



NUODEAN PUMP CO.,LTD

Air Operated Double Diaphragm

DIAPHRAGM PUMPS

WA Series





Nuodean Pump Co.,Ltd, located in Qingdao City of China, is a professional company engaged in diaphragm pumps development, production, sales and service. Our products mainly include: air operated diaphragm pumps, and electric diaphragm pumps. Nuodean's DP11 Series air operated diaphragm pumps offer great performance, which are low-maintenance, non-stall, less-pulsation, anti-freezing, durable and with large flow. DP11 Series pumps' patented pilot air distribution valve provides an ultra-positive, reliable, faster shift signal, and then provides faster pump trip-over with more flow and less pulsation. At the same time, all Nuodean's DP11 Series pumps applied a dual ceramic air valves system which is self-lubricating and maintenance-free, applicable to the harsh environment of air source. So, our DP11 Series offer higher performance than similar products.

NUODEAN'S Air Operated Double Diaphragm include: DP11 Series and WA Series!

NUODEAN air operated diaphragm pumps are ideal for general industrial and OEM installation applications. They can easily pump from clean, light viscosity fluids to corrosive, abrasive medium viscosity fluids and can transfer large particles without damage. Due to their pneumatic motor, they could be used in potentially explosive areas.

At all, we will supply with the best quality products, the best prices and most satisfactory services. We welcome the opportunity to earn your business.

Some Patent Certificates:



Some Photos:



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Introduction(DP11 Series)	

NUODEAN Air operated Diaphragm Pumps

NUODEAN WA Series air operated diaphragm pumps are ideal for general industrial and OEM installation applications. They can easily pump from clean, light viscosity fluids to corrosive, abrasive medium viscosity fluids and can transfer large particles without damage. Due to their pneumatic motor, they could be used in potentially explosive areas.

Our pumps offer the ability to vary the flow outlet and discharge pressure as slow as 0.26 gallons (1 liter) per minute up to 275 gallons (1040 liter) per minute for our larger sizes and adjust fluid pressure up to 123 p.s.i. (8.5 bar), by using just an air filter / regulator and a needle valve.

Why NUODEAN diaphragm pumps? Find your opportunity

- ☐ Sealess Design
- ☐ Low Material Shear
- ☐ Ease of Maintenance
- ☐ Can Run Dry Without Damage
- ☐ Portable
- ☐ Self Priming
- ☐ Easy-to-Install





Non-Metallic Models

The NUODEAN non-metallic offering consists of Polypropylene, acetal and PDVF. All NUODEAN pumps are available with convoluted diaphragms offering long lasting life and reduced maintenance.

Non-Metallic Model Overview



Model	1/2"	1"	1-1/2"	2"
Maximum Flow GPM (LPM)	13 (49.2)	47 (178)	100 (378.5)	145 (548.8)
Maximum Discharge Pressure PSI (BAR)	100 (6.9)	120 (8.3)	120 (8.3)	120 (8.3)
Fluid Ports Inlet/Outlet (BSP Available)	1/2-14 N.P.T.F.-1	1" ANSI/DIN Flange 1" (F) Threaded	1-1/2" ANSI/DIN Flange	2" ANSI/DIN Flange
Materials of Construction	Polypropylene Groundable Acetal PVDF	Polypropylene	Polypropylene	Polypropylene
Pump Weight lbs. (kg.)	7.2 (3.3) Polypropylene 8.8 (4.0) Ground, Acetal 9.5 (4.3) Kynar PVDF	20.3 (9.2) Poly 28.8 (13.1) Poly w/ Cast Iron Center	62 (28.1) Poly 85 (38.5) Poly w/ Cast Iron Center	62 (28.1) Poly 85 (38.5) Poly w/ Cast Iron Center
Maximum Solids Inches (mm)	3/32 (2.4)	1/8 (3.2)	1/4 (6.4)	1/4 (6.4)
Best Selling Models (BSP Available)	WA 666053-0D2 WA 666053-311 WA 666053-344 WA 666053-388 WA 666053-3EB WA 66605J-344 WA 66605J-388 WA 66605J-3EB	WA 6661A3-322-C WA 6661A3-344-C WA 6661A3-3EB-C WA 6661AJ-322-C WA 6661AJ-344-C WA 6661AJ-3EB-C WA 6661B3-344-C	WA 6661T3-344-C WA 6661T3-3EB-C WA 6661T4-444-C WA 6661U3-344-C WA 6661U3-3EB-C	WA 6662A3-244-C WA 6662A3-311-C WA 6662A3-344-C WA 6662A3-3EB-C WA 6662B3-344-C WA 6662B3-3EB-C

1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66605X-XXX

SPECIFICATION:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet: Rp1/2", Or 1/2" NPT

Fluid Inlet: Rp1/2", Or 1/2" NPT

Maximum Flow Rate: 13GPM(49.2LPM)

Max.Operating Pressure: 100psi(6.9bar)

Suspended Solids Max. Dia: 3/32"(2.4mm)

Weight: 7.2 lbs(3.3kg)

Sound Level:70psi 60 cycles/min. 71.1db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA66605	X	-	X	X	X	-	4

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
Base Mode	3-Polypropylene	0-Duckbill	1-Neoprene	1-Neoprene
	6-Groundable Acetal	2-Stainless Steel	2-Nitrile	2-Nitrile
	7-Pure PVDF	3-Polypropylene	3-Viton	3-Viton
		4-PVDF	4-PTFE	4-PTFE/Santoprene
		6-Acetal	5-E.P.R.	5-E.P.R.
			8-Polyurethane	8-Polyurethane
			A-Stainless Steel	9-Hytrel
			E-Santoprene	B-Santoprene

ACCESSORIES:

Air Line Connection Kit | WA66073-1(Piggyback Filter/Regulator with gauge,pipe nipple and 5-foot air hose)

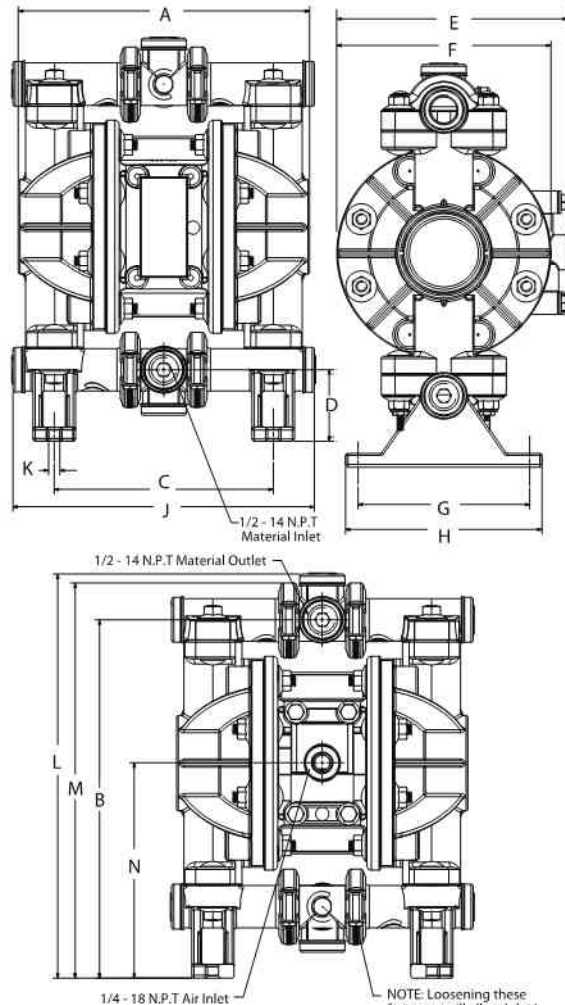
Service Repair Kit | WA637141(air section)
WA637140-XX(fluid section)

1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP MODEL: WA66605X-XXX

DIMENSIONS:

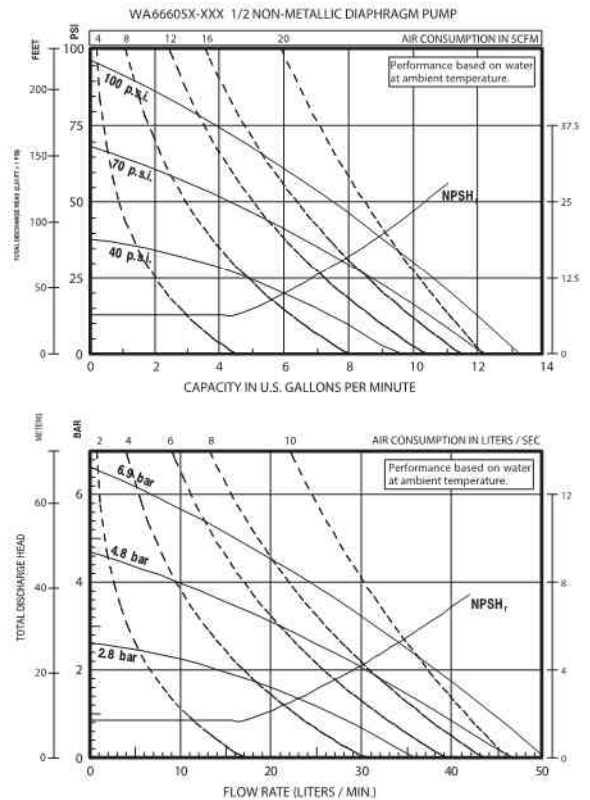
PERFORMANCE CURVE:

1/2 Non-Metallic Dimensions and Flow Charts



NOTE: Dimensions are shown in inches and (mm) and are supplied for reference only.

