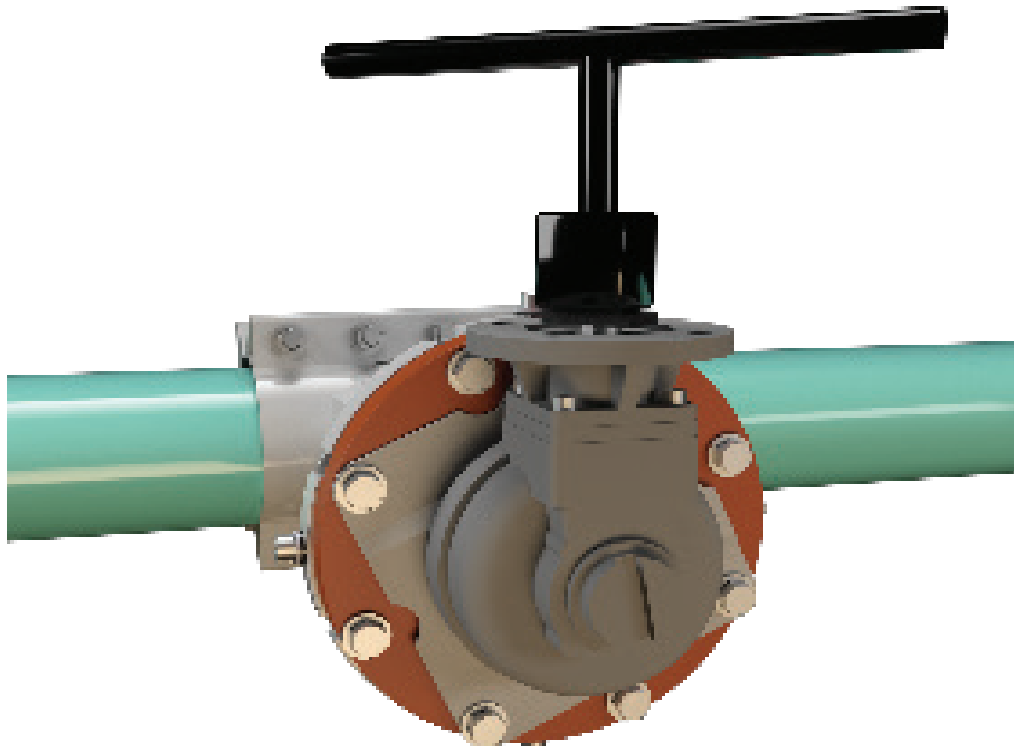


Hydra-Stop Bevel Actuator

Setup and Usage Instructions

HS_BG v1.1 Revised September 2019
Specifications subject to change without notice.



 **HYDRA-STOP[®]**
SOLUTIONS FOR CONTROL

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Have questions or need assistance?

WE ARE HERE TO HELP!

Visit our website:

www.hydra-stop.com

for more info:

- Product Info & Updates
- Tech Bulletins
- Frequently Asked Questions

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Call Hydra-Stop Inside Sales

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I) Installation procedure changes for installing an Insta-Valve 250 in a horizontal orientation.

- a) Supporting an Insta-Valve 250 installed in a horizontal orientation.
- b) Pressure testing a horizontally installed Insta-Valve 250.
- c) Positioning the temporary gate valve in a horizontal installation.
- d) Supporting the Hydra-Tapper during horizontal operation.
- e) Mandatory core sampling.**
- f) Set pin installation - start with the bottom most pin.
- g) Mounting and using the Actuator
- h) Final installation steps

These changes are outlined below.

A) Installing an Insta-Valve 250 installed in a horizontal orientation.

1. Liberally lubricate top and bottom of pipe and mat and throat gaskets with a soap/water solution. Ensure branch gasket is adequately lubricated.
2. Initially mount the top half of the valve body on the pipe in a vertical position.
3. Install the bottom half of the valve body over the tapered ends of the mat gasket ensuring they are flat and smooth against the pipe surface. Visually inspect gasket to ensure tapered ends are not folded or rolled under themselves.
4. Install stainless steel carriage bolts, washers, and nuts. Leave the nuts loose on the bolts.
5. Using a crane (or available lift), hook onto the body's flange and gently rotate the clamp along the pipe until the body is lying parallel to the ground.
6. Block the body well to ensure its position is kept for permanent installation.
7. Be sure that blocking the body does not interfere with the ability to get to the carriage bolts on the underside of the body or with any flange hardware to be used during or after install.

B) Pressure Test Procedure on a horizontally installed Insta-Valve.

- 1) Steps and Procedures to be determined.

C) Positioning the temporary gate valve in a horizontal installation.

