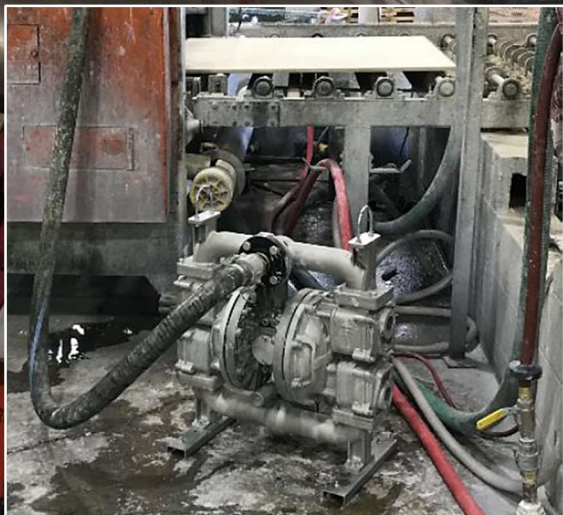


# YTS<sup>®</sup>

since 1966

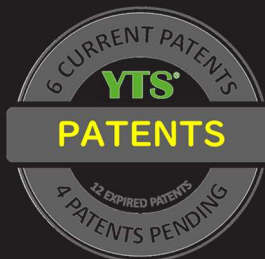
## Air Operated Double Diaphragm Pumps

Most comprehensive range of AODD pumps



ISO 9001

YTS is a **Japanese** manufacturer of  
Air Operated Double Diaphragm  
pumps with **Superior Quality** and **Finish**





# Most Comprehensive range of AODD pumps



Pure Polypropylene (Pure PP)



Conductive Polypropylene (Conductive PP)



Glass Fiber Reinforced Polypropylene (GFRPP)



PVDF



Industrial PTFE



Conductive PTFE



High Purity PTFE



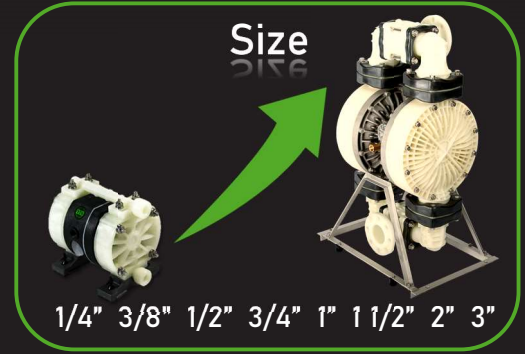
Aluminum



Stainless Steel



Cast Iron



## Specialty Pumps



FDA Compliant



Electro-Polished



Solenoid Controlled



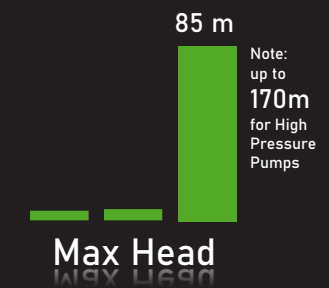
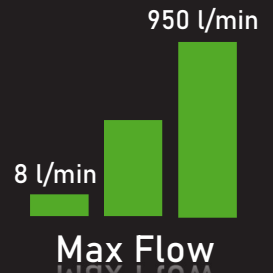
Powder



