

**GENERAL DESCRIPTION**

Vertical Indicator Post – Adjustable Type are designed to operate non-rising stem (Inside Screw) gate valves, which are used to control an underground water supply to automatic sprinkler, water spray deluge, foam water deluge or standpipe fire protection systems. They permit operation of underground valves while providing an above ground visual indication as to whether the valve is open or shut, in addition to a means for locking the valves in a particular position. Indicator posts provide for valve operation from outside of the protected property and therefore, the opportunity for more prompt valve operation in an emergency situation.

Model D-UFP011 Indicator Post feature a telescoping barrel that can be adjusted to its final position and also permits easier setting of OPEN and SHUT Target plates easier adjustment of the post length using the initial installation and ready re-adjustment of the post length, if there is a modification in the location of the final grade.

This model will accommodate 4 through 14 inch size post indicator valves (PIV) requiring 10 to 43 turns to open and that are listed or approved for fire protection system service.

Also this model is available in varying length sizes to suit different trench depths for valves sizes 4 through 14 inch.

Indicator post are provided “standard order” for use with left hand opening valves and accept direct attachment of a 1/2” NPT mounting electric supervisory switching device which can be used by proprietary and central stations to monitor the open position of the indicator post.

Model D-UFP011 indicator post are listed by Underwriters Laboratories Inc. (UL) and Underwriters Laboratories Inc. for use in Canada (cUL) and Factory Mutual Research Corporation (FM).

**Sigma recommends the indicator post to be installed and maintained in compliance with this document as well with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction, Failure to do so may impair the integrity of these devices.**

