

Eclipse 9400

Permanent Automatic Flushing Station for Any Climate

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

Product Details:

- Permanent 2" Automatic Flushing Station (1" also available)
- Housed in UV-resistant enclosure
- Discharges to surface - ideal for more remote areas
- Adjustable flow rates from roughly 40-200 GPM (site/pressure dependent)
- Digital programmable controller (standard) or bluetooth controller (optional)
- Program up to 12 flush cycles per day and up to 6 hours per flush
- Fully serviceable from above ground



Kupferle | 800-231-3990 | hydrants.com





**Digital
Controller**



**Bluetooth
Controller**

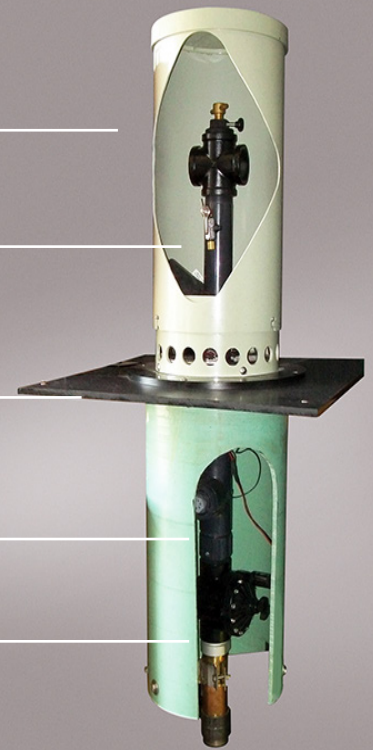
**Adjustable Flow
Control**

**Stainless Steel
Sampling Bibb**

**Diffusion/Splash
Plate**

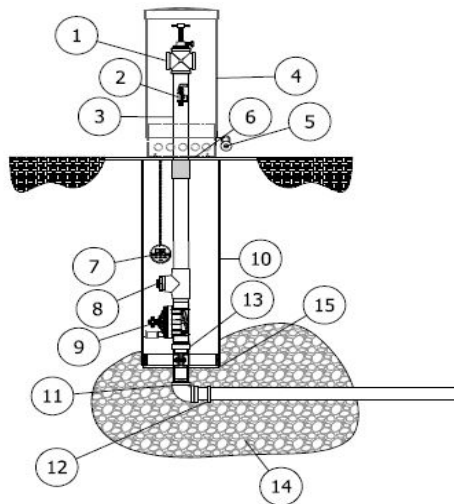
**Spring-Loaded
Drain**

**2" Solenoid
Operated Valve**



#9400 AUTOMATIC FLUSHING DEVICE

#9400 Automatic Flushing device shall be installed in the following locations:



ITEM	ITEM / DESCRIPTION	OPTIONAL	BY OTHERS
1	2" WATER FLOW RESTRICTOR		
2	SAMPLING POINT		
3	2" PVC PIPE		
4	UV RESISTANT LOCKABLE DOME ENCLOSURE		
5	LOCKING POINT		
6	REMOVABLE ACCESS PLATE		
7	CONTROLLER		
8	AUTOMATIC DRAIN		
9	2" AUTOMATIC VALVE		
10	SDR 35 SEWER PIPE		
11	2" SS MIP INLET	X	X
12	2" MIP x COMPRESSION ADAPTER		X
13	O-RING CONNECTOR		
14	1" CLEAN ROCK		X
15	DEBRIS PLATE		

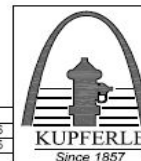
Automatic flushing device shall have a 2" Stainless Steel MIP inlet, that will lead vertically to the bottom into a 2" automatic flushing valve. The flushing valve shall control the flow of water through the hydrant and its diaphragm with the extension and retraction of a DC latching solenoid and have a 220 PSI rating. Each unit shall be furnished with a stand-alone valve controller. Valve controller will not require a second hand-held device for programming. Controller must have minimum of 12 possible flushing cycles per day. Shall be submersible to 12 feet, operate with a 9 volt battery and have resin-seated electrical components. Solenoid shall have no loose parts when removed from valve. Removal of 2" solenoid valve shall be possible via an o-ring connector located under the valve after removal of stainless steel access plate. Valve assembly shall be contained within a UV-resistant locking cover.

