NOMAD™

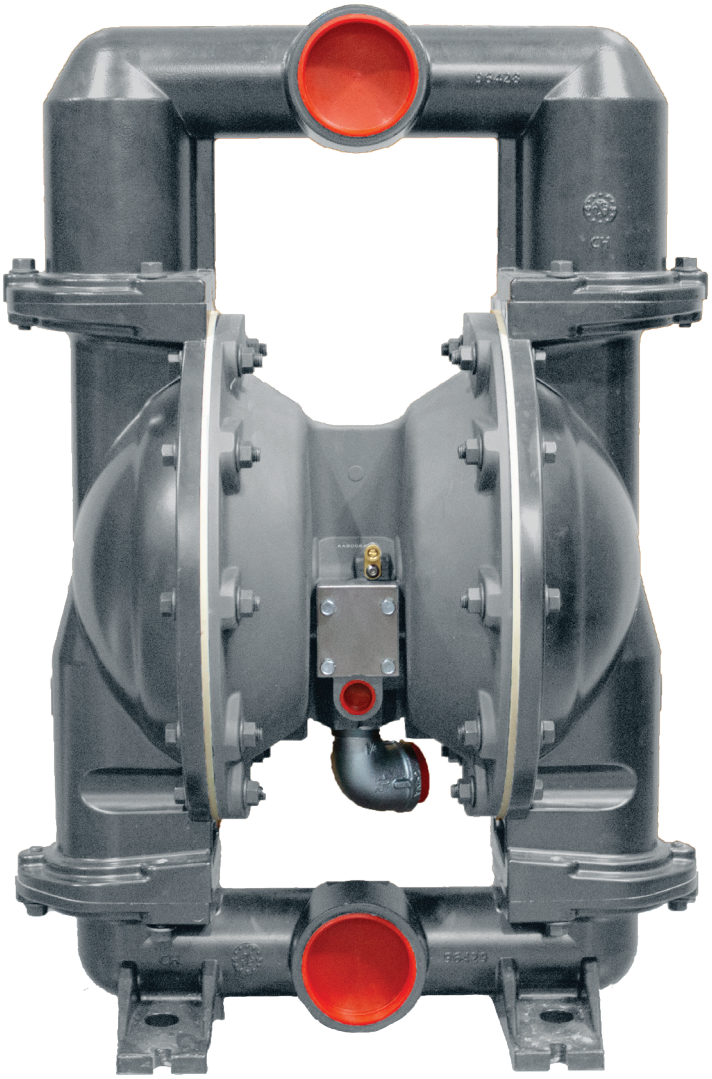
PUMPS • PARTS • PASSION

MODEL: N66630X-XXX-C Metallic

Assembly, Installation and Operation Manual

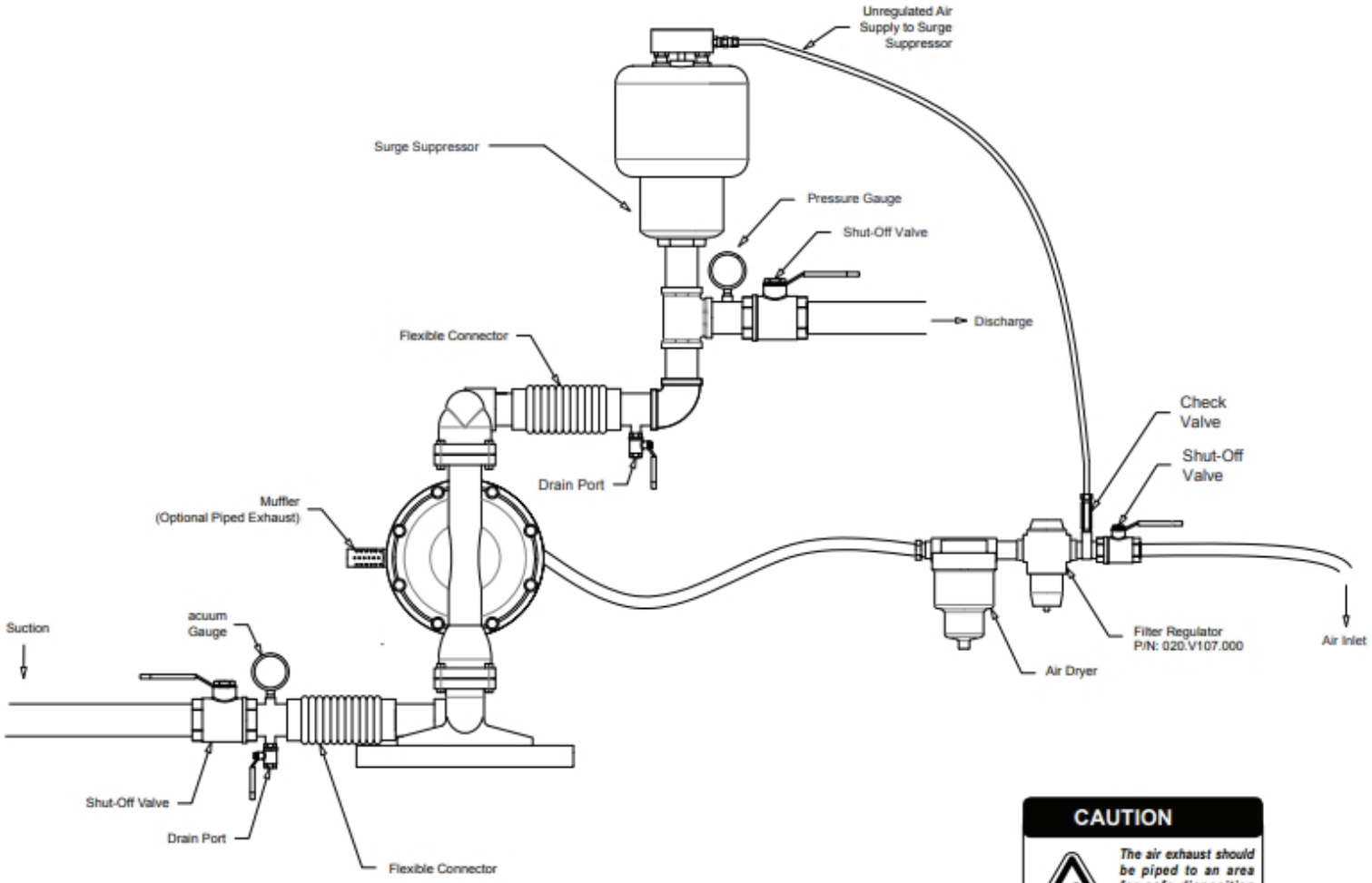
ALUMINUM AND STAINLESS STEEL

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.