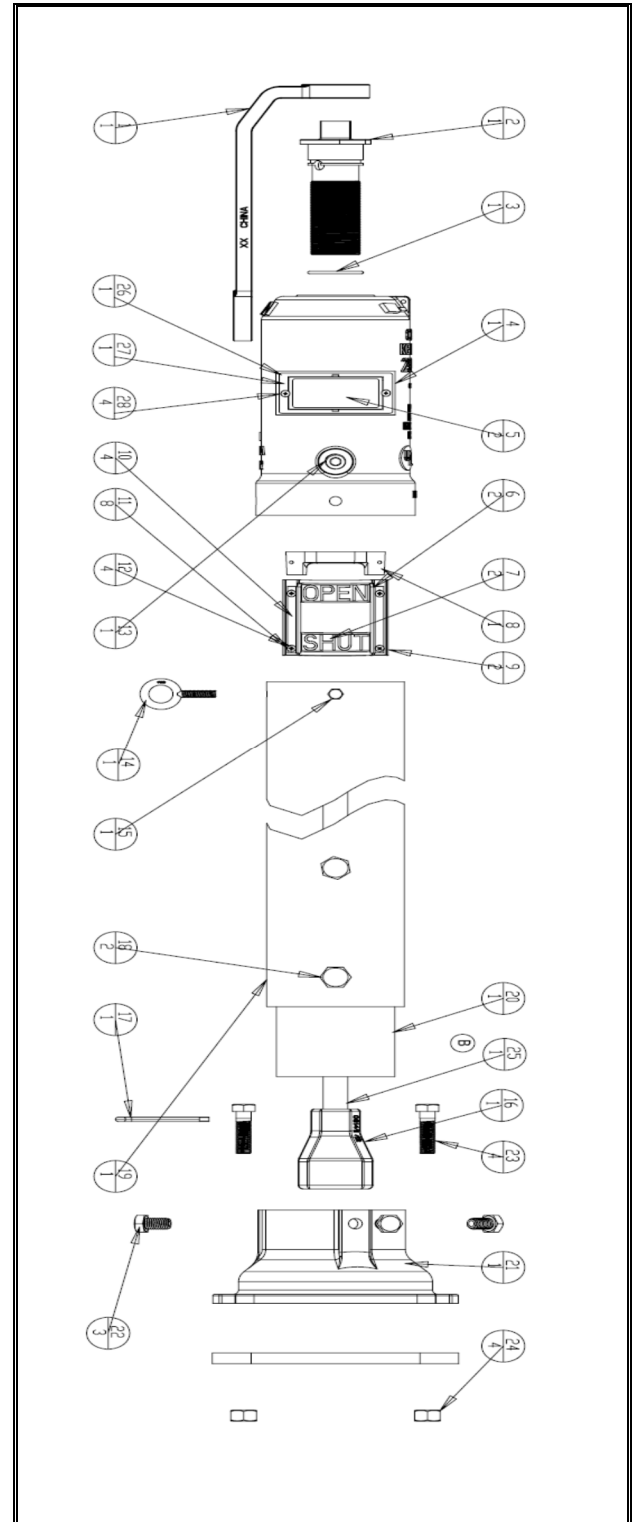


**TECHNICAL DATA**

D-UFP011 Indicator Post bolts directly onto the post indicator flange of 4 through 14 inch post indicator valves employing 2 inch operating nuts. Base flange attaches to a post indicator flange of a PIV having four bolt holes spaced at 90 deg. on a 10 ½ inch diameter bolt circle. Base flange has U-Slotted holes to facilitate easy assembly of the bolts.

The Top, telescoping barrel, base flange, locking wrench is made of Cast iron as per ASTM A-126 and the lower stand pipe is made of Ductile Iron as per DIN 100 K9 ISO 2531. The windows are made of Lexan-UV stabilized. The operating nut & Target Carrier Nut is made of Brass. Bolts & nuts are made of carbon steel and are suitable protected to avoid corrosion.

NO	PART NUMBER	QTY	DESCRIPTION	MATERIAL
1	D-UFP011LW	1	Locking Wrench	Cast Iron
2	D-UFP011ON	1	Operating Nut	Bronze
3	D-UFO011RR	1	Retainer Ring	Buna N
4	D-UFP011TOP	1	Top Section	Cast Iron
5	D-UFP011G	2	Window Glass	Lexan-UV
6	D-UFP011SPO	2	Open Target	Cast Al
7	D-UFP011SPS	2	Shut Target	Cast Al
8	DOUFP011TCN	1	Target Carrier Nut	Bronze
9	D-UFP011TCP	2	Target Carrier Plate	Sheet Metal
10	D-UFP011CTR	4	Clamp Target Retainer	Stainless Steel
11	D-UFP011PH	8	M5 Pan Head	Stainless Steel
12	D-UFP011HN24	4	M5 Hex Nut	Steel, Zinc Plated
13	D-UFP011PP	1	½" NPT Pipe Plug	Malleable Iron
14	D-UFP011EB	1	3/8" Eye Bolt # 23	Steel, Zinc Plated
15	D-UFP011HCS38	1	3/8-16 x 1 hex cap Screw	Steel, Zinc Plated
16	D-UFP011CC	1	Crane Coupling	Cast Iron
17	D-UFP011CP	1	Cotter Pin	Stainless Steel
18	D-UFP011HS34	2	¾" Hex Head Screw	Steel, Zinc Plated
19	D-UFP011TB	1	Telescoping Barrel	Ductile Iron
20	D-UFP011S	1	Lower Stand Pipe	Ductile iron
21	D-UFP011BF	1	Base Flange	Cast Iron
22	D-UFP011HS58	3	5/8 x 1 Hex Head Screw	Steel, Zinc Plated
23	D-UFP011HSC58	3	5/8 x 2 ¼ Hex	Steel, Zinc Plated
24	D-UFP011HN58	4	5/8 Hex Nut	Steel, Zinc Plated
25	D-UFP011SS	1	1" Square Stem	Steel 1020 HRS
26	D-UFP011COV	1	SS Cover	Stainless Steel
27	D-UFP011EVA	2	EVA Foam Gasket	EVA
28	D-UFP011M5	4	M5 Screw	Stainless Steel



D-UFP011 Indicator Post is available in four different order lengths. Each order length can be adjusted for different trench depth limits (Distance from the bottom of the base flange to the Bury or Ground Line) as indicated in Table 1 for the 4 through 14 inch Ever Metal Resilient Wedge PIV's based on the typical diameter of the underground pipe. For different manufacturer PIV's please contact SIGMA for information.

