# NEWMAN NEWFLO™

Replacement Diaphragms for ITT<sup>®</sup>, Saunders<sup>®</sup> and Gemü<sup>™</sup> Valves and Custom Designs

NEWIAN DIAPHRAGAS LLC, A Newman Family Company

1.6635

PRODUCTS OF INTEGRITY...FROM PEOPLE OF INTEGRITY

## NEWMAN NewFlo™ Replacement Diaphragms for ITT®, Saunders® and Gemü™ valves.

New Dependability... New Performance... New Value that you can count on!



"It's time for a new standard of excellence in sanitary valve diaphragms."

6635

Precision fit and designed for ITT<sup>®</sup>, Saunders<sup>®</sup> and Gemü<sup>™</sup> valves, Newman NewFlo<sup>™</sup> diaphragms deliver exceptional performance in today's demanding pharmaceutical processing environment. As always, you can count on Newman's reputation for excellence, success and expertise in the pharmaceutical industry.

#### Time-Tested Materials, Third Party Verified Performance.

- 1. The elastomer backing is manufactured from Newman's famous polymer-rich 2107 EPDM compound.
- 2. The TFM<sup>™</sup> facing of the diaphragm is made from time proven modified fluoropolymer, the choice of the diaphragm valve industry for pharmaceutical applications and validated for years. Manufacturer certified USP Class VI.
- 3. Mechanical exposure testing by Newman and third party industry experts to 500 steam cycles and over 100,000 valve cycles has demonstrated exceptional steam resistance and long term durability. Newman's backings are shown to impart outstanding sealing properties at the lowest bonnet torgue values.

### Certified Peace of Mind and Ground Breaking Traceability.

- 1. Each diaphragm meets the requirements of FDA CFR Title 21 177.2600 (elastomers) and paragraph 177.1550 (perfluorocarbons) and USP Class VI.
- 2. Setting a new standard for traceability and causing a stir across the industry, every diaphragm is fully **batch** traceable **at the part level**, an exclusive in the industry (patent pending). This means that you will know the exact style, size, composition and provenance of every diaphragm in your system, simply by looking at the back of the diaphragm.
- 3. Each diaphragm is backed by Newman's unbeatable 35 year history in manufacturing of premium elastomer parts for the pharmaceutical industry.

### **NEWMAN NewFlo**<sup>M</sup> Replacement Diaphragm Valves



Newman Diaphragms LLC. (NDI) does not manufacture or sell ITT<sup>®</sup>, Saunders<sup>®</sup> or Gemü<sup>™</sup> OEM valves or diaphragms. NDI is not affiliated with any of these companies, nor is NDI or any of its products sponsored by or endorsed by any of these companies.

ITT<sup>®</sup> is a registered trademark of ITT Manufacturing Enterprises, Inc. Gemü<sup>™</sup> is a trademark of Gebruder Muller Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc. Saunders<sup>®</sup> is a registered trademark of Crane Process Flow Technologies Ltd. Aquasyn<sup>®</sup> is a registered trademark of Aquasyn LLC.

Dyneon<sup>™</sup>, TFM<sup>™</sup> and Hostaflon<sup>®</sup> are trademarks of Dyneon a 3-M company.

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Replacement Diaphragms for ITT<sup>®</sup> Weir Style Diaphragm Valves Technical Data Sheet

### Elastomer Backed Two Piece TFM (PTFE) Diaphragms for ITT Pure-Flo<sup>®</sup> and Dia-Flo<sup>®</sup> Valves

#### Genuine Newman 2107 EPDM (Ethylene Propylene Diene Monomer)

Genuine Newman 2107 EPDM is the material of choice for many food and biopharm processing applications, surpassing other EPDM's on the market for decades in performance and reliability. An excellent general purpose elastomer, resistant to many chemicals, polar solvents, many CIP solutions, and most aqueous-based systems. When used as a backing in two-piece diaphragms, Newman 2107 has been shown to impart outstanding sealing properties at the lowest bonnet torque values, a substantial improvement over OEM parts.

#### Genuine Dyneon™ TFM™ (Modified PTFE) with Elastomer Backing

Genuine Dyneon TFM<sup>™</sup> from 3M<sup>®</sup> when used in conjunction with Newman's proprietary processing has resulted in the highest chemical resistance and the lowest permeability and makes it ideal for almost all processing conditions where extended service life is desired. It is resistant to almost all chemicals, solvents, and CIP solutions, and has been tested to 500 one-hour steam cycles/100,000 valve cycles in many valve configurations. It is ideal for continuous steam, hot WFI and processing areas.\* These diaphragms are shipped together with a paired elastomer backing piece, made of Newman 2107 EPDM.