A - 8.155 (207.1 mm)	E - 6.467 (164 mm)	J - 8.445 (215 mm)
B - 10.051 (255 mm)	F - 6.000 (152 mm)	K - 0.312 (8 mm)
C - 6.135 (155.8 mm)	G - 4.812 (122.2 mm)	L - 11.331 (288 mm)
D - 2.005 (51 mm)	H - 5.500 (140 mm)	M - 11.084 (282 mm)
	N - 6.040 (153 mm)	



1" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6661XX-XXX-C

SPECIFICATIONS:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet(female): Rp1", 1"NPT , Or 1" ANSI/DIN Flange

Fluid Inlet(female): Rp1", 1"NPT , Or 1" ANSI/DIN Flange

Maximum Flow Rate: 47GPM(177.9LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/8"(3.2mm)

Maximum Dry Suction Lift: 15feet(4.6m)

Weight: 20.3 lbs(9.2kg)

Sound Level: 70psi 60 cycles/min. 64.5db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example:	WA6661X	X	-	X	X	X	-	C

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
A - Aluminum B - Cast Iron	3 - Polypropylene Flange (3-piece manifold) F - Polypropylene Flange (one-piece manifold) J - Polypropylene N.P.T. threads (one piece manifold) L - Polypropylene BSP threads (one-piece manifold)	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) 8 - Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 4 - PTFE 5 - E.P.R. 8 - Polyurethane A - 316 Stainless Steel C - Hytrel E - Santoprene M - Medical Grade Santoprene	1 - Neoprene 2 - Nitrile 5 - E.P.R. 6 - Composite PTFE M - Medical Grade Santoprene

ACCESSORIES:

Air Line Connection Kit | WA66073-2(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Service Repair Kit | WA637118-C(air section)

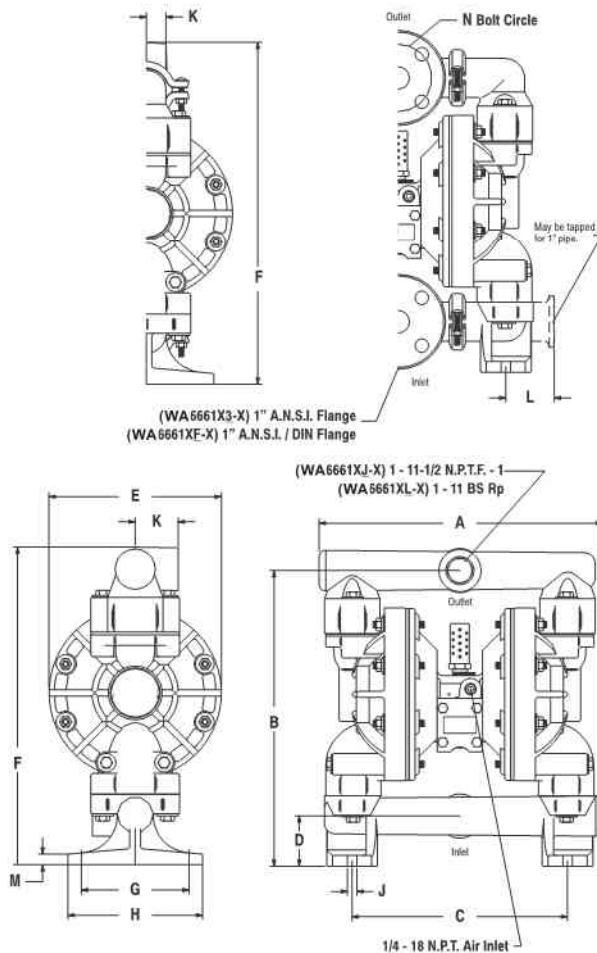
WA637161-XX-C(fluid section)

Flange Connection Kit| WA67078 Kit meets ANSI specifications.

1" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6661XX-XXX-C

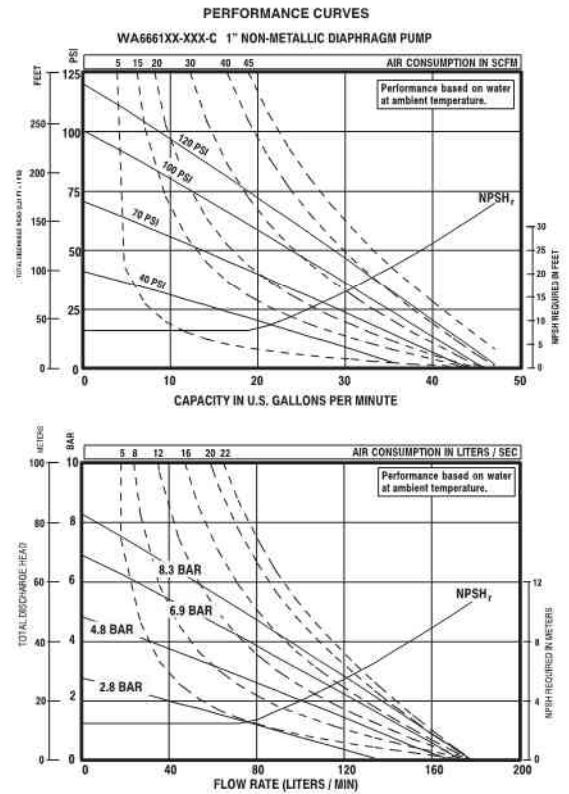
DIMENSIONS:



DIMENSIONS

	WA6661X3-X	WA6661XJ-X WA6661XL-X	WA6661XF-X
A	12-21/32" (321 mm)	13-5/32" (334 mm)	A 13-5/32" (334 mm)
B	13-25/32" (349 mm)	13-25/32" (350 mm)	B 13-25/32" (350 mm)
C	10-1/16" (255 mm)	10-1/16" (255 mm)	C 10-1/16" (255 mm)
D	2-3/8" (60 mm)	2-11/32" (59 mm)	D 2-11/32" (59 mm)
E	8-1/16" (204 mm)	8-1/16" (204 mm)	E 8-1/16" (204 mm)
F	16" (406 mm)	14-13/16" (376 mm)	F 16" (406 mm)
G	5-1/32" (128 mm)	5-1/32" (128 mm)	G 5-1/32" (128 mm)
H	6-9/32" (160 mm)	6-9/32" (160 mm)	H 6-9/32" (160 mm)
J	7/16" (11 mm)	7/16" (11 mm)	J 7/16" (11 mm)
K	15/16" (23 mm)	2" (51 mm)	K 1-1/32" (26 mm)
L	2-9/32" (57 mm)		L
M	1/2" (13 mm)	1/2" (13 mm)	M 1/2" (13 mm)
N	3.140" (80 mm)		N 3.140" (80 mm)
	WA6661XK-X WA6661XN-X		

PERFORMANCE CURVE:



1-1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6661T3-XXX-C

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 1-1/2" ANSI/DIN Flange

Fluid Inlet(female): 1-1/2" ANSI/DIN Flange

Maximum Flow Rate: 100GPM(378.5LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 14feet(4.27m)

Weight: 62 lbs(28.1kg)

Sound Level: 70psi 60 cycles/min. 77.7db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6661X	X	-	X	X	X	-	C

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
T - Aluminum U - Cast Iron	3 - Polypropylene Flange (3-piece manifold) 4 - P.V.D.F (Kynar)	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) 8 - Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE 5 - E.P.R. 8 - Polyurethane C - Hytrel E - Santoprene	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE/Santoprene 5 - E.P.R. 6 - Composite PTFE 9-Hytrel B-Santoprene

ACCESSORIES:

Air Line Connection Kit | WA66084-1(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Service Repair Kit | WA637118-C(air section)

