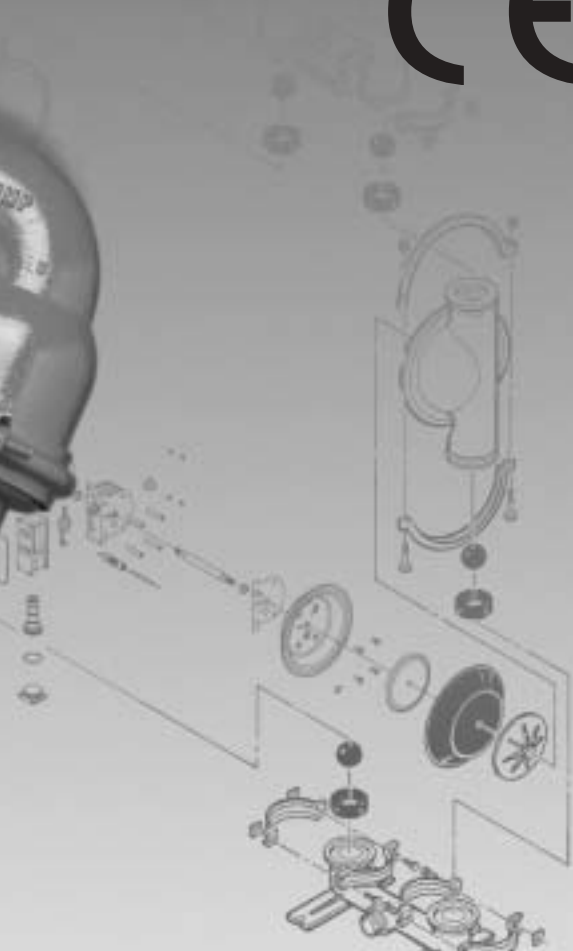


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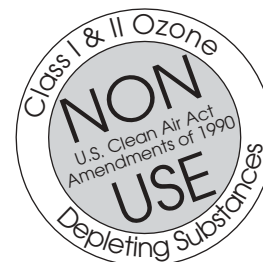


PROFLO™
PROGRESSIVE PUMP TECHNOLOGY

Metal Pumps

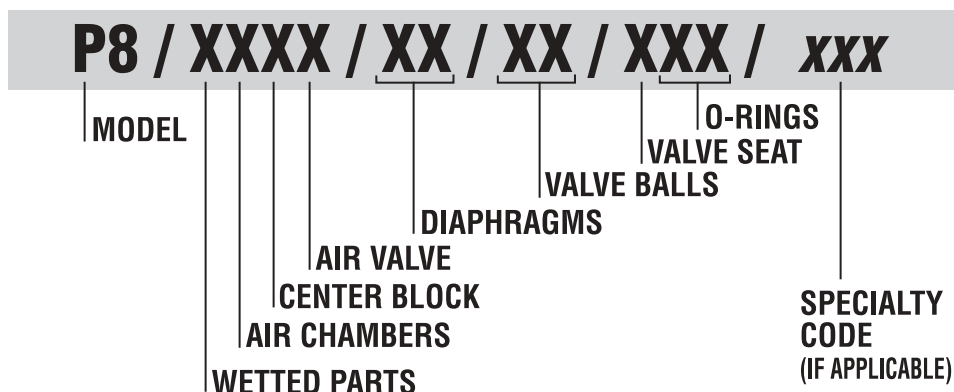
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SECTION 1

WILDEN PUMP DESIGNATION SYSTEM



MODEL P8 METAL MATERIAL CODES

WETTED PARTS

A = ALUMINUM
H = HASTELLOY®
S = STAINLESS STEEL
W = CAST IRON

AIR CHAMBERS

A = ALUMINUM
C = PFA COATED
S = STAINLESS STEEL
Y = HALAR COATED
ALUMINUM

CENTER BLOCK

P = POLYPROPYLENE

AIR VALVE

P = POLYPROPYLENE

DIAPHRAGMS

BN = BUNA-N (Red Dot)
EL = TETRA-FLEX® PTFE
Laminate w/ Nordel® Backing
FG = SANIFLEX™ (Cream)
ND = NORDEL® (Blue Dot)
NE = NEOPRENE (Green Dot)
NT = TETRA-FLEX® PTFE
Laminate w/ Neoprene Backing
PU = POLYURETHANE (Clear)
TF = TEFLON® PTFE
VT = VITON® (Silver or White Dot)
WF = WIL-FLEX™ (Orange)

ULTRA-FLEX™ DIAPHRAGMS

UB = BUNA-N (Red Dot)
UE = NORDEL® (Blue Dot)
UN = NEOPRENE (Green Dot)
UV = VITON® (Silver or White Dot)

VALVE BALL

BN = BUNA-N (Red Dot)
FG = SANIFLEX™ (Cream)
ND = NORDEL® (Blue Dot)
NE = NEOPRENE (Green Dot)
PU = POLYURETHANE (Clear)
TF = TEFLON® PTFE (White)
VT = VITON® (Silver or White Dot)
WF = WIL-FLEX™ (Orange)

VALVE SEAT

A = ALUMINUM
BN = BUNA-N (Red Dot)
FG = SANIFLEX™ (Cream)
H = HASTELLOY®
M = MILD STEEL
ND = NORDEL® (Blue Dot)
NE = NEOPRENE (Green Dot)
PU = POLYURETHANE (Clear)
S = STAINLESS STEEL
VT = VITON® (Silver or White Dot)
WF = WIL-FLEX™ (Orange)

VALVE SEAT O-RING

FS = FLUORO-SEAL™
TF = TEFLON® PTFE

NOTE: MOST ELASTOMERIC MATERIALS USE COLORED DOTS FOR IDENTIFICATION.

THE WILDEN PUMP — HOW IT WORKS

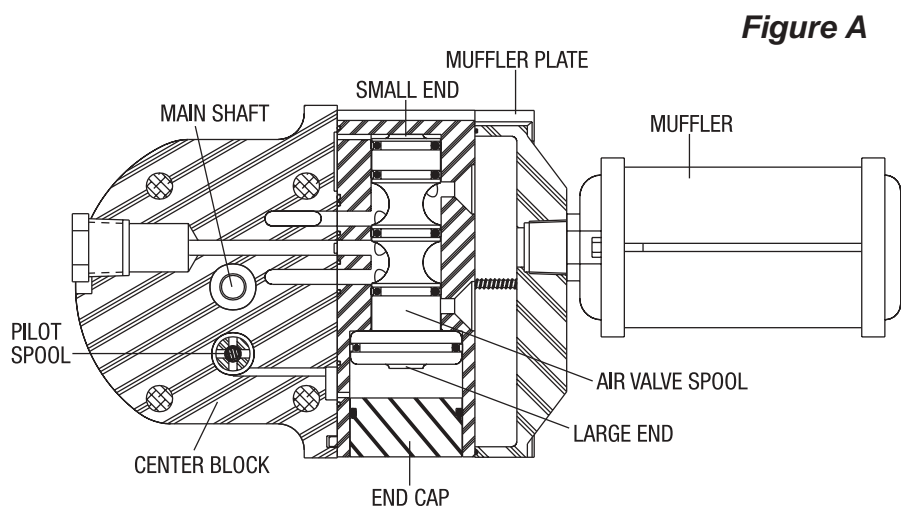
RIGHT STROKE

The diagram illustrates the Mid Stroke phase of a four-stroke internal combustion engine. The piston is positioned in the middle of the cylinder, moving upwards. The intake valve (labeled 'INLET' at the bottom) is closed, and the exhaust valve (labeled 'OUTLET' at the top) is also closed. The combustion chamber is filled with a mixture of fuel and air, which is being compressed by the upward movement of the piston. The diagram shows the piston rings (labeled 'A' and 'B') and the valves (labeled 'OPEN' and 'CLOSED'). The piston is shown in the middle of its stroke, with the combustion chamber filled with a mixture of fuel and air. The diagram is labeled 'MID STROKE' at the bottom.

The diagram illustrates the 'LEFT STROKE' of a double-acting hydraulic cylinder. The cylinder is shown in cross-section with a central piston and a horizontal rod extending to the left. The rod is connected to a piston rod that passes through the cylinder wall. The cylinder is divided into two main chambers: Chamber A on the right and Chamber B on the left. Chamber A is connected to the 'INLET' port at the bottom, which is labeled 'OPEN'. Chamber B is connected to the 'OUTLET' port at the top, which is labeled 'CLOSED'. The piston is shown moving to the left, compressing the fluid in Chamber B and forcing it out through the outlet. The fluid in Chamber A is being pushed into the inlet. The diagram also shows the internal valve mechanism, including a check valve and a relief valve, which are shown in their closed positions during this stroke.

FIGURE 3 At completion of the stroke, the air valve again redirects air to the back side of diaphragm A, which starts diaphragm B on its exhaust stroke. As the pump reaches its original starting point, each diaphragm has gone through one exhaust and one discharge stroke. This constitutes one complete pumping cycle. The pump may take several cycles to completely prime depending on the conditions of the application.


PRO-FLO® AIR DISTRIBUTION SYSTEM OPERATION — HOW IT WORKS




The Pro-Flo™ patented air distribution system incorporates three moving parts: the air valve spool, the pilot spool, and the main shaft/diaphragm assembly. The heart of the system is the air valve spool and air valve. As shown in Figure A, this valve design incorporates an unbalanced spool. The smaller end of the spool is pressurized continuously, while the large end is alternately pressurized then exhausted to move the spool. The spool directs pressurized air to one air chamber while exhausting the other. The air causes the main shaft/diaphragm assembly to shift to one side — discharging liquid on that side and pulling liquid in on the other side. When the shaft reaches the end of its stroke, the inner piston actuates the pilot spool, which pressurizes and exhausts the large end of the air valve spool. The repositioning of the air valve spool routes the air to the other air chamber.

SECTION 3


WILDEN MODEL P8 METAL CAUTIONS – READ FIRST!