Temperature Range (with EPDM backing): -20° F to 300° F\*

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free

of these companies.

KG and/or Gemü Valves Inc

- RoHS Directive 2011/65/EU and 2015/863
- Other certifications available upon request

\* Temperature Ranges are estimates only and vary based on application and system conditions. Steam pressure should be added accordingly to system temperatures. More extreme physical and chemical conditions reduce diaphragm longevity. OEM valve limits should always be consulted and appropriate testing should always be performed before placing diaphragms into service. More complete information about the suitability of materials is available on-line at www.newmannewflo.com.

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Aquasyn® is a registered trademark of Aquasyn LLC.

Saunders® is a registered trademark of Crane Process Flow Technologies Ltd.

Teflon<sup>™</sup> is a registered trademark of The Chemours Company.

Newman Part #	OEM Part #	А	В	Thread	Availability
NIT-08-RX-E1L1*	42175 1/4 TM Diaphragm Alt.	1.2 (31MM)	1.1 (28MM)	4-40	Stock
NIT-08-RX-E1G1	42175 1/4 TM Diaphragm	1.2 (31MM)	1.1 (28MM)	4-40	Stock
NIT-15-RX-E1G1	42176 1/2 TM Diaphragm	1.4 (36MM)	1.3 (33MM)	8-32	Stock
NIT-20-RX-E1G1	42177 3/4 TM Diaphragm	1.8 (44MM)	1.6 (40MM)	8-32	Stock
NIT-25-RX-E1G1	42178 1 TM Diaphragm	2.1 (54MM)	1.8 (46MM)	8-32	Stock
NIT-40-RX-E1G1	42179 1 1/2 TM Diaphragm	2.8 (70MM)	2.6 (65MM)	8-32	Stock
NIT-50-RX-E1G1	42180 2 TM Diaphragm	3.3 (83MM)	3.1 (78MM)	8-32	Stock
NIT-80-RX-E1G1	42182 3 TM Diaphragm	5.0 (127MM)	4.5 (114MM)	5/16-18	Stock

THREAD

NG1

**Front View** 

FACING

BACKING

\* Single piece laminated version of NIT-08-RX-E1G1

#### Contact Newman Diaphragms LLC. for additional sizes and styles or for a distributor in your area for pricing and availability.



Top View

Replacement Diaphragms for ITT® Weir Style Diaphragm Valves

Technical Data Sheet

### Single Piece Diaphragms for ITT Pure-Flo® and Dia-Flo® Valves

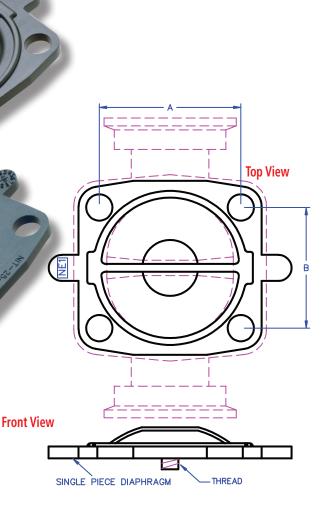
#### Genuine Newman 2107 EPDM (Ethylene Propylene Diene Monomer)

Genuine Newman 2107 EPDM is the material of choice for many food and biopharm processing applications, surpassing other EPDM's on the market for decades in performance and reliability. An excellent general purpose elastomer, resistant to many chemicals, polar solvents, many CIP solutions, and most aqueous-based systems. Used for general processing, acid/alkalis, hot water and occasional steaming.\* Low permeability to gases. Useful in higher pressure and vacuum applications.

Temperature Range: -20° F to 300° F\* Continuous Liquid Media: -20° F to 200° F

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free
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- Other certifications available upon request



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Teflon<sup>™</sup> is a registered trademark of The Chemours Company.