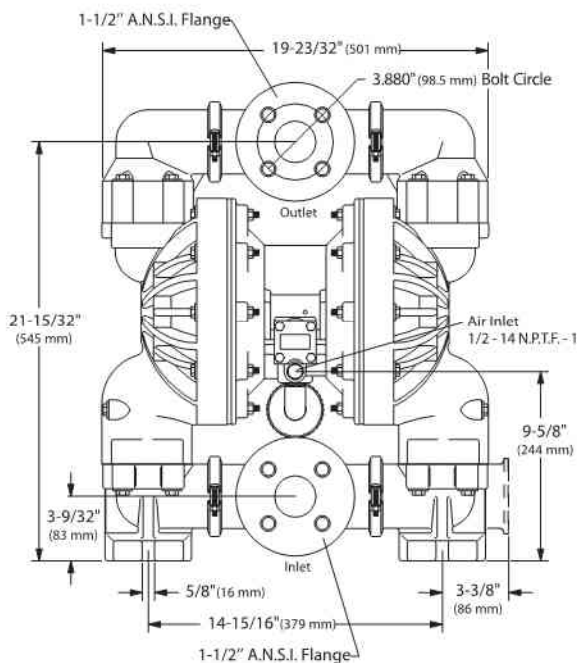
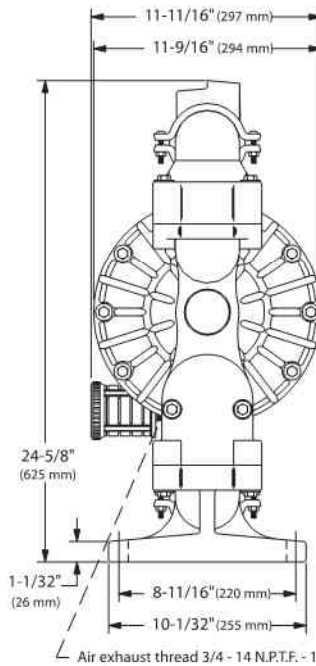
WA637165-XX-C(fluid section)

Flange Connection Kit| WA67079 Kit meets ANSI specifications. Flange Constructed of glass-filled polypropylene. Bolts, washer, and nuts are stainless steel. Gasket is 4401 klinger synthetic fiber nitrile binder.

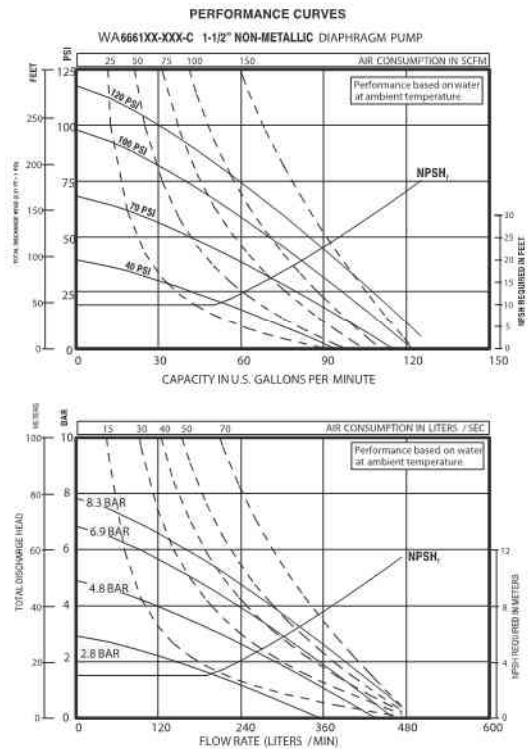
1-1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP MODEL: WA6661T3-XXX-C

DIMENSIONS:

All dimensions are given in inches and millimeters (mm).



PERFORMANCE CURVE:



2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6662A3-XXX-C

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 2" ANSI/DIN Flange

Fluid Inlet(female): 2" ANSI/DIN Flange

Maximum Flow Rate: 145GPM(548.8LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 14feet(4.27m)

Weight: 62 lbs(28.1kg)

Sound Level: 70psi 60 cycles/min. 77.7db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6662X	X	-	X	X	X	-	C

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
A - Aluminum B - Cast Iron	3 - Polypropylene Flange (3-piece manifold) 4 - P.V.D.F (Kynar)	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) 8 - Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 3 - Polypropylene 4 - PTFE 5 - E.P.R. 8 - Polyurethane C - Hytrel E - Santoprene	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE/Santoprene 5 - E.P.R. 6 - Composite PTFE 9-Hytrel B-Santoprene

ACCESSORIES:

Air Line Connection Kit | WA66084-1(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Service Repair Kit | WA637118-C(air section)

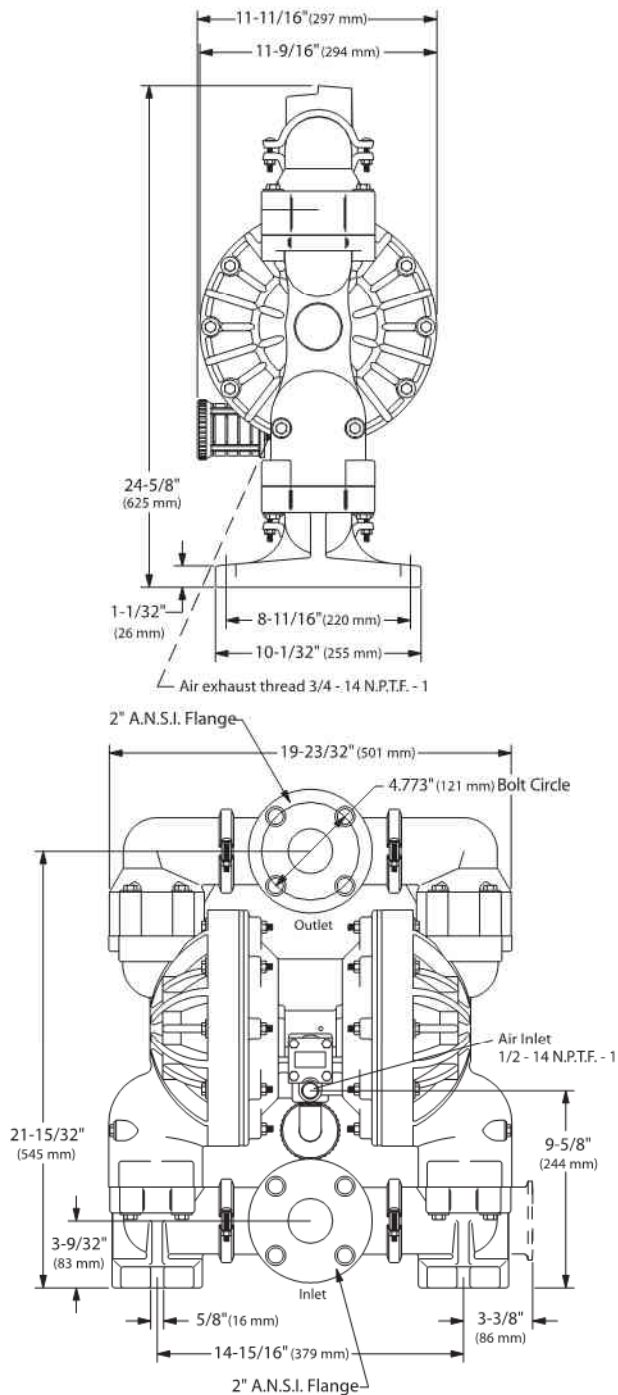
WA637165-XX-C(fluid section)

Flange Connection Kit| WA67080 Kit meets ANSI specifications. Flange Constructed of glass-filled polypropylene. Bolts, washer, and nuts are stainless steel. Gasket is 4401 klinger synthetic fiber nitrile binder.

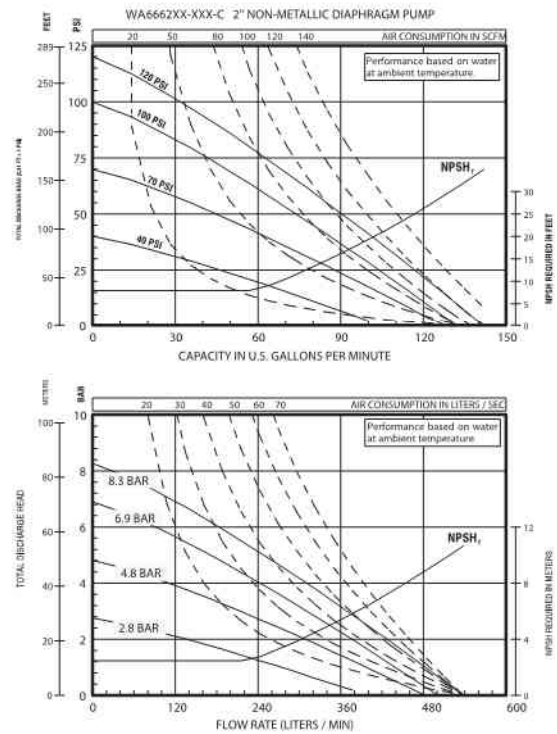
2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP
MODEL: WA6662A3-XXX-C

DIMENSIONS:

All dimensions are given in inches and millimeters (mm).



