

# **DEF Product Support Catalog**











# Pump Supplier to the World

Flowserve is the driving force in the global industrial pump marketplace. Few if any pump companies can match the capabilities in hydraulic engineering, mechanical design or materials science that Flowserve possesses.

# **Pump Designs**

Flowserve offers a wide range of complementary pump types, built to recognized global standards and customer specifications. No other pump company in the world has the depth or breadth of expertise in the successful application of pre-engineered, engineered and special purpose pumps and systems.



## **Product Brands of Distinction**

ACEC™ Centrifugal Pumps

Aldrich™ Pumps

Byron Jackson® Pumps

Calder™ Energy Recovery Devices

Cameron™ Pumps

Durco® Process Pumps

Flowserve® Pumps

IDP® Pumps

Niigata Worthington™ Pumps

Pacific® Pumps

Pleuger® Pumps

Scienco™ Pumps

Sier-Bath® Rotary Pumps

TKL™ Pumps

United Centrifugal® Pumps

Western Land Roller™ Irrigation Pumps

Wilson-Snyder® Pumps

Worthington® Pumps

Worthington Simpson™ Pumps



# Experience Makes the Difference

Flowserve DEF pumps are the most dependable transfer pumps in the industry. Pump to pump, chemical to chemical, Flowserve pumps deliver the performance and reliability expected from a leader. After all, Flowserve has been providing chemical transfer systems for more than 30 years.

# Reaping Benefits

The versatile DEF transfer pump product lines offers numerous benefits and options.

- ISO 2241 compliance via stringent material testing
- 115-volt AC and 12-volt DC options
- · Outstanding chemical resistance
- · Self-priming capability, even when dry
- · Multiple configurations and accessory options
- Portability
- · Ease of use and maintenance
- 2-year warranty

# Reliability Guaranteed

Flowserve offers a 2-Year Service Program on its standard duty DEF pumps and pump mounted flow meters.

For two years from the date of manufacture, Flowserve will provide a replacement pump or meter electronics in the case of equipment failure.

Through this program, Flowserve pump users will spend less money and time on DEF transfer equipment than ever before.



For additional information about the 2-Year Service Program, please call 800.343.PUMP (7867).





# PH6-DEF Diaphragm Transfer Pump

The PH6-DEF diaphragm pump is a versatile transfer pump engineered for use with Diesel Exhaust Fluid (DEF). The PH6-DEF pump is chemically resistant, lightweight, easily portable and highly reliable.

### Features

- Materials of construction compliant with all sections of ISO 22241
  - Housing: glass-filled Nylon standard; polypropylene optional
- Cartridge components: polyphenylene sulfide (PPS), stainless steel,
   EPDM elastomer, Santoprene® diaphragm
- Seals: EPDM standard
- · Vertical or horizontal container top mount
- Removable cartridge containing diaphragm, valves and bypass assembly eases maintenance and field replacement
- · Multiple pump-chamber design for increased dependability
- . SEM-10 flow meters available
- DEF-specific discharge hoses available
- Automatic shutoff dispensing nozzles available
- 2-Year Service Program

### **Operating Parameters**

- Flows to 38 l/m (10 gpm) at 16°C (60°F)
- Pressures to 1.7 bar (25 psi)
- Temperatures to 55°C (130°F)
- 115-volt AC operated motor with 6.1 m (20 ft) cable; 12-volt DC motor optional

® Santoprene a registered trademark of the ExxonMobil.



# Vertically Mounted PH6-DEF Pump

Vertical configuration PH6-DEF pump fits 50 mm (2 in) openings.

