**PUMP DESIGNATION SYSTEM**

**MATERIAL CODES**

**MODEL**
- V2550 = 6 mm (1/4") VELOCITY
- A2550V = 6 mm (1/4") ACCU-FLO™

**WETTED PARTS & OUTER PISTON**
- KK = PVDF / PVDF
- PP = POLYPROPYLENE / POLYPROPYLENE

**AIR CHAMBER/CENTER BLOCK**
- PP = POLYPROPYLENE

**AIR VALVE**
- A = ALUMINUM (ACCU-FLO Only)
- E = PET

**DIAPHRAGMS**
- TSS = FULL-STROKE PTFE W/ SANIFLEX BACK-UP O-RING
- ZWS = WIL-FLEX™ [Santoprene® (Three Black Dots)]

**VALVE BALLS**
- TF = PTFE (White)
- WF = WIL-FLEX™ [Santoprene® (Three Black Dots)]

**VALVE SEAT**
- K = KYNAR
- P = POLYPROPYLENE

**VALVE SEAT O-RING**
- TV = PTFE-ENCAP. FKM
- WF = WIL-FLEX (Santoprene®)

**SPECIALTY CODES**
- 0150 Accu-Flo, 24V DC Coil
- 0151 Accu-Flo, 24V AC/12V Coil
- 0155 Accu-Flo, 110V AC Coil
CAUTIONS & WARNINGS

PUMP TEMPERATURE LIMITS:

⚠️ PVDF and Polypropylene  4°C – 79°C  (40°F - 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 for chemical compatibility and temperature limits.

CAUTION: Do not exceed 6.9 bar (100 psig) air supply pressure.

CAUTION: Verify the chemical compatibility of the process and cleaning fluid to the pump’s component materials in the Wilden Chemical Resistance Guide.

CAUTION: Plastic series pumps are made from plastic that is not UV-stabilized. Direct sunlight exposure for prolonged periods can cause deterioration of plastic.

CAUTION: V2550 pumps are not submersible.

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

WARNING: 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.

WARNING: Ensure that the air supply line is clear of debris. Use of a 5μ (micron) in-line air filter is recommended.
DIMENSIONAL DRAWING

V2550 PLASTIC

DIMENSIONS

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<th>ITEM</th>
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Tools Required:
- 7/16" Socket Wrench

1. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
2. Install outer pistons (item 22) on to ends of shaft.
3. Slide diaphragms (item 21) on to ends (item 19) on to ends of shaft.
4. Slide washer (item 18) and inner pistons (item 17) on to ends of shaft.
5. Install the cartridge with ribs in manifold. Cartridge will be flush with end of the manifold if installed correctly.
6. Install retaining ring (item 6) in groove on air valve assembly. The cartridges must be installed in correct orientation. Align grooves on center section-manifold assembly between two liquid chambers (item 12), taking care to align center section.
7. Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws.
8. Place the center section-manifold assembly between two liquid chambers (item 12), taking care to align center section.
9. Place in a vise and carefully press assembly together. Take care not to pinch or damage sealing O-rings.
10. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
11. Install outer pistons (item 22) on to ends of shaft.
12. Slide diaphragms (item 21) on to ends of shaft.
13. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
14. Install outer pistons (item 22) on to ends of shaft.
15. Slide diaphragms (item 21) on to ends of shaft.
16. Install retaining ring (item 6) in groove on air valve assembly. The cartridges must be installed in correct orientation. Align grooves on center section-manifold assembly between two liquid chambers (item 12), taking care to align center section.
17. Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws.
18. Place the center section-manifold assembly between two liquid chambers (item 12), taking care to align center section.
19. Place in a vise and carefully press assembly together. Take care not to pinch or damage sealing O-rings.
20. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
21. Install outer pistons (item 22) on to ends of shaft.
22. Slide diaphragms (item 21) on to ends of shaft.
23. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
24. Install outer pistons (item 22) on to ends of shaft.
25. Slide diaphragms (item 21) on to ends of shaft.
26. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
27. Install outer pistons (item 22) on to ends of shaft.
28. Slide diaphragms (item 21) on to ends of shaft.
29. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).
30. Install outer pistons (item 22) on to ends of shaft.
Tools Required:

1. Snap-Ring Pliers
2. 5/16” Socket Wrench

Before any maintenance or repair is attempted, the Pump & Engineering, LLC. must be contacted for further instructions.

