NOMAD™

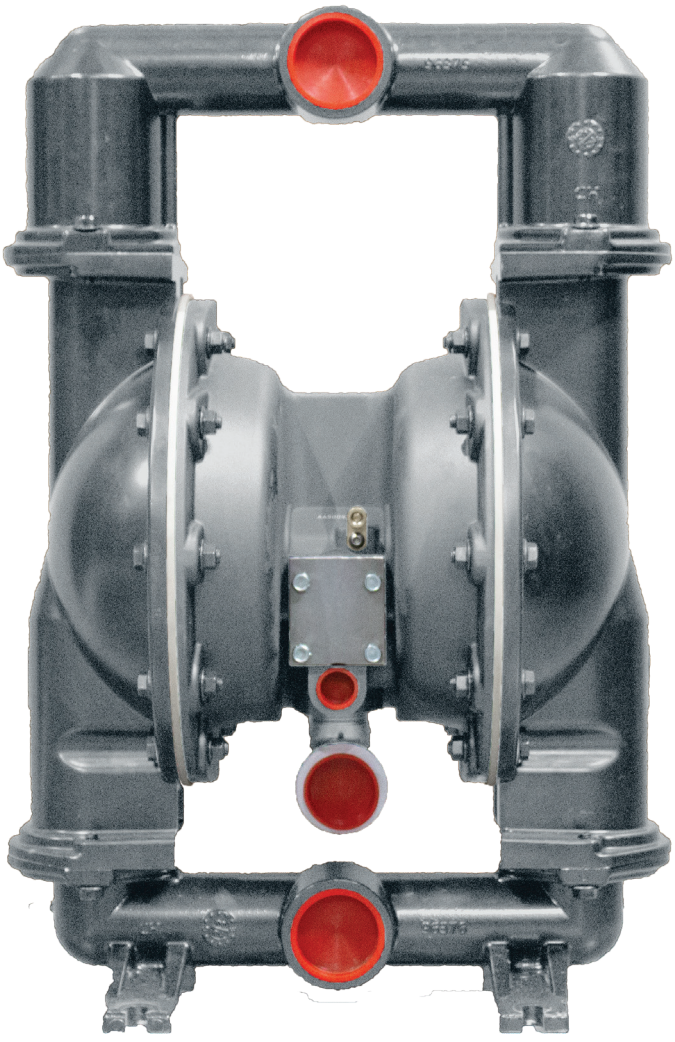
PUMPS • PARTS • PASSION

MODEL: N66625X-XXX-C Metallic

Assembly, Installation and Operation Manual

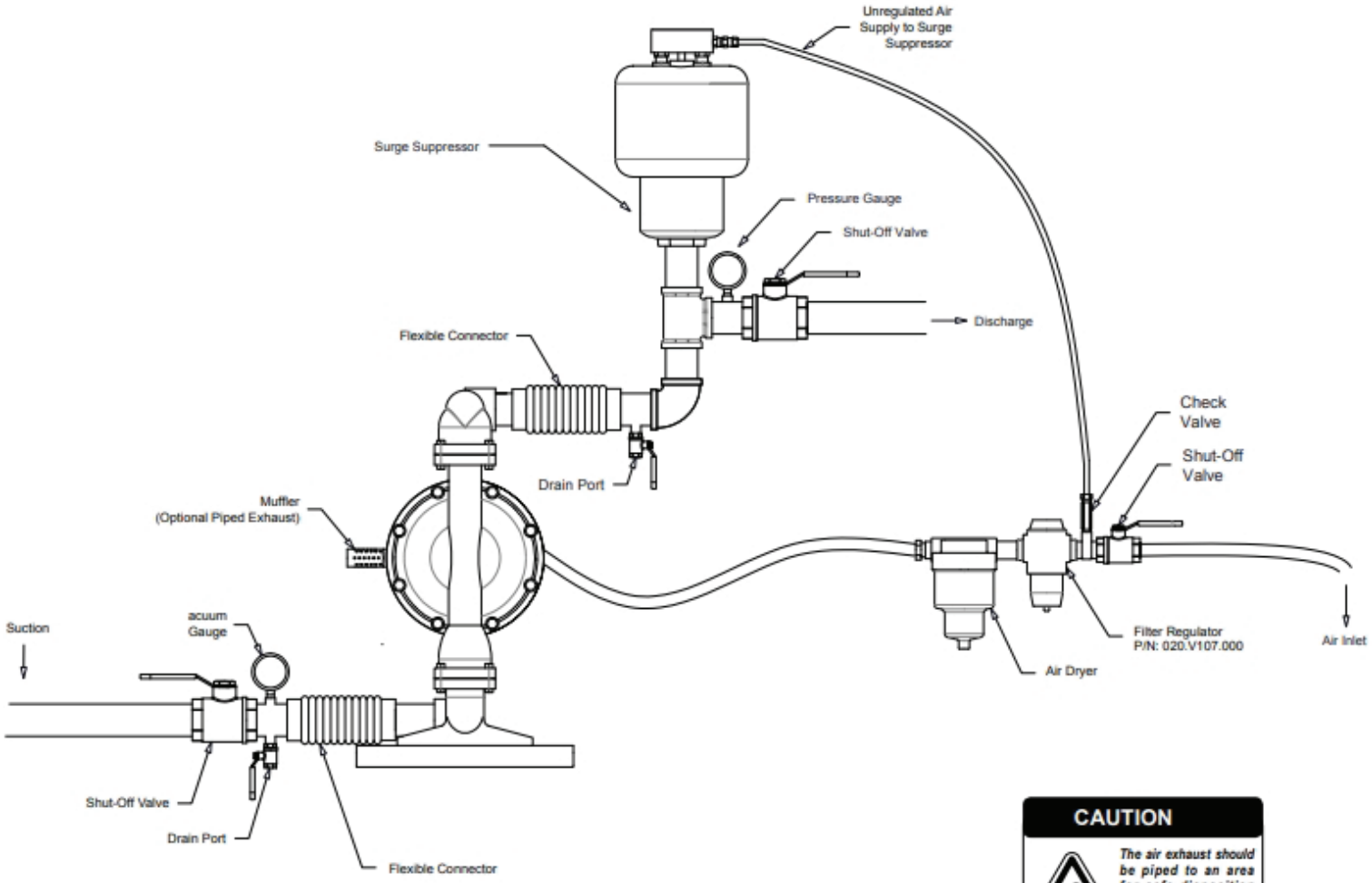
ALUMINUM AND STAINLESS STEEL

OPTA FLO™



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Recommended Installation Guide



Installation And Start-Up
Locate the pump as close to the product being pumped as possible. Keep the suction line length and number of fittings to a minimum. Do not reduce the suction line diameter.

Air Supply
Connect the pump air inlet to an air supply with sufficient capacity and pressure to achieve desired performance. A pressure regulating valve should be installed to insure air supply pressure does not exceed recommended limits.

