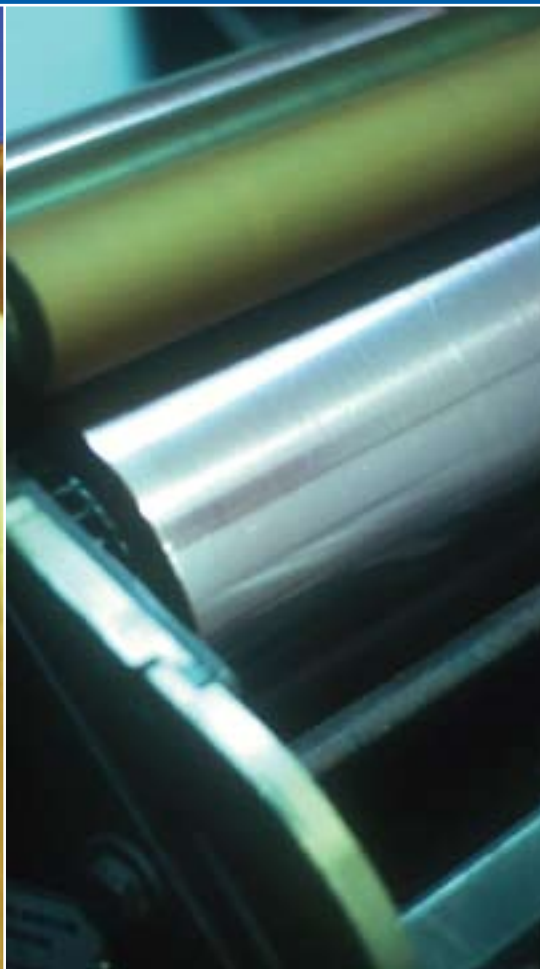




# Process Equipment Buyer's Guide

Diaphragm Pumps for Industrial Applications



PROVEN QUALITY. LEADING TECHNOLOGY.



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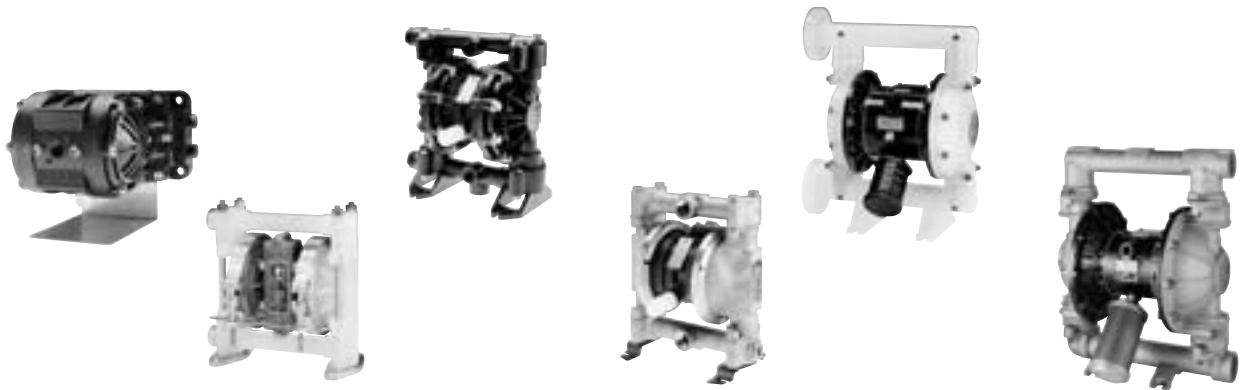
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# Reliable pumping solutions.

When it comes to process applications, it's tough to beat these Graco® pumps! We offer a variety of piston transfer and Husky™ air-operated double diaphragm pumps for your low to high viscosity fluids. Graco pumps are manufactured with your productivity in mind – providing you a more reliable, efficient pump!

	Husky 205	Husky 307	Husky 515	Husky 716	Husky 1040	Husky 1590
Model	Plastic	Plastic	Plastic	Metal	Plastic Metal	Plastic Metal
Typical Application	Waterborne materials Paints Chemicals Detergents Inks	Paints Lubricants Inks Stains Solvents Coatings Dye	Cleaning fluids Chemicals Ceramic glazes Inks Solvents Flammables Acids	Oil Water Most solvents	Chemicals Acids Adhesives Resins Ceramic slips Slurries Solvents	Chemicals Corrosive fluids Acids and gases Latex Abrasive fluids Slurries Sludge
Reference Page	10-13	14-17	18-21	22-25	26-33	34-41



## Try Graco's Husky Pumps for FREE\*!

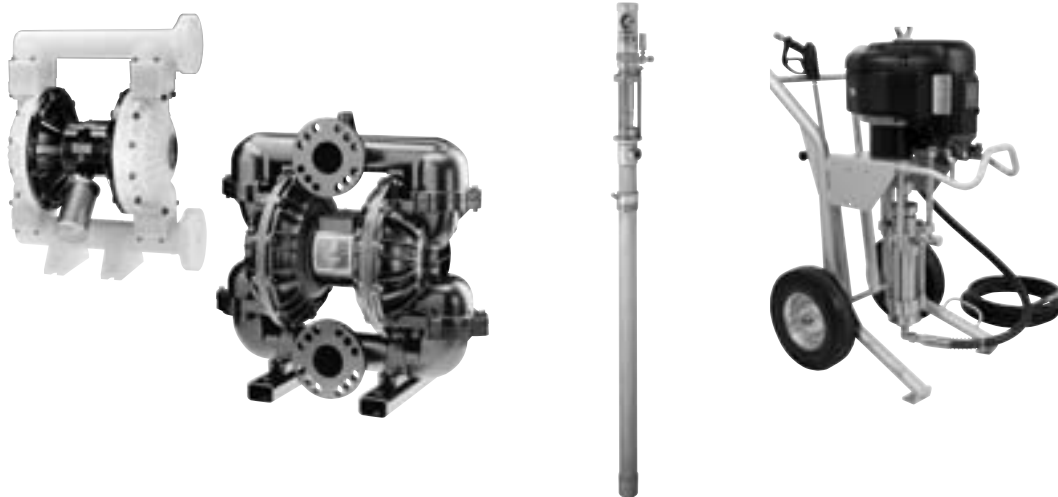
Look for the "Try Before You Buy" logo

- **Try Before you Buy Features**
  - 60 day free customer trial
  - 90 day distributor dating
- **No arm twisting, no hidden clauses, no questions**
- **Send it back at the end of the trial for a full refund**
  - Must arrive at Graco before the end of the 90 day period to avoid non-payment
  - Day 1 is shipment date of product from Graco
  - Distributor to clean product (remove hazardous/toxic materials) prior to shipping



\*May not be available in all geographic areas. Visit [www.graco.com/process](http://www.graco.com/process) for more details.

	Husky 2150	Husky 3275	Husky Transfer Pumps	Hydra-Clean
<b>Model</b>	Plastic Metal	Metal	Fast-Flo 1:1 Husky Packages	President® 10:1 12:1 NXT™ 23:1 NXT 30:1 NXT
<b>Typical Application</b>	Acids and gases Stripping chemicals Alkalies Solvents Sludge Waste water	Chemicals Bulk paint resins Ceramic slip	Anti-freeze Transmission fluid General chemicals Solvents Adhesives Resins Oil	Water Detergent solutions Chemical solutions
<b>Reference Page</b>	42-49	50-53	54-57, 62-66	58-61



## Husky Diaphragm Pump Selector

### Looking for a diaphragm pump?

The Husky Diaphragm Pump Selector (Husky DPS) is the ideal tool to guide you to a selection of Graco Diaphragm Pumps suited to the selected application parameters. Just answer the questions and you'll be directed to the proper part number. Check out [www.graco.com/process](http://www.graco.com/process) to download the selector tool or simply type Husky DPS into the search literature box located on the left hand side of the Graco home page.

# Air-Operated Double-Diaphragm Pumps

## The Husky Air Valve Difference

---

All Husky Air-Operated Double-Diaphragm pumps feature simple, exceptionally reliable air valves that make the Husky line among the most reliable pumps in a variety of applications.

The unique, patented air valve design has a three-way pilot valve for true non-sticking operation. All parts are replaceable without opening wetted body parts.

Husky pumps have a 15 year air valve center section warranty and a 5 year pump warranty. See pump instruction manuals for complete warranty details.

### You'll benefit from these Husky advantages:

- Closed-center design on the 1/2 in (12.7 mm) through 3 in (76.2 mm) pumps blocks air inlet from air exhaust during changeover for handling unconditioned air without hang-ups
- 100% externally-serviceable air valve that requires no lubrication for cleaner operation
- Fewer moving parts than you'll find in many other double-diaphragm pumps for increased durability
- Pilot-pin-actuated pneumatic trigger provides reliable mechanical shifting day in and day out
- Common center section and air valve for 1 in (25.4 mm), 1-1/2 in (38.1 mm) and 2 in (50.8 mm) pumps for reduced inventory



# Husky Features & Benefits

## The Quality and Simplicity Inside!

---

### **A** EASY MAINTENANCE

- Low internal volume reduces waste and makes clean-up easy
- Stainless steel bolts resist corrosion and provide positive positioning for easy reassembly

### **B** UNIQUE, PATENTED AIR VALVE

- Three-way pilot valve for no-stick operation
- All parts are replaceable without opening wet body parts
- No air-line lubrication required

### **C** PRECISION-FITTED PARTS

- Long-wearing End Bearings assure positive rod alignment and are easy to replace

### **D** PROTECTIVE EXHAUST PORT

- Common port for all exhaust prevents vapors in room from attacking air motor seals
- Easily submerges when the exhaust is piped to atmosphere for sump operation

### **E** RUGGED EXTERIOR CONSTRUCTION

- Construction resists corrosion, prevents leakage and ensures clean fluid changes
- Aluminum center sections are epoxy coated
- Corrosion resistant center sections are 316 stainless steel

### **F** FLUID COMPATIBILITY

- Housings available in aluminum, stainless steel, ductile iron, polypropylene, groundable acetal or PVDF

### **G** POSITIVE SEAL DESIGN

- Diaphragm firmly locked in place
- Formed bead acts as a positive fluid seal
- One thru-hole

### **H** HEAVY DUTY DIAPHRAGM PLATES

- Positive grip plates virtually eliminate leakage and pull-out, preventing costly downtime

### **I** LONG LASTING ROD DESIGN

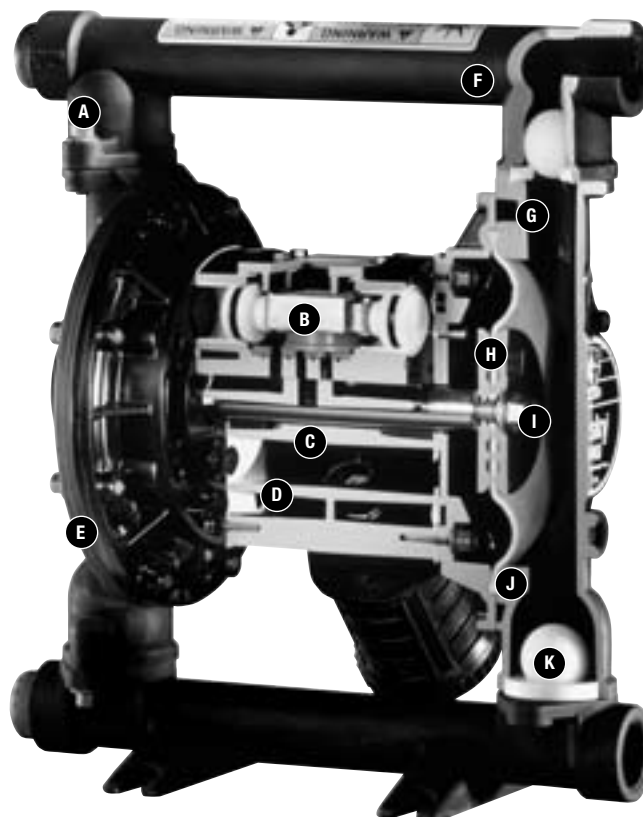
- 300 Series stainless steel rod designed for long life and corrosion resistance — even in wet air

### **J** EASY ALIGNMENT

- Bolted, self-aligning air and fluid sections

### **K** CHOICE OF ELASTOMERS

- Wide range of seat and ball options ensure fluid compatibility and positive seal for maximum efficiency, long life and better suction lift

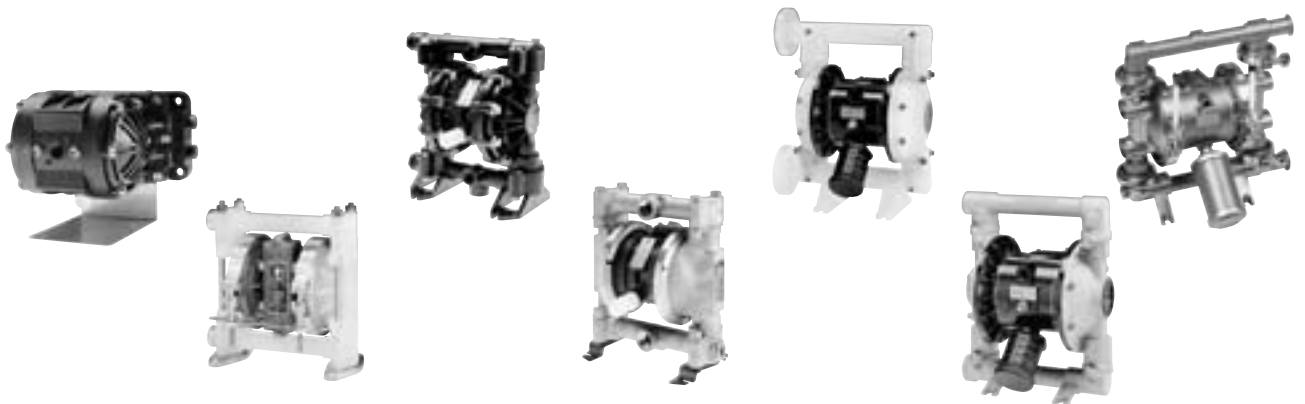


Note: Standard and remote pumps requires use of CycleFlo or available external controlled air valves.

# Air-Operated Double-Diaphragm Pumps

## Model Overview

Model	Husky 205 Plastic	Husky 307 Plastic	Husky 515 Plastic	Husky 716 Metal	Husky 1040 Plastic	Husky 1040 Metal	FDA-Compliant 1040
<b>Connection Size</b>	1/4 in (6.3 mm)	3/8 in (9.4 mm)	1/2 in (12.7 mm) or 3/4 in (19.1 mm)	3/4 in (19.1 mm)	1 in (25.4 mm)	1 in (25.4 mm)	1-1/2 in (38.1 mm)
<b>Thread Type</b>	NPT or BSP	NPT or BSP	NPT or BSP	NPT or BSP	ANSI Flange	NPT or BSP	Tri-Clamp®
<b>Air Valve</b>	Standard and Remote	Standard	Standard and Remote	Standard and Remote	Standard and Remote	Standard and Remote	Standard
<b>Maximum Flow Rate*</b>	5 gpm (19 lpm)	7 gpm (26 lpm)	15 gpm (57 lpm)	16 gpm (61 lpm)	40 gpm (151 lpm)	40 gpm (151 lpm)	40 gpm (151 lpm)
<b>Maximum Discharge Pressure</b>	100 psi (7.0 bar, 0.7 MPa)	100 psi (7.0 bar, 0.7 MPa)	100 psi (7.0 bar, 0.7 MPa)	100 psi (7.0 bar, 0.7 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)
<b>Materials of Construction Available</b>	Polypropylene, PVDF, Acetal	Polypropylene, Acetal	Polypropylene, PVDF, Acetal	Aluminum, 316 Stainless Steel	Polypropylene, PVDF, Acetal	Aluminum, 316 Stainless Steel	316 Stainless Steel
<b>Center Section Available</b>	Polypropylene	Coated Aluminum	Polypropylene	Polypropylene	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	316 Stainless Steel
<b>Pump Weight**</b>	2.0 lb (0.9 kg) Polypropylene 2.5 lb (1.1 kg) Acetal 2.8 lb (1.3 kg) PVDF	4.75 lb (2.2 kg) Acetal 5.2 lb (2.4 kg) Polypropylene	6.5 lb (2.9 kg) Polypropylene 7.8 lb (3.5 kg) Acetal 8.5 lb (3.9 kg) PVDF	8.5 lb (3.9 kg) Aluminum 18 lb (8.2 kg) Stainless Steel	19 lb (8.6 kg) Polypropylene 22 lb (10 kg) PVDF 25 lb (11.3 kg) Acetal	18 lb (8.2 kg) Aluminum 33 lb (15 kg) Stainless Steel	34 lb (16 kg) Stainless Steel
<b>Maximum Solids</b>	0.06 in (1.5 mm)	0.063 in (1.6 mm)	0.094 in (2.5 mm)	0.094 in (2.5 mm)	0.125 in (3.2 mm)	0.125 in (3.2 mm)	0.125 in (3.2 mm)

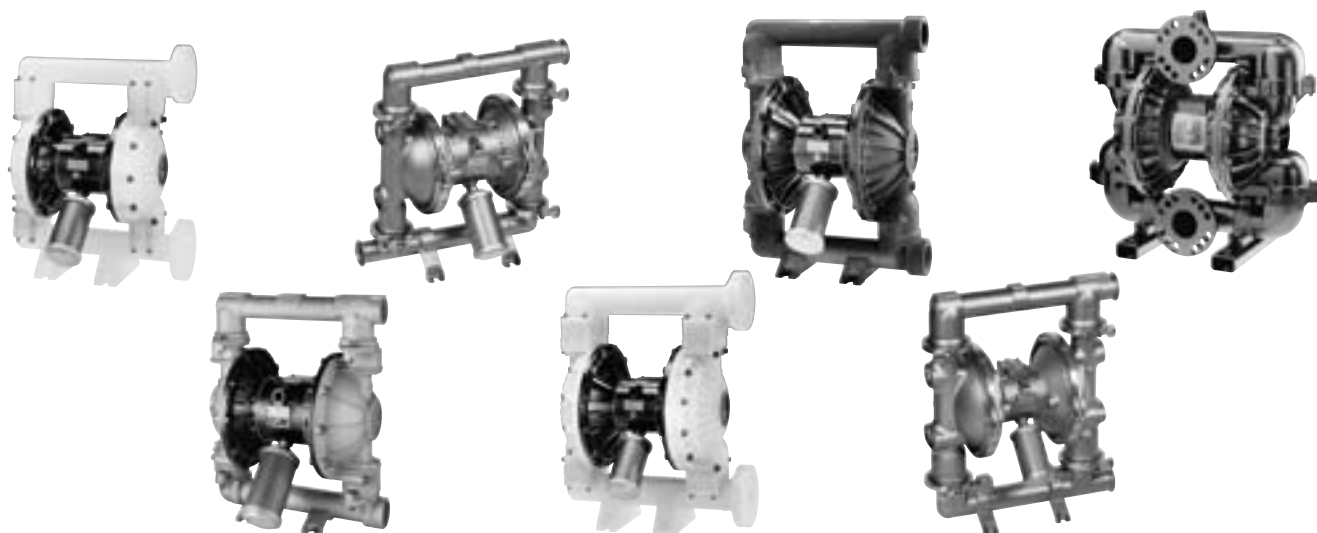


\*Flow rates are with muffler and do not vary based on diaphragm material.

\*\*For pumps with stainless steel center sections, add the following to the weight  
 Husky 1040 increase weight by 11.92 lb (5.4 kg) for stainless steel center sections  
 Husky 1590 increase weight by 13.3 lb (6.0 kg) for stainless steel center sections  
 Husky 2150 increase weight by 19.46 lb (8.8 kg) for stainless steel center sections



Model	Husky 1590 Plastic	Husky 1590 Metal	FDA-Compliant 1590	Husky 2150 Plastic	Husky 2150 Metal	FDA-Compliant 2150	Husky 3275 Metal
<b>Connection Size</b>	1-1/2 in (38.1 mm)	1-1/2 in (38.1 mm)	2 in (50.8 mm)	2 in (50.8 mm)	2 in (50.8 mm)	2-1/2 in (63.5 mm)	3 in (76.2 mm)
<b>Thread Type</b>	ANSI Flange	NPT or BSP	Tri-Clamp	ANSI Flange	NPT or BSP	Tri-Clamp	DIN/ANSI, NPT and BSPT
<b>Air Valve</b>	Standard and Remote	Standard and Remote	Standard	Standard and Remote	Standard and Remote	Standard	Standard
<b>Maximum Flow Rate</b>	100 gpm (379 lpm)	100 gpm (379 lpm)	100 gpm (379 lpm)	150 gpm (568 lpm)	150 gpm (568 lpm)	150 gpm (568 lpm)	275 gpm (1041 lpm)
<b>Maximum Discharge Pressure</b>	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)	120 psi (8.3 bar, 0.8 MPa)
<b>Materials of Construction Available</b>	Polypropylene, PVDF	Aluminum, 316 Stainless Steel	316 Stainless Steel	Polypropylene, PVDF	Aluminum, 316 Stainless Steel, Ductile Iron	316 Stainless Steel	Aluminum
<b>Center Section Available</b>	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	316 Stainless Steel	Coated Aluminum
<b>Pump Weight</b>	35 lb (16 kg) Polypropylene 49 lb (22 kg) PVDF	33.5 lb (15.2 kg) Aluminum 85 lb (38.6 kg) Stainless Steel	72 lb (32.7 kg) Stainless Steel	49 lb (22 kg) Polypropylene 68 lb (31 kg) PVDF	58 lb (26.3 kg) Aluminum 127 lb (57.6 kg) Stainless Steel 130 lb (59 kg) Ductile Iron	122 lb (50.8 kg) Stainless Steel	165 lb (68 kg) Aluminum
<b>Maximum Solids</b>	0.188 in (4.8 mm)	0.188 in (4.8 mm)	0.188 in (4.8 mm)	0.25 in (6.3 mm)	0.25 in (6.3 mm)	0.25 in (6.3 mm)	0.375 in (9.4 mm)

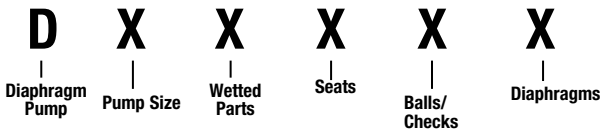


# Pump Selection Key

## Husky Designation

### Pump Designation

Part numbers are located on ID tag on center section of all Husky diaphragm pumps.



PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
1 = 1/4" (6.35 mm) Standard: polypropylene center section	1 = Acetal (npt)	2 = Acetal	1 = PTFE	1 = PTFE
2 = 1/4" (6.35 mm) Remote: polypropylene center section	2 = Poly (npt)	3 = Stainless Steel	2 = Acetal	5 = TPE
3 = 3/8" (9.52 mm) Standard: aluminum center section	3 = Aluminum (npt)	4 = Hardened SST	3 = Stainless Steel	6 = Santoprene
5 = 1/2" (12.7 mm) Standard: polypropylene center section	4 = Stainless Steel (npt)	5 = TPE	4 = Hardened SST	7 = Buna N
4 = 1/2" (12.7 mm) Remote: polypropylene center section	5 = PVDF (npt)	6 = Santoprene	5 = TPE	8 = Fluoroelastomer
5 = 3/4" (19.05 mm) Standard: polypropylene center section	6 = Ductile Iron (npt)	7 = Buna N	6 = Santoprene	8 = Geolast
4 = 3/4" (19.05 mm) Remote: polypropylene center section		8 = Fluoroelastomer	7 = Buna N	
7 = 1" (25.4 mm) Standard: aluminum center section	A = Acetal * (bsp)	9 = Polypropylene	8 = Fluoroelastomer	
8 = 1" (25.4 mm) Remote: aluminum center section	B = Poly * (bsp)	A = PVDF	9 = Polypropylene	
R = 1" (25.4 mm) Standard: stainless steel center section	C = Aluminum (bsp)	G = Geolast	A = PVDF	
S = 1" (25.4 mm) Remote: stainless steel center section	D = Stainless Steel (bsp)		G = Geolast	
B = 1-1/2" (38.1 mm) Standard: aluminum center section	E = PVDF (bsp)	B = SST with viton seal		
C = 1-1/2" (38.1 mm) Remote: aluminum center section	F = Ductile Iron (bsp)	C = Santoprene with viton seal		
T = 1-1/2" (38.1 mm) Standard: stainless steel center section				
U = 1-1/2" (38.1 mm) Remote: stainless steel center section	H = 2 npt Alum Extended			
F = 2" (50.8 mm) Standard: aluminum center section	G = 2 bsp Alum Extended			
G = 2" (50.8 mm) Remote: aluminum center section				
V = 2" (50.8 mm) Standard: stainless steel center section				
W = 2" (50.8 mm) Remote: stainless steel center section				
K = 3" (76.2 mm) Standard: aluminum center section				

\* = BSP plastic in 1/2" (12.7mm) pumps

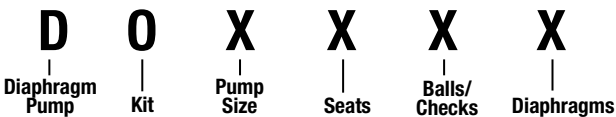
≥1" Plastic pumps flange connections

3" Aluminum pumps flange/npt (f) combination connections

Note: Above matrix is all possible combinations. All combination may not be available. See specific pump listings for available combinations.

### Diaphragm Pump Kit Designation

When selecting a kit, use the same code numbers as for the pumps regarding pump size, seat, ball/checks and diaphragm.