 **CAUTION:** Do not apply compressed air to the exhaust port — pump will not function.


 **CAUTION:** Do not over-lubricate air supply — excess lubrication will reduce pump performance. Pump is pre-lubed.


ELASTOMER TEMPERATURE LIMITS:


Acetal	-28.9°C to 82.2°C	-20°F to 180°F
Neoprene	-17.7°C to 93.3°C	0°F to 200°F
Buna-N	-12.2°C to 82.2°C	10°F to 180°F
Nordel®	-51.1°C to 137.8°C	-60°F to 280°F
Viton®	-40°C to 176.7°C	-40°F to 350°F
Wil-Flex™	-40°C to 107.2°C	-40°F to 225°F
Saniflex™	-28.9°C to 104.4°C	-20°F to 220°F
Polyurethane	-12.2°C to 65.6°C	10°F to 150°F
Teflon® PTFE	4.4°C to 104.4°C	40°F to 220°F
Tetra-Flex® PTFE w/ Neoprene	4.4°C to 107.2°C	40°F to 225°F
Tetra-Flex® PTFE w/ Viton®	4.4°C to 176.6°C	40°F to 350°F
Tetra-Flex® PTFE w/ Nordel®	-10°C to 137°C	14°F to 280°F


 **CAUTION:** When choosing pump materials, be sure to check the temperature limits for all wetted components. Example: Viton® has a maximum limit of 176.7°C (350°F) but polypropylene has a maximum limit of only 79°C (175°F).


 **CAUTION:** Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult Chemical Resistance Guide (E-4) for chemical compatibility and temperature limits.


 **WARNING:** Prevention of static sparking — If static sparking occurs, fire or explosion could result. Pump, valves, and containers must be grounded to a proper grounding point when handling flammable fluids and whenever discharge of static electricity is a hazard.


 **CAUTION:** Do not exceed 8.6 bar (125 psig) air supply pressure.


 **CAUTION:** The process fluid and cleaning fluids must be chemically compatible with all wetted pump components (see E-4).


 **CAUTION:** Pumps should be thoroughly flushed with water before installing into process lines. FDA and USDA approved pumps should be cleaned and/or sanitized before being used.


 **CAUTION:** Always wear safety glasses when operating pump. If diaphragm rupture occurs, material being pumped may be forced out air exhaust.


 **CAUTION:** Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from pump. Disconnect all intake, discharge and air lines. Drain the pump by turning it upside down and allowing any fluid to flow into a suitable container.


 **CAUTION:** Blow out air line for 10 to 20 seconds before attaching to pump to make sure all pipeline debris is clear. Use an in-line air filter. A 5 micron air filter is suggested.

 **NOTE:** When installing Teflon® diaphragms, it is important to tighten outer pistons simultaneously (turning in opposite directions) to ensure tight fit. (See torque specifications in Section 8C.)

 **NOTE:** P8 Cast Iron pumps come standard from the factory with expanded Teflon® gaskets installed in the diaphragm bead of the liquid chamber. Teflon® gaskets cannot be re-used. Consult PS-TG for installation instructions during reassembly.

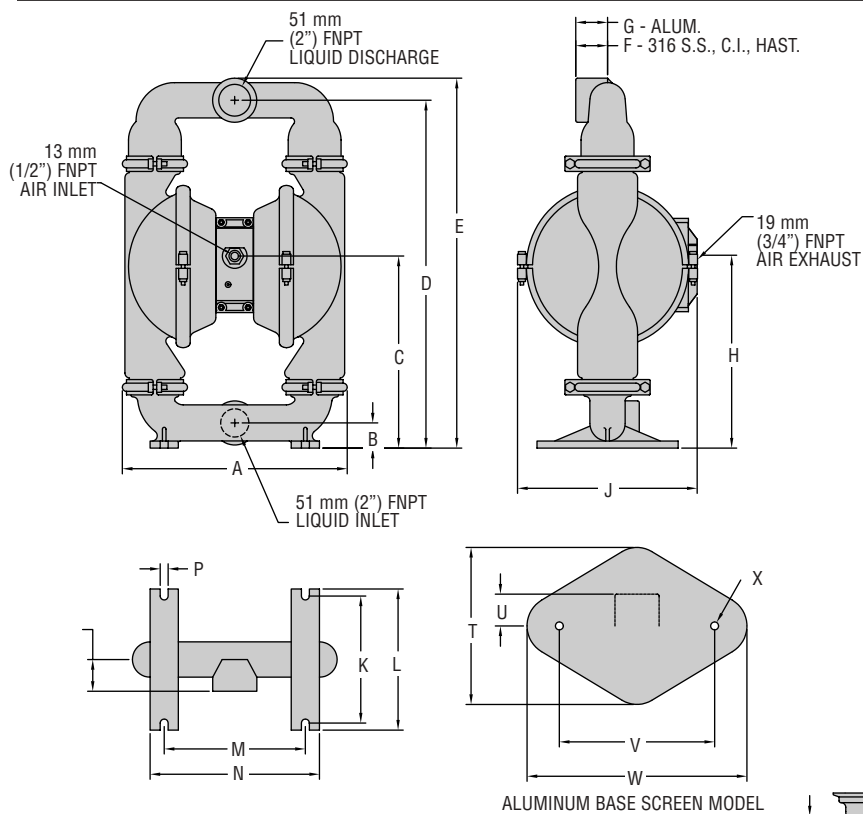
 **NOTE:** Before starting disassembly, mark a line from each liquid chamber to its corresponding air chamber. This line will assist in proper alignment during reassembly.

 **CAUTION:** The P8 Pro-Flo® is not submersible. If your application requires the pump to be submersed, the T8 model can be used.

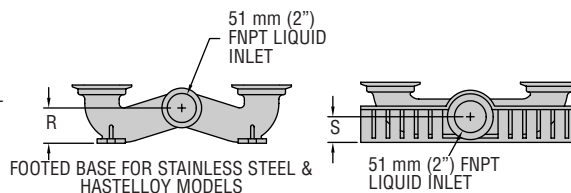
 **CAUTION:** Tighten all hardware prior to installation.

SECTION 4A

DIMENSIONAL DRAWING MODEL P8 METAL PUMP

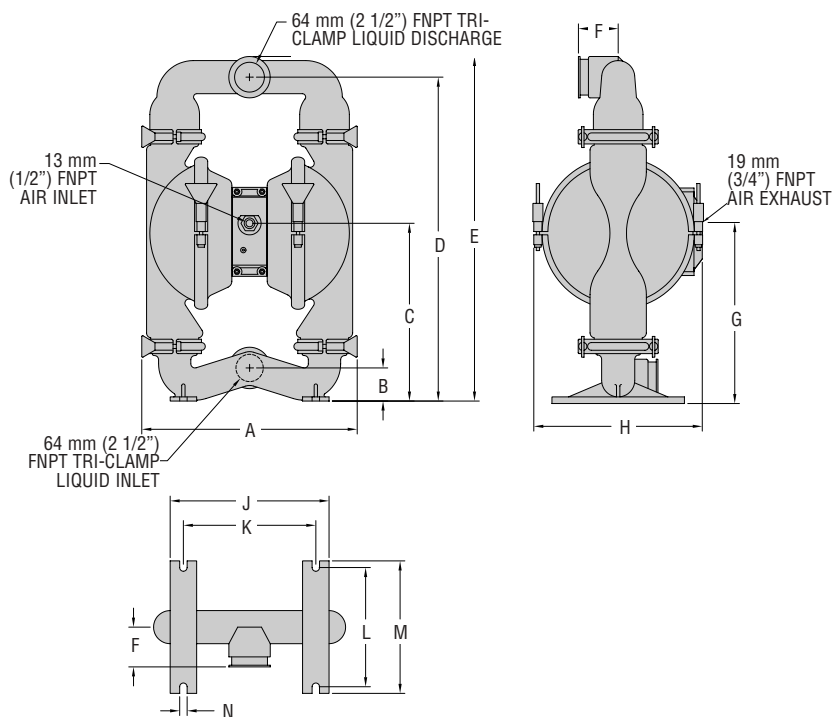


DIMENSIONS – P8 METAL		
ITEM	METRIC (mm)	STANDARD (inch)
A	404	15.9
B	48	1.9
C	356	14.0
D	630	24.8
E	669	26.3
F	58	2.3
G	61	2.4
H	348	13.7
J	343	13.5
K	229	9.0
L	254	10.0
M	257	10.1
N	312	12.3
P	15	0.6
R	64	2.5
S	51	2.0
T	282	11.1
U	71	2.8
V	279	11.0
W	386	15.2
X	15 DIA.	0.6 DIA.



SECTION 4B

DIMENSIONAL DRAWING MODEL P8 METAL SANIFLO^{FDA} PUMP



DIMENSIONS – P8 SANIFLO ^{FDA}		
ITEM	METRIC (mm)	STANDARD (inch)
A	434	17.1
B	64	2.5
C	348	13.7
D	625	24.6
E	666	26.2
F	76	3.0
G	343	13.5
H	345	13.6
J	305	12.0
K	254	10.0
L	229	9.0
M	254	10.0
N	15	0.6

SECTION 5A

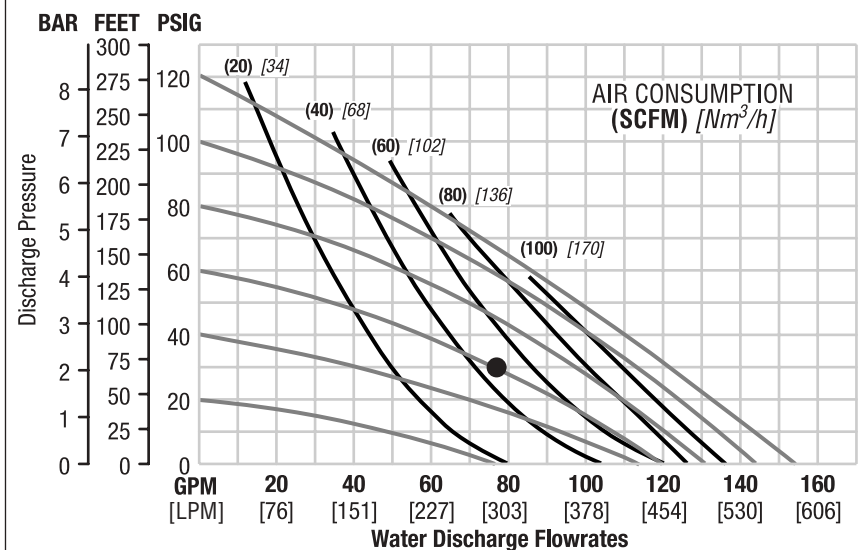
PERFORMANCE CURVES MODEL P8 METAL RUBBER-FITTED

Height.....669 mm (26.3")
Width.....404 mm (15.9")
Depth.....343 mm (13.5")
Ship WeightAluminum 32 kg (70 lbs.)
316 Stainless Steel 51 kg (112 lbs.)
Cast Iron 47 kg (104 lbs.)
Hastelloy 52 kg (114 lbs.)
Air Inlet13 mm (½")
Inlet51 mm (2")
Outlet.....51 mm (2")
Suction Lift7.3 m Dry (24.0')
9.5 m Wet (31.0')

Displacement per
Stroke 2.99 l (.79 gal.)¹
Max. Flow Rate..... 588 lpm (155 gpm)
Max. Size Solids6.35 mm (0.25")
¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 292 lpm (77 gpm) against a discharge pressure head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and 78 Nm³/h (46 scfm) air consumption.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.



Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

SECTION 5B

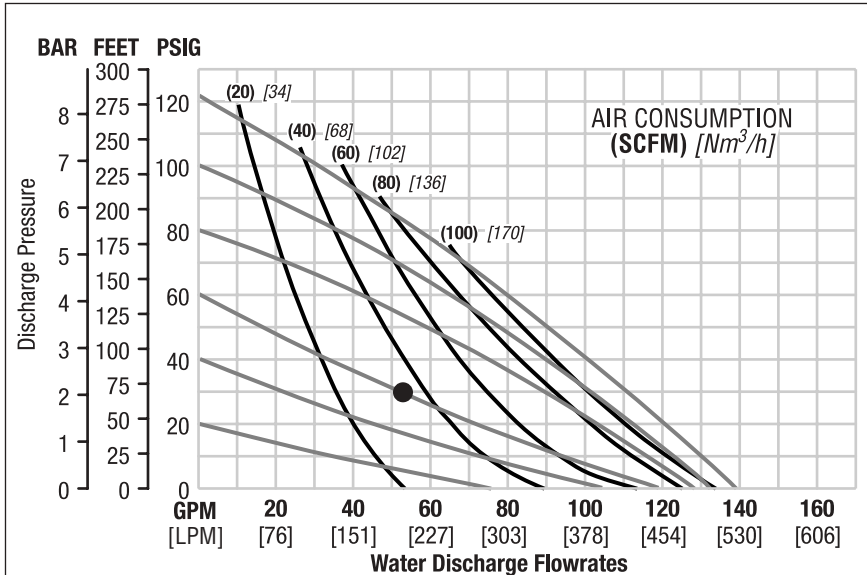
PERFORMANCE CURVES MODEL P8 METAL ULTRA-FLEX™-FITTED

Height.....669 mm (26.3")
Width.....404 mm (15.9")
Depth.....343 mm (13.5")
Ship WeightAluminum 32 kg (70 lbs.)
316 Stainless Steel 51 kg (112 lbs.)
Cast Iron 47 kg (104 lbs.)
Hastelloy 52 kg (114 lbs.)
Air Inlet13 mm (½")
Inlet51 mm (2")
Outlet.....51 mm (2")
Suction Lift4.9 m Dry (16.0')
8.8 m Wet (29.0')

Displacement per
Stroke 2.12 l (.56 gal.)¹
Max. Flow Rate.....526 lpm (139 gpm)
Max. Size Solids6.35 mm (0.25")
¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 201 lpm (53 gpm) against a discharge pressure head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and 59.5 Nm³/h (35 scfm) air consumption.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.



Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

SECTION 5C

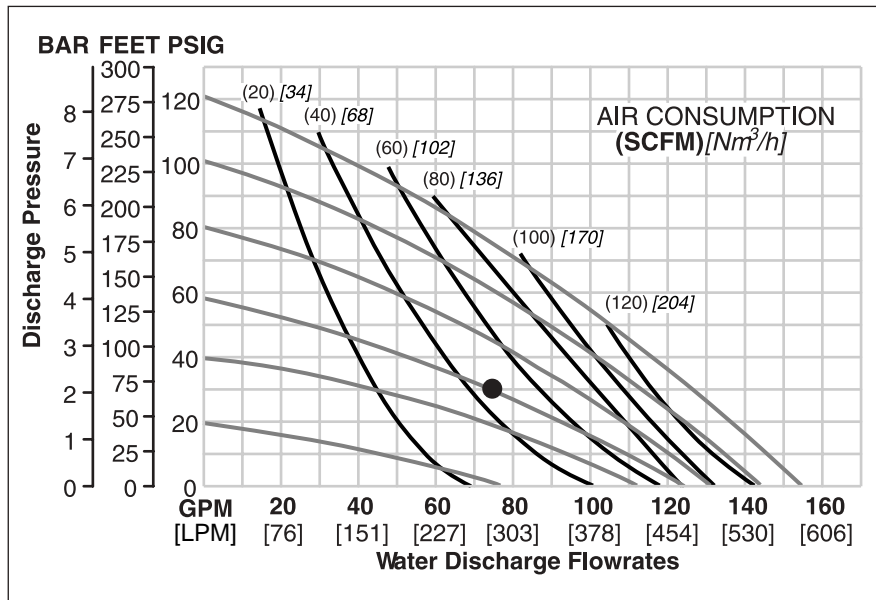
PERFORMANCE CURVES MODEL P8 METAL TPE-FITTED

Height.....669 mm (26.3")
Width.....404 mm (15.9")
Depth.....343 mm (13.5")
Ship WeightAluminum 32 kg (70 lbs.)
 316 Stainless Steel 51 kg (112 lbs.)
 Cast Iron 47 kg (104 lbs.)
 Hastelloy 52 kg (114 lbs.)
Air Inlet13 mm (½")
Inlet51 mm (2")
Outlet.....51 mm (2")
Suction Lift7.0 m Dry (23.0')
 9.5 m Wet (31.0')

Displacement per
Stroke 2.95 l (.78 gal.)¹
Max. Flow Rate.....591 lpm (156 gpm)
Max. Size Solids6.35 mm (0.25")
¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 284 lpm (75 gpm) against a discharge pressure head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and 78 Nm³/h (46 scfm) air consumption.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.



Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

SECTION 5D

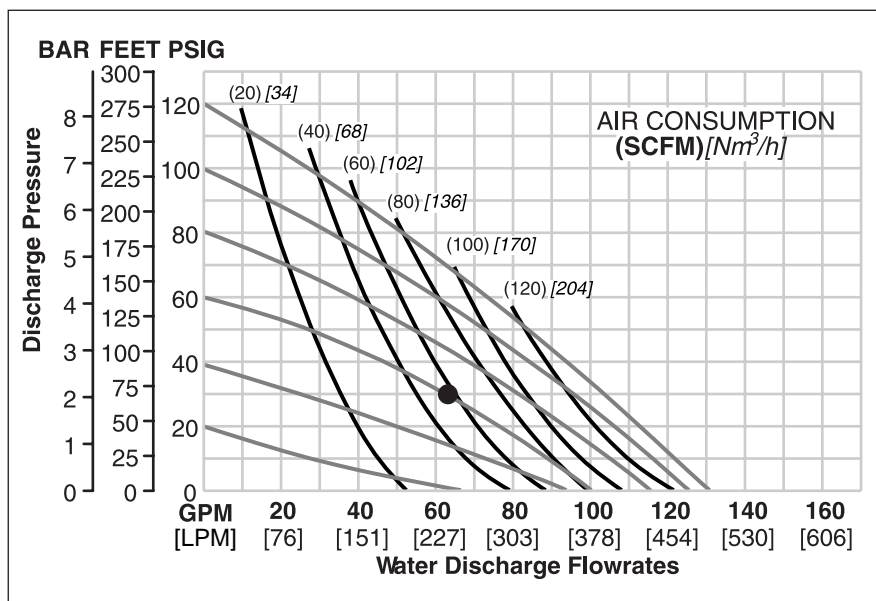
PERFORMANCE CURVES MODEL P8 METAL TEFLON®-FITTED

Height.....669 mm (26.3")
Width.....404 mm (15.9")
Depth.....343 mm (13.5")
Ship WeightAluminum 32 kg (70 lbs.)
 316 Stainless Steel 51 kg (112 lbs.)
 Cast Iron 47 kg (104 lbs.)
 Hastelloy 52 kg (114 lbs.)
Air Inlet13 mm (½")
Inlet51 mm (2")
Outlet.....51 mm (2")
Suction Lift4.6 m Dry (15.0')
 9.5 m Wet (31.0')

Displacement per
Stroke 1.67 l (.44 gal.)¹
Max. Flow Rate.....496 lpm (131 gpm)
Max. Size Solids6.35 mm (0.25")
¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 238 lpm (63 gpm) against a discharge pressure head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and 93.5 Nm³/h (55 scfm) air consumption.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.

