

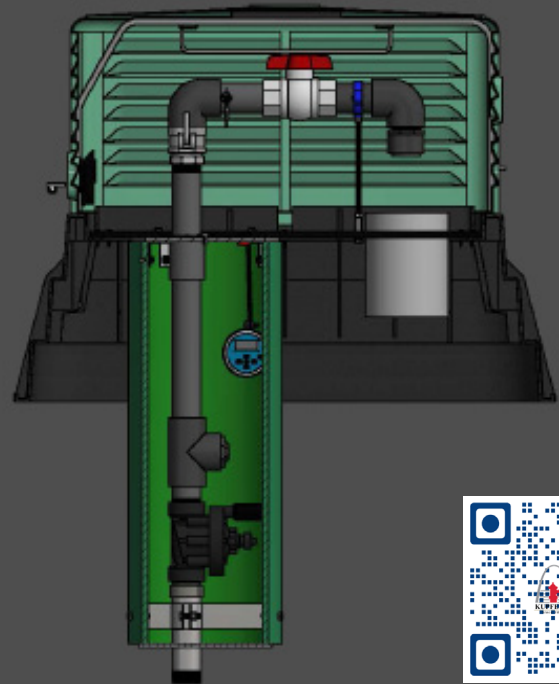
Eclipse 9800 Automatic Flushing Station

Why Automatic Flushing?

- Keep your dead end water fresh and safe for consumption
- Save time and labor by eliminating the need for manual flushing
- Save water by flushing at lower volumes than hydrants
- Flush more regularly and maintain consistent residual levels

Product Details

- 2" Permanent automatic flushing station (1" model available)
- Adjustable flow rates between 50 and 200 GPM
- Housed in UV-Resistent enclosure
- Direct discharge to storm or sanitary sewer - flushing is out of sight!
- Program up to 12 flush cycles per day
- Flexible flush durations from one minute up to 6 hours
- Fully serviceable from above ground
- Powered by one 9V battery - only need to change once per year!





**Digital or Bluetooth
Controller**

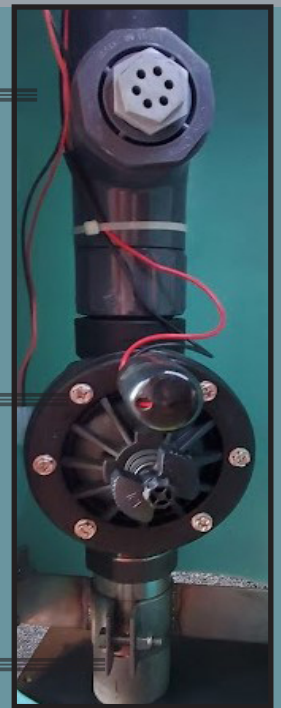


**UV-Resistant
Enclosure**

**Spring-loaded
drain**

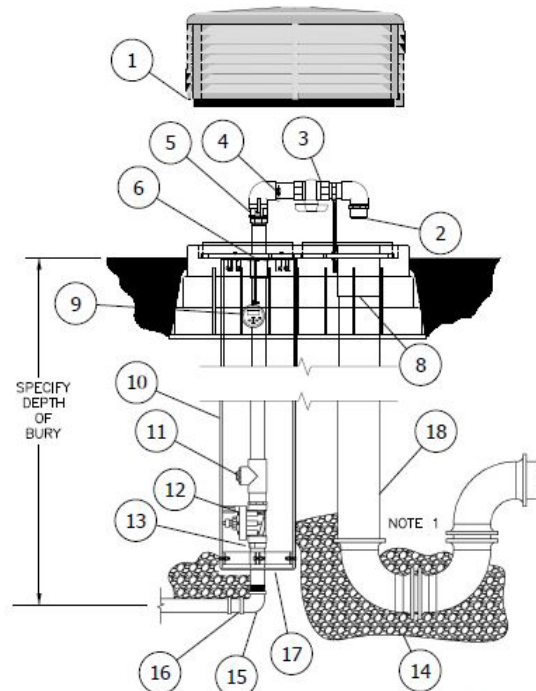
**2" Solenoid
Operated Valve**

**Piston valve design
for easy removal/
maintenance**



#9800 AUTOMATIC FLUSHING DEVICE

Flushing device shall be installed in the
following locations:



ITEM	ITEM / DESCRIPTION	OPTIONAL	BY OTHERS
1	UV RESISTANT LOCKABLE LID		
2	DIFFUSER / TRAP		
3	2" PVC BALL VALVE		
4	SAMPLING POINT		
5	2" STAINLESS STEEL QUICK DISCONNECT		
6	REMOVABLE ACCESS PLATE		
7	DECHLOR BASKET	X	
8	6" SEWER PIPE CONNECTION		
9	CONTROLLER		
10	SDR 35 PVC PIPE		
11	AUTOMATIC DRAIN		
12	2" AUTOMATIC VALVE		
13	O-RING CONNECTOR		
14	1" CLEAN ROCK		X
15	2" S.S. FIP INLET		X
16	2" MIP x COMPRESSION ADAPTER		X
17	DEBRIS PLATE		
18	6" PVC SEWER PIPE & P TRAP		X
19	SCHEDULE 80 PVC PIPE		

LAYOUT NOTES:

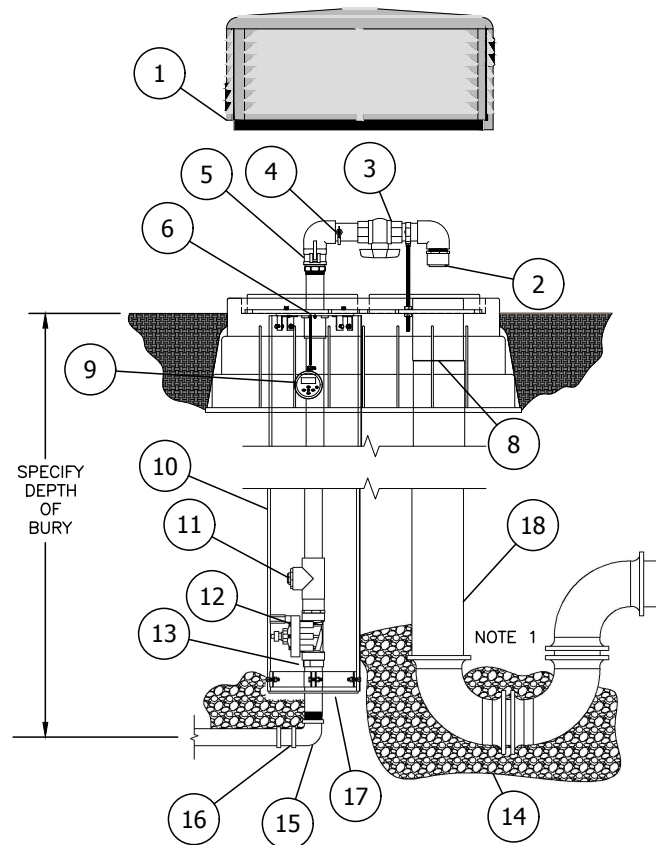
- 1.) KUPFERLE RECOMMENDS THE INSTALLATION OF A 6" DWV P TRAP

Automatic flushing device shall have a 2" stainless steel FIP inlet that will lead vertically to the bottom of a 2" automatic flushing valve. The flushing valve shall control the flow of water through the hydrant and its diaphragm with the extension and retraction of a DC latching solenoid and have a 150 PSI rating. Each unit shall be furnished with a stand-alone valve controller. The valve controller will not require a second hand-held device for programming. Controller must have minimum of 12 possible flushing cycles per day. Controller shall be submersible to 12 feet, operate with a 9 volt battery, and have resin-sealed electrical components. The solenoid shall have no loose parts when removed from the valve. Each unit shall have a all stainless steel sampling point. Removal of the 2" valve shall be possible via an o-ring connector located beneath the valve after the above ground disconnection of the stainless steel access plate. Valve assembly shall be housed in a PVC enclosure and each unit shall be self-draining, non-freezing. All above-ground components shall be contained within a UV-Resistant locking cover.