Air Valve Lubrication
The air distribution system is designed to operate WITHOUT lubrication. This is the standard mode of operation. If lubrication is desired, install an air line lubricator set to deliver one drop of SAE 10 non-detergent oil for every 20 SCFM (9.4 liters/sec.) of air the pump consumes. Consult the Performance Curve to determine air consumption.

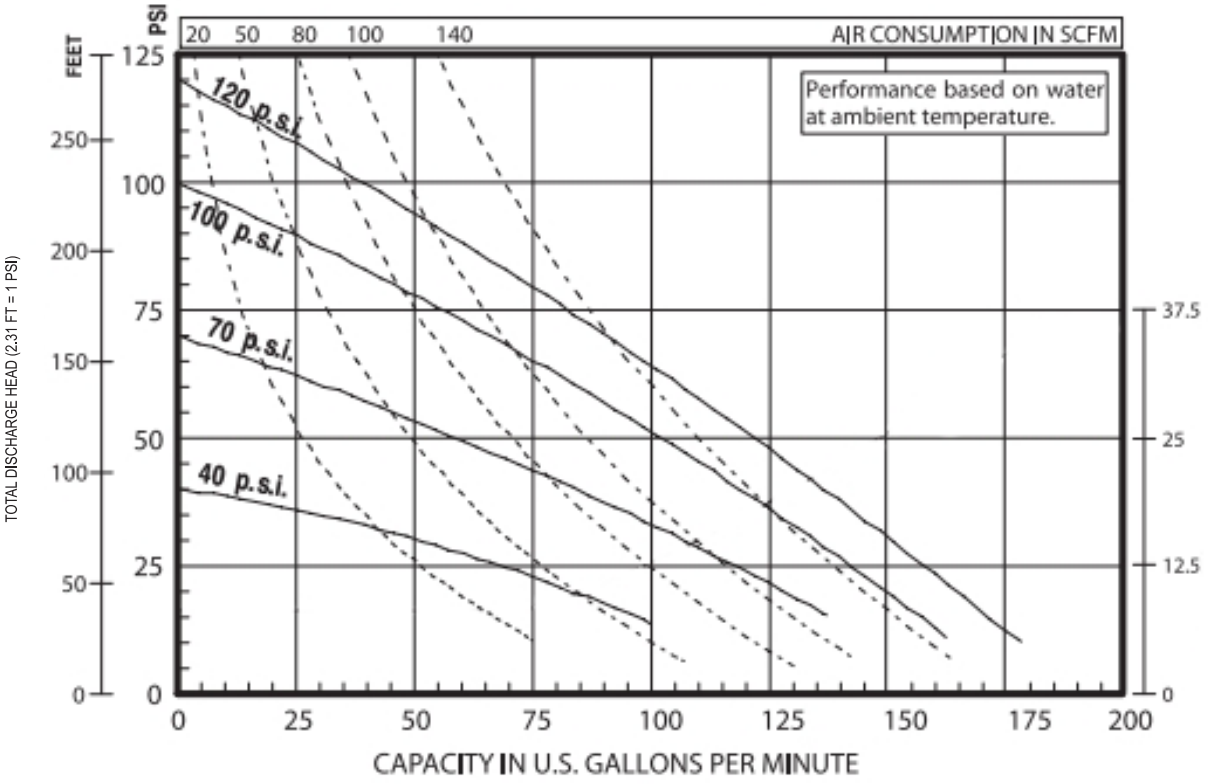
Air Line Moisture
Water in the compressed air supply may cause icing or freezing of the exhaust air, causing the pump to cycle erratically or stop operating. Water in the air supply can be reduced by using a point-of-use air dryer.

