

Air-Operated Double-Diaphragm

High Purity PTFE Pumps



yamada

www.yamadacorp.co.jp/global

The Yamada Advantage

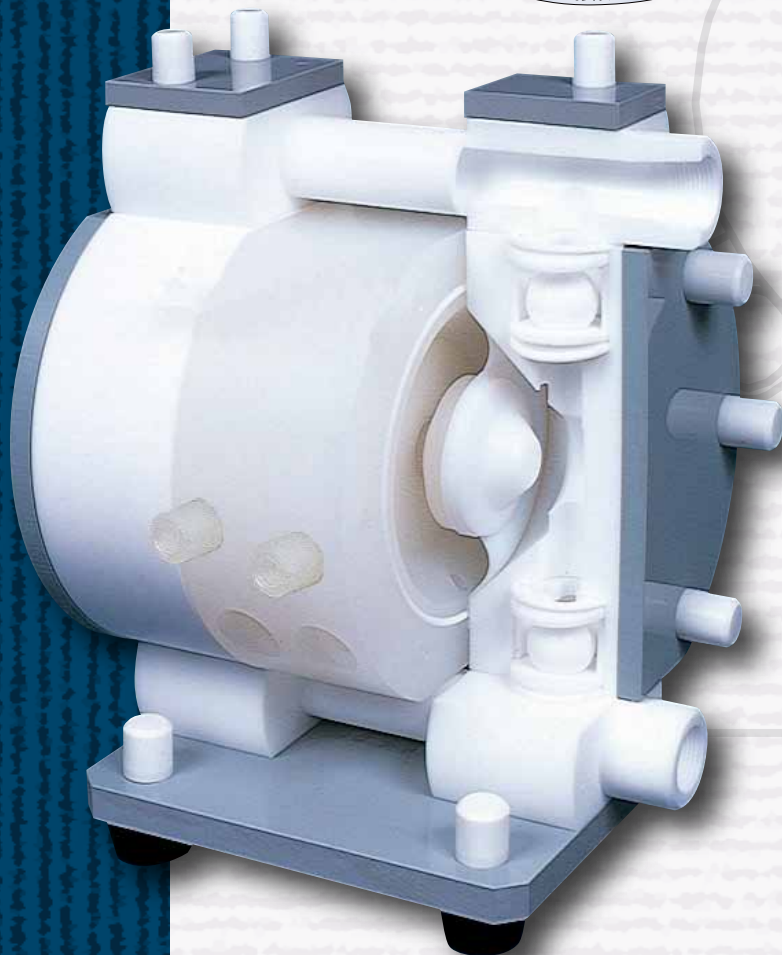
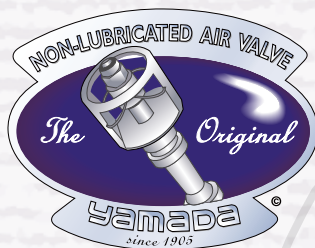
When it comes to quality, performance and reliability, there's no better value in high-purity pumps than Yamada. We've been helping companies solve their liquid transfer problems since 1905 and have over four decades of experience in the design and manufacture of air-operated, double-diaphragm pumps.

Every Yamada pump is manufactured to the strictest quality standards and fully tested prior to shipment. In addition, each pump is backed by the local service and parts you need to keep them operating efficiently for years to come. Visit our Website for details on Yamada's complete line of AODD pumps.



Industry flows through **YAMADA** pumps.

Quality, Performance, Reliability



Important features you'll find in Yamada F-Series PTFE pumps:

Truly Non-Lubricated Air Valve

The patented air valve on all Yamada F-Series pumps never requires lubrication or pre-packing. Plus, it is easily accessible without disassembling the pump.

Wetted Parts

To ensure maximum corrosion resistance, purity levels and low particle generation, Yamada pumps feature diaphragms, liquid chambers and manifolds that are machined from 100% virgin PTFE. Polypropylene and High Density Polyethylene are used in the air motor section (non-wetted) to ensure resistance in a corrosive environment.

Extended Performance Diaphragms

All Yamada F-Series diaphragms are manufactured from 100% virgin PTFE. As a result, these diaphragms will last up to twice as long as those found in many competitive pumps. In addition, incorporating minimal shaft travel reduces pump pulsation.

Clean Room Manufactured

Yamada F-Series pumps are manufactured, DI water tested, nitrogen purged, and double bagged under class 1000 clean room conditions according to stringent quality control standards and procedures.

Most Complete Line Available

Yamada offers five sizes of F-Series pumps for your applications with adjustable flow rates up to a maximum of 95 Liter per minute. Yamada is proud to offer the largest line of field-proven, high purity air-operated double diaphragm pumps.

End-User Maintenance

Yamada F-Series pumps are easily end-user maintainable and are backed with readily available service and parts worldwide.

Explosion-Proof Operation

Air operation eliminates a potential source of ignition, so there's no need to take additional preventative measures when pumping volatile or flammable liquids or when using the pump in potentially hazardous environments.

