-1/4"	378-0208		5-11/16"	1-3/32"	7/8"	5-1/4"

* Hydrant names are registered trademarks of American Darling/American Flow Control, McWane, Mueller or U.S. Pipe; Trumbull Manufacturing is not affiliated with these companies.



HYDRANT MARKERS HELP FIND HYDRANTS WHEN THEY ARE NEEDED MOST.



TOP MOUNT MARKERS ATTACH TO THE HYDRANT VIA THE HYDRANT CAP BOLTS.



SIDE MOUNT MARKERS ATTACH TO THE HYDRANT HOSE NOZZLE.

FIRE HYDRANT MARKERS

Allow for Easy Locating in Difficult-to-Find Environments

Our Hydrant Markers are made of fiberglass shafts with reflective red and white stripes. Shafts are 3/8" in diameter and available in 4, 5 or 6 foot lengths. Spring mounts allow for greater flexibility in wind, rain or snow, and the top mount model includes a flat mounting bracket.

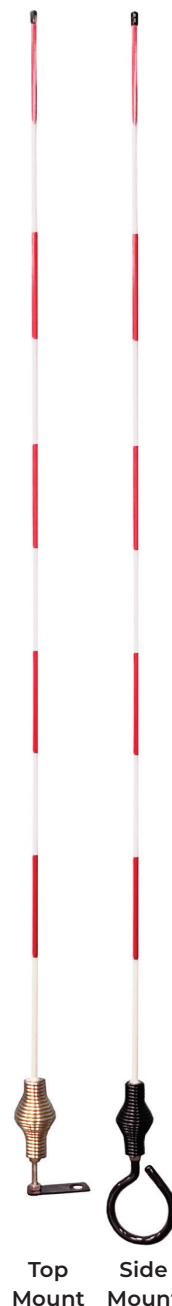
- Easy to install.
- Top mount model installs easily onto the hydrant's cap bolts.
- Side mount model attaches on the hose nozzle.
- Both models are corrosion and UV resistant.
- Models are shipped fully assembled.

Top Mount Hydrant Markers

<i>Item №</i>	<i>Length</i>	<i>Weight</i>
125-250-00040	4'	1.70 lbs.
125-250-00050	5'	1.85 lbs.
125-250-00060	6'	2.00 lbs.

Side Mount Hydrant Markers

<i>Item №</i>	<i>Length</i>	<i>Weight</i>
125-250-00010	4'	1.75 lbs.
125-250-00020	5'	1.95 lbs.
125-250-00030	6'	2.15 lbs.