Unit model # shall be 9800 as manufactured by Kupferle Foundry Company, St. Louis MO (1-800-231-3990), or approved equal.

#9800 AUTOMATIC FLUSHING DEVICE

Flushing device shall be installed in the following locations:



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1	UV RESISTANT LOCKABLE LID		
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3	2" PVC BALL VALVE		
4	SAMPLING POINT		
5	2" STAINLESS STEEL QUICK DISCONNECT		
6	REMOVABLE ACCESS PLATE		
7	DECHLOR BASKET	X	
8	6" SEWER PIPE CONNECTION		
9	CONTROLLER		
10	SDR 35 PVC PIPE		
11	AUTOMATIC DRAIN		
12	2" AUTOMATIC VALVE		
13	O-RING CONNECTOR		
14	1" CLEAN ROCK		X
15	2" S.S. FIP INLET		X
16	2" MIP x COMPRESSION ADAPTER		X
17	DEBRIS PLATE		
18	6" PVC SEWER PIPE & P TRAP		X
19	SCHEDULE 80 PVC PIPE		

LAYOUT NOTES:

- 1.) KUPFERLE RECOMMENDS THE INSTALLATION OF A 6" DWV P TRAP

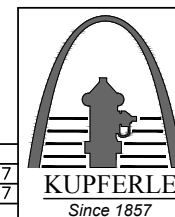
Automatic flushing device shall have a 2" stainless steel MIP inlet that will lead vertically to the bottom of a 2" automatic flushing valve. The flushing valve shall control the flow of water through the hydrant and its diaphragm with the extension and retraction of a DC latching solenoid and have a 220 PSI rating. Each unit shall be furnished with a stand-alone valve controller. The valve controller will not require a second hand-held device for programming. Controller must have minimum of 12 possible flushing cycles per day. Controller shall be submersible to 12 feet, operate with a 9 volt battery, and have resin-sealed electrical components. The solenoid shall have no loose parts when removed from the valve. Each unit shall have a all stainless steel sampling point. Removal of the 2" valve shall be possible via an o-ring connector located beneath the valve after the above ground disconnection of the stainless steel access plate. Valve assembly shall be housed in a PVC enclosure and each unit shall be self-draining, non-freezing. All above-ground components shall be contained within a UV-Resistant locking cover.

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NOTE: Flush water lines free of debris before installation

DD/MM/YY	ISSUED FOR REFERENCE	
DATE	STATUS / REVISION	

SHEET 1 OF 1	SCALE: 1/2"=1'	DRAWN	SMS	05/30/17
9800 SPEC SHEET		APPROVED	DCL	05/30/17
		MODIFIED	KJW	09/23/22



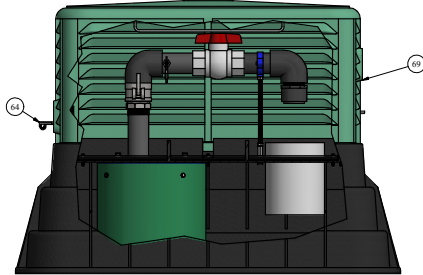
2511 NORTH 9TH STREET
ST. LOUIS, MO 63102
1-800-231-3990
FAX 314-231-2820
www.hydrants.com