Pump Size	Seats	Balls/Checks	Diaphragm
1 = 1/4 in (6.35 mm)	0 = No seat	1 = PTFE	1 = PTFE
3 = 3/8 in (9.52 mm)	2 = Acetal	2 = Acetal	5 = TPE
5 = 1/2 in (12.7 mm) and 3/4 in (19.05 mm)	3 = Stainless Steel	3 = Stainless Steel	6 = Santoprene
7 = 1 in (25.4 mm) metal pump	4 = Hardened SST	4 = Hardened SST	7 = Buna-N
8 = 1 in (25.4 mm) plastic pump	5 = TPE	5 = TPE	8 = Fluoroelastomer
B = 1-1/2 in (38.1 mm) metal pump	6 = Santoprene	6 = Santoprene	G = Geolast
C = 1-1/2 in (38.1 mm) plastic pump	7 = Buna N	7 = Buna-N	
F = 2 in (50.8 mm) metal pump	8 = Fluoroelastomer	8 = Fluoroelastomer	0 = No Diaphragm
G = 2 in (50.8 mm) plastic pump	9 = Poly	9 = Poly	
K = 3 in (76.2 mm)	A = PVDF	A = PVDF	
	B = SST with viton seal	G = Geolast	
	C = Santoprene with viton seal		
	G = Geolast	0 = No Balls/Checks	

# Pump Selection Key

## Wetted Parts Material Options

---

### **Acetal** *Material used for seats, balls & wetted body parts*

- Wide range of solvent resistance
- Withstands extreme fatigue
- Good level of abrasion resistance
- Groundable for use with flammables
- Not for use with acids or bases

### **Aluminum** *Material used for air motor & wetted body parts*

- Medium corrosion and abrasion resistance
- Not for use with HHC's

### **Ductile Iron** *Material used for wetted body parts*

- High abrasion resistance
- Low cost alternative to stainless steel

### **Hardened SST** *Material used for seats and balls*

- Moderate chemical resistance
- Good abrasion resistance
- Abrasion resistant balls and seats

### **PVDF** *Material used for wetted body parts & seats*

- Strong chemical resistance: acids and bases
- Good abrasion resistance
- High temperature resistance

### **Polypropylene** *Material used for air motor, wetted body parts, seats & balls*

- Wide chemical compatibility
- General purpose
- Inexpensive alternative

### **Stainless Steel** *Material used for air motor, wetted body parts, and seats and balls*

- High level of corrosion and abrasion resistance
- Passivated for use with waterbase coatings

### **Buna-N** *Material used for seats, balls and diaphragms*

- Good for petroleum-based fluids
- Not for use with strong solvents or chemicals
- Food grade

### **Geolast** *Material used for seats, balls & diaphragms*

- Good abrasion resistance
- Same chemical compatibility as Buna-N and TPE

### **TPE** *Material used for seats, balls & diaphragms*

- Good abrasion resistance
- Often substituted for Buna-N

### **Santoprene®** *Material used for seats, balls & diaphragms*

- Good abrasion and chemical resistance
- Not for use with solvents
- Often substituted for EPDM or EPR
- Food grade

### **PTFE** *Material used for balls & diaphragms*

- Excellent when used with solvents
- Poor abrasion resistance
- Widest chemical compatibility with fluids
- Food grade

### **Fluoroelastomer** *Material used for seats, balls & diaphragms*

- High level of corrosion resistance with acids
- Resists unleaded fuels
- Food grade

*All other trademarks mentioned herein are the property of their respective owners.*

# Husky 205 Plastic Pumps

## Air-Operated Double-Diaphragm

---

### Features

- 1/4 in (6.35 mm) end-porting
- Low-cost, compact design
- Spring check valves for superior priming in any mounting configuration
- True-formed PTFE and Santoprene diaphragms for enhanced performance
- External controller for optional remote operation

### Typical Applications

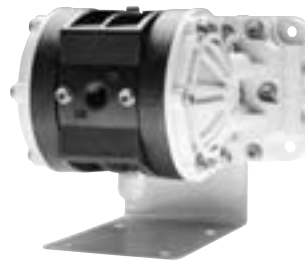
- Supply pump for OEM applications
- Printing ink supply
- Wastewater chemical supply
- Plating/surface finishing
- Chemical dosing

### Typical Fluids Handled

- Waterborne materials, some HHC's
- Paints, coatings, inks and dyes
- Car wash chemicals
- Laundry chemicals and detergents
- Chemicals
- Inks



*Husky 205 Groundable Acetal  
D1102X or D2102X*



*Husky 205 Polypropylene  
D1209X or D2209X*



*Husky 205 PVDF  
D150AX or D250AX*

# Husky 205

## Plastic Pumps

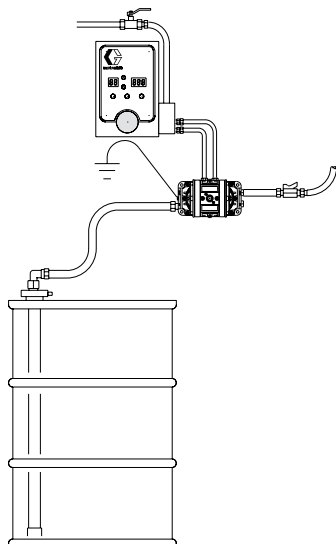
### Technical Specifications

Maximum fluid working pressure.....	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*.....	5.0 gpm (18.9 lpm)
Maximum pump speed.....	250 cpm
Displacement per cycle**.....	0.02 gallon (0.076 liter)
Maximum suction lift (D12096).....	10 ft (3 m) dry
Maximum size pumpable solids.....	0.06 in (1.5 mm)
Maximum operating temperature***	
Acetal.....	250°F (120°C)
Polypropylene.....	275°F (135°C)
PVDF.....	300°F (150°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm.....	.70 dBa
Maximum air consumption.....	9.0 scfm (0.252 m3/min)
Air pressure operating range.....	20 to 100 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/4 npt(f)
Air exhaust port size.....	1/4 npt(f)
Fluid inlet & outlet size****.....	1/4 npt(f)
Weight	
Polypropylene.....	2.0 lb (0.9 kg)
Acetal.....	2.5 lb (1.1 kg)
PVDF.....	2.8 lb (1.3 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	
Polypropylene pump.....	Glass-filled Polypropylene, Santoprene, PTFE, Polypropylene
Acetal pump.....	Acetal with Stainless Steel fibers, PTFE, Acetal, Santoprene
PVDF pump.....	PVDF, PTFE, Santoprene
Instruction manual.....	308652

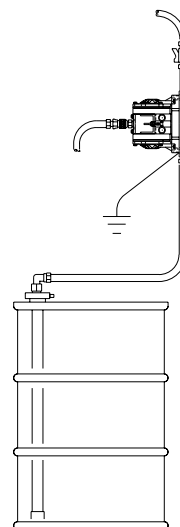
*\* Flow rates are with muffler and do not vary based on diaphragm material*  
*\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type*  
*\*\*\* Actual pump performance may be affected by prolonged usage at temperature*  
*\*\*\*\* Hybrid thread allows for either 1/4 npt or 1/4 bspt fitting*

### Typical System Drawings

Husky 205 Wall-Mount with CycleFlo



Husky 205 Wall-Mount with Drum Feed



# Husky 205

## Plastic Pumps

### Ordering Information

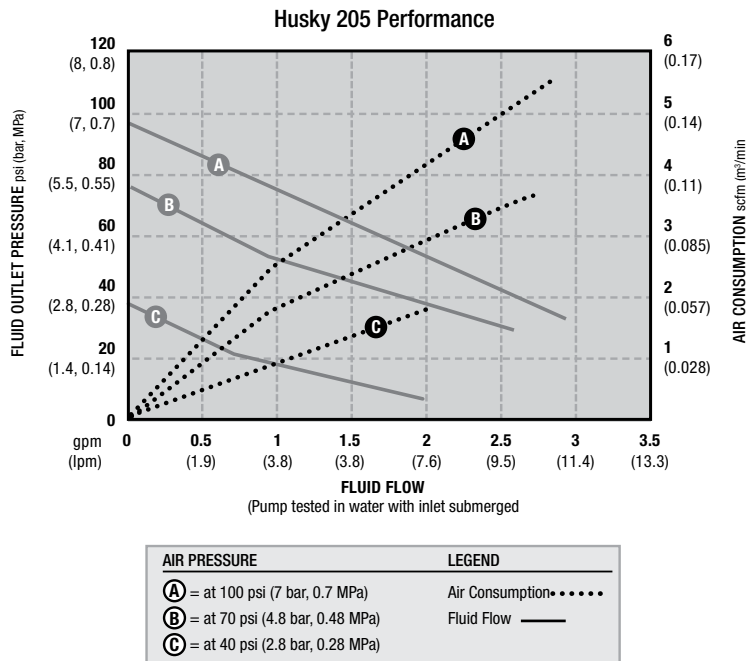
**D** Diaphragm Pump  
**X** Pump Size  
**X** Wetted Parts  
**X** Seats  
**X** Balls/Checks  
**X** Diaphragms

PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	CHECK VALVES	DIAPHRAGM
1 = 1/4" (6.35 mm) Standard: polypropylene center section	1 = Acetal (npt)	2 = Acetal	2 = Acetal	1 = PTFE
2 = 1/4" (6.35 mm) Remote: polypropylene center section	2 = Poly (npt)		9 = Polypropylene	6 = Santoprene
	5 = PVDF (npt)		A = PVDF	

### Accessories

See page 71 for additional accessories.

### Performance Charts



# Husky 205

## Plastic Pumps

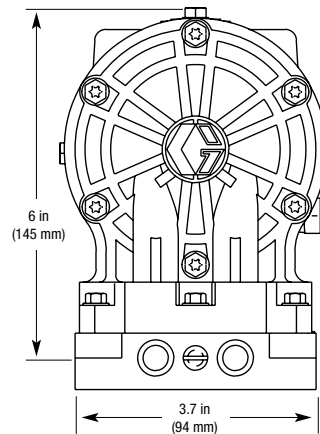
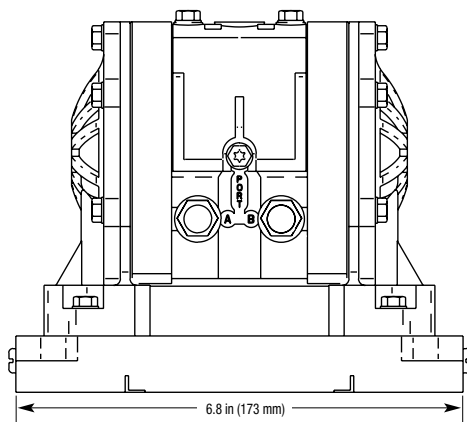
### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Check Valves	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve					
Acetal	D11021	D21021			Acetal	PTFE	D01021	238853	246946
	D11026	D21026			Acetal	Santoprene	D01026	238853	246946
PVDF	D250A1	D250A1			PVDF	PTFE	D010A1	238853	246946
	D250A6	D250A6			PVDF	Santoprene	D010A6	238853	246946
Polypropylene	D12091	D22091			Polypropylene	PTFE	D01091	238853	246946
	D12096	D22096			Polypropylene	Santoprene	D01096	238853	246946

\* Requires Cycleflo or external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 307 Plastic Pumps

## Air-Operated Double-Diaphragm

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### Features

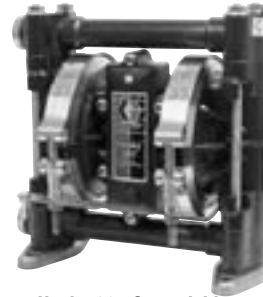
- 3/8 in (9.52 mm) end-porting
- Fully-groundable acetal model
- Delivery up to 7 gpm (26.5 lpm)
- Operates on as little as 20 psi (1.4 bar, 0.14 MPa) air pressure
- Quiet operation — 75 dBa at 50 psi (3.5 bar, 0.35 MPa) and 60 cpm

### Typical Applications

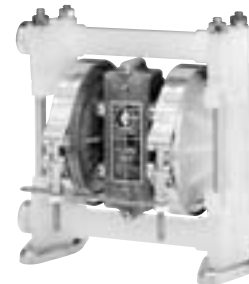
- Drum transfer for fluids up to 1000 centipoise
- Circulation of low viscosity inks, stains and dyes
- Coolant circulation and evacuation
- Waste fluid removal
- Low viscosity adhesive supply
- Consistent low pressure air spray or HVLP supply

### Typical Fluids Handled

- Paints
- Lubricants
- Inks
- Stains
- Solvents
- Coatings
- Dyes



*Husky 307 Groundable  
Acetal D31XXX*



*Husky 307 Polypropylene  
D32XXX*



# Husky 307

## Plastic Pumps

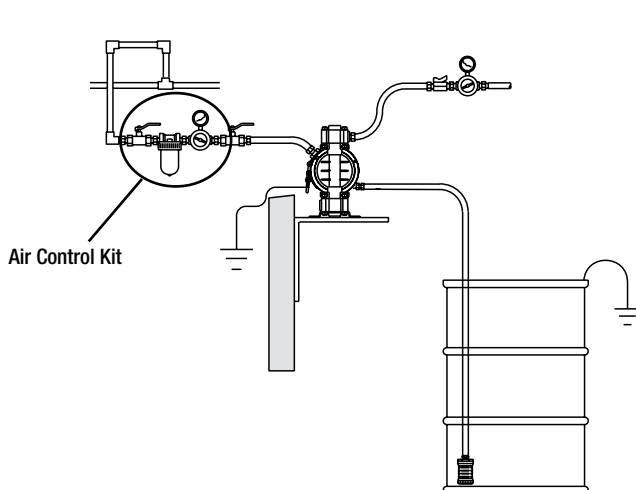
### Technical Specifications

Maximum fluid working pressure.....	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*.....	7.0 gpm (26.5 lpm)
Maximum pump speed.....	330 cpm
Displacement per cycle**.....	0.02 gallon (0.076 liter)
Maximum suction lift (D31255).....	12 ft (3.7 m) dry
Maximum size pumpable solids.....	0.06 in (1.5 mm)
Maximum operating temperature***	
Acetal.....	250°F (120°C)
Polypropylene.....	275°F (135°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Typical sound level	
at 50 psi (3.5 bar, 0.35 MPa) air @ 50 cpm.....	75 dBa
Maximum air consumption.....	6 scfm (0.17 m <sup>3</sup> /min)
Air pressure operating range.....	20 to 100 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/4 npt(f) or bspt(f)
Fluid inlet & outlet size.....	3/8 npt(f)
Weight	
Acetal.....	5.2 lb (2.4 kg)
Polypropylene.....	4.75 lb (2.2 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	
Acetal pump.....	Acetal with Stainless Steel fibers, PTFE
Polypropylene pump.....	Polypropylene, PTFE
Instruction manual.....	308553

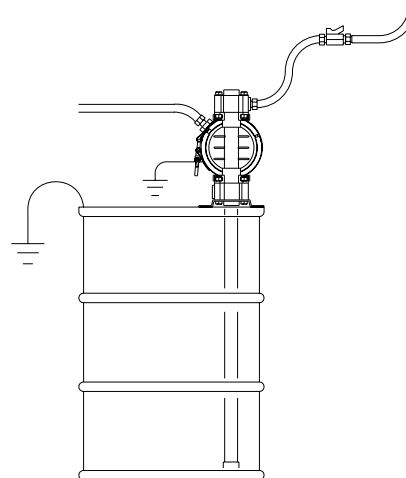
\* Flow rates are with muffler and do not vary based on diaphragm material  
 \*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type  
 \*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawings

Husky 307 Wall-Mount with Siphon Feed



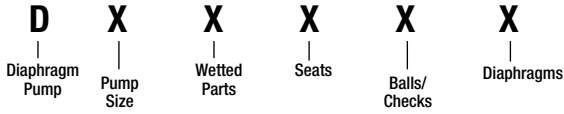
Husky 307 Drum-Mount with Siphon Feed



# Husky 307

## Plastic Pumps

### Ordering Information

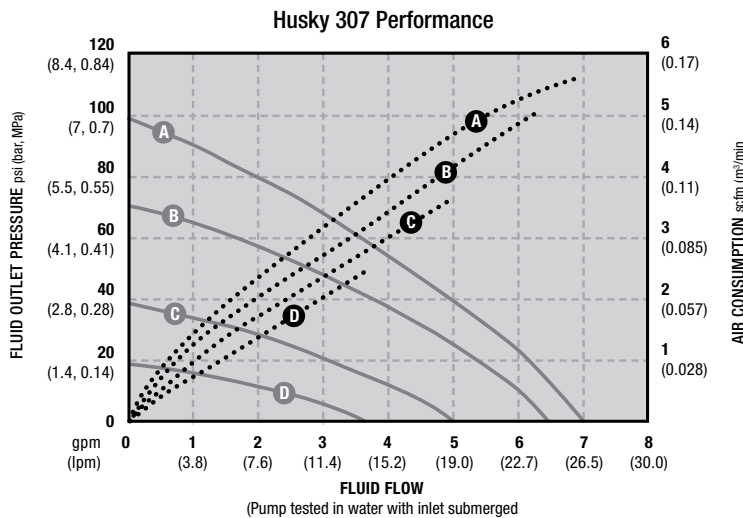


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
3 = 3/8" (9.52 mm) Standard: aluminum center section	1 = Acetal (npt) 2 = Poly (npt) A = Acetal * (bsp) B = Poly * (bsp)	3 = Stainless Steel 4 = Hardened SST 6 = Santoprene A = PVDF	1 = PTFE 5 = TPE 6 = Santoprene 7 = Buna N	1 = PTFE 5 = TPE 6 = Santoprene 7 = Buna N

### Accessories

See page 71 for additional accessories.

### Performance Charts



AIR PRESSURE	LEGEND
(A) = at 100 psi (7 bar, 0.7 MPa)	Air Consumption.....
(B) = at 70 psi (4.8 bar, 0.48 MPa)	Fluid Flow ———
(C) = at 40 psi (2.8 bar, 0.28 MPa)	
(D) = at 20 psi (1.4 bar, 0.14 MPa)	

# Husky 307

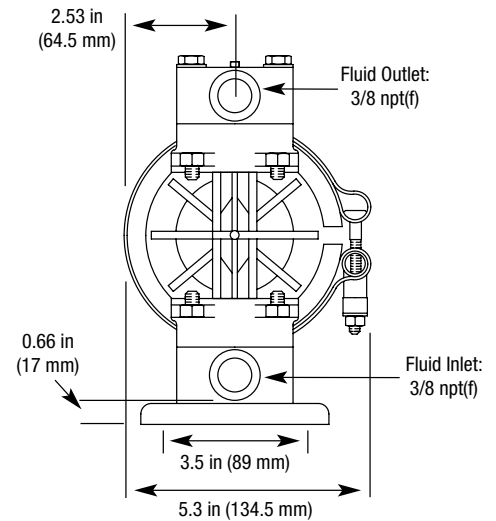
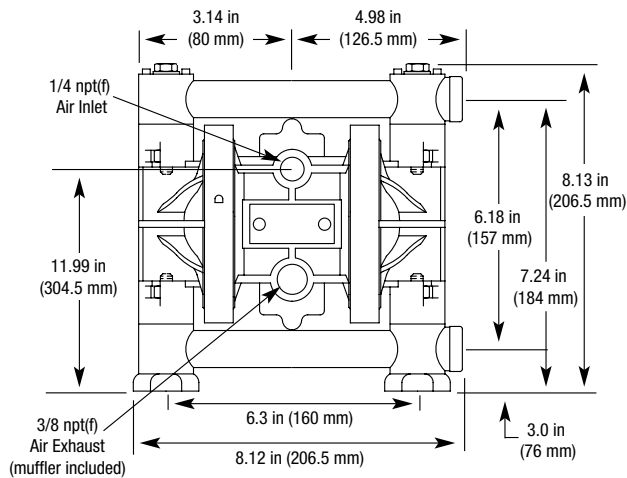
## Plastic Pumps

### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control*
	Standard Air Valve	Remote Air Valve	Standard Air Valve	Remote Air Valve						
Acetal	D31211	NA	D3A211	NA	Acetal	PTFE	PTFE	D03211	239952	246946
	D31255	NA	D3A255	NA	Acetal	TPE	TPE	D03255	239952	246946
	D31277	NA	D3A277	NA	Acetal	Buna	Buna	D03277	239952	246946
	D31311	NA	D3A311	NA	Stainless Steel	PTFE	PTFE	D03311	239952	246946
Polypropylene	D32211	NA	D3B211	NA	Acetal	PTFE	PTFE	D03211	239952	246946
	D32255	NA	D3B255	NA	Acetal	TPE	TPE	D03255	239952	246946
	D32277	NA	D3B277	NA	Acetal	Buna	Buna	D03277	239952	246946
	D32311	NA	D3B311	NA	Stainless Steel	PTFE	PTFE	D03311	239952	246946
	D32366	NA	D3B366	NA	Stainless Steel	Santoprene	Santoprene	D03366	239952	246946
	D32911	NA	D3B911	NA	Polypropylene	PTFE	PTFE	D03911	239952	246946
	D32955	NA	D3B955	NA	Polypropylene	TPE	TPE	D03955	239952	246946
	D32966	NA	D3B966	NA	Polypropylene	Santoprene	Santoprene	D03966	239952	246946
	D32977	NA	D3B977	NA	Polypropylene	Buna	Buna	D03977	239952	246946

\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 515 Plastic Pumps

## Air-Operated Double-Diaphragm

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### Features

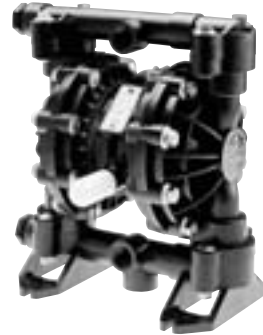
- 1/2 in (12.7 mm) center-porting and 3/4 in (19.05 mm) end-porting
- No seals to leak or fail
- Quiet running — less than 85 dBa with easy-to-use remote muffler capability for even lower noise levels
- High flow rates in a small, portable package
- External controller for optional remote operation
- Patented, high-reliability closed center air valve is externally serviceable

### Typical Applications

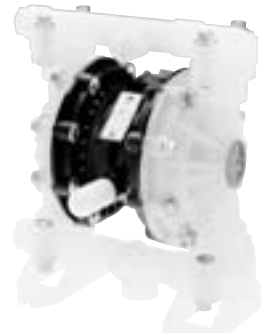
- Machine lubrication servicing
- Drum evacuation
- Plating and dip tanks
- Water treatment

### Typical Fluids Handled

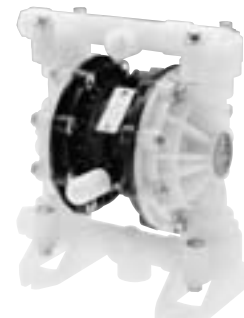
- Cleaning fluids and detergents
- Chemicals
- Ceramic glazes
- Inks
- Solvents and flammables
- Acids and bases



*Husky 515 Groundable Acetal  
D51XXX or D41XXX*



*Husky 515 Polypropylene  
D52XXX or D42XXX*



*Husky 515 PVDF  
D55XXX or D45XXX*

# Husky 515

## Plastic Pumps

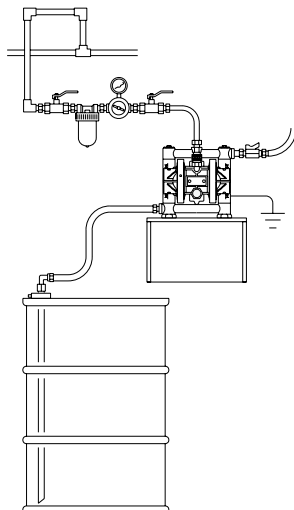
### Technical Specifications

Maximum fluid working pressure.....	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*.....	15 gpm (57 lpm)
Maximum pump speed.....	400 cpm
Displacement per cycle**.....	0.04 gallon (0.15 liter)
Maximum suction lift (D52331).....	12 ft (3.7 m) dry
Maximum size pumpable solids.....	0.09 in (2.5 mm)
Maximum operating temperature***	
Acetal.....	250°F (120°C)
Polypropylene.....	275°F (135°C)
PVDF.....	300°F (150°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 200 cpm.....	.74 dBA
Maximum air consumption.....	28 scfm (0.672 m <sup>3</sup> /min)
Air pressure operating range.....	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)
Air inlet size.....	1/4 npt(f)
Air exhaust port size.....	3/8 npt(f)
Fluid inlet & outlet size.....	1/2 and 3/4 npt(f) or bspt(f)
Weight	
Acetal.....	7.8 lb (3.5 kg)
Polypropylene.....	6.5 lb (2.9 kg)
PVDF.....	8.5 lb (3.9 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	
Acetal pump.....	Groundable Acetal, PTFE, SST
Polypropylene pump.....	Polypropylene, PTFE, SST
PVDF pump.....	PVDF, PTFE
Instruction manual.....	308981

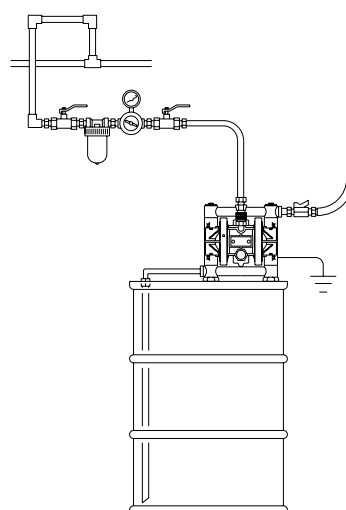
\* Flow rates are with muffler and do not vary based on diaphragm material  
 \*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type  
 \*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawings

Husky 515 Wall-Mount with Drum Feed



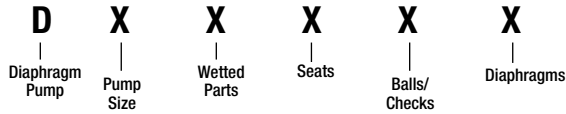
Husky 515 Drum-Mount with Siphon Feed



# Husky 515

## Plastic Pumps

### Ordering Information



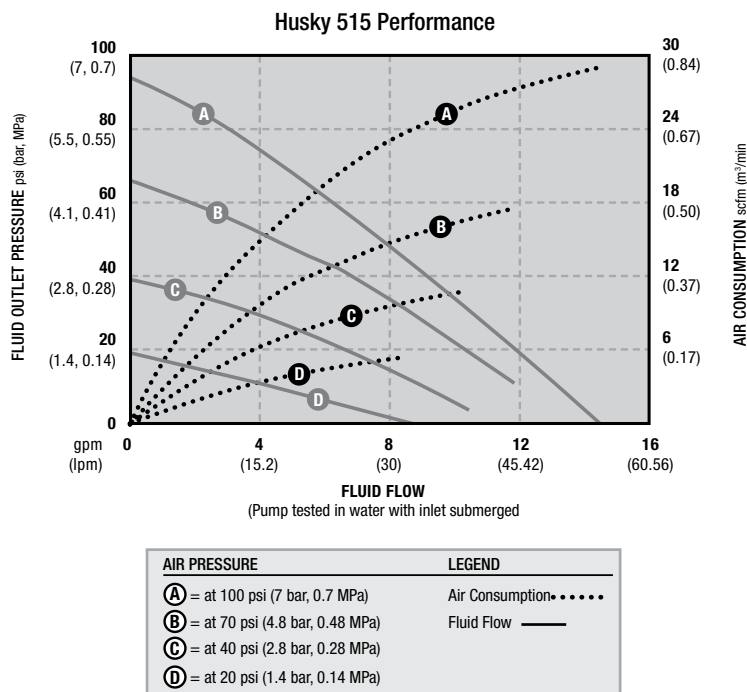
PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
5 = 1/2" (12.7 mm) Standard: polypropylene center section	1 = Acetal (npt)	2 = Acetal	1 = PTFE	1 = PTFE
4 = 1/2" (12.7 mm) Remote: polypropylene center section	2 = Poly (npt)	3 = Stainless Steel	3 = Stainless Steel	5 = TPE
	5 = PVDF (npt)	5 = TPE	6 = Santoprene	6 = Santoprene
	A = Acetal * (bsp)	9 = Polypropylene	8 = Fluoroelastomer	7 = Buna N
	B = Poly * (bsp)	A = PVDF		8 = Fluoroelastomer
	E = PVDF (bsp)	D = Urethane Duckbill		

\* = BSP plastic in 1/2" (12.7mm) pumps

### Accessories

See page 72 for additional accessories.