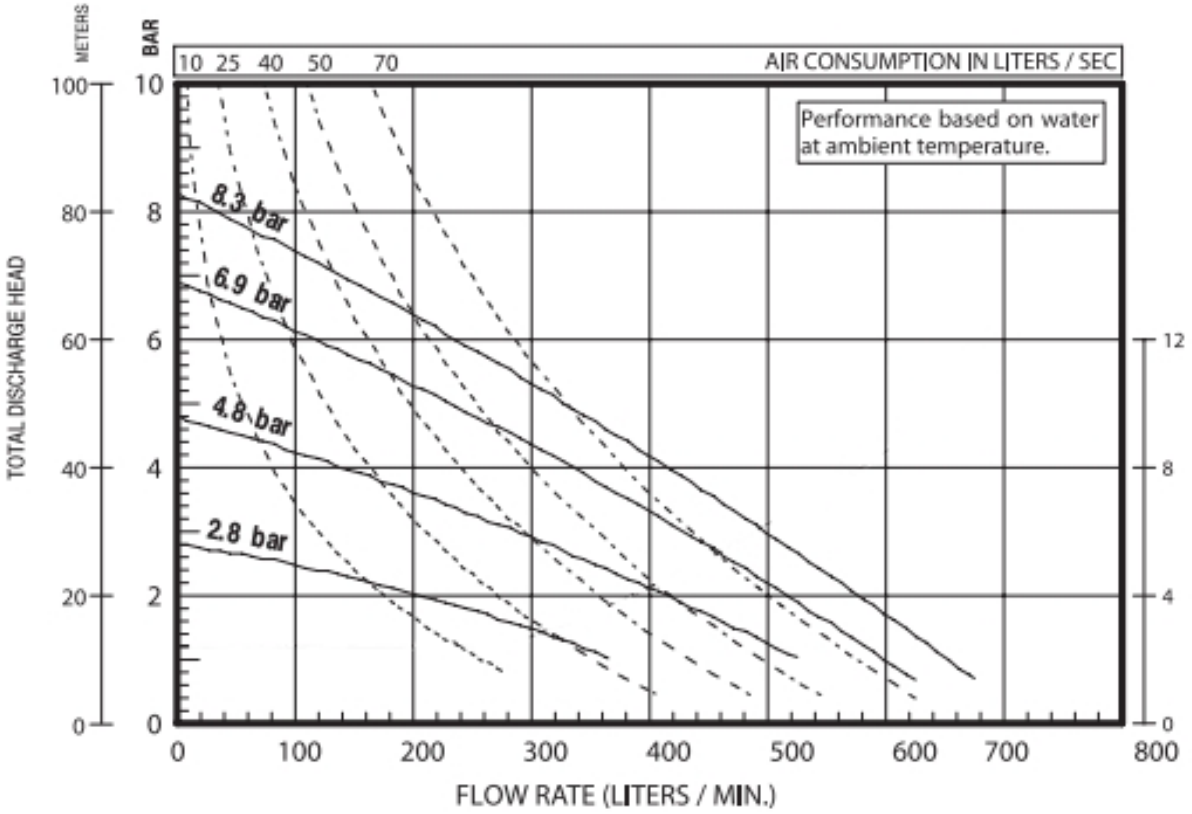
Air Inlet And Priming
To start the pump, slightly open the air shut-off valve. After the pump primes, the air valve can be opened to increase air flow as desired. If opening the valve increases cycling rate, but does not increase the rate of flow, cavitation has occurred. The valve should be closed slightly to obtain the most efficient air flow to pump flow ratio.

Preformance Curves

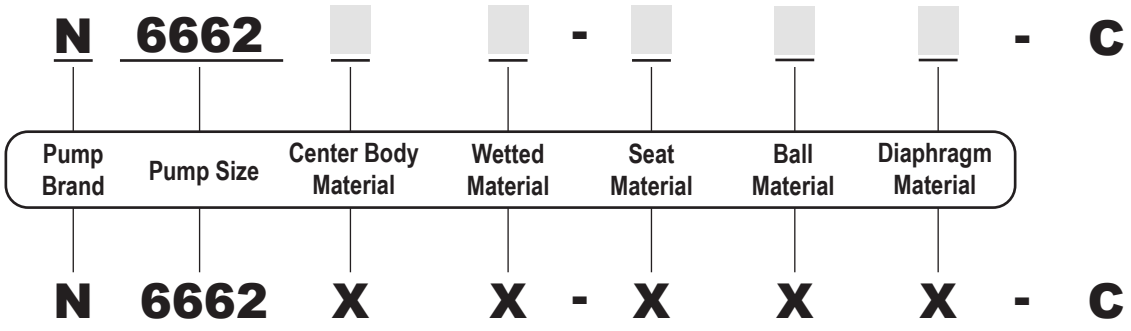
PERFORMANCE CURVES

N666250-XXX-C / N66625B-XXX-X 2” Metallic Pump





Explanation of Pump Nomenclature



Pump Brand:

NOMAD

Pump Size:

2”

Pump Center Body Material:

5 - Aluminum

Wetted Material:

0 - Aluminum

B - Stainless Steel

Seat Material:

1 - Aluminum

2 - Stainless Steel (316)

4 - PVDF

9 - Hytrel

E - Santoprene

G - Buna

Ball Material:

2 - Buna

4 - PTFE

A - Stainless Steel (316)

C - Hytrel

E - Santoprene

Diaphragm Material:

2 - Buna

4 - PTFE / Santoprene

9 - Hytrel

B - Santoprene

Parts List N66625X-XXX-C Fluid Section

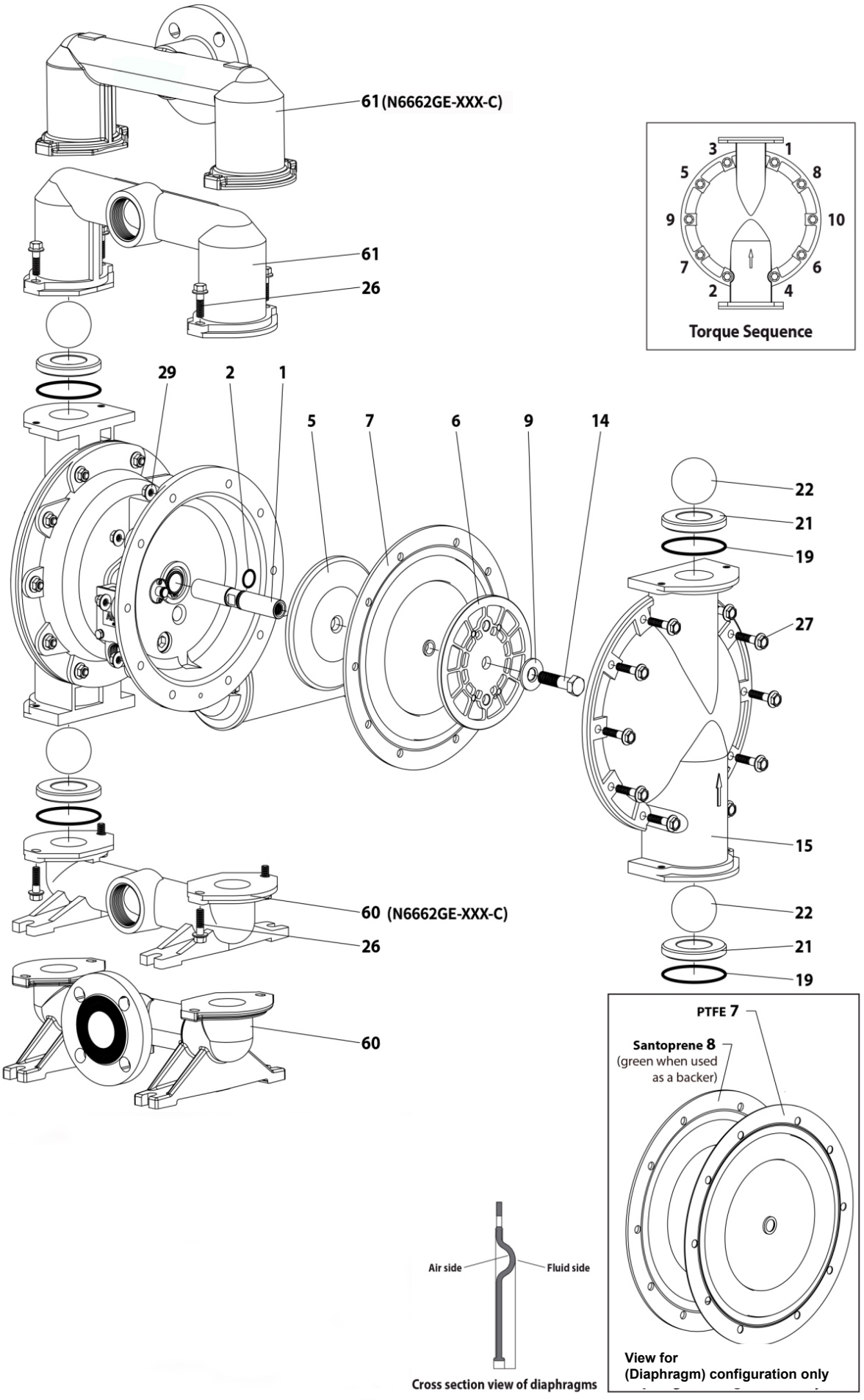


Figure 2

Parts List N66625X-XXX-C Fluid Section

Item	Part Number	Description	Qty	Mtl
N666250-XXX-C Pump Parts List Aluminum				
1	N48497382	Rod	1	[C]
2	N96394	O-Ring	1	[C]
5	N48497390	Inner Piston	1	[A]
6	N96503	Outer Piston	1	[A]
7	N97284-2	Diaphragm	2	[B]
7	N96392-T	Diaphragm	2	[T]
7	N96391-C	Diaphragm	2	[H]
7	N96391-A	Diaphragm	2	[Sp]
8		Backup Diaphragm	2	
9	N93065	Washer	2	[SS]
14	NY5-111-T	Screw (5/8"-18-2-1/2")	2	[SS]
15	N96377	Liquid Chamber	2	[A]
19	NY325-237	O-Ring	4	[B]
19	NY328-237	O-Ring	4	[T]
19	NY327-237	O-Ring	4	[V]
19	N94356	O-Ring	4	[E]
Seat Options N666250-XXX-C				
21				
1XX	N95673	Seat	4	[A]
2XX	N94353	Seat	4	[SS]
9XX	N94328-C	Seat	4	[H]
EXX	N94328-A	Seat	4	[Sp]
GXX	N94328-G	Seat	4	[B]
Ball Options N666250-XXX-C				
22				
X2X	N93358-2	Valve Ball	4	[B]
X4X	N93358-4	Valve Ball	4	[T]
XCX	N93358-C	Valve Ball	4	[H]
XEX	N93358-A	Valve Ball	4	[Sp]
26	N94409-1	Screw (M10 x 1.5 - 6g x 34 mm)	8	[C]