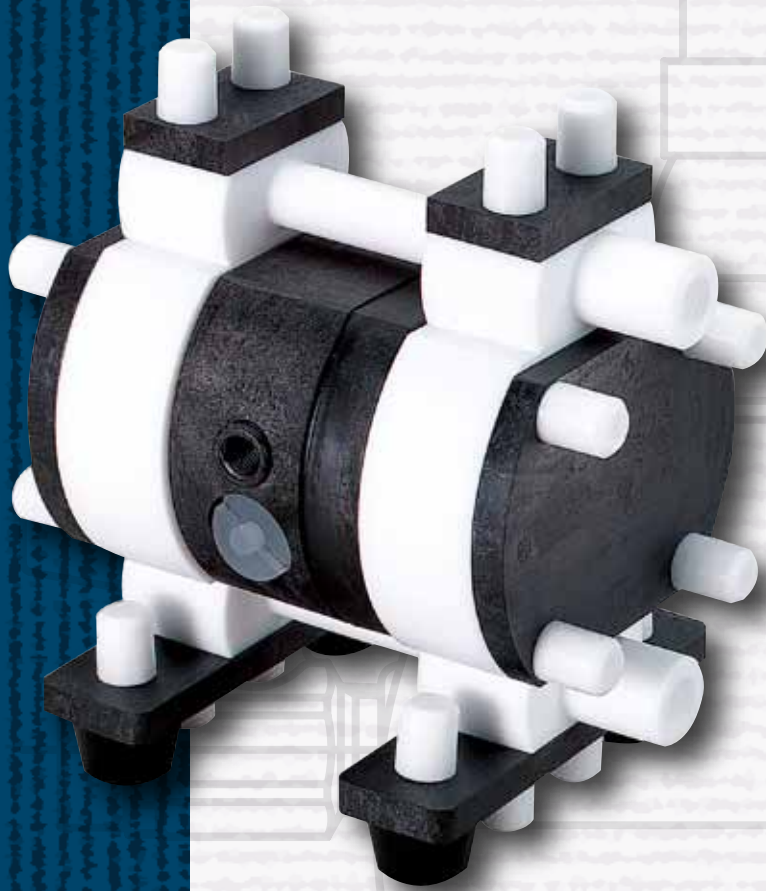
Warranty

Yamada warrants all pumps for one year from date of installation.

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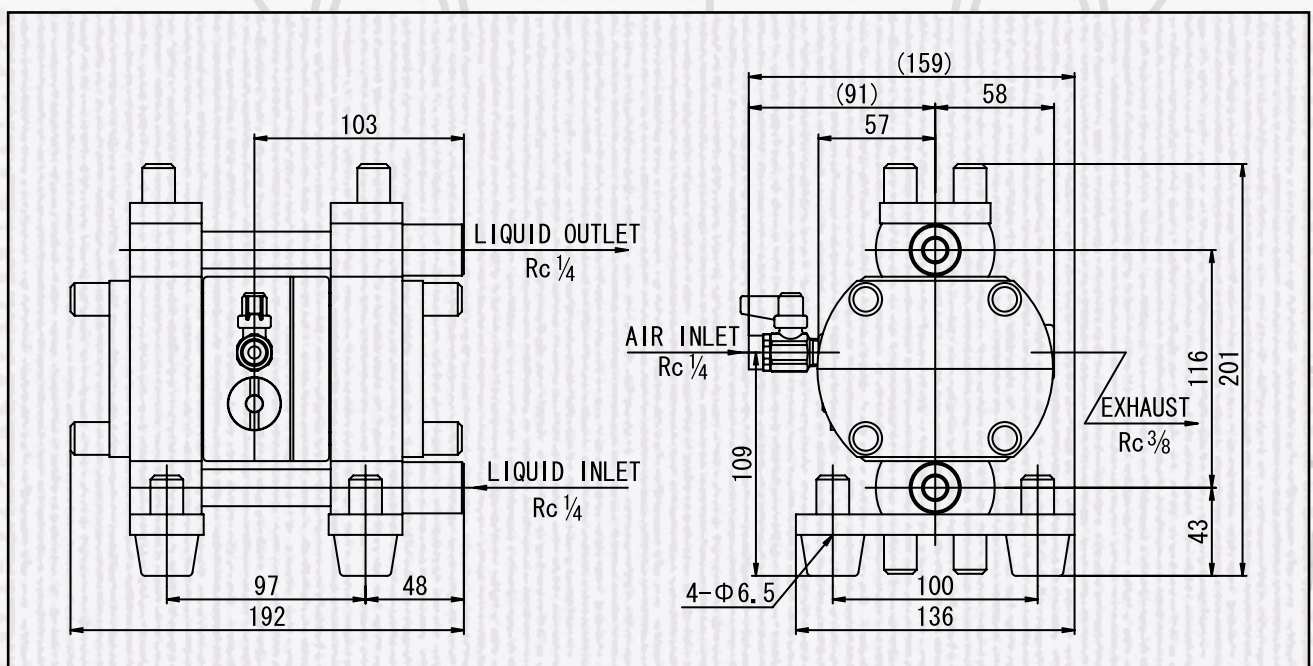
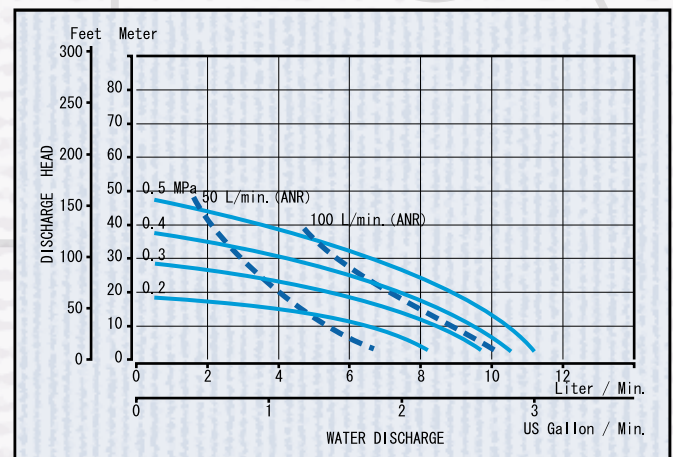
DP-5F Pumps