Newman Diaphragms LLC. (NDI) does not manufacture or sell ITT®, Saunders® or Gemü™ OEM valves or	Newman Part #	OEM Part # ITT PureFlo®	OEM Part # ITT Dia-Flo®	A	В	Thread	Availability
diaphragms. NDI is not affiliated with any of these companies, nor is NDI or any of its products sponsored	NIT-08-RX-E1-S	41502 1/4 17 EPDM Dia	N/A	1.2 (31MM)	1.1 (28MM)	4-40	Stock
by or endorsed by any of these companies.	NIT-15-RX-E1-S	41281 1/2 17 EPDM Dia	43291 1/2 17 EPDM Dia	1.5 (37MM)	1.3 (34MM)	8-32	Stock
$ITT^{\texttt{®}}$ is a registered trademark of $ITT$	NIT-20-RX-E1-S	41282 3/4 17 EPDM Dia	43292 3/4 17 EPDM Dia	1.8 (44MM)	1.6 (40MM)	8-32	Stock
Manufacturing Enterprises, Inc. Gemü™ is a trademark of Gebruder Muller Apparatebau	NIT-25-RX-E1-S	41283 1 17 EPDM Dia	43293 1 17 EPDM Dia	2.1 (54MM)	1.8 (46MM)	1/4-20	Stock
GmbH & Co., KG and/or Gemü Valves, Inc. Saunders <sup>®</sup> is a registered trademark of Crane Process	NIT-40-RX-E1-S	41284 1 1/2 17 EPDM Dia	43294 1 1/2 17 EPDM Dia	2.7 (69MM)	2.6 (65MM)	1/4-20	Stock
Flow Technologies Ltd.	NIT-50-RX-E1-S	41285 2 17 EPDM Dia	43295 2 17 EPDM Dia	3.3 (83MM)	3.1 (78MM)	1/4-20	Stock
Aquasyn $^{\circ}$ is a registered trademark of Aquasyn LLC.	NIT-80-RX-E1-S	41286 3 17 EPDM Dia	43297 3 17 EPDM Dia	5.0 (127MM)	4.5 (114MM)	5/16-18	Stock



Replacement Diaphragms for Gemü™ Weir Style Diaphragm Valves Technical Data Sheet

### Elastomer Backed Two Piece TFM<sup>™</sup> Diaphragms for Gemü<sup>™</sup> Valves

#### Genuine Newman 2107 EPDM (Ethylene Propylene Diene Monomer)

Genuine Newman 2107 EPDM is the material of choice for many food and biopharm processing applications, surpassing other EPDM's on the market for decades in performance and reliability. An excellent general purpose elastomer, resistant to many chemicals, polar solvents, many CIP solutions, and most aqueous-based systems. When used as a backing in two-piece diaphragms, Newman 2107 has been shown to impart outstanding sealing properties at the lowest bonnet torque values, a substantial improvement over OEM parts.

#### Genuine Dyneon<sup>™</sup> TFM<sup>™</sup> (Modified PTFE) with Elastomer Backing

Genuine Dyneon<sup>™</sup>TFM<sup>™</sup> from 3M<sup>®</sup> when used in conjunction with Newman's proprietary processing has resulted in the highest chemical resistance and the lowest permeability and makes it ideal for almost all processing conditions where extended service life is desired. It is resistant to almost all chemicals, solvents, and CIP solutions, and has been tested to 500 one-hour steam cycles/100,000 valve cycles in many valve configurations. It is ideal for continuous steam, hot WFI and processing areas.\* These diaphragms are shipped together with a paired elastomer backing piece made of Newman 2107 EPDM.

Temperature Range (with EPDM backing): -20° F to 300° F\*

#### Certificates Available:

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free
- RoHS Directive 2011/65/EU and 2015/863
- Other certifications available upon request

\* Temperature Ranges are estimates only and vary based on application and system conditions. Steam pressure should be added accordingly to system temperatures. More extreme physical and chemical conditions reduce diaphragm longevity. OEM valve limits should always be consulted and appropriate testing should always be performed before placing diaphragms into service. More complete information about the suitability of materials is available on-line at www.newmannewflo.com.

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with any of these companies, nor is NDI or any of its products sponsored

**OEM Part #** Availability Newman Part # А В Thread NGU-25-RX-E1G1 600/025/M5E 2.1 (54MM) 1.8 (46MM) 1/4 - 20 Stock NGU-40-RX-E1G1 600/040/M5E 2.8 (70MM) 2.6 (65MM) 1/4 - 20 Stock NGU-50-RX-E1G1 600/050/M5E 3.2 (82MM) 3.1 (78MM) 1/4 - 20 Stock NGU-80-RX-E1G1 600/080/M5E 5.0 (127MM) 4.5 (114MM) 5/16 - 18 Stock

THREAD

Front View

BACKING

FACING

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Saunders® is a registered trademark of Crane Process Flow Technologies Itd.

Aquasyn® is a registered trademark of Aquasyn LLC.

by or endorsed by any of these companies.

Contact Newman Diaphragms LLC. for additional sizes and styles or for a distributor in your area for pricing and availability.