### Performance Chart



# Husky 515

## Plastic Pumps

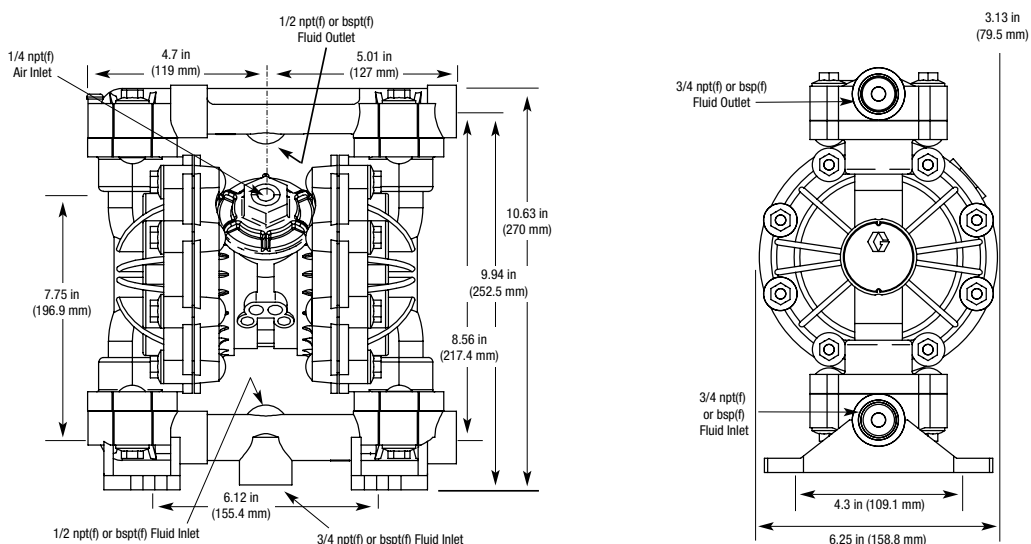
### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
Acetal	D51211	D41211	D5A211	D4A211	Acetal	PTFE	PTFE	D05211	241657	246946
	D51255	D41255	D5A255	D4A255	Acetal	TPE	TPE	D05255	241657	246946
	D51277	D41277	D5A277	D4A277	Acetal	Buna	Buna	D05277	241657	246946
	D51311	D41311	D5A311	D4A311	Stainless Steel	PTFE	PTFE	D05311	241657	246946
	D51331	D41331	D5A331	D4A331	Stainless Steel	Stainless Steel	PTFE	D05331	241657	246946
	D51D05	D41D05	D5AD05	D4AD05	Duckbill		TPE	D05D05	241657	246946
	D51D06	D41D06	D5AD06	D4AD06	Duckbill		Santoprene	D05D06	241657	246946
	D51D07	D41D07	D5AD07	D4AD07	Duckbill		Buna	D05D07	241657	246946
Polypropylene	D52211	D42211	D5B211	D4B211	Acetal	PTFE	PTFE	D05211	241657	246946
	D52277	D42277	D5B277	D4B277	Acetal	Buna	Buna	D05277	241657	246946
	D52311	D42311	D5B311	D4B311	Stainless Steel	PTFE	PTFE	D05311	241657	246946
	D52331	D42331	D5B331	D4B331	Stainless Steel	Stainless Steel	PTFE	D05331	241657	246946
	D52336	D42336	D5B336	D4B336	Stainless Steel	Stainless Steel	Santoprene	D05336	241657	246946
	D52911	D42911	D5B911	D4B911	Polypropylene	PTFE	PTFE	D05911	241657	246946
	D52955	D42955	D5B955	D4B955	Polypropylene	TPE	TPE	D05955	241657	246946
	D52966	D42966	D5B966	D4B966	Polypropylene	Santoprene	Santoprene	D05966	241657	246946
	D52977	D42977	D5B977	D4B977	Polypropylene	Buna	Buna	D05977	241657	246946
	D52988	D42988	D5B988	D4B988	Polypropylene	Fluoroelastomer	Fluoroelastomer	D05988	241657	246946
	D52D05	D42D05	D5BD05	D4BD05	Duckbill		TPE	D05D05	241657	246946
	D52D06	D42D06	D5BD06	D4BD06	Duckbill		Santoprene	D05D06	241657	246946
	D52D07	D42D07	D5BD07	D4BD07	Duckbill		Buna	D05D07	241657	246946
PVDF	D55A11	D45A11	D5EA11	D4EA11	PVDF	PTFE	PTFE	D05A11	241657	246946
	D55A88	D45A88	D5EA88	D4EA88	PVDF	Fluoroelastomer	Fluoroelastomer	D05A88	241657	246946

\*Required Cycleflo to external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 716 Metal Pumps

## Air-Operated Double-Diaphragm

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### Features

- 3/4 in (19.05 mm) center- and end-porting
- No seals to leak or fail
- Quiet running — less than 85 dBa with easy-to-use remote muffler capability for even lower noise levels
- High flow rates in a small, portable package
- External controller for optional remote operation
- Patented, high-reliability closed center air valve is externally serviceable

### Typical Applications

- Machine lubrication servicing
- Cleaning fluids and detergents
- Plating and dip tanks
- Water treatment

### Typical Fluids Handled

- Oil
- Water
- Most solvents



*Husky 716 Aluminum  
D53XXX or D43XXX*



*Husky 716 Stainless Steel  
D54XXX or D44XXX*



# Husky 716

## Metal Pumps

### Technical Specifications

Maximum fluid working pressure.....	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*.....	16 gpm (61 lpm)
Maximum pump speed.....	400 cpm
Displacement per cycle**.....	0.04 gallon (0.15 liter)
Maximum suction lift (D53331).....	11 ft (3.4 m) dry
Maximum size pumpable solids.....	0.09 in (2.5 mm)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 200 cpm.....	74 dBa
Maximum air consumption.....	28 scfm (0.672 m3/min)
Air pressure operating range.....	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)
Air inlet size.....	1/4 npt(f)
Air exhaust port size.....	3/8 npt(f)
Fluid inlet & outlet size.....	3/4 npt(f) or bspt(f)
Weight	
Aluminum.....	8.5 lb (3.9 kg)
Stainless Steel.....	18 lb (8.2 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	
Aluminum pump.....	Aluminum, Stainless Steel, PTFE, Buna-N, Santoprene, Zinc-Plated Steel
Stainless Steel pump.....	Acetal, Polypropylene, Stainless Steel, Polyester, Santoprene, Fluoroelastomer, Nickel-Plated Brass, Epoxy-Coated Steel
Instruction manual.....	308981

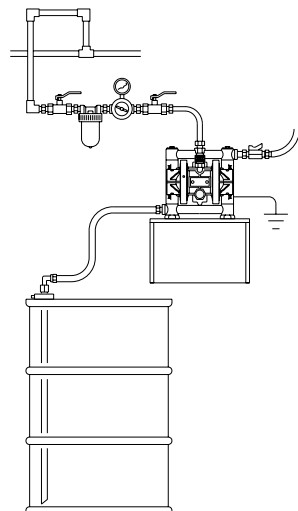
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

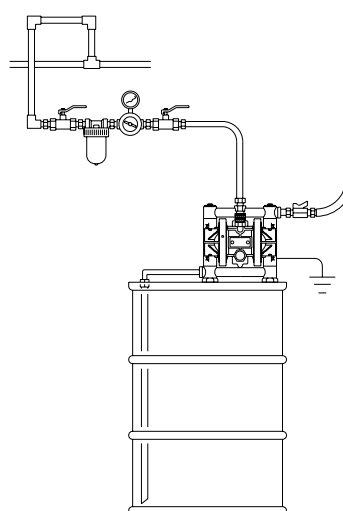
\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawings

Husky 716 Wall-Mount with Drum Feed



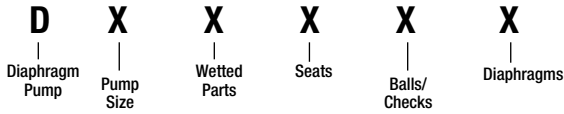
Husky 716 Drum-Mount with Siphon Feed



# Husky 716

## Metal Pumps

### Ordering Information

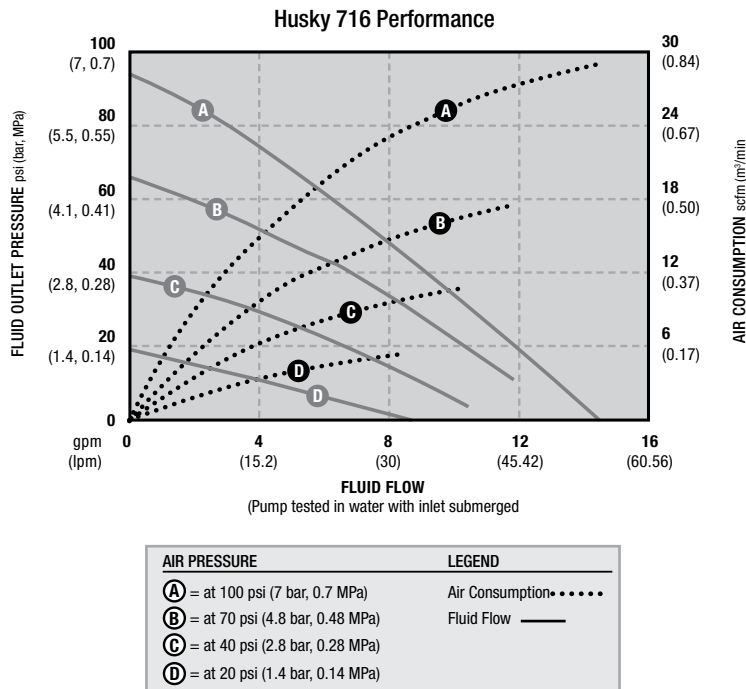


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
5 = 3/4" (19.05 mm) Standard: polypropylene center section	3 = Aluminum (npt)	2 = Acetal	1 = PTFE	1 = PTFE
4 = 3/4" (19.05 mm) Remote: polypropylene center section	4 = Stainless Steel (npt)	3 = Stainless Steel	3 = Stainless Steel	5 = TPE
	C = Aluminum (bsp)	9 = Polypropylene	5 = TPE	6 = Santoprene
	D = Stainless Steel (bsp)	A = PVDF	6 = Santoprene	7 = Buna N
		B = SST with viton seal	7 = Buna N	8 = Fluoroelastomer
		C = Santoprene with viton seal	8 = Fluoroelastomer	
		D = Urethane Duckbill		

### Accessories

See page 72 for additional accessories.

### Performance Chart



# Husky 716

## Metal Pumps

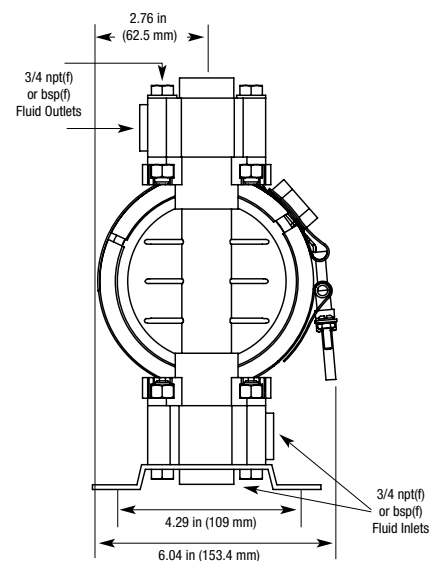
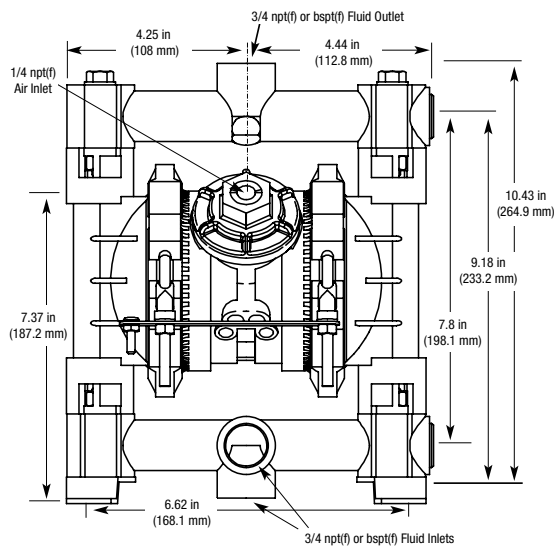
### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
Aluminum	D53211	D43211	D5C211	D4C211	Acetal	PTFE	PTFE	D05211	241657	246946
	D53255	D43255	D5C255	D4C255	Acetal	TPE	TPE	D05255	241657	246946
	D53277	D43277	D5C277	D4C277	Acetal	Buna	Buna	D05277	241657	246946
	D53288	D43288	D5C288	D4C288	Acetal	Fluoroelastomer	Fluoroelastomer	D05288	241657	246946
	D53311	D43311	D5C311	D4C311	Stainless Steel	PTFE	PTFE	D05311	241657	246946
	D53331	D43331	D5C331	D4C331	Stainless Steel	Stainless Steel	PTFE	D05331	241657	246946
	D53355	D43355	D5C355	D4C355	Stainless Steel	TPE	TPE	D05355	241657	246946
	D53366	D43366	D5C366	D4C366	Stainless Steel	Santoprene	Santoprene	D05366	241657	246946
	D53377	D43377	D5C377	D4C377	Stainless Steel	Buna	Buna	D05377	241657	246946
	D53388	D43388	D5C388	D4C388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	D05388	241657	246946
	D53911	D43911	D5C911	D4C911	Polypropylene	Polypropylene	Polypropylene	D05911	241657	246946
	D53955	D43955	D5C955	D4C955	Polypropylene	TPE	TPE	D05955	241657	246946
	D53966	D43966	D5C966	D4C966	Polypropylene	Santoprene	Santoprene	D05966	241657	246946
	D53977	D43977	D5C977	D4C977	Polypropylene	Buna	Buna	D05977	241657	246946
	D53D05	D43D05	D5CD05	D4CD05		Duckbill	TPE	D05D05	241657	246946
	D53D06	D43D06	D5CD06	D4CD06		Duckbill	Santoprene	D05D06	241657	246946
D53D07	D43D07	D5CD07	D4CD07		Duckbill	Buna	D05D07	241657	246946	
Stainless Steel	D54211	D44211	D5D211	D4D211	Acetal	PTFE	PTFE	D05211	241657	246946
	D54311	D44311	D5D311	D4D311	Stainless Steel	PTFE	PTFE	D05311	241657	246946
	D54331	D44331	D5D331	D4D331	Stainless Steel	Stainless Steel	PTFE	D05331	241657	246946
	D54335	D44335	D5D335	D4D335	Stainless Steel	Stainless Steel	TPE	D05335	241657	246946
	D54336	D44336	D5D336	D4D336	Stainless Steel	Stainless Steel	Santoprene	D05336	241657	246946
	D54355	D44355	D5D355	D4D355	Stainless Steel	TPE	TPE	D05355	241657	246946
	D54366	D44366	D5D366	D4D366	Stainless Steel	Santoprene	Santoprene	D05366	241657	246946
	D54377	D44377	D5D377	D4D377	Stainless Steel	Buna	Buna	D05377	241657	246946
	D54388	D44388	D5D388	D4D388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	D05388	241657	246946
	D54911	D44911	D5D911	D4D911	Polypropylene	PTFE	PTFE	D05911	241657	246946
D54966	D44966	D5D966	D4D966	Polypropylene	Santoprene	Santoprene	D05966	241657	246946	

\* Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 1040 Plastic Pumps

## Air-Operated Double-Diaphragm

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### Features

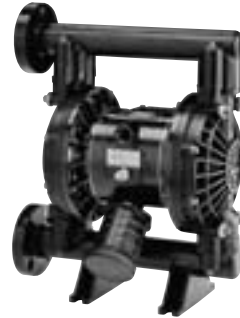
- 1 in (25.4 mm) ANSI end-porting (flange)
- High flow – 40 gpm (151 lpm) in a compact, portable size
- Fluid pressure to 120 psi (8.4 bar, 0.84 MPa)
- Epoxy-coated center section
- External controller for optional remote operation
- Stainless steel center section for corrosive applications
- Patented, high-reliability closed center air valve is externally serviceable

### Typical Applications

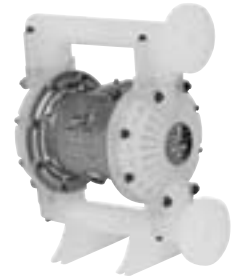
- Drum fluid transfer
- Unloading fluids
- Transferring high temperature acids
- Chemical evacuation
- Tank and sump drainage
- Circulating plating chemical tank

### Typical Fluids Handled

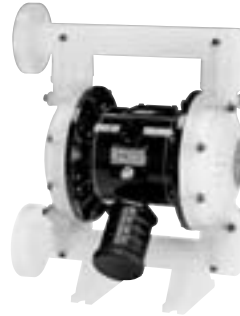
- Chemicals
- Acetic acid
- Chromic acid
- Hydrochloric acid
- Hydrofluoric acid
- Sulfuric acid
- Nitric acid
- Phosphoric acid



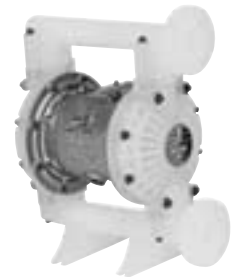
*Husky 1040 Groundable Acetal  
D71XXX or D81XXX*



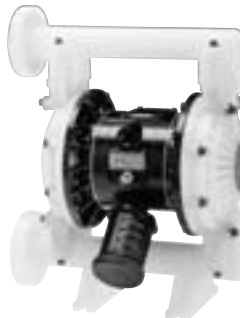
*Husky 1040 Polypropylene  
DR2XXX or DS2XXX*



*Husky 1040 Polypropylene  
D72XXX or D82XXX*



*Husky 1040 PVDF  
DR5XXX or DS5XXX*



*Husky 1040 PVDF  
D75XXX or D85XXX*

# Husky 1040

## Plastic Pumps

### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	40 gpm (151 lpm)
Maximum pump speed.....	267 cpm
Displacement per cycle**.....	0.15 gallon (0.57 liter)
Maximum suction lift (D72888).....	19 ft (5.8 m) dry
Maximum size pumpable solids.....	0.13 in (3.2 mm)
Maximum operating temperature***	
Acetal.....	250°F (120°C)
Polypropylene.....	275°F (135°C)
PVDF.....	300°F (150°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 50 cpm.....	.76 dBa
Maximum air consumption.....	60 scfm (1.7 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	1 in (25.4 mm) ANSI-flange
Wetted Parts.....	varies by model, see instruction manual
Weight	
Acetal.....	22 lb (10 kg)
Polypropylene.....	19 lb (8.6 kg)
Polypropylene with stainless steel center section.....	30.9 lb (14 kg)
PVDF.....	25 lb (11.3 kg)
PVDF with stainless steel center section.....	36.9 lb (16.7 kg)
Instruction manual.....	308443

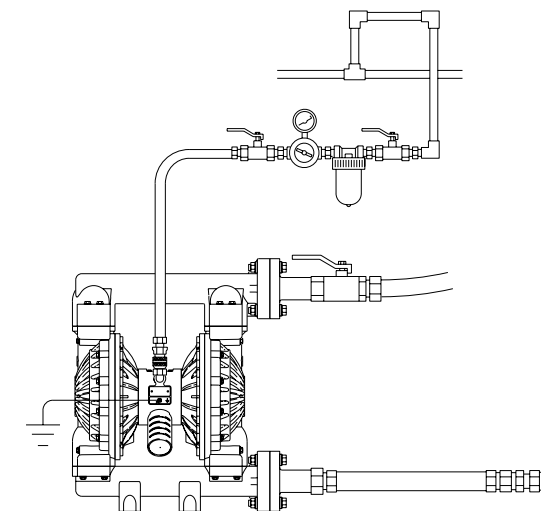
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

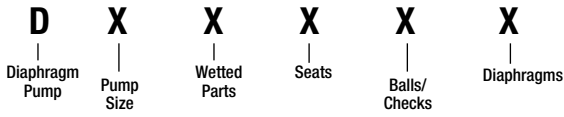
#### Husky 1040 Above Ground Gravity Feed



# Husky 1040

## Plastic Pumps

### Ordering Information

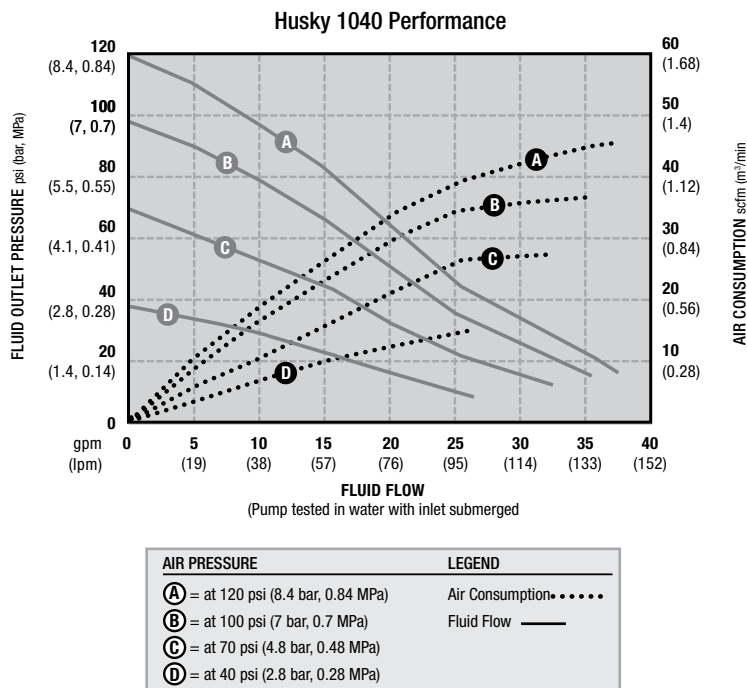


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
7 = 1" (25.4 mm) Standard: aluminum center section	1 = Acetal (npt)	2 = Acetal	1 = PTFE	1 = PTFE
8 = 1" (25.4 mm) Remote: aluminum center section	2 = Poly (npt)	3 = Stainless Steel	2 = Acetal	5 = TPE
R = 1" (25.4 mm) Standard: stainless steel center section	5 = PVDF (npt)	4 = Hardened SST	3 = Stainless Steel	6 = Santoprene
S = 1" (25.4 mm) Remote: stainless steel center section	E = PVDF (bsp)	7 = Buna N	5 = TPE	7 = Buna N
		8 = Fluoroelastomer	6 = Santoprene	8 = Fluoroelastomer
		9 = Polypropylene	7 = Buna N	G = Geolast
		A = PVDF	8 = Fluoroelastomer	
			G = Geolast	

### Accessories

See page 73 for additional accessories.

