

96181 Water Drain Valve

The Shand & Jurs 96181 Water Drain Valve is designed to provide high flow capacity, leak-proof shutoff and non-freezing operation.

Shand & Jurs "Non-Freezing" valves utilize a double valve construction, which operates on the same stem permitting the inner valve to seat first. This action allows the valve chamber to drain sufficiently before the outer valve is closed. An exceptional tight seal is maintained, due to the resilient rugged glass-filled Teflon seat disc on both the inner and outer valve.

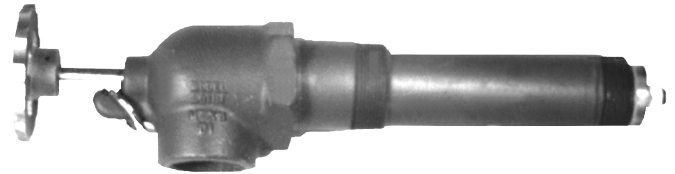
The 96181 incorporates an industry first protective sleeve* which prevents particulates from damaging integral valve components and prevents premature wear.

*Patent Pending

Many unique design features have been incorporated, such as servicing the outer valve without removing valve body from tank. Flushing action is obtained by simply pushing on the handwheel with the outer valve open. This momentarily opens the inner valve and flushes any foreign particles off the inner valve seat. There are also provisions for padlocking the valve into a non-operative position.

The 96181 is available with either threaded or flanged mounting connections for 2", 3" and 4" valve sizes.

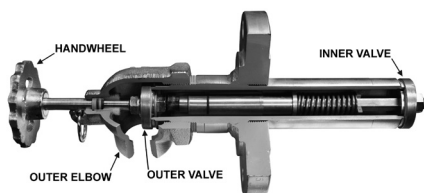
Stem Seal - Stem seal nylon retainer with two Buna-N O-Rings, provides a leak tight section, allowing for discharge piping to be connected to auxiliary equipment.



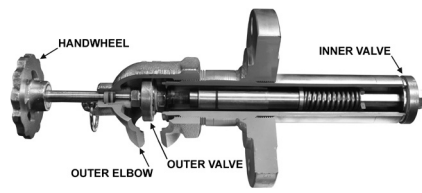
Features

- Positive seal
- Freeze-proof
- Non-clogging
- Easy servicing
- Corrosion resistant

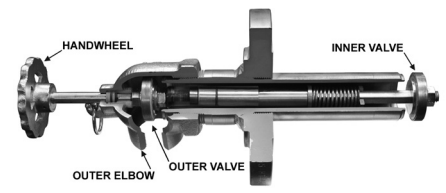
Principle of Operation:



A. Valve Fully Closed
(Inner & Outer Valves Closed)



B. Drain Position
(Outer Valve Open -
Inner Valve Closed)



C. Valve Fully Open
(Inner & Outer Valves Open)

Materials of Construction:

Body:

Steel with 316 Stainless Steel Seat Overlay

Seat Retainer:

Brass; Stainless Steel Optional

Outlet Elbow:

Ductile Iron (Painted)

Stem, Spring, Groove-Pin:

Stainless Steel Seat Disc Retainer

Seat Disc Retainer, Coupling:

Brass; Stainless Steel Optional

Retainer, Post, Nut, Spacer:

Plated-Steel; Stainless Steel Optional

Handwheel:

Aluminum

Seat Disc:

Glass Filled Teflon

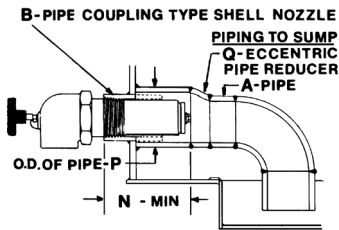
Stem Seal:

Nylon/Buna-N

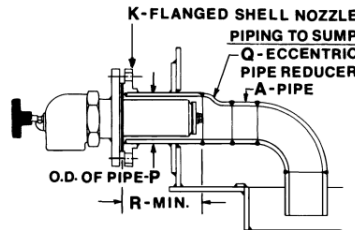
Washer:

Nylon

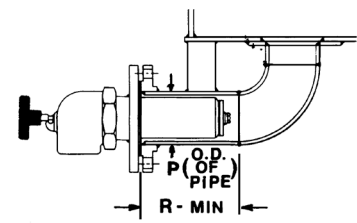
Suggested Types of Installations



Screwed Mounted On Tank Side



Flange Mounted On Tank Side

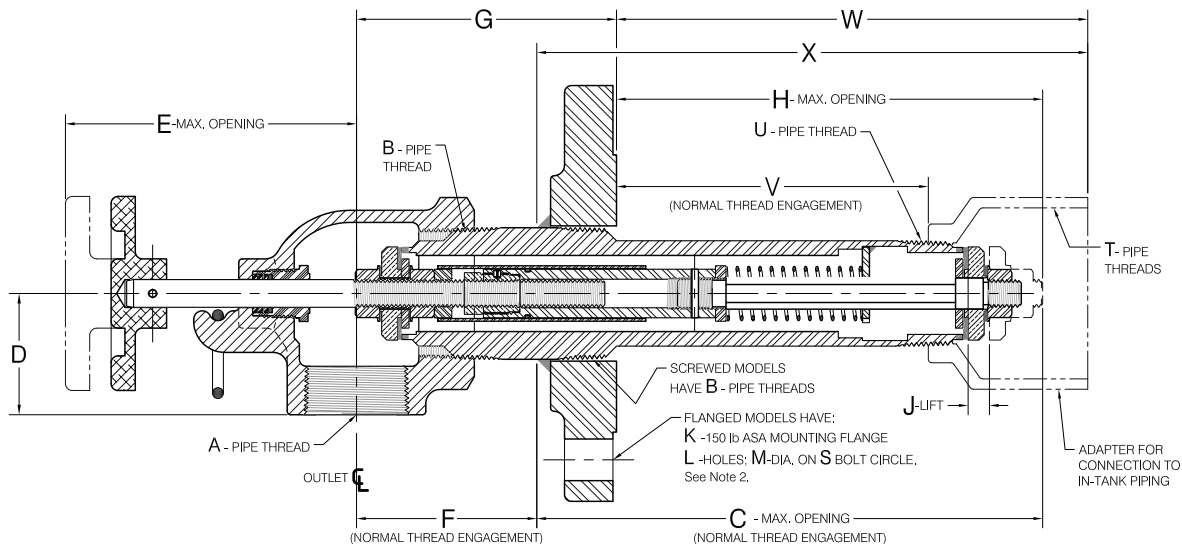


Flange Mounted On Tank Bottom

Table of Dimensions

| Size | A | B | C | D | E | F | G | H | J | K | L | M | N |
|------|-------|---|-------|--------|-------|--------|---------|---------|-------|---|---|-----|-------|
| 2" | 1 1/2 | 2 | 8 7/8 | 2 3/16 | 5 7/8 | 3 5/8 | 4 11/16 | 7 11/16 | 3/4 | 3 | 4 | 3/4 | 9 1/4 |
| 3" | 2 1/2 | 3 | 9 | 2 7/8 | 5 3/4 | 4 5/32 | 5 19/32 | 7 11/16 | 7/8 | 4 | 8 | 3/4 | 9 |
| 4" | 3 | 4 | 9 1/4 | 3 5/8 | 6 3/8 | 4 3/4 | 6 1/8 | 7 11/16 | 1 1/2 | 6 | 8 | 7/8 | 8 1/8 |

| Size | P | Q | R | S | T | U | V | W | X |
|------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|
| 2" | 3 1/2 | 3 x 1 1/2 | 8 1/2 | 6 | 2 1/2 | 1 1/2 | 5 5/8 | 8 1/2 | 9 1/8 |
| 3" | 4 1/2 | 4 x 2 1/2 | 8 | 7 1/2 | 3 1/2 | 2 1/2 | 4 7/8 | 8 3/8 | 9 1/4 |
| 4" | 6 5/8 | 6 x 3 | 7 | 9 1/2 | 5 | 3 1/2 | 4 3/8 | 8 | 9 |



All designs subject to change. Certified dimensions and specifications available upon request.

96181 Ordering Guide

Model Number Selection

The model number will consist of a base number **96181** followed by 4 digit numbers. These digits will represent 2 option tables.

96181 - AB - CD

Ordering Information

Specify:

1. Model 96181 Water Drain Valve
2. Size: 2", 3" or 4"
3. Type of Mounting: Threaded or Flanged
4. Accessories, as Required

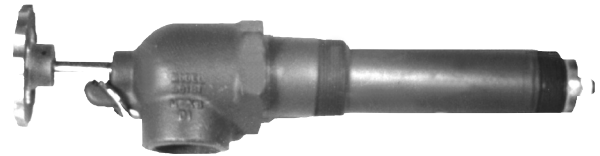


Table AB - Size and Mounting

| Option AB | Description | Ship Weight |
|-----------|-------------------------|-------------|
| 01 | 2" Valve with 2" NPT | 17 lbs. |
| 02 | 2" Valve with 3" Flange | 17 lbs. |
| 03 | 3" Valve with 3" NPT | 26 lbs. |
| 04 | 3" Valve with 4" Flange | 26 lbs. |
| 05 | 4" Valve with 4" NPT | 34 lbs. |
| 06 | 4" Valve with 6" Flange | 34 lbs. |
| 07 | 2" Valve with 4" Flange | 20 lbs. |
| 08 | 3" Valve with 6" Flange | 30 lbs. |
| 09 | 4" Valve with 8" Flange | 40 lbs. |

Table CD - Internal Material

| Option CD | Materials |
|-----------|-----------------------------------|
| 00 | Standard |
| 01 | Stainless Steel w/ Bronze Bushing |
| 02 | Stainless Steel |

Valve Size and Mounting

| Valve Size | Valve Mounting | Outlet Connection | Inlet Connection |
|------------|---------------------|-------------------|------------------|
| 2" | 2" NPT or 3" Flange | 1 ½" NPT | 1 ½" NPT |
| 3" | 3" NPT or 4" Flange | 2 ½" NPT | 2 ½" NPT |
| 4" | 4" NPT or 6" Flange | 3" NPT | 3 ½" NPT |

General Specifications

| | | |
|---|--|------------|
| A | MAXIMUM PRESSURE | 50 PSIG |
| B | MAXIMUM TEMPERATURE | 250°F |
| C | AVERAGE HANDWHEEL SHEAR TORQUE | 750 IN/LBS |
| D | BODY MATERIAL- PAINTED STEEL, SS OVERLAY SEATS | 150 IN/LBS |
| E | OUTLET ELBOW - PAINTED DUCTILE IRON | |

Adapter (To Connect to In-Tank Piping)

| Model Number | Description |
|--------------|-------------|
| 9618-11150 | 2 Inch |
| 9618-11151 | 3 Inch |
| 9618-11152 | 4 Inch |