Heavy-Duty



High Pressure



## Specialty Pumps



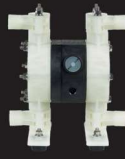
Passive Dampener



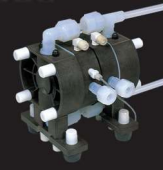
Flap Valve Solids



PTFE or Nickel Coated



Split Manifold



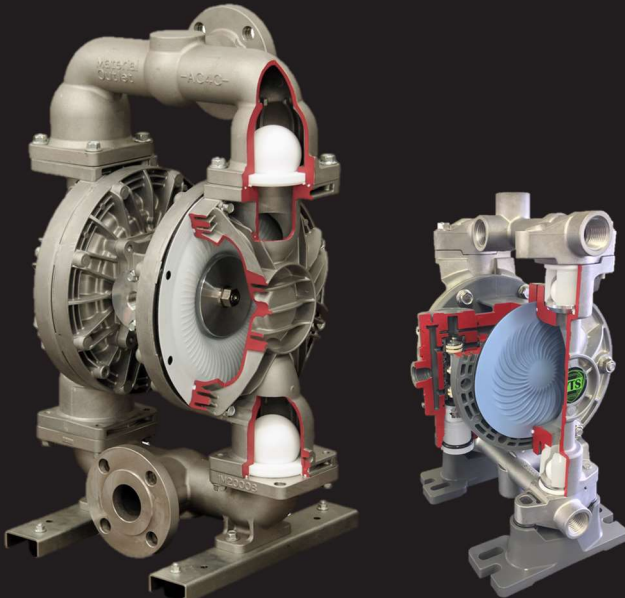
High Temperature PTFE



Wine



Barrel



## Accessories & Spare Parts



Specialty Diaphragms



Active Pulsation Dampeners



Spare Parts

- Pneumatic Liquid Level Controller ◆ Diaphragm Rupture Sensor Kit
- Electric Proximity Sensor ◆ Pneumatic Cycle Counter Kit

## Japan

YTS was founded in Tokyo, Japan in 1966 by Mr. Shotaro Yamada Senior, who was a long-term (since 1923) president of the parent company Yamada Corporation. Originally, the company was called Howa Keiki Seizousho. In 1976, the company name was changed to YTS Co., Ltd. YTS stands for Yamada Technical Service.



The current President - Mr. Hirokazu Yamada, is the third generation of the Yamada family that has been managing the company since its founding in 1966. YTS Presidents:

2012 - ...	Hirokazu Yamada
1969 - 2012	Kazumasa Yamada
1966 - 1969	Shotaro Yamada Senior

Hirokazu Yamada  
President  
YTS Co., Ltd.



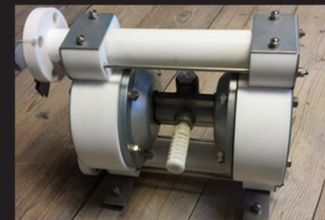
## Europe, The Netherlands

Current President of YTS Pump Engineering BV Mr. Gerard Heikens began to cooperate with YTS Japan in 1983.

Gerard Heikens  
President  
YTS Pump Engineering BV



The first developments of the 1 1/2", 2" and 3" Polypropylene pumps from solid PP material have been made by Mr. Heikens in Europe in the beginning of 90's.



Mr. Heikens developed safety valve apparatus for air pressure operable diaphragm pump, which was patented in 2000 (Patent number: 6129521).

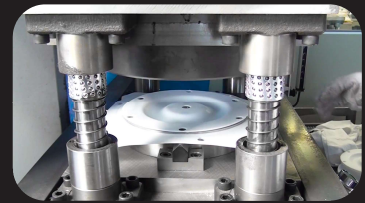
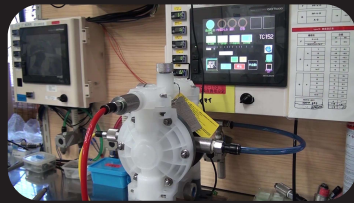
YTS Pump Engineering BV in Netherlands is not only trading company, but is a part of R&D and manufacturing departments of YTS in Japan. We take an active role in development of new pumps and accessories. Our experience staff use their engineering expertise to help customers find the most suitable solutions for their projects.

YTS Pump Engineering BV serve customers from Europe, Middle East and Africa supplying pumps, spare parts and accessories from warehouse located in Doetinchem, Netherlands. Apart from delivering ready products, we also make pumps modifications complying with customers demands for their special projects.





YTS pumps are designed for High Performance Operation and Long Life Expectancy. Engineered with various design features not often found in other brand AODD pumps.

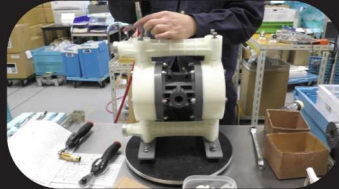


YTS pumps are designed for High Performance Operation and Long Life Expectancy. Engineered with various design features not often found in other brand AODD pumps. YTS has been engaged in the design of diaphragms pumps for over 50 years, and has produced pumps used in just about every application throughout the entire world. The know-how accumulated through an integrated system of design, development, manufacturing, assembly, and sales as well as following customers opinions and feedback have been inherited by our engineers and applied directly to all current or new design concepts.

YTS pumps are manufactured in two plants:



Sakura Manufacturing Plant



Yotsukaido Manufacturing Plant

Both are located in Chiba Prefecture - about 40 kilometers southeast of the center of Tokyo on Tokyo Bay.