### Performance Chart



# Husky 1040

## Plastic Pumps

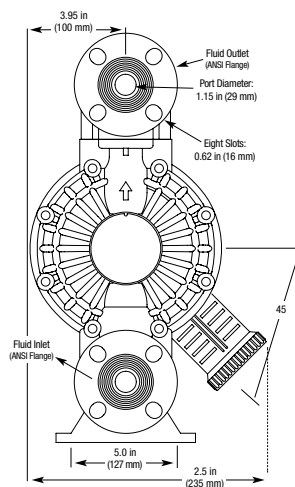
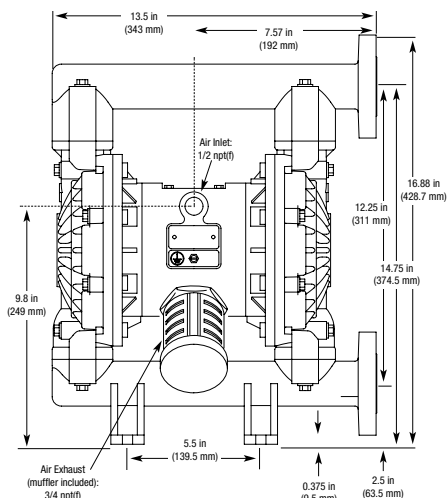
### Popular Models

Material	Part Number (ANSI-Flange)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
<b>Standard Pumps with Aluminum Center Section</b>										
Acetal	D71211	D81211			Acetal	PTFE	PTFE	D07211	236273	246947
	D712GG				Acetal	Geolast	Geolast	D072GG	236273	246947
	D71311	D71311			Stainless Steel	PTFE	PTFE	D07311	236273	246947
	D71331				Stainless Steel	Stainless Steel	PTFE	D07331	236273	246947
Polypropylene	D72311	D82311			Stainless Steel	PTFE	PTFE	D07311	236273	246947
	D72331				Stainless Steel	Stainless Steel	PTFE	D07331	236273	246947
	D72366				Stainless Steel	Santoprene	Santoprene	D07366	236273	246947
	D72377	D72377			Stainless Steel	Buna	Buna	D07377	236273	246947
	D72777	D82777			Buna	Buna	Buna	D07777	236273	246947
	D72888	D82888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
	D72911	D82911			Polypropylene	PTFE	PTFE	D07911	236273	246947
	D72955				Polypropylene	TPE	TPE	D07955	236273	246947
	D72966	D82966			Polypropylene	Santoprene	Santoprene	D07966	236273	246947
	D72977				Polypropylene	Buna	Buna	D07977	236273	246947
	D72988				Polypropylene	Fluoroelastomer	Fluoroelastomer	D07988	236273	246947
	D72A11				PVDF	PTFE	PTFE	D07A11	236273	246947
	PVDF	D75311				Stainless Steel	PTFE	PTFE	D07311	236273
D75811		D85811			Fluoroelastomer	PTFE	PTFE	D07811	236273	246947
D75888		D85888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
D75A11		D85A11			PVDF	PTFE	PTFE	D07A11	236273	246947
D75A88					PVDF	Fluoroelastomer	Fluoroelastomer	D07A88	236273	246947
<b>Corrosion Resistant Pumps with Stainless Steel Center Sections</b>										
Polypropylene	DR2311	DS2311			Stainless Steel	PTFE	PTFE	D07311	236273	246947
	DR2331	DS2331			Stainless Steel	Stainless Steel	PTFE	D07331	236273	246947
	DR2377	DS2377			Stainless Steel	Buna	Buna	D07377	236273	246947
	DR2777	DS2777			Buna	Buna	Buna	D07777	236273	246947
	DR2888	DS2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
	DR2911	DS2911			Polypropylene	PTFE	PTFE	D07911	236273	246947
	DR2977	DS2977			Polypropylene	Buna	Buna	D07977	236273	246947
	DR2988	DS2988			Polypropylene	Fluoroelastomer	Fluoroelastomer	D07988	236273	246947
	DR2A11	DS2A11			PVDF	PTFE	PTFE	D07A11	236273	246947
	PVDF	DR5311	DS5311			Stainless Steel	PTFE	PTFE	D07311	236273
DR5811		DS5811			Fluoroelastomer	PTFE	PTFE	D07811	236273	246947
DR5888		DS5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
DR5A11		DS5A11			PVDF	PTFE	PTFE	D07A11	236273	246947
DR5A88		DS5A88			PVDF	Fluoroelastomer	Fluoroelastomer	D07A88	236273	246947

\*Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 1040 Metal Pumps

## Air-Operated Double-Diaphragm

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### Features

- 1 in (25.4 mm) npt(f) center- and end-porting
- High flow – 40 gpm (151 lpm) in a compact, portable size
- Fluid pressure to 120 psi (8.4 bar, 0.84 MPa)
- Epoxy-coated center section for corrosive environments
- Equipped with an effective and reliable air valve system
- External controller for optional remote operation
- Stainless steel center section for corrosive applications
- Patented, high-reliability closed air valve is externally serviceable

### Typical Applications

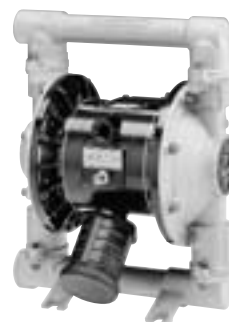
- Drum fluid transfer
- Unloading fluids
- Chemical evacuation
- Ceramic glaze supply
- Dewatering and sump evacuation
- Tank and sump drainage

### Typical Fluids Handled

- Chemicals
- Contaminated surface water
- Adhesives, varnishes, dispersions, solvents and stains
- Resins, latexes, wood preservative stains, concrete paints and primers
- Ceramic slips and slurries



*Husky 1040 Aluminum  
D73XXX or D83XXX*



*Husky 1040 Stainless Steel  
D74XXX or D84XXX*



*Husky 1040 Stainless Steel  
with SST Center Section  
DR4XXX or DS4XXX*



# Husky 1040

## Metal Pumps

### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	40 gpm (151 lpm)
Maximum pump speed.....	276 cpm
Displacement per cycle**.....	0.15 gallon (0.57 liter)
Maximum suction lift (D73888).....	19 ft (5.8 m) dry
Maximum size pumpable solids.....	0.13 in (3.2 mm)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (0.49 bar, 4.9 MPa) air @ 50 cpm.....	76 dBa
Maximum air consumption.....	60 scfm (1.7 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	1 npt(f) or bspt(f)
Wetted parts.....	varies by model, see instruction manual
Weight	
Aluminum.....	18 lb (8.2 kg)
Stainless Steel.....	33 lb (15 kg)
Stainless Steel with stainless steel center section.....	47 lb (22 kg)
Instruction manual.....	308479

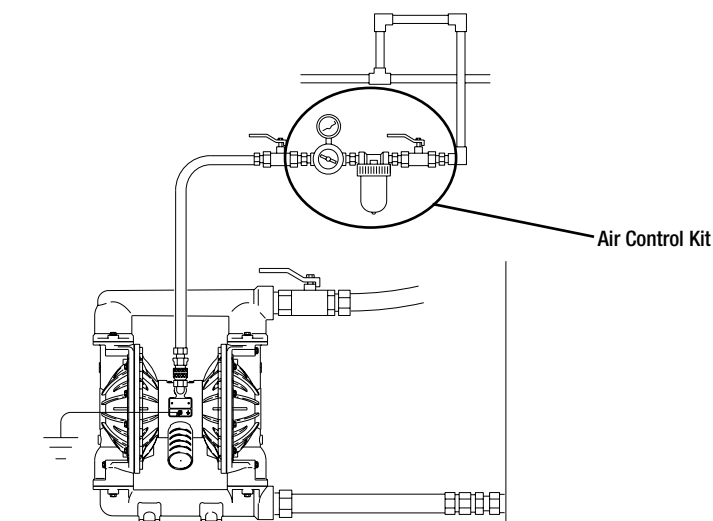
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

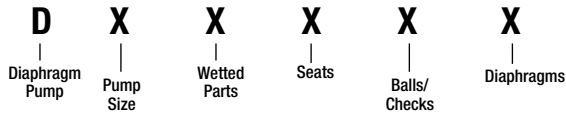
#### Husky 1040 Above Ground Gravity Feed



# Husky 1040

## Metal Pumps

### Ordering Information

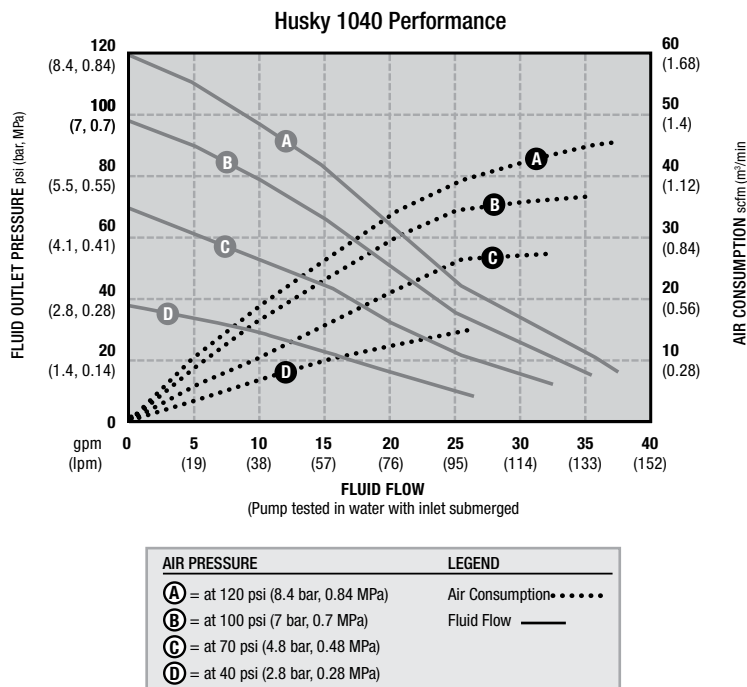


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
7 = 1" (25.4 mm) Standard: aluminum center section	3 = Aluminum (npt)	2 = Acetal	1 = PTFE	1 = PTFE
8 = 1" (25.4 mm) Remote: aluminum center section	4 = Stainless Steel (npt)	3 = Stainless Steel	2 = Acetal	5 = TPE
R = 1" (25.4 mm) Standard: stainless steel center section	C = Aluminum (bsp)	4 = Hardened SST	3 = Stainless Steel	6 = Santoprene
S = 1" (25.4 mm) Remote: stainless steel center section	D = Stainless Steel (bsp)	5 = TPE	4 = Hardened SST	7 = Buna N
		6 = Santoprene	5 = TPE	8 = Fluoroelastomer
		7 = Buna N	6 = Santoprene	G = Geolast
		8 = Fluoroelastomer	7 = Buna N	
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		

### Accessories

See page 73 for additional accessories.

### Performance Chart



# Husky 1040

## Metal Pumps

### Popular Models

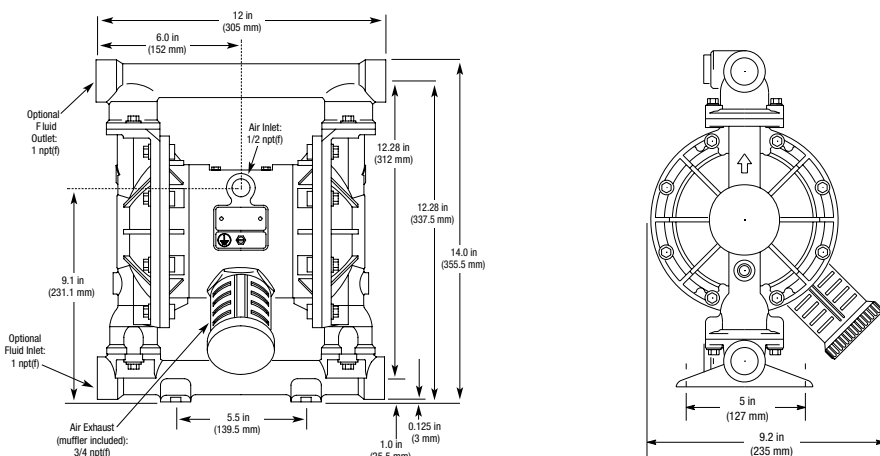
Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
<b>Standard Pumps with Aluminum Center Section</b>										
Aluminum	D73211		D7C211		Acetal	PTFE	PTFE	D07211	236273	246947
	D73277		D7C277		Acetal	Buna	Buna	D07277	236273	246947
	D73311	D83311	D7C311	D8C311	Stainless Steel	PTFE	PTFE	D07311	236273	246947
	D73331	D83331	D7C331	D8C331	Stainless Steel	Stainless Steel	PTFE	D07331	236273	246947
	D73366	D83366	D7C366	D8C366	Stainless Steel	Santoprene	Santoprene	D07366	236273	246947
	D73377		D7C377		Stainless Steel	Buna	Buna	D07377	236273	246947
	D73525		D7C525		TPE	Acetal	TPE	D07525	236273	246947
	D73555		D7C555		TPE	TPE	TPE	D07555	236273	246947
	D73577		D7C577		TPE	Buna	Buna	D07577	236273	246947
	D73666	D83666	D7C666	D8C666	Santoprene	Santoprene	Santoprene	D07666	236273	246947
	D73777	D83777	D7C777	D8C777	Buna	Buna	Buna	D07777	236273	246947
	D73888		D7C888		Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
	D73GGG	D83GGG	D7CGGG	D8CGGG	Geolast	Geolast	Geolast	D07GGG	236273	246947
	D73911		D7C911		Polypropylene	PTFE	PTFE	D07911	236273	246947
	D73977		D7C977		Polypropylene	Buna	Buna	D07977	236273	246947
Stainless Steel	D74211		D7D211		Acetal	PTFE	PTFE	D07211	236273	246947
	D74311	D84311	D7D311	D8D311	Stainless Steel	PTFE	PTFE	D07311	236273	246947
	D74331	D84331	D7D331	D8D331	Stainless Steel	Stainless Steel	PTFE	D07331	236273	246947
	D74336		D7D336		Stainless Steel	Stainless Steel	Santoprene	D07336	236273	246947
	D74366		D7D366		Stainless Steel	Santoprene	Santoprene	D07366	236273	246947
	D74377	D84377	D7D377	D8D377	Stainless Steel	Buna	Buna	D07377	236273	246947
	D74525		D7D525		TPE	Acetal	TPE	D07525	236273	246947
	D74666	D84666	D7D666	D8D666	Santoprene	Santoprene	Santoprene	D07666	236273	246947
	D74777	D84777	D7D777	D8D777	Buna	Buna	Buna	D07777	236273	246947
	D74888		D7D888		Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
	D74GGG	D84GGG	D7DGGG	D8DGGG	Geolast	Geolast	Geolast	D07GGG	236273	246947
	D74911		D7D911		Polypropylene	PTFE	PTFE	D07911	236273	246947
<b>Corrosion Resistant Pumps with Stainless Steel Center Section</b>										
Stainless Steel	DR4311	DS4311	DRD311	DSD311	Stainless Steel	PTFE	PTFE	D07311	236273	246947
	DR4366		DRD366		Stainless Steel	Santoprene	Santoprene	D07366	236273	246947
	DR4377	DS4377	DRD377	DSD377	Stainless Steel	Buna	Buna	D07377	236273	246947
	DR4388	DS4388	DRD388	DSD388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	D07388	236273	246947
	DR4666	DS4666	DRD666	DSD666	Santoprene	Santoprene	Santoprene	D07666	236273	246947
	DR4888		DRD888		Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D07888	236273	246947
	DR4911		DRD911		Polypropylene	PTFE	PTFE	D07911	236273	246947
	DR4A88	DS4A88	DRDA88	DSDA88	Stainless Steel	PVDF	Fluoroelastomer	D07A88	236273	246947

\*Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

For UL pumps, see page 89 for part numbers

### Dimensions



# Husky 1590 Plastic Pumps

## Air-Operated Double-Diaphragm

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### Features

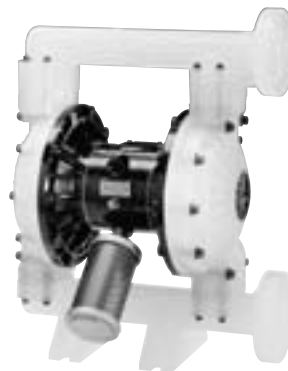
- 1-1/2 in (38.1 mm) ANSI end-porting (flanged)
- High flow – 100 gpm (378 lpm) in a compact, portable size
- Fluid pressure to 120 psi (8.4 bar, 0.84 MPa)
- Patented, high-reliability closed center air valve is externally serviceable
- Lube-free operation
- Epoxy-coated air section
- External controller for optional remote operation
- Stainless steel center section for corrosive applications

### Typical Applications

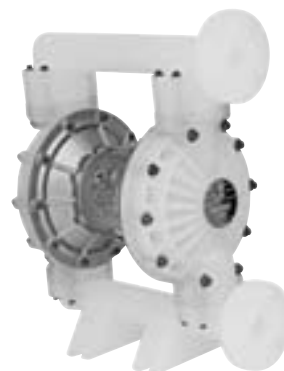
- Tank transfer
- Tank stripping
- Chemical tank plating
- Transferring high temperature acids and gases

### Typical Fluids Handled

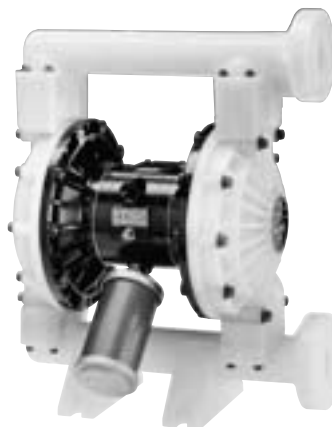
- Chemicals
- Corrosive fluids
- Acids and gases: acetic, chromic, hydrochloric, hydrofluoric, sulfuric, nitric and phosphoric



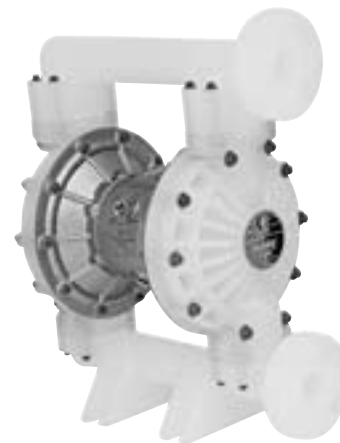
*Husky 1590 Polypropylene  
DB2XXX or DC2XXX*



*Husky 1590 Polypropylene  
with SST Center Section  
DT2XXX or DU2XXX*



*Husky 1590 PVDF  
DB5XXX or DC5XXX*



*Husky 1590 PVDF  
with SST Center Section  
DT5XXX or DU5XXX*

# Husky 1590

## Plastic Pumps

### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	100 gpm (378.5 lpm)
Maximum pump speed.....	200 cpm
Displacement per cycle**.....	0.5 gallon (1.96 liter)
Maximum suction lift (DB2366).....	20 ft (6.1 m) dry
Maximum size pumpable solids.....	0.19 in (4.8 mm)
Maximum operating temperature***	
Polypropylene.....	275°F (135°C)
PVDF.....	300°F (150°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 50 cpm.....	77 dBa
Maximum air consumption.....	125 scfm (3.5 m3/min.)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	.1-1/2 in (38.1 mm) ANSI-flange
Wetted parts.....	varies by model, see instruction manual
Weight	
Polypropylene.....	35 lb (16 kg)
Polypropylene with stainless steel center section.....	48.3 lb (21.9 kg)
PVDF.....	49 lb (22 kg)
PVDF with stainless steel center section.....	62.3 lb (28.2 kg)
Instruction manual.....	308549

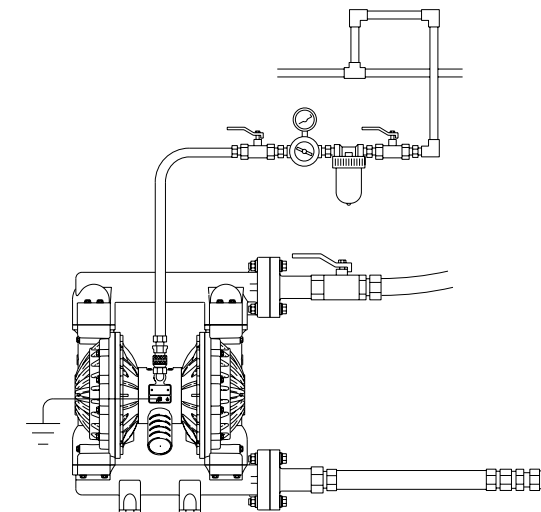
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawings

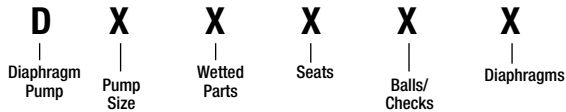
#### Husky 1590 Above Ground Gravity Feed



# Husky 1590

## Plastic Pumps

### Ordering Information

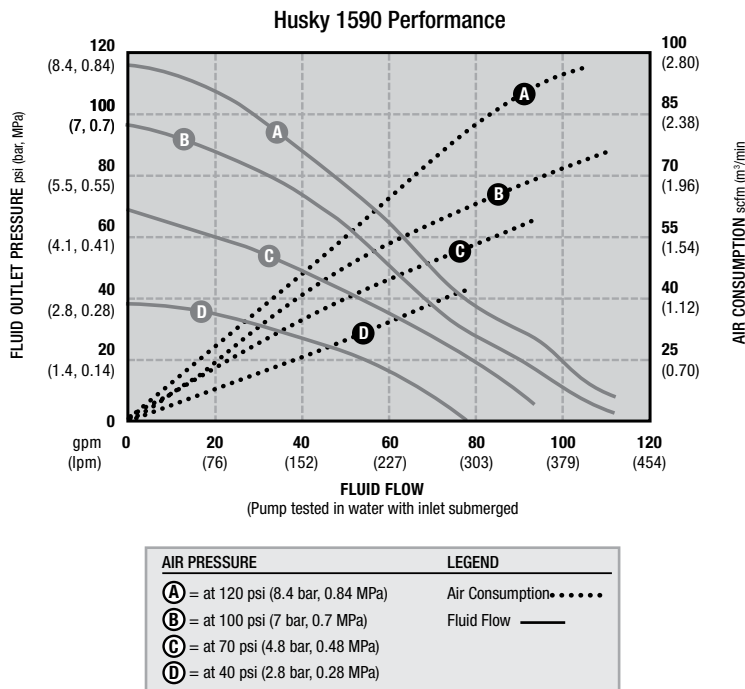


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
B = 1-1/2" (38.1 mm) Standard: aluminum center section	2 = Poly (npt)	3 = Stainless Steel	1 = PTFE	1 = PTFE
C = 1-1/2" (38.1 mm) Remote: aluminum center section	5 = PVDF (npt)	4 = Hardened SST	2 = Acetal	5 = TPE
T = 1-1/2" (38.1 mm) Standard: stainless steel center section		5 = TPE	4 = Hardened SST	6 = Santoprene
U = 1-1/2" (38.1 mm) Remote: stainless steel center section		6 = Santoprene	5 = TPE	7 = Buna N
		7 = Buna N	6 = Santoprene	8 = Fluoroelastomer
		8 = Fluoroelastomer	7 = Buna N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		

### Accessories

See page 73 for additional accessories.

### Performance Chart



# Husky 1590

## Plastic Pumps

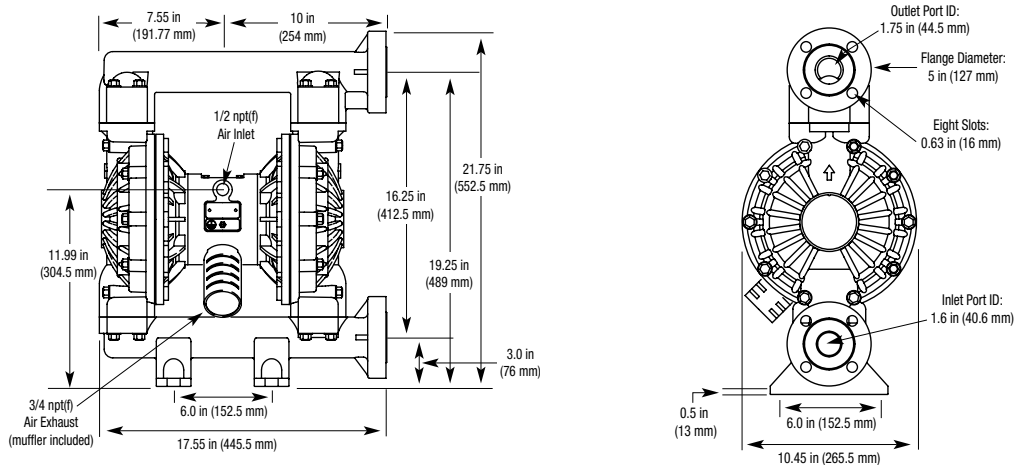
### Popular Models

Material	Part Number (ANSI-Flange)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**	
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve							
<b>Standard Pumps with Aluminum Center Section</b>											
Polypropylene	DB2311				Stainless Steel	PTFE	PTFE	DOC311	236273	246947	
	DB2377	DC2377			Stainless Steel	Buna	Buna	DOC377	236273	246947	
	DB2777	DC2777			Buna	Buna	Buna	DOC777	236273	246947	
	DB2888	DC2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947	
	DB2911	DC2911			Polypropylene	PTFE	PTFE	DOC911	236273	246947	
	DB2955				Polypropylene	TPE	TPE	DOC955	236273	246947	
	DB2966				Polypropylene	Santoprene	Santoprene	DOC966	236273	246947	
	DB2977				Polypropylene	Buna	Buna	DOC977	236273	246947	
	DB2988				Polypropylene	Fluoroelastomer	Fluoroelastomer	DOC988	236273	246947	
	DB29GG	DC29GG			Polypropylene	Geolast	Geolast	DOC9GG	236273	246947	
	PVDF	DB5311				Stainless Steel	PTFE	PTFE	DOC311	236273	246947
		DB5666				Santoprene	Santoprene	Santoprene	DOC666	236273	246947
DB5811		D85811			Fluoroelastomer	PTFE	PTFE	DOC811	236273	246947	
DB5888		D85888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947	
DB5A11		D85A11			PVDF	PTFE	PTFE	DOCA11	236273	246947	
DB5A88					PVDF	Fluoroelastomer	Fluoroelastomer	DOCA88	236273	246947	
<b>Corrosion Resistant Pumps with Stainless Steel Center Section</b>											
Polypropylene	DT2311	DU2311			Stainless Steel	PTFE	PTFE	DOC311	236273	246947	
	DT2341	DU2331			Hardened SST	Stainless Steel	PTFE	DOC331	236273	246947	
	DT2377	DU2377			Stainless Steel	Buna	Buna	DOC377	236273	246947	
	DT2888	DU2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947	
	DT2911	DU2911			Polypropylene	PTFE	PTFE	DOC911	236273	246947	
	DT2977	DU2977			Polypropylene	Buna	Buna	DOC977	236273	246947	
	DT2988	DU2988			Polypropylene	Fluoroelastomer	Fluoroelastomer	DOC988	236273	246947	
PVDF	DT5311	DU5311			Stainless Steel	PTFE	PTFE	DOC311	236273	246947	
	DT5811	DU5811			Fluoroelastomer	PTFE	PTFE	DOC811	236273	246947	
	DT5888	DU5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947	
	DT5A11	DU5A11			PVDF	PTFE	PTFE	DOCA11	236273	246947	
	DT5A88	DU5A11			PVDF	Fluoroelastomer	Fluoroelastomer	DOCA88	236273	246947	

\*Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 1590 Metal Pumps

## Air-Operated Double-Diaphragm

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### Features

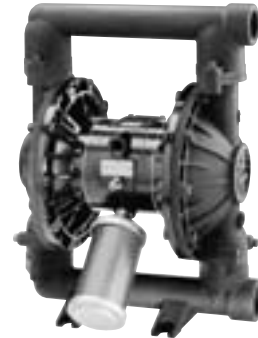
- 1-1/2 in (38.1 mm) npt(f) end-porting
- High flow – 100 gpm (378 lpm) in a compact, portable size
- Fluid pressure to 120 psi (8.4 bar, 0.84 MPa)
- Patented, high-reliability closed center air valve is externally serviceable
- Lube-free operation
- Epoxy-coated air section
- External controller for optional remote operation
- Stainless steel center section for corrosive applications

### Typical Applications

- Filter press
- Tank stripping
- Bilge pumping
- Sand and ball mill pumping
- Oil transfer and oil skimming
- Chemical plating

### Typical Fluids Handled

- Latex
- Abrasive fluids
- Slurries: petroleum, lime, clay, ferrite, salt/brine and pumice
- Sludge: secondary and clarifier
- Pottery slip