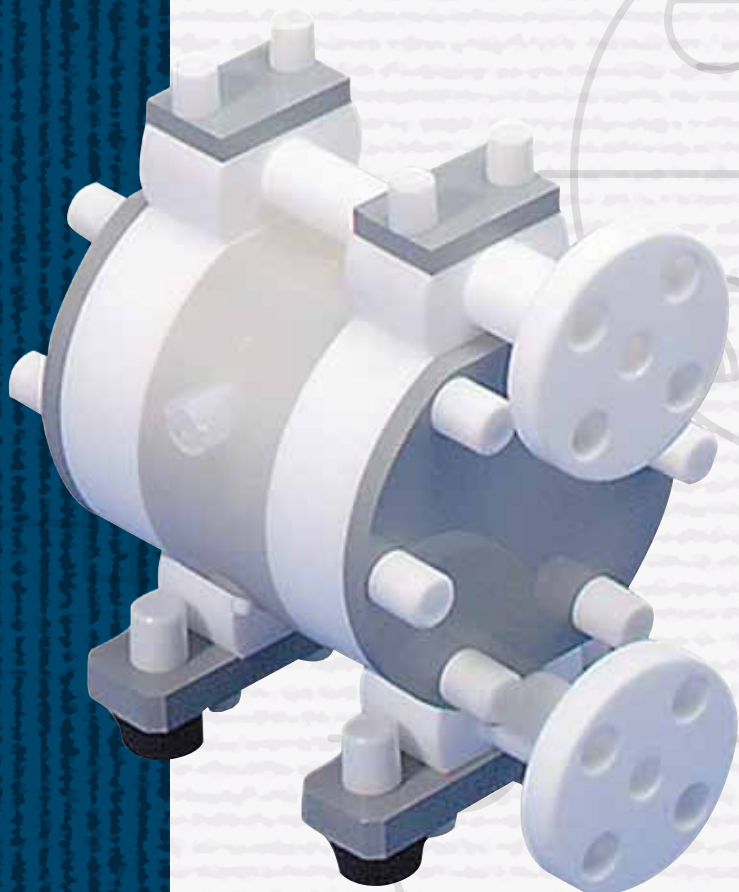
- Rc 1/4 liquid connections.
- Maximum flow up to 11 liter/minute.
- Internal silencer.
- End-user maintainable.
- Self-priming.
- Field-proven design.
- Clean room manufactured, DI water tested, nitrogen purged, and double bagged.
- Flat check valves standard.
- Detailed specifications inside back cover.

Performance Curve

Data based on 1-ft. flooded suction



DP-10F Pumps

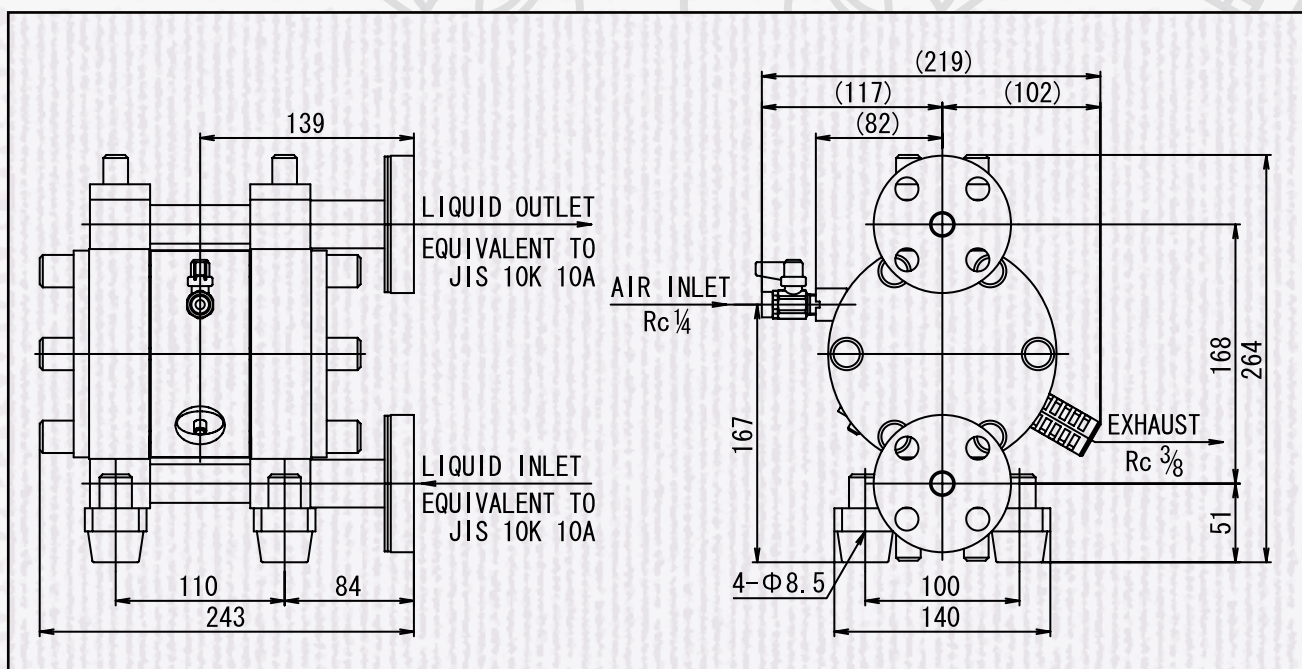
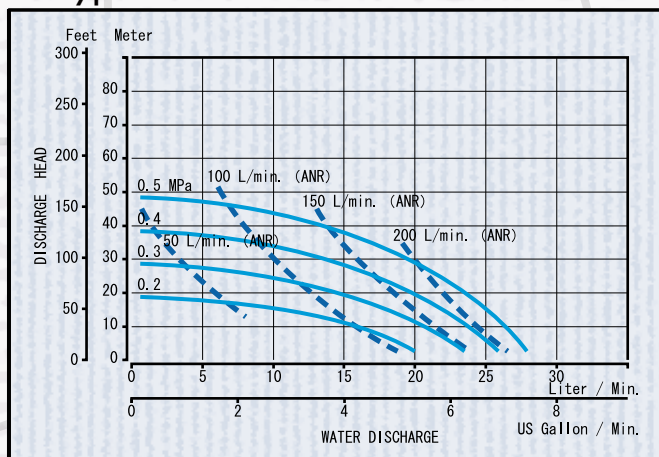


- Available with Rc3/8 or JIS10A flange liquid connections.
- Maximum flow up to 27 liter/minute.
- End-user maintainable.
- Self-priming.
- Field-proven design.
- Clean room manufactured, DI water tested, nitrogen purged, and double bagged.
- Ball or flat check valves available.
- Detailed specifications inside back cover.