There are two mounting options for the base assembly (item 23).

Press muffler element (item 9) into muffler cavity (near air inlet) of center section (item 5). Hold muffler center section.

Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws (item 10).

There should be a consistent 0.05” gap between the center section (item 5) and liquid chambers (item 12).

Place in a vise and carefully press assembly together. Take care not to pinch or damage sealing O-rings.

Place the center section-manifold assembly between two liquid chambers (item 12), taking care to align surfaces of center section (item 5).

Install one (1) NPT plug (item 14) into one (1) inlet port of the manifold (item 13). Install one (1) NPT plug (item 9).

Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).

The cartridges must be installed in (item 19) on to ends of shaft.

NOTE: Install four (4) ball check cartridges (item 3) into manifold (item 13).

Solenoid - Center Section (#4) 1.6 N•m (15 in-lb)

Outer Piston 5.6 N•m (50 in-lb)

ACCU-FLO™ BACK-UP SEAL CARTRIDGE

POLY BALL CHECK CARTRIDGE

DIAPHRAGMS

PTFE-Encapsulated FKM 38-1371-60

Wil-Flex™ 00-1044-58 00-9189-58 00-9188-58 38-1371-58

Saniflex™ 00-1074-56

PTFE 00-1044-55 00-9189-55 00-9188-55

MATERIAL

ALL CIRCLED PART IDENTIFIERS ARE INCLUDED IN REPAIR KITS

DIAPHRAGMS

WIL-41000-E-06WIL-41000-E-06

MANIFOLD

LW0356 Rev. F

O-RINGS

(4)

ACCU-FLO™

BACK-UP

SEAL

CARTRIDGE

POLY BALL

CHECK

CARTRIDGE

(2)

CARTRIDGE

PVDF BALL

CARTRIDGE

(4)

CARTRIDGE

FACET

12.  Install one (1) NPT plug (item 14) into one (1) inlet port of the manifold (item 13). Install one (1) NPT plug (item 9).

13.  Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws (item 10).

14.  There should be a consistent 0.05” gap between the center section (item 5) and liquid chambers (item 12).

15.  Place in a vise and carefully press assembly together. Take care not to pinch or damage sealing O-rings.

16.  Place the center section-manifold assembly between two liquid chambers (item 12), taking care to align surfaces of center section (item 5).

17.  Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).

18.  The cartridges must be installed in (item 19) on to ends of shaft.

19.  NOTE: Install four (4) ball check cartridges (item 3) into manifold (item 13).

20.  Solenoid - Center Section (#4) 1.6 N•m (15 in-lb)

21.  Outer Piston 5.6 N•m (50 in-lb)

PARTS LISTING

EXPLODED VIEW

WETTED PATH COMPONENTS

BALL CHECK CARTRIDGE / MANIFOLD O/RINGS

TAPPET COMPONENTS

FOOT COMPONENTS

V2550 PLASTIC - HORIZONTAL

DIMENSIONS

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LW0352 REV. C
WIL-41000-E-06
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NOTE:
- Snap-Ring Pliers
- 7/16" Socket Wrench
- 5/16" Socket Wrench

VELOCITY MAXIMUM TORQUE SPECIFICATIONS

- Diaphragm – Center Section (#10) 4.5 N•m (40 in-lb)
- Outer Piston 5.6 N•m (50 in-lb)