*Husky 1590 Aluminum  
DB3XXX or DC3XXX*



*Husky 1590 Stainless Steel  
DB4XXX or DC4XXX*



*Husky 1590 Stainless Steel  
with SST Center Section  
DT4XXX or DU4XXX*



# Husky 1590

## Metal Pumps

### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	100 gpm (378.5 lpm)
Maximum pump speed.....	200 cpm
Displacement per cycle**.....	0.5 gallon (1.96 liter)
Maximum suction lift (DB3366).....	20 ft. (6.1 m) dry
Maximum size pumpable solids.....	0.19 in. (4.8 mm)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 50 cpm.....	77 dBa
Maximum air consumption.....	125 scfm (3.5 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	1-1/2 npt(f) or bspt(f)
Wetted parts.....	varies by model, see instruction manual
Weight	
Aluminum.....	33.5 lb (15.2 kg)
Stainless steel.....	85.5 lb (38.6 kg)
Stainless steel with stainless steel center section.....	98.8 lb (44.8 kg)
Instruction manual.....	308441

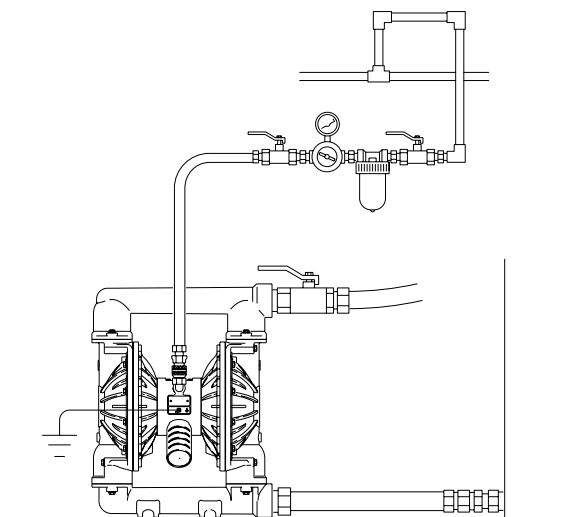
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

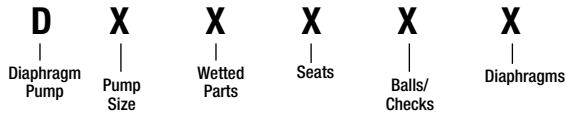
#### Husky 1590 Above Ground Gravity Feed



# Husky 1590

## Metal Pumps

### Ordering Information

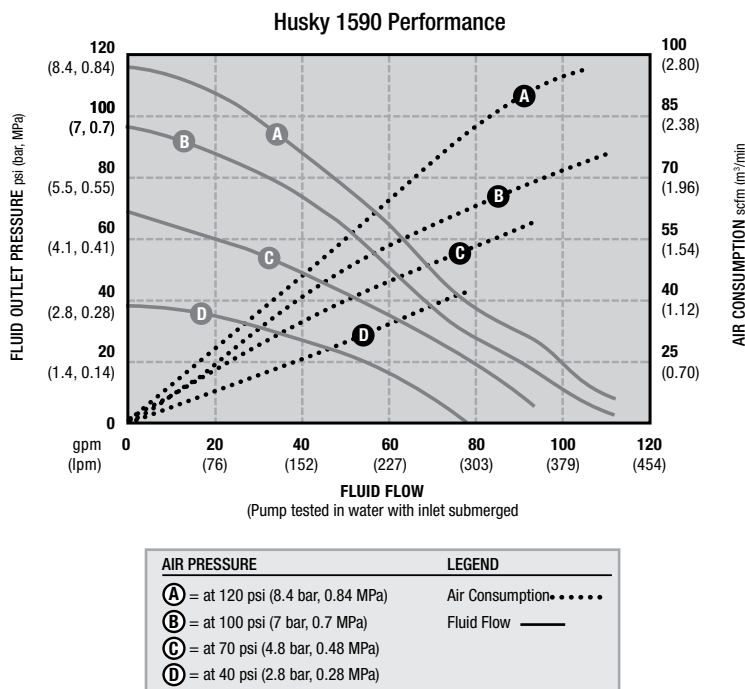


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
B = 1-1/2" (38.1 mm) Standard: aluminum center section	3 = Aluminum (npt)	3 = Stainless Steel	1 = PTFE	1 = PTFE
C = 1-1/2" (38.1 mm) Remote: aluminum center section	4 = Stainless Steel (npt)	4 = Hardened SST	2 = Acetal	5 = TPE
T = 1-1/2" (38.1 mm) Standard: stainless steel center section	C = Aluminum (bsp)	5 = TPE	4 = Hardened SST	6 = Santoprene
U = 1-1/2" (38.1 mm) Remote: stainless steel center section	D = Stainless Steel (bsp)	6 = Santoprene	5 = TPE	7 = Buna N
		7 = Buna N	6 = Santoprene	8 = Fluoroelastomer
		8 = Fluoroelastomer	7 = Buna N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		

### Accessories

See page 73 for additional accessories.

### Performance Chart



# Husky 1590

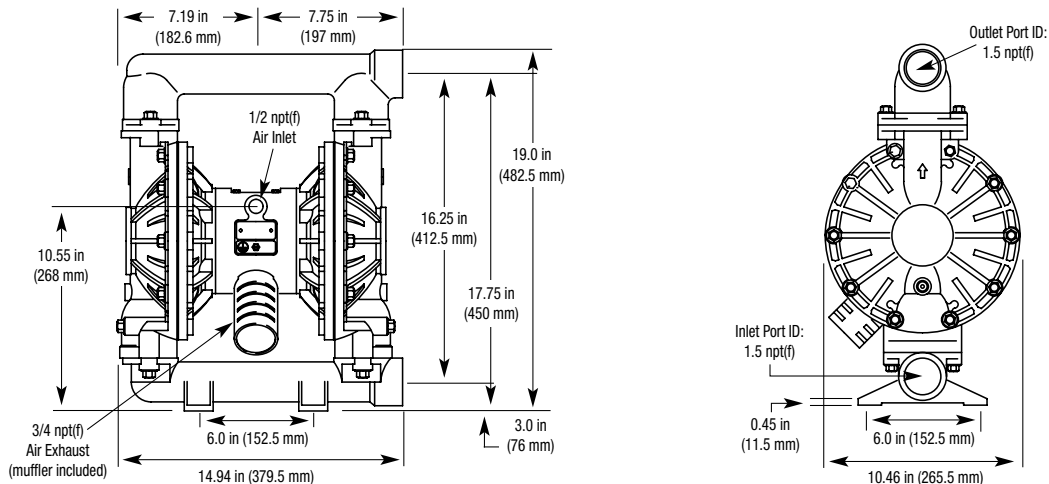
## Metal Pumps

### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
<b>Standard Pumps with Aluminum Center Section</b>										
Aluminum	DB3311	DC3311	DBC311	DCC311	Stainless Steel	PTFE	PTFE	DOB311	236273	246947
	DB3341		DBC341		Hardened SST	Stainless Steel	PTFE	DOB331	236273	246947
	DB3366	DC3366	DBC366	DCC366	Stainless Steel	Santoprene	Santoprene	DOB366	236273	246947
	DB3377	DC3377	DBC377	DCC377	Stainless Steel	Buna	Buna	DOB377	236273	246947
	DB3525	DC3525	DBC525	DCC525	TPE	Acetal	TPE	DOB525	236273	246947
	DB3555		DBC555		TPE	TPE	TPE	DOB555	236273	246947
	DB3666	DC3666	DBC666	DCC666	Santoprene	Santoprene	Santoprene	DOB666	236273	246947
	DB3777	DC3777	DBC777	DCC777	Buna	Buna	Buna	DOB777	236273	246947
	DB3888	DC3888	DBC888	DCC888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	236273	246947
	DB3GGG	DC3GGG	DBCGGG	DCCGGG	Geolast	Geolast	Geolast	DOBGGG	236273	246947
	DB3911		DBC911		Polypropylene	PTFE	PTFE	DOB911	236273	246947
	DB3977		DBC977		Polypropylene	Buna	Buna	DOB977	236273	246947
Stainless Steel	DB4311	DC4311	DBC311	DCD311	Stainless Steel	PTFE	PTFE	DOB311	236273	246947
	DB4341		DBC341		Hardened SST	Stainless Steel	PTFE	DOB331	236273	246947
	DB4377	DC4377	DBC377	DCD377	Stainless Steel	Buna	Buna	DOB377	236273	246947
	DB4525		DBC525		TPE	Acetal	TPE	DOB525	236273	246947
	DB4666	DC4666	DBC666	DCD666	Santoprene	Santoprene	Santoprene	DOB666	236273	246947
	DB4777	DC4777	DBC777	DCD777	Buna	Buna	Buna	DOB777	236273	246947
	DB4888	DC4888	DBC888	DCD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	236273	246947
	DB4GGG	DC4GGG	DBCGGG	DCDGGG	Geolast	Geolast	Geolast	DOBGGG	236273	246947
	DB4911		DBC911		Polypropylene	PTFE	PTFE	DOB911	236273	246947
<b>Corrosion Resistant Pumps with Stainless Steel Center Section</b>										
Stainless Steel	DT4311	DU4311	DTD311	DUD311	Stainless Steel	PTFE	PTFE	DOB311	236273	246947
	DT4377	DU4377	DTD377	DUD377	Stainless Steel	Buna	Buna	DOB377	236273	246947
	DT4388	DU4388	DTD388	DUD388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	DOB388	236273	246947
	DT4666	DU4666	DTD666	DUD666	Santoprene	Santoprene	Santoprene	DOB666	236273	246947
	DT4888	DU4888	DTD888	DUD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOB888	236273	246947
	DT4911	DU4911	DTD911	DUD911	Polypropylene	PTFE	PTFE	DOB911	236273	246947

\*Requires CycleFlo or external valve control  
 \*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 2150 Plastic Pumps

## Air-Operated Double-Diaphragm

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### Features

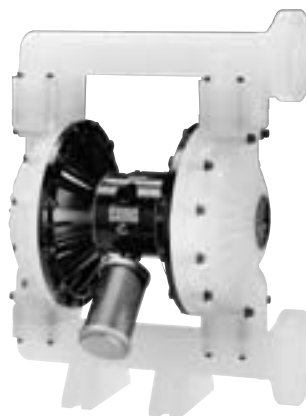
- 2 in (50.8 mm) ANSI end-porting (flange)
- Larger ports for more flow — up to 150 gpm (568 lpm)
- Fluid pressure up to 120 psi (8.4 bar, 0.84 MPa)
- Patented, high-reliability closed center air valve is externally serviceable
- Lube-free operation
- Epoxy-coated air section
- External controller for optional remote operation
- Stainless steel center section for corrosive applications

### Typical Applications

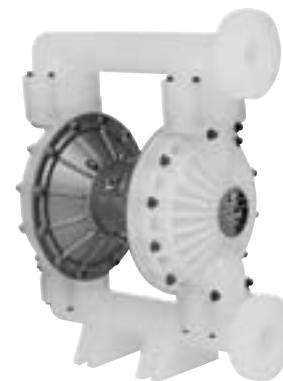
- Drum fluid transfer
- Bulk fluid supply
- Chemical evacuation
- Ground water and sump evacuation
- Waste fluid removal
- Tank and bilge drainage
- Slurry and sludge transfer
- Filter press feed

### Typical Fluids Handled

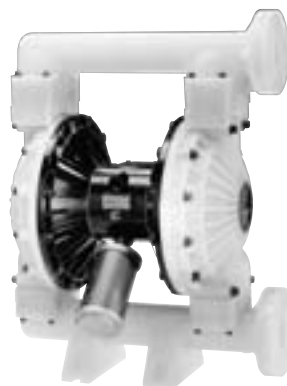
- Acids and gases: acetic, chromic, hydrochloric, Hydrofluoric, sulfuric, nitric and phosphoric
- Ship cleaning and stripping chemicals



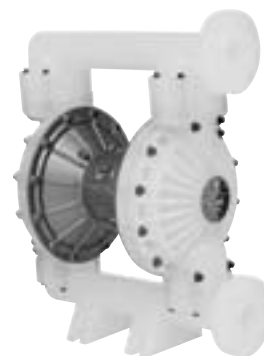
*Husky 2150 Polypropylene  
DF2XXX or DG2XXX*



*Husky 2150 Polypropylene  
with SST Center Section  
DV2XXX or DW2XXX*



*Husky 2150 PVDF  
DF5XXX or DG5XXX*



*Husky 2150 PVDF  
with SST Center Section  
DV5XXX or DW5XXX*

# Husky 2150

## Plastic Pumps

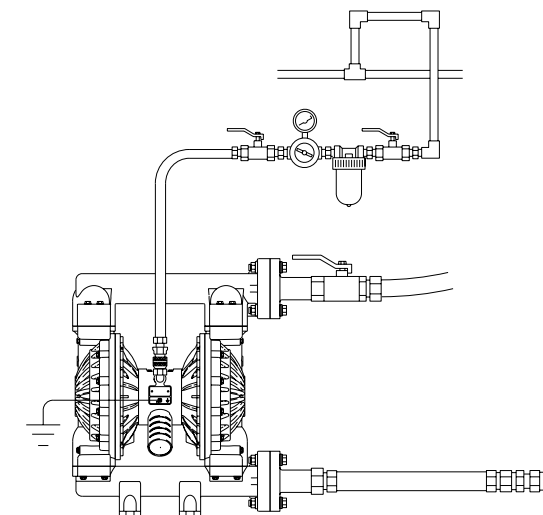
### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	150 gpm (568 lpm)
Maximum pump speed.....	145 cpm
Displacement per cycle**.....	1.03 gallon (3.90 liter)
Maximum suction lift (DF2666).....	20 ft (6.1m) dry
Maximum size pumpable solids.....	0.25 in (6.3 mm)
Maximum operating temperature***	
Polypropylene.....	275°F (135°C)
PVDF.....	300°F (150°C)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 50 cpm.....	78 dBa
Maximum air consumption.....	175 scfm (4.9 m3/min)
Air consumption at 70 psi/60 gpm.....	60 scfm (1.7 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	2 in (51 mm) ANSI-flange
Wetted parts.....	varies by model, see instruction manual
Weight	
Polypropylene.....	49 lb (22 kg)
Polypropylene with stainless steel center section.....	68.5 lb (31 kg)
PVDF.....	68 lb (30.8 kg)
PVDF with stainless steel center section.....	87.5 lb (39.6 kg)
Instruction manual.....	308550

\* Flow rates are with muffler and do not vary based on diaphragm material  
 \*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type  
 \*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

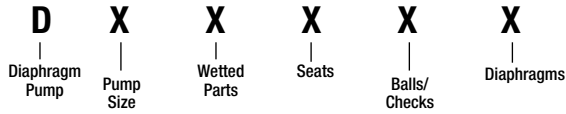
Husky 2150 Above Ground Gravity Feed



# Husky 2150

## Plastic Pumps

### Ordering Information

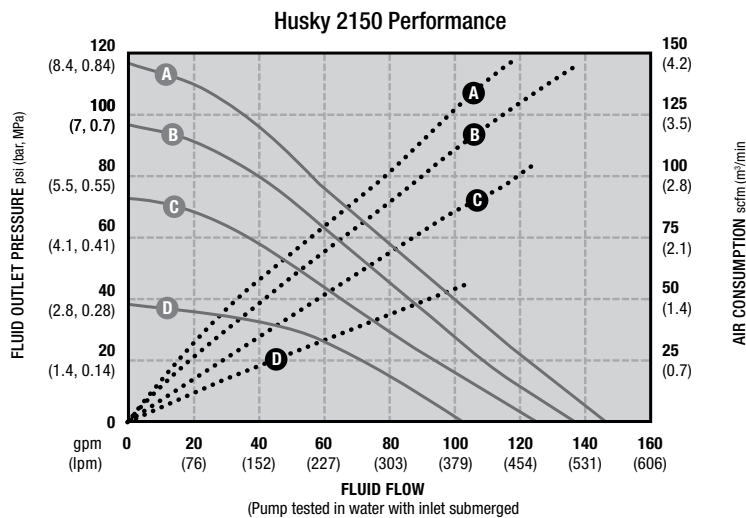


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
F = 2" (50.8 mm) Standard: aluminum center section	2 = Poly (npt)	3 = Stainless Steel	1 = PTFE	1 = PTFE
G = 2" (50.8 mm) Remote: aluminum center section	5 = PVDF (npt)	4 = Hardened SST	2 = Acetal	5 = TPE
V = 2" (50.8 mm) Standard: stainless steel center section		5 = TPE	4 = Hardened SST	6 = Santoprene
W = 2" (50.8 mm) Remote: stainless steel center section		6 = Santoprene	5 = TPE	7 = Buna N
		7 = Buna N	6 = Santoprene	8 = Fluoroelastomer
		8 = Fluoroelastomer	7 = Buna N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
		A = PVDF	G = Geolast	
		G = Geolast		

### Accessories

See page 73 for additional accessories.

### Performance Chart



AIR PRESSURE	LEGEND
<b>A</b> = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption •••••
<b>B</b> = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
<b>C</b> = at 70 psi (4.8 bar, 0.48 MPa)	
<b>D</b> = at 40 psi (2.8 bar, 0.28 MPa)	

# Husky 2150

## Plastic Pumps

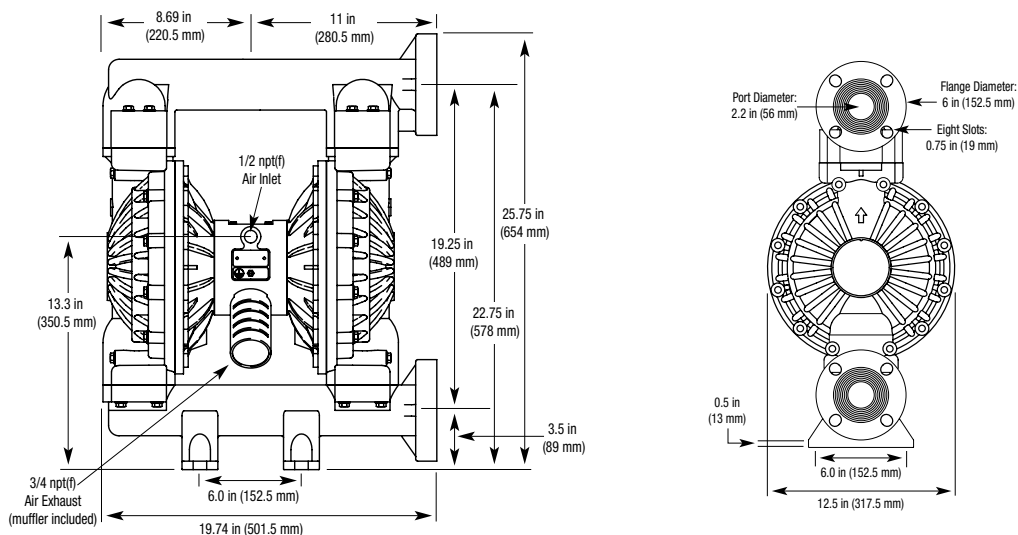
### Popular Models

Material	Part Number (ANSI-Flange)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve						
<b>Standard Pumps with Aluminum Center Section</b>										
Polypropylene	DF2311				Stainless Steel	PTFE	PTFE	D0G311	236273	246947
	DF2377	DC2377			Stainless Steel	Buna	Buna	D0G377	236273	246947
	DF2777	DC2777			Buna	Buna	Buna	D0G777	236273	246947
	DF2888	DC2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
	DF2911	DC2911			Polypropylene	PTFE	PTFE	D0G911	236273	246947
	DF2955				Polypropylene	TPE	TPE	D0G955	236273	246947
	DF2966				Polypropylene	Santoprene	Santoprene	D0G966	236273	246947
	DF2977				Polypropylene	Buna	Buna	D0G977	236273	246947
	DF2988				Polypropylene	Fluoroelastomer	Fluoroelastomer	D0G988	236273	246947
	DF29GG	DC29GG			Polypropylene	Geolast	Geolast	D0G9GG	236273	246947
PVDF	DF5311				Stainless Steel	PTFE	PTFE	D0G311	236273	246947
	DF5666				Santoprene	Santoprene	Santoprene	D0G666	236273	246947
	DF5811	DG5811			Fluoroelastomer	PTFE	PTFE	D0G811	236273	246947
	DF5888	DG5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
	DF5A11	DG5A11			PVDF	PTFE	PTFE	D0GA11	236273	246947
	DF5A88				PVDF	Fluoroelastomer	Fluoroelastomer	D0GA88	236273	246947
<b>Corrosion Resistant Pumps with Stainless Steel Center Section</b>										
Polypropylene	DV2311	DW2311			Stainless Steel	PTFE	PTFE	D0G311	236273	246947
	DV2341	DW2331			Hardened SST	Stainless Steel	PTFE	D0G331	236273	246947
	DV2377	DW2377			Stainless Steel	Buna	Buna	D0G377	236273	246947
	DV2888	DW2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
	DV2911	DW2911			Polypropylene	PTFE	PTFE	D0G911	236273	246947
	DV2977	DW2977			Polypropylene	Buna	Buna	D0G977	236273	246947
	DV2988	DW2988			Polypropylene	Fluoroelastomer	Fluoroelastomer	D0G988	236273	246947
	DV2A11	DW2A11			PVDF	PTFE	PTFE	D0GA11	236273	246947
	DV2A88	DW2A88			PVDF	Fluoroelastomer	Fluoroelastomer	D0GA88	236273	246947
	PVDF	DV5311	DW5311			Stainless Steel	PTFE	PTFE	D0G311	236273
DV5811		DW5811			Fluoroelastomer	PTFE	PTFE	D0G811	236273	246947
DV5888		DW5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
DV5A11		DW5A11			PVDF	PTFE	PTFE	D0GA11	236273	246947
DV5A88		DW5A88			PVDF	Fluoroelastomer	Fluoroelastomer	D0GA88	236273	246947

\*Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

### Dimensions



# Husky 2150 Metal Pumps

## Air-Operated Double-Diaphragm

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### Features

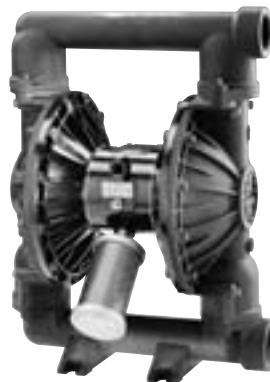
- 2 in (50.8 mm) npt(f) end-porting
- Larger ports for more flow – up to 150 gpm (568 lpm)
- Fluid pressure up to 120 psi (8.4 bar, 0.84 MPa)
- Patented, high-reliability closed center air valve is externally serviceable
- Lube-free operation
- Epoxy-coated air section
- External controller for optional remote operation
- Stainless steel center section for corrosive applications

### Typical Applications

- Drum fluid transfer
- Bulk fluid supply
- Chemical evacuation
- Ground water and sump evacuation
- Waste fluid removal
- Tank and bilge drainage
- Slurry and sludge transfer
- Filter press feed

### Typical Fluids Handled

- Alkalies and solvents
- Suspensions and dispersions
- Solvents, latex paints, varnishes, resins and adhesives
- Sludge and waste water



*Husky 2150 Aluminum  
DF3XXX or DG3XXX*



*Husky 2150 Stainless Steel  
with SST Center Section  
DV4XXX or DW4XXX*



*Husky 2150 Stainless Steel  
DF4XXX or DG4XXX*



*Husky 2150 Extended Aluminum  
DFHXXX or DFGXXX*



*Husky 2150 Ductile Iron  
DF6XXX or DG6XXX*



# Husky 2150

## Metal Pumps

### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	150 gpm (568 lpm)
Maximum pump speed.....	145 cpm
Displacement per cycle**.....	1.03 gallon (3.90 liter)
Maximum suction lift (DF3666).....	20 ft (6.1 m) dry
Maximum size pumpable solids.....	0.25 in (6.3 mm)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
Buna-N.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Fluoroelastomer.....	250°F (121.1°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 50 cpm.....	78 dBa
Maximum air consumption.....	175 scfm (4.9 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	1/2 npt(f)
Fluid inlet & outlet size.....	.2 in (51 mm) npt and bspt
Wetted parts.....	varies by model, see instruction manual
Weight	
Aluminum.....	58 lb (26.3 kg)
Extended aluminum.....	62 lb (28.1 kg)
Stainless steel.....	127 lb (57.6 kg)
Stainless steel with stainless steel center section.....	146.5 lb (66.4 kg)
Ductile iron.....	130 lb (59 kg)
Instruction manual.....	308368

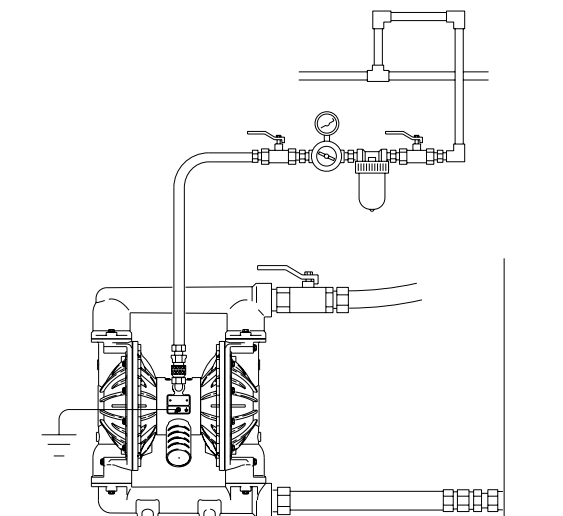
\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

\*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

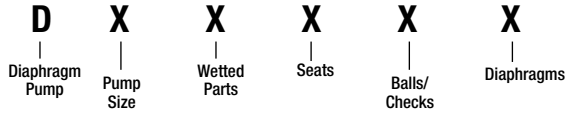
#### Husky 2150 Above Ground Gravity Feed



# Husky 2150

## Metal Pumps

### Ordering Information

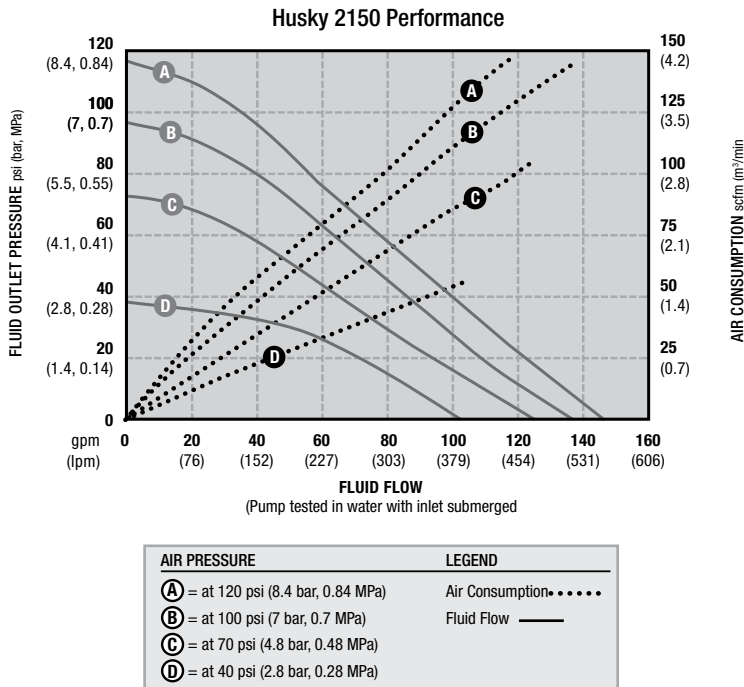


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
F = 2" (50.8 mm) Standard: aluminum center section	3 = Aluminum (npt)	3 = Stainless Steel	1 = PTFE	1 = PTFE
G = 2" (50.8 mm) Remote: aluminum center section	4 = Stainless Steel (npt)	4 = Hardened SST	2 = Acetal	5 = TPE
V = 2" (50.8 mm) Standard: stainless steel center section	6 = Ductile Iron (npt)	5 = TPE	4 = Hardened SST	6 = Santoprene
W = 2" (50.8 mm) Remote: stainless steel center section	C = Aluminum (bsp)	6 = Santoprene	5 = TPE	7 = Buna N
	D = Stainless Steel (bsp)	7 = Buna N	6 = Santoprene	8 = Fluoroelastomer
	F = Ductile Iron (bsp)	8 = Fluoroelastomer	7 = Buna N	G = Geolast
		9 = Polypropylene	8 = Fluoroelastomer	
	H = 2 npt Alum Extended	A = PVDF	G = Geolast	
	G = 2 bsp Alum Extended	G = Geolast		

### Accessories

See page 73 for additional accessories.