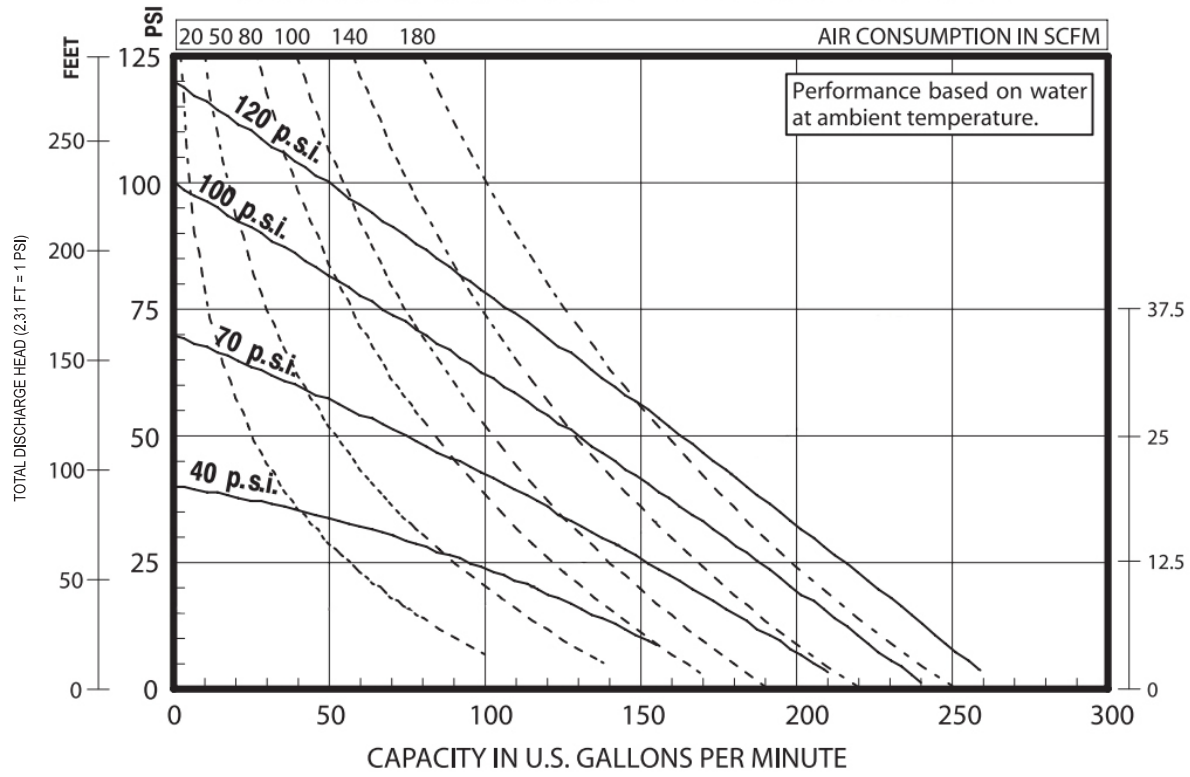
Air Line Moisture
Water in the compressed air supply may cause icing or freezing of the exhaust air, causing the pump to cycle erratically or stop operating. Water in the air supply can be reduced by using a point-of-use air dryer.