CAUTION:
Before any maintenance or repair is attempted, the pressure allowed to bleed from the pump. Compressed air line to the pump should be disconnected and all air is limited solely to replacement or repair of defective Wilden Pump & Engineering, arising from the use or misuse of its products on any application. Responsibility of merchantability and fitness for any particular purpose. No distributor warranties expressed or implied (whether written or oral) including all implied warranties of merchantability and fitness for any particular purpose. No distributor guaranteed is limited solely to replacement or repair of defective Wilden Pump & Engineering, arising from the use or misuse of its products on any application. Responsibility of merchantability and fitness for any particular purpose. No distributor. Warranties other than those specifically included in the product warranty are hereby excluded. No other warranty expressed or implied shall extend beyond the warranty period. WIL-FLEX™ 00-1044-58 00-9189-58 00-9188-55 38-1371-58

Saniflex™ 00-1074-56 PTFE 00-1044-55 00-9189-55 00-9188-55

Description of Part Torque

- Air Valve Assembly includes item 1
- Air Valve Assembly includes items 1, 2, 3, 4, 7, 8, 11 and 17.
V2550 DRY SUCTION-LIFT CURVE A2550V 70/30 OPERATING CONDITION

A2550V PERFORMANCE CURVE

Disp. per Stroke .......................... 0.04 L (0.01 gal)
6.2 m Wet (20.4’)
Suction Lift ............................... 4.3 m Dry (14.2’)
Outlet ....................................... 6 mm (1/4”)
Ship Weight ................................. 2 kg (4 lb)

SOLENOID CONTROL:
When start-stop operation of a standard air valve equipped pump is
eliminate air-line contaminants, a needle valve and pressure regulator
necessary to achieve the desired pumping rate. Air pressure to the pump should not exceed a
Every pump should have an airline large enough to supply the volume of air
AIR SUPPLY:
is within the pump model's capability.

The Velocity pump has two inlet fluid connections and two discharge fluid connections. One inlet
to reduce friction losses.

INSTALLATION:
Specify so that daily operation parameters are not near the pump's maximum rated performance
Wilden Chemical Resistance Guide. For optimum life and performance, the pump size should be

Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2.1 bar (30 psig)
head pressure.

Example: To pump 12.5 lpm (3.3 gpm) against a discharge head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and
10.4 Nm³/h (6.1 scfm) air consumption.

Caution: Do not exceed 6.9 bar (100 psig) air supply pressure.

1WIL-41000-E-06
Suction-lift curves are created using pumps operating at 305 m (1000’) above sea level. This chart is meant to be a guide only. There are many variables which can affect the pump’s operating characteristics.

Suction lift can be affected by the number of intake/discharge elbows, viscosity of pumping fluid, elevation (atmospheric pressure), pipe friction losses and other factors.

**Caution:** Do not exceed 6.9 bar (100 psig) air supply pressure.
Once installation is complete, pump operation can be started by opening vent pressurized air between the solenoid and pump when the pump is stopped. Control by a solenoid valve in the air line, a three-way (3/2) solenoid valve should be used to eliminate air-line contaminants, a needle valve and pressure regulator. Every pump should have an airline large enough to supply the volume of air is within the pump model's capability. A reduction or loss of pump suction capability will result. Ensure that the suction lift requirement is within the pump model's capability. When used in self-priming applications, it is critical that all fittings and connections are airtight or independent of the pump. In addition, the piping should be aligned to avoid placing stress on diameter of pump connection, the length and complexity of the suction and discharge piping should be minimized, unnecessary elbows, bends and fittings should be avoided, all in an effort to reduce friction losses.

The Velocity pump has two inlet fluid connections and two discharge fluid connections. One inlet and discharge connection must be plugged using the supplied NPT plugs. The Velocity pump has two foot-mount configurations and can be mounted independently of the pump. In addition, the piping should be aligned to avoid placing stress on diameter of pump connection, the length and complexity of the suction and discharge piping should be minimized, unnecessary elbows, bends and fittings should be avoided, all in an effort to reduce friction losses.