PATENTED

9800 CUT SHEET

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTES
1	1	1/4 X 1/8 SSB	1/4" x 1/8" S.S. HEX BUSHING	
2	6	10805	BOLT FOR VALVE CYLINDER BRACKET	
3	29.000 in	2PVC	2" SCH. 80 PVC PIPE	B
4	1	20D-ASS	2" S.S. "A" QUICK DISCONNECT	C
5	1	20D-RSS	2" S.S. "R" QUICK DISCONNECT	C
6	1	344-B	BOLT FOR THREADED ROD ASSEMBLY	
7	6	345-N-9400	1/4" S.S. NUT	
8	1	346-N-9400	CONTROLLER BRACKET NUT	
9	1	346-S	CONTROLLER SCREW	
10	1	66S01	PETCOCK BODY	P
11	1	66S02	PETCOCK NUT	P
12	1	66S03	PETCOCK PLUNGER	P
13	1	66S04	HANDLE PIN	P
14	1	66S05	PETCOCK NOZZLE	P
15	1	66S08	O-RING (PETCOCK PACKING NUT)	P
16	1	66S10	G-RING (PETCOCK STEM)	P
17	1	66S22	PETCOCK CAP	C
18	4	66S41	5/16" 1.8 x 1" S.S. Hex Head Bolt	
19	6	77Q-9400	S.S. THREADED NUT	
20	32.000 in	9401	BARREL PROTECTOR (12" PIPE)	B
21	1	9405 - Valve Piston - Raw	VALVE PISTON	



UV RESISTANT ENCLOSURE (NOT TO SCALE)

PGV REPAIR PARTS LIST (12 BOLTS)

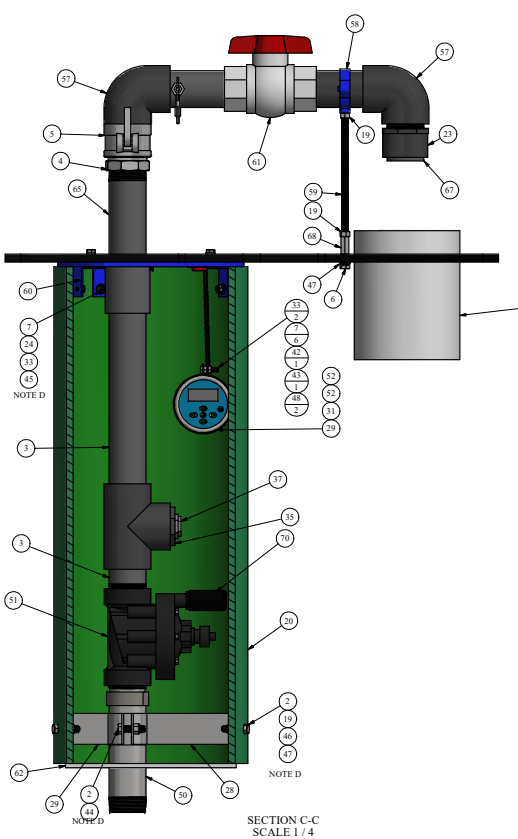
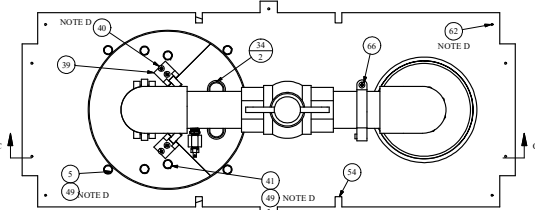
* 0	9516	2" PGV VALVE	C
*	HV414200	9516 VALVE SPRING	A.C.
*	HV414600	9516 FLOW CONTROL ASSEMBLY	A.C.
*	HV414800	9516 DIAPHRAGM SUPPORT	A.C.
*	HV415400	9516 VALVE PLUG O-RING	A.C.
*	HV415500	9516 BONNET	A.C.
*	HV415600	9516 DIAPHRAGM ASSEMBLY	A.C.
*	HV419300	9516 BODY PLUG	A.C.
*	HV433300	9516 VALVE BODY	A.C.
*	HV472800	9516 BONNET SCREW	A.C.
*	HV561200	9516 FLOW CONTROL KNOB	A.C.
*	HV561500	9515/9516 BLEED SCREW ASSEMBLY	A.C.