**Top View** 

Replacement Diaphragms for Gemü<sup>™</sup> Weir Style Diaphragm Valves Technical Data Sheet

### Single Piece Diaphragms for Gemü<sup>™</sup> Valves

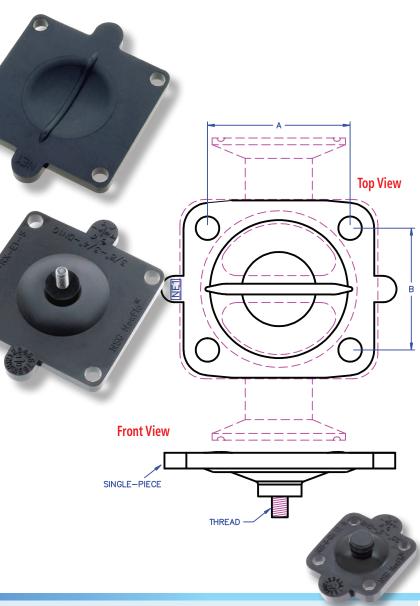
#### Genuine Newman 2107 EPDM (Ethylene Propylene Diene Monomer)

Genuine Newman 2107 EPDM is the material of choice for many food and biopharm processing applications, surpassing other EPDM's on the market for decades in performance and reliability. An excellent general purpose elastomer, resistant to many chemicals, polar solvents, many CIP solutions, and most aqueous-based systems. Used for general processing, acid/alkalis, hot water and occasional steaming.\*Low permeability to gases. Useful in higher pressure and vacuum applications.

Temperature Range: -20° F to 300° F\* Continuous Liquid Media: -20° F to 200° F

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free
- RoHS Directive 2011/65/EU and 2015/863
- Other certifications available upon request



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Newman Part # **OEM Part #** В Fastener Availability Newman Diaphragms LLC. (NDI) does not manufacture А or sell ITT<sup>®</sup>, Saunders<sup>®</sup> or Gemü<sup>™</sup> OEM valves or 600/008/M17 (3,16,13) 0.9 (22MM) 0.9 (22MM) NGU-08-RX-E1-S Button Stock diaphragms. NDI is not affiliated with any of these companies, nor is NDI or any of its products sponsored by NGU-10-RX-E1-S 600/010/M17 (3,16,13) 1.5 (39MM) 1.7 (44MM) M4 x .7 Stock or endorsed by any of these companies. NGU-25-RX-E1-S 600/025/M17 (3,16,13) 2.1 (54MM) 1.8 (46MM) 1/4 - 20 Stock ITT® is a registered trademark of ITT Manufacturing NGU-40-RX-E1-S 600/040/M17 (3,16,13) 2.8 (70MM) 2.6 (65MM) 1/4 - 20 Stock Enterprises, Inc. Gemü<sup>™</sup> is a trademark of Gebruder Muller NGU-50-RX-E1-S 600/050/M17 (3,16,13) 3.2 (82MM) 3.1 (78MM) 1/4 - 20 Stock Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc. Saunders<sup>®</sup> is a registered trademark of Crane Process 4.5 (114MM) 5.0 (127MM) NGU-80-RX-E1-S 600/080/M17 (3,16,13) 5/16 - 18 Stock Flow Technologies Ltd. Aquasyn® is a registered trademark of Aquasyn LLC.



Replacement Diaphragms for Gemü<sup>™</sup> Weir Style Diaphragm Valves Technical Data Sheet

### Single Piece Laminated Diaphragms for Gemü<sup>™</sup> Valves

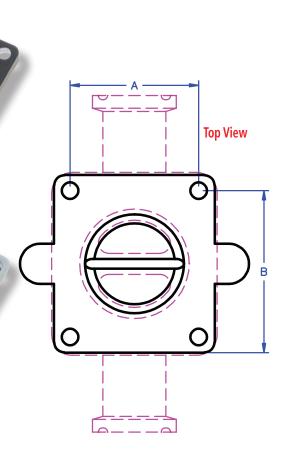
#### EPDM (Ethylene Propylene Diene Monomer) Laminated TFM (Modified PTFE)

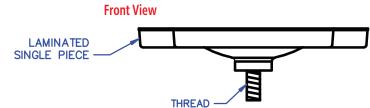
Single piece Newman NewFlo<sup>™</sup> Diaphragms made from TFM laminated onto Newman 2107 EPDM are chosen for Gemü<sup>™</sup> Valves under 1" (DN25) where the chemical resistance of Teflon<sup>™</sup> (PTFE) is required. It is resistant to most chemicals, solvents, CIP solutions, hot WFI and steam.\* Since two dissimilar materials are bonded together in this design, mechanical stresses can be formed during actuation. As a result, Newman NewFlo<sup>™</sup> Diaphragms are only made for smaller size valves where the valve stroke is limited. Two-piece EPDM/TFM diaphragms are recommended for larger valve sizes. Test before using on higher pressure or vacuum systems.

