

DISTRIBUTED BY:

Volumetric Valve

POST-MIX VALVE

SPECIFICATIONS

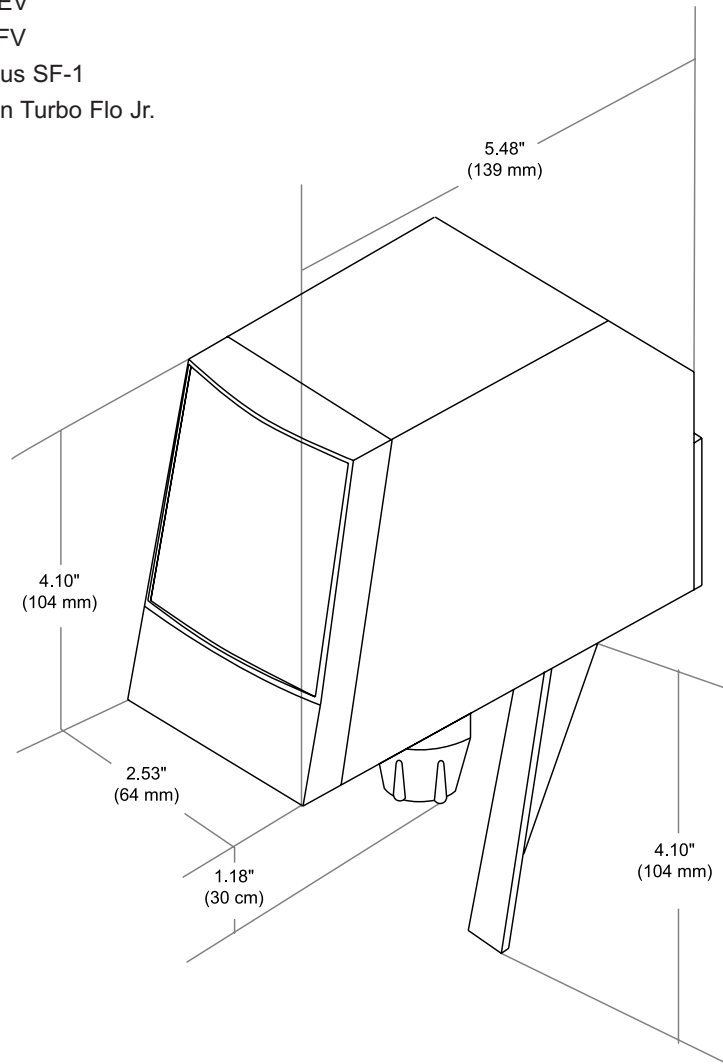
Pressure Requirements (Flowing pressure): Water	40 - 110 psig (2.8 - 7.7 bar)
Syrup (Sugar)	20 - 70 psig (1.4 - 4.9 bar)
Syrup (Diet/Light)	10 - 70 psig (0.7 - 4.9 bar)

Drink Flow Rates: 3.0 oz/sec (90 ml/sec) (Gray flow washer assembly)
2.25 oz/sec (67 ml/sec) (White flow washer assembly)
1.5 oz/sec (45 ml/sec) (Red flow washer assembly)

Electrical Requirements: 24 VAC, 50/60 Hz

Mounting: Uses LEV® Mounting Block - LEV® mounting block has the same mounting screw hole pattern as the following:

- Dole SEV
- Dole FFV
- Cornelius SF-1
- McCann Turbo Flo Jr.



Equipment design and/or specifications may change without notice

Volumetric Valve

POST-MIX VALVE



The Volumetric Valve

The Volumetric Valve controls the ratio by changing the syrup dispensing rate based on the amount of water flowing through the valve. If the water flow rate decreases, then the syrup injection rate decreases. If water flow rate increases, then syrup injection rate increases as well. Once the ratio is programmed, then no adjustments are required. By adapting to changing conditions, the Volumetric Valve will maintain the correct ratio.

Features

Volumetric Ratio Control: The Volumetric Valve delivers more accurate drink portions by tracking the actual volume dispensed. Traditional portion controls use time to set the portion. They cannot adjust for changing conditions. The Volumetric will always fill the cup correctly by changing the pour length when needed. For example, if three Volumetric Valves run simultaneously on one tower, the pour times will be increased to compensate for lower water pressure.

How it works, when the Volumetric Valve is activated:

- Water flows continuously
- Syrup injection rate changes as the water flow rate changes to maintain the correct ratio.