27	N94990-1	Screw (M10 x 1.5 - 6g x 45 mm)	20	[C]
29	N94992-1	Nut (M10 x 1.5 - 6h)	20	[C]
60	N96376-1	Inlet Manifold	1	[A]
61	N96375-1	Discharge Manifold	1	[A]

Item	Part Number	Description	Qty	Mtl
N66625B-XXX-C Pump Parts List Stainless Steel				
1	N48497382	Rod	1	[C]
2	N96394	O-Ring	1	[C]
5	N48497390	Inner Piston	1	[A]
6	N94357-2	Outer Piston	1	[SS]
7	N97284-2	Diaphragm	2	[B]
7	N96392-T	Diaphragm	2	[T]
7	N96391-C	Diaphragm	2	[H]
7	N96391-A	Diaphragm	2	[Sp]
8		Backup Diaphragm	2	
9	N93065	Washer	2	[SS]
14	NY5-111-T	Screw (5/8"-18-2-1/2")	2	[SS]
15	N97626	Liquid Chamber	2	[SS]
19	NY325-237	O-Ring	4	[B]
19	NY328-237	O-Ring	4	[T]
19	NY327-237	O-Ring	4	[V]
19	N94356	O-Ring	4	[E]
Seat Options N66625B-XXX-C				
21				
1XX	N95673	Seat	4	[A]
2XX	N94353	Seat	4	[SS]
9XX	N94328-C	Seat	4	[H]
EXX	N94328-A	Seat	4	[Sp]
GXX	N94328-G	Seat	4	[B]
Ball Options N66625B-XXX-C				
22				
X2X	N93358-2	Valve Ball	4	[B]
X4X	N93358-4	Valve Ball	4	[T]
XCX	N93358-C	Valve Ball	4	[H]
XEX	N93358-A	Valve Ball	4	[Sp]
26	N94409-2	Screw (M10 x 1.5 - 6g x 34 mm)	8	[SS]
27	N94990-1	Screw (M10 x 1.5 - 6g x 45 mm)	20	[SS]
29	N94992	Nut (M10 x 1.5 - 6h)	20	[SS]
60	N973630-1	Inlet Manifold	1	[SS]
61	N97628-1	Discharge Manifold	1	[SS]

Material Code

[A] = Aluminum
[B] = Buna
[C] = Carbon Steel
[Co] = Copper
[CP] = Composite PTFE
[H] = Hytrel
[K] = Kynar
[SP] = Santoprene
[SS] = Stainless Steel
[T] = PTFE
[V] = Viton

