



Process Equipment Catalog

Solutions for Industrial Applications

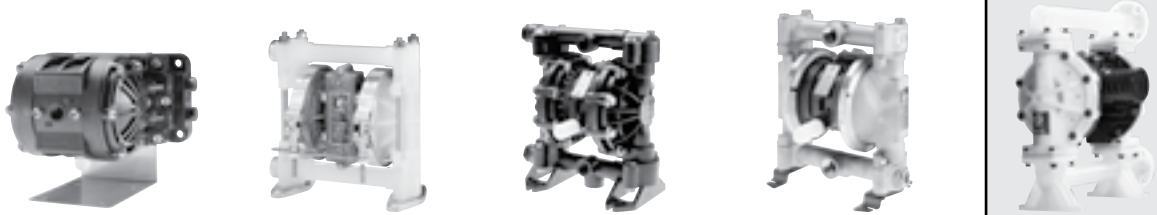


PROVEN QUALITY. LEADING TECHNOLOGY

Contents

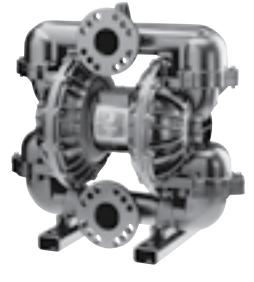
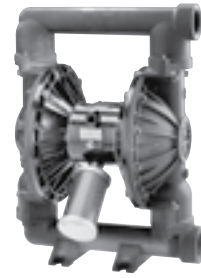
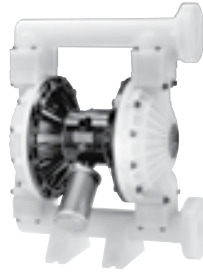
Air-Operated Double Diaphragm Pumps Model Overview	2
Pump Selection Key for Husky AODD Pumps	4
Husky 205 Plastic Pumps	7
Husky 307 Plastic Pumps	9
Husky 515 Plastic Pumps	12
Husky 716 Metal Pumps	15
Husky 1050 Plastic Pumps	18
Husky 1050 Metal Pumps	21
Husky 1590 Plastic Pumps	25
Husky 1590 Metal Pumps	28
Husky 2150 Plastic Pumps	31
Husky 2150 Metal Pumps	34
Husky 3275 Aluminum Pumps	37
Fast-Flo 1:1	39
Hydra-Clean®	40
Husky Transfer Pump Packages	43
CycleFlo and CycleFlo II.....	45
Surge Suppressors	47
Pump Accessories	48
Piston Pumps for Ink Applications	54

Air-Operated Double Diaphragm Pumps Model Overview



Model	Husky 205 Plastic	Husky 307 Plastic	Husky 515 Plastic	Husky 716 Metal	Husky 1050 Plastic
Connection Size	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)
Thread Type	NPT or BSP	NPT or BSP	NPT or BSP	NPT or BSP	ANSI/DIN Flange
Air Valve	Standard and Remote	Standard	Standard and Remote	Standard and Remote	Standard, Smart and Remote
Maximum Flow Rate	5 gpm (19 lpm)	7 gpm (26 lpm)	15 gpm (57 lpm)	16 gpm (61 lpm)	50 gpm (189 lpm)
Maximum Discharge Pressure	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)	125 psi (8.6 bar, 0.9 MPa)
Materials of Construction Available	Polypropylene, PVDF, Acetal	Polypropylene, Acetal	Polypropylene, PVDF, Acetal	Aluminum, 316 Stainless Steel	Polypropylene, Conductive Poly, PVDF
Center Section Available	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene, Conductive Poly
Pump Weight	2.0 lb (0.9 kg) Polypropylene	4.75 lb (2.2 kg) Acetal	6.5 lb (2.9 kg) Polypropylene	8.5 lb (3.9 kg) Aluminum	18 lb (8.2 kg) Polypropylene
	2.5 lb (1.1 kg) Acetal	5.2 lb (2.4 kg) Polypropylene	7.8 lb (3.5 kg) Acetal	18 lb (8.2 kg) Stainless Steel	21 lb (9.5 kg) PVDF
	2.8 lb (1.3 kg) PVDF		8.5 lb (3.9 kg) PVDF		
Maximum Solids	0.06 in (1.5 mm)	0.063 in (1.6 mm)	0.094 in (2.5 mm)	0.094 in (2.5 mm)	.125 in (3.2 mm)

