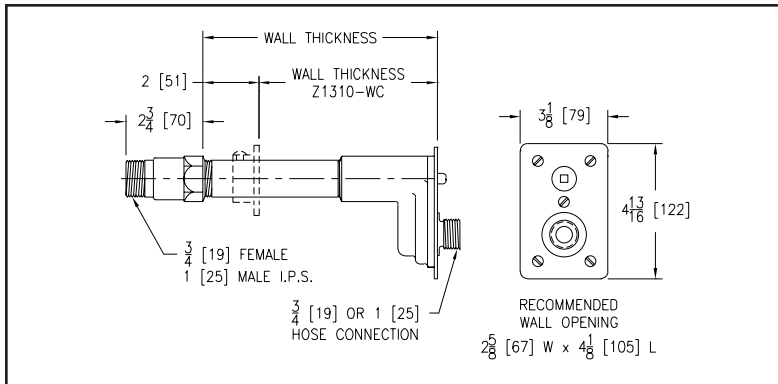
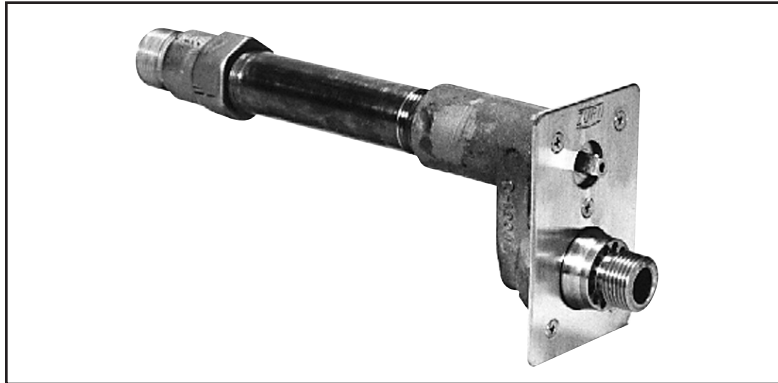


**Z1310 ECOLOTROL WALL HYDRANT – Exposed, Non-Freeze, Anti-Siphon, Automatic Draining**



**ENGINEERING SPECIFICATION:** ZURN Z1310 Exposed Ecolotrol anti-siphon automatic draining wall hydrant. Complete with non-freeze integral backflow preventer, bronze casing, all bronze interior parts, non-turning operating rod with free-floating compression closure valve, replaceable bronze seat and seat washer, and combination 3/4" [19 mm] female or 1" [25 mm] male straight IP inlet. Stainless steel face with operating key.

Wall Thickness Inches [mm]	4" [102]	6" [152]	8" [203]	10" [254]	12" [305]	14" [356]	16" [406]	18" [457]	20" [508]	22" [559]	24" [610]
Overall Length* Inches [mm]	6 1/4" [171]	8 3/4" [222]	10 3/4" [273]	12 3/4" [324]	14 3/4" [375]	16 3/4" [425]	18 3/4" [476]	20 3/4" [527]	22 3/4" [578]	24 3/4" [629]	26 3/4" [679]
Approx. Weight Lbs. [Kg]	5 [2]	5 [2]	5 [2]	8 [4]	8 [4]	8 [4]	11 [5]	11 [5]	14 [6]	14 [6]	14 [6]

\*3/4" [19 mm] female and 1" [25 mm] male IPS connections.

**Z1310 Ecolotrol Wall Hydrant**

The Z1310 Ecolotrol is an exposed, automatic draining, non-freeze, anti-siphon wall hydrant designed for commercial applications such as office buildings, institutions, hospitals, malls and retail outlets, and schools.

