

# RSA-MATIC®

Delivering Quality, Interchangeable Pumping Solutions

• Metallic Pumps • Non-Metallic Pumps • Special Pumps • Upgrade Kits • Parts & Accessories



U2 - 2" Non-Metallic Bolted











# URES & BENEFITS



No costly air leakage (blow by) with expanding u-cup seals, lapped ceramic valve components and inset track gaskets providing a superior seal.



#### Ease of Maintenance

No special tools or training needed with an easily accessible air valve, air side wear components and parts that are available in economical kits or as individual components.



### ktended In-Service Life

Improve your total cost of ownership with self lubricating seals, precision low friction bearing surfaces and robust shafts to ensure durability

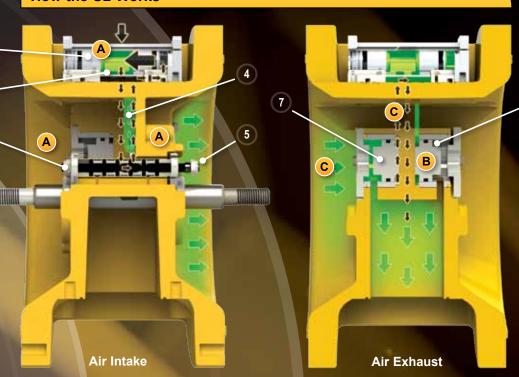


Volumetric efficiency is created with more fluid per stroke by instantly exhausting the air chamber pressure from behind the diaphragms directly to the atmosphere.



On/Off Reliability: Consistent pump start up is ensured by positive modulating air pressure directed from the pilot shaft to the valve spool.

#### **How the U2 Works**



- A The pilot shaft (1) is mechanically shifted by contact from the inner diaphragm plate allowing air pressure to be directed behind one end of the valve spool (2), shifting it and holding it in place.
- B The valve spool actuates the ceramic air diverter (3), opening the right hand air chamber filling port (4) and directing compressed air into the air chamber (5) and behind the exhaust valve (6) keeping it closed so no air can escape.
- C Simultaneously, the pressure is relieved from the opposing exhaust valve (7) allowing it to open, and instantly exhausts the air chamber pressure to atmosphere. When the pump completes its stroke, the pilot shaft (1) is again mechanically shifted causing the process to repeat on the opposite side.

### **Superior Chemical Resistance and Material Options**

The Ultra-Matic incorporates many superior materials to deliver excellent chemical resistance, reduce repair cost and extend service life.



#### 1-piece centers are available with:

- Stainless Steel Shafts
- Ceramic Shoe and Diverter
- Polypropylene Center Block
- PVDF Valve Body



3-piece centers are available with:

- Stainless steel
- Aluminum
- PTFE coated aluminum
- Nickel plated aluminum





## **Ultra-Matic® 2" Bolted Plastic Pumps**

Side Porting Standard, Center Porting Optional

# **Ultra-Matic® 2" Bolted Metallic Pumps**

Vertical Porting Standard, Horizontal Porting Optional

### Specifications

**Flow Rate** 

adjustable to 0-192 gpm (0-727 lpm)

**Port Size** Inlet and Outlet

2" ANSI/DIN #50 Flange

**Air Inlet** 0.50" NPTF **Air Exhaust** 0.75" NPTF

Suction Lift\* (dry)

20' (6.10 m) Rubber PTFE 10' (3.05 m)

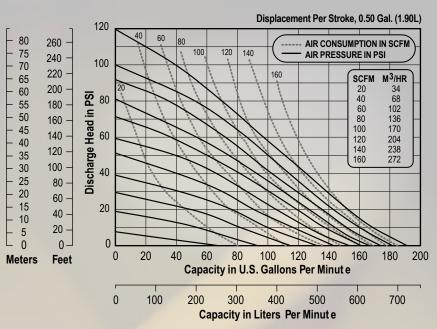
**Max Particle Size** 

Diameter 0.25" (6 mm)

