

The Most Trusted Name in Pumps and Meters

# **Product Catalog**





#### Tuthill - Fill-Rite/Sotera Division

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#### The Tuthill Story Tuthi

Tuthill Corporation is a diversified global manufacturing company, developing and supplying industrial products for our value-minded customers in over 150 markets.

Our culture is based on the Tuthill Business System (TBS); our version of lean manufacturing. TBS coupled with the Conscious Company initiatives of personal continuous improvement, through which Tuthill encourages its employees to reach for a higher level of greatness, allows for excellence not only in the products we manufacture but in the people we employ and customers we serve.

The end result is a company you can depend on, one that eliminates waste in our processes and provides superior products, quality and value for our customers.

Tuthill is celebrating 50 years of manufacturing a comprehensive product line of chemical and fuel transfer products well suited for any dispensing and metering applications. The Fill-Rite and Sotera products are recognized internationally as the most dependable, durable, and rugged products available.

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# **Pump Overview**

#### Tuthill Rotary Vane "Point of Use" Transfer Pumps

It's no secret that the transfer of fuels is one of the foundational components that keeps our world moving. The needs of the Agricultural, Construction, and Transportation industries have long been met by Tuthill's complete line of Fill-Rite rotary vane pumps. The rugged cast iron construction of this product is unparalleled in durability, and has become the standard in these industries. If you work in or deal with these industries, whether on a farm, construction site, or in fleet service, odds are very high that you rely every day on the Fill-Rite branded products to keep you moving.

Recent changes in EPA emission requirements for both on and off road diesel powered equipment have brought about a new demand for Diesel Exhaust Fluid, or DEF. To meet



the demands of this rapidly expanding market, Tuthill has developed a range of Sotera Stainless steel rotary vane pumps designed specifically to deliver maximum compatibility and high flow requirements for dispensing DEF. Manufactured in the Ft. Wayne, Indiana Fill-Rite production facilities, every Sotera Stainless Steel Rotary Vane pump is built to the same stringent quality standards as their Fill-Rite siblings. Robust design and manufacturing to extreme tolerances means the best possible product. Our customers expect nothing less.

#### **Tuthill Diaphragm Pumps**

With a primary focus on transfer and point of use dispensing of Agricultural Chemicals and basic transfer of fuels, Tuthill has been producing electrically powered diaphragm pumps for 20 years. These stalwarts of the agricultural industry are available in both AC and DC powered models, making them ideal for stationary and mobile applications.

Building on a heritage of innovation and quality, Tuthill has recently launched the start of a new range of Sotera Air Operated Diaphragm Pumps. With initial offerings of the most popular ½" and 1" sizes (2" and 3" models to follow), these pumps will provide effective and efficient transfer of engine oils and other service chemicals. Boasting the highest flow rates available in the category and a wide range of materials of construction, Sotera is the right solution for your chemical transfer needs.



# **DC** Transfer Pumps



#### Fill-Rite's Complete Range of Mobile DC Fuel Transfer Pumps

for Gasoline/Diesel/B20/E-15/Kerosene

#### FR1200 Series · Heavy Duty

**15 GPM** 

• 8' Lift

12 Volt

- For In-Bed Truck Tanks
- For Mobile Tanks used in Farming and Construction
- Great Emergency Response Pump

|                          |              | Top Selling Model      |                     | Top Selling Model      |                        |
|--------------------------|--------------|------------------------|---------------------|------------------------|------------------------|
|                          | FR1204       | FR1210C                | FR1210CA            | FR1211C                | FR1211CL               |
| Flow Rate (GPM/LPM)      | Up to 15/57  | Up to 15/57            | Up to 15/57         | Up to 15/57            | Up to 15/57            |
| Voltage                  | 12 Volt      | 12 Volt                | 12 Volt             | 12 Volt                | 12 Volt                |
| Inlet/Outlet             | 1"/3/4"      | 1"/3/4"                | 1"/3/4"             | 1"/3/4"                | 1"/3/4"                |
| Mount                    | 2" NPT       | 2" NPT                 | 2" NPT              | 2" NPT                 | 2" NPT                 |
| Matls of Const - Housing | Cast Iron    | Cast Iron              | Cast Iron           | Cast Iron              | Cast Iron              |
| Horse Power              | 1/4          | 1/4                    | 1/4                 | 1/4                    | 1/4                    |
| Power Cord Length        | -            | 18'                    | 18'                 | 18'                    | 18'                    |
| Amps                     | 20           | 20                     | 20                  | 20                     | 20                     |
| Duty Cycle               | 30 min       | 30 min                 | 30 min              | 30 min                 | 30 min                 |
| Certifications           | UL/cUL Motor | UL/cUL Motor           | UL/cUL Motor        | UL/cUL Motor           | UL/cUL Motor           |
| Included Accessories     | Pump Only    | 20 - 34 ¾" Steel       | 20 - 34 ¾" Steel    | 20 - 34 ¾" Steel       | 20 - 34 ¾" Steel       |
|                          |              | Telescoping Suction    | Telescoping Suction | Telescoping Suction    | Telescoping Suction    |
|                          |              | Pipe, 3/4" x 12' Hose, | Pipe, 3/4" x 12'    | Pipe, 3/4" x 12' Hose, | Pipe, 3/4" x 12' Hose, |
|                          |              | 3/4" Manual Nozzle     | Hose, 3/4" Auto     | 3/4" Manual Nozzle,    | 3⁄4" Manual Nozzle,    |
|                          |              |                        | Nozzle              | Mechanical Meter       | Mechanical Meter       |
|                          |              |                        |                     | (Gal)                  | (Liter)                |

# **DC** Transfer Pumps

#### FR4200 Series · Heavy Duty

**20 GPM** • 25% Higher Flow • 8' Lift • For In-Bed Truck Tanks and Mobile Tanks

**12 Volt** • Great Emergency Response Pump

#### Top Selling Model

|                          | FR4204      | FR4210D               | FR4211D              |
|--------------------------|-------------|-----------------------|----------------------|
| Flow Rate (GPM/LPM)      | Up to 20/75 | Up to 20/75           | Up to 20/75          |
| Voltage                  | 12 Volt     | 12 Volt               | 12 Volt              |
| Inlet/Outlet             | 1"/1"       | 1"/1"                 | 1"/1"                |
| Mount                    | 2" NPT      | 2" NPT                | 2" NPT               |
| Matls of Const - Housing | Cast Iron   | Cast Iron             | Cast Iron            |
| Horse Power              | 1/4         | 1/4                   | 1/4                  |
| Power Cord Length        | -           | 18'                   | 18'                  |
| Amps                     | 19          | 19                    | 19                   |
| Duty Cycle               | 30 min      | 30 min                | 30 min               |
| Certifications           | UL/cUL      | UL/cUL                | UL/cUL Motor         |
| Included Accessories     | Pump Only   | 20 - 34 ¾" Steel      | 20 - 34 ¾" Steel     |
|                          |             | Telescoping Suction   | Telescoping Suction  |
|                          |             | Pipe, 1" x 12' Hose,  | Pipe, 1" x 12' Hose, |
|                          |             | 1" Manual Nozzle      | 1" Manual Nozzle,    |
|                          |             | (For 1" Automatic Noz | Mechanical Meter     |
|                          |             | order FR4210DB)       | (Gal)                |