WATER RATE SLOW
SYRUP INJECTION RATE SLOW

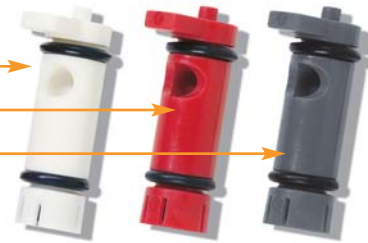


WATER RATE FAST
SYRUP INJECTION RATE FAST



Volumetric Pressure Control: The flow washer assembly sets the flow rate for the Volumetric Valve. Three flow rate options are available: 1.5 oz/sec, 2.25 oz/sec, and 3.0 oz/sec. Each assembly is color coded for easy identification. Just look under the valve behind the nozzle to see a gray, white, or red dot indicating the flow washer assembly installed. If the water pressure falls below specification, the valve will continue to dispense a properly mixed drink, but at a lower flow rate.

- 54-0193 (WHITE) 2.25 oz/sec (66.5 ml/sec)
- 54-0192 (RED) 1.5 oz/sec (45 ml/sec)
- 54-0194, standard (GRAY) 3.0 oz/sec (90 ml/sec)

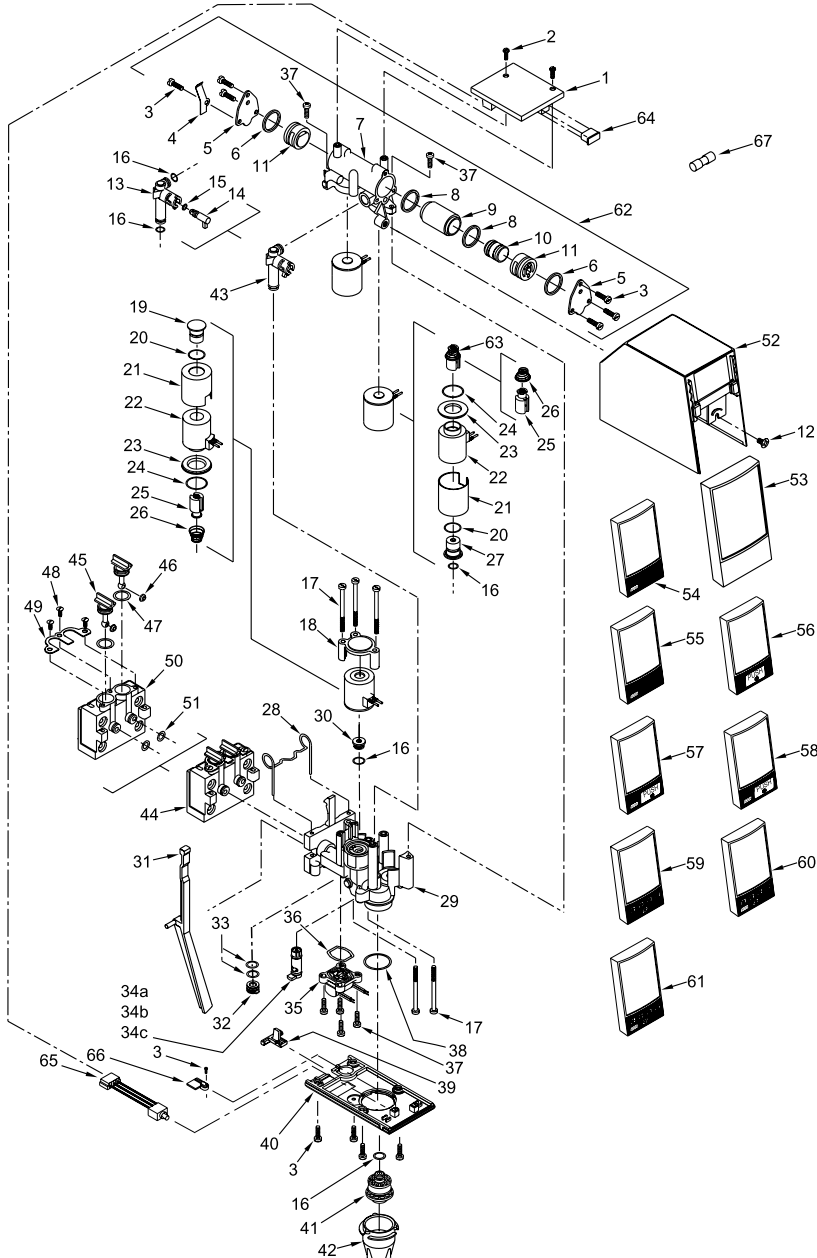


Hand Held Programmer: The hand held programmer is required to set the ratio on Volumetric Valves. The programmer makes valve set-up easy and provides security by limiting who can modify the ratio settings. In addition to setting the ratio, the hand held programmer can be used to help verify the performance of the dispensing system.