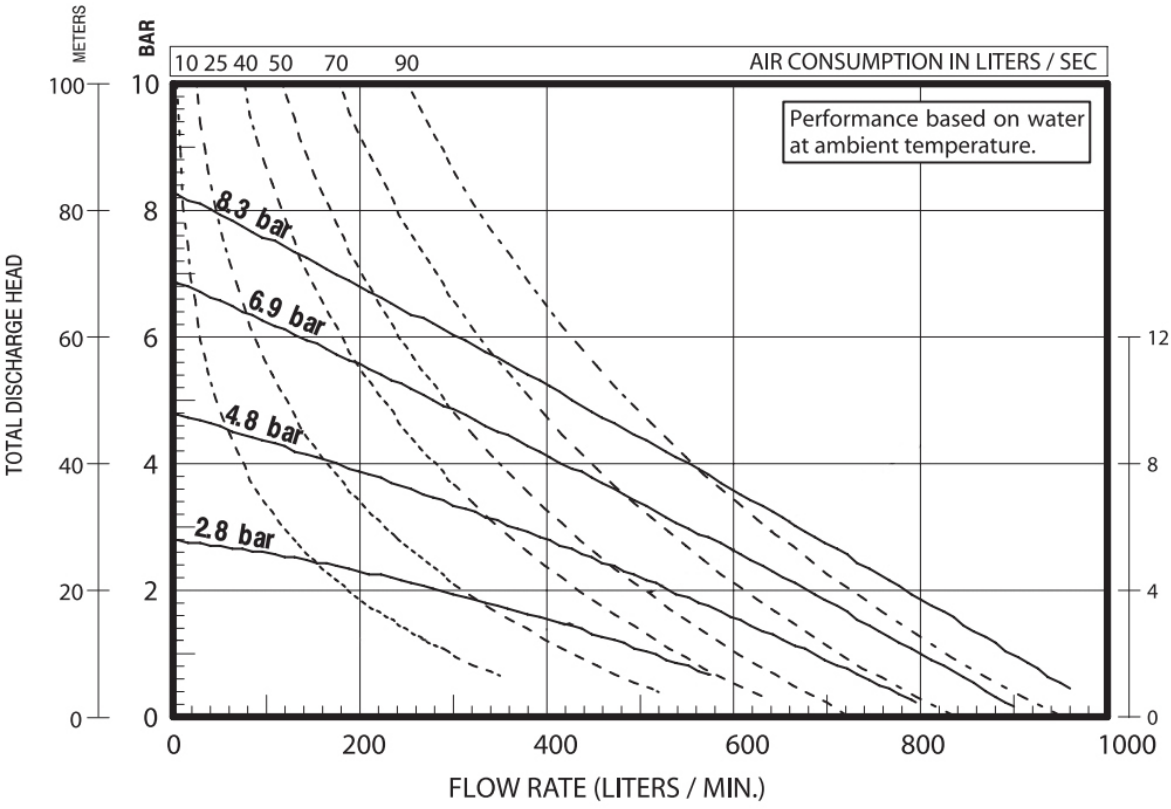
Air Inlet And Priming
To start the pump, slightly open the air shut-off valve. After the pump primes, the air valve can be opened to increase air flow as desired. If opening the valve increases cycling rate, but does not increase the rate of flow, cavitation has occurred. The valve should be closed slightly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

Preformance Curves

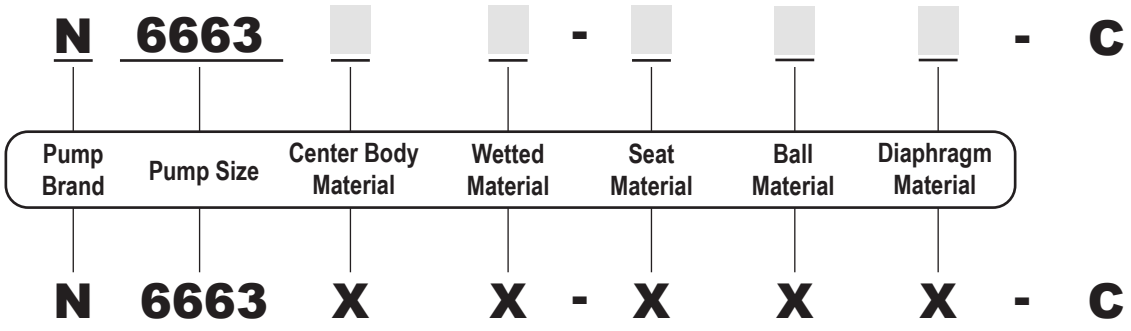
PERFORMANCE CURVES

N66630X-XXX-C 3” Metallic Pump





Explanation of Pump Nomenclature



Pump Brand:

NOMAD

Pump Size:

3”

Pump Center Body Material:

0 - Aluminum

Wetted Material:

0 - Aluminum

1 - Stainless Steel

Seat Material:

1 - Aluminum

2 - Stainless Steel (316)

9 - Hytrel

E - Santoprene

G - Buna

Ball Material:

2 - Buna

4 - PTFE

C - Hytrel

E - Santoprene

Diaphragm Material:

2 - Buna

4 - PTFE / Santoprene

9 - Hytrel

B - Santoprene

Parts List N66630X-XXX-C Fluid Section

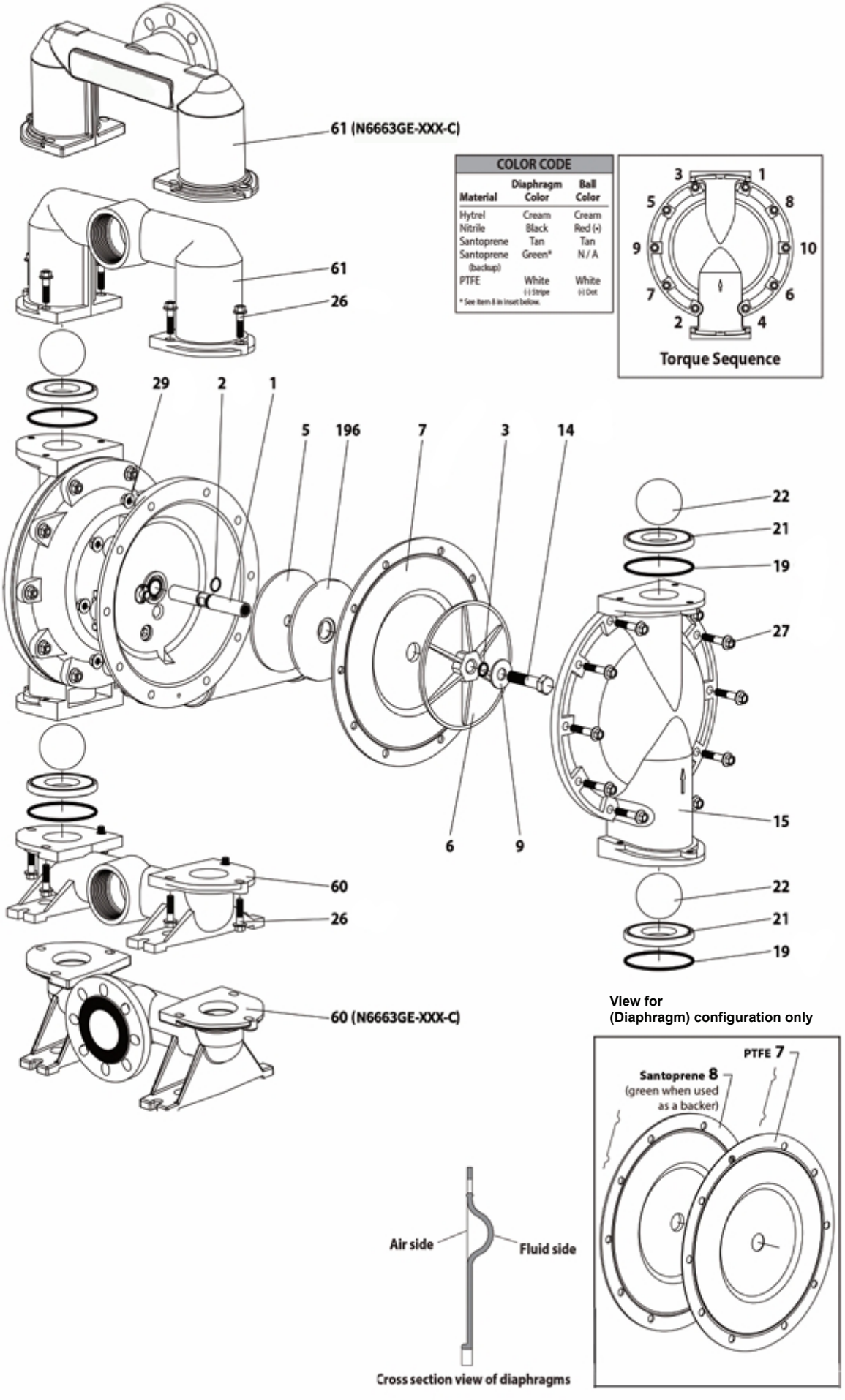


Figure 2

Parts List N66630X-XXX-C Fluid Section

Item	Part Number	Description	Qty	Mtl	Item	Part Number	Description	Qty	Mtl
N666300-XXX-C Pump Parts List Aluminum					N666301-XXX-C Pump Parts List Stainless Steel				
1	N96474	Rod	1	[C]	1	N96474	Rod	1	[C]
2	NY330-117	O-Ring	1	[B]	2	NY330-117	O-Ring	1	[B]
3	NY325-210	O-Ring	2	[B]	3	NY325-210	O-Ring	2	[B]
3	NY328-210	O-Ring	2	[T]	3	NY328-210	O-Ring	2	[T]
3	NY327-210	O-Ring	2	[V]	3	NY327-210	O-Ring	2	[V]
5	N94831-2	Inner Piston	2	[C]	5	N94831-2	Inner Piston	2	[C]
6	N94802	Outer Piston	2	[A]	6	N94803	Outer Piston	2	[SS]
7	N96475-G	Diaphragm	2	[B]	7	N96475-G	Diaphragm	2	[B]
7	N96476-T	Diaphragm	2	[T]	7	N96476-T	Diaphragm	2	[T]
7	N96475-C	Diaphragm	2	[H]	7	N96475-C	Diaphragm	2	[H]
7	N96475-A	Diaphragm	2	[Sp]	7	N96475-A	Diaphragm	2	[Sp]
8	N96477-A	Backup Diaphragm	2	[Sp]	8	N96477-A	Backup Diaphragm	2	[Sp]
9	NY13-12-T	Washer	2	[SS]	9	NY13-12-T	Washer	2	[SS]
14	NY5-134-T	Screw	2	[SS]	14	NY5-134-T	Screw	2	[SS]