PERFORMANCE CURVE:





Metallic Models

The NUODEAN range of diaphragm pumps offers many materials of construction compatible for the chemical industry: Our metallic offering consists of aluminium, cast iron, stainless steel and hastelloy.

Model Overview: Metallic Models



MODEL	1/2"	1"	1-1/2"	2"	3"
Maximum Flow GPM (LPM)	12 (45.4)	35 (133)	90 (340.7)	172 (651)	237 (897)
Maximum Discharge Pressure PSI (BAR)	100 (6.9)	120 (8.3)	120 (8.3)	120 (8.3)	120 (8.3)
Fluid Ports Inlet/Outlet (BSP Available)	1/2" (F) - In/Out	NPT 1" Rp 1	NPT 1-1/2" Rp 1-1/2	NPT 2" Rp 1/2	NPT 3" Rp 3
Materials of Construction	Aluminum Stainless Steel	Aluminum Stainless Steel Cast Iron	Aluminum Stainless Steel Cast Iron	Aluminum Stainless Steel Cast Iron	Aluminum Stainless Steel Cast Iron
Pump Weight Lbs. (Kg.)		19 (8.6) Aluminum* 36 (16.3) Stainless 31 (14.1) Cast Iron*	51.5 (23.4) Aluminum* 84.5 (38.3) Stainless 79.5 (36.1) Cast Iron*	65.2 (29.6) 129.9 (58.9) 124.3 (56.4)	109.8 (49.8) 222.2 (100.8) 213.1 (96.7)
		*add 8-lb(3.63-kg) for cast iron center section		*add 23-lb(10.4-kg) for cast iron center section	
Maximum Solids Inches (mm)	3/32 (2.4)	1/8 (3.2)	1/4 (6.4)	1/4 (6.4)	3/8 (9.5)
Best Selling Models (BSP Available)		WA666100-122-C WA666100-244-C WA666100-322-C WA666100-344-C WA666100-361-C WA666100-362-C WA666100-3EB-C WA666101-244-C	WA666150-244-C WA666150-322-C WA666150-362-C WA666150-3EB-C WA666151-244-C WA666152-281-C WA666152-2EB-C WA66616B-2EB-C	WA666250-144-C WA666250-444-C WA666250-9C9-C WA666250-EEB-C WA666250-G22-C WA666251-EEB-C	WA666300-144-C WA666300-9C9-C WA666300-EEB-C WA666300-G22-C WA666302-EEB-C
Recommended Filter/Regulator	WAP39124-624	WAP39224-614	WAP39334-614	WAP39354-614	WAP39454-614
Air Line Kit	WA66073-1	WA66073-2	WA66084-1	WA66312	WA66109

1/2" Metallic Models

Part of our Compact Series of pumps, our 1/2" metallic pumps feature big performance in a small package. With flow rates up to 14.4 GPM (54.5 LPM) and a wide range of material and porting configurations.

Ratio:	1:1
Maximum Flow:	12.0 g.p.m. (45.4 l.p.m.)
Displacement per cycle:	0.039 Gallons (0.15 Liters)
Air Inlet: (Female)	1/4 - 18 P.T.F. SAE Short (PD05R-X-X-B models) 1/4 - 18 N.P.T.F. - 1 (PD05A-X-X-B models)
Fluid Inlet/Outlet:	1/2 - 14 N.P.T.F. - 1 Rp 1/2 (1/2 - 14 BSP, parallel)
Max. operating pressure:	100-psi (6.9-bar)
Suspended solids max. dia.:	3/32-in. (2.4-mm)
Weight: lbs (kg)	PD05A-XAS-XXX-B 10.4 (4.7) PD05A-XSS-XXX-B 16.6 (7.5) PD05R-XAS-XXX-B 8.0 (3.7) PD05R-XSS-XXX-B 14.3 (6.5)
Maximum dry suction lift: ft (m)	15 (4.5)
Sound Level:	70 PSI 60 Cycles/Min 75 db(A)
Muffler:	PD05A - 93110; PD05R - Integral



Ordering

Position	1	2		3	4	5		6	7	8		9		10	11
Example:	PX05	X	-	X	X	S	-	X	X	X	-	B	-	X	X

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Manifold Material	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material	Position 9
D - Standard E - Remote Actuation Capable	A - Aluminum R - Polypropylene	A - 1/2 - 14 N.P.T.F. - 1 B - Rp 1/2 (1/2 - 14 BSP, parallel)	A - Aluminum S - Stainless Steel	S - Stainless Steel	F - Aluminum P - Polypropylene S - Stainless Steel	A - Santoprene C - Hytrel G - Nitrile S - Stainless Steel T - PTFE U - Polyurethane V - Viton	A - Santoprene C - Hytrel G - Nitrile T - PTFE/ Santoprene U - Polyurethane V - Viton	Revision Level

Accessories

Air Line Connection Kit | WA66073-1

(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Cycle Counter Kit | WA66975

Wall Mount Bracket Kit | WA76763

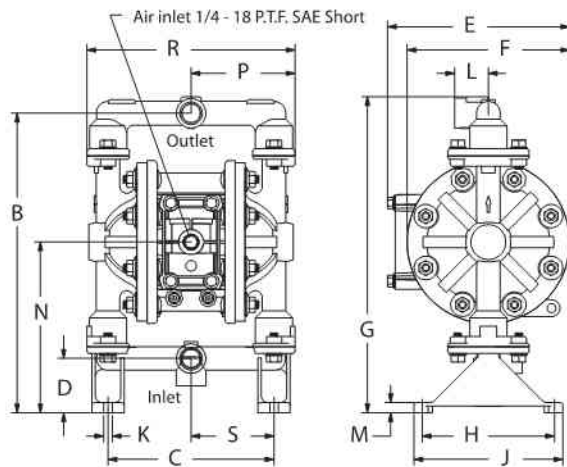
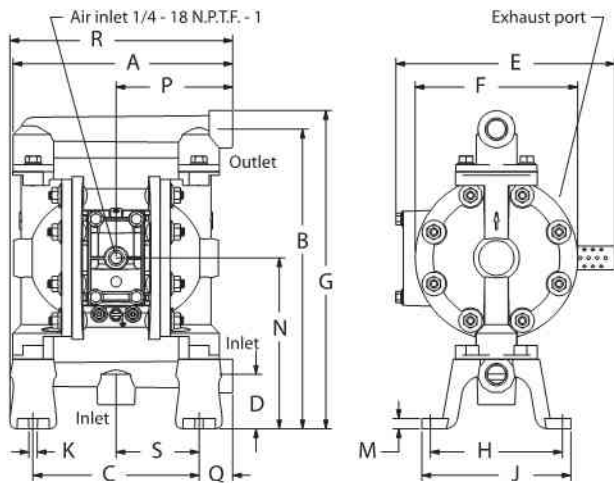
Optional Muffler | WA93110 used with WA637438 kit

Service Repair Kits | WA637428 (air section)

WA637427-XX (fluid section)



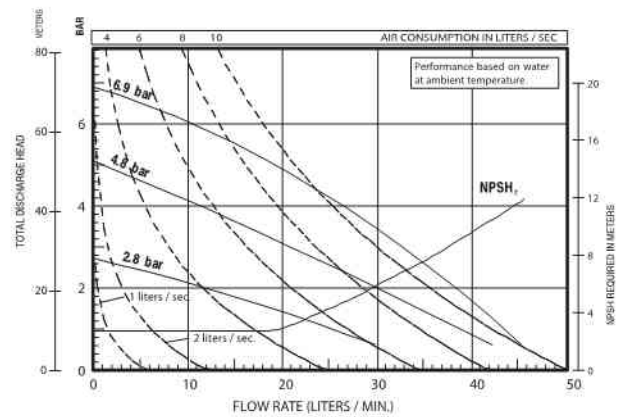
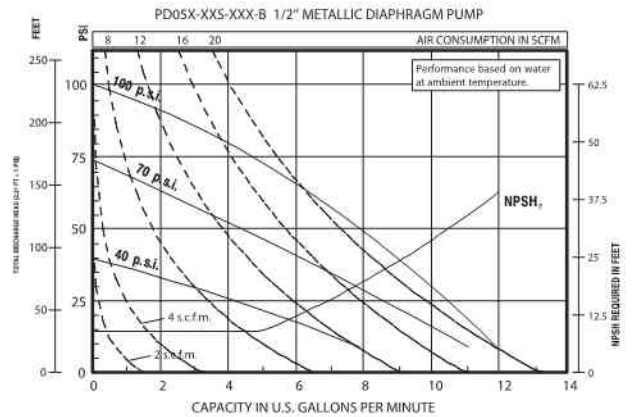
1/2" Metallic Dimensions and Flow Charts