Special parts: NoThe Volumetric Valve features a one piece diffuser assembly and a translucent nozzle. The syrup separator for the Volumetric Valve is part number 54-0201



Volumetric Valve Parts List



Volumetric Valve Parts List

Item	Lancer Part Number	Description	CCUSA Part Number
1	52-2345	PCB Assy (formerly 52-1561)	
2	04-0640	Screw, 4 - 20	24208
3	04-0633	Screw, 6 - 19 x 0.437	24209
4	03-0188	Spring, Lever	24210
5	03-0187	Retainer, Syrup	24211
6	02-0221	O-Ring	22363
7	54-0115/01	Body Assy, Meter Assy, Syrup	24212
8	02-0264	O-Ring	24213
9	81-0298	Sleeve, Syrup	
10	81-0347	Piston	24215
11	05-0940	Retainer, Piston	24216
12	04-0302	Screw	21691
13	54-0175	Tube, Down, Syrup, Restrictor	
14	05-1094	Restrictor, Syrup	
15	02-0085	O-Ring	10060
16	02-0005	O-Ring	10050
17	04-0637	Screw	24221
18	05-0707	Retainer, Soda, Solenoid	24222
19	10-0877	Plug Nut, Soda, Solenoid	
20	02-0089	O-Ring	10061
21	81-0289	Bonnet, Sub-assy, Solenoid	
22	12-0132/01	Coil	24225
23	04-0600	Washer, Solenoid	24226
24	02-0109	O-Ring	17428
25	23-1071	Core Assy	
26	03-0180	Spring, Core	24228
27	10-0280	Plug Nut, Syrup	24230
28	03-0233	Retainer, Valve	24231
29	54-0178	Body Assy	24232
30	05-0706	Seat, Soda	24233
31	54-0125	Lever Arm	24234
32	05-0779/01	Plug, Regulator	24236
33	02-0003	O-Ring	10049
34a	54-0192	Flow Washer Assy, Red, 1.50 Ounces	24237
34b	54-0193	Flow Washer Assy, White, 2.25 Ounces	24238
34c	54-0194	Flow Washer Assy, Gray, 3.00 Ounces	24239
35	54-0126	Meter Assy (Includes #36)	24240
36	02-0354	O-Ring	24241
37	04-0549	Screw, 6 - 19 X 0.625	24242
38	02-0408	O-Ring	10707
39*	05-1102	Filler, Plate, Bottom	24243
40	05-0960/01	Plate, Bottom	24244
41	54-0176/01	Diffuser, Body Assy	24245
42	05-1080	Nozzle	24246
43	54-0190	Down Tube, Restrictor Assy	24220
44	82-0274	Mounting Block	19810
45	05-0266	Valve Stem, Mounting Block	12270
46	05-0267	Washer	12286
47	02-0047	O-Ring	15175
48	04-0269	Screw	19894
49	03-0087	Retainer, Valve, Mounting Block	12263
50	05-0265/01	Mounting Block	12189
51	02-0126	O-Ring	10706
52	54-0029/01	Cover Sub-assy	23984
53	05-0287/02	ID Panel	21432
54	52-1571	ID Panel, Water Button	24251
55	52-1572	ID Panel, Soda Button	
56	52-1399	ID Panel, Push Button	
57	52-1573	ID Panel, Push Button, Water	24254
58	52-1574	ID Panel, Push Button, Soda	
59	52-1575	ID Panel, Portion Control,	24256
60	52-1576	ID Panel, Portion Control, Water	24257
61	52-1577	ID Panel, Portion Control, Soda	
62	82-1117/01	Meter Assy, Syrup	24217
63	82-1624	Core/Spring Assy (Includes Items 25 and 26)	24229
64	05-1187	Cover, Programmer Plug	
65	52-2491	Harness Assy, Syrup Purge	
66	05-1958	Holder, Purge Switch, Volumetric Valve	
67	12-0348	Fuse, 5 Amp, 5X15, Fast Acting*Model 150P - Pushbutton only	