Unit model # shall be 9400 as manufactured by Kupferle Foundry Company. Model #9400 St. Louis, MO. 1-800-231-3990, or approved equal.

NOTE: Flush water lines free of debris before installation

DATE	STATUS / REVISION	

SHEET OF	SCALE: 1/2"=1'	DRAWN	INITIALS	DATE
#9400 SPEC SHEET		APPROVED	SMS	10/4/16
		MODIFIED	DCL	10/4/16



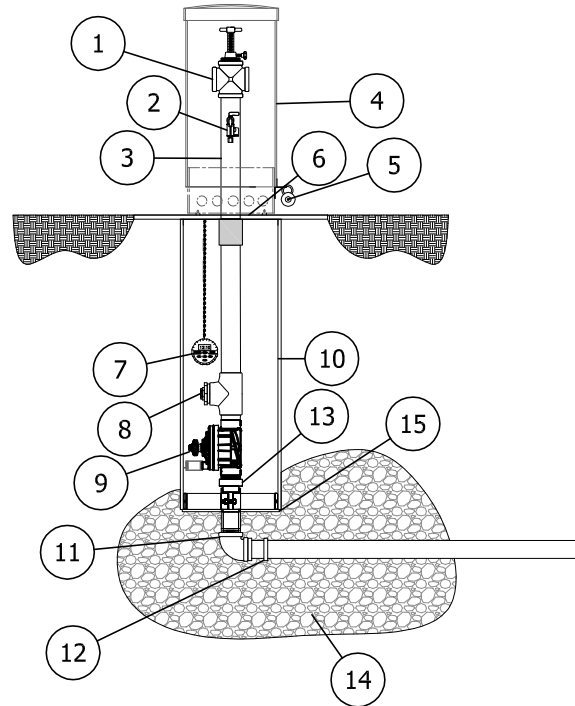
2511 NORTH 9TH STREET
ST. LOUIS, MO 63102
1-800-231-3990
FAX 314-231-2820
www.hydrants.com

Kupferle | Saint Louis, Missouri | hydrants.com



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DATE	STATUS / REVISION	KUPFERLE Since 1857 2511 NORTH 9TH STREET ST. LOUIS, MO 63102 1-800-231-3990 FAX 314-231-2820 www.hydrants.com	
SHEET OF			
SCALE: 1/2"=1'			
#9400 SPEC SHEET			
DRAWN		INITIALS	DATE
APPROVED		SMS	10/4/16
MODIFIED		DCL	10/4/16