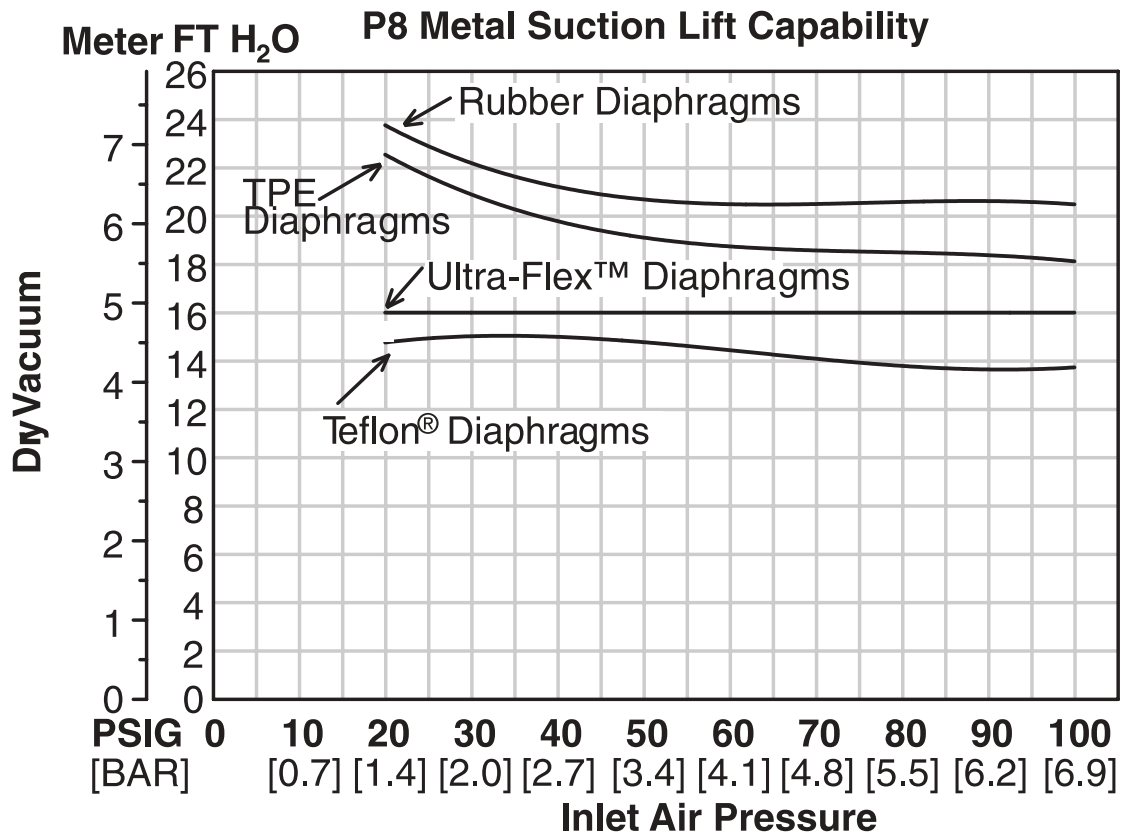


Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

SECTION 6

SUCTION LIFT CURVES & DATA



Suction lift curves are calibrated for pumps operating at 305 m (1,000') above sea level. This chart is meant to be a guide only. There are many variables which can affect your pump's operating characteristics. The number of intake and

discharge elbows, viscosity of pumping fluid, elevation (atmospheric pressure) and pipe friction loss all affect the amount of suction lift your pump will attain.

SECTION 7A

INSTALLATION

The P8 Pro-Flo™ model has a 51 mm (2") inlet and 51 mm (2") outlet and is designed for flows to 591 lpm (156 gpm). Refer to Section 5 for performance characteristics. The **P8 Metal** pump is manufactured with wetted parts of Aluminum, 316 Stainless Steel, Cast Iron, and Hastelloy. The center block of the **P8 Metal** is constructed of polypropylene. A variety of diaphragms, valve balls, valve seats and O-rings are available to satisfy temperature, chemical compatibility, abrasion and flex concerns.

The suction pipe size should be at least 51 mm (2") diameter or larger if highly viscous material is being pumped. The suction hose must be non-collapsible, reinforced type as the P8 is capable of pulling a high vacuum. Discharge piping should be at least 51 mm (2"); larger diameter can be used to reduce friction losses. It is critical that all fittings and connections are airtight or a reduction or loss of pump suction capability will result.

INSTALLATION: Months of careful planning, study, and selection efforts can result in unsatisfactory pump performance if installation details are left to chance.

Premature failure and long term dissatisfaction can be avoided if reasonable care is exercised throughout the installation process.

LOCATION: Noise, safety, and other logistical factors usually dictate where equipment will be situated on the production floor. Multiple installations with conflicting requirements can result in congestion of utility areas, leaving few choices for additional pumps.

Within the framework of these and other existing conditions, every pump should be located in such a way that six key factors are balanced against each other to maximum advantage.

ACCESS: First of all, the location should be accessible. If it's easy to reach the pump, maintenance personnel will have an easier time carrying out routine inspections and adjustments. Should major repairs become necessary, ease of access can play a key role in speeding the repair process and reducing total downtime.

AIR SUPPLY: Every pump location should have an air line large enough to supply the volume of air necessary to achieve the desired pumping rate (see Section 5). Use air pressure up to a maximum of 8.6 bar (125 psig) depending on pumping requirements.

For best results, the pumps should use a 5 micron air filter, needle valve and regulator. The use of an air filter before the pump will ensure that the majority of any pipeline contaminants will be eliminated.

SOLENOID OPERATION: When operation is controlled by a solenoid valve in the air line, three-way valves should be used. This valve allows trapped air between the valve and the pump to bleed off which improves pump performance. Pumping volume can be determined by counting the number of strokes per minute and then multiplying the figure by the displacement per stroke.

MUFFLER: Sound levels are reduced below OSHA specifications using the standard Wilden muffler. Other mufflers can be used to further reduce sound levels, but they usually reduce pump performance.

ELEVATION: Selecting a site that is well within the pump's dynamic lift capability will assure that loss-of-prime troubles will be eliminated. In addition, pump efficiency can be adversely affected if proper attention is not given to site location.

PIPING: Final determination of the pump site should not be made until the piping problems of each possible location have been evaluated. The impact of current and future installations should be considered ahead of time to make sure that inadvertent restrictions are not created for any remaining sites.

The best choice possible will be a site involving the shortest and straightest hook-up of suction and discharge piping. Unnecessary elbows, bends, and fittings should be avoided. Pipe sizes should be selected so as to keep friction losses within practical limits. All piping should be supported independently of the pump. In addition, the piping should be aligned so as to avoid placing stress on the pump fittings.

Flexible hose can be installed to aid in absorbing the forces created by the natural reciprocating action of the pump. If the pump is to be bolted down to a solid location, a mounting pad placed between the pump and the foundation will assist in minimizing pump vibration. Flexible connections between the pump and rigid piping will also assist in minimizing pump vibration. If quick-closing valves are installed at any point in the discharge system, or if pulsation within a system becomes a problem, a surge suppressor should be installed to protect the pump, piping and gauges from surges and water hammer.

If the pump is to be used in a self-priming application, be sure that all connections are airtight and that the suction lift is within the model's ability. Note: Materials of construction and elastomer material have an effect on suction lift parameters. Please refer to Section 6 for specifics.

When pumps are installed in applications involving flooded suction or suction head pressures, a gate valve should be installed in the suction line to permit closing of the line for pump service.

Pumps in service with a positive suction head are most efficient when inlet pressure is limited to 0.5–0.7 bar (7–10 psig). Premature diaphragm failure may occur if positive suction is .68 bar (10 psig) and higher.

THE MODEL P8 WILL PASS 4.8 MM (0.19) SOLIDS. WHENEVER THE POSSIBILITY EXISTS THAT LARGER SOLID OBJECTS MAY BE SUCKED INTO THE PUMP, A STRAINER SHOULD BE USED ON THE SUCTION LINE.

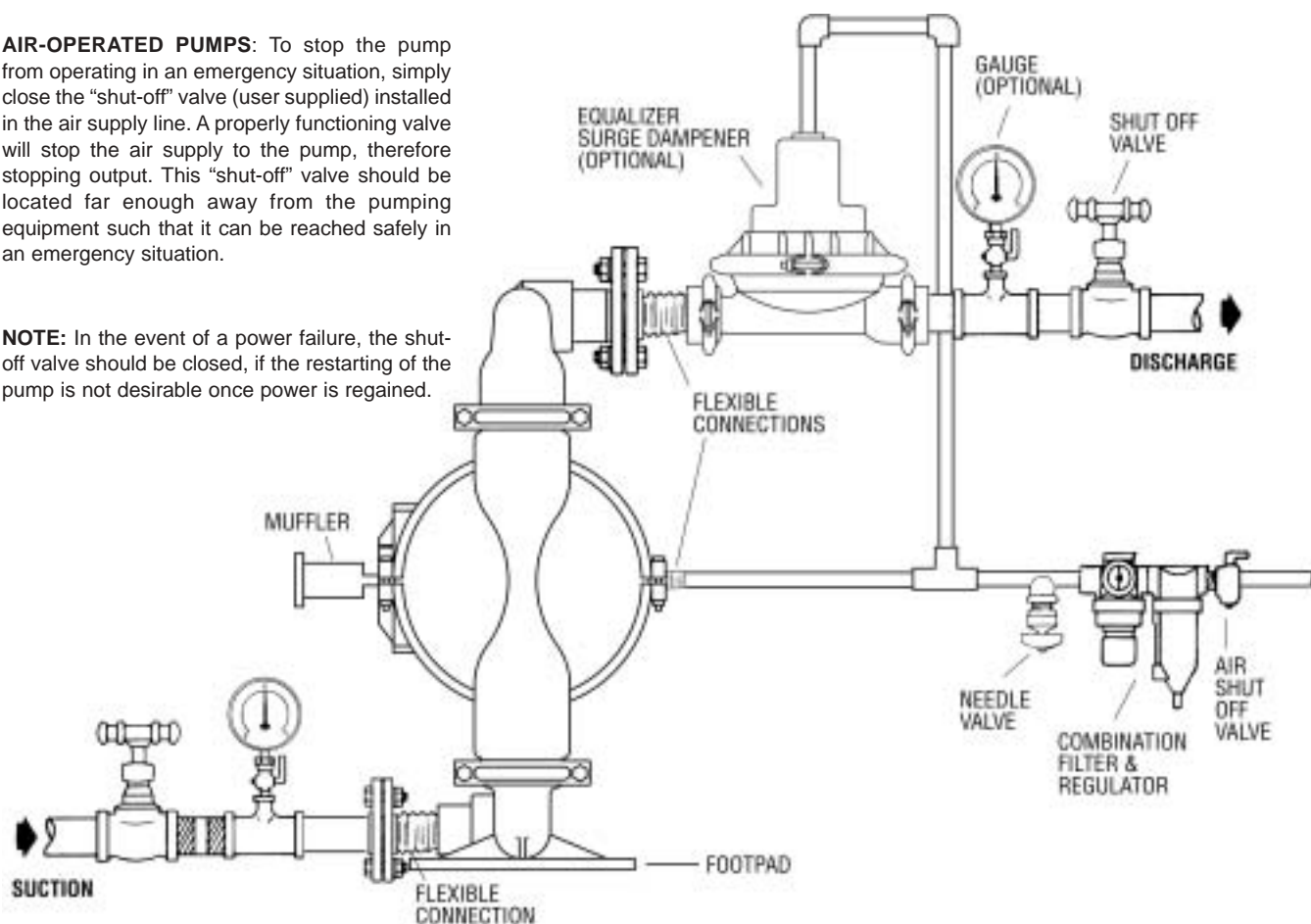
CAUTION: DO NOT EXCEED 8.6 BAR (125 PSIG) AIR SUPPLY PRESSURE.