**Table 1: Nominal Trench Depths for Ever Metal Resilient Wedge PIV**

Valve Size	Size A		Size B		Size C		Size D	
	Min	Max	Min	Max	Min	Max	Min	Max
4"	31"	51"	49"	69"	67"	87"	88"	111"
6"	35"	55"	53"	73"	71"	91"	92"	115"
8"	42"	62"	60"	80"	78"	98"	99"	122"
10"	45"	65"	63"	83"	81"	101"	102"	125"
12"	49"	69"	67"	87"	85"	105"	106"	129"
14"	58"	78"	76"	96"	94"	114"	115"	138"

**Installation Instructions:**

PIV should be opened to the fully open position before proceeding with the indicator post installation.

**a) Disassembly of the Indicator Post Unit:**

- Remove the Top Section from the end of the barrel.
- Loosen the two screws on the barrel and slide off the top of the standpipe.

**b) Base Flange Installation:**

- Attach the base flange along with the stand pipe to the post indicator flange of the valve using the four 5/8" x 2 1/4" Hex Head Bolt and nuts provided.

**c) Ground Line Adjustments:**

- Lower the barrel over the standpipe until the ground line mark on the barrel is at the ground height and tighten the two screws securely.

**d) Square Stem Adjustments:**

- Lower the stem into the barrel/standpipe, placing the crane coupling over the valve operating nut.
- Make sure the stem engage the operating nut a minimum of 2 inches, but not more than 5 inches.
- To ensure for the correct engagement the end of the stem should be 7 inches above the top of the telescoping barrel.

**e) Target (Open & Shut) Adjustments:**

- Table 3 indicates the adjustment distance for the OPEN , SHUT positions for the 4 through 14 inch sizes of Ever Metal PIV's.

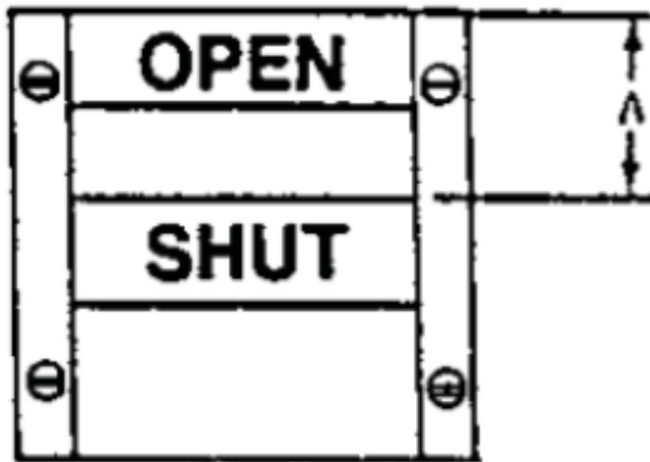
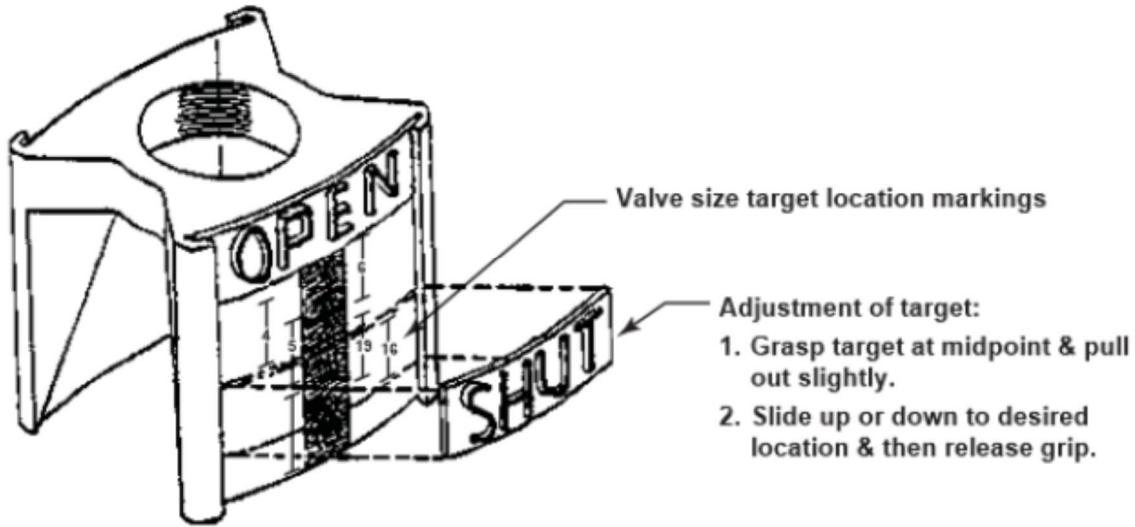
**Table 2: Adjustment of targets OPEN, SHUT positions for Ever Metal Resilient Wedge PIV – Open Left Valves**