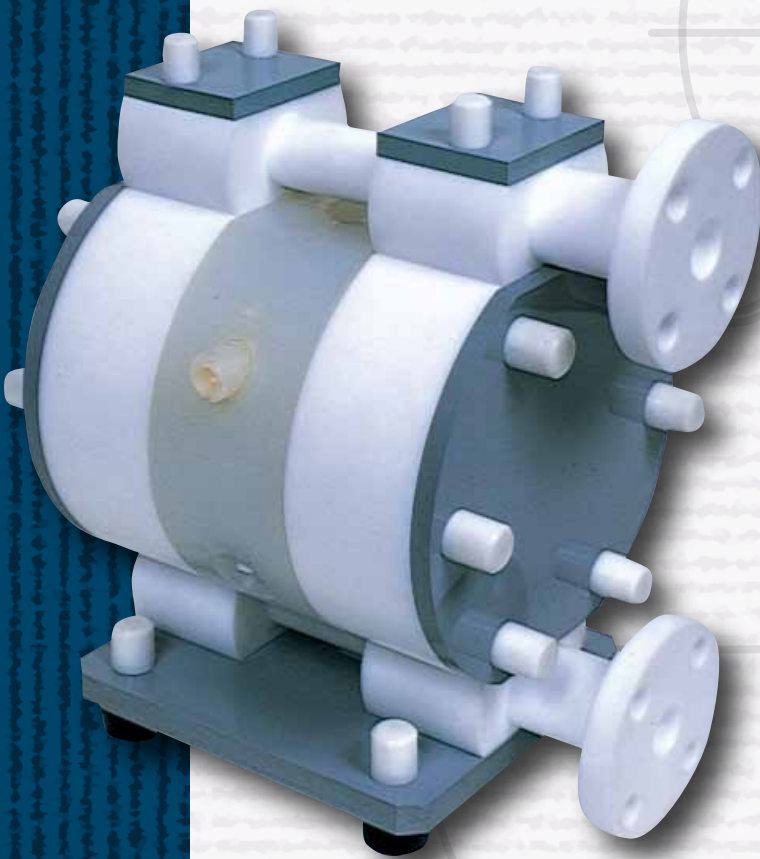
ANSI Flange also available—consult Yamada.

Performance Curve

Data based on 1-ft. flooded suction, ball-type check valve.



DP-20F Pumps

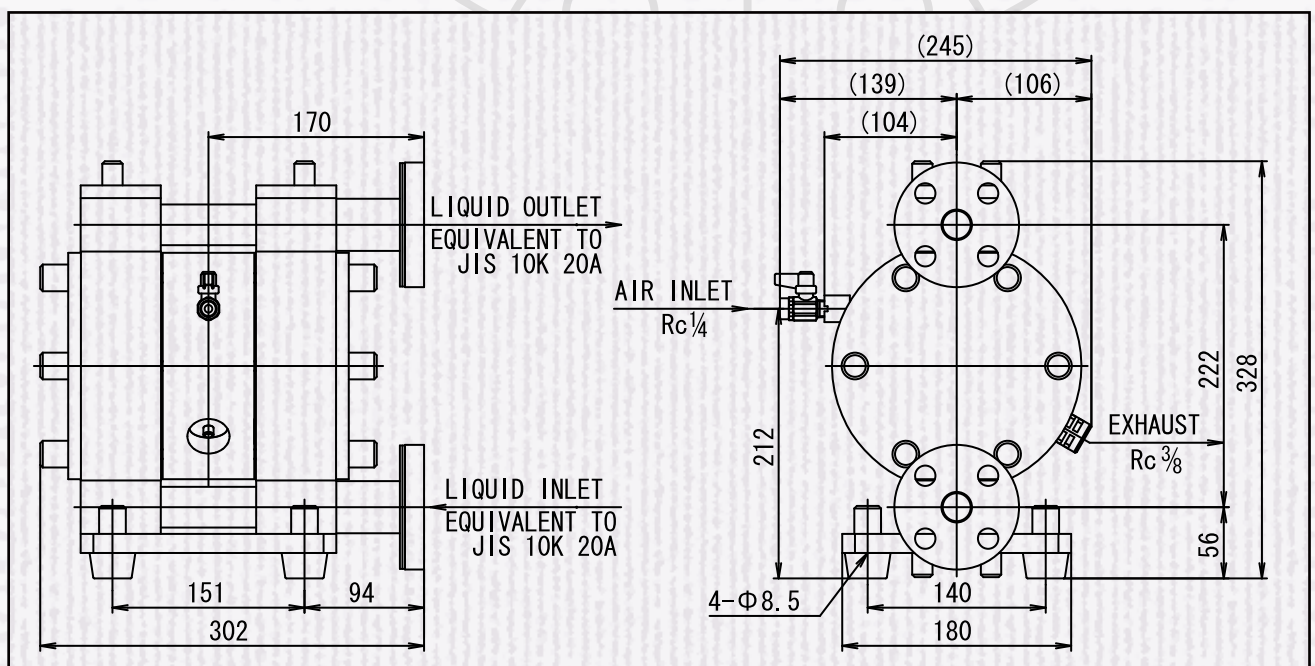
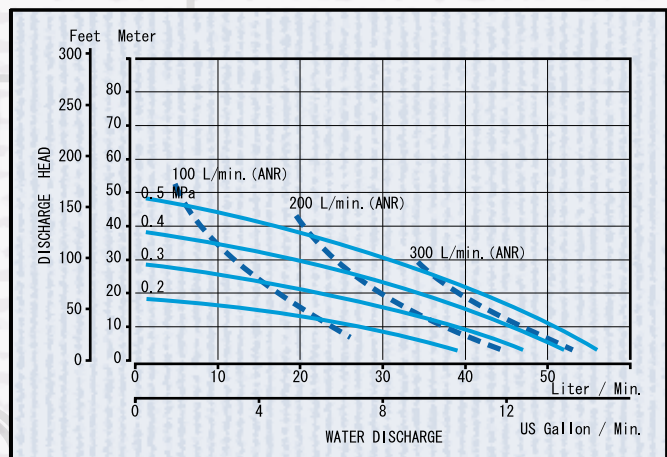


