

# **ONE-UP®** PUMP DIAPHRAGMS

Guaranteed to Last Longer

**FOR AIR-OPERATED  
DIAPHRAGM PUMPS**



## Durable Versatility

ONE-UP® pump diaphragms, with proprietary PTFE on the wetted side, are a significant advancement over conventional PTFE diaphragms. Considerably stronger, with greater flex life, they provide a dramatic improvement in service life. Satisfaction guaranteed, or purchase price refunded.

Chemical resistance is the property that makes ONE-UP® pump diaphragms so versatile. Suitable for use with most chemicals and in elevated temperatures and pressures, these diaphragms are ideally suited for those general service pumps that are likely to be put to one use today and another tomorrow.

You can expect long, effective service life and reduced maintenance costs with these durable one-piece diaphragms. Strength and chemical resistance make ONE-UP® pump diaphragms perfect for just about all of your pumping requirements.

## Technical Data

### Material/Construction:

One-piece composite design with a proprietary 100% PTFE on wetted side.

### Temperature Range:

Neoprene backing:

14°F to 200°F (-10°C to 93°C)

EPDM backing:

14°F to 280°F (-10°C to 137°C)

Viton backing:

32°F to 350°F (0°C to 176°C)

### Chemical Resistance:

Chemical resistance to all media in pH 0-14 range, except molten alkali metals and elemental fluorine.

### Flex Life:

>70MM cycles (ASTM-D-2176, 0.020 in. thick, 0.600 in. wide)

### Impact Strength:

30.4 ft. lbs./in. (ASTM-D-256, 0.220 in. thick)

### Safety:

Complies to FDA 21 CFR 177.1550 (PTFE) requirements for food

## Key Features

- Made from a proprietary 100% PTFE
- Bonded to a reinforced rubber backing
- Patented rib construction
- Chemically inert & temperature resistant
- Greater flex life
- Available for most makes of pumps & sizes

## Key Benefits

- Lasts Longer: Replace diaphragms less often
- Versatility: Diaphragms work with most chemicals
- Cost: Lowers maintenance and operating costs



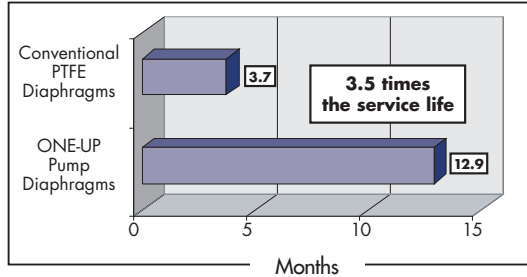


# ONE-UP® PUMP DIAPHRAGMS

For Air Operated Diaphragm Pumps

## Field Testing

ONE-UP® pump diaphragms have been extensively field tested in a wide variety of industries including food & beverage processing; pharmaceuticals, paint, solvent and detergent manufacturing and wastewater treatment. Documented case histories show that the average service life is 3.5 times longer than conventional PTFE diaphragms.



## Long Service Life

The superiority of the PTFE technology developed by Gore ensures that pump diaphragms will provide extended service life.

Property	ASTM Method	Sample Dimensions (thickness)	Conventional PTFE (Literature)	Gore PTFE (Test Data)
Flex Life (MM cycles)	ASTM-D-2176	0.020 in 0.600 in	4.1	70+*
Impact Strength (ft lbs/in)	ASTM-D-256	0.220 in	2 – 3.5	30.4
Tensile Strength (psi)	ASTM-D-638	0.220 in	4000-5200	14920
Mullins Burst (psi)	ASTM-D-3786	0.020 in	180**	540
Tensile Creep (1000 hr, 1000 psi)	ASTM-D-2990	0.100 in	20%-30%**	9%-10%

Sample dimensions are given to compare conventional PTFE to Gore's PTFE for testing purposes and do not represent actual diaphragm dimensions.

\*Test was stopped over time \*\*Actual test results for conventional PTFE film.

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## Easy Installation

Since the ONE-UP® pump diaphragm is a one-piece design, it is simple to install. Whether it incorporates bolt holes or a perimeter sealing bead, it fits easily into the pump housing without the difficulties associated with installing two-piece diaphragm sets.



## Satisfaction Guaranteed

We guarantee your satisfaction. If, on your initial order, you are not completely satisfied with the performance-in-use of the diaphragms, return them to us for a full refund of the purchase price.

## Availability

ONE-UP® pump diaphragms are available for the following makes of air operated diaphragm pumps: ALMATEC, ARO, DEPA, BLAGDON, FLOTRONICS, GRACO, VERDER, VERSAMATIC, WARREN RUPP, WILDEN, YAMADA.

## Contact us for more information

For further information on availability, ordering, or technical information, call your local authorized Gore distributor or the application engineers at W. L. Gore & Associates, Inc. (800-654-4229). Visit us at [www.gore.com](http://www.gore.com).



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