#### FR3200 Series · Heavy Duty

25 GPM • Highest Flow DC Pump in the Industry

12 Volt • For Remote Fueling of Large
Ag and Construction Equipment

#### **Coming Soon**



#### Standard Duty - 12 Volt

|                          | SD1200 Series  | FR1600 Series  | FR2400 Series ·      | Heavy Duty          |
|--------------------------|--|--|----------------------|---------------------|
|                          | Weekend Warrior     For In-Bed Truck and     Small Mobile Tanks     Great Emergency Pump | <ul><li>Extremely Portable</li><li>Diesel Only</li><li>For Drums and Totes</li></ul> | 10 01 111            |                     |
|                          | SD1202   | FR1614   | FR2410C              | FR2411CL            |
| Flow Rate (GPM/LPM)      | Up to 13/49  | Up to 10/38  | Up to 15/57          | Up to 15/57         |
| Voltage                  | 12 Volt  | 12 Volt  | 24 Volt              | 24 Volt             |
| Inlet/Outlet             | 1"/3/4"  | 3/4" / 3/4"  | 1"/ <sup>3</sup> ⁄4" | 1"/3/4"             |
| Mount                    | 2" NPT   | -  | 2" NPT               | 2" NPT              |
| Matls of Const - Housing | Cast Iron  | Cast Iron  | Cast Iron            | Cast Iron           |
| Horse Power              | 1/4  | 1/4  | 1/4                  | 1/4                 |
| Power Cord Length        | 15'  | 6½'  | 18'                  | 18'                 |
| Amps                     | 20   | 20   | 10                   | 10                  |
| Duty Cycle               | 30 min   | 30 min   | 30 min               | 30 min              |
| Certifications           | UL/cUL Motor   | -  | UL/cUL Motor         | UL/cUL Motor        |
| Included Accessories     | 151/4" - 431/4" PVC  | 8' PVC Suction Hose,   | 20 - 34 ¾" Steel     | 20 - 34 ¾" Steel    |
|                          | Two - Piece Suction Pipe,  | <sup>3</sup> ⁄4" x 8' Hose, <sup>3</sup> ⁄4"   | Telescoping Suction  | Telescoping Suc-    |
|                          | <sup>3</sup> ⁄ <sub>4</sub> " x 10' Hose,  | Manual Poly Nozzle   | Pipe, ¾" x 12' Hose, | tion Pipe, ¾" x 12' |
| 4                        | 3/4" Manual Nozzle   | (For Pump Only   | ¾" Manual Nozzle     | Hose, ¾" Manual     |
|                          | [For 3/4" Automatic Nozzle   | order FR1612)  |                      | Nozzle, Mechanical  |
|                          | order SD1202A)   |  |                      | Meter (Liter)       |

# **AC Transfer Pumps**



#### Fill-Rite's Complete Range of AC Fuel Transfer Pumps

for Gasoline/Diesel/B20/E-15/Kerosene

|                          | SD600 Series · Standard Duty   | FR600 Series · Heavy Duty  |  |  |
|--------------------------|--|--|--|--|
|                          | 13 GPM  • 8' Lift  • For use with Skid Tanks  12 Volt  • Perfect for the Weekend Warrior | 15 GPM • 8' Lift • For use with Skid Tanks • For Very Small Fleets |  |  |
|                          | SD602  | Top Selling Model<br>FR610C  |  |  |
| Flow Rate (GPM/LPM)      | Up to 13/49  | Up to 15/57  |  |  |
| Voltage                  | 115 Volt   | 115 Volt   |  |  |
| Inlet/Outlet             | 1"/3⁄4"  | 1"/3/4"  |  |  |
| Bung Mount               | 2" NPT   | 2" NPT   |  |  |
| Matls of Const - Housing | Cast Iron  | Cast Iron  |  |  |
| Horse Power              | 1/4  | 1/4  |  |  |
| HZ                       | 60   | 60   |  |  |
| Amps                     | 1.5  | 1.5  |  |  |
| Duty Cycle               | 30 Min   | 30 Min   |  |  |
| Certification            | UL/cUL   | UL/cUL   |  |  |
| Included Accessories     | Three Piece PVC  | 20 - 34 3/4" Steel Telescoping                                     |  |  |
|                          | Suction Pipe,  | Suction Pipe, 3/4" x 12' Hose,                                     |  |  |
| F                        | <sup>3</sup> ⁄ <sub>4</sub> " x 12' Hose,  | 3/4" Manual Nozzle   |  |  |
|                          | ³⁄₄" Manual Nozzle   | (For Pump Only order FR604)  |  |  |
|                          |  | (For 3/4" Automatic Nozzle order                                   |  |  |
|                          |  | FR610CA)   |  |  |

# **AC** Transfer Pumps

#### FR700 Series · Heavy Duty

• 10' Lift (Gasoline) 12' Lift (Diesel)

• For use with Above Ground and Underground Tanks

115 Volt • For Small Fleets

#### Top Selling Model Top Selling Model

|                          | FR700V             | FR701V                                    | FR701VL           | FR710VN     | FR711VA               |
|--------------------------|--------------------|---|-------------------|-------------|-----------------------|
| Flow Rate (GPM/LPM)      | Up to 20/75        | Up to 20/75                               | Up to 20/75       | Up to 20/75 | Up to 20/75           |
| Voltage                  | 115 Volt           | 115 Volt                                  | 115 Volt          | 115 Volt    | 115 Volt              |
| Inlet/Outlet             | 1 1/4" / 3/4"      | 11/4" / 3/4"                              | 11/4" / 3/4"      | 11/4" / 1"  | 11/4" / 1"            |
| Bung Mount               | 2" NPT             | 2" NPT                                    | 2" NPT            | 2" NPT      | 2" NPT                |
| Matls of Const - Housing | Cast Iron          | Cast Iron                                 | Cast Iron         | Cast Iron   | Cast Iron             |
| Horse Power              | 1/3                | 1/3                                       | 1/3               | 1/3         | 1/3                   |
| HZ                       | 60                 | 60  | 60                | 60          | 60                    |
| Amps                     | 5.5                | 5.5                                       | 5.5               | 5.5         | 5.5                   |
| Duty Cycle               | 30 Min             | 30 Min                                    | 30 Min            | 30 Min      | 30 Min                |
| Certification            | UL/cUL             | UL/cUL                                    | UL/cUL            | UL/cUL      | UL/cUL                |
| Included Accessories     | 3⁄4" x 12' Hose,   | <sup>3</sup> ⁄ <sub>4</sub> " x 12' Hose, | 3⁄4" x 12' Hose,  | Pump Only   | 1" x 18' Hose,        |
|                          | 3/4" Manual Nozzle | 3⁄4" Manual Nozzle,                       | ¾" Manual Nozzle, |             | 1" Ultra Hi Flow Auto |
|                          | (For Pump Only     | Mechanical Meter                          | Mechanical Meter  |             | Nozzle, Mechanical    |
|                          | order FR700VN)     | (Gal)                                     | (Liter)           |             | Meter (Gal)           |
|                          |                    |   |                   |             |                       |
|                          |                    |   |                   |             |                       |

#### FR300 Series · Heavy Duty

35 GPM

Diesel Only

115/230 Volt • For Large Fleets

• 18' Lift

- For use with Above Ground and Underground Tanks
- 35% Faster Flow

|                          | · ·              | 3                 |                  |                   | New Model             |
|--------------------------|------------------|-------------------|------------------|-------------------|-----------------------|
|                          | FR310V           | FR311V            | FR311VB          | FR311VL           | FR319VB               |
| Flow Rate (GPM/LPM)      | Up to 35/132     | Up to 35/132      | Up to 35/132     | Up to 35/132      | Up to 35/132          |
| Voltage                  | 115/230 Volt     | 115/230 Volt      | 115/230 Volt     | 115/230 Volt      | 115/230 Volt          |
| Inlet/Outlet             | 11/4" / 1"       | 11/4" / 1"        | 11/4" / 1"       | 11/4" / 1"        | 11/4" / 1"            |
| Bung Mount               | 2" NPT           | 2" NPT            | 2" NPT           | 2" NPT            | 2" NPT                |
| Matls of Const - Housing | Cast Iron        | Cast Iron         | Cast Iron        | Cast Iron         | Cast Iron             |
| Horse Power              | 3/4              | 3/4               | 3/4              | 3/4               | 3/4                   |
| HZ                       | 50/60            | 50/60             | 50/60            | 50/60             | 50/60                 |
| Amps                     | 9.8/4.9/11.4/5.7 | 9.8/4.9/11.4/5.7  | 9.8/4.9/11.4/5.7 | 9.8/4.9/11.4/5.7  | 9.8/4.9/11.4/5.7      |
| Duty Cycle               | 30 Min           | 30 Min            | 30 Min           | 30 Min            | 30 Min                |
| Certification            | UL/cUL           | UL/cUL            | UL/cUL           | UL/cUL            | UL/cUL Motor          |
| Included Accessories     | 1" x 12' Hose,   | 1" x 12' Hose,    | 1" x 12' Hose,   | 1" x 12' Hose,    | 1" x 18' Hose,        |
|                          | 1" Manual Nozzle | 1" Manual Nozzle, | 1" Ultra Hi-Flow | 1" Manual Nozzle, | 1" Ultra Hi-Flow Auto |
|                          |                  | Mechanical Meter  | Auto Nozzle,     | Mechanical Meter  | Nozzle, Digital Meter |
|                          |                  | (Gal)             | Mechanical Meter | (Liter)           |                       |
|                          |                  |                   | (Gal)            |                   |                       |
|                          |                  |                   |                  |                   |                       |