- Available with Rc3/8 or JIS10A flange liquid connections.
- Maximum flow up to 27 liter/minute.
- End-user maintainable.
- Self-priming.
- Field-proven design.
- Clean room manufactured, DI water tested, nitrogen purged, and double bagged.
- Ball or flat check valves available.
- Detailed specifications inside back cover.

ANSI Flange also available—consult Yamada.

Performance Curve

Data based on 1-ft. flooded suction, ball-type check valve



DP-25F Pumps

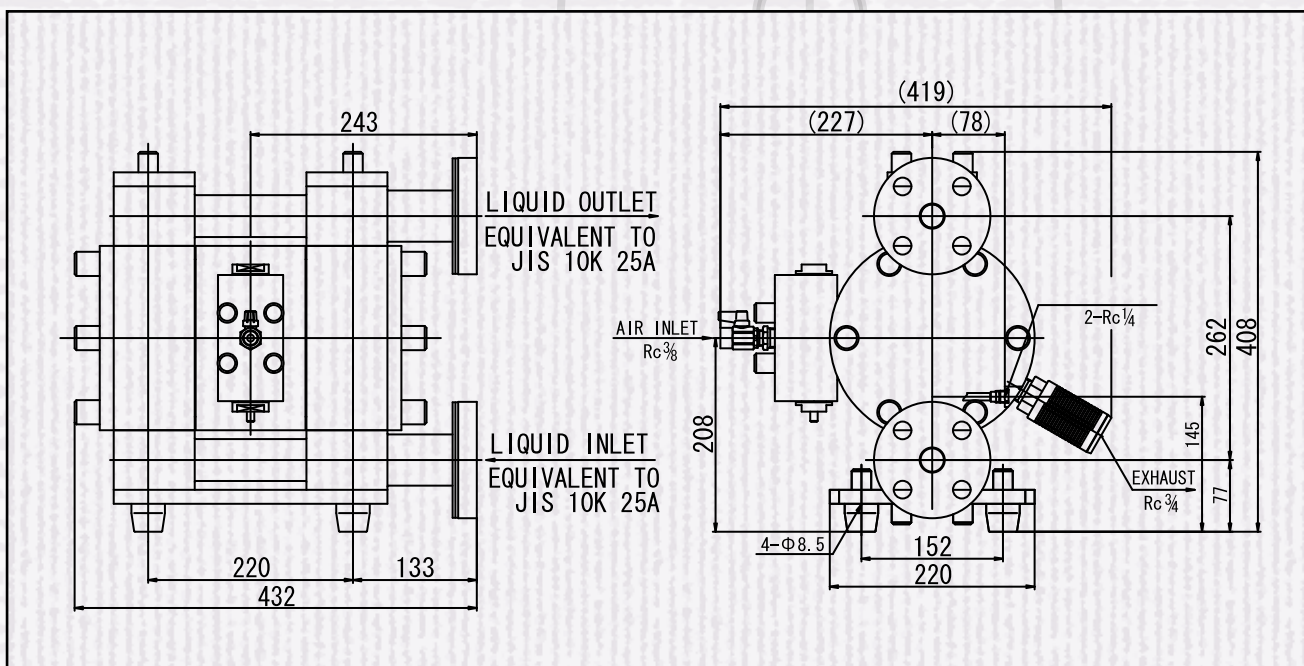
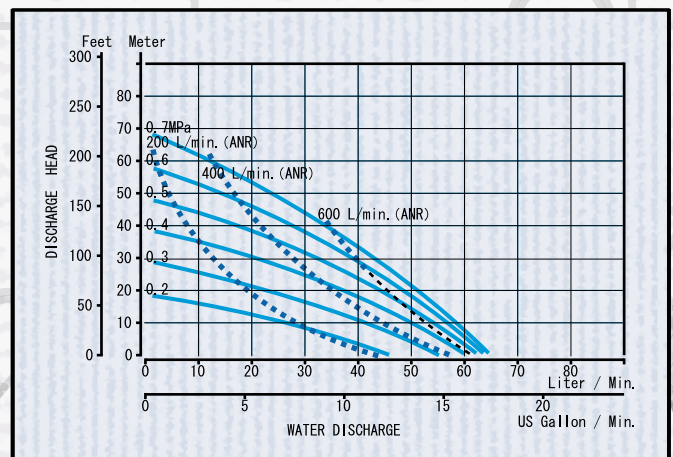


- Available with JIS25A flange liquid connections.
- Maximum flow up to 64 liter/minute.
- End-user maintainable.
- Self-priming.
- Field-proven design.
- Clean room manufactured, DI water tested, nitrogen purged, and double bagged.
- Ball or flat check valves available.
- Detailed specifications inside back cover.

ANSI Flange also available—consult Yamada.