15	N96430	Fluid Cap	2	[A]	15	N96650	Fluid Cap	2	[SS]
19	NY325-350	O-Ring	4	[B]	19	NY325-350	O-Ring	4	[B]
19	NY328-350	O-Ring	4	[T]	19	NY328-350	O-Ring	4	[T]
19	NY327-350	O-Ring	4	[V]	19	NY327-350	O-Ring	4	[V]
Seat Options N666300-XXX-C					Seat Options N666301-XXX-C				
21					21				
1XX	N95674	Valve Seat	4	[A]	1XX	N95674	Valve Seat	4	[A]
2XX	N94113	Valve Seat	4	[SS]	2XX	N94113	Valve Seat	4	[SS]
9XX	N94104-C	Valve Seat	4	[H]	9XX	N94104-C	Valve Seat	4	[H]
EXX	N94104-A	Valve Seat	4	[Sp]	EXX	N94104-A	Valve Seat	4	[Sp]
GXX	N94104-G	Valve Seat	4	[B]	GXX	N94104-G	Valve Seat	4	[B]
Ball Options N666300-XXX-C					Ball Options N666301-XXX-C				
22					22				
X2X	N94103-G	Valve Ball	4	[B]	X2X	N94103-G	Valve Ball	4	[B]
X4X	N94103-T	Valve Ball	4	[T]	X4X	N94103-T	Valve Ball	4	[T]
XCX	N94103-C	Valve Ball	4	[H]	XCX	N94103-C	Valve Ball	4	[H]
XEX	N94103-A	Valve Ball	4	[SP]	XEX	N94103-A	Valve Ball	4	[SP]
26	N94412-1	Screw (M12 x 1.75 - 6g x 45 mm)	12	[C]	26	N94412-1	Screw (M12 x 1.75 - 6g x 45 mm)	12	[C]
27	N94991-1	Screw (M12 x 1.75 - 6g x 60 mm)	20	[C]	27	N94991-1	Screw (M12 x 1.75 - 6g x 60 mm)	20	[C]
29	N95053-1	Nut (M12 x 1.75 -6h)	20	[C]	29	N95053-1	Nut (M12 x 1.75 -6h)	20	[C]
43	N93004	Ground Lug	1	[Co]	43	N93004	Ground Lug	1	[Co]
60	N96429-1	Inlet Manifold	1	[A]	60	N96654-1	Inlet Manifold	1	[SS]
61	N96428-1	Discharge Manifold	1	[A]	61	N96649-1	Discharge Manifold	1	[SS]
196	N94631	Cushion	2	[Sp]	196	N94631	Cushion	2	[Sp]