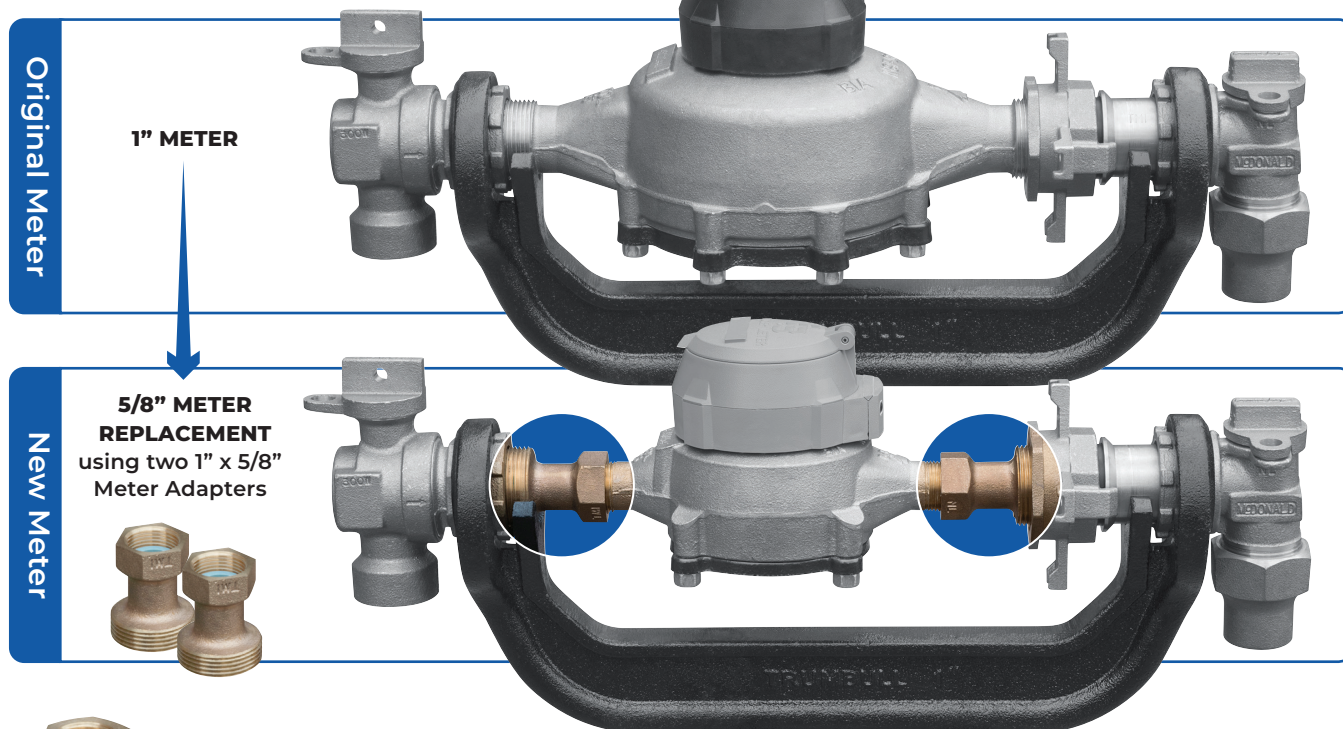


Top Mount Side Mount

METER ADAPTERS

When changing meter sizes in an existing setting, use Trumbull Meter Adapters to make up the difference in length and thread size. Our Meter Adapters are cast from UNS C89833 brass and have been certified by UL for compliance with NSF/ANSI 61 and NSF/ANSI 372, per the U.S. Safe Drinking Water Act.

HERE'S AN EXAMPLE OF HOW THEY WORK:



Item №	Weight	Ford №	Original Meter		New Meter		Quantity Required
			Meter Size	Laying Length	Meter Size	Laying Length*	
368-0642	0.4 lbs.	A13	3/4"	9"	5/8"	7-1/2"	2
368-0643	0.4 lbs.	A14	1"	10-3/4"	5/8"	7-1/2"	2
368-0639	0.4 lbs.	A23	3/4"	9"	5/8" x 3/4"	7-1/2"	1
368-0641	0.6 lbs.	A24	1"	10-3/4"	5/8" x 3/4" & 3/4" **	7-1/2"	2
368-0644	0.4 lbs.	A34	1"	10-3/4"	3/4"	9"	2
368-0640	0.7 lbs.	A44	1"	10-3/4"	3/4" x 1"	9"	1
379-1022	3.2 lbs.	A47	2" Flange	17"	1"	10-3/4"	2

* Meter Adapters are provided with a hard fiber gasket to maintain existing laying lengths, however, for polymer meters with pressed on metal threads, a soft rubber gasket is required; please specify on order. Adapter No. 379-1022 is provided with one 2" rubber flange gasket and one 1" rubber gasket.

** 3/4" meters have been made with 7-1/2" and 9" laying lengths; Adapter No. 368-0641 is designed for 3/4" meters with 7-1/2" laying length.

METER COUPLINGS AND FLANGES

Certified by UL for compliance with NSF/ANSI 61 and NSF/ANSI 372, per the U.S. Safe Drinking Water Act



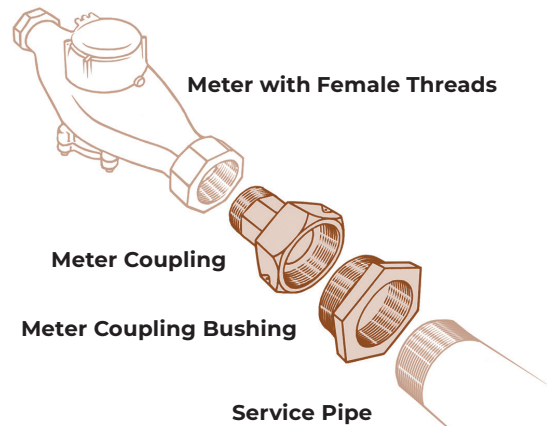
Meter Couplings

- Barrel is in contact with water and is cast brass to meet UNS C89833.
- Swivel nut does not contact water and is cast from UNS C83600.