**Hydrant Features**

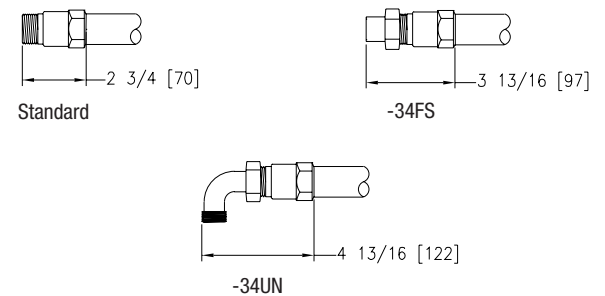
- **Certification** – IAPMO® listed. Approved under ASSE standard 1019-A (3/4" [19 mm] connection).
- **Integral Anti-Siphon Vacuum Breaker/Backflow Preventer** – Unique design utilizes an internal Equa-Balance® seal to prevent contamination of the potable water supply through back siphonage. The use of an additional hose-connection vacuum breaker with ASSE 1011 approval is not necessary.
- **Valve Seat** – Removable bronze valve seat with circular seating surface.
- **Valve** – One-piece assembly, replaceable, free-floating compression closure valve plunger operates the water flow and drainage with a maximum of two and one-half (2-1/2) turns. No adjustments are necessary.
- **Casing** – Threaded brass pipe nipple.
- **Operating Screw** – Chrome-plated brass.
- **Operating Rod** – 3/8" [10 mm] solid brass.
- **Faceplate** – Constructed of type 304 stainless steel with brush finish.
- **Modular Installation** – Hydrant may be installed in a horizontal or vertical orientation. Fits standard modular brick course when installed horizontally.
- **Drainage** – Through circular drain ports of the nozzle.
- **Operating Pressures** – Minimum running pressure 8 psi. Maximum static pressure 125 psi.
- **Temperature Range** – Minimum 33°F. Maximum 130°F.

**OPTIONS**

**SUFFIXES**

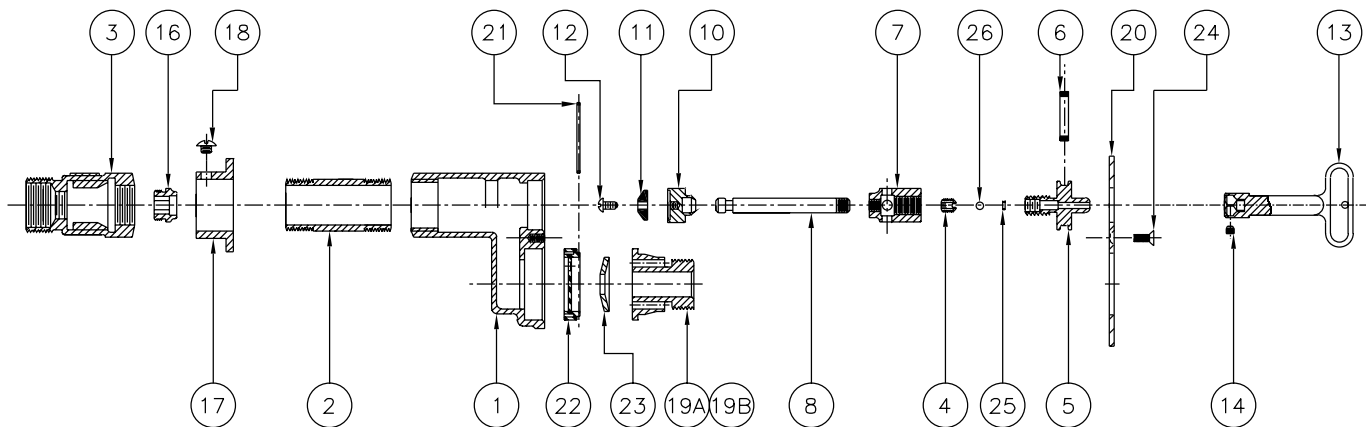
- PB Polished Bronze Face
- RA2 12" [305 mm] Replacement Rod Assembly with Repair Kit (-RK)
- RA4 24" [610 mm] Replacement Rod Assembly with Repair Kit (-RK)
- RK Hydrant Parts Repair Kit
- SB Statuary Bronze Face (Specify light, medium, or dark finish.)
- WC Wall Clamp
- 34FS 3/4" [19 mm] Solder Female Inlet Adapter
- 34UN 3/4" [19 mm] IP 90° Inlet Elbow with Union Nut