Temperature Range: -20° F to 300° F\* Continuous Liquid Media: -20° F to 300° F

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI •
- ADI Free .
- RoHS Directive 2011/65/EU and 2015/863 •
- Other certifications available upon request





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Newman Part #	OEM Part #	А	В	Fastener	Availability
NGU-08-RX-E1L1	600/008/M5A (52)	0.9 (22MM)	0.9 (22MM)	Button	Stock
NGU-10-RX-E1L1	600/010/M5A (52)	1.5 (39MM)	1.7 (44MM)	M4 x .7	Stock
NGU-25-RX-E1L1	600/025/M5A (52)	2.1 (54MM)	1.8 (46MM)	1/4 - 20	Stock
	NGU-08-RX-E1L1 NGU-10-RX-E1L1	NGU-08-RX-E1L1600/008/M5A (52)NGU-10-RX-E1L1600/010/M5A (52)	NGU-08-RX-E1L1600/008/M5A (52)0.9 (22MM)NGU-10-RX-E1L1600/010/M5A (52)1.5 (39MM)	NGU-08-RX-E1L1         600/008/M5A (52)         0.9 (22MM)         0.9 (22MM)           NGU-10-RX-E1L1         600/010/M5A (52)         1.5 (39MM)         1.7 (44MM)	NGU-08-RX-E1L1         600/008/M5A (52)         0.9 (22MM)         0.9 (22MM)         Button           NGU-10-RX-E1L1         600/010/M5A (52)         1.5 (39MM)         1.7 (44MM)         M4 x .7

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Replacement Diaphragms for Saunders® Weir Style Diaphragm Valves Technical Data Sheet

### Elastomer Backed Two Piece TFM<sup>™</sup> (PTFE) Diaphragms for Saunders® Valves

#### Genuine Newman 2107 EPDM (Ethylene Propylene Diene Monomer)

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Genuine Dyneon TFM<sup>™</sup> from 3M<sup>®</sup> when used in conjunction with Newman's proprietary processing has resulted in the highest chemical resistance and the lowest permeability and makes it ideal for almost all processing conditions where extended service life is desired. It is resistant to almost all chemicals, solvents, and CIP solutions, and has been tested to 500 one-hour steam cycles/100,000 valve cycles in many valve configurations. It is ideal for continuous steam, hot WFI and processing areas.\* These diaphragms are shipped together with a paired elastomer backing piece made of Newman 2107 EPDM.

Temperature Range (with EPDM backing): -20° F to 300° F\*

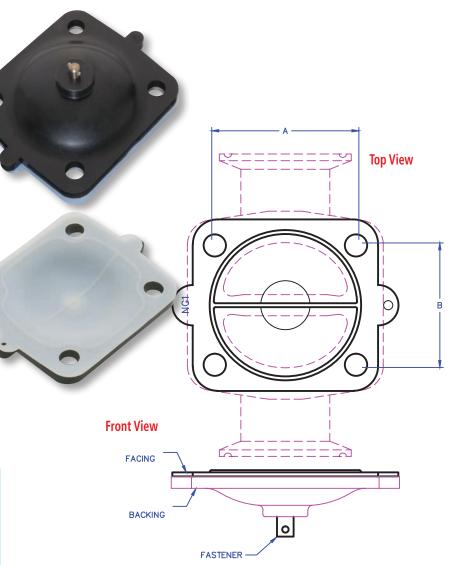
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sell ITT <sup>®</sup> , Saunders <sup>®</sup> or Gemü <sup>™</sup> OEM valves or diaphragms. NDI is not affiliated with any of these companies, nor is NDI	NSD-15-RX-E1G1	DA015S5 (.500")	1.43 (36MM)	1.31 (33MM)	Bayonet Style	Stock
or any of its products sponsored by or endorsed by any of	NSD-20-RX-E1G1	DA020S5 (.750")	1.75 (44MM)	1.55 (40MM)	Bayonet Style	Stock
these companies.	NSD-25-RX-E1G1	DA025S5 (1")	2.12 (54MM)	1.81 (46MM)	Bayonet Style	Stock
ITT <sup>®</sup> is a registered trademark of ITT Manufacturing Enterprises, Inc.	NSD-40-RX-E1G1	DA040S5 (1.5")	2.75 (70MM)	2.56 (65MM)	Bayonet Style	Stock
Gemü™ is a trademark of Gebruder Muller Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc.	NSD-50-RX-E1G1	DA050S5 (2")	3.23 (82MM)	3.05 (78MM)	Bayonet Style	Stock
Saunders® is a registered trademark of Crane Process Flow	NSD-80-RX-E1G1	DA080S5 (3")	5.00 (127MM)	4.50 (114MM)	Bayonet Style	Stock
Technologies Ltd.						

