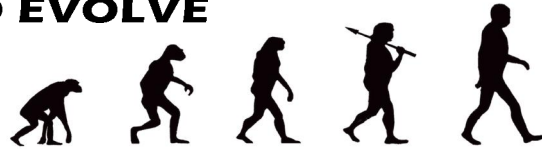


Flanged Full-Flow Safety Seacocks	SBV-P, SBV
Flanged Full-Flow Seacocks	BV, FBV
In-Line Full-Flow Ball Valves	IBV, IBV-S
Flanged Adaptors and Accessories	IBVF, IBVF-S, BB
Special Purpose Valves	PNC, CV, FV-450-X, TS-350-T
Full-Flow Fuel Valves	FV, TWV
Engine Flush Kit	SSC, SSCV
U-LUBE Grease	FOR ALL BALL VALVES



IT'S TIME TO EVOLVE



CONCEPT

Equipment that is used regularly is more reliable than neglected equipment. E-Valve was developed to address the challenges of regularly "exercising" seacocks, preventing the accumulation of nuisance marine growth, and to provide safety and convenience features never before available. E-Valve seacocks are UL listed, gearboxes are IP-67 rated and Control Modules comply with ABYC, USCG, ISO and NMEA ignition protection standards. It's time to evolve!



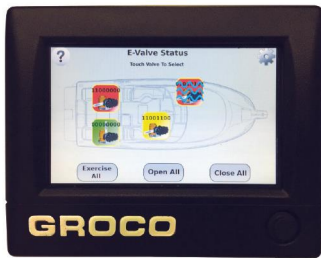
CONTROL MODULE



E-VALVE SEACOCK

BASIC E-VALVE

Basic E-Valve (FBVE models) includes a motorized seacock (sizes 3/4" to 3", 12V or 24V), Control Module with 20-foot cable, and a 3-foot connectorized power cable (Deutsch #DT04-2P). For automatic operation or connection to a PLC 11-2038-03 cable is purchased separately. The Control Module indicates that power is present, open or closed E-Valve status, and the presence of high water at the E-Valve location, and is typically located in the engine compartment. Push button commands include OPEN VALVE and CLOSE VALVE.



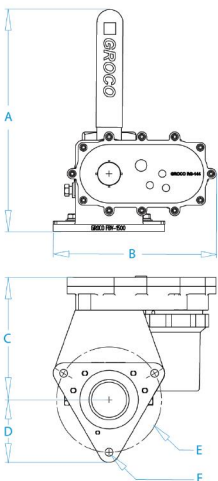
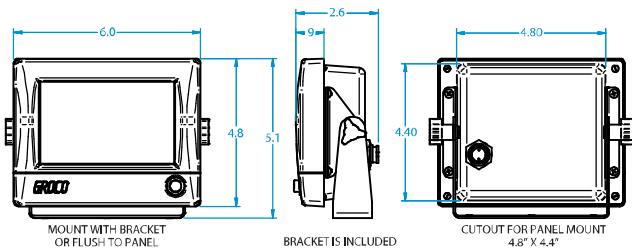
LCD-5 TOUCH SCREEN

RF E-VALVE

RF E-Valve (FBVERF Models) includes a motorized seacock (sizes 3/4" to 3", 12V or 24V) and a Control Module with 20-foot cable. For automatic operation or connection to a PLC 11-2038-03 cable is purchased separately. The Control Module, usually located in the engine compartment, communicates wirelessly with GROCO LCD-5 touch screen located as much as 75-feet away at the helm.

LCD-5

LCD-5 (purchased separately) is a full color touch screen that displays, monitors and controls all of the E-Valves on your boat. The screen shows OPEN, CLOSED, AUTOMATIC or LOCKED valve status, valve name and physical location, and the presence of high water at any E-Valve location. Commands include OPEN VALVE, CLOSE VALVE, OPEN ALL, CLOSE ALL, EXERCISE ALL, and scheduled EXERCISE ALL.