Item No	Male Thread	Fits Meter Size	Laying Length	Weight
368-0590	1/2"	5/8" x 3/4" and 3/4"	2-3/8"	0.44 lbs.
368-0591	1/2"	5/8" x 1/2"	2-3/8"	0.25 lbs.
368-0646	1/2"	5/8" x 3/4" and 3/4"	1-5/8"	0.40 lbs.
368-0593	3/4"	5/8" x 3/4" and 3/4"	2"	0.45 lbs.
368-0592	3/4"	5/8" x 3/4" and 3/4"	2-1/2"	0.50 lbs.
368-0595	1"	1"	2-5/8"	0.70 lbs.
368-0597	1-1/2"	1-1/2"	2-7/8"	1.85 lbs.
368-0598	2"	2"	3"	2.65 lbs.

Bushings

For use with 1-1/2" or 2" meters with female threads, as shown below.



Meter Coupling

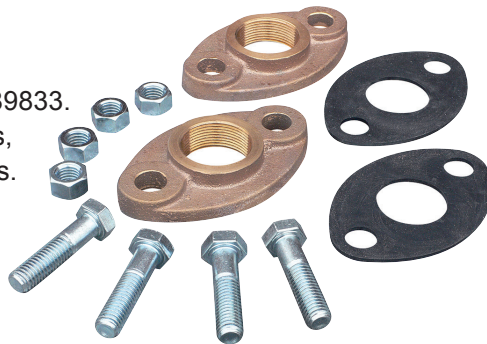
Meter Coupling Bushing

Service Pipe

Item No	Size	Fits Coupling	Weight
368-0618	1-1/2"	1-1/2"	0.85 lbs.
368-0619	2"	2"	1.20 lbs.

Meter Flange Kits

- Cast brass to meet UNS C89833.
- Boxed kit includes 2 flanges, 2 gaskets & 4 bolts and nuts.



Item No	Size	Fits Meter	Fastener Material	Weight
379-2015	1-1/2"	1-1/2"	zinc-plated	5.40 lbs.
379-2025	1-1/2"	1-1/2"	brass	5.40 lbs.
379-2030	1-1/2"	1-1/2"	stainless steel	5.40 lbs.
379-2016	2"	2"	zinc-plated	7.10 lbs.
379-2026	2"	2"	brass	7.10 lbs.
379-2031	2"	2"	stainless steel	7.10 lbs.

Meter Flanges Sold Individually

- Cast brass to meet UNS C89833.
- Includes one flange and one gasket.



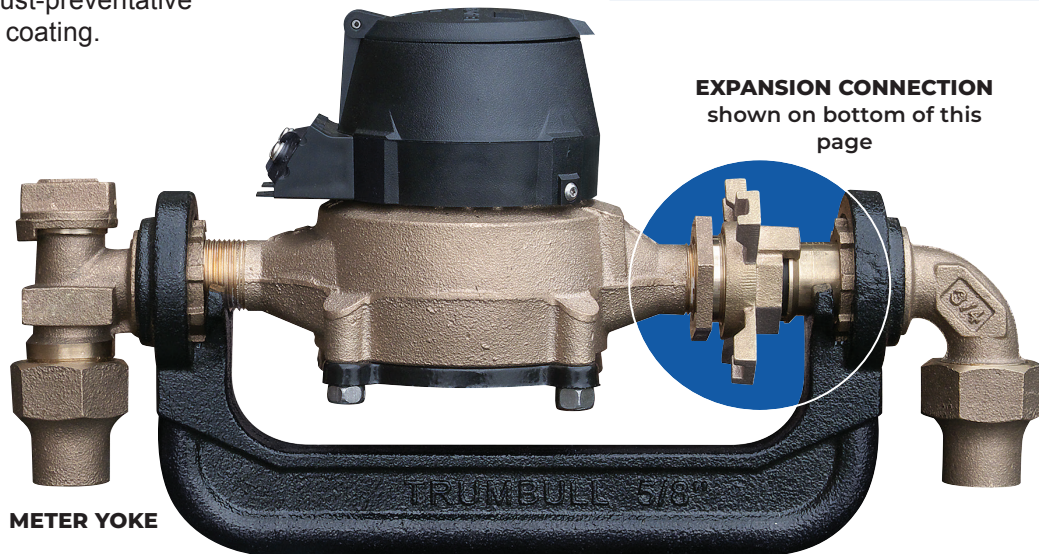
Item No	Size	Fits Meter	Weight
379-1015	1-1/2"	1-1/2"	2.00 lbs.
379-1016	2"	2"	2.45 lbs.