**Shipping Weight** 

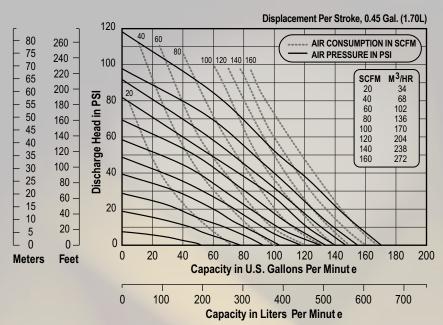
Poly, End Port 67 lbs (30 kg) 72 lbs (33 kg) Poly, Center Port PVDF, End Port 93 lbs (42 kg) PVDF, Center Port 98 lbs (44 kg)

### Performance



\* For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

### Performance



\* For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

### Specifications

**Flow Rate** 

adjustable to 0-170 gpm (0-644 lpm)

**Port Size** 

Inlet and Outlet 2" ANSI/DIN #50 Flange

**Air Inlet** 0.50" NPTF

0.75" NPTF Air Exhaust

Suction Lift\* (dry)

20' (6.10 m) Rubber PTFE 10' (3.05 m)

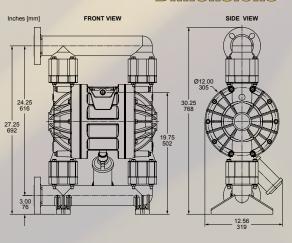
**Max Particle Size** 

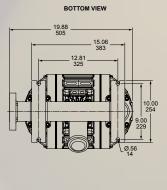
Diameter 0.25" (6 mm)

**Shipping Weight** 

115 lbs (52 kg) Cast Iron 123 lbs (56 kg) Hastelloy C Stainless Steel 115 lbs (52 kg)

### Dimensions







One-piece molded non-metallic center section

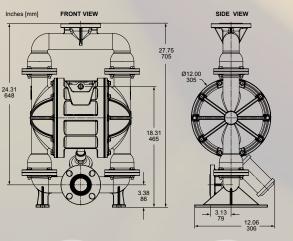


Available with side or centermounted ports



Dimensionally interchangeable with Wilden® Original™ Series nonmetallic units

### Dimensions





One-piece molded non-metallic center section



Includes both ANSI and **DIN** flange connections



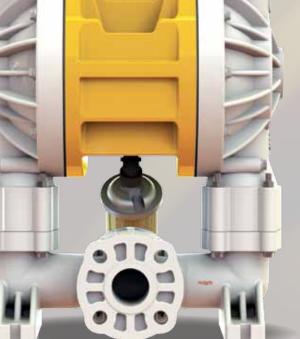
BOTTOM VIEW

Available with vertical or horizontal discharge









## Specifications

#### **Flow Rate**

0-182 gpm (0-689 lpm) adjustable to

**Port Size** 

Inlet and Outlet 2" Female NPT (BSP) **Air Inlet** 0.50" Female NPT 0.75" Female NPT Air Exhaust

Suction Lift\* (dry)

20' (6.10 m) Rubber PTFE 10' (3.05 m)

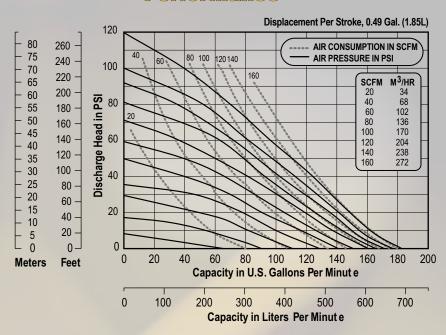
**Max Particle Size** 

Diameter 0.25" (6 mm)

**Shipping Weight** 

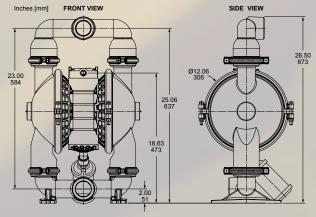
69 lbs (31 kg) Aluminum 114 lbs (52 kg) Cast Iron 124 lbs (56 kg) Hastelloy Stainless Steel 114 lbs (52 kg)

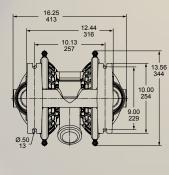
### Performance



\* For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

### Dimensions







Three-piece center section with non-metallic **center** and metallic air chambers