Disp. per Stroke\(^1\) ..........................0.04 L (0.01 gal)
Inlet ..................................6 mm (1/4”)
Outlet ..................................6 mm (1/4”)
Inlet ..................................6 mm (1/4”)
Outlet ..................................6 mm (1/4”)
Suction Lift ............................4.3 m Dry (14.2’)
6.2 m Wet (20.4’)
Disp. per Stroke\(^1\) ............0.04 L (0.01 gal)
Max. Flow Rate ....14.8 lpm (3.9 gpm)
Max. Size Solids............0.8 mm (1/32”)

\(^1\)Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2.1 bar (30 psig) head pressure.

**Example:** To pump 7.9 lpm (2.1 gpm) against a discharge head of 2.1 bar (30 psig) requires 4.1 bar (60 psig) and 6.6 Nm\(^3\)/h (3.9 scfm) air consumption.

**Caution:** Do not exceed 6.9 bar (100 psig) air supply pressure.
This curve demonstrates the flow created when the stroke rate is varied under static air and fluid pressure conditions. This curve can be applied to different pressure conditions to estimate the change in flow due to stroke rate.
**SUGGESTED INSTALLATION**

**PUMP SELECTION:** Ensure that the pump materials of construction are compatible with the pumping media and the immediate surroundings the pump will be subjected to. Refer to the Wilden Chemical Resistance Guide. For optimum life and performance, the pump size should be specified so that daily operation parameters are not near the pump’s maximum rated performance capabilities.

**INSTALLATION:** The Velocity pump has two foot-mount configurations and can be mounted in any orientation. The pump can be mounted in place or left free standing for use in multiple locations. If the pump is to be mounted in place, it is suggested to attach the Base Assembly to the desired horizontal or vertical surface using four (4) screws (not supplied) and then attach the pump to the Base Assembly (See Assembly Instructions).

The Velocity pump has two inlet fluid connections and two discharge fluid connections. One inlet and discharge connection must be plugged using the supplied NPT plugs.

**PIPING:** The suction and discharge piping diameter should be equivalent or larger than the diameter of pump connection, the length and complexity of the suction and discharge piping should be minimized, unnecessary elbows, bends and fittings should be avoided, all in an effort to reduce friction losses.

The suction hose must be non-collapsible. If rigid piping is used, it should be supported independently of the pump. In addition, the piping should be aligned to avoid placing stress on the pump fittings.

When used in self-priming applications, it is critical that all fittings and connections are airtight or a reduction or loss of pump suction capability will result. Ensure that the suction lift requirement is within the pump model’s capability.

**AIR SUPPLY:** Every pump should have an airline large enough to supply the volume of air necessary to achieve the desired pumping rate. Air pressure to the pump should not exceed a maximum of 6.9 bar (100 psig). For best results, the pumps should use a 5µ (micron) air filter to eliminate air-line contaminants, a needle valve and pressure regulator.

**SOLENOID CONTROL:** When start-stop operation of a standard air valve equipped pump is controlled by a solenoid valve in the air line, a three-way (3/2) solenoid valve should be used to vent pressurized air between the solenoid and pump when the pump is stopped.

**PUMP OPERATION:** Once installation is complete, pump operation can be started by opening the air shut-off valve (do not exceed the pump’s maximum rated pressure). The pressure regulator and needle valve are used to adjust the speed of the pump.
**BASIC TROUBLESHOOTING**

**Pump will not run or runs slowly:**

1. Ensure the air inlet pressure is 0.3 bar (5 psig) above the start-up pressure of the pump.
2. Ensure the differential pressure (difference between the air inlet pressure and fluid discharge pressure) is not less than 0.7 bar (10 psig).
3. Check air line/filter for blockage/debris. Check for obstruction in the air passageways of the pump.
4. Check for objects in the pump that would obstruct the movement of internal parts.
5. Check for severe air leakage (blow-by) coming from the air exhaust. This could indicate a failed O-ring seal or worn air valve assembly.
6. Inspect for check valve failure. A worn check ball can get stuck in the seat. A check ball can swell and become stuck if not compatible with fluid pumped. Replace if necessary.

