# **Pre-Engineered Pump Systems**

# Walchem Pump Systems

Pre-engineered pump systems provide chemical feed solutions and ease of installation in many applications. The Walchem Pump Systems are available in four configurations offering simplicity while accommodating a range of needs, from the economical basic systems to full-featured redundant backup systems.

The core of every system begins with a rugged, chemical resistant pump stand molded of UV stabilized linear low density polyethylene. Components added to the stand to create the various systems include calibration columns, back pressure/anti-siphon valves, pressure relief valves, pulsation dampeners, gauges, ball valves and Y-strainers.

### **Summary of Key Benefits**

- Single, dual and redundant pre-engineered pump systems
- Factory assembled and hydrostatically tested
- Compact and efficient use of space. The Walchem Pump Systems have been designed specifically to accommodate all the components in a minimum amount of space while facilitating easy service or replacement of the components
- Auto-fill option provides the plumbing and valves to enable the metering pump to fill the calibration column for applications when flooded suction is not available
- Rugged polyethylene stand designed for harsh environments. The LLDPE pump stand has excellent chemical resistance and is UV stabilized. Floor mount design standard. Wall mountable with mounting kit.
- Large capacity spill containment with drain designed into each stand. The provided NPT connection enables easy drainage of chemical or rinse water caught within the containment area

## **Typical Applications**

- Cooling tower water treatment
- Boiler water treatment
- pH adjustment
- Chlorination

- Sanitary cleaning
- Drinking water treatment (Fluoride/pH)
- Closed loop systems
- Scrubber replenishment



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## Ordering Information



W = Walchem Pre-engineered Pump System

#### **A** Pump Configuration

- SP = Single Pump System
- DP = Dual Pump System
- RP = Redundant Dual Pump System (not available w/Basic system layouts)

#### **B** System Layout

- B = Basic System including the pump stand, calibration column, isolation valves and Ystrainer
- S = Standard System includes the Basic System components plus back pressure/ anti-siphon and pressure relief valves
- P = Premium System includes the Standard System components plus pulsation dampener and 200 PSI isolated pressure gauge
- L = Premium System includes the Standard System components plus pulsation dampener and 100 PSI isolated pressure gauge

#### C Calibration Column Auto-Fill Option

- N = None
- Y = Auto-fill feature uses the metering pump to fill the calibration column. (Auto-fill option 'Y' required for Redundant Pump Systems.)

#### D Pump Connection Size

- 3 = 3/8" tubing connections & 250 mL calibration column
- 5 = 1/2" tubing connections, & 1000 mL calibration column

#### **E** Materials of Construction

- VC = PVC components with 1/2" PVC piping, PE tubing, and FKM elastomer seals
- VE = PVC components with 1/2" PVC piping, PE tubing and EPDM elastomer seals

Note: Metering Pumps ordered separately

BASIC SYSTEMS are available in either single or dual pump system layouts. The Basic systems provide ease of installation for either one or two metering pumps. Utilizing a one piece molded polyethylene stand with spill containment, the Basic systems are comprised of ½" Schedule 80\* piping with isolation ball valves on both the inlet and outlet. The suction side also has a calibration column with valve and a PVC Y-Strainer.

STANDARD SYSTEMS start with the same features of the Basic Systems, adding both a back pressure/antisiphon valve for control and a pressure relief valve for over-pressure protection. An auto-fill configuration can also be added where the metering pump fills the calibration column (suction lift applications).

PREMIUM SYSTEMS take the Standard Systems further by adding more flow control and system protection with the addition of a pulsation dampener and isolated pressure gauge into the discharge of the system. Auto-fill is also available in the Premium Systems.

REDUNDANT PUMP SYSTEMS are available in the Standard or Premium Systems and has the Auto-fill configuration standard. Redundant systems have common suction and discharge lines and use one plumbing system for both pumps in the system. They are designed for Primary/Backup pump scenarios.

\*In the suction side, Schedule 40 Tees are used.









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