DIMENSIONS

A 8-1/8" (206.0 mm)	G see below	N 6-5/16" (159.9 mm)
B 11-1/16" (280.4 mm)	H 4-7/8" (123.8 mm)	P see below
C 6-1/8" (155.6 mm)	J 5-1/2" (139.7 mm)	Q 1-1/4" (31.6 mm)
D 2" (50.8 mm)	K 5/16" (8.0 mm)	R see below
E see below	L 1-1/4" (31.8 mm)	S 3-1/16" (77.8 mm)
F 6" (152.4 mm)	M 3/8" (9.5 mm)	

Dimension	PD05A-XXS-XXX-B	PD05R-XXS-XXX-B
"E"	8-3/32" (205.5 mm)	6-23/32" (170.6 mm)
"G"	11-3/4" (297.9 mm)	11-21/32" (296.0 mm)
"P"	4-5/16" (109.3 mm)	3-27/32" (97.4 mm)
"R"	8-7/32" (208.5 mm)	7-11/16" (194.9 mm)



1" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6661XX-XXX-C

SPECIFICATIONS:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet(female): 1"BSPT Or 1"NPT

Fluid Inlet(female): 1"BSPT Or 1"NPT

Maximum Flow Rate: 35GPM(133LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 20feet(6.1m)

Weight:WA666100-X-C(aluminum)19 lbs(8.6kg)

WA666101-X-C(stainless steel)36 lbs(16.3kg)

WA666102-X-C(Cast Iron)31 lbs(14.1kg)

Displacement Per Cycle: 0.16Gallons(0.60Liters)

Sound Level:70psi 50 cycles/min. 81.0db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6661X	X	-	X	X	X	-	C

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
0-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum	1-Neoprene	1-Neoprene
1-Cast Iron, NPT	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
2-Aluminum,BSP	2-Cast Iron(steel hardware)	3-Polypropylene	3-Viton	3-Viton
3-Cast Iron,BSP	9-SS,dual outlet(steel hardware)	4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum(stainless)	5-Carbon Steel	5-E.P.R.	5-E.P.R.
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	6-Acetal	6-Acetal
	C-Cast Iron(stainless)		8-Polyurethane	9-Hytrel
	D-SS,dual outlet(stainless hardware)		A-Stainless Steel	B-Santoprene
			C-Hytrel	G-Nitrile
			E-Santoprene	

ACCESSORIES:

Air Line Connection Kit | WA66073-2(Piggyback Filter/Regulator with gauge,pipe nipple and 5-foot air hose)

Service Repair Kit | WA637118-C(air section)

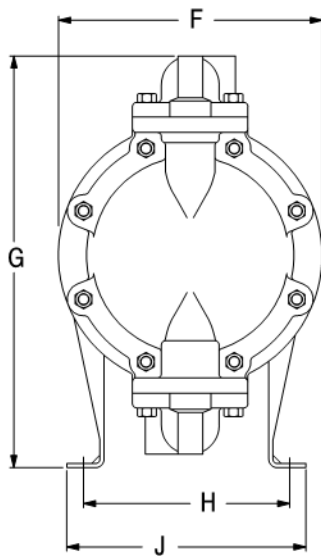
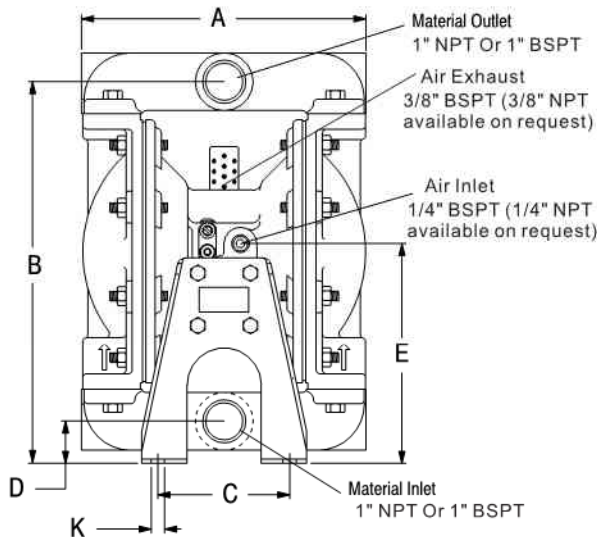
WA637119-XX-C(fluid section)

Wall Mount | WA66100

1" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA6661XX-XXX-C

DIMENSIONS:

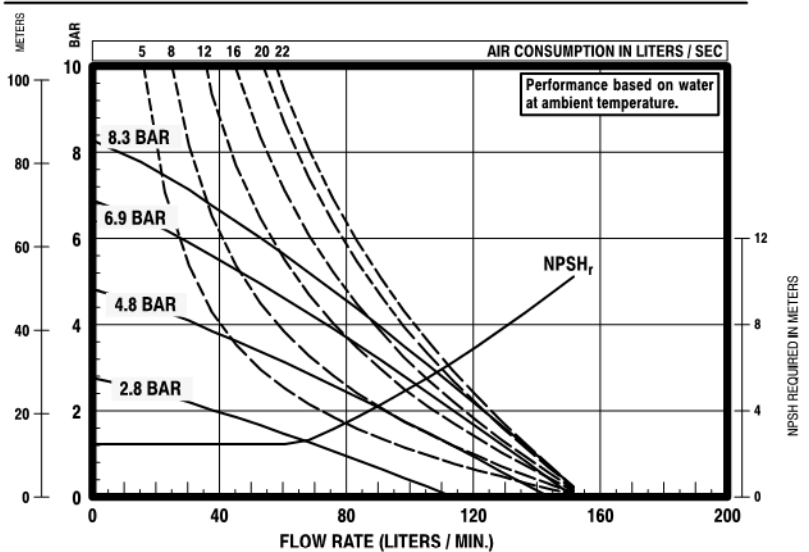
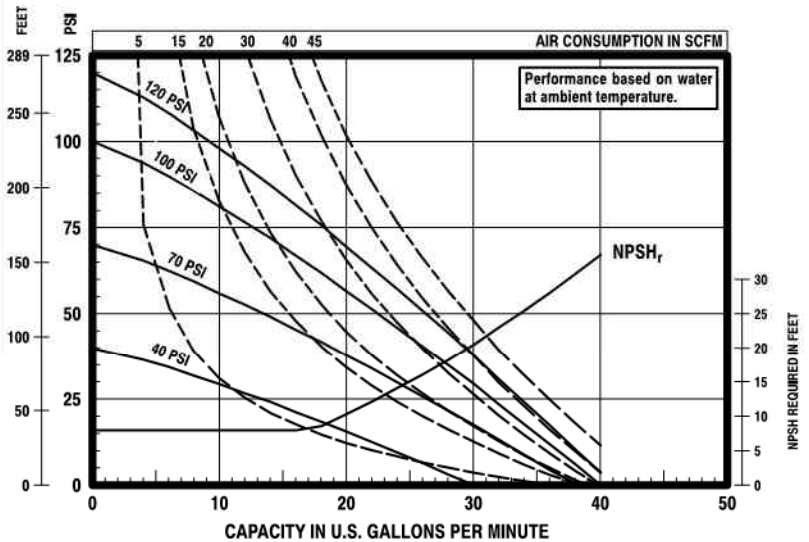


DIMENSIONS

A 8-9/16" (217 mm)	E 6-1/2" (165 mm)	H 6-1/4" (159 mm)
B 11-9/16" (294 mm)	F 8" (203 mm)	J 7-5/16" (186 mm)
C 4" (102 mm)	G 12-1/2" (318 mm)	K 7/16" (11 mm)
D 1-1/4" (32 mm)		

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

PERFORMANCE CURVE:



1-1/2" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66615X-XXX-C THRU WA66618X-XXX-C

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 1-1/2"BSPT Or 1-1/2"NPT

Fluid Inlet(female): 1-1/2"BSPT Or 1-1/2"NPT

Maximum Flow Rate: 90GPM(340.7LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 19feet(5.8m)

Weight:WA666150-X-C(aluminum)51.5 lbs(23.4kg)

WA666151-X-C(stainless steel)84.5 lbs(38.3kg)

WA666152-X-C(Cast Iron)79.5 lbs(36.1kg)

Displacement Per Cycle: 0.64Gallons(2.42Liters)

Sound Level:70psi 60 cycles/min. 80.5db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6661X	X	-	X	X	X	-	C

Position 1 Center Body	Position 2 Fluid Caps Maniflod Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
5-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum	1-Neoprene	1-Neoprene
6-Cast Iron, NPT	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
7-Aluminum,BSP	2-Cast Iron(steel hardware)	3-Polypropylene	3-Viton	3-Viton
8-Cast Iron,BSP		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	5-E.P.R.	5-E.P.R.
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	6-Acetal	6-Acetal
	C-Cast Iron(stainless)		8-Polyurethane	9-Hytrel
			A-Stainless Steel	B-Santoprene
			C-Hytrel	G-Nitrile
			E-Santoprene	