**Pump runs but little or no product flows:**

1. Check for cavitation. Confirm vacuum required to lift the fluid is not greater than the vapor pressure of the fluid being pumped. Slow pump speed to allow viscous fluids to flow into liquid chambers.
2. Ensure that the suction lift requirement is within the pump model’s capability.
3. Inspect for check valve failure. A worn check ball can get stuck in the seat. A check ball can swell and become stuck if not compatible with fluid pumped. Replace if necessary.

**Air bubbles in pump discharge:**

1. Check for ruptured diaphragm.
2. Check tightness of outer piston to shaft.
3. Check integrity of O-ring seals, especially intake side of manifold.
4. Ensure pipe connections are airtight.

**Product comes out of air exhaust:**

1. Check for ruptured diaphragm.
2. Check tightness of outer piston to shaft.
**Tools Required:**
- 5/16” Socket Wrench
- 7/16” Socket Wrench
- Snap-Ring Pliers

**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.

1. Insert the smaller end of the air valve assembly (item 1) into center section (item 5) until fully seated. Install retaining ring (item 6) in groove on air valve assembly.

2. Install backup O-rings (item 20) on to surfaces of center section (item 5).

3. Slide washer (item 18) and inner pistons (item 19) on to ends of shaft.

4. Slide diaphragms (item 21) on to ends of shaft.

5. Install outer pistons (item 22) on to ends of shaft. Tighten to specified torque (50 lb-in). Over-tightening could damage outer piston.

6. Install four (4) ball check cartridges (item 15) into manifold (item 13). **NOTE:** The cartridges must be installed in correct orientation. Align grooves on cartridge with ribs in manifold. Cartridge will be flush with end of the manifold if installed correctly.

7. Install four (4) manifold O-rings (item 16) on to ends of manifold (item 13).

8. Place upper screw boss in manifold (item 13) in-between the flanges at the bottom of the center section (item 5).

9. Place the center section-manifold assembly between two liquid chambers (item 12), taking care to align the large bore on liquid chamber over the diaphragm and the two (2) small bores over the manifold.

10. Place in a vise and carefully press assembly together. Take care not to pinch or damage sealing O-rings. There should be a consistent 0.05” gap between the center section (item 5) and liquid chambers (item 12).

11. Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws (item 10). Tighten fasteners to specified torque (35 lb-in). Over-tightening fasteners could damage center section.

12. Press muffler element (item 9) into muffler cavity (near air inlet) of center section (item 5). Hold muffler element in place using one (1) #10 screw (item 10).

13. There are two mounting options for the base assembly (item 23).

14. Install one (1) NPT plug (item 14) into one (1) inlet port of the manifold (item 13). Install one (1) NPT plug into one (1) discharge port on manifold.
DIMENSIONAL DRAWING

DIMENSIONS

ITEM METRIC

H 78 3.1
G 116 4.6
K 46 1.8
C 108 4.3
J 46 1.8
E 201 7.9

M 83 3.3
N 98 3.9
G 46 1.8
D 177 7.0
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C 119 4.7
L 57 2.2
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N 196 7.7
V 10 0.4
S 57 2.2
R 60 2.4
P 98 3.9
T 83 3.3
L 99 3.9

12.
14.
10.

1.
7.
8.
6.

2.
8.
6.

Install one (1) NPT plug (item 14) into one (1) inlet port of the manifold (item 13). Install one (1) NPT plug element in place using one (1) #10 screw (item 10).

Press muffler element (item 9) into muffler cavity (near air inlet) of center section (item 5). Hold muffler center section. Tighten fasteners to specified torque (35 lb-in). Over-tightening fasteners could damage.

Fasten liquid chambers (item 12) to center section (item 5) and manifold (item 13) using (22) #10 screws 12).

There should be a consistent 0.05" gap between the center section (item 5) and liquid chambers (item 12).