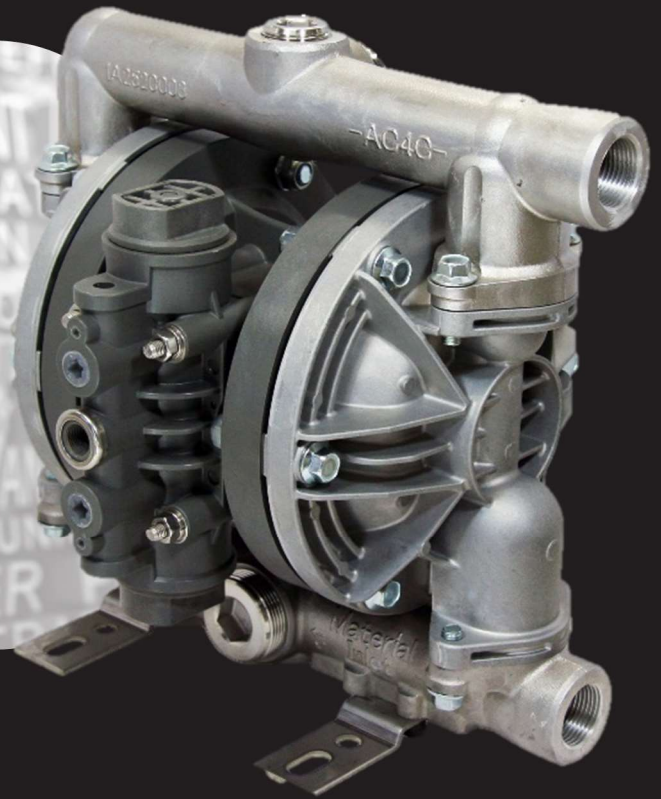


Industries served



# YTS®

## place where innovations are born



## Most Important Patents

### → 1987

A new High-Temperature Double Diaphragm pump was developed. (Japanese patent jointly owned with Fujitsu).

Patent Number #2518842

### → 1993

A new Long-life C-Spool Valve for 1 ½" 2" and 3" Double Diaphragm Pumps with a special sealing structure enabling fully lubrication free operation.

Patent Number #3150012

### → 1995

A new method of manufacturing Metal free PTFE Diaphragms was developed.

Patent Number #2726014

### → 1997

An Electric Pump Controller with an emergency stop function was designed and manufactured.

Patent Number #3083275

### → 2001

A Special Diaphragm pump, Automatic Self-Start Recovery Valve for the use in the semiconductor industry was designed. (Differential-Pressure Type).

Patent Number #3416656

### → 2012

A new range of high-performance ½" Diaphragm Pumps available in Pure PP, PVDF, aluminum, & stainless steel.

Patent Number #1493139, #1494339, #1494140

### → 2013

A new range of high-performance 1" Diaphragm Pumps available in aluminum cast iron & stainless steel.

Patent Number #1493116, #1493474

### → 2014

A new mechanical Air Spool with increased switching reliability and lower air consumption. New Looped C® Spool Air Valve Developed and introduced for sale.