P8 PUMPS CANNOT BE SUBMERGED. FOR SUBMERGED APPLICATIONS, USE A WILDEN T8 PUMP.

SUGGESTED INSTALLATION

AIR-OPERATED PUMPS: To stop the pump from operating in an emergency situation, simply close the “shut-off” valve (user supplied) installed in the air supply line. A properly functioning valve will stop the air supply to the pump, therefore stopping output. This “shut-off” valve should be located far enough away from the pumping equipment such that it can be reached safely in an emergency situation.

NOTE: In the event of a power failure, the shut-off valve should be closed, if the restarting of the pump is not desirable once power is regained.



SECTION 7B

SUGGESTED OPERATION AND MAINTENANCE INSTRUCTIONS

OPERATION: The P8 is pre-lubricated, and does not require in-line lubrication. Additional lubrication will not damage the pump, however if the pump is heavily lubricated by an external source, the pump's internal lubrication may be washed away. If the pump is then moved to a non-lubricated location, it may need to be disassembled and re-lubricated as described in the ASSEMBLY/DISASSEMBLY INSTRUCTIONS.

Pump discharge rate can be controlled by limiting the volume and/or pressure of the air supply to the pump (preferred method). An air regulator is used to regulate air pressure. A needle valve is used to regulate volume. Pump discharge rate can also be controlled by throttling the pump discharge by partially closing a valve in the discharge line of the pump. This action increases friction loss which reduces flow rate. (See Section 5.) This is useful when the need exists to control the pump from a remote location. When the pump discharge pressure equals or exceeds the air supply pressure, the pump will stop; no bypass or pressure relief valve is needed, and pump damage will not occur. The pump has reached a “deadhead” situation and can be restarted by reducing the

fluid discharge pressure or increasing the air inlet pressure. The Wilden P8 pump runs solely on compressed air and does not generate heat, therefore your process fluid temperature will not be affected.

MAINTENANCE AND INSPECTIONS: Since each application is unique, maintenance schedules may be different for every pump. Frequency of use, line pressure, viscosity and abrasiveness of process fluid all affect the parts life of a Wilden pump. Periodic inspections have been found to offer the best means for preventing unscheduled pump downtime. Personnel familiar with the pump's construction and service should be informed of any abnormalities that are detected during operation.

RECORDS: When service is required, a record should be made of all necessary repairs and replacements. Over a period of time, such records can become a valuable tool for predicting and preventing future maintenance problems and unscheduled downtime. In addition, accurate records make it possible to identify pumps that are poorly suited to their applications.

SECTION 7C

TROUBLESHOOTING

Pump will not run or runs slowly.

1. Ensure that the air inlet pressure is at least .4 bar (5 psig) above startup pressure and that the differential pressure (the difference between air inlet and liquid discharge pressures) is not less than .7 bar (10 psig).
2. Check air inlet filter for debris (see recommended installation).
3. Check for extreme air leakage (blow by) which would indicate worn seals/bores in the air valve, pilot spool, main shaft.
4. Disassemble pump and check for obstructions in the air passageways or objects which would obstruct the movement of internal parts.
5. Check for sticking ball check valves. If material being pumped is not compatible with pump elastomers, swelling may occur. Replace ball check valves and seals with proper elastomers. Also, as the check valve balls wear out, they become smaller and can become stuck in the seats. In this case, replace balls and seats.
6. Check for broken inner piston which will cause the air valve spool to be unable to shift.
7. Remove plug from pilot spool exhaust.

Pump runs but little or no product flows.

1. Check for pump cavitation; slow pump speed down to allow thick material to flow into liquid chambers.
2. Verify that vacuum required to lift liquid is not greater than the vapor pressure of the material being pumped (cavitation).

3. Check for sticking ball check valves. If material being pumped is not compatible with pump elastomers, swelling may occur. Replace ball check valves and seals with proper elastomers. Also, as the check valve balls wear out, they become smaller and can become stuck in the seats. In this case, replace balls and seats.

Pump air valve freezes.

1. Check for excessive moisture in compressed air. Either install a dryer or hot air generator for compressed air. Alternatively, a coalescing filter may be used to remove the water from the compressed air in some applications.

Air bubbles in pump discharge.

1. Check for ruptured diaphragm.
2. Check tightness of outer pistons (refer to Section 8C).
3. Check tightness of clamp bands and integrity of O-rings and seals, especially at intake manifold.
4. Ensure pipe connections are airtight.

Product comes out air exhaust.

1. Check for diaphragm rupture.
2. Check tightness of outer pistons to shaft.

SECTION 8A

MODEL P8 METAL

DIRECTIONS FOR DISASSEMBLY/REASSEMBLY

CAUTION: Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from the pump. Disconnect all intake, discharge, and air lines. Drain the pump by turning it upside down and allowing any fluid to flow into a suitable container. Be aware of any hazardous effects of contact with your process fluid.

The Wilden P8 metal pump has a 51 mm (2") inlet and 51 mm (2") outlet and is designed for flows up to 591 LPM (156 GPM). Its air distribution system is based on a revolutionary design which increases reliability and performance. The model P8 is available in Aluminum, Cast Iron, 316 Stainless Steel, or Hastelloy wetted parts. For highly corrosive applications, polypropylene and PVDF models are available.

TOOLS REQUIRED:

11 mm ($\frac{7}{16}$ ") Wrench

13 mm ($\frac{1}{2}$ ") Wrench

5 mm ($\frac{3}{16}$ ") Allen Wrench

6 mm ($\frac{1}{4}$ ") Allen Wrench

Adjustable Wrench

Vise equipped w/soft jaws

(such as plywood, plastic or other suitable material)

NOTE: The model photographed for these instructions incorporates rubber diaphragms, balls, and seats. Models with Teflon® diaphragms, balls and seats are the same except where noted.



DISASSEMBLY:

Figure 1

Step 1

Before starting disassembly, mark a line from each liquid chamber to its corresponding air chamber. This line will assist in proper alignment during reassembly. (Figure 1)



Step 2

Figure 2

Utilizing a 13 mm ($\frac{1}{2}$ ") wrench, remove the two small clamp bands that fasten the discharge manifold to the liquid chambers. (Figure 2)



Step 3

Figure 3

Remove the discharge manifold to expose the valve balls and seats. Inspect ball cage area of manifold for excessive wear or damage. (Figure 3)



Step 4 *Figure 4*

Remove the discharge valve balls and seats (*Figure 4*) from the liquid chambers and inspect for nicks, chemical attack or abrasive wear. Replace worn parts with genuine Wilden parts for reliable performance.



Step 5 *Figure 5*

Remove the two small clamp bands which fasten the intake manifold to the liquid chambers. (*Figure 5*)



Step 6 *Figure 6*

Lift liquid chambers and center section from intake manifold to expose intake valve balls and seats. Inspect ball cage area of liquid chamber for excessive wear or damage. (*Figure 6*)



Step 7 *Figure 7*

Remove one set of large clamp bands which secure one liquid chamber to the center section. (*Figure 7*)



Step 8 *Figure 8*

Lift liquid chamber away from center section to expose diaphragm and outer piston. (*Figure 8*)



Step 9A

Figure 9A

Using an adjustable wrench, or by rotating the diaphragm by hand, remove the diaphragm assembly.

NOTE: Due to varying torque values, one of the following two situations may occur: 1) The outer piston, diaphragm and inner piston remain attached to the shaft and the entire assembly can be removed from the center section (Figure 9A).



Step 9B

Figure 9B

2) The outer piston, diaphragm and inner piston separate from the shaft which remains connected to the opposite side diaphragm assembly (Figure 9B). Repeat disassembly instructions for the opposite liquid chamber. Inspect diaphragm assembly and shaft for signs of wear or chemical attack. Replace all worn parts with genuine Wilden parts for reliable performance.



Step 10

Figure 10

To remove diaphragm assembly from shaft, secure shaft with soft jaws (a vise fitted with plywood, plastic or other suitable material) to ensure shaft is not nicked, scratched or gouged. Using an adjustable wrench, remove diaphragm assembly from shaft. (Figure 10)

SECTION 8B

PRO-FLO™ AIR VALVE/CENTER SECTION DISASSEMBLY, CLEANING, INSPECTION

AIR VALVE DISASSEMBLY:

CAUTION: Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from the pump. Disconnect all intake, discharge, and air lines. Drain the pump by turning it upside down and allowing any fluid to flow into a suitable container. Be aware of hazardous effects of contact with your process fluid.

The Wilden Metal P8 utilizes a revolutionary Pro-Flo® air distribution system. A 13 mm ($\frac{1}{2}$ ") air inlet connects the air supply to the center section. Proprietary composite seals reduce the coefficient of friction and allow the P8 to run lube-free. Constructed of Acetal or Polypropylene, the Pro-Flo® air distribution system is designed to perform in on/off, non-freezing, non-stalling, tough duty applications.

TOOLS REQUIRED:

5 mm ($\frac{3}{16}$ ") Hex Head Wrench
6 mm ($\frac{1}{8}$ ") Hex Head Wrench
Snap Ring Pliers
O-Ring Pick



Step 1

Figure 1

Loosen the air valve bolts utilizing a 5 mm ($\frac{3}{16}$ ") hex head wrench and then remove muffler plate screws. (*Figure 1*)



Step 2

Figure 2

Remove muffler plate and air valve bolts from air valve assembly (*Figure 2*) exposing muffler gasket for inspection. Replace if necessary.