PATENTED

9400 CUT SHEET

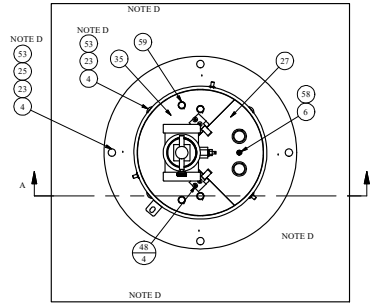
PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTES
1	1	1/4" x 1/8" SHH	1/4" x 1/8" S.S. HEX BUSHING	
2	6	10805	BOLT FOR VALVE BRACKET	
3	17,500 in	2PVCPC	*Varies*	
4	2	345-N-9400	1/4" S.S. NUT	
5	1	346-N-9400	CONTROL RING BRACKET NUT	
6	1	346-S	BOLT FOR CHAIN MOUNT	
7	1	66501	PETCOCK BODY	P
8	1	66502	PETCOCK NUT	P
9	1	66503	PETCOCK PLUNGER	P
10	1	66504	HANDLE PIN	P
11	1	66505	PETCOCK NOZZLE	P
12	1	66508	O-RING (PETCOCK PACKING NUT)	P
13	1	66510	O-RING (PETCOCK STEM)	P
14	1	66522	PETCOCK CAP	C
15	4	77Q-9400	3/8" S.S. NUT	
16	32,000 in	9401	BARREL PROTECTOR (12" PIPE)	
17	1	9402	PLATFORM FOR 9400	C
18	1	9403	COVER FOR 9400	C
19	1	9404	BASE FOR 9400	C
20	1	9405 - Valve Piston - Raw	VALVE PISTON	C
21	1	9406	2" SCH 80 PVC COUPLING	
22	4	9408	BRACKET FOR PLATFORM TO BARREL PROTECTOR	
23	8	9409	BOLTS FOR BASE RING	
24	4	9410	MACHINE SCREW FOR COVER RING TO BARREL PROTECTOR	
25	9	9419	S.S. FLAT WASHER	
26	1	9420-O	ACCESS PLATE (REMOVABLE)	
27	3	9421	VALVE PISTON O-RING	C
28	1	9422	WATER RESTRICTOR CROSS	
29	1	9423	WATER RESTRICTOR CAP	
30	1	9424	WATER RESTRICTOR SCREW	
31	1	9425	WATER RESTRICTOR HANDLE	
32	1	9426	PVC WATER RESTRICTOR PLATE	
33	1	9427 - Water Restrictor Knob	Plastic Head Thumb Screw with Hex Drive	C
34	1	9428-O	ACCESS PLATE (BASE)	
35	1	9429	ACCESS PLATE COVER RING	C
36	1	9430-L	VALVE CYLINDER BRACKET - LONG	
37	1	9430-S	VALVE CYLINDER BRACKET - SHORT	
38	1	9431	CONTROLLER HOLDER COVER	A.C.
39	1	9433	SOLENOID COVER	A
40	1	9434	CONTROLLER COVER BUTTON	A.C.
41	1	9438	1/4" S.S. BOLT	
42	2	9444	CAPS FOR REMOVABLE ACCESS PLATE	C
43	1	9446	2 x 1 in SCH 80 AUTODRAIN BUSHING	
44	1	9447	2" SCH 80 PVC TEE	
45	1	9448	AUTO DRAIN	
46	1	9449	SPRING FOR 3" OR LESS D.O.B.	A.C.
47	2	9451	HINGE CLAMP	
48	4	9452	HINGE CLAMP SCREW	
49	4	9453	5/16" BOLT FOR ACCESS PLATE	
50	1	9455	CHAIN FOR CONTROLLER	C
51	1	9456	CONTROLLER HOLDER	C
52	2	9457	3/8-16 S.S. LOCK NUT	
53	18	9458	1/4" S.S. LOCK WASHER	
54	4	9460	WASHER FOR VALVE BRACKET	
55	4	9461	LOCK WASHER FOR VALVE BRACKET	
56	1	9462	RUBBER SKIRT FOR 9400	C
57	1	9463	ACCESS PLATE & RING GASKET	A
58	2	9464	S.S. "S" HOOK	
59	4	9465	S.S. LOCK WASHER FOR ACCESS PLATE	
60	1	9466	PLATFORM SPLASH PLATE	
61	14,000 in	9473	2" SCH 80 PVC PIPE WITH THREADS	
62	1	9474	WATER RESTRICTOR SEAT RUBBER	C
63	1	9476	VALVE CYLINDER	C
64	1	9515	2" ICV VALVE	C
65	1	9517	VALVE CONTROLLER	C
66	2	9518	9 VOLT BATTERY	A
67	1	9809	DEBRIS PLATE	C
68	4	OPTIONAL REPAIR PARTS LIST		
69	8	HV365400	9515 VALVE SPRING	A.C.
70	8	HV365500	9515 VALVE BODY	A.C.
71	0	9469	DE-CHLORINATION BASKET	C
72	0	9516	2" PGV VALVE	C
73	0	9450	SPRING FOR 3.5" D.O.B.	A.C.
74	0	2PVCUC	2" SCH 80 PVC UNION	
ICV PARTS LIST (6 BOLTS)				
*		HV365400	9515 VALVE SPRING	A.C.
*		HV365500	9515 VALVE BODY	A.C.
*		HV365600	9515 DIAPHRAGM SUPPORT	A.C.
*		HV366700	9515 BONNET BOLT	A.C.
*		HV371600	9515 E-CLIP RETAINER	A.C.
*		HV374500	9515 DIAPHRAGM ASSEMBLY	A.C.
*		HV180600	9515 BONNET	A.C.
*		HV368000	9515 FLOW CONTROL ASSEMBLY	A.C.
*		HV561200	9515 FLOW CONTROL KNOB	A.C.
*		HV561500	9515/9516 BLEED SCREW ASSEMBLY	A.C.