Patent Pending

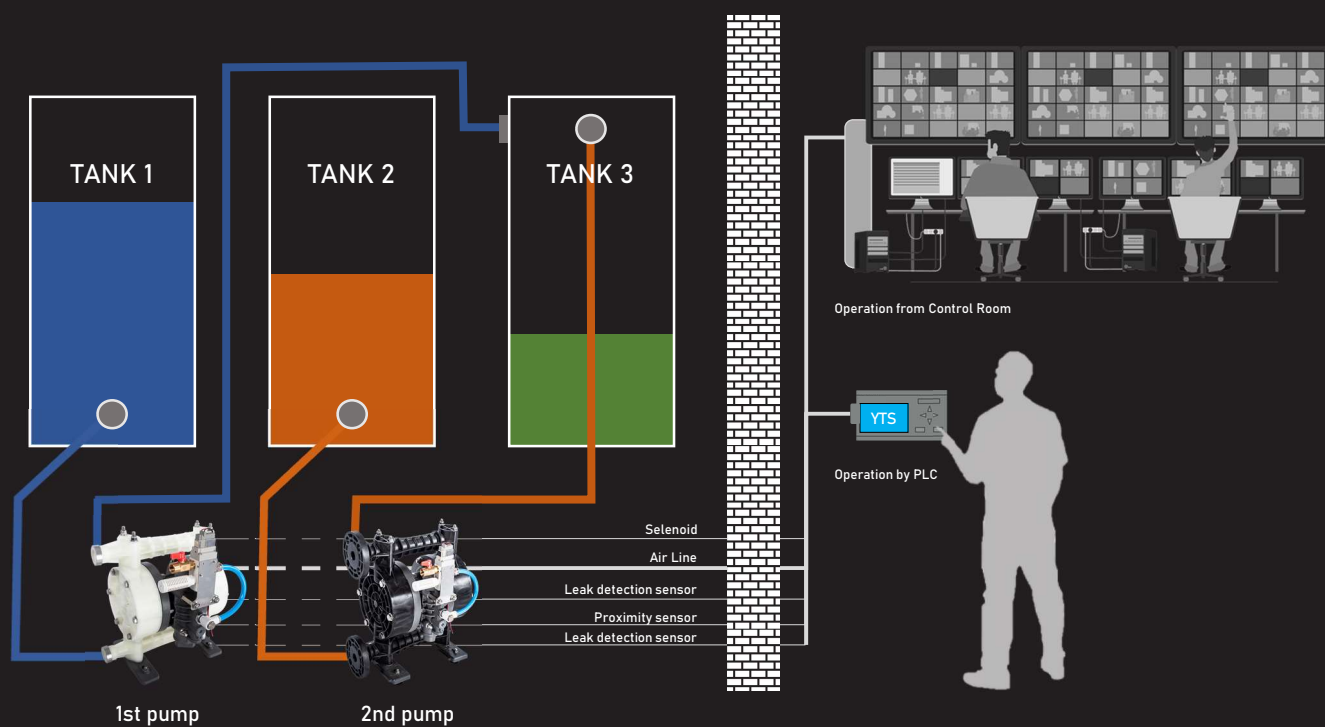


# The Industrial Internet of Things (IIoT)

YTS pumps enhanced with electronic interface capability provides sensor signals to accurately measure flow rates, control pumps via electronic solenoids and monitor diaphragms health using leak-detection sensors.

This allows to transform pumps operation from inefficient manual processes to intelligent fluid management. Pumping process can take place without constant monitoring from people.

Nowadays, many plants operates their processes in centralized control rooms. YTS pumps with electronic interface capabilities allows machine-to-machine communication. This help users of YTS pumps eliminate inaccuracies, increase production, reduce downtime, improve processing efficiency and maintain the highest safety standards.



Directly Mounted Solenoid



Proximity Sensor for batching applications



Leak detection sensors for Conductive and Non-Conductive Fluids



Option available for all YTS pumps sizes and materials.  
Options available for non-hazardous areas and hazardous areas (ATEX).



1/4" D050



1/2" D152



3/4" D200



1" D250



2" D500



# High Performance Metallic Pumps

3/4"	⊕	200 l/min
1"	⊕	220
1 1/2"	⊕	600
2"	⊕	780
3"	⊕	950

85m

Up to 170m for High Pressure Pumps

Max Head

Cast Iron  
Aluminum

Stainless Steel

Other sizes of Aluminum and Stainless Steel pumps:



1/4"

3/8"

1/2"



