Johnston Boiler Company Feedwater Control Valve



Standard Features:

- Power Supply: 115 VAC
- NEMA 3 Motor Enclosure
- 0-135 Ohm Control Input
- Stainless Steel Valve Body
- 2 Adjustable SPDT End Switches
- 100% Shutoff
- Universal Bracket & linkage

• Reinforced Teflon Seat, Body Seal and Stem Packing For Long Life

- Class IV Shutoff
- Full Port Design
- Ambient Temp. To 150 Degrees

Options:

- Power supply: 24 VAC
- Weatherproofing Kit
- 4 20 mA Control Input

Valve Sizes:

• 3/4" - 2" NPT



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Replacement parts list



ITEM	JBC	DESCRIPTION	QTY
1	015892	MOD MOTOR	1
2	032932	LINKAGE ARM SQUARE HOLE	1
3	032966	LINKAGE ARM	1
4	032627	0.75" BALL VALVE	1
4	034740	1.00" BALL VALVE	1
4	034741	1.25" BALL VALVE	1
4	034742	1.50" BALL VALVE	1
4	034743	2.00" BALL VALVE	1
5	032959	THREADED ROD	1
6	#15 FUW	BEVELED WASHER	2
7	#18 FUW	BUSHING	1
8	#19 FUW	JAM NUT	2
9	#26 FUW	LOCK WASHER	1
10	034748	NUT .025-28 UNF	8

ITEM	JBC	DESCRIPTION	QTY
11	035683	BOLT #10-24X0.75 - 0.75" VALVE	4
11	035682	BOLT 0.25-20X0.75 - 1.00" VALVE	4
11	034745	BOLT 0.25-20X1.00 - 1.25" VALVE	4
11	034746	BOLT 0.313-18X1.00 - 1.50" VALVE	4
11	034746	BOLT 0.313-18X1.00 - 2.00" VALVE	4
12	034751	BOLT 0.25-20X1.00	4
13	034753	BOLT 0.25-20X1.25	2
14	012854	WASHER FLAT .25	8
15	012877	LOCK WASHER - 0.25	6
16		ARM LOCKING PIN	1
17	032960	LINKAGE JOINT	2
18	034743	PART NUMBER STICKER	1
19	032646	BRACKET FEEDWATER VALVE	1

Modutrol IV Motor Wiring

Typical On/Off Level Control Wiring



Remote 4-20 mA Signal for Control



Auxiliary Switch Schematics



Wiring for Potentiometer Control





Notes:

1 Power supply. Provide disconnect means and overload protection as required

Use NEC Class 1 wiring unless power supply meets class 2 requirements. Tape unused leads. Ensure the current draw of the external circuit is less than 7.2 amps FLA / 43.2 amp locked rotor.

Assembly/Adjustment Setup





OPEN

Assembly:

- Valve and motor are to be in fully closed position when installing or adjusting linkage arm. Fully closed position is with the flat sides of the valve shaft perpendicular to the pipe as shown above.
- Motor linkage arm to be set up with bolt head on arm facing upward and bolt facing downward as shown in above drawing.
- Standard motor is 90 degree rotation.

Decreasing Flow:

To decrease flow, adjust valve travel, loosen linkage connector and slide top linkage joint towards the right on the motor bracket. Lengthen rod to suit new position. Maximum decrease in valve travel is approx. 65% open.

Auxiliary Switch Adjustment:

Auxiliary Switches can be set to actuate at any point in the travel of the motor. The SPDT switches are actuated by adjustable cams. Set cams by moving top of screwdriver only. Pressing screwdriver against sides of cam slots or use of excessive force could cause damage. Each click is approximately two degrees of rotation. The blue cam controls the valve open switch and the red cam controls the valve closed switch. Rotating the blue cam to the right decreases the open switch and rotating it to the left increases the open switch. Rotating the red cam to the right increases the closed switch and rotating it to the left decreases the closed switch. Be sure not to rotate the cams pass the 90-degree rotation limit of the motor.