### Performance Chart



# Husky 2150

## Metal Pumps

### Popular Models

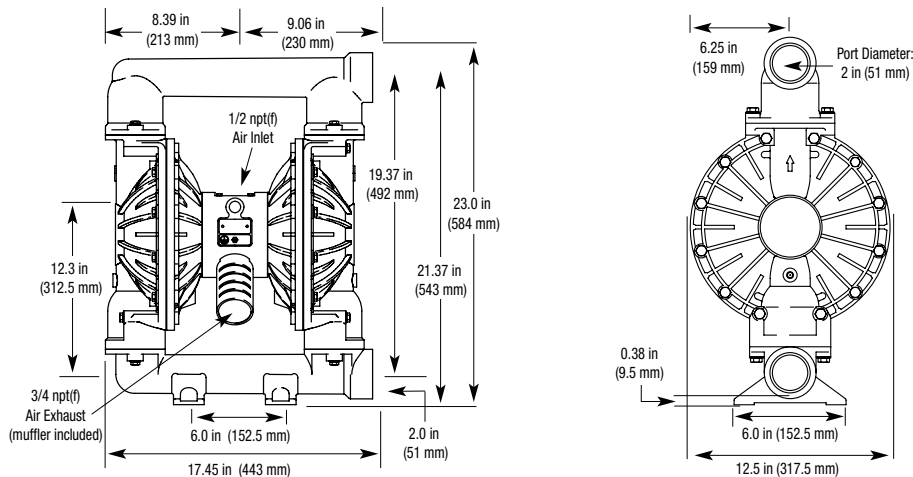
Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control**	
	Standard Air Valve	Remote* Air Valve	Standard Air Valve	Remote* Air Valve							
<b>Standard Pumps with Aluminum Center Section</b>											
Aluminum***	DF3311	DG3311	DFC311	DGC311	Stainless Steel	PTFE	PTFE	DOF311	236273	246947	
	DF3341	DG3341	DFC341	DGC341	Hardened SST	Stainless Steel	PTFE	DOF331	236273	246947	
	DF3366	DG3366	DFC366	DGC366	Stainless Steel	Santoprene	Santoprene	DOF366	236273	246947	
	DF3377	DG3377	DFC377	DGC377	Stainless Steel	Buna	Buna	DOF377	236273	246947	
	DF3525	DG3525	DFC525	DGC525	TPE	Acetal	TPE	DOF525	236273	246947	
	DF3555		DFC555		TPE	TPE	TPE	DOF555	236273	246947	
	DF3666	DG3666	DFC666	DGC666	Santoprene	Santoprene	Santoprene	DOF666	236273	246947	
	DF3777	DG3777	DFC777	DGC777	Buna	Buna	Buna	DOF777	236273	246947	
	DF3888	DG3888	DFC888	DGC888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOF888	236273	246947	
	DF3GGG	DG3GGG	DFCGGG	DGCGGG	Geolast	Geolast	Geolast	DOFGGG	236273	246947	
	DF3911	DG3911	DFC911	DGC911	Polypropylene	PTFE	PTFE	DOF911	236273	246947	
	DF3977	DG3977	DFC977		Polypropylene	Buna	Buna	DOF977	236273	246947	
	Stainless Steel	DF4311	DG4311	DFD311	DGD311	Stainless Steel	PTFE	PTFE	DOF311	236273	246947
		DF4341		DFD341		Hardened SST	Stainless Steel	PTFE	DOF331	236273	246947
		DF4366	DG4366	DFD366	DGD366	Stainless Steel	Santoprene	Santoprene	DOF366	236273	246947
		DF4377	DG4377	DFD377	DGD377	Stainless Steel	Buna	Buna	DOF377	236273	246947
		DF4525		DFD525		TPE	Acetal	TPE	DOF525	236273	246947
DF4666		DG4666	DFD666	DGD666	Santoprene	Santoprene	Santoprene	DOF666	236273	246947	
DF4777		DG4777	DFD777	DGD777	Buna	Buna	Buna	DOF777	236273	246947	
DF4888		DG4888	DFD888	DGD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOF888	236273	246947	
DF4GGG		DG4GGG	DFDGGG	DGDGGG	Geolast	Geolast	Geolast	DOFGGG	236273	246947	
DF4911			DFD911		Polypropylene	PTFE	PTFE	DOF911	236273	246947	
Ductile		DF6311		DFF311		Stainless Steel	PTFE	PTFE	DOF311	236273	246947
	DF6366		DFF366		Stainless Steel	Santoprene	Santoprene	DOF366	236273	246947	
	DF6441		DFF441		Hardened SST	Hardened SST	PTFE	DOF441	236273	246947	
	DF6466	DG6466	DFF466	DGF466	Hardened SST	Santoprene	Santoprene	DOF466	236273	246947	
	DF6525		DFF525		TPE	Acetal	TPE	DOF525	236273	246947	
	DF6666	DG6666	DFF666	DGF666	Santoprene	Santoprene	Santoprene	DOF666	236273	246947	
	DF6A11		DFFA11		PVDF	PTFE	PTFE	DOFA11	236273	246947	
	DF6A88		DFFA88		PVDF	Fluoroelastomer	Fluoroelastomer	DOFA88	236273	246947	
	DF6GGG	DG6GGG	DFFGGG	DGFGGG	Geolast	Geolast	Geolast	DOFGGG	236273	246947	
	<b>Corrosion Resistant Pumps with Stainless Steel Center Section</b>										
Stainless Steel	DV4311	DW4311	DVD311	DWD311	Stainless Steel	PTFE	PTFE	DOF311	236273	246947	
	DV4377	DW4377	DVD377	DWD377	Stainless Steel	Buna	Buna	DOF377	236273	246947	
	DV4388	DW4388	DVD388	DWD388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	DOF388	236273	246947	
	DV4666	DW4666	DVD666	DWD666	Santoprene	Santoprene	Santoprene	DOF666	236273	246947	
	DV4888	DW4888	DVD888	DWD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOF888	236273	246947	
	DV4911	DW4911	DVD911	DWD911	Polypropylene	PTFE	PTFE	DOF911	236273	246947	

\*Requires CycleFlo or external valve control

\*\* Air control includes air regulator and filter with gauge

\*\*\* Also available in Extended Height version; use DFH or DFG designations

### Dimensions



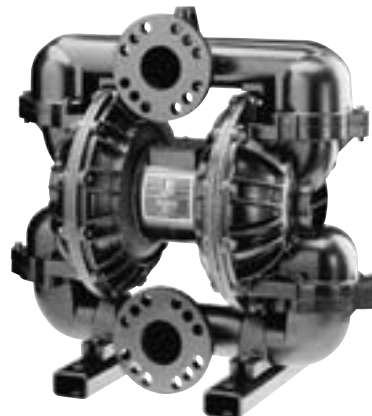
# Husky 3275 Aluminum Pumps

## Air-Operated Double-Diaphragm

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### Features

- 3 in (76.2 mm) ANSI center-porting that is internally threaded 3 npt or bspt
- Bolted leak-free, flanged connections — no clamp bands used
- Patented, high-reliability closed center air valve is externally serviceable
- Large flow paths for high viscosities
- Easy air valve maintenance
- Heavy-duty construction
- Fluid flow up to 275 gpm (1040 lpm)



*Husky 3275 Aluminum  
DK3XXX*

### Typical Applications

- Chemical transfers
- Filter press-feed
- Dewatering

### Typical Fluids Handled

- Chemicals
- Bulk paint resins
- Ceramic slip

# Husky 3275

## Aluminum Pumps

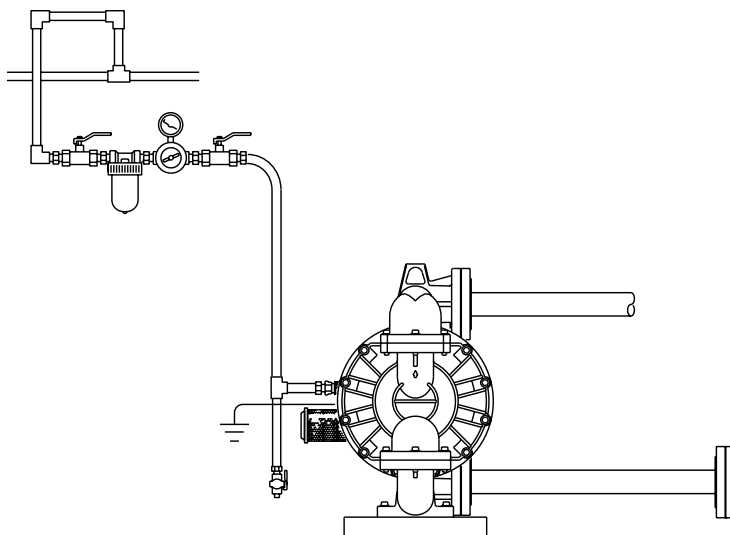
### Technical Specifications

Maximum fluid working pressure.....	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*.....	275 gpm (1,041 lpm)
Maximum pump speed.....	135 cpm
Displacement per cycle**.....	2.0 gallon (7.6 liter)
Maximum suction lift (DK3666).....	8 ft (2.4 m) dry
Maximum size pumpable solids.....	0.38 in (9.4 mm)
Maximum diaphragm operating temperature***	
PTFE.....	220°F (104.4°C)
Santoprene.....	180°F (82.2°C)
TPE.....	150°F (65.5°C)
Geolast.....	150°F (65.5°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 105 cpm.....	79 dBa
Maximum air consumption.....	325 scfm (9.1 m3/min)
Air consumption at 70 psi (4.7 bar, 0.47 MPa)/100 gpm (379 lpm).....	120 scfm (1.26 m3/min)
Air pressure operating range.....	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size.....	3/4 npt(f)
Fluid inlet & outlet size.....	3 in (76.2 mm) ANSI 4 bolt flange/DIN 8-bolt flange internal thread is 3 npt or bspt
Wetted parts.....	varies by model, see instruction manual
Weight.....	150 lb (68 kg)
Instruction manual.....	308639

\* Flow rates are with muffler and do not vary based on diaphragm material  
 \*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type  
 \*\*\* Actual pump performance may be affected by prolonged usage at temperature

### Typical System Drawing

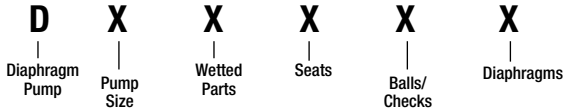
Husky 3275 Above Ground Gravity Feed



# Husky 3275

## Aluminum Pumps

### Ordering Information

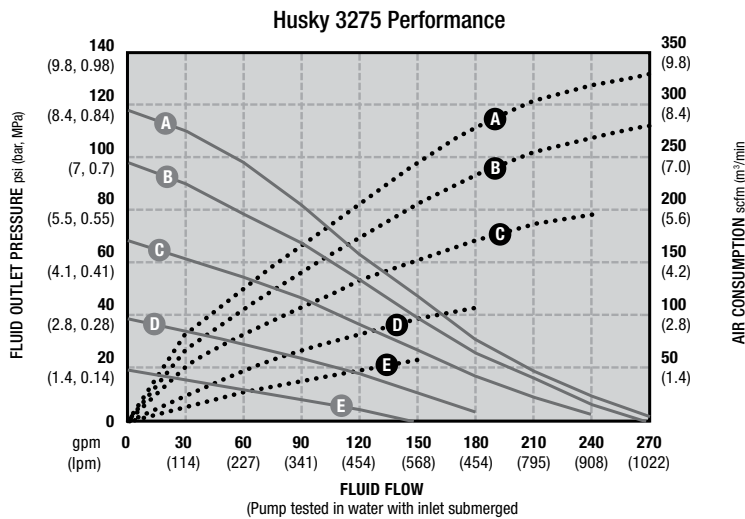


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
K = 3" (76.2 mm) Standard: aluminum center section	3 = Aluminum (npt) C = Aluminum (bsp)	3 = Stainless Steel 5 = TPE 6 = Santoprene G = Geolast	1 = PTFE 2 = Acetal G = Geolast	1 = PTFE 5 = TPE 6 = Santoprene G = Geolast

### Accessories

See page 76 for additional accessories.

### Performance Chart



AIR PRESSURE	LEGEND
<b>(A)</b> = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption.....
<b>(B)</b> = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
<b>(C)</b> = at 70 psi (4.8 bar, 0.48 MPa)	
<b>(D)</b> = at 40 psi (2.8 bar, 0.28 MPa)	
<b>(E)</b> = at 20 psi (1.4 bar, 0.14 MPa)	

# Husky 3275

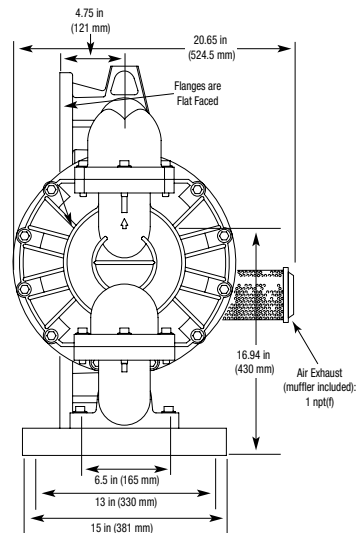
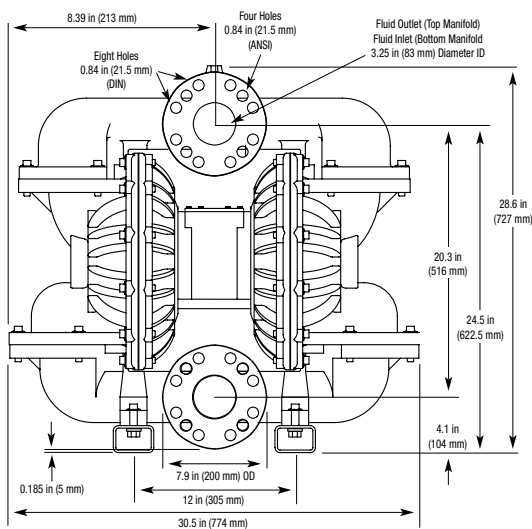
## Aluminum Pumps

### Popular Models

Material	Part Number (NPT Ported)		Part Number (BSP Ported)		Materials for Seats	Materials for Balls	Materials for Diaphragms	Fluid Kit	Air Kit	Air Control*
	Standard Air Valve	Remote Air Valve	Standard Air Valve	Remote Air Valve						
Aluminum	DK3311	NA	DKC311	NA	Stainless Steel	PTFE	PTFE	DOK311	238765	246948
	DK3316	NA	DKC316	NA	Stainless Steel	PTFE	Santoprene	DOK316	238765	246948
	DK3366	NA	DKC366	NA	Stainless Steel	Santoprene	Santoprene	DOK366	238765	246948
	DK3515	NA	DKC515	NA	TPE	PTFE	TPE	DOK515	238765	246948
	DK3525	NA	DKC525	NA	TPE	Acetal	TPE	DOK525	238765	246948
	DK3565	NA	DKC565	NA	TPE	Santoprene	TPE	DOK565	238765	246948
	DK3611	NA	DKC611	NA	Santoprene	PTFE	PTFE	DOK611	238765	246948
	DK3616	NA	DKC616	NA	Santoprene	PTFE	Santoprene	DOK616	238765	246948
	DK3666	NA	DKC666	NA	Santoprene	Santoprene	Santoprene	DOK666	238765	246948
	DK3GG6	NA	DKCGG6	NA	Geolast	Geolast	Santoprene	DOKGG6	238765	246948
	DK3GGG	NA	DKCGGG	NA	Geolast	Geolast	Geolast	DOKGGG	238765	246948

\* Air control includes air regulator and filter with gauge

### Dimensions



# Fast-Flo® 1:1

## Air-Operated Piston Transfer Pumps

---

### Features and Benefits

- Air-powered for high reliability and low cost
- Delivery up to 5 gpm (19 lpm)
- Plate (flat) check options for lower viscosity fluids
- UL options available when installed in accordance with NFPA

### Typical Application

- Transfer from drum to day tank
- Continuous or dead end transfer
- Low viscosity spray adhesive supply
- Supply pump for air spray and HVLP (high volume low pressure) spray applications of coatings and wood finishing materials

### Typical Fluids Handled

- Anti-freeze
- Windshield washer solvent
- Automatic transmission fluid
- Motor and hydraulic oil
- General chemicals
- Thinners and solvents
- Light viscosity coatings
- Spray adhesives and finishes





# Fast-Flo 1:1

## Air-Operated Piston Transfer Pumps

### Ordering Information

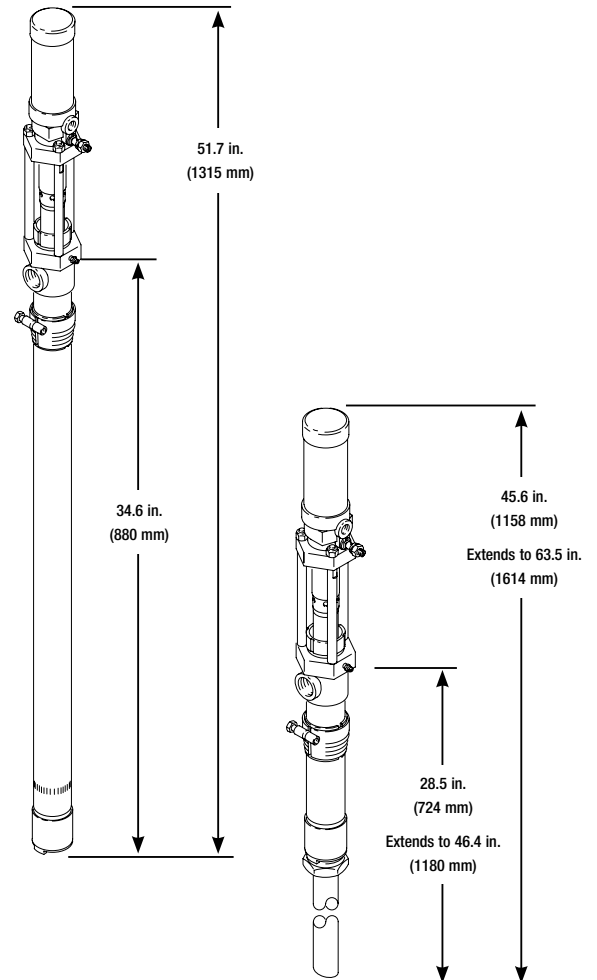
Part Number	Construction	Packing
226940	Drum/CS/SST (UL, CE)	T&L
226941	Drum/CS/SST (UL)	PE
226942	Drum/SST	PE
226943	Stubby/CS/SST (UL)	L
226944	Stubby/CS/SST (UL, CE)	PE
226945	Stubby/SST (UL, CE)	PE
226946	Drum/CS/SST	T
237129	Drum/SST (UL, CE)	T
237130	Stubby/CS	L
237131	Stubby/CS	T
237132	Stubby/CS	T
237133	Drum/CS	L
237134	Drum/CS (UL)	T

N = Neoprene      SST = 304 Stainless Steel  
 L = Leather        CS = Carbon Steel  
 T = PTFE            PE = Polyethylene

### Technical Specifications

	Priming Piston
Maximum fluid working pressure	180 psi (12.6 bar, 1.26 MPa)
Maximum pump speed	100 cpm
Pump cycles per gallon (3.8 l)	25
Maximum air input pressure	180 psi (12.6 bar, 1.26 MPa)
Maximum operating temperature	120°F (49°C)
Typical sound level	72 dBa
Air inlet	1/4 npt (f)
Fluid outlet	3/4 npt (f)
Weight	20 lbs (9.07 kg) Drum; 11 lbs (4.99 kg) Stubby
Instruction Manual	307427

### Dimensions



# T2

## Graco 2:1 Transfer Pump

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### Features and Benefits

- O-ring seal design is more durable and lasts longer - more spraying uptime and less time on maintenance
- Provide consistent feed pressures and flow rates for dependable results
- Lower pressure drops with higher viscosity materials at any ambient temperature
- Designed and manufactured by the worldwide leader in pump technology

### Typical Application

- Foam chemical supply
- Spray gun supply
- Dispensing valve supply
- Cleaning chemical supply
- Fluid transfer

### Typical Fluids Handled

- Solvents
- Cleaning chemical supply
- Chemicals
- Catalysts
- Isocyanates
- Adhesives
- Resins



# T2

## Graco 2:1 Transfer Pumps

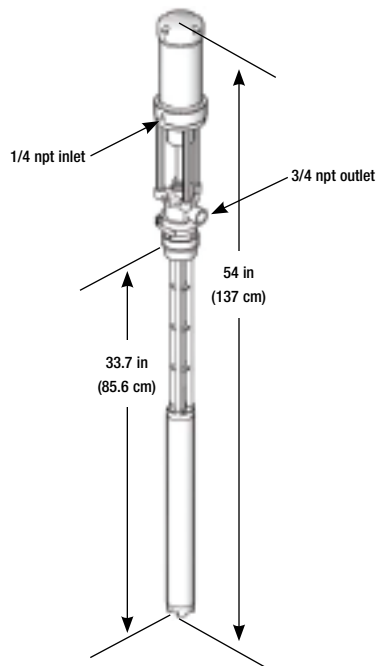
### Ordering Information

- 295616** Graco T2 2.25:1 Transfer Pump
- 246081** Graco T2 2.25:1 Transfer Pump, air supply kit, 10 ft x 3/4 in (3 m x 19 mm) supply hose and fittings
- 246098** Graco T2 2.25:1 Transfer Pump and 10 ft x 3/4 in (3 m x 19 mm) supply hose

### Technical Specifications

	T2
Ratio	2.25:1
Maximum output - continuous	5.0 gpm (19 lpm)
Maximum output - intermittent	7.5 gpm (28 lpm)
Maximum input air pressure	180 psi (12.6 bar, 1.26 MPa)
Maximum output fluid pressure	405 psi (28 bar, 2.8 MPa)
Maximum ambient temperature	120°F (50°C)
Maximum fluid temperature	190°F (88°C)
Typical sound level	60 dBa
Weight	21 lbs (9.5 kg)
Dimensions	54 in (137 cm) length 3.5 in (8.9 cm) diameter (cap)
Instruction Manual	311882

### Dimensions



# Hydra-Clean®

## Air-Operated Pressure Washers

### Features and Benefits

- Supply packages include everything you need for use with open-head universal drums
- Available with an accumulator and chemical injector
- Configurations available to fit most pressure, flow, and material requirements
- Supports multiple guns
- Use with cold or hot water up to 200°F (93°C)

### Typical Applications

- Vehicle fleets, buses, transit systems
- Heavy construction equipment, off-highway vehicles
- General industrial equipment
- Building exteriors
- Sanitizing
- Public works facilities and equipment
- Farm maintenance
- Marinas

### Typical Coatings Applied

- Water
- Detergent solutions
- Chemical solutions



### Technical Specifications

Part Number	Pump Package	Max. Working Pressure psi (MPa, bar)	Max. Air Input Pressure psi (MPa, bar)	Fluid Flow at 60 cpm gpm (lpm)	Vol. per Cycle oz (cc)	Air Inlet Size	Fluid Inlet Size	Fluid Outlet Size*	Instruction Manual
247549	12:1 Cart Mount	1250 (8.6, 86)	100 PSI (0.7, 7)	8.7 (33.0)	550	3/4" npt(f)	1"	3/8"	312585
247550	12:1 Wall Mount	1250 (8.6, 86)	100 PSI (0.7, 7)	8.7 (33.0)	550	3/4" npt(f)	1"	3/8"	312585
247551	23:1 Cart Mount	2275 (15.7, 157)	100 PSI (0.7, 7)	9.2 (34.7)	580	3/4" npt(f)	1"	3/8"	312585
247552	23:1 Wall Mount	2275 (15.7, 157)	100 PSI (0.7, 7)	9.2 (34.7)	580	3/4" npt(f)	1"	3/8"	312585
247553	30:1 Cart Mount	3065 (21.1, 211)	100 PSI (0.7, 7)	6.8 (25.9)	430	3/4" npt(f)	1"	3/8"	312585
247554	30:1 Wall Mount	3065 (21.1, 211)	100 PSI (0.7, 7)	6.8 (25.9)	430	3/4" npt(f)	1"	3/8"	312585

\*Includes two outlet ports per unit

# Hydra-Clean

## Air-Operated Pressure Washers

### Ordering Information

Package Order No.	247549 or 247550	247551 or 247552	247553 or 247554
Pump Assembly Part No.	N34DN0	N65DN0	N65DN0
Pump Lower Part No.	247599	241648	687055
Construction	SST	SST	SST
Standard Seal Repair Kit	247881	222880	See manual 311825
Construction	UHMWPE/CF-PTFE	UHMWPE/CF-PTFE	UHMWPE/CF-PTFE
Optional Seal Repair Kits	207581	222875	222845
Construction	PTFE	UHMWPE/PTFE	UHMWPE/PTFE
Motor Repair Kit	See manual 311238	See manual 311238	See manual 311238
Instruction Manual	312585	312585	312585

### Accessories

#### GUNS AND WANDS

<b>247879</b>	Replacement gun/wand
<b>15T283</b>	Brass/stainless spray gun
<b>15T282</b>	Stainless steel spray gun
<b>15T279</b>	32 inch stainless steel wand
<b>15T280</b>	10 inch stainless steel wand
<b>247880</b>	Gun stainless steel connection
<b>247622</b>	Gun and suction tube holder

#### FLUID HOSES

<b>214959</b>	1 in x 6 ft inlet hose
<b>247878</b>	3/8 in x 50 ft outlet hose: 4500 psi

#### OTHER

<b>15T284</b>	60 mesh inlet strainer with 1" NPT(f) connection
<b>191635</b>	10 mesh inlet strainer with 1" NPT(f) connection

### Stainless Steel Tips

Part No.	Tip No.	Orifice Size in. (mm)	Fan Width Angle at 40 psi (3 bar, 0.03 MPa)	Capacity at 1000 psi (68.9 bar, 6.89 MPa) GPM (lpm)
805418	40020	0.020 (0.51)	40°	1.00 (3.78)
805422*	40030	0.030 (0.76)	40°	1.50 (5.68)
805426	40035	0.035 (0.89)	40°	1.75 (6.62)
805433*	25045	0.045 (1.14)	25°	2.25 (8.52)
805445	25060	0.060 (1.52)	25°	3.00 (11.36)
805446*	40060	0.060 (1.52)	40°	3.00 (11.36)
805450*	40065	0.065 (1.65)	40°	3.25 (12.30)
805453	25070	0.070 (1.78)	25°	3.50 (13.25)
805458	40075	0.075 (1.91)	40°	3.75 (14.20)
805459*	00080	0.080 (2.03)	0°	4.00 (15.14)
805471	00100	0.100 (2.54)	0°	5.00 (18.93)

\*Tip included with pump packages

Other orifice sizes and fan widths available from Graco, contact a sales representative for more information.

