

# Filter System Options and Accessories

#### DIGITAL FLOWMETER/TOTALIZER

A battery powered meter that indicates flow rate, total gallons pumped, and total batch gallons pumped since reset. It is connected in-line with system piping. The meter turns on when flow begins and shuts off automatically when flow stops. Pressing the mode button switches among the three functions, and the total batch flow function can be reset to zero.

#### SUCTION LINE STRAINER

**Basket Strainer** – Provides much greater capacity over the Y-Strainer, and can be opened without using tools. The Basket Strainer has a 40 mesh screen basket and should be used when pumping heavily contaminated fluid and/or when longer cleaning interval is desired.

**Y-Strainer** – An inline strainer mounted in the suction line upstream of the pump. The 40 mesh screen strainer protects the pump from damage caused by large particles or objects contaminating the inlet fluid. A screwed port on the strainer allows inspection and cleaning of the strainer element.

#### DIFFERENTIAL PRESSURE GAUGE

A direct reading Differential Pressure Gauge shows the total differential pressure across a filter housing (the difference between pressure at the inlet to the filter housing and the pressure at the outlet from the housing). The gauge is used to monitor pressure increases across the filters and indicates when to change cartridges that have plugged. The Differential Pressure Gauge can be ordered with a switch to shut the system off and illuminate an alarm light when a pre-set differential pressure has been reached.

#### **FILTER BYPASS**

Consists of a 3-way valve upstream of the filters and piping to the outlet line downstream of the filters. A check valve is used to prevent backward flow through the filters. The Filter Bypass allows transfer of fluid without filtration. The 3-way valve selects direction of flow: either through the filters, or bypassing filtration.

#### **REMOTE STOP/START SWITCH**

The Remote Stop/Start switch comes with a 25-foot cord. This allows the unit to be turned on or off while standing at some distance from the filter system. This option is useful to observe oil level and control the system while topping off remote oil filled electrical equipment.

#### FULL PORT ISOLATION VALVES

These valves are used to isolate the filter system inlet & outlet lines from the equipment it is connected to. The ½ turn ball valves have full sized ports to prevent flow restriction.













## AUTOMATIC AIR ELIMINATOR (AAE)

Vents air from a filter housing automatically. A float inside the AAE drops when air is present – opening a port at the top. System pressure forces the air out the open port, which closes when fluid level rises. A small check valve mounted to the discharge port prevents the filter housing from draining down during periods when the pump is turned off or when the receiving tank oil level is below the top of the filter housing. The discharge port can be connected to a container to collect any fluid that might be "spit" out by the AAE.

#### 4-WAY VALVE

Also called a flow reversing valve. The 4-Way Valve has two ports that go to and from the pump/filter system, and two inlet/outlet ports. Turning the valve handle 90 degrees changes the direction of flow through the inlet/outlet ports. This allows a filter system to pump from one container into another; then by turning the valve handle 90 degrees, the direction of flow is reversed allowing the fluid to flow from the receiving container back to the original container. Reversal of flow direction is obtained without having to disconnect the inlet & outlet lines and reversing them.

### **PRESSURE SHUT-OFF SWITCH**

The Pressure Shut-Off Switch is located downstream of the pump before the filters. When the pre-set pressure is reached, the switch will shut the pump off. An alarm light can also be installed for visual confirmation. The pressure setting is adjustable. The switch will protect plugged filters from excessive pressure, and protects the system from excessive back-pressure caused by a downstream restriction in flow such as from a closed flow valve. The switch permits unattended operation of the system without worry of having to continuously monitor pressure increases across the filter.

# FLOW CONTROL BYPASS

Consists of a bypass loop with globe valve that connects the pump outlet back to the pump inlet. With the globe valve closed, full flow is available. Opening the globe valve bypasses part of the flow back to the pump inlet which lowers the amount of flow available through the system. The Flow Control Bypass allows adjustment of flow rate for flow sensitive filter cartridges or equipment, and controls pump cavitation caused by restrictions in the suction line.

#### **POWER DRAIN**

Velcon

A power drain uses the system pump to evacuate the filter housings without having to use the manual drains. The Power Drain must be used in conjunction with the Filter Bypass option. Fluid is pumped from the filter housing through the power drain valve and exits the system via the Filter Bypass line. The Power Drain prevents messes caused when manually draining the housings into buckets or other containers. An auxiliary inlet port is included with the Power Drain which allows introduction of make-up fluid into the system.

Velcon products are sold and serviced by a world-wide representative

network. To order, contact Headquarters or your LOCAL REPRESENTATIVE:











COMPANY HEADQUARTERS: Velcon Filters, Inc. 4525 Centennial Blvd. Colorado Springs, CO 80919-3350 Phone: 1.800.531.0180 Fax: 719.531.5690 e-mail: vfsales@velcon.com www.velcon.com

MANUFACTURING PLANTS LOCATED AT: Colorado Springs, Colorado Sylacauga, Alabama Harlingen, Texas

OVERSEAS AFFILIATES: Frankfurt/M., W. Germany & Singapore Liquid Filtration and Separation Specialists

Due to Velcon Filters' continuing product improvement, drawings, specifications and pictures are subject to change without notice

Svstems