ACCESSORIES:

Air Line Connection Kit | WA66084-1(Piggyback Filter/Regulator with gauge,pipe nipple and 5-foot air hose)

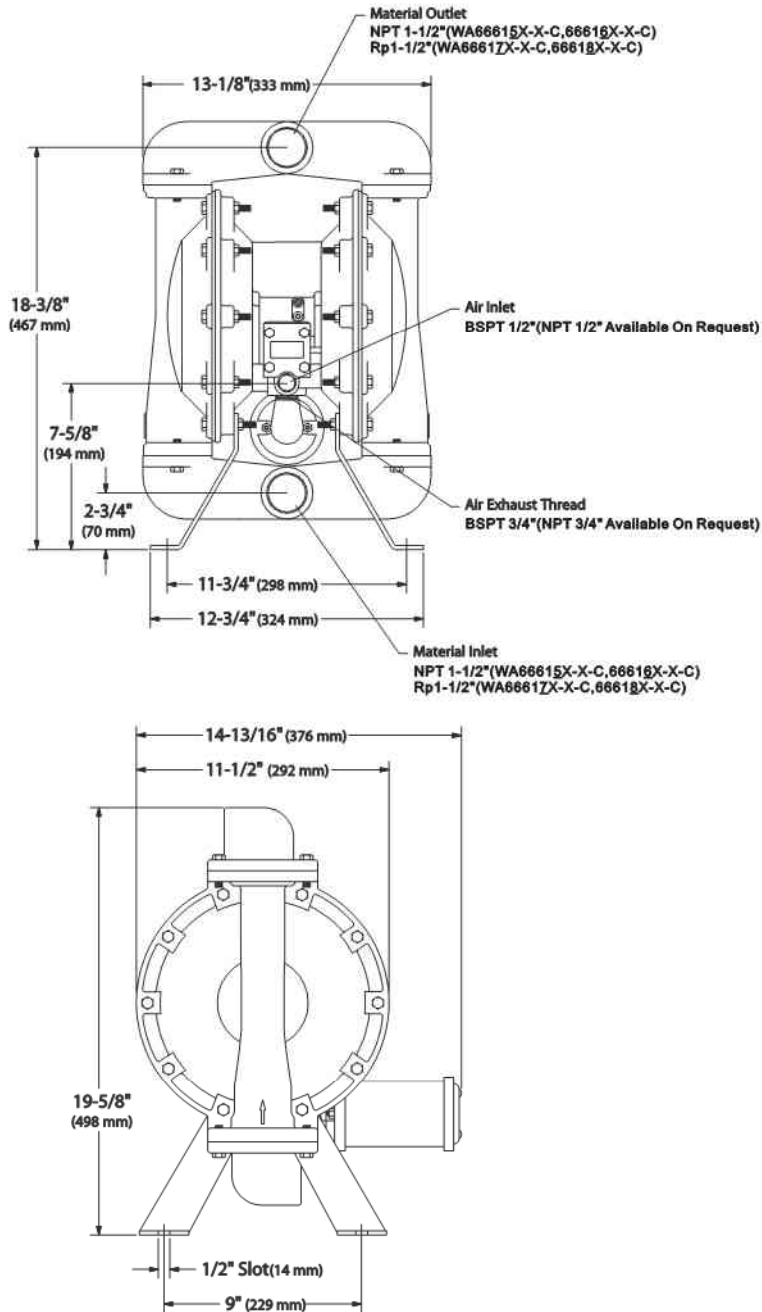
Service Repair Kit | WA637118-C(air section)

WA637124-XX(fluid section)

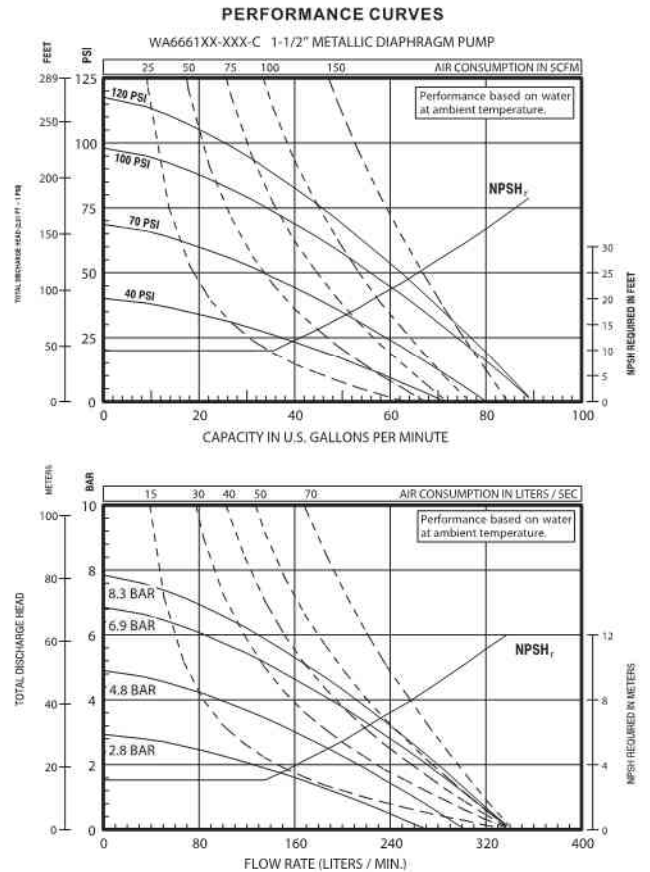
Wall Mount | WA62133

1-1/2" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP MODEL: WA66615X-XXX-C THRU WA66618X-XXX-C

DIMENSIONS:



PERFORMANCE CURVE:



2" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66625X-XXX-C and WA66627X-XXX-C

SPECIFICATIONS:

Air Inlet(female): 3/4"BSPT(3/4"NPT Available On Request)

Fluid Outlet(female): 2"BSPT Or 2"NPT

Fluid Inlet(female): 2"BSPT Or 2"NPT

Maximum Flow Rate: 172GPM(651LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 27.2feet(8.3m)

Weight:WA6662X0-XXX-C 65.2 lbs(29.6kg)

WA6662X1-XXX-C 129.9 lbs(58.9kg)

WA6662X2-XXX-C 124.3 lbs(56.38kg)

Displacement Per Cycle: 1.4Gallons(5.3Liters)

Sound Level:70psi 60 cycles/min. 85.3db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6662X	X	-	X	X	X	-	C

Position 1	Position 2	Position 3	Position 4	Position 5
Center Body	Fluid Caps Manifold Mat.	Seat Material	Ball Check Material	Diaphragm Material
5-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum		
	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
7-Aluminum,BSP	2-Cast Iron(steel hardware)			
		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	A-Stainless Steel	
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	C-Hytrel	6-Composite PTFE
	C-Cast Iron(stainless hardware)	9-Hytrel	E-Santoprene	9-Hytrel
		E-Santoprene		B-Santoprene
		G-Nitrile		G-Nitrile

ACCESSORIES:

Air Line Connection Kit | WA66312(Piggyback Filter/Regulator with gauge,pipe nipple and 5-foot air hose)

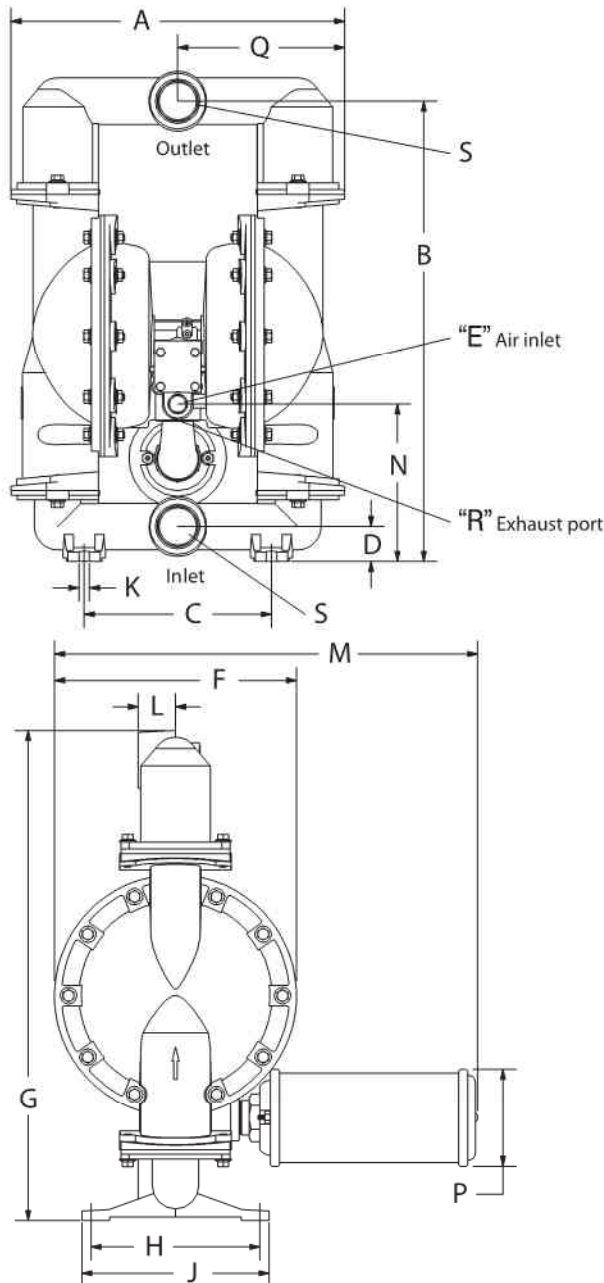
Service Repair Kit | WA637434(air section)