# Husky Transfer Pump Packages

## 55 Gallon (208 Liter) Size

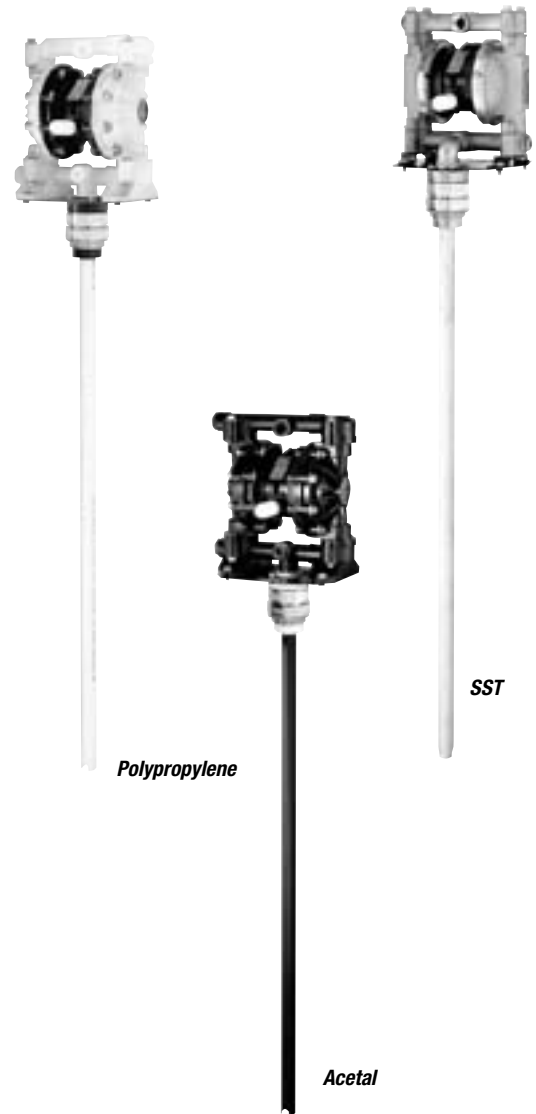
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### Features

- Excellent for abrasive, low- to medium-viscosity fluids and shear sensitive materials
- Suction tube is immersed inside the drum – not the pump
- Quick-priming and immediate flow of product
- Handles fluid viscosities up to 3,000 cps and solids up to 0.09 in (2.29 mm)
- Runs dry without damage
- Provides air tight seal for moisture-sensitive fluids
- Bung adapter fits into any 2 in (50.8 mm) bung opening
- Easy-out seal provides fast slide in and out of drums without disconnecting hoses and accommodates slightly off-sized drums up to 2-1/2 in (63.5 mm)

### Typical Applications and Fluids Handled

- Industrial solvents: aromatics, esters, ketones, chlorinated solvents
- Adhesives: contact cement, white glue, resins
- Decorative/protective coatings: paints, stains, varnishes, solvents
- Lubricants/coolants: motor oil, hydraulic fluids, cutting fluids, anti-freeze
- Cleaners/sanitizers: soaps, detergents, solvents, acids, caustics
- Inks: flexographic, silk-screen



# Husky Transfer Pump Packages

## 55 Gallon (208 Liter) Size

### Technical Specifications

Maximum fluid working pressure.....	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	
For 515 (1/2 in [12.7 mm] ports) .....	12 gpm (57 lpm)
For 716, 515 (3/4 in [19.05 mm] ports) .....	14 gpm (61 lpm)
Maximum pump speed .....	400 cpm
Displacement per cycle** .....	0.04 gallon (0.15 liter)
Maximum size pumpable solids .....	.0094 in (2.5 mm)
Typical sound level @ 70 psi (4.8 bar, 0.48 MPa) air @ 50 cpm .....	67 dBa
Maximum air consumption .....	28 scfm (0.672 m <sup>3</sup> /min)
Air pressure operating range .....	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)
Air inlet size .....	1/4 npt(f)
Air exhaust port size .....	3/8 npt(f)
Fluid inlet size for Husky 515 and Husky 715 .....	3/4 npt(f)
Fluid outlet size	
Husky 515 .....	1/2 and 3/4 npt(f)
Husky 716 .....	3/4 npt(f)
Wetted parts (fluid covers and manifolds)	
Acetal pumps .....	groundable acetal, PTFE
Polypropylene pumps .....	polypropylene, PTFE
Aluminum pumps .....	aluminum, stainless steel, PTFE, zinc-plated steel
Stainless Steel pumps .....	stainless steel, PTFE
Pump weight	
Polypropylene .....	6.5 lb (2.9 kg)
Acetal .....	7.8 lb (3.5 kg)
Aluminum .....	8.5 lb (3.9 kg)
Stainless Steel .....	18 lb (8.2 kg)
Drum kit weight	
Polypropylene tube w/poly easy-out seal .....	4.0 lb (1.8 kg)
Aluminum tube with acetal easy-out seal .....	4.5 lb (2.0 kg)
Stainless Steel tube with acetal easy-out seal .....	6.5 lb (2.9 kg)
Stainless Steel tube with Stainless Steel easy-out seal .....	9.5 lb (4.3 kg)
Drum package weight	
Polypropylene pump with polypropylene tube .....	10.5 lb (4.8 kg)
Acetal pump with aluminum tube .....	12.3 lb (5.6 kg)
Aluminum pump with aluminum tube .....	13.0 lb (5.9 kg)
Acetal pump with Stainless Steel tube .....	14.3 lb (6.5 kg)
Stainless Steel pump with Stainless Steel tube .....	27.5 lb (12.5 kg)
Drum package instruction manual .....	309116
Husky 515/716 instruction manual .....	308981

\* Flow rates are with muffler and do not vary based on diaphragm material

\*\* Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

# Husky Transfer Pump Packages

## 55 Gallon (208 Liter) Size

### Ordering Information

Package Number	Pump Type	Pump Components				Drum Kit Components			
		Pump* Number	Seats	Balls	Diaphragms	Drum** Kit Number	Tube Material	Tube Part Number	Easy Out Seal and Mounting Base
233051	Husky 515 Polypropylene	241565	Polypropylene	PTFE	PTFE	233045	Polypropylene	196096	233073
233052	Husky 515 Acetal	241564	Acetal	PTFE	PTFE	233047	Stainless Steel	196094	233074
233053	Husky 515 Acetal	241564	Acetal	PTFE	PTFE	233046	Aluminum	195095	233074
233054	Husky 716 Aluminum	243305	Acetal	Santoprene	Santoprene	233046	Aluminum	196095	233074
233055	Husky 716 Aluminum	243306	Acetal	Buna	Buna	233046	Aluminum	196095	233074
233056	Husky 716 Aluminum	243307	Acetal	PTFE	PTFE	233046	Aluminum	196095	233074
233057	Husky 716 Stainless Steel	D54311	Stainless Steel	PTFE	PTFE	233048	Stainless Steel	196094	233076

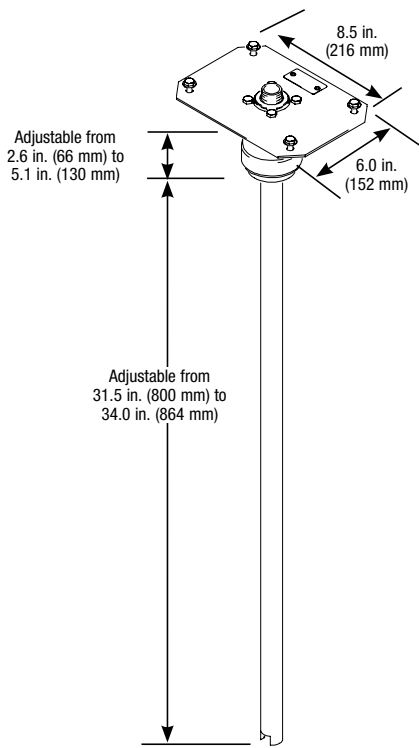
\* Pump number consists of seats, balls, diaphragms and an open down port

\*\* Drum kit number consists of an easy out seal, mounting base and tube

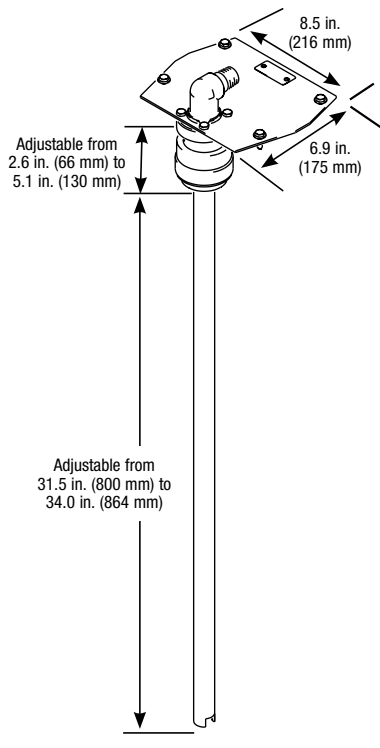
### Accessories

- 246946 Air Regulator/Filter
- 208536 Air Line Quick Coupler
- 169970 Quick Coupler Nipple

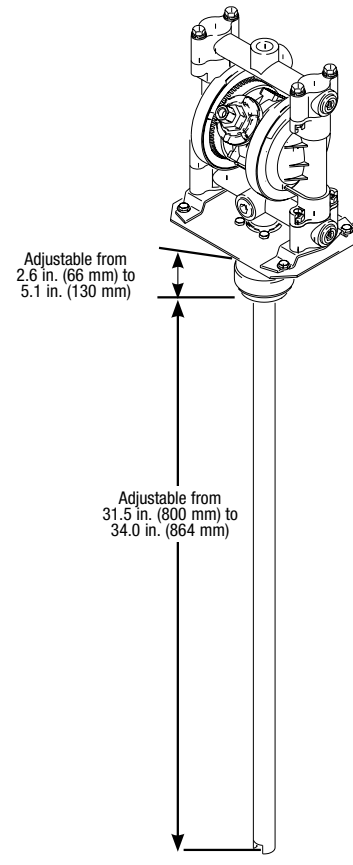
### Dimensions



**Poly, Acetal and Aluminum Pumps**



**Stainless Steel Pumps**



Overall height depends on pump. See page 20 or 24 for pump dimensions



# Husky Transfer Pump Packages

## Pump and Agitator Packages

---

### Husky 55 gal (200 l) Dispensing Package

This fully-integrated system includes:

- Stainless steel back-gearred agitator with siphon tube
- Stainless steel drum cover
- Husky 515 – 1/2 in (12.7 mm) air-operated double-diaphragm pump
- Air-powered drum cover lift
- Air controls and dispense valve

### Ordering Information

**231418** Husky 515 acetal pump, stainless steel drum cover, heavy-duty agitator, drum cover lift, hose and valve

**231419** Same as 231418 (excludes hose or valve)

### Husky Twistork® Package

Ideal for closed 55 gallon (200 liter) drum agitating and evacuation in one simple, easy-to-use package. Easily mixes most paints, resins, urethanes, epoxies and silicones.

Includes:

- Twistork siphon agitator
- Husky 515 – 1/2 in (12.7 mm) air-operated double-diaphragm pump
- Bracket-mounted in a simple package to fit into a 2 in (50.8 mm) bung
- Powerful helical blade to lift and disperse solids from the drum bottom for material consistency
- Exclusive in-shaft siphon tube allows simultaneous mixing and evacuating for greater savings on equipment, time and material

### Ordering Information

**238859** Husky 515 D52911 Polypropylene pump mounted on Twistork

**238860** Husky 515 D51211 Acetal Pumps mounted on Twistork



# CycleFlo™

## Solenoid Pump Controllers

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### Features and Benefits

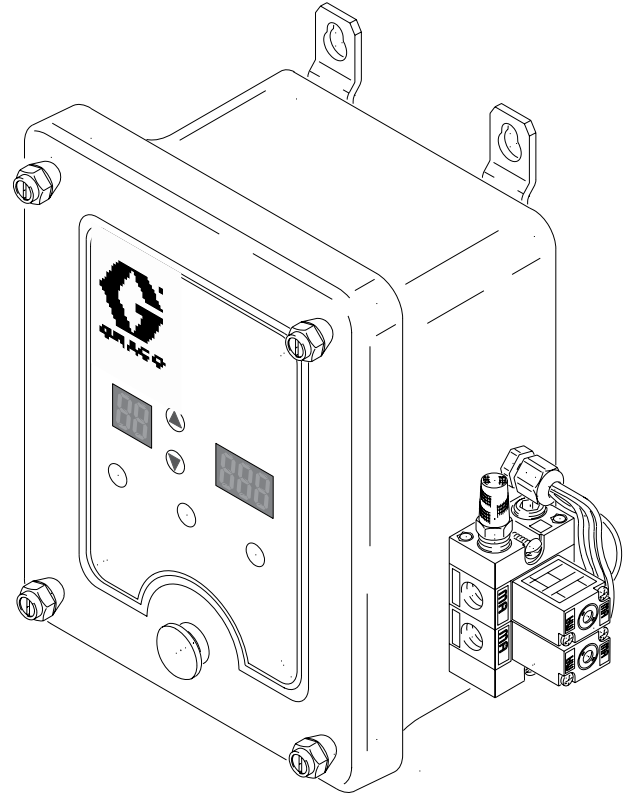
- Total fluid control when used with Husky remote air valve diaphragm pumps
- Automates processes
- Controls flow rates and batch rates with  $\pm 5\%$  accuracy at a fraction of the cost of elaborate pump metering systems
- Controls dispenses from 23 cps up to 10,000 gallons per batch
- Flow rate control independent of fluid pressure
- Presets range from 10 to 200 cycles per minute
- Fully pneumatic hookups from CycleFlo Controller to Husky remote diaphragm pump
- 32 programmable presets for cycle count
- Operates in manual and remote modes
- Not intrinsically safe for hazardous areas

### Typical Application

- Waste neutralization
- Inline chemical injection
- Measured flow
- Storage to production transfer
- Bulk transfer
- Filtration

### Typical Fluids Handled

- Caustics and acids
- Recovered waste materials
- Process chemicals
- Coatings and inks
- Soaps and sanitary chemicals



*CycleFlo*  
195264 and 196706

# CycleFlo II

## Solenoid Pump Controllers

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### Features and Benefits

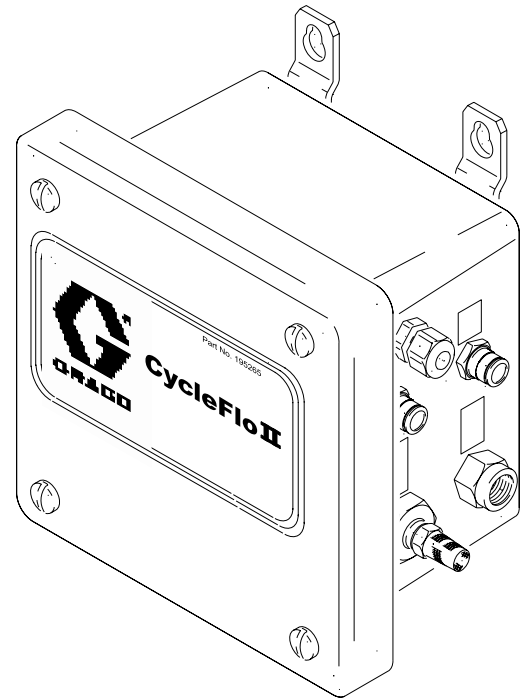
- Total fluid control when used with Husky remote air valve diaphragm pumps
- Automates processes
- Controls flow rates and batch rates with  $\pm 5\%$  accuracy at a fraction of the cost of elaborate pump metering systems
- Flow rate control independent of fluid pressure
- Fully pneumatic hookups from CycleFlo II Controller to Husky remote diaphragm pump
- Continually operates pump at a designed cycle speed, while electric signal is activated

### Typical Application

- Waste neutralization
- Inline chemical injection
- Measured flow
- Storage to production transfer
- Bulk transfer
- Filtration

### Typical Fluids Handled

- Caustics and acids
- Recovered waste materials
- Process chemicals
- Coatings and inks
- Soaps and sanitary chemicals



**CycleFlo**  
**195265**

# CycleFlo and CycleFlo II

## Solenoid Pump Controllers

### Ordering Information

195264 CycleFlo Pneumatic pump controller, 120V

196706 CycleFlo Pneumatic pump controller, 240V

195265 CycleFlo II Pneumatic pump controller, 120V

309003 CycleFlo Instruction Manual

309004 CycleFlo II Instruction Manual

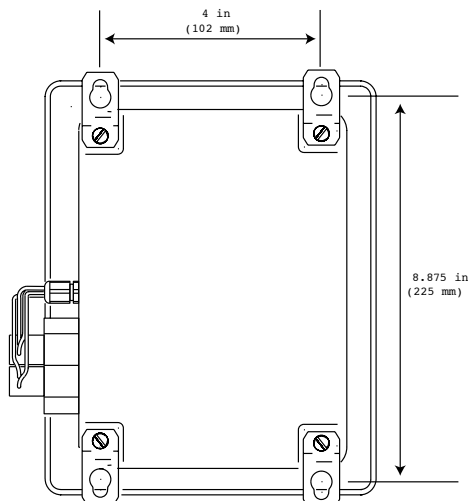
### Pump Selector

Highlighted areas indicate the different sizes of remote pumps and available materials of construction for seats, balls and diaphragms that can be used with the CycleFlo and CycleFlo II controller.

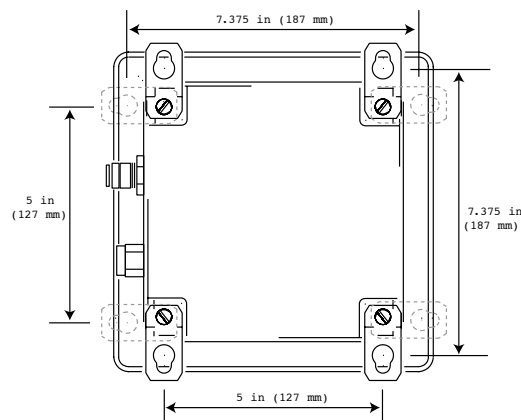
PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
2 = 1/4" (6.35 mm) Remote: polypropylene center section	1 = Acetal (npt)	0 = Seat with ball	1 = PTFE	1 = PTFE
4 = 1/2" (12.7 mm) Remote: polypropylene center section	2 = Poly (npt)	2 = Acetal	2 = Acetal	5 = TPE
4 = 3/4" (19.05 mm) Remote: polypropylene center section	3 = Aluminum (npt)	3 = Stainless Steel	3 = Stainless Steel	6 = Santoprene
8 = 1" (25.4 mm) Remote: aluminum center section	4 = Stainless Steel (npt)	4 = Hardened SST	4 = Hardened SST	7 = Buna N
S = 1" (25.4 mm) Remote: stainless steel center section	5 = PVDF (npt)	5 = TPE	5 = TPE	8 = Fluoroelastomer
C = 1-1/2" (38.1 mm) Remote: aluminum center section	6 = Ductile Iron (npt)	6 = Santoprene	6 = Santoprene	G = Geolast
U = 1-1/2" (38.1 mm) Remote: stainless steel center section	A = Acetal * (bsp)	7 = Buna N	7 = Buna N	
G = 2" (50.8 mm) Remote: aluminum center section	B = Poly * (bsp)	8 = Fluoroelastomer	8 = Fluoroelastomer	
W = 2" (50.8 mm) Remote: stainless steel center section	C = Aluminum (bsp)	9 = Polypropylene	9 = Polypropylene	
	D = Stainless Steel (bsp)	A = PVDF	A = PVDF	
	E = PVDF (bsp)	G = Geolast	G = Geolast	
	F = Ductile Iron (bsp)	B = SST with viton seal		
	H = 2 npt Alum Extended	C = Santoprene with viton seal		
	G = 2 bsp Alum Extended	D = Urethane Duckbill		
	* = BSP plastic in 1/2" (12.7mm) pumps			

### Mounting Dimensions

CycleFlo



CycleFlo II



# CycleFlo and CycleFlo II

## Solenoid Pump Controllers

### How To Determine The Best Remote Pump:

1. Configure the best seat, ball and diaphragm combination, as well as fluid wetted parts, based on material compatibility and application requirements.
  - If the material is a mild acid, the choice could be a DX2911.
2. Determine dispense time and volume accuracy.
  - In two minutes, 50 gallons need to be dispensed  $\pm 5\%$  accuracy
3. Use the displacement volume chart below to choose the pump size with an outlet volume/cycle that is most closely divisible into your required flow.
  - Husky 1590 produces .5 gal/cycle
  - Husky 2150 produces 1.03 gal/cycle

#### DISPLACEMENT VOLUME CHART

Volume/cycle	Husky 205	Husky 515	Husky 716	Husky 1040	Husky 1590	Husky 2150
	1/4 in	1/2 in	3/4 in	1 in	1-1/2 in	2 in
Cubic centimeters (cc)	46	150	150	570	1960	3000
Liters	0.05	0.15	0.15	0.57	1.96	3.9
Grams (assumes s.g =1.0)	46	150	150	570	1960	3900
Kilograms (kg)	0.05	0.15	0.15	0.57	1.96	3.9
Gallons	0.01	0.04	0.04	0.15	0.50	1.03
Quarts	0.05	0.16	0.16	0.6	2.0	4.12
Pints	0.1	0.32	0.32	1.2	4.0	8.24
Ounces	1.54	5.12	5.12	19.2	64.0	131.84
Cubic inch	2.77	9.24	9.24	34.65	115.5	237.93

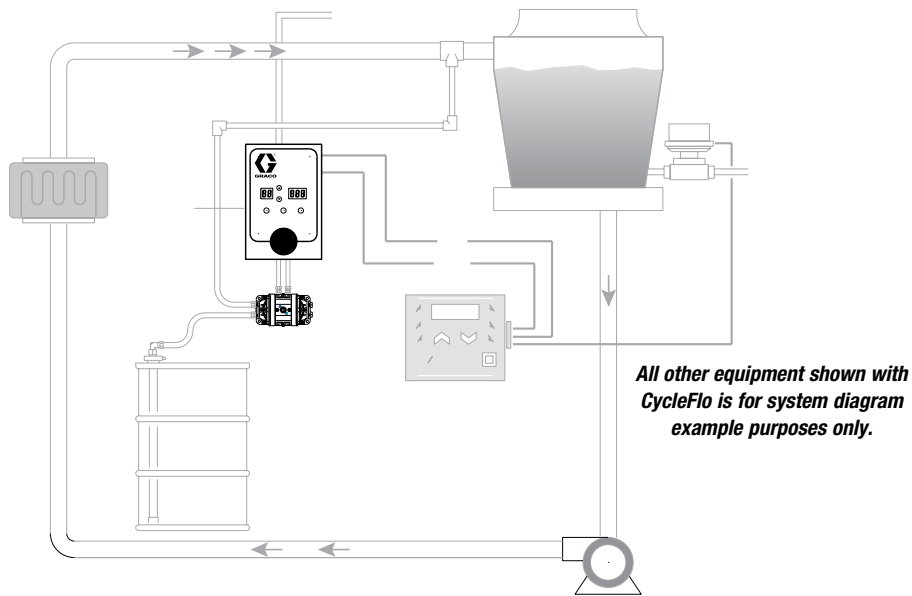
4. Determine the number of cycles required. Calculate the dispense time by dividing required flow by outlet volume per cycle.
  - Husky 1590 = 50 gal/0.5 gal/cycle = 100 cycles
  - Husky 2150 = 50 gal/1.03 gal/cycle = 48.55 cycles
5. Determine if cycle output is within the dispense accuracy required.
  - Husky 2150 requires 48.55 cycles to pump 50 gallons. Only full cycles are possible, so either 48 or 49 cycles can be counted. At the 48 cycle count, dispense would be 49.44 gallons. At the 49 cycle count, dispense would be 50.47 gallons.
  - Husky 1590 requires 100 cycles to pump 50 gallons. No partial cycles required.
6. After determining the best size, use the pump ordering matrix to decide which remote center section is most suitable for the application – DC2911 (aluminum center section) or DU5911 (stainless steel center section).
  - Since a mild acid is being pumped, DC2911, an aluminum center section would be the best choice.