NEW! Husky 1050



Husky 1050 Metal	Husky 1590 Plastic	Husky 1590 Metal	Husky 2150 Plastic	Husky 2150 Metal	Husky 3275 Metal
1 in (25.4 mm)	1-1/2 in (38.1 mm)	1-1/2 in (38.1 mm)	2 in (50.8 mm)	2 in (50.8 mm)	3 in (76.2 mm)
NPT or BSP	ANSI Flange	NPT or BSP	ANSI Flange	NPT or BSP	DIN/ANSI, NPT and BSP
Standard, Smart and Remote	Standard and Remote	Standard and Remote	Standard and Remote	Standard and Remote	Standard
50 gpm (189 lpm)	100 gpm (379 lpm)	100 gpm (379 lpm)	150 gpm (568 lpm)	150 gpm (568 lpm)	275 gpm (1041 lpm)
125 psi (8.6 bar, 0.9 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)
Aluminum, 316 Stainless Steel, Hastelloy	Polypropylene, PVDF	Aluminum, 316 Stainless Steel	Polypropylene, PVDF	Aluminum, 316 Stainless Steel, Ductile Iron	Aluminum
Coated Aluminum, Polypropylene, Conductive Poly	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	Coated Aluminum, 316 Stainless Steel	Coated Aluminum
23 lb (10.4 kg) Aluminum	35 lb (16 kg) Polypropylene	33.5 lb (15.2 kg) Aluminum	49 lb (22 kg) Polypropylene	58 lb (26.3 kg) Aluminum	150 lb (68 kg) Aluminum
36.3 - 41 lb (16.5-18.6 kg) Stainless Steel	49 lb (22 kg) PVDF	85 lb (38.6 kg) Stainless Steel	68 lb (31 kg) PVDF	111 lb (50.3 kg) Stainless Steel	
				130 lb (59 kg) Ductile Iron	
.125 in (3.2 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)	0.375 in (9.4 mm)

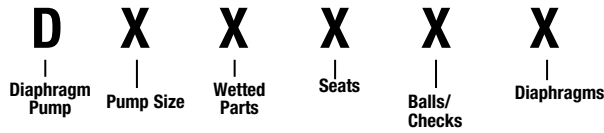
1 inch Pump Family

Pump Selection Key

Husky AODD Pumps

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 2 = 1/4" (6.35 mm) Remote: polypropylene center section 3 = 3/8" (9.52 mm) Standard: aluminum center section 5 = 1/2" (12.7 mm) Standard: polypropylene center section 4 = 1/2" (12.7 mm) Remote: polypropylene center section 5 = 3/4" (19.05 mm) Standard: polypropylene center section 4 = 3/4" (19.05 mm) Remote: polypropylene center section 1" (25.4 mm) refer to Husky 1050 Selector Tool, page 5 B = 1-1/2" (38.1 mm) Standard: aluminum center section C = 1-1/2" (38.1 mm) Remote: aluminum center section T = 1-1/2" (38.1 mm) Standard: stainless steel center section U = 1-1/2" (38.1 mm) Remote: stainless steel center section F = 2" (50.8 mm) Standard: aluminum center section 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	1 = Acetal (npt) 2 = Poly (npt) 3 = Aluminum (npt) 4 = Stainless Steel (npt) 5 = PVDF (npt) 6 = Ductile Iron (npt) A = Acetal * (bsp) B = Poly * (bsp) C = Aluminum (bsp) D = Stainless Steel (bsp) E = PVDF (bsp) F = Ductile Iron (bsp) H = 2 npt Alum Extended G = 2 bsp Alum Extended	2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = TPE 6 = Santoprene 7 = Buna N 8 = Fluoroelastomer 9 = Polypropylene A = PVDF G = Geolast B = SST with viton seal C = Santoprene with viton seal	1 = PTFE 2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = TPE 6 = Santoprene 7 = Buna N 8 = Fluoroelastomer 9 = Polypropylene A = PVDF G = Geolast	1 = PTFE 5 = TPE 6 = Santoprene 7 = Buna N 8 = Fluoroelastomer G = Geolast