REPAIR KITS

PART NUMBER	DESCRIPTION	PARTS INCLUDED
X66-PETCOCK	S.S. PETCOCK ASSEMBLY	66S01 BODY (1), 66S08 O-RING (1), 66S02 NUT (1), 66S03 O-RING (1), 66S04 PIN (1), 66S05 NOZZLE (1), 66S22 CAP (1)
X9400-AUTO DRAIN	AUTO DRAIN ASSEMBLY FOR 3" D.O.B. OR LESS	9447 TEE (1), 9446 BUSHING (1), 9448 AUTO DRAIN (1), 9449 SPRING (1), 2PVC (1)
X9405	VALVE PISTON WITH O-RINGS	9405 PISTON (1), 9421 O-RING (3)
X9420-O	REMOVABLE ACCESS PLATE W/ CAPS	9420-O ACCESS PLATE REMOVABLE (1), 9444 CAPS (2), 9428-O ACCESS PLATE BASE (1), 9451 HINGE CLAMP (2), 9452 SCREW (4), 9453 BOLT (2), 9465 LOCK WASHER (2), 346-S-9400 SCREW (1), 346-N-9400 NUT (1)
X9428-O	ACCESS PLATE BASE COMPLETE	9448 AUTO DRAIN (1), 9449 SPRING (1)
X9448-49	AUTO DRAIN 3" D.O.B. OR LESS	9448 AUTO DRAIN (1), 9450 SPRING (1)
X9448-50	AUTO DRAIN 3.5" - 6" D.O.B.	9448 AUTO DRAIN (1), 9454 SPRING (1)
X9448-54	AUTO DRAIN 6.5" D.O.B.	9448 AUTO DRAIN (1), 9454 SPRING (1)
X9517-BIG	CONTROLLER WITH BATTERY FOR 9400 OR 9800	9517 CONTROLLER (1), 9518 BATTERY (2), 9414 COVER (1), 9412 WIRE CONNECTOR (2), 9414 WIRE RECEPTACLE (1)
X9800-AERATOR	9800 AERATOR ASSEMBLY	9407 PVC ADAPTOR (1), 9830 STREAM SHAPER (1)
X9800-ACC PLATE	ACCESS PLATE COMPLETE	9420-O ACCESS PLATE REMOVABLE (1), 9444 CAPS (2), 9428-O ACCESS PLATE BASE (1), 9451 HINGE CLAMP (2), 9452 SCREW (4), 9453 BOLT (2), 9465 LOCK WASHER (2), 346-S-9400 SCREW (1), 346-N-9400 NUT (1)
X9800-LOWER-#	BELOW GRADE ASSEMBLY (EACH 6" D.O.B. 4" OR GREATER)	2PVC SCH 80 PIPE (1.75), 9814 2" PVC PIPE W/ THREADS (1), 9406 PVC COUPLING (1), 9447 TEE FOR AUTO DRAIN (1), 9446 BUSHING FOR AUTO DRAIN (1), 9448 AUTO DRAIN (1), 9515 ICV VALVE (1), 9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (3), 9449 SPRING (1), 2PVC UNION (1)
X9800-LOWER-3'	BELOW GRADE ASSEMBLY (3' BURY OR LESS)	2PVC SCH 80 PIPE (1.75), 9814 2" PVC PIPE W/ THREADS (1), 9406 PVC COUPLING (1), 9447 TEE FOR AUTO DRAIN (1), 9446 BUSHING FOR AUTO DRAIN (1), 9448 AUTO DRAIN (1), 9515 ICV VALVE (1), 9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (3), 9449 SPRING (1), 2PVC UNION (1)
X9800-UP-PVC	9800 UPPER ASSEMBLY COMPLETE	2PVC SCH 80 PIPE (1.75), 9814 2" PVC PIPE W/ THREADS (1), 9406 PVC COUPLING (1), 9447 TEE FOR AUTO DRAIN (1), 9446 BUSHING FOR AUTO DRAIN (1), 9448 AUTO DRAIN (1), 9515 ICV VALVE (1), 9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (3), 9449 SPRING (1), 2PVC UNION (1)
X380600	9515 BONNET COMPLETE	HV380600 BONNET (1), HV561200 KNOB (1), HV561500 BLEED SCREW (1), HV374000 O-CLIP (1), HV560800 FLOW CONTROL (1)
X458200	SOLENOID WITH CONNECTORS (SPECIFY DEPTH OF BURY)	HV458200 SOLENOID (1), 9411 WIRE PINS (2), 9413 RECEPTACLE (1), 9415 RED WIRE (SPECIFY D.O.B.), 9416 BLACK WIRE (SPECIFY D.O.B.), 9417 BUTT SPLICE (2), 9418 HEAT SHRINK (25), 9415 HEAT SHRINK (25)
Z9800-BLUE TOOTH	9800 BLUE TOOTH KIT	9530 CONTROLLER (1), CONTROLLER HOLDER (1), 77Q-9400 NUT (2), 9460 WASHER (2), 9414 WIRE RECEPTACLE (1), 9412 WIRE CONNECTOR (2), 9531 BATTERY FOR BLUE TOOTH (2)
X9400-PVC VALVE	VALVE ASSEMBLY	9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (3), 9515 ICV VALVE (1), 2PVC SCH 80 PIPE GxT (3), 9447 2PVC TEE GxGxG, 9446 BUSHING FOR AUTO DRAIN (1), 2PVC SCH 80 PIPE GxG (2.5), 2PVC UNION (1)

