



Inboard Manifold Kit





The PHIBER Inboard Manifold Kit enables "hands free" injection of fresh water into a raw water network for flushing and pickling of "wet" seawater systems. It uses simple physics to guide the flow of fresh water, eliminating the need for manual opening or closing of valves when performing a freshwater flush. It is designed to allow flushing for complex systems that must be flushed while operating, such as those used on inboard combustion engines (propulsion or generator).

The Balancing Tee and the Swing Gate operate in concert during a flush. They are configured by the installer to minimize the duration and volume of flushing water needed by injecting it directly into the circuit at the optimal location for maximum benefit.

The Balancing Tee serves as the freshwater injection point. During a flush, fresh water is pushed in through the Tee, causing changes in pressure within the raw water network. Once the flow meets or exceeds the demand of the raw water pump, a "Balanced" state is achieved.

Positive pressure & flow from the freshwater pump cancels out the **negative pressure & flow** created by the raw water pump. As the flow of seawater diminishes, the internal gate in the Swing Check closes via gravity as the flow of fresh water becomes adequate to satisfy the demands of the raw water pump.

The Manifold **protects the critical raw water pump** as well. If the demand of the raw water pump exceeds the incoming flow of fresh water, the Swing Check's internal gate opens in proportion to the demand, guaranteeing the adequate flow of water into the raw water network, protecting critical components from cooling water starvation.

General		
Manifold Material	316 Stainless Steel	
Thread Types	NPT (See drawings for specific Kit)	
Dimensions	(See drawings for specific Kit)	
Weight (Entire Assembly)	(See drawings for specific Kit)	



Kits

Item #	Size	Kit Includes
25-9000505	1"	Bonnet Lock & Wire
25-9000510	1 1/4"	Bonnet Lock & Wire
25-9000515	1 1/2"	Bonnet Lock & Wire
25-9000520	2"	Bonnet Lock & Wire
25-9000525	2 1/2"	Reducer Bushing Bonnet Lock & Wire
25-9000530	3"	Reducer Bushing Bonnet Lock & Wire
25-9000540	4"	Reducer Bushing Bonnet Lock & Wire

NOTE: Additional components are needed for proper installation

Features

- Rugged design can be installed in harsh environments
- Operationally failsafe protects the raw water system
- Service life +20 years
- Aggregate components allow for effective placement, minimal installation footprint, and creative architecture
- Engineered design ensures safety and integrity of raw water system equipment and operation







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