## Rugged YTS pumps

3" D800



950 l/min

2" D500



780 l/min

1 1/2" D400



600 l/min

1" D250



220 l/min

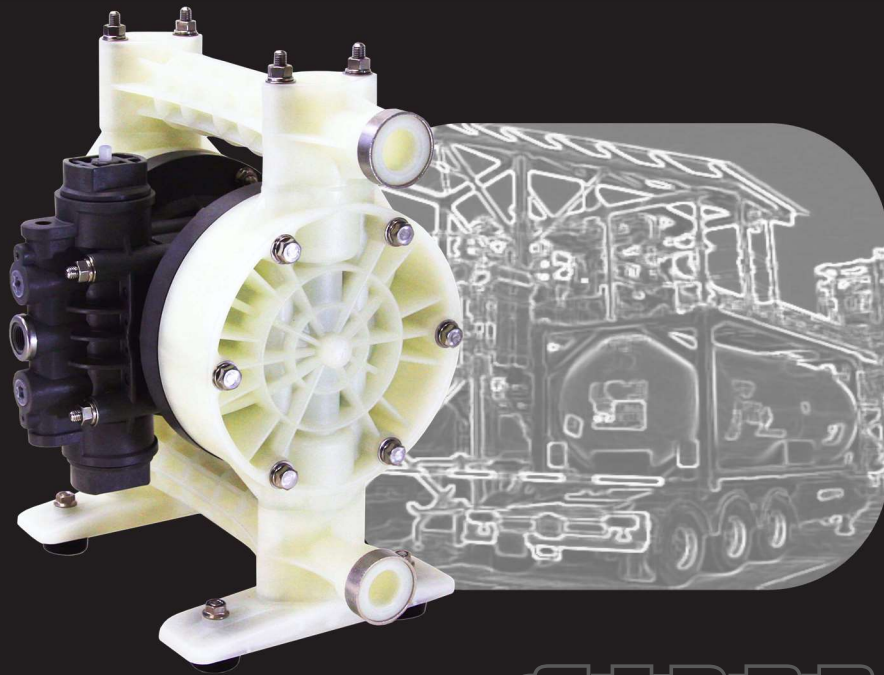
3/4" D200



200 l/min



# Glass Fiber Reinforced Polypropylene



## GFRPP

## Glass Fiber Reinforced Polypropylene advantages over Polypropylene:



### ➔ Stiffness

Adding Glass Fiber reinforcement to Polypropylene significantly increase stiffness in molded pump's elements.

### ➔ Strength

Reinforcing Glass Fibers provide pumps with increased strength, which translates into the ability to resist deformation or creep under loads and higher fatigue endurance with minimal compression.

### ➔ Toughness (Durability)

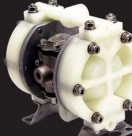




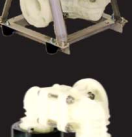
Glass Fiber reinforcement helps pump's elements resist cracking and impedes crack propagation by forming a robust internal fiber skeleton.

### ➔ Dimensional Stability

Glass Fiber Polypropylene Pumps retain a significant amount of their durability at low and elevated temperatures. Pumps exhibits reduced thermal expansion.

### ➔ Heat Resistance

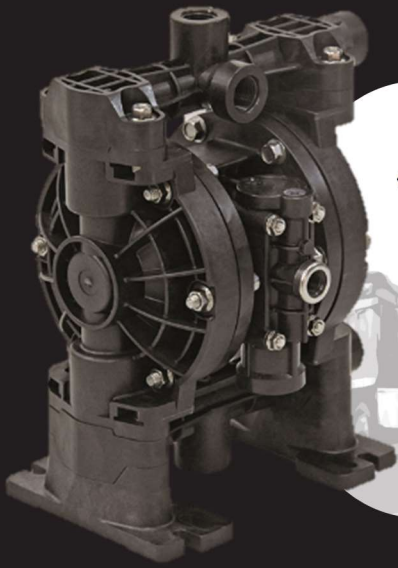
Stiffness gains through fiber reinforcement also translate into increased performance at elevated temperatures.

	1/4" D050GT-X 11,5 l/min		3/8" D101G-X 18 l/min		3/8" D101G-X 24 l/min
	1/2" D151G-X 28 l/min		1/2" D151G-X 54 l/min		3/4" D200G 120 l/min
	3/4" D200G 120 l/min		1" D250G 170 l/min		1" D250GJ 170 l/min
	1 1/2" D400GJM 380 l/min		1 1/2" D400GJ 390 l/min		2" D500GJM 620 l/min
	2" D500GJ 630 l/min		3" D800GJM 760 l/min		3" D800GJ 820 l/min