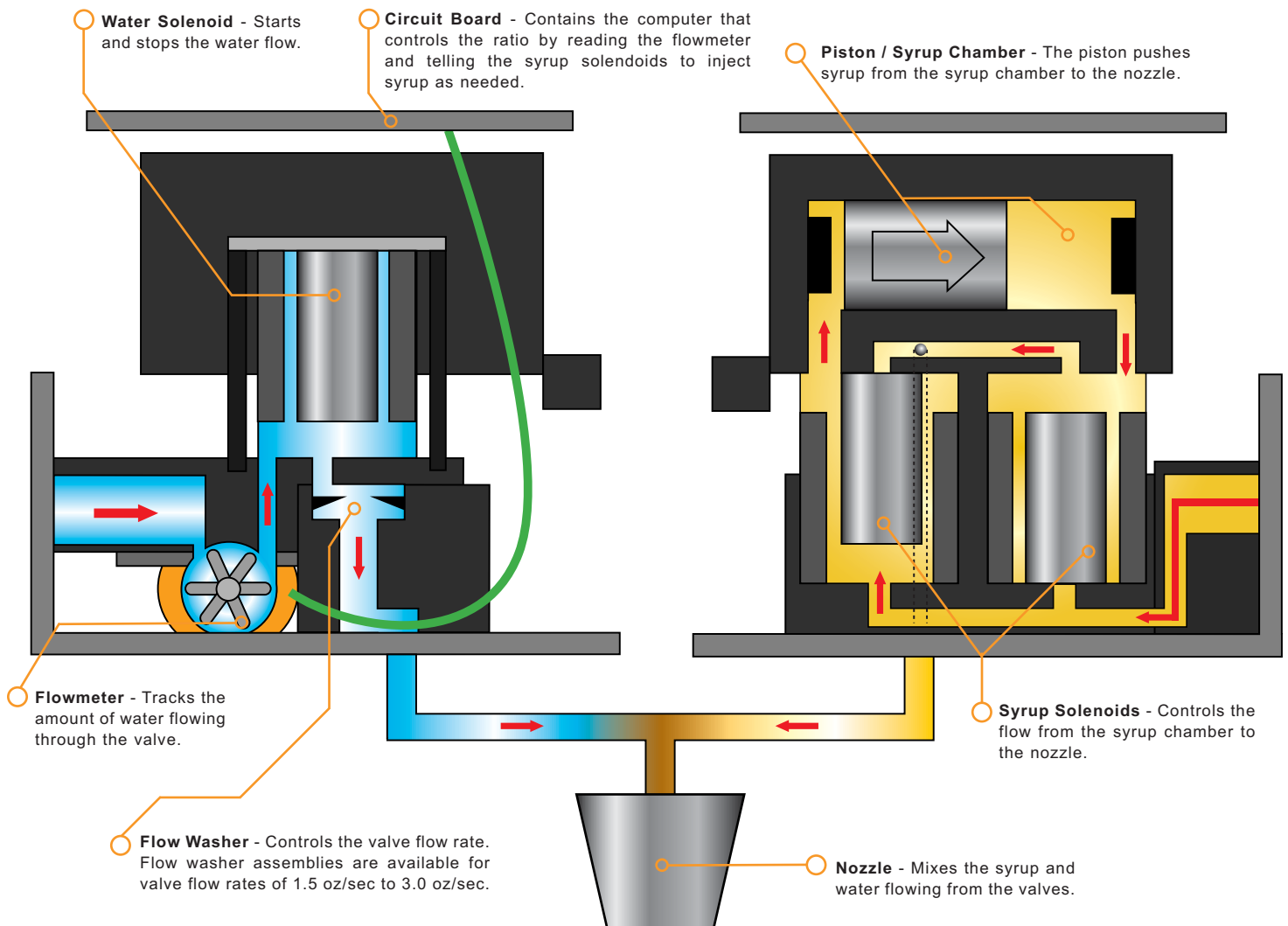
Volumetric Valve Recommended Spare parts per 100 Volumetric Valves (82-2357)

Quantity	Part Number	Description
10	02-0005	O-ring
10	02-0089	O-ring
10	02-0109	O-ring
10	02-0408	"O-ring, Nozzle"
2	03-0188	Lever Spring
6	04-0549	"Screw, 6-19 x .625 long"
6	04-0633	"Screw, 6-19 x .437 long"
6	04-0637	"Screw, 6-19 x 1.99 long"
6	04-0640	"Screw, 4-20"
10	05-1080	Nozzle
5	12-0132/01	Coil
2	52-1561-SP	Circuit Board Assy
10	54-0125	Lever Arm
2	54-0126-SP	Flowmeter Assy
10	54-0176/01	Diffuser
10	54-0192-SP	1.5 oz/sec Flow Washer Assy (Red)
5	54-0193-SP	2.25 oz/sec Flow Washer Assy (White)
5	54-0194-SP	3.0 oz/sec Flow Washer Assy (Gray)
5	82-1624-SP	"Core/Spring Assy, Solenoid"