Install outer pistons (item 22) on to ends of shaft.

Slide washer (item 18) and inner pistons into valve assembly.

Install retaining ring (item 6) in groove on air cartridge with ribs in manifold. Cartridge will be flush with end of the manifold if installed correctly.

Correct orientation. Align grooves on

NOTE:

Install four (4) ball check cartridges into manifold (item 13).

Install one (1) NPT plug (item 14) into one (1) inlet port of the manifold (item 13). Install one (1) NPT plug element in place using one (1) #10 screw (item 10).

Press muffler element (item 9) into muffler cavity (near air inlet) of center section (item 5). Hold muffler center section. Tighten fasteners to specified torque (35 lb-in). Over-tightening fasteners could damage.

Install outer pistons (item 22) on to ends of shaft.

Slide washer (item 18) and inner pistons into valve assembly.
## Parts Listing

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
<th>V2550 /PPPPE/…/P/N</th>
<th>A2550V /PPPAA/…/P/N</th>
<th>V2550 /KKPPE/…/P/N</th>
<th>A2550V /KKPAA/…/P/N</th>
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<tr>
<td>1</td>
<td>Air Valve Assembly¹</td>
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<td>3</td>
<td>O-Ring, Shaft (-110, Ø.362” x Ø.103”)</td>
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<td>4</td>
<td>Screw, Hex Washer Head Torx, Solenoid Air Valve (#4-24 x 1 1/4”)</td>
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<td>5</td>
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<td>Screw, Hex Washer Head Tri-Lobe (#10-14 x 1-1/4”)</td>
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<td>12</td>
<td>Liquid Chamber</td>
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<td>Manifold Pipe Plug 1/4” (NPT)</td>
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<td>Manifold O-Ring, PTFE Fitted (-214, Ø.984 x Ø.139”)</td>
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<td>18</td>
<td>Washer, Inner Piston (Ø.255” x Ø.468” x .060”)</td>
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</table>

### Air Distribution Components

1. Air Valve Assembly includes item 6 and 9.
2. Accu-Flo™ Air Valve Assembly includes items 2, 4, 7, 8 and 11.
3. Air Valve Center Section Assembly includes items 1, 6, 9 and 10.
4. Accu-Flo™ Center Section Assembly includes items 1, 2, 3, 4, 7, 8, 11 and 17.
5. Removable Base Assembly includes items 24 and 25.

* See Elastomer Options

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**Air Force**

*WIL-41000-E-06*
### ELASTOMER OPTIONS

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<tr>
<th>MATERIAL</th>
<th>DIAPHRAGMS (2)</th>
<th>DIAPHRAGM BACK-UP SEAL (2)</th>
<th>POLY BALL CHECK CARTRIDGE (4)</th>
<th>PVDF BALL CHECK CARTRIDGE (4)</th>
<th>MANIFOLD O-RINGS (4)</th>
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<td>PTFE</td>
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### MAXIMUM TORQUE SPECIFICATIONS

#### VELOCITY MAXIMUM TORQUE SPECIFICATIONS

<table>
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<tr>
<th>Description of Part</th>
<th>Torque</th>
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<tr>
<td>Liquid Chamber – Center Section (#10)</td>
<td>4.5 N•m (40 in-lb)</td>
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<tr>
<td>Outer Piston</td>
<td>5.6 N•m (50 in-lb)</td>
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<tr>
<td>Solenoid - Center Section (#4)</td>
<td>1.6 N•m (15 in-lb)</td>
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WARRANTY

Each and every product manufactured by Wilden Pump & Engineering, LLC is built to meet the highest standards of quality. Every pump is functionally tested to insure integrity of operation. Wilden Pump & 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 five (5) years from date of installation or six (6) years from date of manufacture, 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 & 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 Pump & Engineering, LLC. All decisions as to the cause of failure are the sole determination of Wilden Pump & 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 & Engineering, LLC other than expressly provided herein.