**Inlet Descriptions**



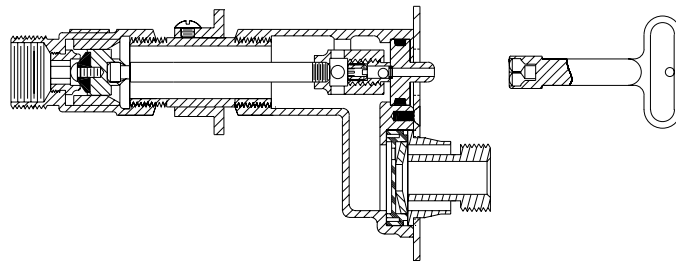
## Z1310 ECOLOTROL WALL HYDRANT Parts Assembly, Parts List, and Operating Rod Assemblies

### Z1310 Parts Assembly



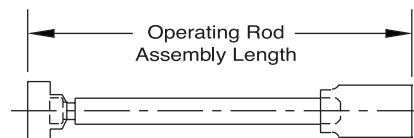
### Z1310 Parts List

Item	Description	Qty.	Part No.
1	Head	1	56061-003
2	Casing	1	50270-XXX
3	Valve Housing	1	31258-001
*4	Setscrew	1	51459-001
*5	Operating Screw	1	25049-002
*6	O-Ring	1	23750-028
*7	Operating Coupling	1	25147-001
8	Operating Rod	1	45042-XXX
10	Washer Guide	1	25050-001
*11	Washer	1	23075-001
*12	Screw #10-24 NC	1	14853-042
*13	Key	1	59546-001
14	Key Setscrew (Optional)	1	18006-027
*16	Removable Seat	1	25262-001
17	Wall Clamp (Optional)	1	50268-001
18	Wall Clamp Screw (Optional)	1	26050-004
19A	3/4" Nozzle	1	50799-005
19B	1" Nozzle	1	50799-006
20	Faceplate	1	56115-005
*21	Disc O-Ring	1	23750-204
22	Disc	1	50819-001
*23	Equa-Balance® Seal	1	50785-001
24	Faceplate Screw	5	22698-047
*25	Ball O-Ring	1	23750-232
*26	Ball	1	51458-001



### Operating Rod Assemblies

4" Wall	4-3/4"
6" Wall	6-3/4"
8" Wall	8-3/4"
10" Wall	10-3/4"
12" Wall	12-3/4"
14" Wall	14-3/4"
16" Wall	16-3/4"
18" Wall	18-3/4"
20" Wall	20-3/4"
22" Wall	22-3/4"
24" Wall	24-3/4"



\*Items are available in -RK Repair Kit Option bag (#66955-201-9).

## Z1310 ECOLOTROL WALL HYDRANT Troubleshooting Guide

### Z1310 Troubleshooting Guide

PROBLEM	CAUSE	SOLUTION
Hydrant will not operate when turned on.	Water supply is shut off.	Turn on water supply.
Cannot turn the hydrant on with key.	Hydrant hasn't been used for a long time – O-Ring has adhered to the operating screw and head.	Follow steps 1-2, 5, and 9-10 of the Service Guide.
Water running continuously from orifice in operating screw. (Note: When first turning hydrant on, water may spit for a few seconds until ball seats on O-Ring.)	Debris between ball and O-Ring (in operating screw).	Follow steps 1-2, 6, and 9-10 of the Service Guide.
	Ball O-Ring not seated properly (in operating screw).	Follow steps 1-2, 6, and 9-10 of the Service Guide.
Water sprays from holes around nozzle when hydrant is on.	Equa-Balance® seal is damaged.	Follow steps 1-3 and 9-10 of the Service Guide.
Hydrant will not self-drain when it is shut off (hose and nozzle are attached).	Screw nozzle is closed.	Open screw nozzle so hose will drain some, relieving pressure.
	Gun nozzle is closed.	Squeeze gun nozzle trigger so hose will drain some, relieving pressure.
Water does not shut off completely when hydrant is turned off.	Debris between seat and washer.	Follow steps 1-2, 4, and 8-10 of the Service Guide. Clean by turning water supply on and flush hydrant.
	Washer is worn out.	Follow steps 1-2, 4, and 7-10 of the Service Guide.
	Wire draw in seat.	Replace seat.
Hydrant exhibits low flow.	Water supply to the hydrant is restricted.	Check water supply to ensure that all upstream valves are fully open.