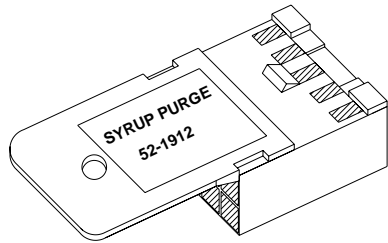
Valve Components

The Volumetric Valve controls the ratio by changing the syrup dispensing rate based on the amount of water flowing through the valve. If the water flow rate decreases, then the syrup injection rate decreases. If water flow rate increases, then syrup injection rate increases as well. Once the ratio is programmed, then no adjustments are required. By adapting to changing conditions, the Volumetric Valve will maintain the correct ratio.

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The Hand Held Programmer



◀ 52-1912
Syrup Purge Plug



52-1420/01 ▶
Programmer, Hand-Held, Volumetric Valve



An additional syrup purge accessory has been made available.

A toggle switch mounted to the bottom plate (easily accessible by lifting the ID Panel) can now be added to the Volumetric Valve. The three position toggle switch can be placed in an "on" position for normal valve operation, "off" position to disable the valve, or in the "purge" position to place the valve in continuous syrup side purge operation.

The purge function is useful for sanitization and for priming the syrup line. This is an enhancement, in terms of ease of syrup purge operation, over the syrup purge plug (Lancer PN 52-1912) or the purge function on the Hand Held Programmer.

Five Steps to Valve Set-up:

1. **Plug in the Programmer** - Remove the ID panel or open the dispenser shroud and insert the programmer's cable into the connector on the front of the Volumetric Valve.
2. **Check the settings** - Press "read mem" to display the current valve settings.
3. **Select a ratio** - Use the up and down arrows to step through 140 available ratios.
4. **Choose drink type** - Press "carb toggle" to choose a carbonated or plain water drink.
5. **Press "enter"** - The valve is now programmed. Unplug the programmer and the valve is ready for operation.

Hand Held Programmer Features

- 5 sec pour** - Activates a 5 second mixed drink pour. Convenient method for doing draw tests.
- 5 sec water** - Activates the water side of the valve for 5 seconds. After the pour, the programmer displays the ratio, the counts from the flowmeter, and the flow rate in oz/sec and ml/sec.
- Syrup purge** - Activates the syrup side of the valve for six seconds. The syrup side will continue to run as long as the button is held down.
- Install** - The syrup purge will help bring syrup through the lines on new installations and flavor changes.
- Sanitizing** - Syrup purge will allow cleaning of syrup lines without running the water side of the valve. Use optional syrup purge plug for hands-off sanitizing.
- Syrup pressure** - The syrup purge can help determine if there is sufficient syrup pressure to the valve. Press and release syrup purge button. Six (6) second syrup purge should dispense 3 oz. of syrup.



- Works like pour/cancel on portion control ID panels. It will stop timed pours activated by other buttons or it can be used to manually pour a mixed drink from a valve.



Volumetric Valve with pushbutton and water button

19-0161-3W Valve Assy., Vol., PB PROG, 3.0 oz/sec, WTR B

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with pushbutton and soda button

19-0163-3S Valve Assy., Vol., P.C. PROG, 3.0 oz/sec, SODA B

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with pushbutton

19-0161-3 Valve Assy., Vol., PB PROG, 3.0 oz/sec

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with portion control and soda button

19-0164-3S Valve Assy., Vol., LVR PROG, 3.0 oz/sec, SODA B

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with portion control and water button

19-0164-3W Valve Assy., Vol., LVR PROG, 3.0 oz/sec, WTR B

These valve is also available in 1.5 and 2.25 ounce per second valves.

Serviceability, Versatility and Fast Flow!



Volumetric Valve with portion control

19-0163-3 Valve Assy., Vol., P.C.
PROG, 3.0 oz/sec

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with lever

19-0164-3 Valve Assy., Vol., LVR
PROG, 3.0 oz/sec

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with lever and water button

19-0164-3W Valve Assy., Vol., LVR
PROG, 3.0 oz/sec, WTR B

These valve is also available in 1.5 and 2.25 ounce per second valves.



Volumetric Valve with lever and soda button

19-0164-3S Valve Assy., Vol., LVR
PROG, 3.0 oz/sec, SODA B

These valve is also available in 1.5 and 2.25 ounce per second valves.