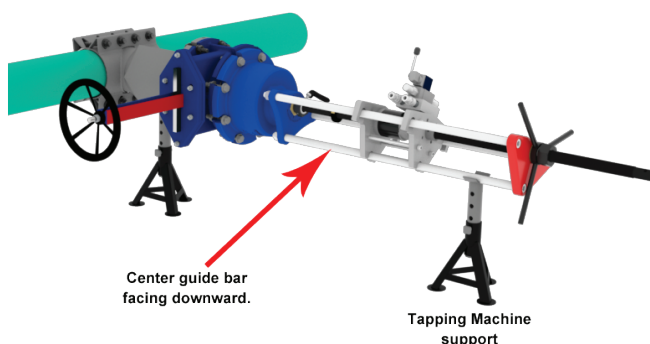
- 1) Use approved grease to hold the temporary gate valve o-ring in place.

D) Mounting and supporting the Hydra-Tapper during horizontal operation.

- 1) The Hydra-Tapper should be installed with the center guide bar oriented toward the ground to simplify tapping process. See image to the left.
- 2) Support the Hydra-Tapper while in the horizontal position. Use blocks or a jack stand for support.

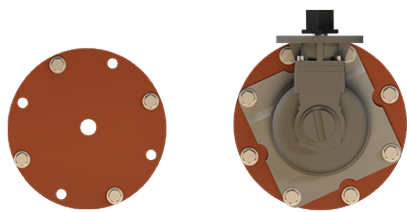
E) Mandatory Core Sampling

- 1) **Hydra-Stop requires** performing a core-sample on a horizontally mounted Insta-Valve. Core-Sampling will ensure that the tap is positioned properly and allows for proper operation.
 - a. Use of the feed screw to push the cutter into place may be required. This must be done cau-

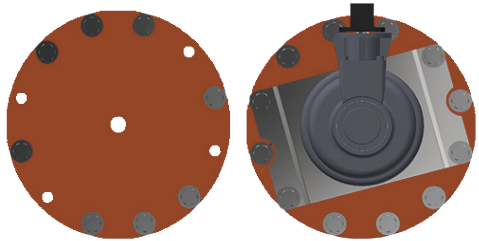


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MODEL: IB4
4-8" use



MODEL: IB6
10-12" use

tiously so as not to break the cutter teeth.

b. Tapping depth should be set to 1/2 Pipe OD.

F) Set Pin Installation

a) Start with the bottom most pin.

G) Mounting and using the Actuator

a) Leave four of the bolt holes open for the gearbox [See figure to the left]. Cross tighten the bolts, nuts and washers on the remaining bolts.

NOTE: if the gearbox does not match up to the valve stem, turn the gearbox's input rod until the inner drive bushing and valve stem geometry are lined up.

NOTE: 10/12 IV 250 ONLY - place the gearbox adaptor piece onto the feed screw prior to mounting the gearbox

b) Install the gearbox/mounting plate over the valve stem. Ensure that the mounting plate bolt holes line up with those on the bonnet so that the gearbox input rod is pointing up. Set the 2" gearbox operating nut on the gearbox's input rod and tighten down the set pin.

c) Fully open/close the valve to confirm a successful installation. The IV 250 with a gearbox is three turns per inch plus three turns times three depending on the type and condition of the inside diameter of the pipe

H) Final installation steps

a) Once installation is complete, place the valve adaptor over the bevel gear's flange in the correct orientation. The adaptor fits a 6.90 O.D. pipe. [see image]



Bevel Gear Valve Adaptor



4" Open Left Bevel Gear Actuator

Turns to Close/Open: 45± 3

Maximum Torque: 155 ft lbs

WARNING: Operating above the max. torque can damage the valve

b) Included in the bevel gear kit is a 1.4" x 4" sticker that should be installed after the valve has been buried. It is important for the sticker to be placed in a visible area for future operators.

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DIMENSIONS, TORQUES

Gearbox	Ratio	Weight	Length
4-8 IV IB4	3:1	35 lbs	12.5"
10-12 IV IB6	3:1	62 lbs	15"

TRENCH SIZE

Full Equipment Stack up dimensions:

Valve Size	Full Equipment Length (ft)*	Width (in)	Depth (in)**
4"	10'	50"	12" - 22"
6"	10.5'	50"	12" - 24"
8"	11'	50"	12" - 26"
10"	12'	62"	18" - 30"
12"	12.5'	62"	18" - 32"

*Trench should be made longer than the listed lengths for comfortable movement around the pipe and equipment

**Vertical install is recommended if the measurement from the top of the pipe to ground level is greater than the depth upper limit

MAX Gearbox Input Torque

Valve Size	Approx # Turns (on Gearbox)	MAX Input Torque
4 IV	45	155 ft. lbs
6 IV	63	155 ft. lbs
8 IV	81	155 ft. lbs
10 IV	97	195 ft. lbs
12 IV	115	195 ft. lbs

Warning: Going over the maximum torque can damage the gearbox and valve stem, resulting in problems operating the valve.