# Cabinet Pumps and Meters



# Fill-Rite's Complete Range of Cabinet Pumps, Meters and Remote Fueling Systems

for Gasoline/Diesel/B20/E-15/Kerosene

#### FR 702 Cabinet Pumps and Meters · Heavy Duty

• For Pedestal Mounting or Direct Tank Top Mounting

115/230 Volt

|                          | 110/ 200 0010                             |                |                 |                 |
|--------------------------|---|----------------|-----------------|-----------------|
|                          |   |                |                 | New Model       |
|                          | FR702VR                                   | FR702VLRU      | FR702VRU        | FR702VRGU       |
| Flow Rate (GPM/LPM)      | Up to 20/75                               | Up to 20/75    | Up to 20/75     | Up to 20/75     |
| Voltage                  | 115 Volt                                  | 115 Volt       | 115 Volt        | 230 Volt        |
| Inlet/Outlet             | 1 1/4"/ 3/4"                              | 1 1/4"/ 3/4"   | 1 1/4"/ 3/4"    | 1 1/4"/ 3/4"    |
| Bung Mount               | 2" NPT                                    | 2" NPT         | 2" NPT          | 2" NPT          |
| Matls of Const - Housing | Cast Iron                                 | Cast Iron      | Cast Iron       | Cast Iron       |
| Horse Power              | 1/3                                       | 1/3            | 1/3             | 1/3             |
| HZ                       | 60  | 60             | 60              | 50              |
| Amps                     | 5.5                                       | 5.5            | 5.5             | 5.5             |
| Duty Cycle               | 30 Min                                    | 30 Min         | 30 Min          | 30 Min          |
| Certification            | UL/cUL                                    | UL/cUL         | UL/cUL          | UL/cUL          |
| Included Accessories     | <sup>3</sup> ⁄ <sub>4</sub> " x 12' Hose, | Liter Register | Gallon Register | Gallon Register |
|                          | 3⁄4" Manual Nozzle                        |                |                 |                 |

## Remote Operated Fueling Systems

Fill-Rite's Remote operated Fueling Systems have been specifically designed for taller tank and remote dispense point applications, such as when the tank is behind a secondary containment wall, or any application that requires the pump to be separated from the system due to accessibility.

Remote applications require both a Fill-rite Remote Pump and Cabinet Meter (see below). [Refer to the Installation Diagram on page 22]

**Fill-Rite's Remote Pumps** are specifically designed for this application. They are self priming and come to you ready to be mounted to top of fuel tank (recommended location). The On/Off power required to operate is supplied directly from the meter cabinet. Anti-siphon kit is included - customer installed.

#### Remote Pumps · Heavy Duty

4 Digit Mechanical (Gal)

Meter

Certification

115/230 Volt • For use with FR902 Cabinet Meters

|                          | FR303V          | FR313V           | FR713V       |
|--------------------------|-----------------|------------------|--------------|
| Flow Rate (GPM/LPM)      | Up to 20/75     | Up to 35/132     | Up to 20/75  |
| Voltage                  | 115/230 Volt    | 115/230 Volt     | 115 Volt     |
| Inlet/Outlet             | 1 1/4" / 1"     | 1 1/4"/1"        | 1 1/4"/ 3/4" |
| Bung Mount               | 2" NPT          | 2" NPT           | 2" NPT       |
| Matls of Const - Housing | Cast Iron       | Cast Iron        | Cast Iron    |
| Horse Power              | 1/2             | 3/4              | 1/3          |
| HZ                       | 50/60           | 50/60            | 60           |
| Amps                     | 8.2/4.1/9.2/4.6 | 9.8/4.9/11.4/5.7 | 5.5          |
| Duty Cycle               | 30 Min          | 30 Min           | 30 Min       |
| Certification            | UL/cUL          | UL/cUL           | UL/cUL       |

**FR902** Meter Cabinets are made from 16 gauge steel and powder coated to stand up to the elements. The design incorporates many features that improve initial installation and maintenance. Hood removal requires only the removal of 3 screws and the reset knob, it is pulser ready and all external wiring connections are placed in easy access locations.

#### FR902 Cabinet Meters · Heavy Duty • For use with Remote Pump 6-40 GPM · Can be used with submersible pumps FR902LR FR902RU FR902LRU FR902R 6-40/23-151 Flow Rate [GPM/LPM] 6 - 40 / 23-151 6-40/23-151 6-40/23-151 Inlet/Outlet 1"/1" 1"/1" 1"/1"



4 Digit Mechanical (Liter)

UL/cUL

4 Digit Mechanical (Liter)

4 Digit Mechanical (Gal)

UL/cUL



Tough. Reliable. Long-Lasting. Fill-Rite hand pumps deliver fluids quickly and easily. Whether your transferring gasoline, oil or diesel, select from a variety of Fill-Rite hand pumps. You'll appreciate the trouble free performance of these rugged hand pumps.

FR150 Piston Series · Heavy Duty

#### • Vacuum Breaker Included For Drums, Totes, and Barrels Top Selling Model FR151 FR150 Flow Rate 20 Gal/100 strokes 20 Gal/100 strokes 20 Gallons/100 strokes Inlet/Outlet 1" / 3/4" 1" / 3/4" 1" / 3/4" 2" NPT **Bung Mount** 2" NPT 2" NPT Matls of Const - Housing Cast Aluminum Cast Aluminum Cast Aluminum Certification UL/cUL UL/cUL UL/cUL Compatible Fluids Gasoline, Diesel Fuel, Light Oil, and Kerosene Included Accessoriess 20" - 34 3/4" Steel 20" - 34 3/4" Steel Pump Only **Telescoping Suction Telescoping Suction** Pipe, 3/4" x 8' Hose, Pipe, Pail Spout 3/4" Hose-end

Spout



#### FR112 Rotary Series · Heavy Duty

3' Lif

- Vacuum Breaker Included
- For Drums, Totes, and Barrels

|                          | rop Selling Model                        |  |                         |  |  |
|--------------------------|--|--|-------------------------|--|--|
|                          | FR112                                    | FR112C   | FR113                   |  |  |
| Flow Rate                | 10 Gallons per 100 rev.                  | 10 Gallons per 100 rev.                        | 10 Gallons per 100 rev. |  |  |
| Inlet/Outlet             | 1" / 3/4"                                | 1" / 3⁄4"                                      | 1" / 3/4"               |  |  |
| Bung Mount               | 2" NPT                                   | 2" NPT   | 2" NPT                  |  |  |
| Matls of Const - Housing | Cast Aluminum                            | Cast Aluminum                                  | Cast Aluminum           |  |  |
| Certification            | UL/cUL                                   | UL/cUL   | UL/cUL                  |  |  |
| Compatible Fluids        | Gas                                      | Gasoline, Diesel Fuel, Light Oil, and Kerosene |                         |  |  |
| Included Accessoriess    | 20" - 34 3/4" Steel                      | 20" - 34 3/4" Steel                            | 20" - 34 3/4" Steel     |  |  |
|                          | Telescoping Suction Pipe,                | Telescoping Suction                            | Telescoping Suction     |  |  |
|                          | <sup>3</sup> / <sub>4</sub> " x 8' Hose, | Pipe, ¾" x 8' Hose,                            | Pipe, Pail Spout        |  |  |
|                          | 3⁄4" Hose-end Spout                      | 3⁄4" Hose-end Spout,                           |                         |  |  |
|                          | (For Pump Only order FR110)              | Gallon Counter                                 |                         |  |  |