# Conductive Fiber Polypropylene pumps

for **Chemical** transfer in **Explosive** environments



ATEX



1/4"  
D050C-X  
11 l/min

1/2"  
D152C-X  
56 l/min



1"  
D250C-X  
170 l/min  
1"  
D250CJ-X  
170 l/min



1 1/2"  
D400CJM-X  
380 l/min



1 1/2"  
D400CJ-X  
390 l/min



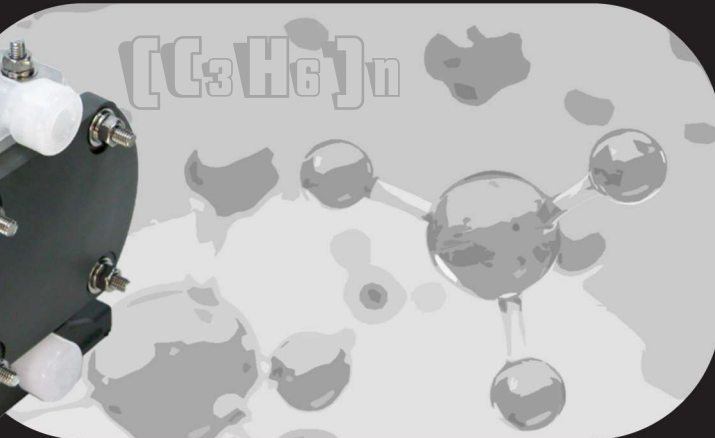
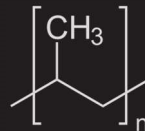
2"  
D500CJM-X  
620 l/min



2"  
D500CJ-X  
630 l/min

# Pure Polypropylene (PP)

pumps for **Chemical** transfer



Pure Polypropylene properties

Good chemical resistance over a wide range of bases and acids

Poor resistance to chlorinated solvents and aromatics

High thermal expansion coefficient

Susceptible to UV degradation



1/4"  
D050PT  
11,5 l/min



3/8"  
D101P  
18 l/min



1/2"  
D152P  
56 l/min

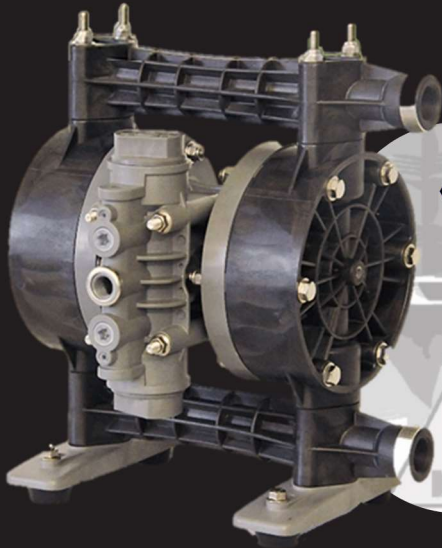


# PVDF (Kynar®)

pumps for transfer



# Aggressive and Hazardous fluids



ATEX



PVDF (Polyvinylidene Fluoride) (Kynar®) is often used for applications where there is a need to resist harsh thermal, chemical and ultraviolet environments and is used especially for the production, storage and transfer of corrosive fluids. PVDF pumps are considered safe for the transfer of a large range of highly corrosive chemicals and are also safe for use in explosive environments and can achieve a certain level of ATEX certification.

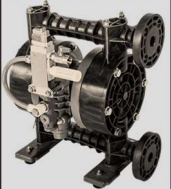
## PVDF (Kynar®) exhibits

- ➔ High chemical corrosion resistance
- ➔ High temperature resistance
- ➔ High mechanical strength
- ➔ Low permeability to most gases and liquids
- ➔ High abrasion resistance
- ➔ Electrical conductivity
- ➔ Resistance to ultraviolet radiation
- ➔ Light weight



ATEX



	1/4" D030V 8,2 l/min		1/4" D050V 11 l/min
	1/2" D151V-X 50 l/min		1/2" D152V-X 56 l/min
	3/4" D200V-X 120 l/min		1" D250V-X 170 l/min
	1" D250VJ-X 170 l/min	<b>ELECTRICALLY OPERATED PUMPS</b>  CONTROL BY SOLENOID VALVE OPTION FOR ALL MODELS	
	1 1/2" D400VJM 380 l/min		1 1/2" D400VJ 390 l/min
	2" D500VJM 620 l/min		2" D500VJ 630 l/min