Step 3

Figure 3

Lift away air valve assembly and remove air valve gasket for inspection (*Figure 3*). Replace if necessary.



Step 4

Figure 4

Remove air valve end cap to expose air valve spool by simply lifting up on end cap once air valve bolts are removed. (*Figure 4*)



Step 5 *Figure 5*

Remove air valve spool from air valve body by threading one air valve bolt into the end of the spool and gently sliding the spool out of the air valve body (*Figure 5*). Inspect seals for signs of wear and replace entire assembly if necessary. Use caution when handling air valve spool to prevent damaging seals.

NOTE: Seals should not be removed from assembly.
Seals are not sold separately.



Step 6 *Figure 6*

Remove pilot spool retaining snap ring on both sides of center section with snap ring pliers (*Figure 6*).



Step 7 *Figure 7*

Remove air chamber bolts with 6 mm ($\frac{1}{8}$ ") hex head wrench (*Figure 7*).



Step 8 *Figure 8*

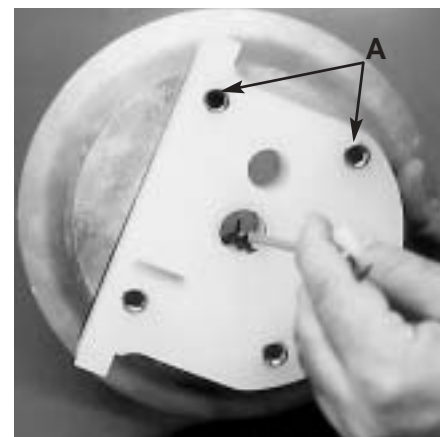
Remove pilot spool bushing from center block (*Figure 8*).



Step 9 *Figure 9*

With O-ring pick, gently remove the o-ring from the opposite side of the "center hole" cut on the spool. Gently remove the pilot spool from sleeve and inspect for nicks or gouges and other signs of wear. replace pilot sleeve assembly or outer sleeve o-rings if necessary. During re-assembly never insert the pilot spool into the sleeve with the "center cut" side first, this end incorporates the urethane o-ring and will be damaged as it slides over the ports cut in the sleeve.

NOTE: Seals should not be removed from pilot spool. Seals are not sold separately.



Step 10 *Figure 10*

Check center block Glyd™ rings for signs of wear. If necessary, remove glyd rings with O-ring pick and replace. (*Figure 10*)

NOTE: Threaded sleeves (see A — *Figure 10*) are removable and can be replaced if necessary. Sleeves can be press fit by hand.

SECTION 8C

REASSEMBLY HINTS & TIPS

ASSEMBLY:

Upon performing applicable maintenance to the air distribution system, the pump can now be reassembled. Please refer to the disassembly instructions for photos and parts placement. To reassemble the pump, follow the disassembly instructions in reverse order. The air distribution system needs to be assembled first, then the diaphragms and finally the wetted path. Please find the applicable torque specifications on this page. The following tips will assist in the assembly process.

- Lubricate air valve bore, center section shaft and pilot spool bore with NLGI grade 2 molybdenum disulfide based grease or equivalent.
- Clean the inside of the center section shaft bushing to ensure no damage is done to new glyd ring seals.
- A small amount NLGI grade 2 molybdenum disulfide based grease can be applied to the muffler and air valve gaskets to locate gaskets during assembly.
- Make sure that the exhaust port on the muffler plate is centered between the two exhaust ports on the center section.
- Stainless bolts should be lubed to reduce the possibility of seizing during tightening.
- Use a mallet to tamp lightly on the large clamp bands to seat the diaphragm before tightening.

MAXIMUM TORQUE SPECIFICATIONS

Description of Part	Metal Pumps
Air Valve	[5.1 N•m] 45 ft.- lbs.
Outer Piston	[78.6 N•m] 58 ft.- lbs.
Small Clamp Band	[3.4 N•m] 30 ft.- lbs.
Large Clamp Band (Rubber-Fitted)	[10.7 N•m] 95 ft.- lbs.
Large Clamp Band (Teflon®-Fitted)	[13.6 N•m] 120 ft.- lbs.
Air Chamber Bolts	[47.5 N•m] 35 ft.- lbs.

GLYD™ RING INSTALLATION:

PRE-INSTALLATION

- Once all of the old seals have been removed, the inside of the bushing should be cleaned to ensure no debris is left that may cause premature damage to the new seals.

INSTALLATION

The following tools can be used to aid in the installation of the new seals:

Needle Nose Pliers
Phillips Screwdriver
Electrical Tape

- Wrap electrical tape around each leg of the needle nose pliers (heat shrink tubing may also be used). This is done to prevent damaging the inside surface of the new seal.
- With a new seal in hand, place the two legs of the needle nose pliers inside the seal ring. (See *Figure A*.)
- Open the pliers as wide as the seal diameter will allow, then with two fingers pull down on the top portion of the seal to form kidney bean shape. (See *Figure B*.)
- Lightly clamp the pliers together to hold the seal into the kidney shape. Be sure to pull the seal into as tight of a kidney shape as possible, this will allow the seal to travel down the bushing bore easier.
- With the seal clamped in the pliers, insert the seal into the bushing bore and position the bottom of the seal into the correct groove. Once the bottom of the seal is seated in the groove, release the clamp pressure on the pliers. This will allow the seal to partially snap back to its original shape.
- After the pliers are removed, you will notice a slight bump in the seal shape. Before the seal can be properly resized, the bump in the seal should be removed as much as possible. This can be done with either the Phillips screwdriver or your finger. With either the side of the screwdriver or your finger, apply light pressure to the peak of the bump. This pressure will cause the bump to be almost completely eliminated.
- Lubricate the edge of the shaft with NLGI grade 2 molybdenum disulfide based grease.
- Slowly insert the center shaft with a rotating motion. This will complete the resizing of the seal.
- Perform these steps for the remaining seal.

Figure A

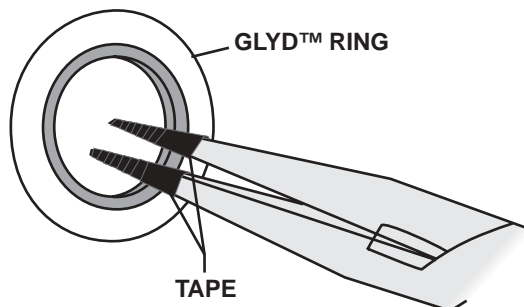
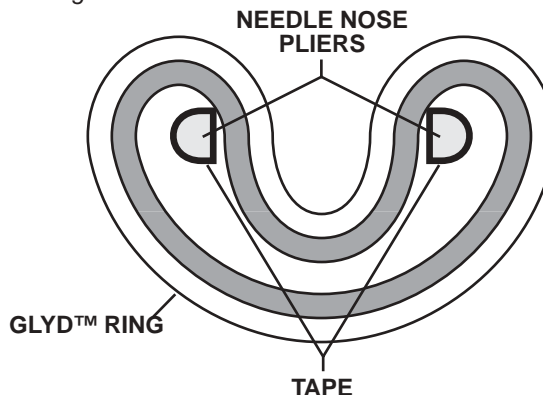


Figure B



SECTION 8E

GASKET KIT INSTALLATION

Only P8 Cast Iron pumps come standard with expanded Teflon® Gasket Kits (P/N 08-9502-99). Carefully prepare sealing surfaces by removing all debris and foreign matter from diaphragm bead and all mating surfaces. If necessary,

smooth or deburr all sealing surfaces. Mating surfaces must be properly aligned in order to ensure positive sealing characteristics.



Step 1 *Figure 1*

Gently remove the adhesive covering from the back of the Teflon® tape. Ensure that the adhesive strip remains attached to the Teflon® tape and is not removed with the adhesive covering.



Step 2 *Figure 2*

Starting at any point, place the Teflon® tape directly on top of the diaphragm bead. Press lightly on the tape to ensure that the adhesive holds it in place during assembly. Do not stretch the tape during placement on the diaphragm bead.



Step 3 *Figure 3*

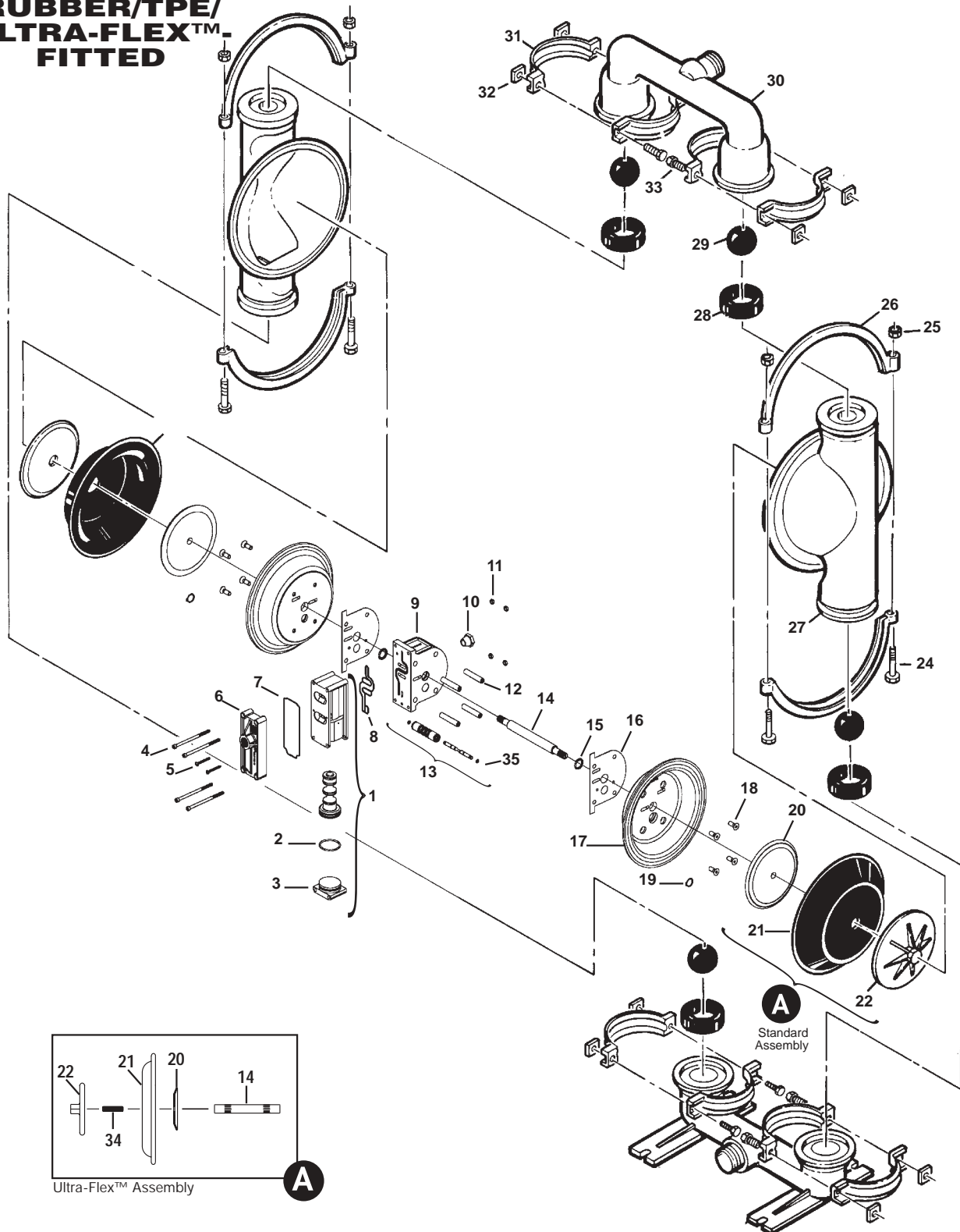
The end of the tape should overlap approximately 13 mm ($\frac{1}{2}$ ") (*Figure 3*). Proceed to install the Teflon® tape on the remaining diaphragm.