#### Special Use Pumps · Standard Duty

- For Drums, Totes, and Barrels
- Will handle a range of automotive fluids (see compatible fluids below)

|                          | FR31                            | FR20V                    | SD62                           | SD11                              | SD13                          |
|--------------------------|---------------------------------|--------------------------|--------------------------------|-----------------------------------|-------------------------------|
| Description              | Quart Stroke Pump               | Lever Piston             | Rotary Pump                    | Lever Piston                      | Pail pump                     |
| Flow Rate                | 1 Quart per Stroke              | 11 oz. per Stroke        | 7.5 Gal/100 strokes            | 11 oz. per Stroke                 | 8 oz. per Stroke              |
| Inlet/Outlet             | ½" / spout                      | 1" / spout               | 3/4" / spout                   | 1" / spout                        | 1" / PVC hose                 |
| Bung Mount               | 2" NPT                          | 2" NPT                   | 2" NPT                         | 2" NPT                            | Mounts in Pail                |
| Matls of Const - Housing | Cast Iron and Steel             | Polypropylene            | Cast Iron                      | Steel                             | PVC                           |
| Certification            | UL/cUL                          | -                        | -                              | -                                 | -                             |
| Compatible Fluids        | Gear and lube oil, anti-freeze, | Light oils, anti-freeze, | Diesel, Kerosene, Machine Oil, | Light oils, ATF, hydraulic fluid, | hydraulic fluid, transmission |
|                          | petroleum products              | coolant, hydraulic oils  | Fuel Oil, petroleum products   | diesel fuel and kerosene          | fluid, motor oil              |
| Included Accessoriess    | 21" - 36" PVC                   | PVC Telescoping          | Steel 3 Piece                  | Steel Telescoping                 | -                             |
|                          | Telescoping Suction             | Suction Pipe             | Suction Pipe                   | Suction Pipe                      |                               |
|                          | Pipe                            |                          |                                |                                   |                               |
|                          |                                 |                          |                                |                                   |                               |



# FILL-RITE. Air Operated Diaphragm Pumps SOTERA OPERA SOTERA OPERA O

Tuthill is setting a New Standard in Air Operated Pumps. The SP100 is a new evolutionary design that incorporates design characteristics for improved performance and functionality. With 15% more Flow, 62% fewer parts, "Best in Class" efficiency and half the repair time, our SP100 provides the best value in the market today. Choose the configuration to match the application, the SP100 will transfer anything from Lube Oil to detergents to Antifreeze.

SP100-05N-CD-HHH

|  | SP100-05N-XX-XXX-X     |
|--|------------------------|
| Max Flowrate (flooded suction)           | 17.5 gpm (79.56 lpm)   |
| Max Inlet Pressure                       | 100 psi (7bar)         |
| Max Outlet Pressure                      | 100 psi (7 bar)        |
| Air Consumption @ 40psi                  | 0.65 cfm/gal           |
| Displacement/Cycle @ 100psi              | 0.036 gal (0.14L)      |
| Max Particle Size                        | 3/32" dia (2.4mm)      |
| Noise Level @ 70psi                      | 75.0 db(A) at 60 cpm   |
| Ratio                                    | 1:1                    |
| Inlet/Outlet                             | ½" / ½" NPT            |
| Air Inlet                                | 1/4" NPT               |
| Air Exhaust                              | 1/8" NPT               |
| Air Inlet Pressure Range                 | 2-100 psi (0.14-7 bar) |
| Max Material Inlet Pressure              | 10 psi (0.69 bar)      |
| Fluid Outlet Pressure Range              | 2-100 psi (0.14-7 bar) |
| Max Pump Speed                           | 450 cpm                |
| Max Suction Lift (water w/ Hytrel Balls) | 14 ft [4.27 m]         |
|  |                        |

#### Fluid Compatibility

SP100-05N-PP-SSS

Transmission fluid - SP100-05N-CD-HHH

Anti Freeze - SP100-05N-CD-HHH

Waste Oil - SP100-05N-CD-HHH

New Oil - SP100-05N-CD-HHH

Diesel Exhaust Fluid - SP100-05N-PP-SSS

Windshield wiper fluid - SP100-05N-PP-TTP

Ag Chemicals - SP100-05N-PP-TTP or SP100-05N-PP-SSS

See AOD accesssories on Page 22

#### Coming in Mid-2012

1" Metallic and Non-Metallic



# AC/DC Electric Diaphragm Pumps



The 400B Series offers proven technology that combines the attributes of an air operated diaphragm pump with the convenience, portability, and efficiency of an electric driven design. The 400B uses less power than other conventional chemical pumps for maximum efficiency.

Our unique design improves fluid handling capabilities with low material sheering, solids handling up to 1/10" and dry-run capabilities. These features make this the ideal waste oil, gear oil, lube oil or hydraulic fluid transfer pump.

The power distribution's unique reciprocating, spring driven, double diaphragm configuration retains constant pressure, regardless of the load. No Internal Bypass required - the pump automatically goes neutral when the end of hose valve is shut off.

|                   |  |   |   |   | Top Selling Model  |
|-------------------|--|---|---|---|--|
| FR205B            | FR210B   | FR405BEXPX054   | FR410B  | FR410BEXP   | FR450B*  |
| Up to 13/49       | Up to 13/49  | Up to 13/49   | Up to 13/49   | Up to 13/49   | Up to 13/49  |
| 24 VDC            | 24 VDC   | 12 VDC  | 12 VDC  | 12 VDC  | 115 VAC  |
| 1"/1" NPT         | 1"/1" NPT  | 1"/1" NPT   | 1"/1" NPT   | 1"/1" NPT   | 1"/1" NPT  |
| 2" NPT            | 2" NPT   | 2" NPT  | 2" NPT  | 2" NPT  | 2" NPT   |
| Glass filled Poly | Glass filled Poly  | Glass filled Poly   | Glass filled Poly   | Glass filled Poly   | Glass filled Poly  |
| 1/4               | 1/4  | 1/4 Explosion Proof   | 1/4   | 1/4 Explosion Proof   | 1/4  |
| 15'               | 15'  | 15'   | 15'   | 15'   | 6.5'   |
| 10                | 10   | 20  | 20  | 20  | 2.5  |
| 30 min            | 30 min   | 30 min  | 30 min  | 30 min  | 30 min   |
| UL/cUL Motor      | UL/cUL Motor   | UL/cUL Motor  | -   | UL/cUL Motor  | -  |
| Pump Only         | 20 - 34 ¾" Steel   | Pump Only   | 20 - 34 ¾" Steel  | 20 - 34 ¾" Steel  | 20 - 34 ¾" Steel   |
|                   | Telescoping  |   | Telescoping   | Telescoping   | Telescoping  |
|                   | Suction Pipe,  |   | Suction Pipe,   | Suction Pipe,   | Suction Pipe,  |
|                   | 1"x12ft Hose,  |   | 1"x12ft Hose,   | 1"x12ft Hose,   | 1"x12ft Hose,  |
|                   | 1" Manual Noz.   |   | 1" Manual Noz.  | 1" Manual Noz.  | 1" Manual Noz.   |
|                   |  |   |   |   |  |
|                   | Up to 13/49 24 VDC 1"/1" NPT 2" NPT Glass filled Poly 1/4 15' 10 30 min UL/cUL Motor | Up to 13/49 24 VDC 24 VDC 1"/1" NPT 2" NPT 2" NPT Glass filled Poly 1/4 15' 10 30 min UL/cUL Motor Pump Only 20 - 34 3/4" Steel Telescoping Suction Pipe, 1"x12ft Hose, | Up to 13/49 24 VDC 24 VDC 12 VDC 1"/1" NPT 1"/1" NPT 2" NPT 2" NPT Glass filled Poly 1/4 1/4 1/4 1/4 15' 10 10 20 30 min 30 min 30 min UL/cUL Motor Pump Only 20 - 34 3/4" Steel Telescoping Suction Pipe, 1"x12ft Hose, 1" Manual Noz. | Up to 13/49 24 VDC 24 VDC 12 VDC 11"/1" NPT 1"/1" NPT 2" NPT 2" NPT Glass filled Poly 1/4 15' 10 10 20 30 min UL/cUL Motor Pump Only 20 - 34 3/4" Steel Telescoping Suction Pipe, 1"x12ft Hose, | Up to 13/49 24 VDC 24 VDC 12 VDC 12 VDC 12 VDC 11"/1" NPT 1"/1" NPT 2" NPT 2" NPT 2" NPT Glass filled Poly 1/4 1/4 1/4 1/4 Explosion Proof 15' 10 10 20 20 30 min 30 min UL/cUL Motor Pump Only 20 - 34 3/4" Steel Telescoping Suction Pipe, 1"x12ft Hose, 1" Manual Noz. 12 VDC 13/49 1/4 NPT 2" NPT 1/4 Explosion Proof 1/4 1/4 Explosion Proof 1/5' 15' 15' 15' 15' 10 20 20 20 30 min 30 min 30 min 30 min 30 min Telescoping Suction Pipe, 1"x12ft Hose, 1" Manual Noz. 1" Manual Noz. |

<sup>\*</sup> Visit www.fillrite.com for more configurations

<sup>\* \*</sup> UL/cUL Listed, not for gasoline service

## **DEF Products**



Sotera Professional Series Rotary Vane pumps are perfect for DEF transfer pumping applications. Stainless steel construction and Viton® seals ensure clean, dependable handling of DEF products with durable, long-lasting pump performance. Complete your pump package with our easy-to-use accessories - all the parts you need to quickly and efficiently dispense DEF.