Performance Curve

Data based on 1-ft. flooded suction, ball-type check valve



DP-38F Pumps

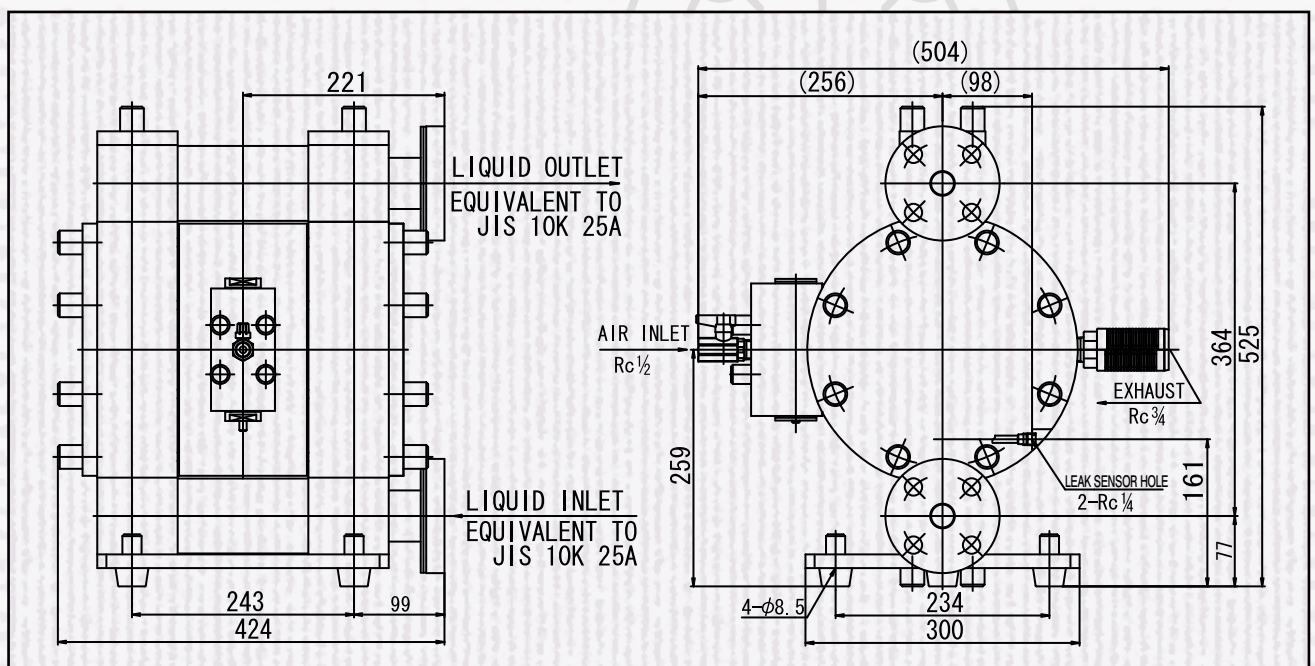
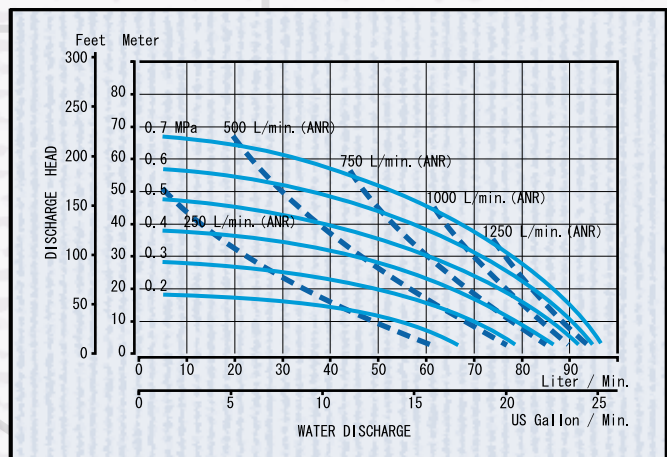


- Available with JIS25A flange liquid connections.
- Maximum flow up to 95 liter/minute.
- End-user maintainable.
- Self-priming.
- Field-proven design.
- Clean room manufactured, DI water tested, nitrogen purged, and double bagged.
- Ball or flat check valves available.
- Detailed specifications inside back cover.

ANSI Flange also available—consult Yamada.

Performance Curve

Data based on 1-ft. flooded suction, ball-type check valve

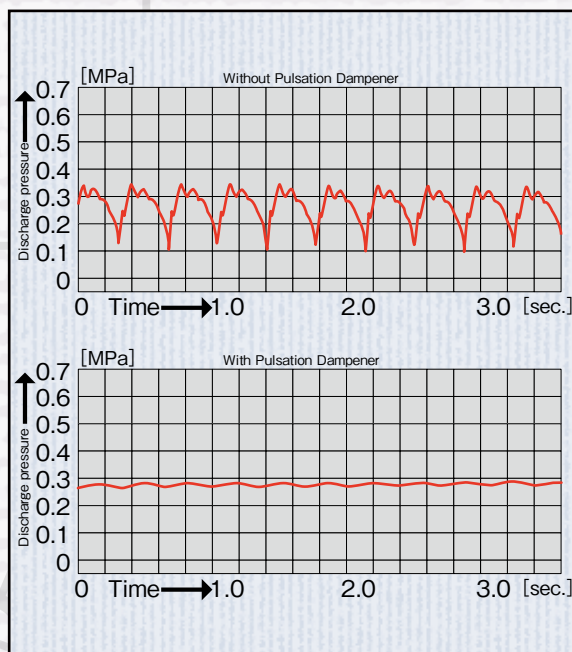


Pulsation Dampeners

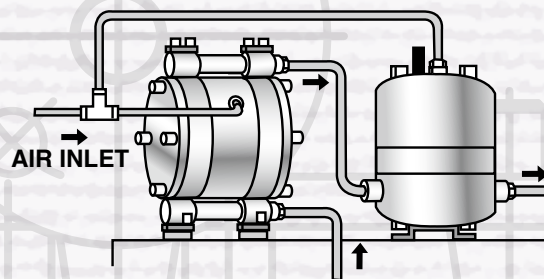
- For all F-Series PTFE pumps.
- 100% PTFE wetted construction.
- Reduces pulsations up to 90%.
- Easy-to-install.
- Explosion-proof, air-operated design.
- Completely automatic.