WA637432-XX(fluid section)

2" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66625X-XXX-C and WA66627X-XXX-C

DIMENSIONS:



DIMENSIONS

A 17-15/16" (455.1 mm)	G 26-3/8" (669.5 mm)	N 8-15/32" (214.6 mm)
B 24-3/4" (628.7 mm)	H 9-1/16" (230.2 mm)	P 5-1/4" (133.4 mm)
C 10-1/16" (255.6 mm)	J 10-1/16" (255.6 mm)	Q 8-13/32" (227.6 mm)
D 1-7/8" (47.6 mm)	K 9/16" (14.3 mm)	R 1-1/4 - 1-1/2 N.P.T.F.-1
E 3/4 - 14 N.P.T.F. - 1	L 2" (50.8 mm)	S (see below)
F 13" (330.2 mm)	M 22-3/4" (577.3 mm)	

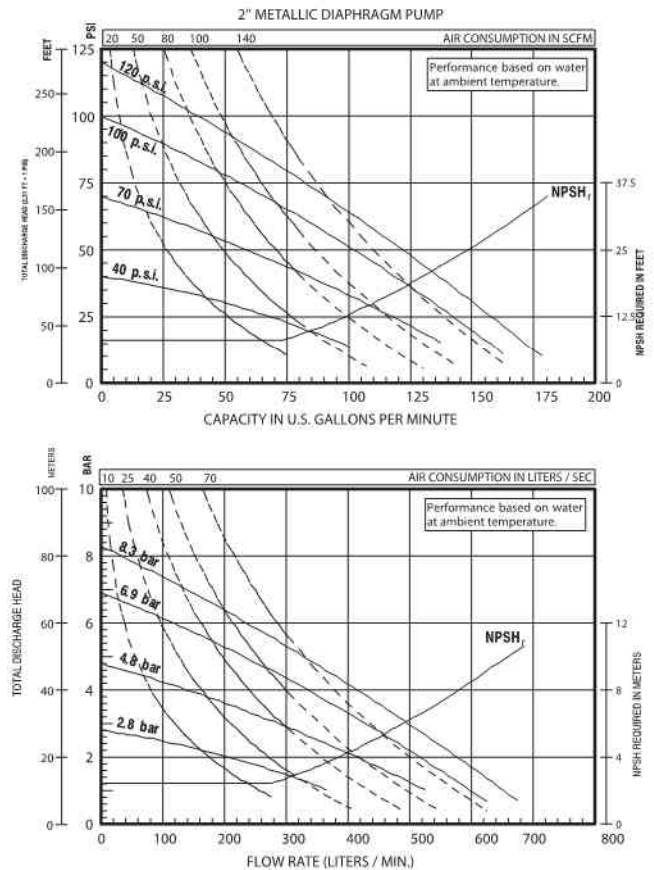
"S" Inlet / Outlet

WA66625-XXX-C NPT 2"

WA66627-XXX-C Rp 2 (2 - 11 BSP parallel)

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

PERFORMANCE CURVE:



Refer to www.AROzone.com for full size flow curves.

For additional information contact
technical support at 1.800.495.0276

3" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66630X-XXX-C and WA66632X-XXX-C

SPECIFICATIONS:

Air Inlet(female): 3/4"BSPT(3/4"NPT Available On Request)

Fluid Outlet(female): 3"BSPT Or 3"NPT

Fluid Inlet(female): 3"BSPT Or 3"NPT

Maximum Flow Rate: 237GPM(897 LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 3/8"(9.5mm)

Maximum Dry Suction Lift: 17.6feet(5.4m)

Weight:WA6663X0-XXX-C 109.8 lbs(49.8kg)

WA6663X1-XXX-C 222.2 lbs(100.8kg)

WA6663X2-XXX-C 213.1 lbs(96.7kg)

Displacement Per Cycle: 2.65Gallons(10.03Liters)

Sound Level:70psi 60 cycles/min. 86.3db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6
Example	WA6663X	X	-	X	X	X	-	C

Position 1	Position 2	Position 3	Position 4	Position 5
Center Body	Fluid Caps Manifold Mat.	Seat Material	Ball Check Material	Diaphragm Material
0-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum		
	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
2-Aluminum,BSP	2-Cast Iron(steel hardware)			
		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	A-Stainless Steel	
	B-SS(stainless hardware)	8-Hard Stainless Steel	C-Hytrel	6-Composite PTFE
	C-Cast Iron(stainless hardware)	9-Hytrel	E-Santoprene	9-Hytrel
		E-Santoprene		B-Santoprene
		G-Nitrile		G-Nitrile

ACCESSORIES:

Air Line Connection Kit | WA66312(Piggyback Filter/Regulator with gauge,pipe nipple and 5-foot air hose)

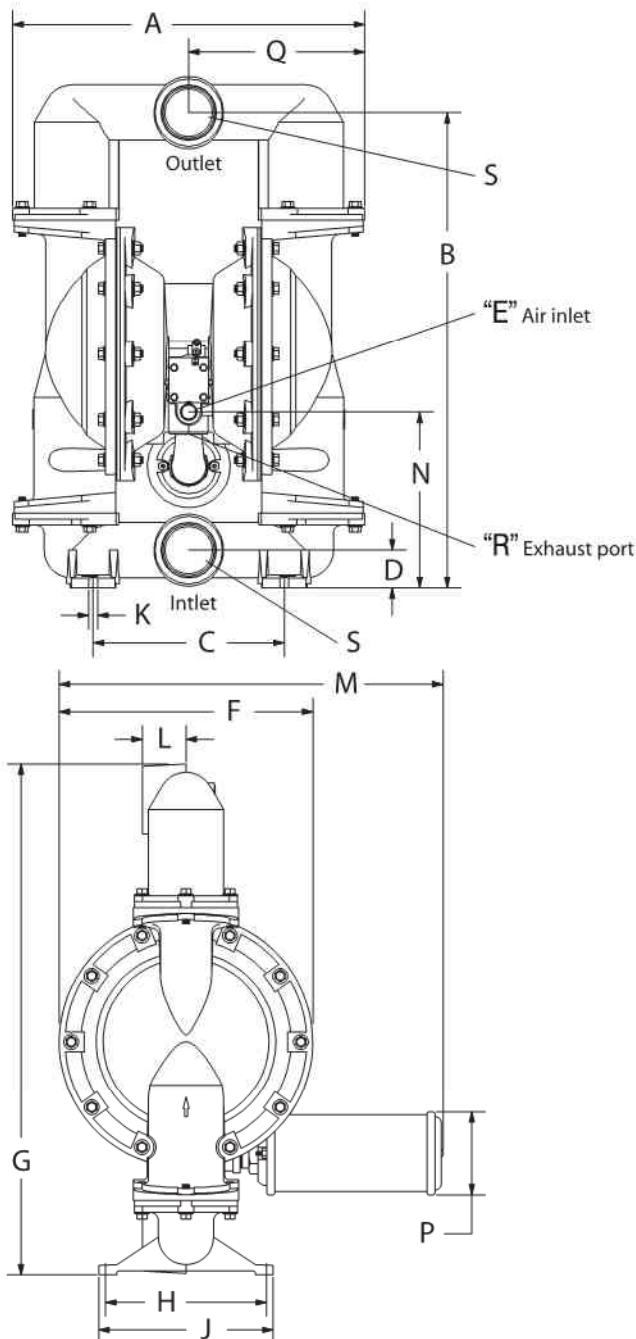
Service Repair Kit | WA637434(air section)

WA637433-XX(fluid section)

3" METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA66630X-XXX-C and WA66632X-XXX-C

DIMENSIONS:



DIMENSIONS

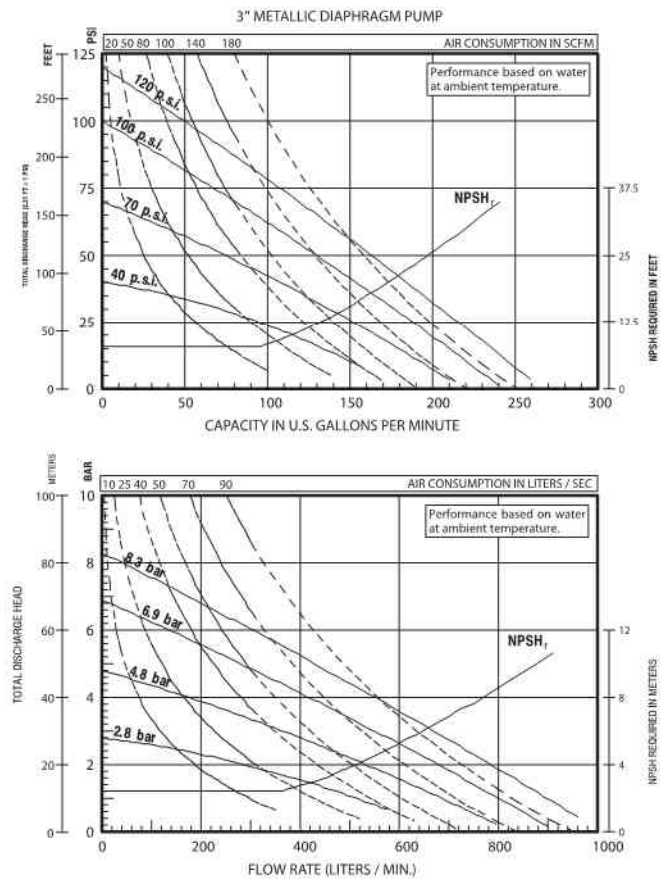
A 22-7/32" (563.9 mm)	G 32-9/32" (819.8 mm)	N 11-3/32" (281.4 mm)
B 30" (762.0 mm)	H 10-5/32" (258.0 mm)	P 5-1/4" (133.4 mm)
C 12-1/16" (306.4 mm)	J 11" (279.4 mm)	Q 11-1/8" (281.9 mm)
D 2-3/8" (60.3 mm)	K 9/16" (14.3 mm)	R 1-1/4 - 11-1/2N.P.T.F.-1
E 3/4 - 14 N.P.T.F. - 1	L 2-3/4" (69.9 mm)	S (see below)
F 16" (406.4 mm)	M 24-7/16" (620.7 mm)	

"S" Inlet / Outlet

WA66630-XXX-C NPT 3"

WA66632-XXX-C Rp 3 (3 - 11 BSP parallel)

PERFORMANCE CURVE:



Other Product Introduction(DP11 Series):

Why select Air Operated Double Diaphragm Pumps?

- Sealless Design
- Low Material Shear
- Ease of Maintenance
- Can Run Dry without Damage
- Portable
- Self Priming
- Easy-to-install

Why choose us?



Besides, what advantages do NUODEAN'S pumps have?

- **Non-Stall Design:** This avoids stalling issues associated with other pumps.
- **Big flow rate:** Our DP11 Series AODD pumps apply bigger ball & wider fluid passage than other similar products.
- **Self-lubricating, and maintenance-free air systems.**
- **More flow and less pulsation:** Pilot air-distribution valve provides an ultra-positive, reliable shift signal that avoids stall-out, and provides faster pump trip-over with more flow and less pulsation.
- **The use of dual ceramic dynamic seals:** More wear-resisting and to prevent & discharge pollution; Applicable to the harsh environment of air source; Long lifetime.
- **Anti-icing design:** With built-in energy-dissipation chamber, it is anti-icing and effectively reduces the discharge air pressure and noise from work; Cold exhaust air is diverted from ice-prone components.
- **High lift, Stable Operating:** Greatly optimized air system ensures the most efficiency, with no air-leakage.



Stress analysis is applied for each major component design!

Other Product Introduction(DP11 Series):

Main Air Distribution Valve

- Patented “unstallable” air balanced valve design which avoids stalling issues associated with other pumps.
- Maintenance-free and Self-lubricating.
- Low start-up pressure(1.4bar)

The Use Of Dual Ceramic Dynamic Seals:

- More wear-resisting and to prevent and discharge pollution.
- Applicable to the harsh environment of air source.
- The most efficiency, with no air-leakage.

Pilot Air Distribution Valve

- Provides an ultra-positive, reliable shift signal.
- Provides faster pump trip-over with more flow.
- Faster trip-over with less pulsation.

Built-in Energy Dissipation Chamber

- It effectively reduces the discharge pressure and noise from work.
- It is anti-icing.

Bigger Ball Is Applied Than Similar Pumps

- Increase fluid passing ability

Wider Fluid Passage

- Help reduce fluid pressure drop & increase pump flow rate.

Bigger Ball Is Applied Than Similar Pumps

- Increase fluid passing ability.

Stainless Steel Diaphragm Plate

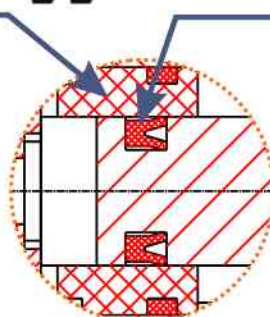
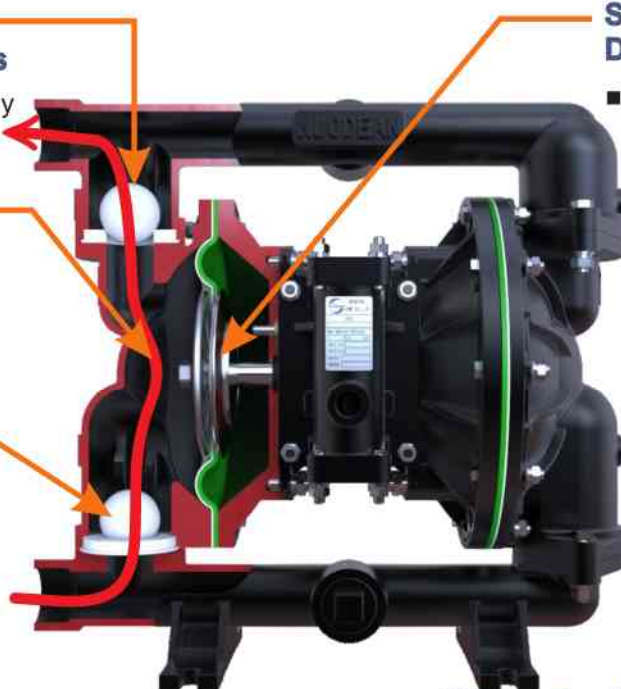
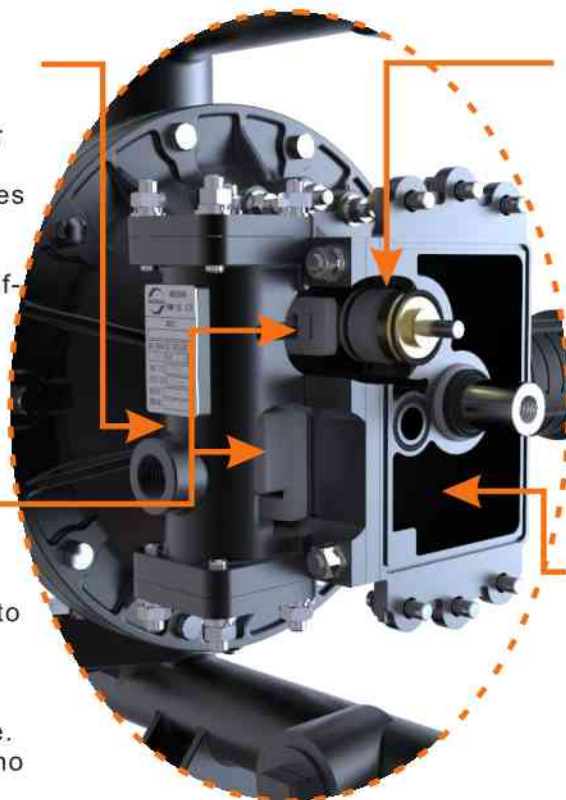
- High duty, more corrosion resistance and ensure no leakage.

POM Bush

- Very low friction coefficient.
- Self-lubricating.

Y Type Seal Ring

- Self-sealing, better seal effect.
- Automatic compensation for abrasion.
- Long lifetime.



Hot Products:



1" Aluminum Alloy AODD Pumps

Hot Products:



DP11 Series

1" Aluminum Alloy AODD Pumps

Non-Stall, Less-pulsation, Large Flow, Less-Maintenance, Anti-icing!
More details, please see DP11 Series Catalogue or visit our website.



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