Aquasyn® is a registered trademark of Aquasyn LLC.



Replacement Diaphragms for Saunders® Weir Style Diaphragm Valves Technical Data Sheet

### Single Piece Diaphragms for Saunders® Valves

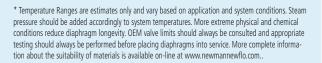
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					Color A	
Newman Diaphragms LLC. (NDI) does not manufacture or	Newman Part #	OEM Part #	A	В	Fastener	Availability
sell ITT <sup>®</sup> , Saunders <sup>®</sup> or Gemü <sup>™</sup> OEM valves or diaphragms. NDI is not affiliated with any of these companies, nor is	NSD-08-RX-E1-SB	DP008E2 (.250")	1.02 (26MM)	0.90 (23MM)	Button	Stock
NDI or any of its products sponsored by or endorsed by any	NSD-08-RX-E1-ST	DP008E2 (.250")	1.02 (26MM)	0.90 (23MM)	M3 x .5	Stock
of these companies.	NSD-15-RX-E1-S	DA015E3 (.500")	1.43 (36MM)	1.31 (33MM)	Button	Stock
ITT® is a registered trademark of ITT Manufacturing Enterprises, Inc.	NSD-20-RX-E1-S	DA020E3 (.750")	1.75 (44MM)	1.55 (40MM)	Button	Stock
Gemü <sup>™</sup> is a trademark of Gebruder Muller Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc.	NSD-25-RX-E1-S	DA025E3 (1")	2.12 (54MM)	1.81 (46MM)	1/4 - 20	Stock
Saunders <sup>®</sup> is a registered trademark of Crane Process Flow Technologies Ltd.	NSD-40-RX-E1-S	DA040E3 (1.5")	2.75 (70MM)	2.56 (65MM)	1/4 - 20	Stock
Aquasyn <sup>®</sup> is a registered trademark of Aquasyn LLC.	NSD-50-RX-E1-S	DA050E3 (2")	3.23 (82MM)	3.05 (78MM)	1/4 - 20	Stock
	NSD-80-RX-E1-S	DA080E3 (3")	5.00 (127MM)	4.50 (114MM)	5/16 - 18	Stock

Front View

BACKING

FASTENER

Contact Newman Diaphragms LLC. for additional sizes and styles or for a distributor in your area for pricing and availability.



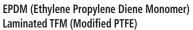
**Top View** 

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### Newman NewFlo<sup>™</sup> for Saunders<sup>®</sup> Sampling Valves

Replacement Diaphragms for Saunders® round valves Technical Data Sheet

# S-Style SP Replacement Diaphragm for Saunders<sup>®</sup> Four-Bolt Round Valves



Single piece Newman NewFlo<sup>™</sup> Diaphragms made from TFM laminated onto Newman 2107 EPDM are chosen for Saunders<sup>®</sup> Sampling Valves where the chemical resistance of Teflon<sup>™</sup> (PTFE) is required. It is resistant to most chemicals, solvents, CIP solutions, hot WFI and steam. Test before using on higher pressure or vacuum systems.

Temperature Range: -20° F to 300° F\* Continuous Liquid Media: -20° F to 300° F

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free
- RoHS Directive 2011/65/EU and 2015/863
- Other certifications available upon request

							▲ B ↓
	LAMINATED					 7	
a star	LAMINATED Newman Part #	OEM Part #	A	B	Fastener	Availability	
	Newman	2	A 1.03 (26MM)	В 0.9 (22ММ)	Fastener Button	Availability Stock	

NON-LAMINATED	)				
Newman Part #	OEM Part #	А	В	Fastener	Availability
NSD-08-RX-E1-SB	DP008E2	1.03 (26MM)	0.9 (22MM)	Button	Stock

### S-Style SP Replacement Diaphragm for Saunders<sup>®</sup> Two-Bolt Round Valves

NON-LAMINATED				
Part #	OEM Part #	А	Fastener	Availability
NSD-10R-RX-E1-SB	DA010E2	1.38 (35MM)	Button	Stock

\* Temperature Ranges are estimates only and vary based on application and system conditions. Steam pressure should be added accordingly to system temperatures. More extreme physical and chemical conditions reduce diaphragm longevity. OEM valve limits should always be consulted and appropriate testing should always be performed before placing diaphragms into service. More complete information about the suitability of materials is available on-line at www.newmannewflo.com.

Teflon<sup>™</sup> is a registered trademark of The Chemours Company.