Material Code

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

Parts List N66630X-XXX-C Air Motor Section

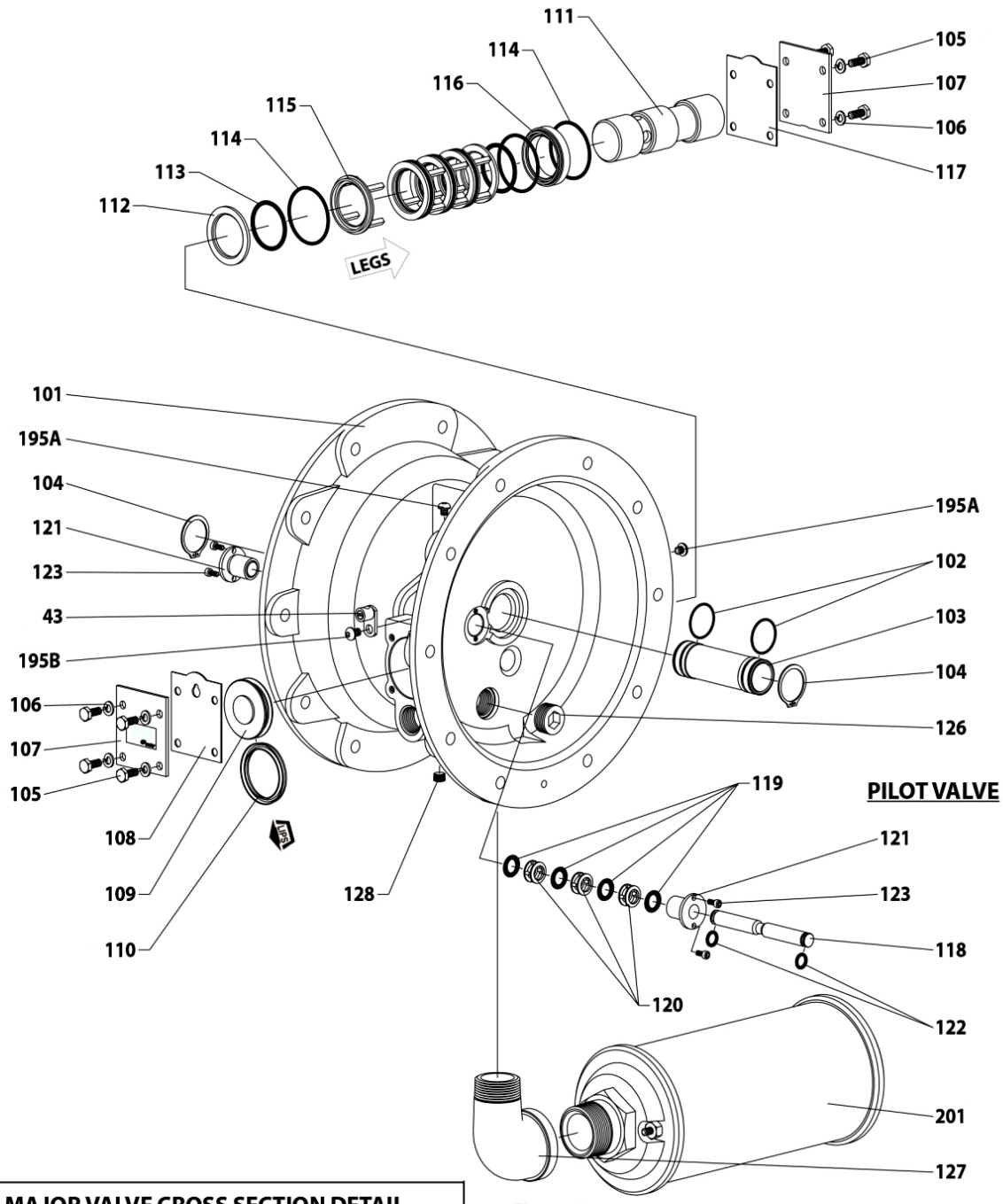


Figure 3

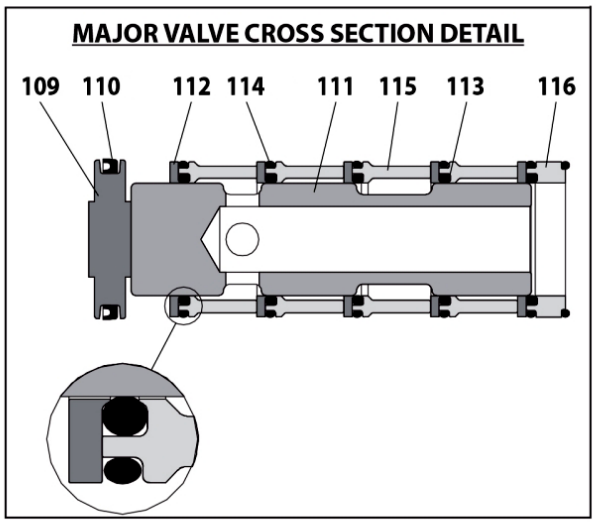


Figure 4

Parts List N66630X-XXX-C Air Motor Section

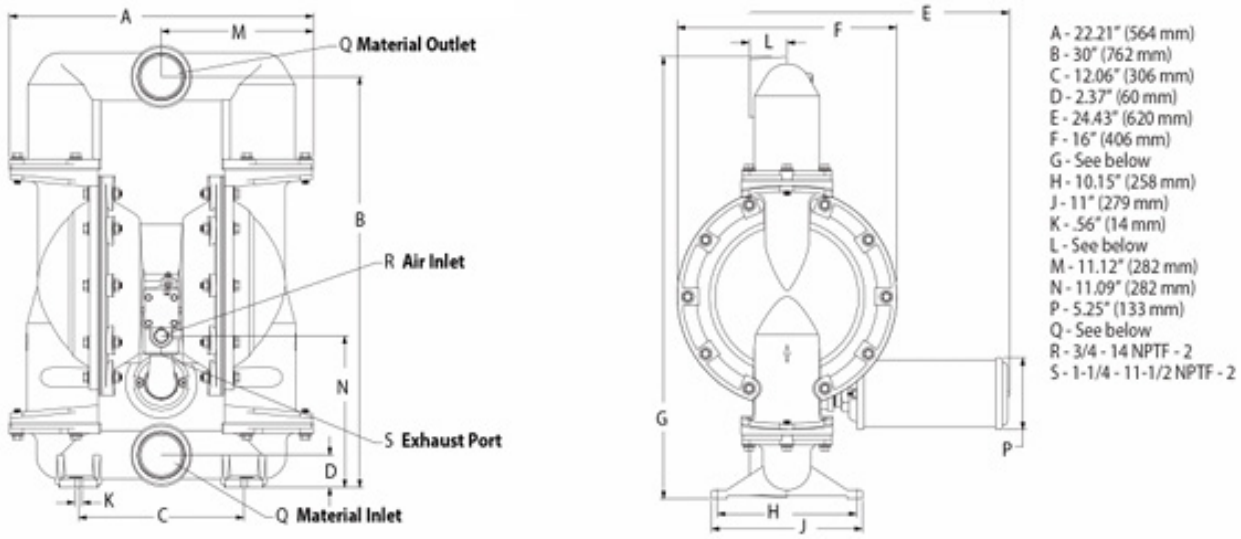
Item	Part Number	Description	Qty	Mtl
N66630X-XXX-C Air Motor Parts List				
101	N98357-2	Center Section	1	[A]
102	NY325-24	O-Ring	2	[B]
103	N94528	Pilot Sleeve	1	[D]
104	NY145-26	Retaining Ring	2	[C]
105	NY6-42-T	Cap Screw (1/4" - 20 x 5/8")	8	[SS]
106	NY14-416-T	Lockwasher (1/4")	8	[SS]
107	N96424	Plate	2	[SS]
108	N96426	Gasket (with notch)	1	[B/NY]
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/NY]
118	N93309-2	Pilot Rod	1	[C]
119	N93075	O-Ring	4	[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 (1-1/4 - 11-1/2 NPT x 1 -1/2 -11-1/2 NPT)	1	[C]
128	NY227-2-L	Pipe Plug (1/8-27 N.P.T. 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	N93139	Muffler	1	[P]
		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

N66630X-XXX-C



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

Model	"G"	"L"	Model	"G"	"L"
N6663X0-XXX-C	32.28" (820 mm)	2.75" (70 mm)	N6663XA-XXX-C	32.28" (820 mm)	2.75" (70 mm)
N6663X1-XXX-C	32.18" (817 mm)	2.62" (67 mm)	N6663XB-XXX-C	32.18" (817 mm)	2.62" (67 mm)
N6663X2-XXX-C	32.28" (820 mm)	2.75" (70 mm)	N6663XC-XXX-C	32.28" (820 mm)	2.75" (70 mm)

Model	"Q"
N666300-XXX-C	3 - 8 NPTF - 2
N666320-XXX-C	Rp 3 (3 - 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.

