

TELESCOPING VALVES

STAINLESS STEEL TUBES

SCREW TYPE LIFTS

Telescoping valves are designed to control the height of liquid within a pond, reservoir, or other holding chamber. In modern sewage treatment facilities, one specific use is to control the level of effluent in settling basins. Also called Decanting Valves or Sludge Draw-off Valves, the assembly consists of a drain tube which can slip up and down inside a stationary vertical pipe. Through a lifting device, the tube is raised and lowered to maintain the desired level within the chamber.

CONSTRUCTION FEATURES

TUBE:

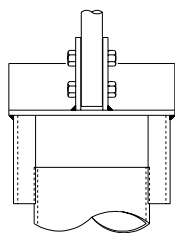
Waterman manufactures telescoping valves in a range of sizes from 4" tube diameter to 36" tube diameter. Valve body material is stainless steel. Lifting straps (bails) are the same material as tube and rigidly welded to tube. V notches or flared tube tops can be provided when requested.

SEAL AND FLANGE:

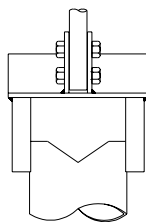
At the point where the sliding tube enters the vertical stationary pipe a seal is effected by means of a wiper gasket retained by a holding flange. This retaining flange may be of cast iron or stainless steel. The wiper gasket is generally of Neoprene and is of such dimension as to provide a friction seal around the sliding tube.

STEM AND OPERATOR:

Stems are manufactured from solid type 304 or 316 stainless steel rod and are available in rising stems. The standard operator is the Waterman Threaded Stem Type Lift mounted on an upright or offset pedestal.



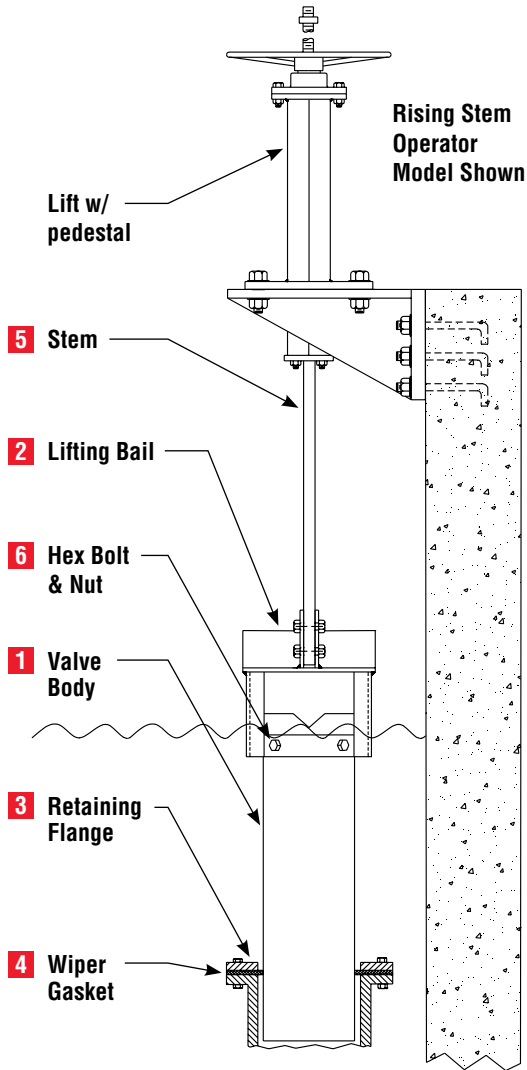
**PLAIN STYLE
STAINLESS STEEL**



**V NOTCH STYLE
STAINLESS STEEL**

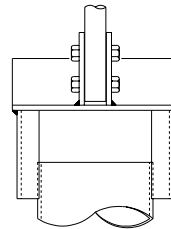


TELESCOPING VALVES

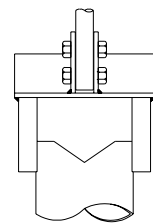


PARTS

No.	Name
1	304 or 316 Stainless Steel*
2	Lifting Strap-Stainless Steel ASTM A-276
3	Retainer Flange-Cast Iron ASTM A-126 Class B or Stainless Steel
4	Wiper Gasket-Neoprene ASTM D-2000
5	Lifting Stem-Stainless Steel ASTM A-276
6	Hex Bolt & Nut-Stainless Steel ASTM F-593



PLAIN STYLE
STAINLESS STEEL



V NOTCH STYLE
STAINLESS STEEL

SPECIFICATIONS

GENERAL

Telescoping valves are used primarily for sludge removal, or liquid level control, and are considered to be fully open when in the low-ermost position. The valve tube travels inside a cast iron or ductile iron riser pipe as shown in the plan drawings. The nominal riser pipe diameter determines the valve tube diameter. Vee notch, flared, or baffled tube tops shall be provided when required by the plan drawings.

TUBE (METAL)

Stainless steel or steel tubes up through 24" size shall be manufactured from seamless pipe or tube. Tube lengths shall be as shown or noted on the drawings and must be of sufficient length to facilitate valve travel and maintain an appropriate insert depth. Valve tubes are to be a minimum 1/8" thick and are attached to connecting stems by use of a lifting bail.

SEAL FLANGE

A cast iron or stainless steel companion flange and neoprene slip seal gasket shall be provided by the valve manufacturer. The gasket must be a minimum 1/4" thick. The inside diameter of the gasket is to be 1/8" smaller than the outside diameter of the valve tube to provide a friction seal. The gasket is to be sandwiched between the riser pipe flange and the companion flange. The gasket and companion flange shall include a 125# standard drilling pattern to match the riser pipe.

LIFTING BAIL

The bail shall be the same material as the tube and be rigidly welded to the tube.

LIFT AND STEMS (RISING)

Lifts shall be handwheel type, with UHMW polyethylene thrust bearings along with a stub acme threaded type 304 or 316 stainless steel stem to provide automatic self-locking, infinite valve positioning. Where conditions require, a vee keyed shaft, with torque plate, shall be used to prevent valve tube rotation. Handwheels shall be a minimum of 12" in diameter and shall include a clear plastic Butyrate stem cover with a mylar strip type position indicator, calibrated in 1/4 inch increments to illustrate valve position. The mylar strip, provided by the manufacturer, will be affixed by the contractor after installation to provide a true and accurate indication of the tube elevation by comparing it to the top of the rising stem. Stainless steel anchor bolts shall be provided for all pedestals. Cleaning and shop prime coat of lift housing and handwheel will be (as specified elsewhere in this specification) (manufacturer's standard). Also available when required: geared lift w/crank or electric motor operator.