

VD-S Series, Vertical Duplex Strainers

Installation, Operation, and Maintenance

The Concept: Plumbing systems that require constant filtration but cannot be shut down for filter cleaning may be well served by GROCO VD Series Duplex Strainers. A centrally located valve diverts system flow to one side of the filter while the other side may be serviced.

Installation: Choose a location for the VD Series strainer that will allow the handle to be actuated for filter selection, and that allows at least twelve inches (12") above the top of the assembly for filter basket removal and cleaning.

Bolt VD Series strainers to a suitably sturdy mount surface by bolting through the mount brackets located behind each side of the filter body. Also utilize the brackets on the bottom end caps.

Bonding: The strainer must be connected to the vessel bonding system. This is most easily done with 14-gauge (or larger) stranded copper wire and a ring connector beneath one of the tie rods that hold the strainer together.

Warning: Motorized equipment is to have a separate connection to the vessel AC grounding bus in accordance with ABYC, E-11, Figure-18. DO NOT make the strainer bonding connection in series with motorized equipment. It is permissible to make the bonding connection in series with non-motorized equipment such as seacocks or thru-hull fittings.

Plumbing: VD Series strainers have inlet and outlet ports threaded for NPT pipe connections. GROCO manufactures a full range of sizes of Full Flow and Standard Flow pipe-to-hose adaptors for this purpose, or threaded pipe may be used. Apply TFE thread tape to all pipe connections, and double clamp all hose connections. Observe the "IN" and "OUT" markings on the top of the filter body.

Operation: The position of the valve handle indicates which filter is in use. The other side may be disassembled for cleaning. Assume that the valve handle is actuated to a full stop position when selecting a new filter in-use position.

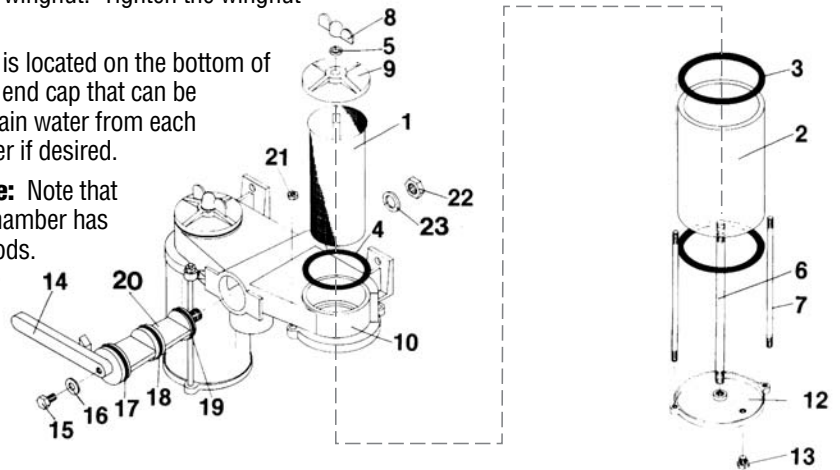
Maintenance: The position of the valve handle indicates which filter is in use. The other side may be disassembled for cleaning. Spin the center wingnut off and remove the bronze cover. The filter basket may be removed for cleaning. Inspect the cover gasket and replace if necessary.

Replace the filter basket, top cover, wingnut washer, and wingnut. Tighten the wingnut securely.

A drain plug is located on the bottom of each bronze end cap that can be utilized to drain water from each filter chamber if desired.

Service Note: Note that each filter chamber has outside tie rods. The purpose of these tie rods is simply to hold the filter

together during cleaning (while the center wingnut has been removed). The outside tie rod hex nuts should not be over-tightened. Overtightening may bend the bronze end caps and cause leakage. Sealing of the sight glass gaskets, the cover gasket, and the wingnut washer is accomplished by tightening the center wingnut.



ITEM	DESCRIPTION	QTY	VD-1000-S	VD-1250-S	VD-1500-S	VD-2000-S	VD-2500-S
1	Basket, #304 SS	2	SS-76	SS-76-A	SS-85-M	SS-85-N	SS-85-L
	Basket, Monel	2	S-76	S76-A	S-85-M	S-85-N	S-85-L
	Basket, 60-mesh	2	SS-76 FM	SS-76-A FM	SS-85-M FM	SS-85-N FM	SS-85-L FM
2	Sight Glass	2	S-77	S-77-A	S-88	S-88-A	S-88-B
	Cylinder, #316 SS	2	AS-77	AS-77-A	AS-88	AS-88-A	AS-88-B
• 3	Gasket	2	#8R SET	#8R SET	#10R SET	#10R SET	#10R SET
• 4	Gasket	2	S-751-A	S-751-A	S-86-A	S-86-A	S-86-A
• 5	Washer	2	500-K	500-K	504-F	504-F	504-F
6	Tie Rod, center	2	S-73-D	S-73-E	S-82-E	S-82-F	S-82-G
7	Tie Rod, outside	4	S-73-X	S-73-B	S-82-B	S-82-C	S-82-D
8	Wingnut	2	SVS-5	SVS-5	S-75	S-75	S-75
9	Cover	2	S-751	S-751	S-86	S-86	S-86
10,22,23, 14-20	Body/Plug Assy	1	VD-1000 BPA	VD-1250 BPA	VD-1500 BPA	VD-2000 BPA	VD-2500 BPA
10	Valve Body	1	Not Sold	Not Sold	Not Sold	Not Sold	Not Sold
12	End Cap	2	S-73-A	S-73-A	S-82-AB	S-82-AB	S-82-AB
13	Drain Plug	2	1827HB	1827HB	1827HB	1827HB	1827HB
14	Valve Handle	1	-	-	VD-2502	VD-2502	VD-2502-A
15	Bolt **	1	NA	NA	51618HB	51618HB	51618HB
16	Washer	1	-	-	24L	24L	24L
• 17	O-Ring	1	2-222	2-222	2-234	2-234	2-234
• 18	O-Ring	1	-	-	2-231	2-231	2-236
• 19	O-Ring	1	2-218	2-218	2-229	2-229	2-240
20	Valve Plug	1	Not Sold	Not Sold	Not Sold	Not Sold	Not Sold
21	Nut	4	1420HS	1420HS	51618HS	51618HS	51618HS
22	Nut	1	1220HB	1220HB	5818HB	5818HB	5818HB
23	Washer	1	VD-A	VD-A	VD-B	VD-B	VD-B
NS	Lockwashers	4	14SS	14SS	516SS	516SS	516SS
•	Service Kit		VD-1	VD-1	VD-2	VD-2	VD-3