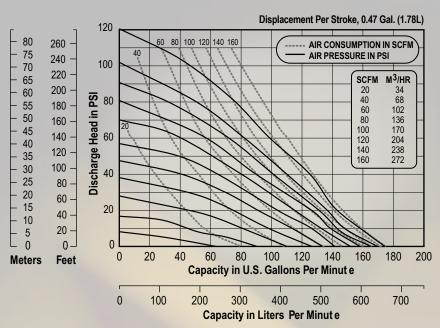


Clamp design provides quick teardown for repairs



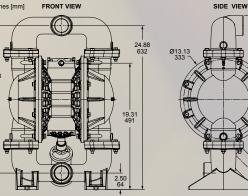
Pumps and center sections are interchangeable with Wilden® 2" Original Series clamp style pumps

### Performance



\* For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

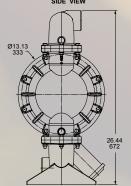
### Dimensions



Leak-free

bolted design

for a greater positive seal





Cast-in boss allows for installation of drain plugs



The most solid feet in the industry for improved durability

### Specifications

#### **Flow Rate**

adjustable to 0-175 gpm (0-662 lpm)

#### **Port Size**

Inlet and Outlet 2" Female NPT (BSP)

#### Air Inlet 0.50" NPTF

0.75" NPTF Air Exhaust

### Suction Lift\* (dry)

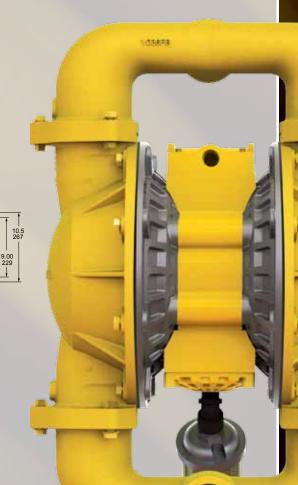
20' (6.10 m) Rubber PTFE 10' (3.05 m)

#### **Max Particle Size**

Diameter 0.43" (11 mm)

### **Shipping Weight**

75 lbs (34 kg) Aluminum



## Specifications

**Flow Rate** 

adjustable to 0-182 gpm (0-689 lpm)

**Port Size** Inlet and Outlet

2.5" Tri-Clamp

**Air Inlet** 0.50" Female NPT Air Exhaust 0.75" Female NPT

Suction Lift\* (dry) 20' (6.10 m)

Rubber

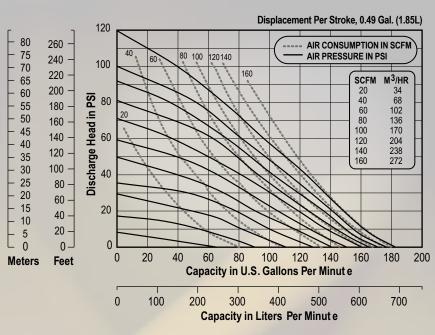
Teflon® 10' (3.05 m) **Max Particle Size** 

0.44" (11 mm)

**Shipping Weight** 

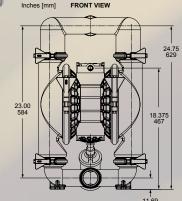
117 lbs (53 kg)

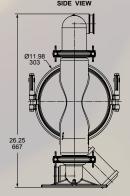
## Performance

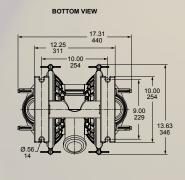


\* For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

### Dimensions









**Electro-Polished** wetted components (internally and externally)

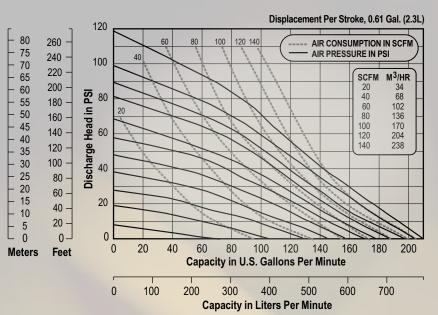


Clamp bands and wing nuts for quick teardown and sanitizing



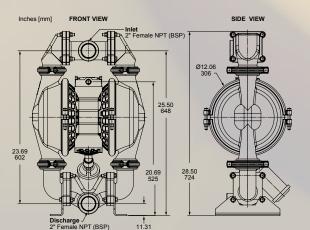
Tri-Clamp connections for quick disassembly

## Performance



\*For U2 pumps fitted with PTFE diaphragms, reduce water discharge figures by 20%. Suction lift is reduced to 10' (3.05 m) dry and 20' (6.10 m) wet.