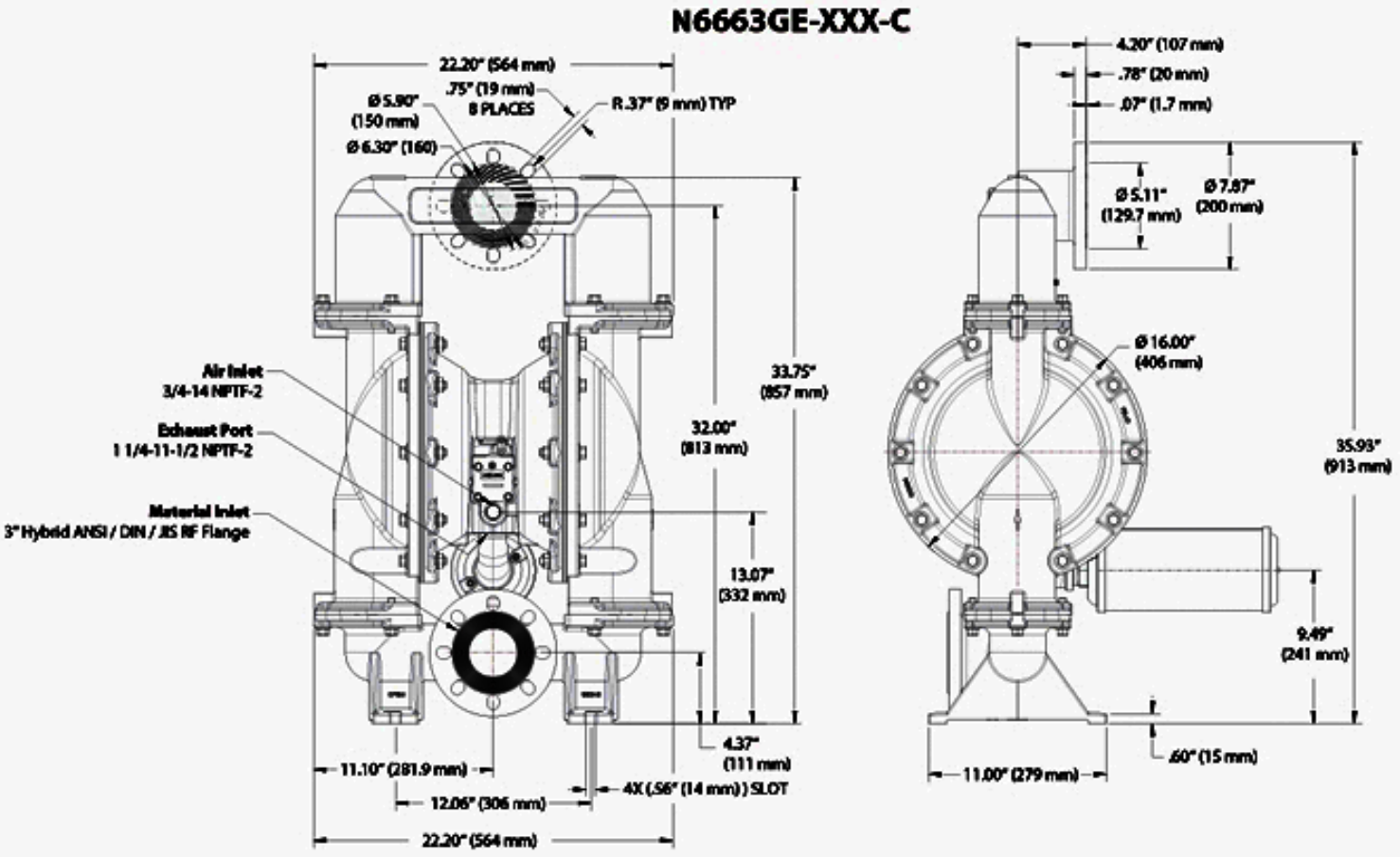
Product discharged from exhaust outlet.

- 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



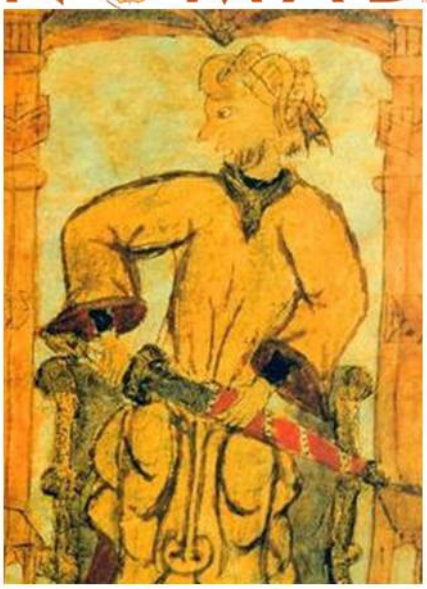
Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

Figure 6

JDA Global LLC

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