# **Series DDI Chemical Metering Pump**

Industrial chemical metering pump, available in simplex configuration.

Capacities to: 7920 GPD – 330 GPH
Pressures to: 290 PSI – 20 BAR
Pump has a full 2-year warranty

• Available Heads: PVDF; PP; PVC or 316SS and other materials per request

# **Series DDI Chemical Metering Pump**



#### FRAME AND GEARBOX

Pump features a mechanically linked diaphragm, driven by an oil immersed worm/wheel reduction gearbox, which in turn, is driven by a close-coupled electric motor. The pump utilizes a rigid, one-piece cast iron or aluminum frame to ensure rigidity between all components. The frame is provided with an oil drain and separate oil fill/breather. The oil fill is positioned so that oil is added until it overflows; the oil level is then at the correct operating level and cannot be overfilled. The four integrally cast hold down feet are machined so that the pump is ready for mounting.

## **SOLUTION HEAD**

Six sizes of solution heads combined with 5 stroking rates result in the pump having a capacity range from .76 to 7920 GPD (0.12 to 1249 liters/hour), with discharge pressures to 290 PSI (2000 kpag), depending on head size and material. Head materials in PVDF, PVC, PP, 316SS and other materials per request in conjunction with diaphragm in PTFE, elastomer cover with PTFE and other materials per request mean that the pump is able to handle a wide range of industrial chemicals.

### **SUCTION AND DISCHARGE VALVES**

DDI Series utilizes screw in valves in the same materials as the solution head PVDF, PVC, PP, 316SS and other materials per request. A variety of ball check materials including stainless steel, ceramic, Pyrex, PTFE and Hastalloy. The valve assemblies are fully serviceable with all components being replaceable. For products with a high viscosity such as polymer solutions, the valves are available with springs to assist in positive valve operation. Single and double action.

### **SEATS AND SEALS:**

EPDM; FKM, Viton, PTFE, stainless steel, Ceramic other materials per request.

#### **CONNECTORS:**

For hose or threaded.

# **DRIVE MOTOR**

DDI series can use different motors to adapt pump to customer installation. DDI Series pump is available with motors in a variety of voltages VAC and VDC from 110 to 440 Volts, several HP capacities, 1 or 3 phase, 50-60hz 1725 to 3600 rpm, TEFC industrial, XP, and other options available for outdoor industrial use.

#### **CAPACITY CONTROL**

Pump's output can be manually adjusted via a precision micrometer adjustment set to operate between 1-100% of the pump rated capacity. A variable speed controller can also be used to operate the pump between 20-100%. The variable speed controller can accept a 4-20 mA and MODBUS signal from an external process controller to provide automatic capacity adjustment control.

#### **WARRANTY**

Pump has a full 2-year warranty.

#### **COMPACT DESIGN:**

Facilitates, installation and use of available space.

### **CONTINUOUS SERVICE:**

Pump and motor, even outdoors and with adverse weather conditions.

# **FLOW REGULATION:**

By lost stroke system, manually operable with the pump running or stopped, by means of an exclusive mechanical digital regulator. Also automatic regulation adding optional electronic resources such as variable speed drives, boards, MODBUS and telemetry among others.

#### DIAL WITH DIGITAL MECHANICAL INDICATOR:

Allows a comfortable direct reading in percentage of the total flow, between 0 and 99%, with an appreciation of 1%.

### **DRIVE:**

100% armored and standardized electric motor, linked to the endless by means of semi-elastic coupling that allows its easy replacement and also absorbs undesirable misalignments and vibrations.

**REDUCER**: Of the worm and crown type, both fully mounted on angular contact bearings in the case of the auger and radial in the case of the crown lubricated in oil bath with level control by means of a side viewer.

#### **CHEMICAL HANDLING:**

Such as hypochlorite solutions, hydrated lime, aluminum sulfate, polymers, activated carbon for water treatment as well as other multiple applications. The heads, diaphragms and seals are selected to suit the user's requirement.

# **SERIES DDI - TAILOR MADE**

We understand that some processes require a tailor made approach. That is why in 2013 we decided to launch Enchlor OEM. Our goal is to provide non-standard, tailor made, custom fit equipment for the water treatment industry. Ehchlor OEM adapts equipment to a wide range of applications by reengineering components, accessories and materials of our standard engineering product line. The goal of OEM is to solve the needs of our customers. By accepting these challenges we provide our technical staff with the ability to expand their capabilities beyond standard equipment. This experience has proven rewarding to all our stakeholders. As our customers can request tailor made solutions, our distributors can expand their product offerings and our staff can perfect their technical craft.

#### **DDI PUMP DATA**

Basic Models 30A - 60A - 80A - 150A - 300A - 450A - 600A - 1200A

#### Pump Data will indicate:

- Motor specifications
- Head Size and Material
- Maximum Rated Capacity
- Maximum Allowable Discharge Pressure
- Valve Arrangement and materials
- Diaphragm, seats and seals materials
- Maximum Temperature Limit
- Micrometer Stroke Resolution
- Stroking Rates SPM
- Connection Sizes
- Accessories included like tanks, agitators, spare parts kits and others.