# CycleFlo and CycleFlo II

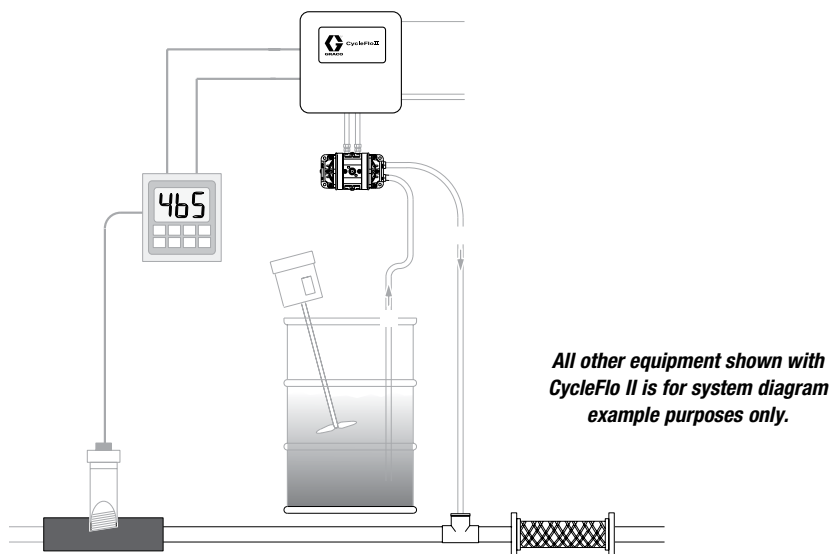
## Solenoid Pump Controllers

### Typical Installations

#### CycleFlo – Circulation Flowrate Control \*



#### CycleFlo II – Batch Process\*



\*For pump sizes larger than the Husky 205, a third airline and shut off device is required.  
Refer to part number 115605 for the CycleFlo and part number 115606 for the CycleFlo II.

# Surge Suppressors

## Husky 750 and Husky 2000

### Features and Benefits

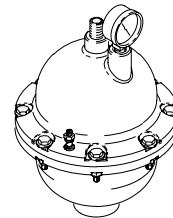
- Controls pressure fluctuations and acceleration loss, preventing cavitation
- Creates even fluid flow to the process when placed directly at the discharge of a positive displacement pump
- Accumulates expanded fluids in a closed system, reducing potentially dangerous high pressures
- Absorbs “water hammer” pressure spikes created from quick closing valves
- Protects filter media from loosening or tearing
- Absorbs initial fluid surge when pump starts, preventing pipe fitting breakage and damage to instrumentation
- Requires downstream back pressure not applicable on open discharge systems
- Automatic surge suppressors use pump inlet air pressure to pressurize surge chamber
- Adjustable surge suppressors provide an independent air regulator to adjust air pressure to surge chamber

### Typical Application

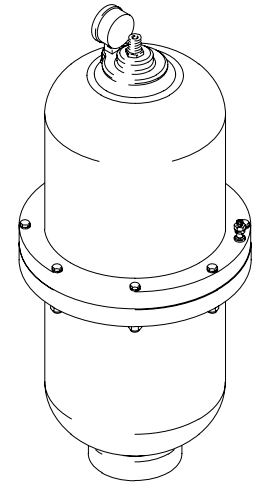
- Transferring
- Metering
- Filtering
- Spraying
- Printing
- Mixing
- Filling
- Dosing, injecting
- Coating

### Typical Fluids Handled

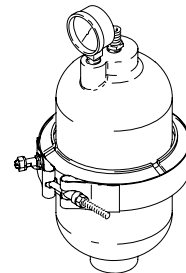
- Chemical process
- Pulp, paper, textile
- Paint and coating
- Gas, oil, petrochemical
- Biotech/pharmaceutical
- Consumer products
- Food and beverage
- Water treatment



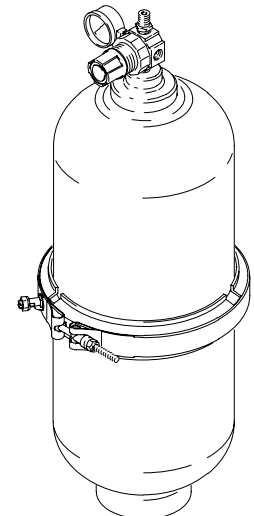
**239095**  
**Automatic**



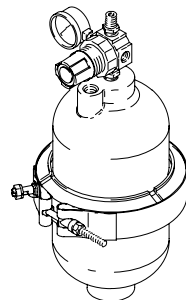
**239126**  
**Automatic**



**239096**  
**Automatic**



**239088**  
**Adjustable**



**239091**  
**Adjustable**

# Surge Suppressors

## Husky 750 and Husky 2000

### Technical Specifications

Max. air input pressure . . . . .	120 psi (0.84 MPa, 8.4 bar)
Air line connection . . . . .	1/4 npt
Fluid inlet size	
Husky 2000 models . . . . .	2 in npt(f)
Husky 750 models . . . . .	3/4 in npt(f)
Wetted parts . . . . .	See ordering information, pg 78
Weight. . . . .	See ordering information, pg 78
Instruction manual. . . . .	308703

### Ordering Information

#### Automatic Husky 750, 3/4 in npt(f) Surge Suppressors

Polypropylene wetted bottom housing and non-wetted top housing

Weight: 9 lb (4.1 kg)

- 239096** with Buna-N bladder
- 239121** with PTFE bellows
- 239122** with Fluoroelastomer bladder

SST wetted bottom housing and non-wetted top housing

Weight: 16 lb (7.3 kg)

- 239095** with Buna-N bladder
- 239123** with PTFE bellows
- 239124** with Fluoroelastomer bladder

Acetal wetted bottom housing and non-wetted top housing

Weight: 9 lb (4.1 kg)

- 239094** with Buna-N bladder
- 239125** with PTFE bellows

#### Adjustable Husky 750, 3/4 in npt(f) Surge Suppressors

Polypropylene wetted bottom housing and non-wetted top housing

Weight: 9 lb (4.1 kg)

- 239091** with Buna-N bladder
- 239129** with PTFE bellows
- 239130** with Fluoroelastomer bladder

SST wetted bottom housing and non-wetted top housing

Weight: 16 lb (7.3 kg)

- 239090** with Buna-N bladder
- 239131** with PTFE bellows
- 239132** with Fluoroelastomer bladder

Acetal wetted bottom housing and non-wetted top housing

Weight: 9 lb (4.1 kg)

- 239089** with Buna-N bladder
- 239133** with PTFE bellows

#### Automatic Husky 2000, 2 in npt(f) Surge Suppressors

SST wetted bottom housing, polypropylene non-wetted top housing

Weight: 36 lb (16.3 kg)

- 239093** with Buna-N bladder
- 239126** with PTFE bellows
- 239127** with Fluoroelastomer bladder

Polypropylene wetted bottom housing and non-wetted top housing

Weight: 18 lb (8.2 kg)

- 239092** with Buna-N bladder
- 239128** with PTFE bellows

#### Adjustable Husky 2000, 2 in npt(f) Surge Suppressors

SST wetted bottom housing, polypropylene non-wetted top housing

Weight: 36 lb (16.3 kg)

- 239088** with Buna-N bladder
- 239134** with PTFE bellows
- 239135** with Fluoroelastomer bladder

Polypropylene wetted bottom housing and non-wetted top housing

Weight: 18 lb (8.2 kg)

- 239087** with Buna-N bladder
- 239136** with PTFE bellows



# Pump Accessories

## Air-Operated Double-Diaphragm Pump

### Husky 205 Accessories

### Part Number

#### AIR CONTROLS

Regulator / Filter Assembly 1/4" npt(f) (6.35 mm)	246946
Quick Connect Air Coupler 1/4" npt (6.35 mm)	208356
Quick Connect Air Nipple 1/4" npt (6.35 mm) mbe	169970
Air Shut Off Valve 1/4" npt (6.35mm), bleed type, relieves trapped air downline of valve	110223
Air Runaway Valve (stops pump from cavitating when empty)	224040
Air Muffler (comes with pump)	114174

#### 55-GALLON SIPHON KITS

Polypropylene Suction Kit (includes siphon hose, tube and connectors)	239142
Acetal Suction Kit (includes siphon hose, tube and connectors)	239143
PVDF Suction Kit (includes siphon hose, tube and connectors)	239144

#### REMOTE PUMP CONTROLLERS

CycleFlo (cpm rate and batch control) 120v	195264
CycleFlo (cpm rate and batch control) 240v	196706
CycleFlo II (rate controller with solenoid valve) 120v	195265

### Husky 307 Accessories

#### AIR CONTROLS

Regulator / Filter Assembly 1/4" npt(f) (6.35 mm)	246946
Quick Connect Air Coupler 1/4" npt (6.35 mm)	208356
Quick Connect Air Nipple 1/4" npt (6.35 mm) mbe	169970
Air Shut Off Valve 1/4" npt (6.35 mm), bleed type, relieves trapped air downline of valve	110223
Air Runaway Valve (stop pump from cavitating when empty)	224040
Air Muffler (comes with pump)	112933

#### 55-GALLON SIPHON KITS

Polypropylene Suction Kit (includes siphon hose, tube and connectors)	235502
Acetal Suction Kit (includes siphon hose, tube and connectors)	235500

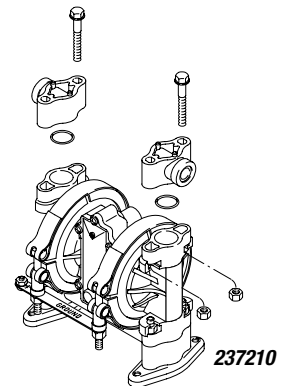
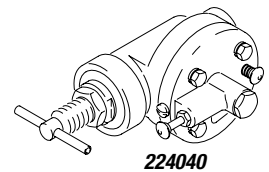
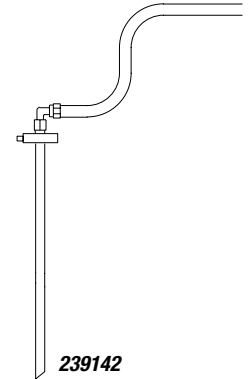
#### REMOTE PUMP CONTROLLERS

Husky 307 pumps are not equipped to run in remote mode	N/A
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#### SPLIT MANIFOLD KITS

By varying the manifold kits, pumps can be configured in different ways (one inlet and two outlets, two inlets and one outlet, and two inlets and two outlets, etc), allowing for system flexibility. Pumps need to be ordered separately. One kit is required for each side (top or bottom). See 308439 for details.

Acetal Split Manifold Kit	237211
Polypropylene Split Manifold Kit	237210
Rubber Foot Kit	236452



# Pump Accessories

## Husky 515 and Husky 716 Accessories

## Part Number

### AIR CONTROLS

Regulator / Filter Assembly 1/4" npt(f) (6.35 mm)	246946
Quick Connect Air Coupler 1/4" npt (6.35 mm)	208356
Quick Connect Air Nipple 1/4" npt (6.35 mm) mbe	169970
Air Shut Off Valve 1/4" npt (6.35 mm), bleed type, relieves trapped air downline of valve	110223
Air Runaway Valve (stop pump from cavitating when empty)	224040
Air Muffler (comes with pump)	112933
Center Section Conversion Kit (converts an old style Husky 715 to a Husky 515/716)	241631
Center Section Conversion Kit (converts an old remote style Husky 715 to a Husky 515/716)	241664

### 55-GALLON SIPHON KITS

Drum Kit (includes "easy out seal" mounting base and siphon tube). Best used with a wall mounted Husky 515 or 716 model. Pump models can be mounted to base, but may require opening bottom inlet. See 309116 for details.

Mounting Base with a Polypropylene Siphon Tube	233045
Mounting Base with a Aluminum Siphon Tube	233046
Mounting Base with a Stainless Steel Siphon Tube (used with non sst pumps)	233047
Mounting Base with a Stainless Steel Siphon Tube (for sst pump only)	233048

### REMOTE PUMP CONTROLLERS

CycleFlo (cpm rate and batch control) 120v	195264
CycleFlo (cpm rate and batch control) 240v	196706
CycleFlo II (rate controller with solenoid valve) 120v	195265
Cycle Counter Kit (counts cycles of pump through a magnetic sensor)	241406
Proximity Switch Kits (used in conjunction with 241406 kit)	241405

### SPLIT MANIFOLD KITS (Husky 515 only)

By varying the manifold kits, pumps can be configured in different ways (one inlet and two outlets, two inlets and one outlet, and two inlets and two outlets, etc), allowing for system flexibility. Pumps need to be ordered separately. See manual 308951 for details.

Polypropylene Inlet Manifolds	241240
Polypropylene Outlet Manifolds	241243
Acetal Inlet Manifolds	241241
Acetal Outlet Manifolds	241244
PVDF Inlet Manifolds	241242
PVDF Outlet Manifolds	241245

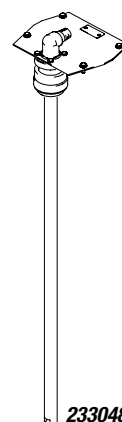
### MISCELLANEOUS ACCESSORIES

Duckbill Replacement Parts (urethane) for 515 and 716 Husky Pumps	239754
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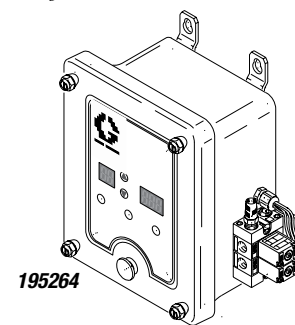
### SURGE SUPPRESSORS

Surge suppressors are designed to reduce the pulsation caused during pump changeover. The suppressor construction is generally closely matched with the pump's material (Stainless Steel with Stainless Steel, Acetal with Aluminum, etc.) and are available in either an adjustable or automatic version. See 308703 for details.

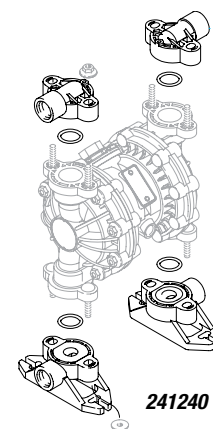
<b>Automatic Husky 750, 3/4" (19.05 mm)</b>	
Polypropylene (wetted bottom and top housings) with a Buna N bladder	239096
with PTFE bellows	239121
with a Fluoroelastomer bladder	239122



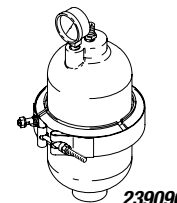
233048



195264



241240



239096

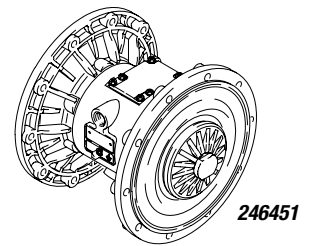
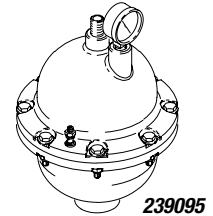
# Pump Accessories

## Husky 515 and Husky 716 Accessories (continued)

## Part Number

### SURGE SUPPRESSORS (continued)

Stainless Steel (wetted bottom and top housings) with a Buna N bladder	239095
with PTFE bellows	239123
with a Fluoroelastomer bladder	239124
Acetal (wetted bottom and top housings) with a Buna N bladder	239094
with PTFE bellows	239125
<b>Adjustable Husky 750, 3/4" (19.05 mm)</b>	
Polypropylene (wetted bottom and top housings) with a Buna N bladder	239091
with PTFE bellows	239129
with a Fluoroelastomer bladder	239130
Stainless Steel (wetted bottom and top housings) with a Buna N bladder	239090
with PTFE bellows	239131
with a Fluoroelastomer bladder	239132
Acetal (wetted bottom and top housings) with a Buna N bladder	239089
with PTFE bellows	239133



### LEAK DETECTOR

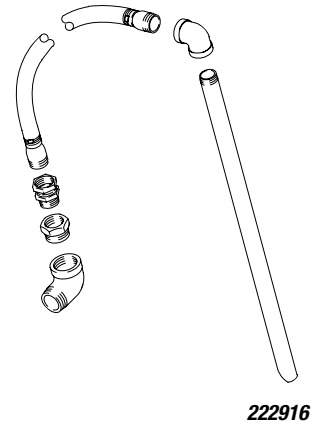
Leak detectors are designed to shut off the pump in the event a diaphragm fails. The leaking material flows out the air section and is captured by the leak detector reservoir. Once the reservoir is filled, a signal is sent that would shut off the pump. These detectors should only be used when a massive failure is allowed.

Polypropylene Housings with PVC Wetted Parts	239080
Shut Off Valve Kit (used in conjunction with 239080)	110146

## Husky 1040, 1590, 2150 Accessories

### AIR CONTROLS

Regulator / Filter Assembly 1/2" npt(f) (12.7 mm)	246947
Quick Connect Air Coupler 1/2" npt (12.7 mm)	110199
Quick Connect Air Nipple 1/2" npt (12.7 mm) mbe	110196
Air Shut Off Valve 1/2" npt (12.7mm), bleed type, relieves trapped air downline of valve	110225
Air Runaway Valve (stop pump from cavitating when empty)	224040
Air Muffler (comes with pump) 1040 pumps	112812
Air Muffler (comes with pump) 1590 and 2150 pumps	102656
<b>Center Section Conversion Kit (converts an aluminum center section to sst. Includes air covers).</b>	
Husky1040	246450
Husky 1590	246451
Husky 2150	246452



### 55-GALLON SIPHON KIT

Siphon kit is used for drawing fluids from 55-gallon sized containers, through a 2" bung opening. Kit comes with carbon steel tube, 8' (2.44m) polyethylene hose and couplings	222916
--	--------

# Pump Accessories

## Husky 1040, 1590, 2150 Accessories (continued)

## Part Number

### REMOTE PUMP CONTROLLERS

CycleFlo (cpm rate and batch control) 120v	195264
CycleFlo (cpm rate and batch control) 240v	196706
CycleFlo II (rate controller with solenoid valve) 120v	195265

### DUAL INLET MANIFOLD

Aluminum Husky 1040 only	685984
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### SURGE SUPPRESSORS

Surge suppressors are designed to reduce the pulsation caused during pump changeover. The suppressor construction is generally closely matched with the pump's material (Stainless Steel with Stainless Steel, Acetal with Aluminum, etc.) and are available in either an adjustable or automatic version. See 308703 for details.

#### Automatic Husky 2000, 2 in (50.8 mm)

Polypropylene (wetted bottom and top housings) with a Buna N bladder	239092
with PTFE bellows	239128
Stainless Steel (wetted bottom and top housings) with a Buna N bladder	239093
with PTFE bellows	239126
with a Fluoroelastomer bladder	239127

#### Adjustable Husky 2000, 2 in (50.8 mm)

Polypropylene (wetted bottom and top housings) with a Buna N bladder	239087
with PTFE bellows	239136
Stainless Steel (wetted bottom and top housings) with a Buna N bladder	239088
with PTFE bellows	239134
with a Fluoroelastomer bladder	239135

### UL PUMPS

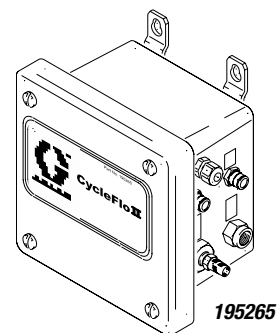
For use with leaded and unleaded fuels

Husky 1040 for use with leaded fuel (seat, ball, diaphragm)	236265
Same as 236265, maximum inlet of 50 psi (3.4 bar, 0.3 MPa)	236267

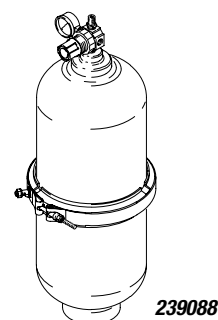
### LEAK DETECTOR

Leak detectors are designed to shut off the pump in the event a diaphragm fails. The leaking material flows out the air section and is captured by the leak detector reservoir. Once the reservoir is filled, a signal is sent that would shut off the pump. These detectors should only be used when a massive failure is allowed.

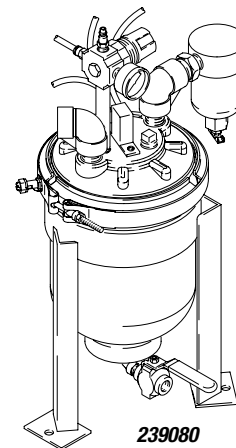
Polypropylene Housings with PVC Wetted Parts	239080
Shut Off Valve Kit (used in conjunction with 239080)	110146



195265



239088



239080

# Pump Accessories

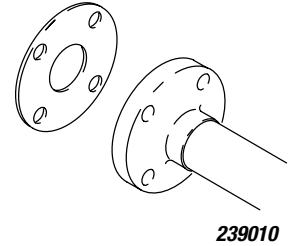
## Husky 1040, 1590, 2150 Accessories (continued)

## Part Number

### MISCELLANEOUS ACCESSORIES

**Flange Kits.** Used to transition a flanged pump to a npt connection to transition from a threaded connection to a flange. It is recommended that the flange kit be compatible with the pump material.

Polypropylene 1" (24.14 mm) flange for Husky 1040 D72XXX pumps. 1" ANSI x 1" npt (f)	239005
Stainless Steel 1" (24.14 mm) flange for Husky 1040 D71XXX and D74XXX pumps 1" ANSI x 1" npt (f)	239008
PVDF 1" (24.14 mm) flange for Husky 1040 D75XXX pump 1" ANSI x 1" npt (f)	239009
Polypropylene 1-1/2" (36.84 mm) flange for Husky 1590 DB2XXX pump 1-1/2" ANSI x 1-1/2" (f)	239006
PVDF 1-1/2" (36.84 mm) flange for Husky 1590 DB5XXX pump. 1-1/2" ANSI x 1-1/2" (f)	239010
Polypropylene 2" (48.28 mm) flange for Husky 2150 DF2XXX pump. 2" ANSI x 2" (f)	239007
PVDF 2" (48.28 mm) flange for Husky 2150 DF5XXX pump 2" ANSI x 2" (f)	239011



### FDA-Compliant 1040, 1590, 2150 Accessories

#### WEIGHTED BALL KITS

FDA-Compliant 1040 weighted ball kit	15H832
FDA-Compliant 1590 weighted ball kit	15H833
FDA-Compliant 2150 weighted ball kit	15H834
1040 kit with PTFE seat O-ring and santoprene diaphragm	FK1132
1590 kit with PTFE seat O-ring and santoprene diaphragm	FK2132
2150 kit with PTFE seat O-ring and santoprene diaphragm	FK3132
1040 kit with EPDM seat O-ring and santoprene diaphragm	FK1232
1590 kit with EPDM seat O-ring and santoprene diaphragm	FK2232
2150 kit with EPDM seat O-ring and santoprene diaphragm	FK3232

#### HEAVY DUTY PTFE DIAPHRAGM KITS

1040 diaphragm kit	253626
1590 diaphragm kit	253627
2150 diaphragm kit	253628
1040 upgrade kit, includes new airside diaphragm plate	289224
1590 upgrade kit, includes new airside diaphragm plate	289225
2150 upgrade kit, includes new airside diaphragm plate	289226

#### HEAVY DUTY PTFE FDA-COMPLIANT DIAPHRAGM KITS

1040, with PTFE o-rings	FK1113
1040, with EPDM o-rings	FK1213
1590, with PTFE o-rings	FK2113
1590, with EPDM o-rings	FK2213
2150, with PTFE o-rings	FK3113
2150, with EPDM o-rings	FK3213

# Pump Accessories

## Husky 3275 Accessories

### AIR CONTROLS

Regulator / Filter Assembly 3/4" npt(f) (19.5 mm)	246948
Quick Connect Air Coupler 3/4" npt (19.5 mm)	110200
Quick Connect Air Nipple 3/4" npt (19.5 mm) mbe	110197
Air Shut Off Valve 3/4" npt (19.5 mm), bleed type, relieves trapped air downline of valve	110226
Air Runaway Valve (stop pump from cavitating when empty)	224040
Air Muffler (comes with pump)	111897

### 55-GALLON SIPHON KITS

Typically, 3" pumps are not used for emptying 55-gallon containers	N/A
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### REMOTE PUMP CONTROLLERS

Husky 307 pumps are not equipped to run in remote mode	N/A
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### SPLIT MANIFOLD KITS

There are no Husky 3275 with a split manifold option	N/A
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### SURGE SUPPRESSORS

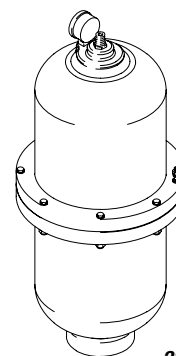
Surge suppressors are designed to reduce the pulsation caused during pump changeover. The suppressor construction is generally closely matched with the pump's material (Stainless Steel with Stainless Steel, Acetal with Aluminum, etc.) and are available either in adjustable or automatic version. See 308703 for details. Requires bushing down the outlet piping from 3" to 2".

<b>Automatic Husky 2000, 2 in (50.8 mm)</b>	
Polypropylene (wetted bottom and top housings) with a Buna N bladder	239092
with PTFE bellows	239128
<b>Adjustable Husky 2000, 2 in (50.8 mm)</b>	
Polypropylene (wetted bottom and top housings) with a Buna N bladder	239087
with PTFE bellows	239136

### LEAK DETECTOR

Leak detectors are designed to shut off the pump in the event a diaphragm fails. The leaking material flows out the air section and is captured by the leak detector reservoir. Once the reservoir is filled, a signal is sent that would shut off the pump. These detectors should only be used when a massive failure is allowed.

Polypropylene Housings with PVC Wetted Parts	239080
Shut Off Valve Kit (used in conjunction with 239080)	110146



239128

# Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

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In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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## Equipment Misuse Hazard

**General Misuse:** Any misuse of Graco equipment or accessories, such as over-pressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, can cause them to rupture. Misuse of equipment can result in fluid injection, splashing in the eyes or on the skin, or other serious bodily injury, or fire, explosion or property damage. NEVER alter or modify any part of Graco equipment; doing so could cause the product to malfunction. CHECK all equipment regularly and repair or replace worn or damaged parts immediately. Always wear protective eye wear, gloves, clothing and respirator as recommended by fluid and solvent manufacturers.

**System Pressure:** Be sure that all equipment and accessories used are rated to withstand the applicable MAXIMUM WORKING PRESSURE. DO NOT exceed the maximum working pressure of any component or accessory used in a system.

**Fluid and Solvent Compatibility:** All chemicals used in a Graco sprayer must be compatible with wetted parts. Consult your chemical supplier to ensure compatibility. Do not use 1:1:1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in this equipment, which contains aluminum and/or zinc parts. Such use could result in a serious chemical reaction, with the possibility of explosion, which could cause death, serious bodily injury and/or substantial property damage.



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The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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