Performance Data

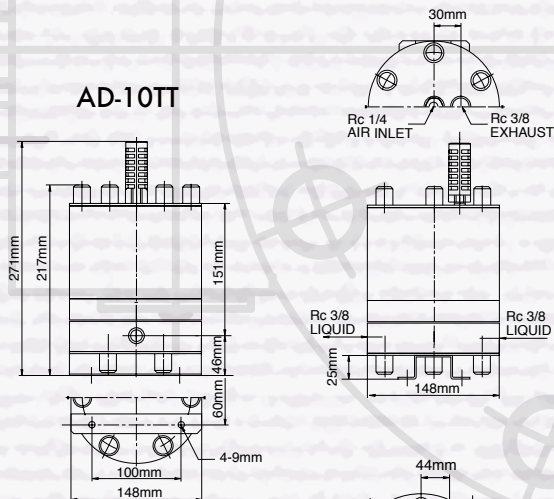
Pump Cycles



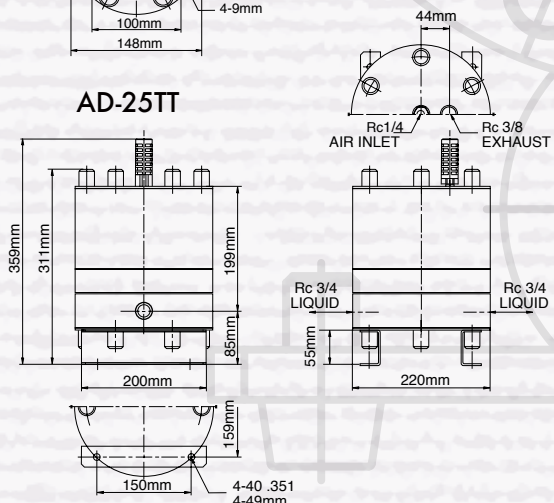
Pulsation Dampeners are designed to reduce pulsations normally associated with air-operated double-diaphragm pumps, protecting the entire pump system from the damaging effects of shock. Yamada offers a complete line of high-purity pulsation dampeners for a variety of applications.



AD-10TT



AD-25TT



| Model Number | For Pump Models | Air Inlet | Liquid Inlet & Discharge | Weight |
|--------------|-------------------|-----------|--------------------------|---------------------|
| AD-10TT | DP-5F and DP-10F | Rc1/4 | Rc3/8 | 4.5 kg (8.8 lbs.) |
| AD-25TT | DP-20F and DP-25F | Rc1/4 | Rc3/4 | 12.5 kg (26.5 lbs.) |
| AD-38TT | DP-38F | Rc1/4 | Rc1 | 30 kg (84.0 lbs.) |

BTT-Series Pumps



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- Transfer pumps for non-high purity applications in a corrosive environment.
 - PTFE wetted components and PP center body.
 - Available in 3/4" and 1" liquid connections.
 - Maximum flow up to 150 liter/minute.
 - Self priming.
 - Field-proven design.
 - Never needs air line lubrication.
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F-Series Ultra-High Purity Pumps



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- Transfer pumps for ultra-high purity process fluids.
 - Absolutely No internal metallic components.
 - Ultra high-purity PTFE/PFA wetted components.
 - Clean room assembled and tested - class 1000.
 - Single-piece PTFE diaphragm design.
 - Available in 3/8", 3/4" and 1" liquid connections.
 - Maximum flow up to 120 liter/minute.
 - Various pump control, non-lubricated internal air valve, external solenoid valve and external timer control, are available.
 - Field-proven design
-



