

Garlock® One-Up®

PUMP DIAPHRAGM



GUARANTEED TO LAST LONGER

GARLOCK® 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.

DURABLE VERSATILITY

Chemical resistance is the property that makes GARLOCK® 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 use 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 most of your pumping requirements.

GARLOCK® ONE-UP® diaphragms may be used in potentially explosive atmospheres when installed in ATEX compliant pumps. For further information, please contact your local Garlock representative.

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)

PHYSIOLOGICAL SAFETY

FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.



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 brands of pumps & sizes

KEY BENEFITS

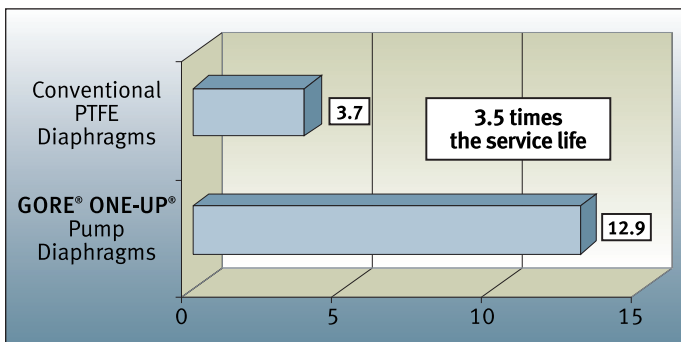
- Lasts Longer: Replace diaphragms less often
- Versatility: Diaphragms work with most chemicals
- Cost: Lowers maintenance and operating costs

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FIELD TESTING

GARLOCK® ONE-UP® pump diaphragms have been extensively field tested in a wide variety of industries including chemical processing, 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 Garlock 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 Garlock's PTFE for testing purposes and do not represent actual diaphragm dimensions.

* Test was stopped over time.

** Actual test results for conventional PTFE film.

Supplied by: _____

WARNING:

Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing.

While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.

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EASY INSTALLATION

Since the GARLOCK® 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

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

Garlock
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