Newman Diaphragms LLC (NDI) does not manufacture or sell ITT<sup>®</sup>, Saunders<sup>®</sup>, Gemü<sup>™</sup> or OEM valves or diaphragms. NDI is not affiliated with any of these companies, nor is NDI or any of its products sponsored by or endorsed by any of these companies.

ITT<sup>®</sup> is a registered trademark of ITT Manufacturing Enterprises, Inc. Gemü<sup>™</sup> is a trademark of Gebruder Muller Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc. Saunders<sup>®</sup> is a registered trademark of Crane Process Flow Technologies Ltd. Aquasyn<sup>®</sup> is a registered trademark of Aquasyn LLC.



### NAS Replacement Valves Technical Data Sheet

### Single Piece Laminated Diaphragm for Aquasyn<sup>®</sup> Valves

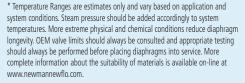
#### EPDM (Ethylene Propylene Diene Monomer) Laminated TFM (Modified PTFE)

Single piece Newman NewFlo<sup>™</sup> Diaphragms made from TFM laminated onto Newman 2107 EPDM are chosen for Aquasyn<sup>®</sup> Valves where the chemical resistance of Teflon<sup>™</sup> (PTFE) is required. It is resistant to most chemicals, solvents, CIP solutions, hot WFI and steam. Test before using on higher pressure or vacuum systems.

Temperature Range: -20° F to 300° F\* Continuous Liquid Media: -20° F to 300° F

#### **Certificates Available:**

- FDA Extraction Studies per 21CFR177.2600 (elastomers) and 21CFR177.1550 (PTFE)
- Testing according to USP Chapter <87> and Chapter <88> Class VI
- ADI Free
- RoHS Directive 2011/65/EU and 2015/863
- Other certifications available upon request



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ITT<sup>®</sup> is a registered trademark of ITT Manufacturing Enterprises, Inc. Gemü<sup>™</sup> is a trademark of Gebruder Muller Apparatebau GmbH & Co., KG and/or Gemü Valves, Inc. Saunders<sup>®</sup> is a registered trademark of Crane Process Flow Technologies Ltd. Aquasyn<sup>®</sup> is a registered trademark of Aquasyn LLC.

Newman Part #	OEM Part #	А	В	Fastener	Availability
NAS-25-RX-E1L1	D16P	2.12 (54MM)	1.81 (46MM)	M6 x .1	Stock
NAS-40-RX-E1L1	D24P	2.75 (70MM)	2.56 (65MM)	M6 x .1	Stock

**Front View** 

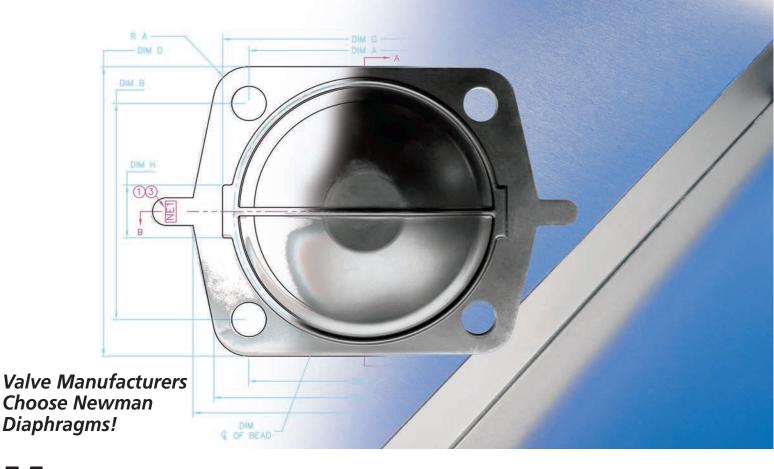
Contact Newman Diaphragms LLC. for additional sizes and styles or for a distributor in your area for pricing and availability.



**Top View** 

В

### CUSTOM DIAPHRAGMS



ore valve manufacturers are choosing Newman Diaphragms, LLC to make diaphragms for their high purity processing valves! The combination of our unmatched, established, certified, proprietary materials and our technical and manufacturing expertise are making Newman Diaphragms the choice in the high purity processing world.

Newman Diaphragms can help you with your new and existing product offerings:

#### • Are you an established valve manufacturer?

Compare our materials, features, quality and pricing. We are your value leader.

• Are you just getting started in the industry? Do you have a new valve design? Newman materials are already known and trusted around the world. Because our proprietary materials are often already in product contact in your customer's process (in the form of Newman O-rings and gaskets), getting your new valve design approved and qualified is quicker, simpler and less expensive for everyone! Your new design can be introduced into sensitive processes faster. Trust Newman to support you from design and development all the way through to full production! We can help make your dream valve a reality!