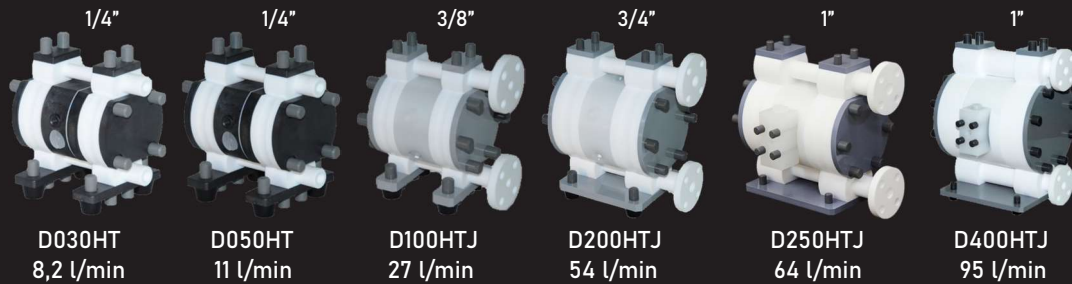


# High Purity Virgin PTFE pumps

for **Clean Room** chemical transfer



**Class 1000 clean room**  
assembled, tested & packed



1/4"  
D030HT  
8,2 l/min

1/4"  
D050HT  
11 l/min

3/8"  
D100HTJ  
27 l/min

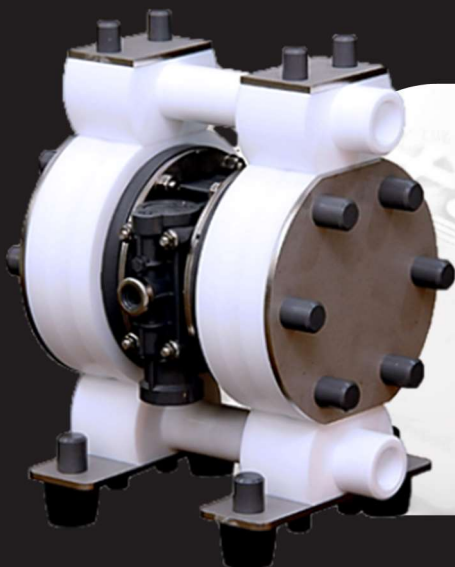
3/4"  
D200HTJ  
54 l/min

1"  
D250HTJ  
64 l/min

1"  
D400HTJ  
95 l/min

# Industrial Grade PTFE pumps

for **Aggressive** chemical transfer



Used for transfer and deliver aggressive and hazardous fluids in the semiconductor production



1/4"  
D030TT-X  
8,2 l/min

1/4"  
D050TT -X  
11 l/min

1/2"  
D150TTJ  
50 l/min

3/4"  
D152TT-X  
50 l/min

1"  
D250TTJ  
150 l/min



Self-priming pneumatic diaphragms pumps

Consistent and precision fluid transfer



Specific amounts of fluid can be transferred and metered



Pumps can run dry and work in dead head applications



Can transfer liquid laden slurries



100% nonlubricated design to reduce the chance of liquid process contamination and also offers 100% clean emissions free exhaust air