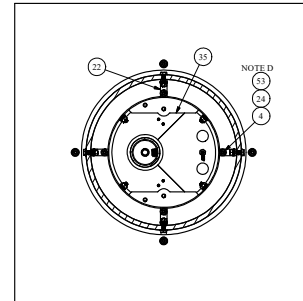
PGV REPAIR PARTS LIST (12 BOLTS)			
*	HV412700	9516 FLOW CONTROL HANDLE	A.C
*	HV414200	9516 VALVE SPRING	A.C
*	HV414600	9516 FLOW CONTROL ASSEMBLY	A.C
*	HV414800	9516 DIAPHRAGM SUPPORT	A.C
*	HV415400	VALVE PLUG O-RING	A.C
*	HV415500	9516 BONNET	A.C
*	HV415600	9516 DIAPHRAGM ASSEMBLY	A.C
*	HV419300	BODY PLUG	A.C
*	HV433300	9516 VALVE BODY	A.C
*	HV472000	9516 BONNET SCREW	A.C
*	HV561500	9515/9516 BLEED SCREW ASSEMBLY	A.C
74	0	2PVCUC	2" SCH 80 PVC UNION

OPTIONS AND REPAIR KITS

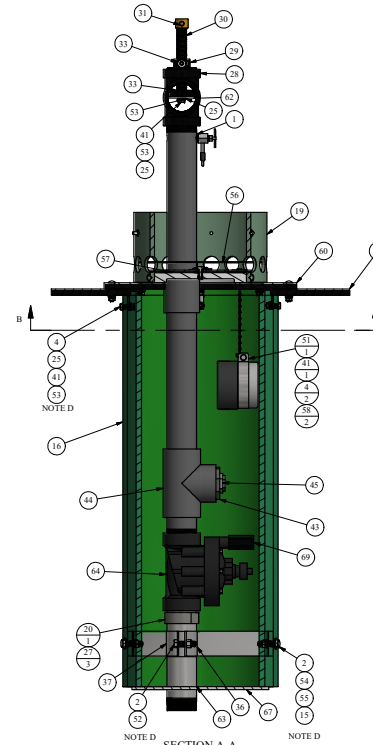
PART NUMBER	DESCRIPTION	PARTS INCLUDED
X380600	9515 BONNET COMPLETE	HV368000 SOLENOID (1), HV561200 KNOB (1), HV561500 BLEED SCREW (1), HV371600 E-CLIP (1), HV560800 FLOW CONTROL (1)
X415500	9516 BONNET COMPLETE	HV145500 BONNET (1), HV412700 KNOB (1), HV561500 BLEED SCREW (1), HV414600 FLOW CONTROL (1)
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 BOLT SPECK (2), 9418 HEAT SHRINK (25), 9445 HEAT SHRINK (25)
X66-PETCOCK	STAINLESS STEEL PETCOCK ASSEMBLY	66501 BODY (1), 66508 PACKING NUT O-RING (1), 66502 NUT (1), 66503 PLUNGER (1), 66510 PLUNGER O-RING (1), 66504 NOZZLE (1), 66522 CAP (1)
X9400-ACC. PLATE	ACCESS PLATE COMPLETE	9420-O ACCESS PLATE REMOVABLE (1), 9444 CAP (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), 9464 S-HOOK (1), 346-N-9400 NUT (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), 9407 ADAPTER (1)
X9400-LOWER-4"	9400 BELOW GRADE ASSEMBLY (EACH 6" D.O.B. 4" OR GREATER)	2PVCPC 2" SCH 80 PVC PIPE (1.75" FOR D.O.B.), 9406 PVC COUPLING (1), 9447 TEE (1), 2PVCUC UNION (1), 9446 BUSHING (1), 9448 AUTO DRAIN (1), 9515 2" ICV VALVE (1), 9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (1), 9449 SPRING (1)
X9400-LOWER-3"	9400 BELOW GRADE OPERATING PARTS (3" BURY OR LESS)	2PVCPC 2" SCH 80 PVC PIPE (1.75", 9406 PVC COUPLING (1), 9447 TEE (1), 9446 BUSHING (1), 9448 AUTO DRAIN (1), 9515 2" ICV VALVE (1), 9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (1), 9449 SPRING (1)
