

# Series SFK

## Complete Seal Flush Kit

### Features:

- Automatically regulates flow to optimum rate for seals or packing.
- Strainer safeguards against contamination.
- Rugged weatherproof solenoid valve turns flush on and off.
- Fittings for both 1/8" and 1/4" stuffing box connections.
- Magnetic flow meter works horizontally or vertically. Requires no external power.
- Flexible tubing simplifies installation.
- Compatible with the Onyx Smart Box controller.

**Applications:** Ideal for automatic control of seal flush water for stuffing boxes, single mechanical seals and double mechanical seals.

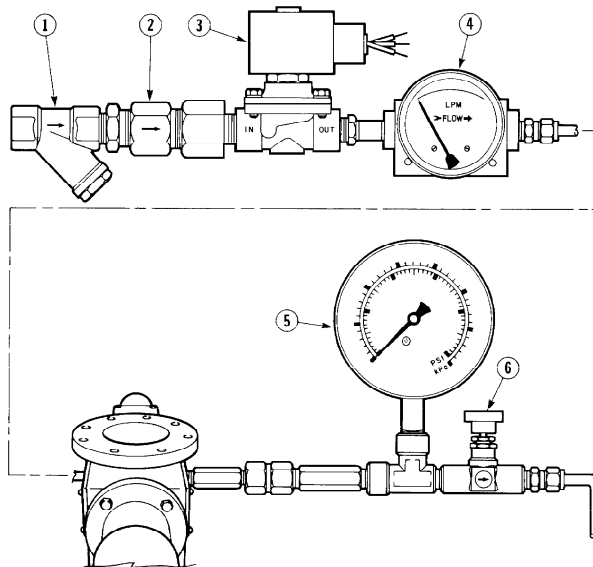
**Operation:** The heart of the Onyx Seal Flush Kit is the Automatic Flow Regulator (item #2). This device maintains constant volumetric flow rate regardless of changes in upstream or downstream pressure. It

has no manual adjustment and requires no external power. This insures that the pump seal receives the right amount of coolant without waste or product dilution.

The solenoid valve (item #3) turns the flush water on and off with the pump. The standard solenoid coil is 120 VAC/60~ suitable for indoor or outdoor installation.

The kit also includes a magnetically coupled flow meter. This meter will work in any orientation (horizontal or vertical), has no pressurized glass components which could burst, and is impervious to scaling or coating. This flow meter is not for adjusting the flow rate (which is fixed) but verifies correct flush rate. It is available with a magnetic reed switch to signal seal flush failure.

The pressure gauge (item #5) and needle valve (item #6) provide a means to adjust stuffing box pressure. Since the Automatic Regulator maintains constant flow, a drop in box pressure indicates packing wear or seal malfunction.



- |   |                          |
|---|--------------------------|
| 1 | Strainer                 |
| 2 | Automatic Flow Regulator |
| 3 | Solenoid Valve           |
| 4 | Flow Meter               |
| 5 | Pressure Gauge           |
| 6 | Needle valve             |



**ONYX VALVE**

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When combined with the Onyx "Smart Box", the SFK kit provides a complete integrated pump protection package. When it receives a "run" command, the Smart Box turns on the flush water and verifies proper seal flush operation before starting the pump. If the seal flush fails for any reason, the Smart Box stops the pump, sends an alarm signal, and a "Seal Flush Fail" lamp turns on. During normal shut down, the Smart box keeps the seal flush on for a few seconds after stopping the pump to allow the pump to coast to a complete stop before shutting off the flow stream.

The Smart Box also protects pumps from dry running and over pressure conditions.

**Installation:** The Onyx SFK kit comes with everything needed for almost any pump seal hook up, including:

- Bronze Strainer.
- 20 ft of flexible copper tubing. Eliminates critical piping alignment on pump stuffing box connections and simplifies pump maintenance.
- 1/4" NPT tube connectors for stuffing box connections.
- 1/8" NPT adapters for stuffing box connections.
- Long nipples for connecting to "hard-to-reach" stuffing box connections.
- Extra tubing to direct spent coolant towards drain.
- Gauge with bronze tube and socket, 63 mm Ø stainless steel sealed case, liquid filled, 100 psi range, ANSI grade "B" accuracy.
- Needle valve.

**Options:**

- 220 VAC Solenoid valve.
- Flow switch on flow meter
- Explosion proof solenoid valve
- Custom kits are available for special installations.

**Available Flow Regulators**

The recommended flow rate for most mechanical seals is 1 liter per minute. Flow regulators set at 2 liters/min and 3 liters/min are also available.

Specifications subject to change or improvement without notice.

(6-98)