### Features

- · Vertical container top mount
- Fits tanks with 50 mm (2 in) openings
- 25 mm (1 in) bung suction adapter available
- 25 mm (1 in) discharge (female NPT threaded)
- Built-in 4-pin Micro Matic<sup>®</sup> quick coupler for closed system capability available on some models
- Diptubes and tank adapters available
- 2-Year Service Program

## **Available Configurations**

### Part Number: PH6110-DEF

- 115-volt AC motor with 6.1 m (20 ft) power cable
- 50 mm (2 in) suction (male NPT threaded)

### Part Number: PH6P-DEF

- 12-volt DC motor with 6.1 m (20 ft) cable with terminal clamps
- 50 mm (2 in) suction (male NPT threaded)

### Part Number: PH6110-DEF-MM (shown)

- 115-volt AC motor with 6.1 m (20 ft) power cable
- · Integrated Micro Matic quick coupler
- 19 mm (¾ in) female BSPP discharge available

### Part Number: PH6P-MM-DEF

- 12-volt DC motor with 6.1 m (20 ft) cable with terminal clamps
- Integrated Micro Matic quick coupler
- 19 mm (¾ in) female BSPP discharge available
- ® Micro Matic is a registered trademark of Micro Matic Industrial.





# Horizontally Mounted PH6-DEF Pump

Horizontally mounted PH6-DEF pump with a Nylon housing and a 50 mm (2 in) opening.

### Features

- · Horizontal container top mount
- Corrosion resistant steel bracket features fastener slots to adapt to multiple tank types
- Fits tanks with 25 mm or 50 mm
   (1 in or 2 in) openings via reducer
- · Reducer included
- 2-Year Service Program

### **Available Configurations**

Part Number: CES-PH6110-DEF (shown)

• 115-volt AC motor with 6.1 m (20 ft) power cable

Part Number: CES-PH6P-DEF

 12-volt DC motor with 6.1 m (20 ft) cable with terminal clamps



## **Metered Hand Pump**

The manually-operated metered hand pump precisely delivers high volumes of chemicals at low pressures.

### **Features**

- Rugged polypropylene construction with Viton® seals
- Includes diptube, discharge hose, ball valve and spout
- Accurate to 2% per full stroke
- 50 mm (2 in) threaded bung connection
- · EPDM seals available
- · Buttress thread adapter optional
- 1-quart/1-liter capacity
- · Metric or English units
- Full 12-month warranty from date of shipment

### Available Configurations

Part Number: MP1Q-SS

- 1-quart capacity
- · English units

Part Number: MP1L-SS

- · 1-liter capacity
- · Metric units

® Viton is a registered trademark of DuPont®.



# **HP Drum Pump**

The HP Drum Pump is designed to efficiently deliver high volumes of harsh and viscous chemicals at low pressures.

#### **Features**

- Efficient, double pumping action ensures product delivery on both up and down strokes
- No-friction design eliminates wear and prevents jamming
- Outlet spout swivels to prevent drips
- Outlet spout accepts extender hose
- 50 mm (2 in) buttress adapter
- 50 mm (2 in) NPT adapter
- · Anti-pumping safety device
- · Wetted materials
  - Polypropylene
  - Polyethylene
- · 24-month warranty

# **Available Configurations**

Part Number: HP-30

• Fits 15 and 30 gallon containers

Part Number: HP-55

• Fits 30 and 55 gallon containers



# Flow Meters



# **Electronic Flow Meter**

The SEM-10-DEF electronic flow meter offers simple one-touch operation and comes ready to use.

### **Features**

- · Positive displacement nutating disk design meters with great accuracy and minimal pressure loss
- · Simple, one-touch operation
- LCD display measures 19 mm (¾ in) and is the largest on the market
- · Large, positive touch buttons
- · Choice of calibration units
- 25 mm (1 in) rear mounting port allows meter to be mounted directly to the pump discharge
- 25 mm (1 in) side port
- · Extended battery life
  - Takes one 3-volt lithium battery
  - Battery replaceable without removing the meter or chemical exposure
- Materials of construction:
  - Nylon housing standard; polypropylene optional
  - Meter chamber: Polyphenylene sulfide and stainless steel
  - O-rings: EPDM
  - Electronic body: Nylon
  - Screws: Stainless steel

## **Operating Parameters**

- Flows from 0.5 m3/h (2 gpm) to 6.8 m<sup>3</sup>/h (30 gpm)
- Pressures to 4 bar (60 psi)
- Temperatures to 65°C (150°F)
- Accuracy to ± 0.5%

Part Number: SEM-10-DEF



# Flow-Through Electronic Flow Meter

The SEM-10FT-DEF electronic flow meter is able to be mounted at the hose end.