Metal free liquid wetted section



Machined liquid mating surfaces

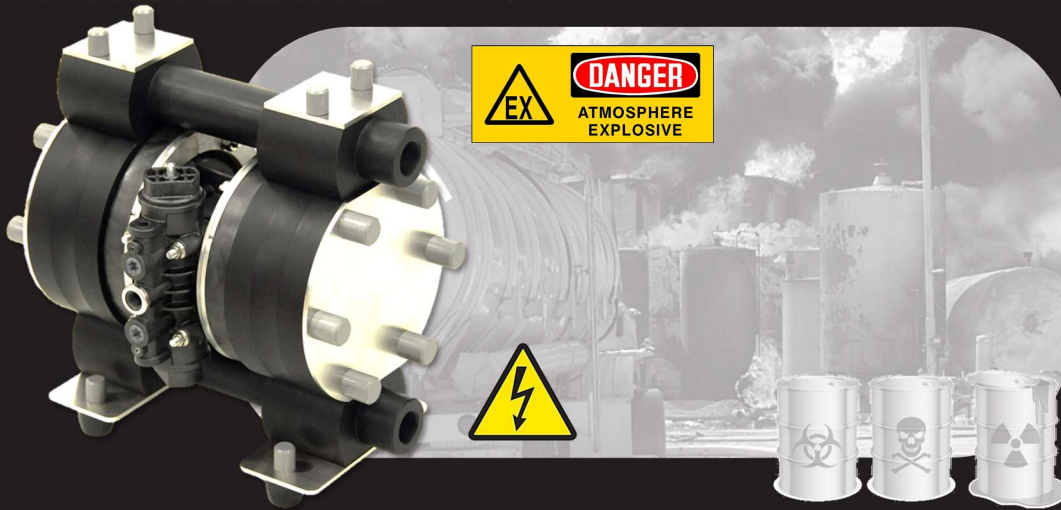


Outside accessible air spool



# Electrically Conductive PTFE pumps for Aggressive and Flammable Explosive environments

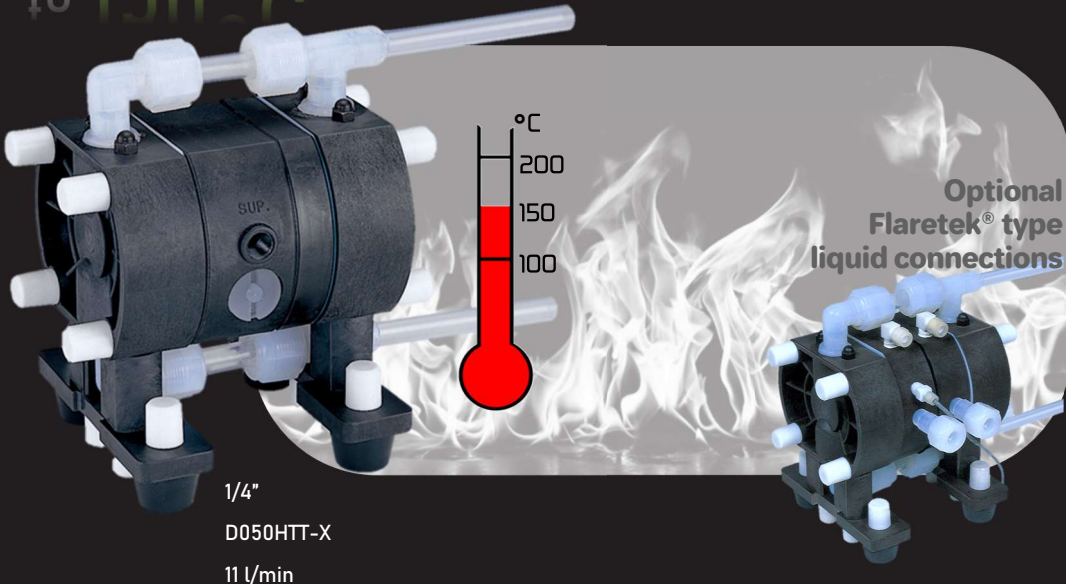
pumps for fluids for use in environments



- Electrically conductive PTFE liquid wetted section
- Conductive PPS/Polypropylene air motor section
- Electrically groundable with ATEX certification
- Safely operate in explosive environments



# High Temperature PTFE pump for Aggressive liquids up to 150°C



- Self-priming pneumatic diaphragms pumps
- ◆ Consistent and precision fluid transfer
  - ◆ Specific amounts of fluid can be transferred and metered
  - ◆ Pumps can run dry and work in dead head applications
  - ◆ Can transfer liquid laden slurries and large sized solids
  - ◆ 100% nonlubricated design to reduce the chance of liquid process contamination and also offers 100% clean emissions free exhaust air
  - ◆ Machined liquid mating surfaces
  - ◆ Outside accessible air spool
  - ◆ Independent pilot valves



# Conductive Active Pulsation Dampeners



## Fully Automatic Operation with Self Adjusting Speed and Pressure Control

3/8" 10 Series

Aluminum, Stainless Steel, Conductive Fiber Polypropylene

1/2" 15 Series

Aluminum, Stainless Steel, PVDF, Acetal, Conductive Fiber Polypropylene, Conductive PTFE

1" 25 Series

Aluminum, Stainless Steel, Cast Iron, PVDF, Conductive Fiber Polypropylene, Conductive PTFE

1 1/2" 40 Series

Aluminum, Stainless Steel, Cast Iron, PVDF, Conductive Fiber Polypropylene

2" 50 Series

Aluminum, Stainless Steel, Cast Iron, PVDF, Conductive Fiber Polypropylene

## Passive Pulsation Dampeners

Stainless Steel ♦ Conductive Fiber Polypropylene ♦ Conductive PTFE

Separate devices and directly mounted on the pump



Sizes:

1/4"

3/8"

1/2"

3/4"

1"

1 1/2"

2"

3"





# Most comprehensive range of AODD pumps

**YTS<sup>®</sup>** JAPAN Co., Ltd.  
598-10, Monoi, Yotsukaido City, Chiba, Japan

**YTS<sup>®</sup>** Pump Engineering B.V.  
Logistiekweg 26, 7007CJ Doetinchem, The Netherlands  
Tel.: +31 (0)85 7607060  
info@yts-pumps.com

[www.yts-pumps.com](http://www.yts-pumps.com)