SECTION 9A

EXPLODED VIEW/PARTS LISTING

P8 METAL

RUBBER/TPE/
ULTRA-FLEX™
FITTED



P8 Metal, Rubber/TPE-Fitted or Ultra-Flex™-Fitted

Item #	Part Description	Qty. per Pump	P8/AAPP P/N	P8/WAPP P/N	P8/SAPP P/N	P8/HAPP P/N
1	Pro-Flo® Air Valve Assembly¹	1	04-2000-20-700	04-2000-20-700	04-2000-20-700	04-2000-20-700
2	O-Ring (-225), End Cap (1.859 X .139)	1	04-2390-52-700	04-2390-52-700	04-2390-52-700	04-2390-52-700
3	End Cap, Pro-Flo®	1	04-2330-20-700	04-2330-20-700	04-2330-20-700	04-2330-20-700
4	Screw, HHC, Air Valve (1/4" x 4.5")	4	01-6000-03	01-6000-03	01-6000-03	01-6000-03
5	Screw, SHCS, 10-16 x 1 3/4"	2	04-6351-03	04-6351-03	04-6351-03	04-6351-03
6	Muffler Plate, Pro-Flo®	1	04-3180-20-700	04-3180-20-700	04-3180-20-700	04-3180-20-700
7	Gasket, Muffler Plate	1	04-3500-52-700	04-3500-52-700	04-3500-52-700	04-3500-52-700
8	Gasket, Air Valve	1	04-2600-52-700	04-2600-52-700	04-2600-52-700	04-2600-52-700
9	Center Block²	1	04-3110-20	04-3110-20	04-3110-20	04-3110-20
10	Bushing, Reducer	1	04-6950-20-700	04-6950-20-700	04-6950-20-700	04-6950-20-700
11	Nut, Square 1/4-20	4	00-6505-03	00-6505-03	00-6505-03	00-6505-03
12	Sleeve, Threaded, Pro-Flo® Center Block	4	04-7710-08	04-7710-08	04-7710-08	04-7710-08
13	Removable Pilot Sleeve Assembly	1	04-3880-99	04-3880-99	04-3880-99	04-3880-99
14	Shaft, Pro-Flo®	1	08-3810-09	08-3810-09	08-3810-09	08-3810-09
	Shaft, Pro-Flo®, Ultra-Flex™	1	08-3841-03	08-3841-03	08-3841-03	08-3841-03
15	Glyd Ring	2	08-3210-55-225	08-3210-55-225	08-3210-55-225	08-3210-55-225
16	Gasket, Center Block, Pro-Flo®	2	04-3526-52	04-3526-52	04-3526-52	04-3526-52
17	Air Chamber, Pro-Flo®	2	08-3651-01	08-3651-01	08-3651-01	08-3651-01
18	Screw, HSFHS, 3/8"-16 x 1"	8	71-6250-08	71-6250-08	71-6250-08	71-6250-08
19	Retaining Ring	2	04-3890-03	04-3890-03	04-3890-03	04-3890-03
20	Inner Piston	2	08-3700-01	08-3700-01	08-3700-01	08-3700-01
	Inner Piston, Ultra-Flex™	2	08-3761-01	08-3761-01	08-3761-01	08-3761-01
21	Diaphragm	2	*	*	*	*
22	Outer Piston	2	08-4550-01	08-4550-02	08-4550-03	08-4550-04
	Outer Piston, Ultra-Flex™	2	04-4552-01	08-4560-02	04-4550-03	04-4550-04
23	Inlet Manifold	1	08-5080-01	08-5080-02	08-5080-03	08-5080-04
24	Large Carriage Bolt (3/8"-16 x 3")	4	08-6120-08	08-6120-08	08-6120-03	08-6120-03
25	Large Hex Nut (3/8"-16)	4	08-6450-08	08-6450-08	08-6450-03	08-6450-03
26	Large Clamp Band Assy. (Includes 24 & 25)	2	08-7300-08	08-7300-08	08-7300-03	08-7300-03
27	Liquid Chamber	2	08-5000-01	08-5000-02	08-5000-03	08-5000-04
28	Valve Seat	4	*	*	*	*
29	Valve Ball	4	*	*	*	*
30	Discharge Manifold	1	08-5020-01	08-5020-02	08-5020-03	08-5020-04
31	Small Clamp Band Assy. (Includes 32 & 33)	4	08-7100-08	08-7100-08	08-7100-03	08-7100-03
32	Hex Nut (5/16"-18)	8	04-6420-08	04-6420-08	08-6400-03	08-6400-03
33	Small Hex Cap Screw (5/16"-18 x 1 3/8")	8	08-6050-08	08-6050-08	08-6050-03	08-6050-03
34	Stud, Ultra-Flex™	2	08-6150-08	08-6150-08	08-6150-08	08-6150-08
35	Pilot Spool Retaining O-Ring	2	04-2650-49-700	04-2650-49-700	04-2650-49-700	04-2650-49-700

¹Air Valve Assembly includes item numbers 2 and 3.

²Center Block includes item number 15.

BSP-fitted pumps are available. Contact your distributor for part numbers.

For optional P8 Metal Pump elastomers, see Section 10.

*See Section 10 — Elastomer Chart

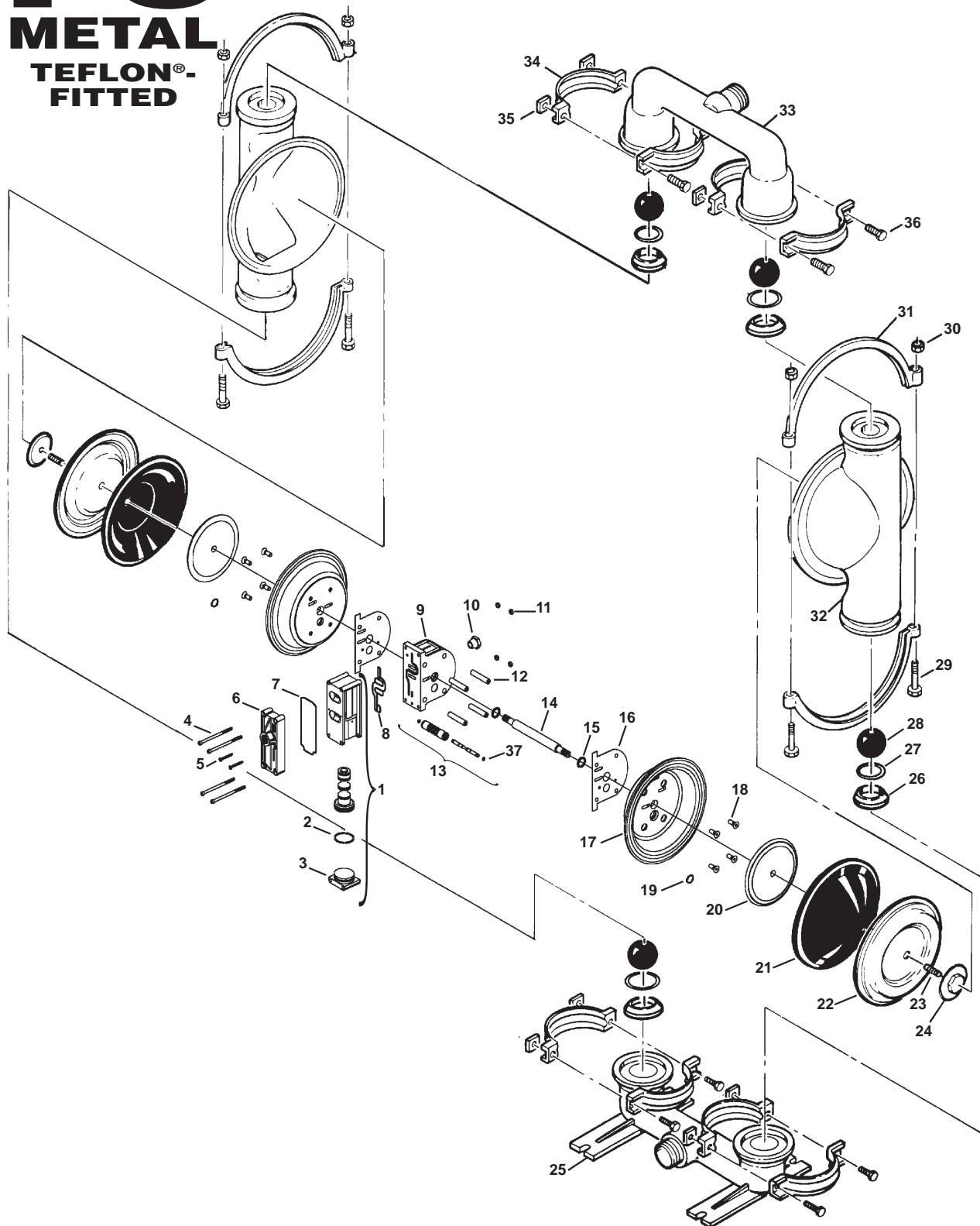
All bold face items are primary wear parts.