CAST IRON METER YOKES

Trumbull Meter Yokes provide uniform spacing and alignment for setting water meters. Used in conjunction with Expansion Connections for easy installation and removal of meters.

Cast of gray iron, Class 25, with rust-preventative black coating.

Item No	Meter Size	Length	Height	Weight
367-5470	5/8"	10-15/16"	4-1/8"	3.65 lbs.
367-5469	5/8" x 3/4"	10-15/16"	4-1/8"	4.20 lbs.
367-5471	3/4"	12-1/2"	4-1/8"	4.60 lbs.
367-5472	1"	14-3/4"	5-1/4"	7.30 lbs.

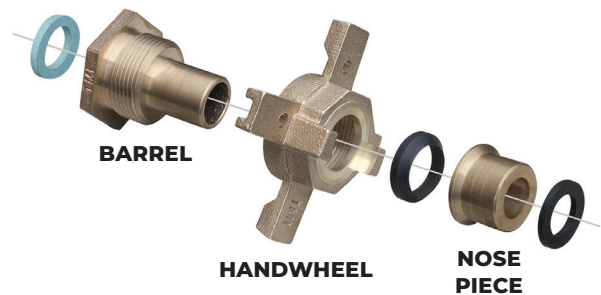


EXPANSION CONNECTIONS

Expansion Connections are screwed onto one end of a meter and allow for easy installation and removal from Meter Yoke. Turning the Handwheel causes expansion into the rubber gaskets in the Yoke, creating a water-tight seal.

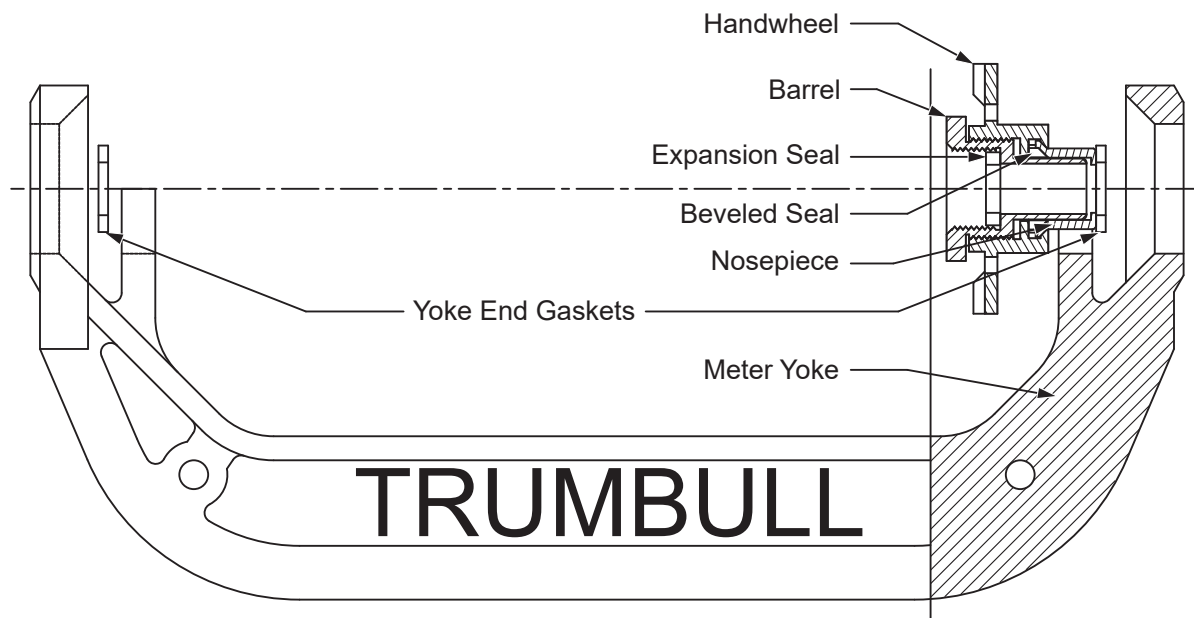
Nose Piece and Barrel are in contact with water and are cast from UNS C89833 brass. Certified by UL for compliance with NSF/ANSI 61 and NSF/ANSI 372, per the U.S. Safe Drinking Water Act.

Handwheel does not contact water and is cast from UNS C83600. Both the flat seal yoke gaskets and bevelled seal gasket are EPDM. Expansion seal gasket between barrel and meter is fiber; however, for polymer meters with pressed on metal threads, a soft rubber gasket is required. Please specify on order. All gaskets are NSF-61.