825D075BSPPS



SV20A1NSD (shown with mounting plate and meter)

#### KIT180MAMPS

- Stainless Steel Mounting Plate
- 825D075BSPP Digital Meter
- ¾" x 6' hardwall suction hose
- 3/4" x 12' discharge hose
- 3/4" stainless steel auto nozzle
- stainless steel coupler

#### KIT180MAPS

- Stainless Steel Mounting Plate
- 3/4" x 6' hardwall suction hose
- ¾" x 12' discharge hose
- 3/4" stainless steel auto nozzle

#### KIT180MPPS

• Stainless Steel Mounting Plate

|                     |              | Top Selling Model                  | SV8ARDNSD/    | SV20A1NSD/    |                   |
|---------------------|--------------|------------------------------------|---------------|---------------|-------------------|
|                     | FRSD120800MN | FRSA120800MN                       | SV8SRDBSD     | SV20A1BSD     | 825D075BSPPS      |
| Flow Rate (GPM/LPM) | 8/30         | 8/30                               | 8/30          | 20/76         | 2 - 20/7.6 -76    |
| Motor Horsepower    | 1/2          | 1/2                                | 1/2           | 1/2           | -                 |
| Motor Kw            | 373          | 373                                | 373           | 373           | -                 |
| FL Motor Amps       | 35           | 7.2                                | 7.2           | 7.2           | -                 |
| Voltage             | 12 VDC       | 115 VAC                            | 115 VAC       | 115 VAC       | -                 |
| Port Size           | 3/4" BSPP    | <sup>3</sup> ⁄ <sub>4</sub> " BSPP | 3/4" BSPP/NPT | 3/4" BSPP/NPT | 3/4" BSPP         |
| Motor Type          | TEFC         | TEFC                               | ODP           | TEFC          | -                 |
| Max Viscosity       | 40 cp        | 40 cp                              | 40 cp         | 40 ср         | -                 |
| Max Temp (°F / °C)  | 120/49       | 120/49                             | 120/49        | 120/49        | 130/54            |
| Duty                | Continuous   | Continuous                         | Continuous    | Continuous    | n/a               |
| Housing             | 304SS        | 304SS                              | 304SS         | 304SS         | Glass-Filled Poly |
| Vanes               | Acetal       | Acetal                             | Acetal        | Acetal        | n/a               |
| Seals               | Viton®       | Viton®                             | Viton®        | Viton®        | Viton®            |
| Accuracy            | -            | -                                  | -             | -             | ± 0,5%            |
| Certification*      | UL/cUL       | UL/cUL                             | -             | UL/cUL        | -                 |

<sup>\*</sup> Not approved for volatile applications

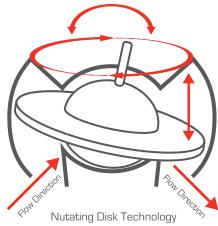
## **Meter Overview**

#### **Tuthill Positive Displacement Meters**

Fill-Rite has over 50 years of experience in the design and manufacture of positive displacement meters, shipping over 100,000 units annually. Our expertise in Nutating Disc and Oval Gear technologies position us to cover a broad range of applications in multiple markets. Whether you're keeping track of fuel consumption on site or out in the field, or you need a meter that is "Weights and Measures approved" for custody transfer, batching, or dispensing, Fill-Rite can provide a value minded professional solution.

#### Nutating Disc (accuracy +/- 2%)

Mechanical Meters are the work horses of the Fill-Rite line. The 800 and 900 Series nutating disc mechanical meters are designed specifically to meter and totalize [Gas/diesel] fuels transferred on-site. For rapid fuel transfer these are typically mated to a Fill-Rite Pump, but can also be used in gravity feed applications. The flow range for these two models is 5 - 40 GPM. If you need something that is a bit more robust and can handle higher flows (up to 60 GPM) and pressure (150 – 1500 PSI) look no further than the TN Series. The TN Series is not only great for Diesel it can also handle many other Automotive and Industrial fluid applications.



#### **Digital Meters**

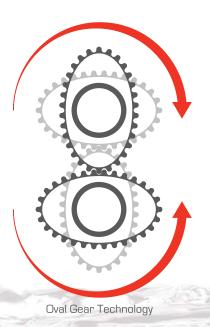
Our 900D Series (Nickel coated aluminum) and 825/820 Series Digital Chemical (Polypropylene) meters can handle a wide range of flows and compatibilities. Both Petro Chemical and Chemicals can be metered. Coming the Summer of 2012, Fill-Rite will add the 900DP Digital Meter with electronic pulser to our line. This exciting new product has no equal in the industry, providing the same performance as the class leading 900D with the added capability of electronic pulse output for Energy Management Systems.

#### Precision Oval Gear (accuracy +/-.05%)

Tuthill manufactures a complete series of Oval Gear Precision Meters that are available in both Aluminum and Stainless Steel. The TS Series Meters cover a flow rate range of 8 - 200 GPM and pressure range of 0-400PSI. Weights and Measures approved models are available for certain Custody Transfer applications that include refined Fuels and Diesel Exhaust Fluid. Applications include: Dispenser - Fuels and DEF, Bulk Rack - High volume loading and unloading, Bob Tail - Delivery Truck (Gas / Diesel / Home Heating Oil).

Our TM Series (Mini) 2-20 GPM precision meters complete the low flow range of our offering. Applications Include: Additive Injection, Fuel Consumption measurement, and more.





**Tuthill** 

# FILL-RITE High Flow/High Pressure Rugged Application Meters



Our TN Meters are part our Fill-Rite family of meters that are famous for rugged dependability. These meters utilize positive displacement nutating disk technology for use in non-custody transfer applications such as inventory control of refined petroleum products and non-corrosive chemicals.

High pressure versions are available in two model sizes (TN700 and TN800 series) for use in automotive fluid distribution systems, lube trucks, and similar service. With a viscosity range from 1 to 50,000 cSt, these meters can handle a wide range of temperature and viscosity conditions for a versatile solution to your metering needs.

#### Contact Customer Service for a full line listing of TN Meters

|                           | TN740AN1CAA1TAI        | TN760AN1CAB1GAF         | TN860AN1CAB1GAC                | TN860AN1CAB2GAC         | TN860AN1CAB2GBC             |
|---------------------------|------------------------|-------------------------|--------------------------------|-------------------------|-----------------------------|
| Flow (GPM/LPM)            | 0.5 - 10 / 1.9 - 38    | 0.8 - 15 / 2.9 - 57     | 6.0 - 60 / 23 - 230            | 6.0-60/23-230           | 6.0 - 60 / 23 - 230         |
| Max Pressure (psi/bar)    | 1,000/69.0             | 400/27.6                | 150/10.3                       | 150/10.3                | 150/10.3                    |
| Inlet/Outlet Port         | 1"/ 1" NPT             | 1½"/1½" NPT             | 1½"/1½" NPT                    | 1½"/1½" NPT             | 1½"/1½" NPT                 |
| Meter Type                | 4 Digit Mech. 1/10 Gal | 4 Digit Mech. Whole Gal | 4 Digit Mech. Whole Gal        | 4 Digit Mech. Whole Gal | 4 Digit Mech. Whole Gal     |
| Mtrls of Const - Housing  | Anodized Aluminum      | Anodized Aluminum       | Anodized Aluminum              | Anodized Aluminum       | Anodized Aluminum           |
| Mtrls of Const - Seals    | Viton®                 | Viton®                  | Viton®                         | Viton®                  | PTFE & Chemraz®             |
| Mtrls of Const - Internal | PPS, Stainless Steel   | PPS, Stainless Steel    | PPS, Stainless Steel           | PPS, Stainless Steel    | PPS, Stainless Steel        |
| Max Temp. (°F/°C)         | 167°/75°               | 167°/75°                | 167°/75°                       | 167°/75°                | 167°/75°                    |
| Totalizer Digits          | 8                      | 8                       | 8                              | 8                       | 8                           |
| Meter Accuracy            | +/-2.00%               | +/-2.00%                | +/-2.00%                       | +/-2.00%                | +/-2.00%                    |
| Vicosity Range (cSt)      | 125 - 50,000           | 125 - 50,000            | 3 - 22                         | 1 - 2                   | 1 - 2                       |
| Fluid Compatibility       | High Viscosity<br>Lube | High Viscosity<br>Lube  | Diesel, BioDiesel,<br>Kerosene | Gasoline, Water         | E85, E100,<br>ALS, Solvents |