Parts List N66625X-XXX-C Air Motor Section

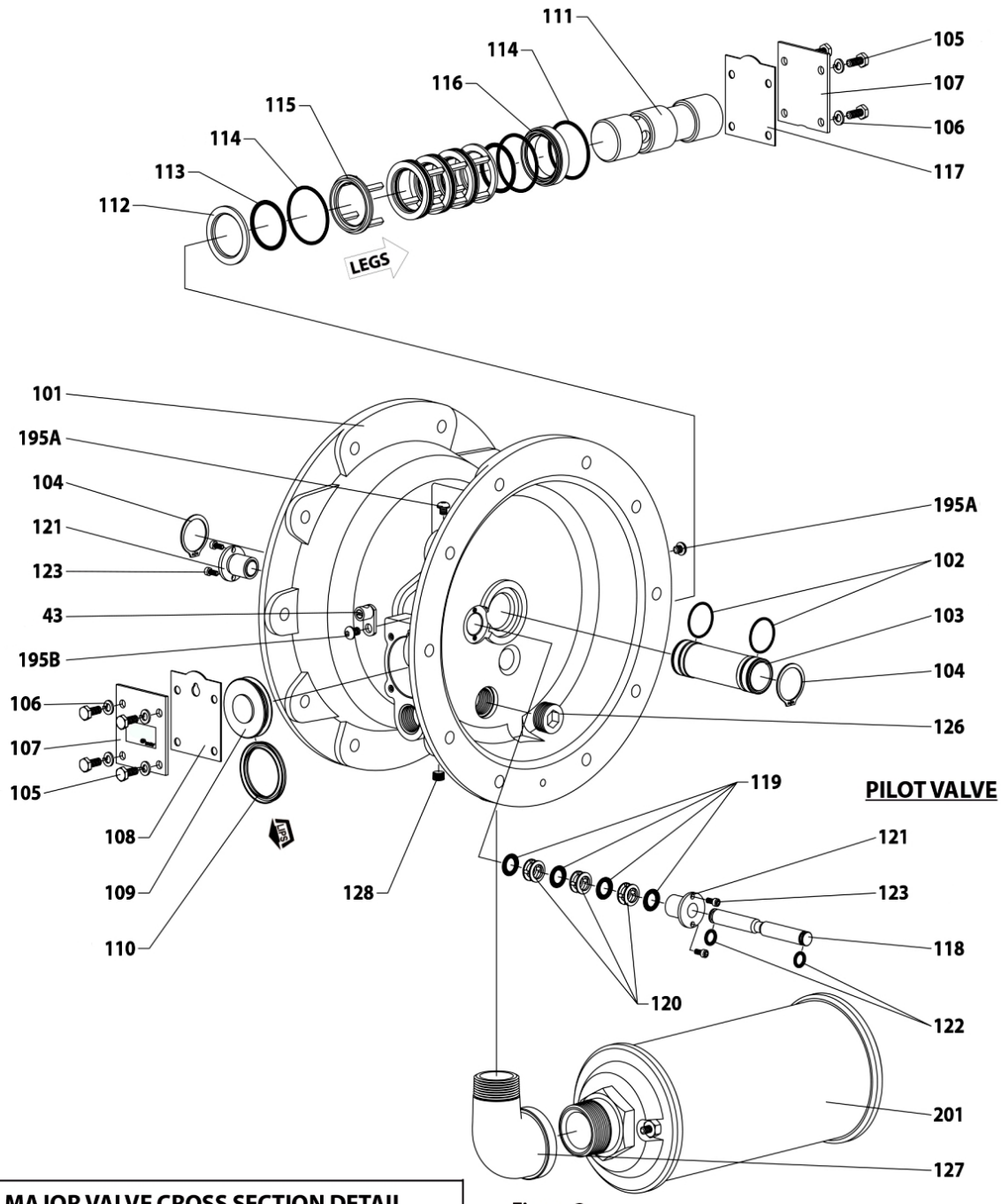


Figure 3

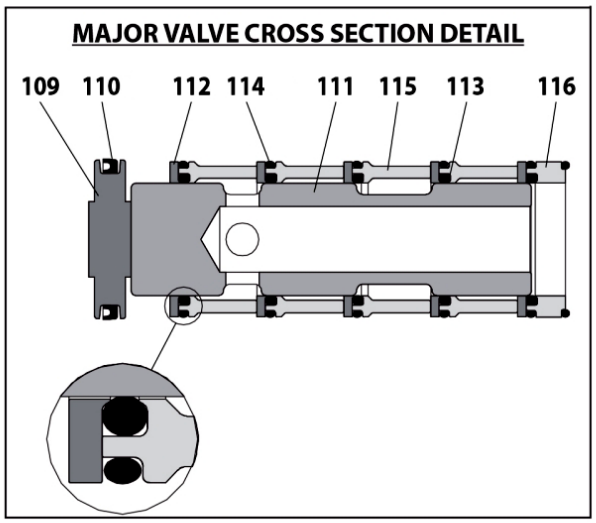


Figure 4

Parts List N66625X-XXX-C Air Motor Section

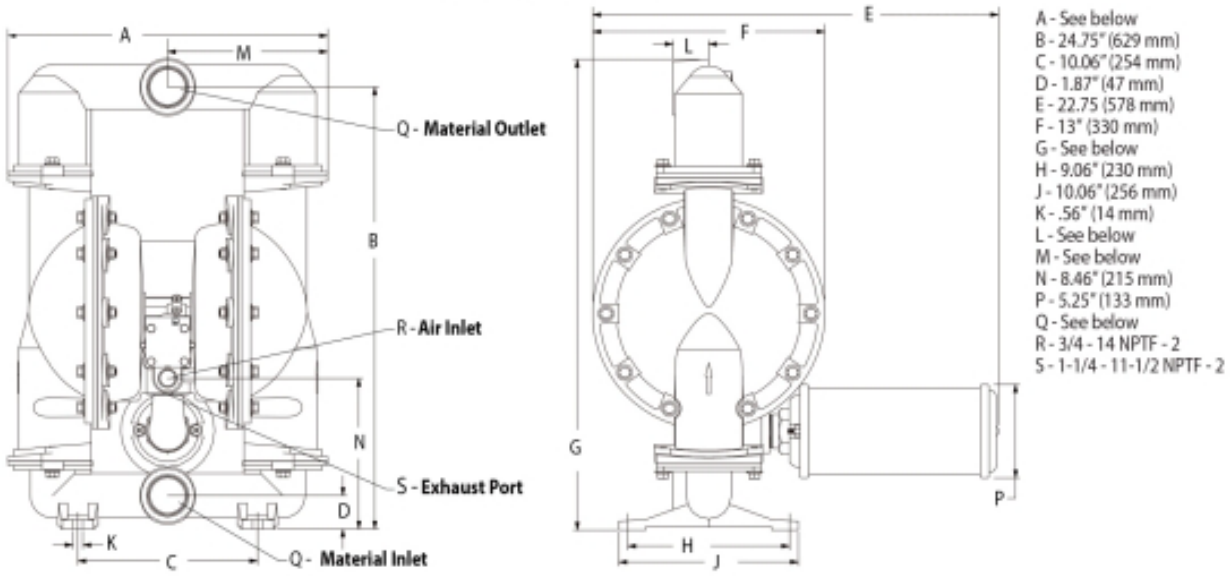
Item	Part Number	Description	Qty	Mtl
N66625X-XXX-C Air Motor Parts List				
101	N96374	Center Section	1	[A]
102	NY325-24	O-Ring	2	[B]
103	N94528	Pilot Sleeve	1	[D]
104	NY145-26	Retaining Ring	2	[C]
105	N93860	Screw / Lockwasher (1/4" - 20 x 5/8")	8	[C]
105	NY6-42-T	Cap Screw (1/4" - 20 x 5/8")	8	[SS]
106	NY14-416	Lockwasher (1/4")	8	[SS]
107	N96424	Plate	2	[SS]
108	N96426	Gasket	1	[B]
109	N96422	Piston	1	[D]
110	NY186-55	U-Cup	1	[B]
111	N96421	Spool	1	[A]
112	N93251	Washer	5	[Z]
113	NY325-222	O-Ring	5	[B]
114	NY325-134	O-Ring	6	[B]
115	N93250	Spacer	4	[Z]
116	N96420	Spacer	1	[Z]
117	N96425	Gasket	1	[B]
118	N93309-2	Pilot Rod	1	[C]
119	N93075	O-Ring	2	[U]
120	N115959	Spacer	3	[Z]
121	N98723-2	Sleeve Brushing	2	[Bz]
122	N94820	O-Ring	2	[U]
123	NY154-41	Screw (#8 - 32 x 3/8")	4	[C]
126	NY227-6-L	Pipe Plug (3/4 - 14PTF x 17/32")	1	[C]
127	N96451	Pipe Fitting	1	[C]
128	NY227-2-L	Pipe Plug (1/8 - 27 PTF x 1/4")	1	[C]
195A	N94987	Button Head Screw (1/4" - 20 x 1/4")	2	[SS]
195B	N94987-1	Button Head Screw (1/4" - 20 x 3/8")	1	[SS]
201	N67389	Muffler Kit (includes item 127)	1	
	N637308	Grease Packet		

Material Code

[A] = Aluminum
[B] = Buna
[Bz] = Bronze
[C] = Carbon Steel
[D] = Acetal
[Ny] = Nylon
[Ny] = Nylon
[SS] = Stainless Steel
[U] = Polyurethane
[Z] = Zinc

Dimensional Data

N6662XX-XXX-C



A - See below
B - 24.75" (629 mm)
