

## EcoFlow®

### SEAL SUPPORT SYSTEMS

## BENEFITS

- Drastically decreases seal water consumption
- Increases water treatment efficiency
- 100% mechanical/self-operating, no outside power source required
- Eliminates dry runs due to operator error
- Increases seal life
- Expands mechanical seal use to more applications
- Decreases operating cost
- Easy to install
- Temperature response is unaffected by pressure variations
- Optional side port feature allows flushing debris from inside valve

## DESIGN FEATURES

- Exclusive **Thermoloid®** thermal actuator
- All Stainless steel body, fittings, spring, and plug
- Corrosion resistant - long service life
- Ram-type plug for tight, reliable shutoff
- Operates in narrow temperature band
- Fail safe design

## APPLICATION

The **EcoFlow®** valve is installed on the seal water outlet of a double mechanical seal to continuously maintain a constant seal water outlet temperature. This increases seal life by ensuring an optimum seal environment while drastically reducing water consumption and significantly increasing cost savings.

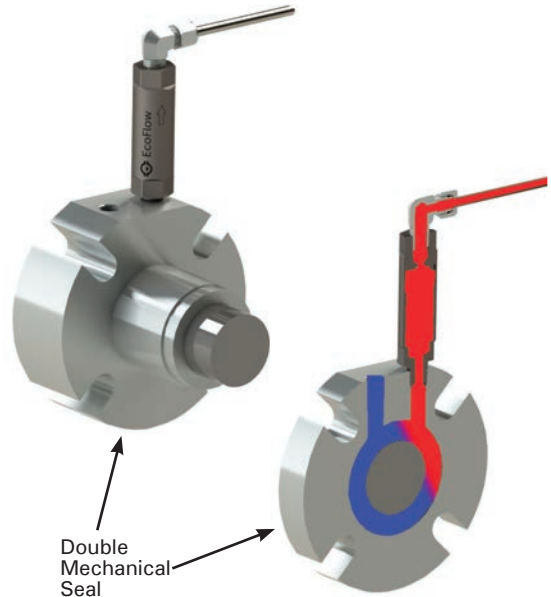
## OPERATION

The **EcoFlow®** contains a highly reliable, repeatable thermal actuator which continuously senses the seal water temperature.

If the seal water should exceed the specified factory set-point it will modulate open discharging the hot water, displacing it with cool water. This cooler water will cause the **EcoFlow®** to modulate closed. This cycle will continue to occur as long as excessive heat is being transferred to the seal water causing the water temperature to exceed its factory set-point.



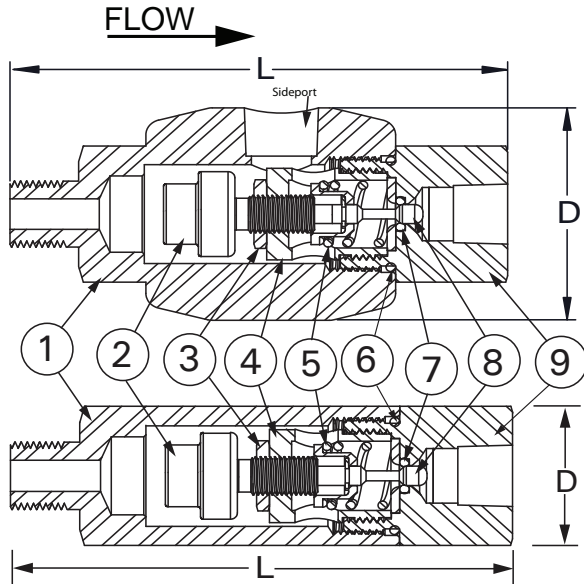
## SAMPLE APPLICATION



# ECOFLOW®

## SEAL SUPPORT SYSTEMS

### PARTS & MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	VALVE BODY	300 Series SS
2	THERMAL ACTUATOR	300 Series SS
3	LOCKNUT	300 Series SS
4	RETAINER	300 Series SS
5	OPERATING SPRING	300 Series SS
6	SEALING O-RING	Buna-N
7	SEAT SEAL	Buna-N
8	RAM-TYPE PLUG	300 Series SS
9	SEAT HOUSING	300 Series SS

### DIMENSIONS & CAPACITIES

Type	SIZE (NPT)	D		L		Weight		C <sub>v</sub>	Maximum Operating Pressure	Maximum Temperature
		in.	mm	in.	mm	Lbs.	Kg			
EcoFlow®	1/4"	1.1	28	3.6	91	0.7	0.3	0.5	400 PSIG (27.6 BAR)	250°F (121°C)
EcoFlow® w/ side port		1.7	43			1.3	0.6			
EcoFlow®	3/8"	1.1	28	3.8	97	0.7	0.3			
EcoFlow® w/ side port		1.7	43			1.3	0.6			

### ORDERING

Part Number <sup>1</sup>	Description
241-100000-XXX	1/4" EcoFlow® SS
241-100100-XXX	1/4" EcoFlow® SS w/ side port
241-111000-XXX	3/8" EcoFlow® SS
241-111200-XXX	3/8" EcoFlow® SS w/ side port

#### NOTES

1. Full open temperatures "XXX" available: 040°F, 045°F, 050°F, 060°F, 070°F, 075°F, 085°F, 095°F, 100°F, 105°F, 110°F, 115°F, 120°F, 125°F, 130°F, 140°F, 150°F, 160°F, 170°F, 175°F, 180°F, 190°F, 200°F and 210°F.
2. Note: Closing temperature is typically 10°F below opening temperature.
3. Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)



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EcoFlow  
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*Because of continuous improvements, ThermOmegaTech®, Inc. reserves the right to change the design and specifications without notice*