⚠ **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 ⚠ **ADVERTENCIA:** Cáncer y daño reproductivo - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 ⚠ **AVERTISSEMENT:** Cancer et effets néfastes sur la reproduction - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Z1310 ECOLOTROL WALL HYDRANT Service Guide

### Z1310 Service Guide

#### Step 1: Shutting Off the Water Supply to the Hydrant

Locate the supply shut-off valve and rotate until water supply is off.

#### Step 2: Removing the Faceplate and Adjacent Components

Using 1/8" Allen wrench, remove the five faceplate screws (24) from head (1) by turning counterclockwise. Remove the faceplate (20), and nozzle (19).

If the Equa-Balance® seal was not the reason for service – skip to step 4.

#### Step 3: Replacing the Equa-Balance® Seal

Remove the current Equa-Balance® seal (23). Check seal for damage (punctures, rips, etc.). Replace damaged seal with a new seal (23) observing proper orientation (EQUA-BALANCE® SEAL SHOULD CUP INWARD IN ITS REPLACED STATE.)

#### Step 4: Removing the Internal Operating Assembly

The internal operating assembly (4-8, 10-12, and 25-26) can be removed by gripping the square end of the operating screw (5) with a pair of pliers and pulling straight out.

If the operating screw O-Ring was not the reason for service – skip to step 6.

#### Step 5: Replacing the Operating Screw O-Ring

Remove the operating screw (5) from operating coupling (7) by turning clockwise and slip the old O-Ring (6) off, and replace with new O-Ring (6). Reinstall operating screw (5) into operating coupling (7) by turning counterclockwise. (Note: Lubricate the operating screw (5) threads and the O-Ring (6) with Lubriplate FGL-2 if needed.)

If the operating screw assembly was not the reason for service – skip to step 7.

#### Step 6: Checking Operating Screw Assembly

Remove the operating screw (5) from the operating coupling (7) by turning clockwise, and using 5/32" Allen wrench, remove setscrew (4) by turning counterclockwise, remove stainless steel ball (26) and check orientation of O-Ring (25). If not seated properly, reseal, replace the ball (26) and replace setscrew (4) using Allen wrench and turning clockwise until flush with operating screw (5) or until tight and flush with operating screw (5).

(Note: Lubricate and reinstall as in step 5.)

If the hydrant shutoff washer was not the reason for service – skip to step 8.

#### Step 7: Replacing the Hydrant Shutoff Washer

Remove #10-24 NC x 3/8 screw (12) using a flat screwdriver and turning screw (12) counterclockwise, remove washer (11) and replace with new washer (11) and new screw (12) turning screw clockwise until tight.

#### Step 8: Replacing the Internal Operating Assembly

There is a flat or a V-notched boss inside of the hydrant head (1) that keeps the operating coupling (7) from rotating when hydrant is turned on and off. With operating screw (5) turned counterclockwise into operating coupling (7) until it stops, and making sure that a flat side or corner of operating coupling (7) lines up with appropriate boss, reinsert the internal operating assembly into the hydrant.

#### Step 9: Replacing the Wall Plate

Insert nozzle (19) into place and fasten the faceplate (20) to head (1) using the 1/8" Allen wrench and the five faceplate screws (24). Rotate the screws clockwise until screws are snugged tight. (By hand only!)

#### Step 10: Turning On the Water Supply

Locate the water supply shut-off valve and rotate until water supply is on.

### Z1310 Ecolotrol Wall Hydrant – 3/4" Hose Connection

Z1310 Ecolotrol Wall Hydrant – 3/4" Hose Connection				
Static Pressure (psi)	Running Inlet Pressure (psi)	Running Outlet Pressure (psi)	Flow Rate (gpm)	Pressure Drop Across Unit (psi)
10	3.1	0.1	2.8	3.0
20	11.3	1.0	6.0	10.3
30	22.4	1.7	7.3	20.7
40	31.8	2.5	8.6	29.4
50	40.9	3.2	9.7	37.7
60	48.5	3.9	10.6	44.6
70	60.1	7.9	12.2	52.2
80	67.8	9.5	13.3	58.2
90	76.5	10.7	14.4	65.8