C - 10.06" (254 mm)
D - 1.87" (47 mm)
E - 22.75 (578 mm)
F - 13" (330 mm)
G - See below
H - 9.06" (230 mm)
J - 10.06" (256 mm)
K - .56" (14 mm)
L - See below
M - See below
N - 8.46" (215 mm)
P - 5.25" (133 mm)
Q - See below
R - 3/4 - 14 NPTF - 2
S - 1-1/4 - 11-1/2 NPTF - 2

Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

Model	"A"	"G"	"L"	"M"
N6662X0-XXX-C	17.93" (455.1 mm)	26.37" (669 mm)	2" (50.8 mm)	8.87" (227.6 mm)
N6662X1-XXX-C	17.90" (454.6 mm)	26.25" (666.75 mm)	1.87" (47.6 mm)	8.93" (227.3 mm)
N6662X2-XXX-C	17.93" (455.1 mm)	26.37" (669 mm)	2" (50.8 mm)	8.87" (227.6 mm)
N6662XA-XXX-C	17.93" (455.1 mm)	26.37" (669 mm)	2" (50.8 mm)	8.87" (227.6 mm)
N6662XB-XXX-C	17.90" (454.6 mm)	26.25" (666.75 mm)	1.87" (47.6 mm)	8.93" (227.3 mm)
N6662XC-XXX-C	17.93" (455.1 mm)	26.37" (669 mm)	2" (50.8 mm)	8.87" (227.6 mm)

Model	"Q"
N666250-XXX-C	2 - 11-1/2 NPTF - 2
N666270-XXX-C	Rp 2 (2 - 11 BSP, parallel

Figure 5

Troubleshooting

Low output volume, erratic flow or no flow.

- Check air supply.
- Check for plugged outlet hose.
- Check for kinked (restrictive) outlet material hose.
- Check for kinked (restrictive) or collapsed inlet material hose.
- Check for pump cavitation – suction pipe should be sized at least as large as the inlet thread diameter of the pump for proper flow if high viscosity fluids are being pumped. Suction hose must be a non-collapsing type, capable of pulling a high volume.
- Check all joints on the inlet manifolds and suction connections. These must be air tight.
- Inspect the pump for solid objects lodged in the diaphragm chamber or the seat area.