#### **Mechanical Meters**

Fill-Rite's line of 3-wheel and 4-wheel mechanical flow meters are designed to meet the stringent demands of customers who need to monitor fuel usage accurately and dependably. Rugged construction, easy to read numbers, and the flexibility of horizontal or vertical positioning are just three features of these superior meters. Plus, all can be field calibrated for the utmost accuracy.



# Mechanical Meters





|  | Gravity Feed Models  |  |   | Quan   |  |   |
|--|--|--|---|--|--|---|
|  | 806C   | 806CL  | 807C  | 807CL  | 807C1  | 807CL1  |
| Description  | 3-Digit (Gallon)   | 3-Digit (Liter)  | 3-Digit (Gallon)  | 3-Digit (Liter)  | 3-Digit (Gallon)   | 3-Digit (Liter)   |
| Flow Rate (GPM/LPM)  | 5 - 20/19-75   | 5 - 20/19-75   | 5 - 20/19-75  | 5 - 20/19-75   | 5 - 20/19-75   | 5 - 20/19-75  |
| Max Pressure (psi/bar)   | 50/3.5   | 50/3.5   | 50/3.5  | 50/3.5   | 50/3.5   | 50/3.5  |
| Inlet/Outlet   | 1"/1"  | 1"/1"  | 3/4"/ 3/4"  | 3/4"/ 3/4"   | 1"/1"  | 1"/1"   |
| Matls of Const - Housing   | Aluminum   | Aluminum   | Aluminum  | Aluminum   | Aluminum   | Aluminum  |
| Mtrls of Const - Seals   | Viton® & Buna  | Viton® & Buna  | Viton® & Buna   | Viton® & Buna  | Viton® & Buna  | Viton® & Buna   |
| Mtrls of Const - Internal  | PPS, Stainless   | PPS, Stainless   | PPS, Stainless  | PPS, Stainless   | PPS, Stainless   | PPS, Stainless  |
| Compatible Fluids  |  |  | Gasoline, Diesel, B   | 20, E15, Kerosene  | e  |   |
| Certification  | UL/cUL, CE, Ex   | UL/cUL, CE, Ex   | UL/cUL, CE, Ex  | UL/cUL, CE, Ex   | UL/cUL, CE, Ex   | UL/cUL, CE, Ex  |
|  |  |  |   |  |  |   |
|  | 807CN1   | 807CMK   | 901   | 901L   | 9011.5   | 901L1.5   |
| Description  | 807CN1 3-Digit (Gallon)  | 807CMK<br>3-Digit (Gallon)   | 901<br>4-Digit (Gallon)   | 901L<br>4-Digit (Liter)  | 9011.5<br>4-Digit (Gallon)   | 901L1.5<br>4-Digit (Liter)  |
| Description Flow Rate (GPM/LPM)  |  |  |   |  |  |   |
| <u>'</u>   | 3-Digit (Gallon)   | 3-Digit (Gallon)   | 4-Digit (Gallon)  | 4-Digit (Liter)  | 4-Digit (Gallon)   | 4-Digit (Liter)   |
| Flow Rate (GPM/LPM)  | 3-Digit (Gallon)<br>5 - 20/19-75   | 3-Digit (Gallon)<br>5 - 20/19-75   | 4-Digit (Gallon)<br>6 - 40/23-151   | 4-Digit (Liter)<br>6 - 40/23-151   | 4-Digit (Gallon)<br>6 - 40/23-151  | 4-Digit (Liter)<br>6 - 40/23-151  |
| Flow Rate (GPM/LPM)  Max Pressure (psi/bar)  | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5   | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5   | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5   | 4-Digit (Liter)<br>6 - 40/23-151<br>50/3.5   | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5  | 4-Digit (Liter) 6 - 40/23-151 50/3.5  |
| Flow Rate (GPM/LPM)  Max Pressure (psi/bar)  Inlet/Outlet  | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5<br>1"/1"                                    | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5<br>3/4"/3/4"                              | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5<br>1"/1"  | 4-Digit (Liter)<br>6 - 40/23-151<br>50/3.5<br>1"/1"                                    | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5<br>11/2"/ 11/2"                                | 4-Digit (Liter)<br>6 - 40/23-151<br>50/3.5<br>11/2"/ 11/2"                                |
| Flow Rate (GPM/LPM)  Max Pressure (psi/bar)  Inlet/Outlet  Matls of Const - Housing  | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5<br>1"/1"<br>Nickel Plate Aluminum           | 3-Digit (Gallon)<br>5 - 20/19-75<br>50/3.5<br>3/4"/3/4"<br>Aluminum                  | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5<br>1"/1"<br>Aluminum  | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1"/1" Aluminum Viton® & Buna                      | 4-Digit (Gallon)<br>6 - 40/23-151<br>50/3.5<br>1½"/ 1½"<br>Aluminum                        | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1½"/ 1½" Aluminum Viton® & Buna                      |
| Flow Rate (GPM/LPM)  Max Pressure (psi/bar)  Inlet/Outlet  Matls of Const - Housing  Mtrls of Const - Seals                            | 3-Digit (Gallon) 5 - 20/19-75 50/3.5 1"/1" Nickel Plate Aluminum Viton®                | 3-Digit (Gallon) 5 - 20/19-75 50/3.5 3/4"/3/4" Aluminum Viton® & Buna PPS, Stainless | 4-Digit (Gallon) 6 - 40/23-151 50/3.5 1"/1" Aluminum Viton® & Buna  | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1"/1" Aluminum Viton® & Buna SS, Steel, Polyester | 4-Digit (Gallon) 6 - 40/23-151 50/3.5 1½"/ 1½" Aluminum Viton® & Buna SS, Steel, Polyester | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1½"/ 1½" Aluminum Viton® & Buna                      |
| Flow Rate (GPM/LPM)  Max Pressure (psi/bar)  Inlet/Outlet  Matls of Const - Housing  Mtrls of Const - Seals  Mtrls of Const - Internal | 3-Digit (Gallon) 5 - 20/19-75 50/3.5 1"/1" Nickel Plate Aluminum Viton® PPS, Stainless | 3-Digit (Gallon) 5 - 20/19-75 50/3.5 3/4"/3/4" Aluminum Viton® & Buna PPS, Stainless | 4-Digit (Gallon) 6 - 40/23-151 50/3.5 1"/1" Aluminum Viton® & Buna SS, Steel, Polyester Gasoline, Diesel, B | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1"/1" Aluminum Viton® & Buna SS, Steel, Polyester | 4-Digit (Gallon) 6 - 40/23-151 50/3.5 1½"/1½" Aluminum Viton® & Buna SS, Steel, Polyester  | 4-Digit (Liter) 6 - 40/23-151 50/3.5 1½"/ 1½" Aluminum Viton® & Buna SS, Steel, Polyester |