Valve Size	4"	6"	8"	10"	12"
Distance "A"	0.833"	0.999"	1.332"	1.66"	1.99"

Position the SHUT target as indicated below and tighten the retainer screw until snug.

Avoid over tightening.

Repeat the procedure for the other side.



**Open Right Valves:**

The procedure is similar as to the open left valves except for the following difference

- a) OPEN target is placed below the SHUT target
- b) OPEN target is placed at the very bottom of the plate.

The position of the SHUT target is determined and set as described above.

**Maintenance:****1. Lubrication:**

Upper bearing area needs to be lubricated at least once in a year, by applying several drops of light machine oil or food grade grease to the areas where the Operating Nut (D-UFP011ON) contacts the Top Section (D-UFP011TOP)  
This area can be reached by removing the Locking Wrench (D-UFP011LW) and lifting upward on the Operating Nut.

**D-UFP011 Vertical Indicator Post – Lower Stand Pipe Replacement:**

1. Using the correct wrench loosen the 2 - ¾" Hex Head Screws (D-UFP011HS34) that holds the Telescoping Barrel (D-UFP011TB) to the Lower Stand Pipe (D-UFP011S).
2. Please use caution when lifting off the entire Top Assembly from the Telescoping Barrel & Base Flange (D-UFP011BF)
3. Remove the Square Stem (D-UFP011SS) and Crane Coupling (D-UFP011CC) sub-assembly.
4. Loosen the 3 – 5/8" x 1 Hex Head Screws (D-UFP011HS58) that hold the lower stand pipe with the Base Flange.
5. Remove the existing Lower Stand Pipe and set the new one into the socket in the Base Flange.
6. Tighten the 3- 5/8" x 1 Hex Head Screws securely ( 50 -100 ft-lb)
7. Please use caution when sliding the entire Top Assembly over the new Lower Stand Pipe.
8. Tighten the 2 – ¾" Hex Head Screws securely that holds the Telescoping Barrel to the Lower Stand Pipe.
9. Remove the Locking Wrench, 1 – 3/8" – 16 x 1 Hex Cap Screw (D-UFP011HCS38) and 1 - 3/8" Eye Bolt (D-UFP011EB)
10. Please use caution when lifting off the Top Section, Operating Nut, and Target Carrier Assembly from the Telescoping Barrel.
11. For a longer Lower Stand Pipe has been replaced then a Corresponding length of Square Stem (Refer Table 3 for sizes) should be replaced.
12. New Square Stem needs to be drilled for a 0.31" through hole for connecting the Crane Coupling with the Cotter Pin.

13. Using the 3 – 5/8" x 1 Hex Head Screws connect the Base Flange along with the assembled indicator post to the post indicator flange of the PIV.
14. Connect the crane coupling on the stem to the 2" Square operating Nut of the PIV.

**Table 3: Indicator Post Sizes:**

SIZE	LOWER STAND PIPE	SQUARE STEM
A	36"	72"
B	60"	88"
C	80"	100"
D	100"	120"

**Field Adjustment Instructions:**

1. Remove the Top Section from the received Indicator Post (D-UFP011)
2. Loosen the telescoping barrel screws and adjust the barrel to the ground line.
3. Cut the Square Stem to the required length above the top of the barrel end if required.
4. Set the targets "OPEN" & "SHUT" to the required distance for the corresponding valve sizes.
5. Reattach the TOP Section to the top of the Indicator Post Assembly.