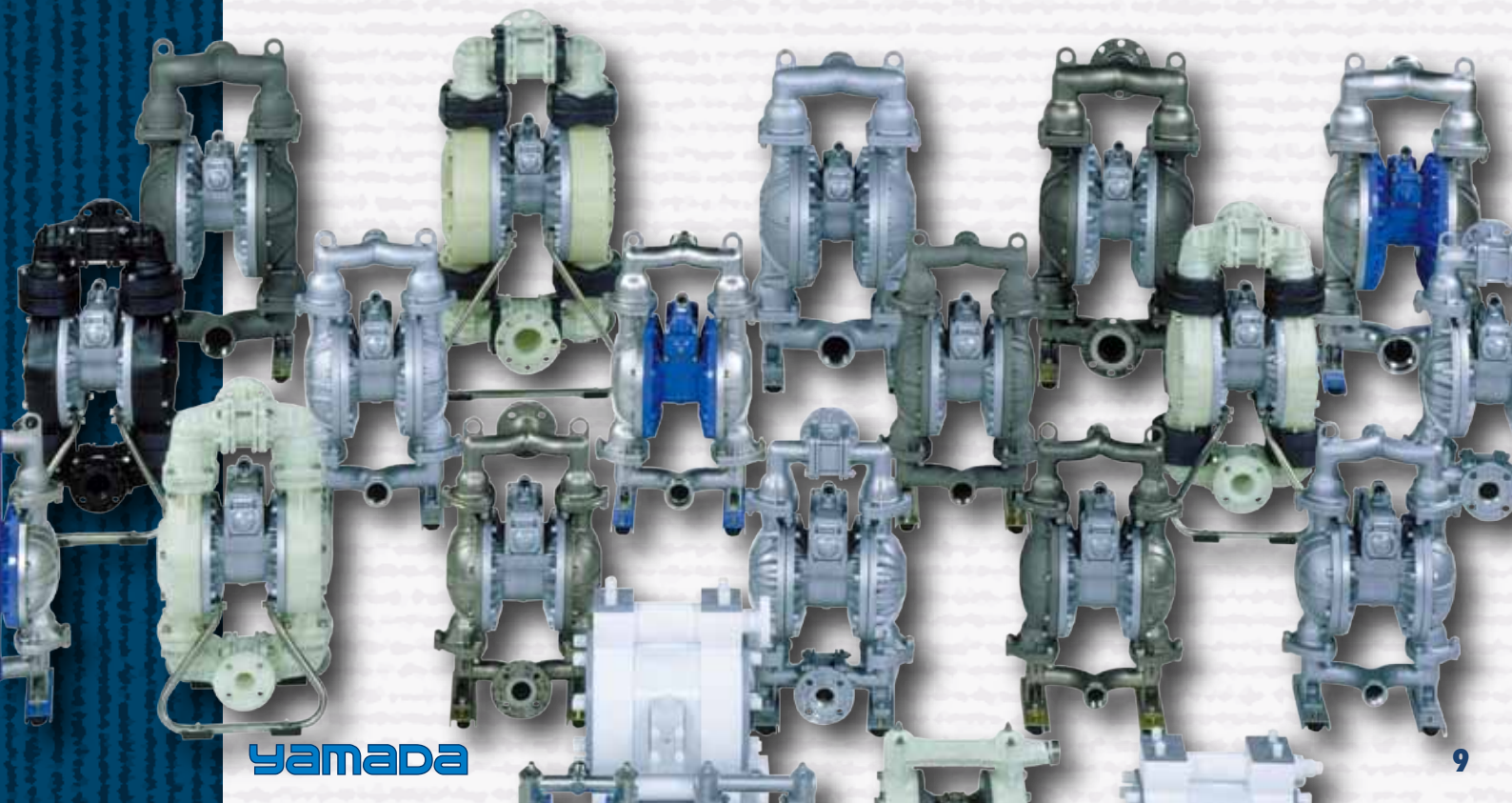
F-Series Pump Specifications

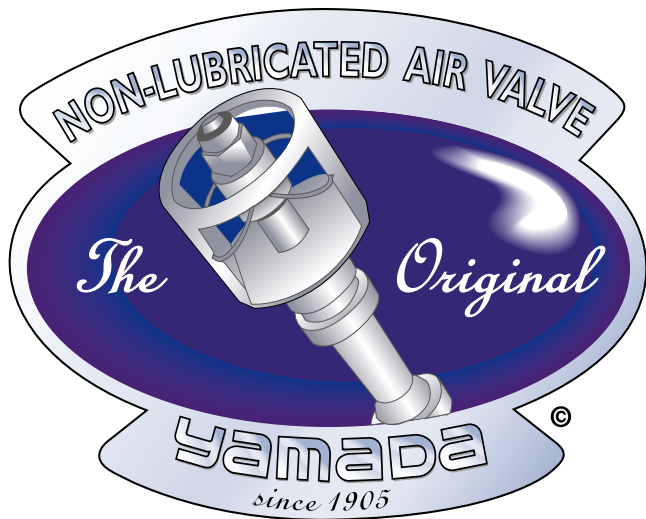
| Model | DP-5F | DP-10F | DP-20F | DP-25F | DP-38F |
|-----------------------------------|-------------------|---|--------------------------------------|---------------------------|---------------------------|
| Pump Material | | | | | |
| Casing | PTFE | PTFE | PTFE | PTFE | PTFE |
| Manifold | PTFE | PTFE | PTFE | PTFE | PTFE |
| Body(Non-Wetted) | Ryton®(PPS resin) | Polypropylene | Polypropylene | High Density Polyethylene | High Density Polyethylene |
| Check Valve | Flat | Ball or flat check valves available. Flat check valve is recommended for increased flow (up to 5%) and suction lift applications. Ball check valve is recommended for flooded suction or viscous liquids. | | | |
| Discharge Volume/Cycle | 13mL | 65mL | 150mL | 300mL | 700mL |
| Maximum Cycles/Minute | 400 | 250 | 250 | 230 | 150 |
| Port Dimensions | | | | | |
| Liquid Inlet & Discharge | Rc 1/4 | Rc 3/8 JIS 10A flange | Rc 3/4 JIS 20A flange | JIS 25A flange | JIS 25A flange |
| Air Inlet | Rc 1/4 | Rc 1/4 | Rc 1/4 | Rc 3/8 | Rc 1/2 |
| Air Exhaust (with muffler) | Rc 3/8 | Rc 3/8 | Rc 3/8 | Rc 3/4 | Rc 3/4 |
| Air Supply Pressure | 0.2 - 0.5MPa | 0.2 - 0.5MPa | 0.2 - 0.5MPa | 0.2 - 0.7MPa | 0.2 - 0.7MPa |
| Maximum Liquid Temperature | 0 - 80°C | | | | |
| Net Weight | Rc 1/4 3.4kg | Rc 3/8 6.7kg flange 7.2kg | Rc 3/8 14.6kg flange 15.5kg | flange 32.0kg | flange 52.0kg |

Due to Yamada's commitment to continual product improvement, specifications subject to change without notice.

Utility Pumps

In addition to high purity pumps, Yamada offers a full line of industrial air-operated double-diaphragm pumps. Contact Yamada for our full-line general brochure.





Industry flows through
Yamada pumps.



**CAUTION WHEN
SELECTING A PUMP**

Yamada offers a large range of Air Operated Double Diaphragm Pumps to cater for many different kinds of materials and conditions. When selecting the most appropriate pump for a particular selection and installation please consult your local Yamada Pump Distributor or Yamada Corporation.



CAUTION

The products presented in this catalogue may be classified as an export-controlled item under Foreign Exchange and Foreign Trade Act of Japan, hence an export license must be required to export the products. In addition, whenever the products are to be re-exported from any country to the third country, an export license must be required under the laws and regulations of the re-exporting country.

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