#### Features

- · Flow through configuration enables meter to be mounted at hose end
- Positive displacement nutating disk design meters with great accuracy and minimal pressure loss
- · Simple, one-touch operation
- LCD display measures 19 mm (¾ in) and is the largest on the market
- · Large, positive touch buttons
- · Choice of calibration units
- 25 mm (1 in) side ports
- · Extended battery life
  - Takes one 3-volt lithium battery
  - Battery replaceable without removing the meter or chemical exposure
- Materials same as SEM-10-DEF flow meter

### **Operating Parameters**

- Flows from 0.5 m<sup>3</sup>/h (2 gpm) to 6.8 m<sup>3</sup>/h (30 gpm)
- Pressures to 4 bar (60 psi)
- Temperatures to 65°C (150°F)
- Accuracy to ± 0.5%

Part Number: SEM-10FT-DEF



# Stainless Steel Electronic Flow Meter

The SEM-10SS-DEF electronic flow meter is a multiple use, non-commercial meter with a stainless steel housing.

#### Features

- · Positive displacement nutating disk design meters liquids with great accuracy and minimal pressure loss
- · Stainless steel and plastic construction is durable and corrosion resistant
- Simple, one-touch operation
- LCD display measures 19 mm (¾ in) and is the largest on the market
- · Large, positive touch buttons
- · Choice of calibration units
- 25 mm (1 in) rear mounting port allows meter to be mounted directly to the pump discharge
- 25 mm (1 in) side port
- · Extended battery life
  - Takes one 3-volt lithium battery
  - Battery replaceable without removing the meter or chemical exposure
- · Materials same as SEM-10-DEF flow meter but with a stainless steel housing

### **Operating Parameters**

- Flows from 0.5 m3/h (2 gpm) to 6.8 m<sup>3</sup>/h (30 gpm)
- Pressures to 6.9 bar (100 psi)
- Temperatures to 85°C (185°F)
- Accuracy to ± 0.5%

Part Number: SEM-10SS-DEF





## Flow Meter Electronics Kit

Electronics repair kit for SEM-10-DEF flow meter. Also can be used on SEM-10FT-DEF flow meter.

### Features

- Electronic LCD display
- 3-volt lithium battery
- · Mounting gasket
- · Stainless steel screws

Part Number: SEM-10 Kit-1



# Stainless Steel Flow Meter Chamber Kit

Chamber repair kit for SEM-10SS-DEF flow meter.

### Features

- · Magnet holder assembly
- Washer
- Drive dog assembly and pin
- Wobble plate assembly and housing
- · Viton O-rings

Part Number: SEM-20 Kit



# Flow Meter Chamber Kit

Chamber repair kit for SEM-10-DEF flow meter. Also can be used on SEM-10FT-DEF flow meter.

### Features

- Nylon
- · Magnet wheel
- Top and bottom EPDM O-rings

Part Number: SEM-10 Kit-2E



# Stainless Steel Flow Meter Electronics Kit

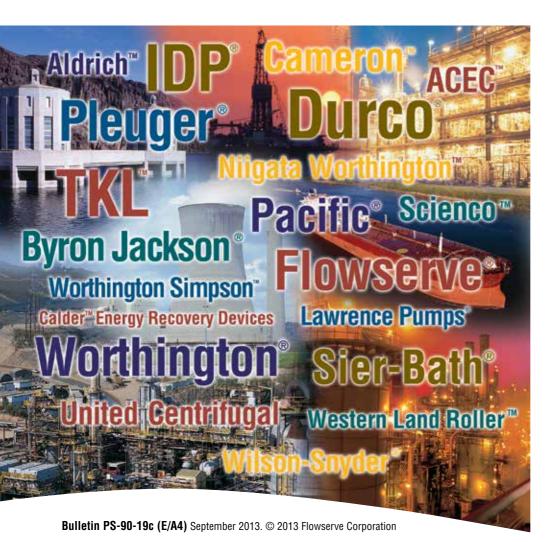
Electronics repair kit for SEM-10SS-DEF flow meter.

### Features

- · Potted electronic assembly
- 3-volt lithium battery
- · Mounting gasket
- · Stainless steel screws

Part Number: SEM-10SS Kit





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