SECTION 9B

EXPLODED VIEW/PARTS LISTING

P8
METAL
TEFLON®-
FITTED



P8 Metal, Teflon®-Fitted

Item #	Part Description	Qty. per Pump	P8/AAPP P/N	P8/WAPP P/N	P8/SAPP P/N	P8/HAPP P/N
1	Pro-Flo® Air Valve Assembly¹	1	04-2000-20-700	04-2000-20-700	04-2000-20-700	04-2000-20-700
2	O-Ring (-225), End Cap (1.859 X .139)	1	04-2390-52-700	04-2390-52-700	04-2390-52-700	04-2390-52-700
3	End Cap, Pro-Flo®	1	04-2330-20-700	04-2330-20-700	04-2330-20-700	04-2330-20-700
4	Screw, HHC, Air Valve (1/4" x 4.5")	4	01-6000-03	01-6000-03	01-6000-03	01-6000-03
5	Screw, SHCS, 10-16 x 1 3/4"	2	04-6351-03	04-6351-03	04-6351-03	04-6351-03
6	Muffler Plate, Pro-Flo®	1	04-3180-20-700	04-3180-20-700	04-3180-20-700	04-3180-20-700
7	Gasket, Muffler Plate	1	04-3500-52-700	04-3500-52-700	04-3500-52-700	04-3500-52-700
8	Gasket, Air Valve	1	04-2600-52-700	04-2600-52-700	04-2600-52-700	04-2600-52-700
9	Center Block²	1	04-3110-20	04-3110-20	04-3110-20	04-3110-20
10	Bushing, Reducer	1	04-6950-20-700	04-6950-20-700	04-6950-20-700	04-6950-20-700
11	Nut, Square, 1/4"-20	4	00-6505-03	00-6505-03	00-6505-03	00-6505-03
12	Sleeve, Threaded, Pro-Flo® Center Block	4	04-7710-03	04-7710-03	04-7710-03	04-7710-03
13	Removable Pilot Sleeve Assembly	1	04-3880-99	04-3880-99	04-3880-99	04-3880-99
14	Shaft, Pro-Flo®	1	08-3840-09	08-3840-09	08-3840-09	08-3840-09
15	Glyd Ring	2	08-3210-55-225	08-3210-55-225	08-3210-55-225	08-3210-55-225
16	Gasket, Center Block, Pro-Flo®	2	04-3526-52	04-3526-52	04-3526-52	04-3526-52
17	Air Chamber, Pro-Flo®	2	08-3651-01	08-3651-01	08-3651-01	08-3651-01
18	Screw, HSFHS, 3/8"-16 x 1"	8	71-6250-08	71-6250-08	71-6250-08	71-6250-08
19	Retaining Ring	2	04-3890-03	04-3890-03	04-3890-03	04-3890-03
20	Inner Piston	2	08-3750-01	08-3750-01	08-3750-01	08-3750-01
21	Back-up Diaphragm	2	08-1060-51	08-1060-51	08-1060-51	08-1060-51
22	Diaphragm, Teflon®	2	08-1010-55	08-1010-55	08-1010-55	08-1010-55
23	Stud	2	08-6152-08	08-6152-08	08-6152-08	08-6152-08
24	Outer Piston	2	08-4600-01	08-4600-03	08-4600-03	08-4600-04
25	Inlet Manifold	1	08-5080-01	08-5080-02	08-5080-03	08-5080-04
26	Valve Seat	4	08-1121-01	08-1121-08	08-1121-03	08-1121-04
27	Valve Seat, Teflon® O-Ring	4	08-1200-55	08-1200-55	08-1200-55	08-1200-55
28	Valve Ball, Teflon®	4	08-1080-55	08-1080-55	08-1080-55	08-1080-55
29	Large Carriage Bolt (3/8"-16 x 3")	4	08-6120-03	08-6120-03	08-6120-03	08-6120-03
30	Large Hex Nut (3/8"-16)	4	08-6450-03	08-6450-03	08-6450-03	08-6450-03
31	Large Clamp Band Assy. (Includes 29 & 30)	2	08-7300-03	08-7300-03	08-7300-03	08-7300-03
32	Liquid Chamber	2	08-5000-01	08-5000-02	08-5000-03	08-5000-04
33	Discharge Manifold	1	08-5020-01	08-5020-02	08-5020-03	08-5020-04
34	Small Clamp Band Assy. (Includes 35 & 36)	4	08-7100-03	08-7100-03	08-7100-03	08-7100-03
35	Hex Nut (5/16"-18)	8	08-6400-03	08-6400-03	08-6400-03	08-6400-03
36	Small Hex Cap Screw (5/16"-18 x 1 3/8")	8	08-6050-03	08-6050-03	08-6050-03	08-6050-03
37	Pilot Spool Retaining O-Ring	2	04-2650-49-700	04-2650-49-700	04-2650-49-700	04-2650-49-700

¹Air Valve Assembly includes item numbers 2 and 3.

²Center Block includes item number 15.

BSP-fitted pumps are available. Contact your distributor for part numbers.

Fluoro-Seal™ O-rings available upon request.

All bold face items are primary wear parts.



SECTION 10

ELASTOMER OPTIONS

P8 Metal

Material	Diaphragms (2)	Ultra-Flex™ Diaphragms (2)	Valve Balls (4)	Valve Seats (4)	Valve Seat O-Rings (4)
Polyurethane	08-1010-50	N/A	08-1080-50	08-1120-50	N/A
Neoprene	08-1010-51	08-1020-51	08-1080-51	08-1120-51	N/A
Buna-N	08-1010-52	08-1020-52	08-1080-52	08-1120-52	N/A
Nordel®	08-1010-54	08-1020-54	08-1080-54	08-1120-54	N/A
Viton®	08-1010-53	08-1020-53	08-1080-53	08-1120-53	N/A
Sani-Flex™	08-1010-56	N/A	08-1080-56	08-1120-56	N/A
Teflon® PTFE	08-1010-55 ¹	N/A	08-1080-55	N/A	08-1200-55 ²
Neoprene Backup ²	08-1060-51	N/A	N/A	N/A	N/A
Wil-Flex™	08-1010-58	N/A	08-1080-58	08-1120-58	N/A
Tetra-Flex™ PTFE w/Neoprene	08-1010-64	N/A	N/A	N/A	N/A
Tetra-Flex™ PTFE w/Nordel®	08-1010-81	N/A	N/A	N/A	N/A
Tetra-Flex™ PTFE w/Viton®	08-1010-82	N/A	N/A	N/A	N/A
Fluoro-Seal™	N/A	N/A	N/A	N/A	08-1200-34 ²
Aluminum	N/A	N/A	N/A	08-1121-01	N/A
Stainless Steel	N/A	N/A	N/A	08-1121-03	N/A
Hastelloy	N/A	N/A	N/A	08-1121-04	N/A
Mild Steel	N/A	N/A	N/A	08-1121-08	N/A

¹Use Neoprene back-up diaphragms with Teflon® diaphragms only.

²Utilized in conjunction with metallic seat.

NOTE: Sani-Flex™ back-up diaphragms, P/N 08-1060-56, are available upon request. Please consult your local distributor.

*Consult P/S UF for Ultra-Flex™ information.

MAINTENANCE RECORD

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WARRANTY

Each and every product manufactured by Wilden Pump and Engineering, LLC is built to meet the highest standards of quality. Every pump is functionally tested to insure integrity of operation.

Wilden Pump and Engineering, LLC warrants that pumps, accessories and parts manufactured or supplied by it to be free from defects in material and workmanship for a period of one year from date of startup or two years from date of shipment, whichever comes first. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Wilden pumps and parts is beyond our control, we cannot guarantee the suitability of any pump or part for a particular application and Wilden Pump and Engineering, LLC shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Responsibility is limited solely to replacement or repair of defective Wilden pumps and parts.

All decisions as to the cause of failure are the sole determination of Wilden Pump and Engineering, LLC.

Prior approval must be obtained from Wilden for return of any items for warranty consideration and must be accompanied by the appropriate MSDS for the product(s) involved. A Return Goods Tag, obtained from an authorized Wilden distributor, must be included with the items which must be shipped freight prepaid.

The foregoing warranty is exclusive and in lieu of all other warranties expressed or implied (whether written or oral) including all implied warranties of merchantability and fitness for any particular purpose. No distributor or other person is authorized to assume any liability or obligation for Wilden Pump and Engineering, LLC other than expressly provided herein.

PLEASE PRINT OR TYPE AND FAX TO WILDEN

Item # _____ Serial # _____

Company Purchased From _____

Your Company Name _____

Industry _____

Your Name _____ Title _____

Your Address (Street) _____

(City) _____ (State) _____ (Postal Code) _____ (Country) _____

(Telephone) _____ (Fax) _____ (e-mail) _____

Number of pumps in facility? _____ Diaphragm _____ Centrifugal

_____ Gear _____ Submersible _____ Lobe _____ Other _____

Fluid being pumped _____

How did you hear of Wilden Pump? _____ Trade Journal _____ Trade Show

_____ Internet/E-mail _____ Distributor _____ Other _____

ONCE COMPLETE, FAX TO (909) 783-3440

NOTE: WARRANTY VOID IF PAGE IS NOT FAXED TO WILDEN



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Maximize product containment
Longer MTBF (Mean Time Between Failures)
Enhanced internal clearance
The result of advanced thought



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Unique Technology
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