MODEL	RF MODEL	PIPE SIZE inch	A inch	B inch	C inch	D inch	E inch	F inch	WEIGHT lb
FBVE-750	FBVERF-750	3/4"	6.1	6.4	4.5	2.0	3.12	3 x 5/16"	4.4
FBVE-1000	FBVERF-1000	1"	7.3	6.5	4.8	2.1	3.38	3 x 5/16"	5.0
FBVE-1250	FBVERF-1250	1-1/4"	7.1	6.6	5.0	2.3	3.62	3 x 5/16"	5.8
FBVE-1500	FBVERF-1500	1-1/2"	9.5	7.0	5.2	2.7	4.50	3 x 5/16"	7.1
FBVE-2000	FBVERF-2000	2"	10.1	7.3	5.5	3.0	5.00	3 x 3/8"	9.7
FBVE-2500	FBVERF-2500	2-1/2"	12.4	9.2	6.7	3.6	5.88	3 x 3/8"	22.0
FBVE-3000	FBVERF-3000	3"	14.8	9.7	6.7	4.2	7.00	3 x 3/8"	31.0
FBVE-4000	FBVERF-4000	4"	-	-	-	-	-	-	-
FBVE-5000	FBVERF-5000	5"	-	-	-	-	-	-	-

*Weight is for the valve and gearbox only

THE U-LUBE CONCEPT

Ball valves (in-line valves or flanged seacocks) that are "exercised" frequently operate more easily and are likely to remain free of marine growth. The task of regularly opening and closing valves, however, is often neglected because valves are difficult to reach, or because owners just don't feel like it. Consequently, valves are left in one position for months or even seasons, and when the time comes to open or close the valve, the build-up of barnacles and calcium make it difficult or impossible.

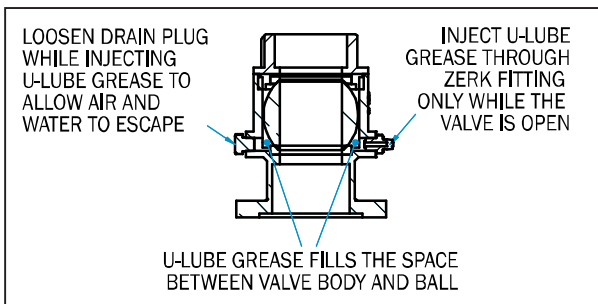


FIGURE 1

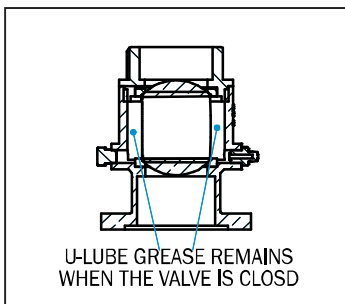


FIGURE 2

Without U-LUBE, each time a ball valve is closed (see figure-2), seawater is deposited into the space between the valve body and the ball where it stagnates until a valve actuation exchanges new seawater for the old. Stagnant seawater promotes corrosion and growth of marine organisms, so neglected ball valves will naturally accumulate slime, barnacles and other nuisance marine growth. With the space now filled with U-LUBE grease, marine growth is inhibited and the valve will operate more smoothly.

Specifically developed for ball valves, U-LUBE is a proprietary patent-pending formulation of grease and marine growth inhibitor which is injected through a zerk fitting while the valve is in the OPEN position (see figure-1). The zerk also serves as a drain plug and may be fitted to any valve with a 1/8"-27 NPT port. The zerk is standard on BV, FBV, IBV and BVS valves 1-1/4" and larger.

The approximate volume of U-Lube grease required to fill the space between the ball OD and the valve body ID for GROCO ball valves is shown below; the grease volume for other valve brands will be similar, but will vary slightly.

U-LUBE is a long lasting waterproof grease specially formulated to lubricate and protect internal ball valve components, and to discourage nuisance marine growth. U-LUBE's tacky texture keeps it where it is applied, and helps provide maximum protection against wear, rust, and water washout in non-ball valve applications such as bushings and bearings exposed to wet conditions and a wide range of temperatures.

VALVE SIZE	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"
OUNCES of U-LUBE	.03	.03	.04	.05	.1	.35	.7	1	2.8	7	11	16