X9400-RESTRICTOR	WATER RESTRICTOR ASSEMBLY COMPLETE	9425 HANDLE (1), 9424 SCREW (1), 9427 KNOB (1), 9426 PLATE (1), 9474 SEAT (1), 9438 BOLT (1), 9423 CAP (1), 9422 RESTRICTOR (1), 9419 WASHER (1), 9458 LOCK WASHER (1)
X9400-SAMPLING	9400 SAMPLING POINT COMPLETE	1/4 x 1/8 SHH BUSHING (1), X66-PETCOCK (1)
X9405	VALVE PISTON WITH O-RINGS	9405 PISTON (1), 9421 O-RING (1)
X9420-O	ACCESS PLATE REMOVABLE WITH CAPS	9420-O ACCESS PLATE REMOVABLE (1), 9444 CAP (2)
X9428-O	ACCESS PLATE BASE COMPLETE	9428-O ACCESS PLATE BASE (1), 9451 HINGE CLAMP (2), 9452 SCREW (4)
X9448-49	AUTO DRAIN 3" D.O.B. OR LESS	9448 AUTO DRAIN (1), 9449 SPRING (1)
X9448-50	AUTO DRAIN 3.5" D.O.B.	9448 AUTO DRAIN (1), 9450 SPRING (1)
X9448-54	AUTO DRAIN 6.5" D.O.B.	9448 AUTO DRAIN (1), 9454 SPRING (1)
X9517-BG	CONTROLLER WITH BATTERY FOR 9400 OR 9800	9517 CONTROLLER (1), 9518 BATTERY (2), 9434 COVER (1), 9412 WIRE CONNECTOR (2), 9414 WIRE RECEPTACLE (1)
X9400-BLUETOOTH	BLUETOOTH CONTROLLER UPGRADE	9530 BLUETOOTH CONTROLLER (1), 9531 BATTERY FOR BLUETOOTH (2), 9412 WIRE CONNECTOR (2), 9414 WIRE RECEPTACLE (1), 9407 BOLT BRACKET (1), 9417 HOSE CLAMP (1), 9458 LOCK WASHER (1), 345-N-9400 NUT (1), 9456 CONTROLLER HOLDER (1), 9438 BOLT (1), 9434 COVER (1)
X9400-PVC-VALVE	VALVE ASSEMBLY	9405 VALVE PISTON (1), 9421 VALVE PISTON O-RING (1), 9515 ICV VALVE (1), 2PVCPC SCH 80 PIPE Gt (3), 9447 2PVCPC TEE GtGtG, 9446 BUSHING FOR AUTO DRAIN (1), 2PVCPC SCH 80 PIPE GtG (2.5), 2PVCUC UNION (1)



ACCESS PLATE VIEW



SECTION B-B
PLATFORM BOTTOM SECTION VIEW

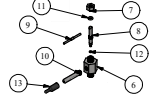


NOTE D
SECTION A-A
FLUSHER SIDE VIEW

OPTIONAL 9469 DECHLORINATION BASKET



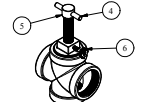
PETCOCK ASSEMBLY



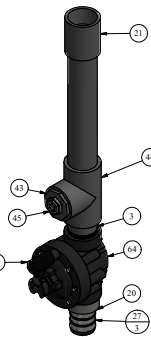
9516 PGV VALVE



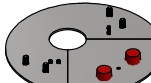
X9400-RESTRICTOR ASSEMBLY



X9400-LOWER-3' ASSEMBLY



X9400-ACC. PLATE ASSEMBLY



DRAWN SAS	10/20/2017	
CHECKED DCL	9/25/2018	
MODIFIED KJW	5/28/2021	
SIZE D	SCALE 1/5	
DWG NO #9400 Cut_Rev4	SHEET 1 OF 1	REV 4

LEGEND

X	STANDARD TAG
Y	TAG WITH QUANTITY

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