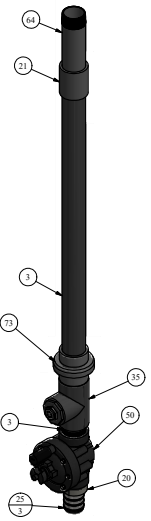
ICV (6 BOLTS) PARTS LIST

*	HV365400	9515 VALVE SPRING	A.C.
*	HV365500	9515 VALVE BODY	A.C.
*	HV365900	9515 DIAPHRAGM SUPPORT	A.C.
*	HV366700	9515 BONNET BOLT	A.C.
*	HV374000	9515 O-CLIP RETAINER	A.C.
*	HV374500	9515 DIAPHRAGM ASSEMBLY	A.C.
*	HV360800	9515 FLOW CONTROL ASSEMBLY	A.C.
*	HV561200	9515 FLOW CONTROL KNOB	A.C.
*	HV561500	9515/9516 BLEED SCREW ASSEMBLY	A.C.

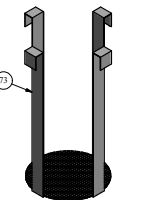


SECTION C-C
SCALE 1 / 4

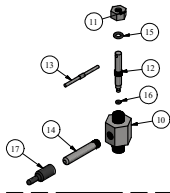
X9800-LOWER-# ASSEMBLY



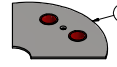
OPTIONAL 9815 DECHLORE BASKET



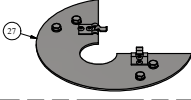
PETCOCK ASSEMBLY



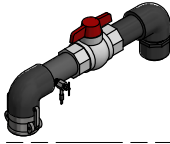
X9420-O ASSEMBLY



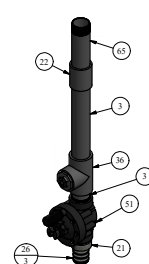
X9428-O ASSEMBLY



X9800-UP-PVC ASSEMBLY



X9800-LOWER-3' ASSEMBLY



DRAWN	4/17/2017	
CHECKED	5/23/2017	
DCL		
MODIFIED	05/26/2021	
KJW		
SIZE	SCALE	
D	1 / 4	
DWG NO	#9800 Cut_Rev4	SHEET
		1 OF 1
		REV 4

LEGEND

X	STANDARD TAG
Y	TAG WITH Y QUANTITY

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