### Dimensions





Three-piece center section with non-metallic center and metallic air chamber options



Clamp bands for quick disassembly



Flap valves for the pumping of solids

### Specifications

**Flow Rate** 

adjustable to 0-210 gpm (0-795 lpm)

**Port Size** 

Inlet and Outlet 2" Female NPT (BSP) Air Inlet 0.50" Female NPT Air Exhaust 0.75" Female NPT

Suction Lift\* (dry)

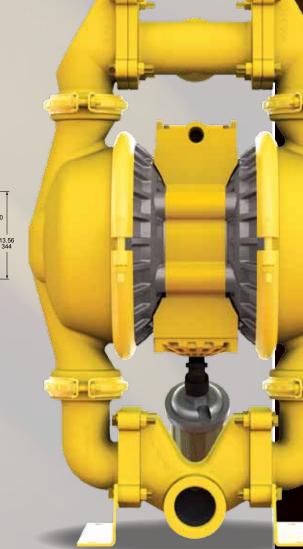
Rubber 20' (6.10 m PTFE 10' (3.05 m)

**Max Particle Size** 

1.125" (29 mm)

**Shipping Weight** 

77 lbs (35 kg)







DELIVERING QUALITY, INTERCHANGEABLE PUMPING SOLUTIONS

Clamped Pumps

# PARTS & ACCESSORIES

Versa-Matic offers the most extensive line of diaphragms in the industry, including:



#### Versa-Rugged VR<sup>™</sup> Diaphragms

Our standard rubber diaphragms are reinforced with high-quality fabric and designed to reduce maintenance and repair costs. They are interchangeable with many Wilden® pump models.



#### Versa-Dome® Diaphragms

An industry first, Versa-Dome's simple, smooth dome shape delivers flex across the entire face of the diaphragm to provide three times the life of standard diaphragms. They are interchangeable with most Wilden® 2" & 3" pump models.



#### FDA Hytrel® Thermoplastic **Diaphragms**

Approved for use with food and dairy mediums, FDA Hytrel diaphragms are also excellent for abrasive product transfer.



#### **TPE-XL Thermoplastic Diaphragms**

Versa-Matic's innovative thermoplastic diaphragms have much of the chemical resistance of PTFE but cost significantly less. They are extremely resistant to abrasion and are interchangeable with most Wilden® pump models.



### **FUSION™ Integrated-Plate Bonded PTFE Diaphragms**

FUSION diaphragms enhance flow rates, displacement per cycle and suction lift. Backing ribs allow for extended life and deflection ridges eliminate radial cracking and potential leak paths.

Hytrel® is a registered trademarks of DuPont. Kynar® is a registered trademark of Penwalt Corp. Wilden® is a registered trade name of Wilden Pump and Engineering Company, a Dover Resources Company.

Elima-Matic<sup>®</sup>, Fusion<sup>™</sup>, Versa-Dome<sup>®</sup>, Versa-Matic<sup>®</sup>, Versa-Sense<sup>™</sup>, Versa-Tuff® and Versa-Rugged VR™ are registered tradenames and trademarks of IDEX Corporation. Elima-Matic U.S. Patent No. 5.326.234. Versa-Matic's product line includes a variety of pump accessories to enhance your pump performance:



#### Surge Suppressors

Our surge suppressors provide virtually pulse-free discharge flow, for steadier pressure and less system vibration and noise. Self-charging and self-venting.



#### Pail and Drum Transfer Kits

These adapter kits easily nect 1/4" or 1/2" plastic pumps to a 5-gallon bucket, 120 lb. barrel or 55-gallon drum for a cleaner application.



#### Versa-Sense™ II Leak Detector

The Versa-Sense II protects product from contamination in the event of a diaphragm failure. The control unit can easily be wired to an audible alarm or pump shutdown device.



#### Flange Adapter Kits

Our new Flange Adapter Kits allow you to guickly. easily and economically convert your flange pumps to female-threaded pumps. The kits are available in three sizes for use with 1", 1-1/2" and 2" nonmetallic polypropylene pumps.



#### Filter/Regulator/Lubricators

FRLs improve pump performance and reduce maintenance costs. Used to filter particles and water out of the compressed air coming into the pump, as well as control the air pressure. Also controls lubrication amounts to optimize pump performance.





#### **VERSA-MATIC®**

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