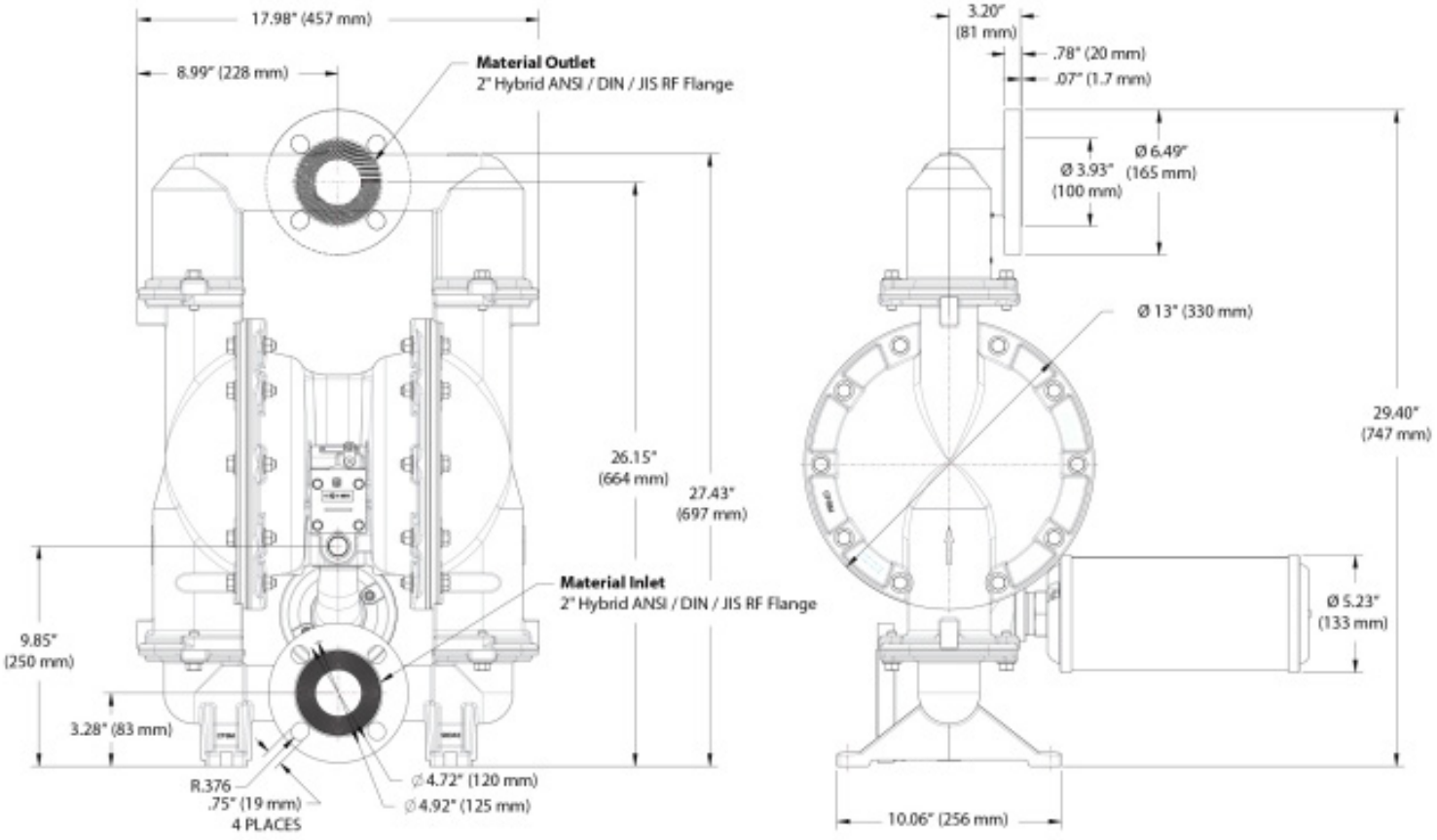
Product discharged from exhaust outlet.

- Check for diaphragm rupture.
- Check tightness of (14) diaphragm screw.

Air bubbles in product discharge.

- Check connections of suction plumbing.
- Check "O" rings between intake manifold and fluid caps.
- Check tightness of (14) diaphragm screw.

Dimensional Data



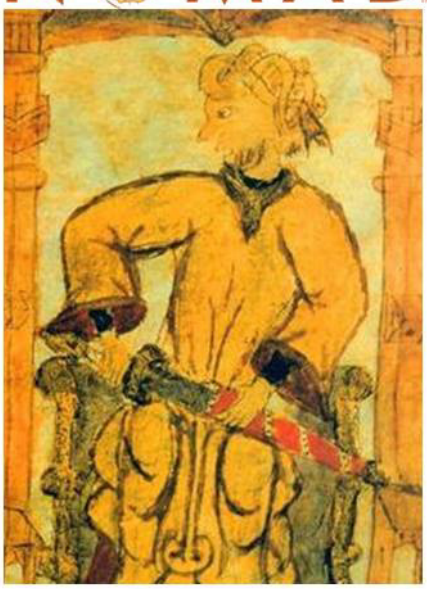
Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

Figure 6

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