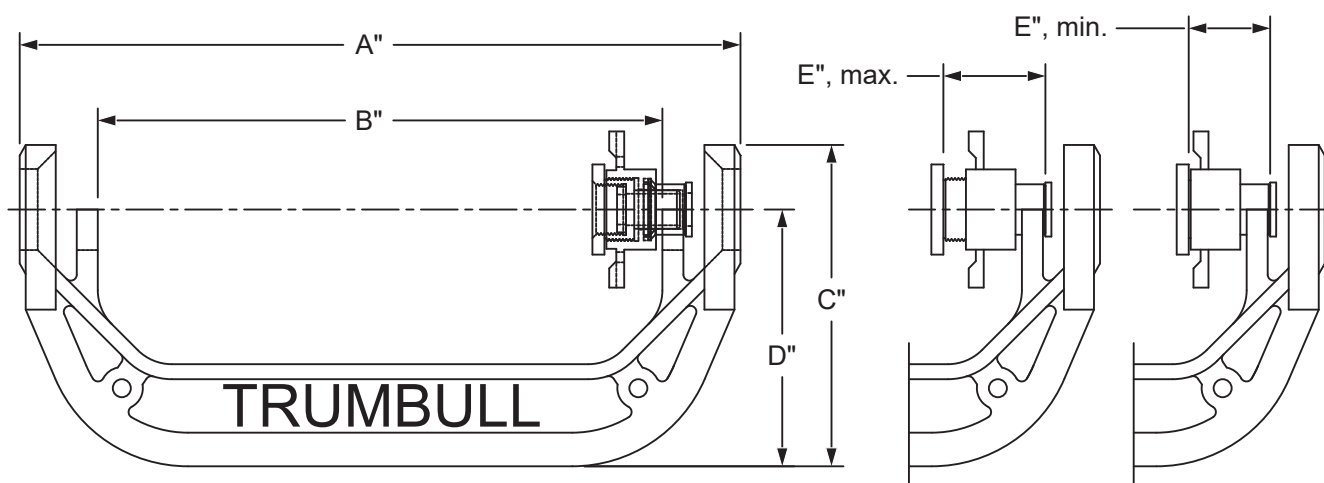
i Dimensions of Yokes & Expansion Connections are consistent & interchangeable with other industry manufacturers.

Item No	Meter Size	Size	Type	Weight
368-0630	5/8"	5/8"	Handwheel	0.72 lbs.
368-0632	5/8" x 3/4" & 3/4"	3/4"	Handwheel	0.93 lbs.
368-0635	1"	1"	Handwheel	1.61 lbs.



Barrel and Nosepiece are in contact with potable water and will conform to UNS C89833. They will be marked, "NL", and are certified by UL for compliance with NSF/ANSI 61 and NSF/ANSI 372, per the U.S. Safe Drinking Water Act. EPDM and fiber seals meet NSF/ANSI 61.

Handwheel is not in contact with potable water and will conform to UNS C83600.



Meter Size	Yoke						Expander			
	A"	B"	C"	D"	Wt., lbs.	Item No.	Bore Size	E", min. - max.	Wt., lbs.	Item No.
5/8"	10.69"	8.19"	5.16"	3.88"	3.9	367-5470	0.59"	1.44" - 1.75"	0.65	368-0630
5/8" x 3/4"	10.94"	8.34"	5.16"	3.88"	4.1	367-5469	0.72"	1.75" - 2.0"	0.85	368-0632
3/4"	12.31"	9.81"	5.16"	3.88"	4.4	367-5471	0.72"	1.75" - 2.0"	0.85	368-0632
1"	14.88"	11.75"	6.69"	5.34"	7.25	367-5472	0.97"	2.19" - 2.63"	1.65	368-0635

Material:
ASTM Class 30 Gray Iron,
black E-coat all surfaces.

UNS C89833 - Barrel and Nosepiece certified
by UL for compliance with NSF/ANSI 61 and
NSF/ANSI 372, per the U.S. Safe Drinking
Water Act. (In contact with potable water).

**METER YOKE and
EXPANSION CONNECTIONS**
Drawn to Scale

Drawn:
FCN
05/19/14

Revision:
FCN
© 04/07/15

Trumbull Manufacturing
Youngstown, Ohio
www.trumbull-mfg.com



3850 Hendricks Road
Youngstown, Ohio 44515

trumbull-mfg.com

Phone
330.270.7888

Toll Free
877.504.1507

Fax
330.392.0756