|                           | 90101.5               | 901MK300V                            | 901LMK300            | 901MK4200            | 901LMK4200           |  |  |
|---------------------------|-----------------------|--------------------------------------|----------------------|----------------------|----------------------|--|--|
| Description               | 4-Digit (Gallon)      | 4-Digit (Gallon)                     | 4-Digit (Liter)      | 4-Digit (Gallon)     | 4-Digit (Liter)      |  |  |
| Flow Rate (GPM/LPM)       | 6 - 40/23-151         | 6 - 40/23-151                        | 6 - 40/23-151        | 6-40/23-151          | 6-40/23-151          |  |  |
| Max Pressure (psi/bar)    | 50/3.5                | 50/3.5                               | 50/3.5               | 50/3.5               | 50/3.5               |  |  |
| Inlet/Outlet              | 1½"/ 1½"              | 1"/ 1"                               | 1"/ 1"               | 1"/ 1"               | 1"/ 1"               |  |  |
| Matls of Const - Housing  | Nickel Plate Aluminum | Aluminum                             | Aluminum             | Aluminum             | Aluminum             |  |  |
| Mtrls of Const - Seals    | Viton®                | Vlton® & Buna                        | Vlton® & Buna        | Vlton® & Buna        | Vlton® & Buna        |  |  |
| Mtrls of Const - Internal | SS, Steel, Polyester  | SS, Steel, Polyester                 | SS, Steel, Polyester | SS, Steel, Polyester | SS, Steel, Polyester |  |  |
| Compatible Fluids         | +Non-Potable Water    | Gasoline, Diesel, B20, E15, Kerosene |                      |                      |                      |  |  |
| Certification             | UL/cUL, CE, Ex        | UL/cUL, CE, Ex                       | UL/cUL, CE, Ex       | UL/cUL, CE, Ex       | UL/cUL, CE, Ex       |  |  |
|                           |                       |                                      |                      |                      |                      |  |  |

# **Digital Display Meters**





#### Coming in Mid 2012

Fill-Rite positive displacement nutating disc meters are ideal for in-line use, or mounted to one of our Rotary Vane or Diaphragm Pumps. The rugged corrosion-resistant construction provides a durable product for the most demanding applications. Our digital meters are easy to calibrate and allow for simple selection of metering units. Incredible utility, visual clarity, and amazing accuracy is what you get from our line of digital meters.



The 900DP Meter for Gasoline Applications

|                           | 820                                 | 900D  | 900D1.5                   | 900DBSPT              | 900D1.5BSPT    |  |  |
|---------------------------|-------------------------------------|---|---------------------------|-----------------------|----------------|--|--|
| Flow Rate (GPM/LPM)       | 2 - 20/7-75                         | 6-40/23-151   | 6-40/23-151               | 6-40/23-151           | 6-40/23-151    |  |  |
| Max Pressure (psi/bar)    | 120/8.2 @ 70°F                      | 50/3.5  | 50/3.5                    | 50/3.5                | 50/3.5         |  |  |
| Inlet/Outlet              | 1"/1"                               | 1"/1" NPT   | 1½"/1½" NPT               | 1"/1" BSPT            | 1½"/1½" BSPT   |  |  |
| Matls of Const - Body     | Polypropylene                       |   | Nickel Plated Alum        | ninum / Aluminum      |                |  |  |
| Mtrls of Const - Seals    | Viton®                              | Buna  | Buna                      | Buna                  | Buna           |  |  |
| Mtrls of Const - Internal | Stainless, PPS                      |   | Stainless Steel, Ste      | el, Polyester, Acetal |                |  |  |
| Power Source              | 2 AA Batteries                      | 2 AA Batteries  | 2 AA Batteries            | 2 AA Batteries        | 2 AA Batteries |  |  |
| Calibration               |                                     | Ounces, Pints, Qua  | rts, Liters, Gallons. and | d user defined units  |                |  |  |
| Certification             | -                                   | CE, Ex  | CE, Ex                    | CE, Ex                | CE, Ex         |  |  |
| Compatible Fluids         | Water, light oils,<br>mild chemical | Diesel, Kerosene, Mineral Spirits, and Standard Solvents and Heptanes |                           |                       |                |  |  |

# Specialty Dispenser Meters

#### **Dispenser Meters**

Tuthill offers the most dependable precision meters on the market for Fuel and Diesel Exhaust Fluid dispenser applications. From DEF to pure Ethanol, we are able to accommodate a wide range of fluid compatibilities through a variety of materials. Our meters conform to the Weights and Measures Handbook 44 requirements.





|                                     | TSO4A                    | TSO4C      | TSO6A     | TSO6C      | TS10A    | TS10C    | TS15A     | TS15C   |
|-------------------------------------|--------------------------|------------|-----------|------------|----------|----------|-----------|---------|
| Flow Rate (GPM/LPM)                 | 1.5-15/                  | /5.5-56    | 2-20/     | /8-76      | 4-40/    | 15-150   | 6-60/2    | 23-230  |
| Linearity / Linearity Downturn      |                          |            | bette     | r than ±   | 0.20%/   | 10:1     |           |         |
| Repeatability                       |                          | better     | than ±0.  | 05% (un    | der cons | tant con | ditions)  |         |
| Pressure Rating (at 100°F/40°C)     |                          |            | 50 PS     | SI = 3.5 E | BAR =35  | 0 kPa    |           |         |
| Temperature Rating                  |                          | -          | 40° to +  | 122°F      | = - 40°C | to +50°( | 3         |         |
| Certifications                      | 2G Ex d                  | IIA T4, -2 | 20°C < Ta | a < +60°   | C, ATEK, | IEC Ex 8 | k IP65, U | L & cUL |
| Unscaled Pulse Resolution (PPG/PPL) | 800/                     | ′ 212      | 400/      | 106        | 1,728    | / 471    | 1,013     | / 268   |
| Matls of Const - Case               | AA*                      | SS**       | AA*       | SS**       | AA*      | SS**     | AA*       | SS**    |
| Matls of Const - Gears              | PPS with carbon bearings |            |           |            |          |          |           |         |
| Matls of Const - Posts              | Stainless Steel          |            |           |            |          |          |           |         |
| Matls of Const - Seals              |                          |            | ١         | /iton™ o   | r PTFE™  |          |           |         |

<sup>\*</sup> Anodized Aluminum \*

<sup>\* \*</sup>Stainless Steel



#### **LPG Meters**

Whether the requirement is for retail or wholesale dispense, Fill-Rite accommodates single or double hose metering for a wide range of LPG installation options with simplicity and precision.

|                                     | TSO6AS83 (LPG Single) and TSO6AS84 (LPG Twin)                                       |
|-------------------------------------|---|
| Flow Rate (GPM/LPM)                 | 2-20 / 7.5-75   |
| Linearity/Linearity Downturn        | better than 0.50% / 10:1  |
| Repeatability                       | 0.20%   |
| Pressure Rating (at 100°F/40°C)     | $350  \text{PSI}$ at $100^{\circ}\text{F} = 24  \text{BAR}$ at $40^{\circ}\text{C}$ |
| Temperature Rating                  | -40°F to $+300$ °F = $-40$ °C to $+150$ °C  |
| Certifications                      | Weights & Measures US, CE Mark, UL, cUL & Atex                                      |
| Unscaled Pulse Resolution (PPG/PPL) | 380/100   |
| Matls of Const - Case               | Anodized Aluminum   |
| Matls of Const - Gears              | Stainless Steel   |
| Matls of Const- Posts               | Stainless Steel   |
| Matls of Const - Seals              | UL Buna N   |

# Bulk Loading and Unloading Meters

The TS Series is well suited for use in fuels process transfer, high speed batching and loading, tank truck meters, stationary dispensing, industrial and petro-chemical refining and processing. Combined with a mechanical/digital register, printer, or solenoid batching, it is possible to build an application specific system that delivers performance, accuracy, and easy maintenance making the TS Series the intelligent choice.



Available in Aluminum and Stainless Steel, TS Series precision meters offer a full range of metering

options ranging from 1", 1½", 2", and 3" sizes with 40-200 GPM at a 150 PSI. These highly precise meters are available in a wide range of configurations to accommodate different temperatures, viscosities, chemical compatibilities, mechanical/digital register calibrations, strainers, filters, air eliminators, air check, backpressure, and preset valves, flanges, and seals.