#### Consider all the benefits:

- Technical and Manufacturing Expertise
- Already known, used and trusted materials
- Fully certified proprietary materials (FDA, USP, and most worldwide certifications already available!)
- Faster time to market
- Proven, tested performance

Let Newman Diaphragms, LLC help you grow your vision, grow your offerings,...and grow your business!

#### Send us your design for a quote today!!



Product Spotlight	Precision fit for ITT <sup>®</sup> , Saunders <sup>®</sup> and Gemü <sup>™</sup> valves, the NewFlo <sup>™</sup> Replacement Diaphragm is specifically designed as a functional equivalent replacement diaphragm for weir-style valves. Diaphragm facings use the best modified fluoropolymer, TFM <sup>™</sup> , which has been shown to have superior steam resistance and outstanding flex life. Elastomer diaphragms and backings use Newman's high-performance, polymer-rich 2107 compound, the same material used in NSG gaskets, O-rings and OEM parts.
Product Differentiators	<ul> <li>Quality: Newman controls all materials and parts, the best grades from the best manufacturers         <ul> <li>– and its own proprietary elastomer formulations.</li> <li>Reliability: Rigorous testing by third-party industry experts demonstrates long-term durability through 500 steam cycles and more than 100,000 valve cycles.</li> </ul> </li> <li>Maintenance: Less retorquing, plus increased diaphragm longevity equals less maintenance and less plant down-time.</li> <li>Traceability: NewFlo<sup>™</sup> Diaphragms are fully batch traceable at the part level – an exclusive in the industry (patent pending).</li> <li>Cleanability: Smoother surface finishes provide better cleanability and sanitization.</li> </ul>
Technical Specifications	<ul> <li>USP Class VI compliant</li> <li>FDA compliant</li> <li>Made from TFM<sup>™</sup> from 3M<sup>®</sup> and Newman's premium, proprietary elastomer formulation</li> <li>Available in single-piece and two-piece varieties</li> </ul>







#### About Newman Sanitary Gasket

Established in 1973 by founder David Newman, Newman Sanitary Gasket Company is a leading provider of O-rings, gaskets and custom-molded EPDM elastomer parts for companies serving the pharmaceutical industry and other sanitary processing industries.

Newman houses its production, shipping and storage efficiently within its 22,500 sq. ft. state-of-the-art facility. Newman is an ISO 9001 company located in Lebanon, Ohio.

Please check the Newman Sanitary Gasket web site for the up-to-date ISO certificate: http://www.newmangasket.com/Certificates.htm For more infomation, please visit www.newmannewflo.com.

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### VALIDATION PACKAGE INFORMATION

You may have already validated Newman's NewFlo™ Diaphragm compounds!



Includes Compliance and Physical Testing Results 1.4-1-2014 Validation of Newman's diaphragms in your system may not require the rigorous procedures and high cost you may be facing with other replacement diaphragms. Specifically created to be substituted in your valves as functional equivalents, Newman diaphragms are precision designed and manufactured from the highest quality conforming materials already validated in the industry. We have chosen to use the best modified fluoropolymer, TFM<sup>™</sup> (genuine Dyneon<sup>™</sup> Hostaflon<sup>®</sup> TFM<sup>™</sup> from 3M<sup>®</sup>), which has been shown to have superior steam resistance and outstanding flex life.

The EPDM backing is made from Newman's premium, polymer rich 2107 compound: the same EPDM used in our gaskets, "O"-rings and OEM parts. You have no doubt validated at least one of our 2107 EPDM products already in use in your processing areas. Newman's EPDM has demonstrated exceptional chemical and steam resistance and provides enhanced sealing properties. Under testing, Newman's diaphragms have successfully performed at the lowest bonnet torque values and have not required retorqueing. This benefits service life and reduces maintenance. Newman's EPDM has shown superior dynamic strength that translates into more cycles before changeout is needed.

**Newman NewFlo™ Diaphragms:** Setting a new standard of excellence in sanitary valve diaphragms:

- Proven reputation
- Proven materials
- Proven performance
- Unmatched traceability

New value that you can depend on!

#### Newman NewFlo<sup>™</sup> Diaphragm Validation Binder includes:

- Section 1 General Compliance Test Results
- Section 2 Physical Test Results
- Section 3 USP 24-19 Testing Section <87> Biological Reactivity Tests Section <88> Biological Reactivity Tests
- Section 4 Code of Federal Regulations
- Section 5 Certificates of Conformance