# Positive Displacement Oval Gear Meters for Fuels



Mechanical Fuel Meters For Aviation Fuel, Bio-Diesel, Diesel Fuel, Light Fuel Oils, Gasoline, Glycols, Kerosene and Water

|                         | TS15A                              | TS20A                                     | TS30A                             |
|-------------------------|------------------------------------|---|-----------------------------------|
| Flow Rate (GPM/LPM)     | 60/227                             | 150/568                                   | 200/757                           |
| Max Pressure (psi/bar)  | 150/10.3                           | 150/10.3                                  | 150/10.3                          |
| Inlet/Outlet Port       | 1½" NPT                            | 2" NPT                                    | 3" NPT                            |
| Register Type           | 5 Wheel Mechanical                 | 5 Wheel Mechanical                        | 5 Wheel Mechanical                |
| Matls of Const - Body   | Aluminum                           | Aluminum                                  | Aluminum                          |
| Mtrls of Const - Seals  | Viton® or PTFE                     | Viton® or PTFE                            | Viton® or PTFE                    |
| Rotors and Bearings     | LV-PPS/Carbon                      | LV-PPS/Carbon                             | LV-PPS/Carbon                     |
| Max Temp. Range (F°/C°) | - 40° - 180° / - 40° - 80°         | - 40° - 180° / - 40° - 80°                | - 40° - 180° / - 40° - 80°        |
| Totalizer Digits        | 8                                  | 8   | 8                                 |
| Meter Accuracy          | ± 0.05%                            | ± 0.05%                                   | ± 0.05%                           |
| Viscosity Range (cSt)   | Up to 300 - can be used with highe | er viscosities, meter will be derated, co | nsult factory for recommendations |

#### Best Selling Models - w/ Mechanical Registers

TS15AVO4ATCBMXAXX - Meter and Mechanical Register (1/10 Gallon)

TS20AV04ATCBMXAXX - Meter and Mechanical Register (1/10 Gallon)

TS20AV06ATCBMXAS4 - Meter, Mechanical Register (1/10 Gallon), Strainer (40 Mesh) and Air Eliminator

TS20AV04ALCBMXAXX - Meter and Mechanical Register (Liter)

TS20AV06ALCBMXAS4 - Meter, Mechanical Register (Liter), Strainer (40 Mesh) and Air Eliminator

TS30AV04AGCBMXAXX - Meter and Mechanical Register (Whole Gallons)

TS30AV06AGCBMXAS4 - Meter, Mechanical Register (Whole Gallons), Strainer (40 Mesh) and Air Eliminator

TS30AV04ALCBMXAXX - Meter and Mechanical Register (Liter)

TS30AV06ALCBMXAS4 - Meter, Mechanical Register (Liter), Strainer (40 Mesh) and Air Eliminator

For Full Line Listing Including Digital Register Options, Contact Customer Service



## Accessories



|                   | N075UMN11                  | N100UMN11                  | NO75DAU10                                      | NO75UAU10                                      |
|-------------------|----------------------------|----------------------------|--|--|
| Description       | ¾" Aluminum Nozzle         | 1" Aluminum Nozzle         | <sup>3</sup> ⁄ <sub>4</sub> " Automatic Nozzle | <sup>3</sup> ⁄ <sub>4</sub> " Automatic Nozzle |
|                   |                            |                            | w/Hook, Diesel Spout                           | w/Hook, Unleaded Spout                         |
| Certification     | UL/cUL                     | UL/cUL                     | UL/cUL   | UL/cUL   |
| Compatible Fluids | Diesel, Gasoline, Kerosene | Diesel, Gasoline, Kerosene | Diesel, Gasoline, Kerosene                     | Diesel, Gasoline, Kerosene                     |
|                   |                            |                            |  |  |

|                   | N100DAU10                  | N100DAU13                  | FRNA075DAU10               | FRNA100DAU00               |
|-------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Description       | 1" Automatic Nozzle w/     | 1"Ultra High Flow Auto-    | 3/4" Arctic Automatic      | 1" Arctic Automatic        |
|                   | Hook                       | matic Nozzle w/Hook        | Nozzle w/Hook              | Nozzle                     |
| Certification     | UL                         | UL/cUL                     | UL/cUL                     | UL/cUL                     |
| Compatible Fluids | Diesel, Gasoline, Kerosene | Diesel, Gasoline, Kerosene | Diesel, Gasoline, Kerosene | Diesel, Gasoline, Kerosene |







|             | 300F7773          | 700F3135                                     | FRH07512        | FRH07514        | FRH07520                                 |
|-------------|-------------------|--|-----------------|-----------------|--|
| Description | 1" x 12' Hose, UL | <sup>3</sup> ⁄ <sub>4</sub> " x 12' Hose, UL | 3⁄4" x 12' Hose | 3/4" x 14' Hose | <sup>3</sup> ⁄ <sub>4</sub> " x 20' Hose |

|             | FRH10012      | FRH10014      | FRH10020      | FRHA07515              | FRHA10020            |
|-------------|---------------|---------------|---------------|------------------------|----------------------|
| Description | 1" x 12' Hose | 1" x 14' Hose | 1" x 20' Hose | 3/4" x 15' Arctic Hose | 1" x 20' Arctic Hose |

# Accessories







|                         | F1810HC1          | F1810HM0       | F1810PC1          | F1810PM0       | F4030PM0         | F4010PM0         |
|-------------------------|-------------------|----------------|-------------------|----------------|------------------|------------------|
| Description             | Clear Bowl Filter | Spin on Filter | Clear Bowl Filter | Spin on Filter | Spin on Filter - | Spin on Filter - |
|                         | w/Drain kit       | 10 Micron      | w/Drain kit       | 10 Micron      | 30 Micron        | 10 Micron        |
| Filter Type             | Hydrosorb         | Hydrosorb      | Particulate       | Particulate    | Particulate      | Particulate      |
| Max Flow Rate (GPM/LPM) | 18/68             | 18/68          | 18/68             | 18/68          | 40/151           | 40/151           |





| 1200KTG8127 3/4" Filter Head |  | 700ACCF7017 1" Filter Head           |  |  |
|------------------------------|--|--------------------------------------|--|--|
| Description                  | For use with F18 Particulate and Hydrosorb Filters | For use with F40 Particulate Filters |  |  |





|             | 1200KTG9099                 | 30F1879                     | 30F5301                     |
|-------------|-----------------------------|-----------------------------|-----------------------------|
| Description | 1" Telescoping Suction Pipe | ½" Telescoping Suction Pipe | ½" Telescoping Suction Pipe |
| Material    | Steel                       | Polypropylene               | Steel                       |
| Length      | 20" to 34 3/4"              | 21" to 36"                  | 21" to 36"                  |





|             | FRTC                                 | FRTCB                                  |
|-------------|--------------------------------------|--|
| Description | Vented Fuel Cap for Tanks (cap only) | Vented Fill Cap with 2" Base for Tanks |





|             | S034H1311                         | S100H1312                       |  |
|-------------|-----------------------------------|---------------------------------|--|
| Description | 3/4" Aluminum Single Plane Swivel | 1" Aluminum Single Plane Swivel |  |

## **Accessories**



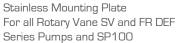




Wall Mount Assembly Kit for SP100

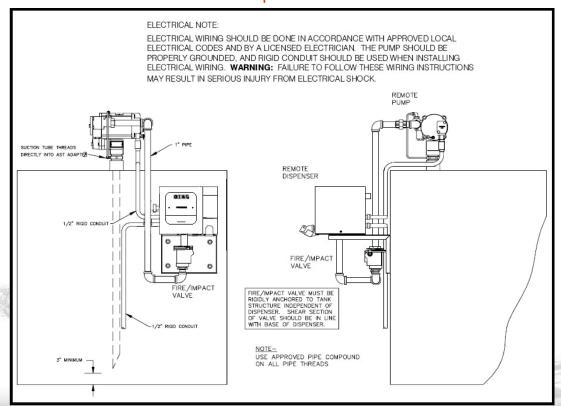
Filter Regulator Hose Air Line Connection Kit for SP100 RSV Four Pin Dispense Coupler



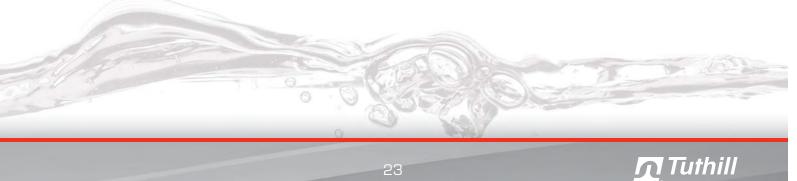




## Above Ground Tank Installation for Remote Pumps and Meter Cabinets



## Notes





#### Notes



#### For More Information Visit Us at







#### For Our Retail Customers

A full listing of our UPC codes, shipping weights, and pallet quantities is available at www.fillrite.com

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