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

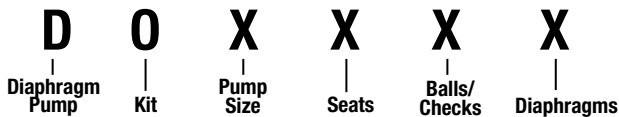
≥1" Plastic pumps flange connections

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) 3 = 3/8 in (9.52 mm) 5 = 1/2 in (12.7 mm) and 3/4 in (19.05 mm) 1" (25.4 mm) refer to Husky 1050 Selector Tool, page 5 B = 1-1/2 in (38.1 mm) metal pump C = 1-1/2 in (38.1 mm) plastic pump F = 2 in (50.8 mm) metal pump G = 2 in (50.8 mm) plastic pump K = 3 in (76.2 mm)	0 = No seat 2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = TPE 6 = Santoprene 7 = Buna N 8 = Fluoroelastomer 9 = Poly A = PVDF B = SST with viton seal C = Santoprene with viton seal G = Geolast	1 = PTFE 2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = TPE 6 = Santoprene 7 = Buna-N 8 = Fluoroelastomer 9 = Poly A = PVDF G = Geolast 0 = No Balls/Checks	1 = PTFE 5 = TPE 6 = Santoprene 7 = Buna-N 8 = Fluoroelastomer G = Geolast 0 = No Diaphragm

NEW! Husky 1050 Selector Tool

Find the Right Pump for your Application

To order a Husky 1050, use the online selector tool at www.graco.com/process or contact your distributor.



Example of Product Selector Tool on www.graco.com/process.

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 halogenated hydrocarbons

Ductile Iron *Material used for wetted body parts*

- High abrasion resistance

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 or hydrocarbons
- 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

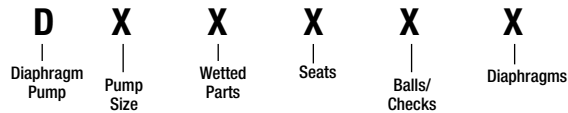
Fluoroelastomer *Material used for seats, balls & diaphragms*

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

Husky 205 Plastic Pumps

Air-Operated Double Diaphragm

Ordering Information



PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	CHECK VALVES	DIAPHRAGM
1 = 1/4" (6.35 mm) Standard: polypropylene center section 2 = 1/4" (6.35 mm) Remote: polypropylene center section	1 = Acetal (npt) 2 = Poly (npt) 5 = PVDF (npt)	0 = No Seats	2 = Acetal 9 = Polypropylene A = PVDF	1 = PTFE 6 = Santoprene

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	D11021	D21021	Acetal	PTFE	D01021	238853	246946
	D11026	D21026	D11026	D21026	Acetal	Santoprene	D01026	238853	246946
PVDF	D150A1	D250A1	D150A1	D250A1	PVDF	PTFE	D010A1	238853	246946
	D150A6	D250A6	D150A6	D250A6	PVDF	Santoprene	D010A6	238853	246946
Polypropylene	D12091	D22091	D12091	D22091	Polypropylene	PTFE	D01091	238853	246946
	D12096	D22096	D12096	D22096	Polypropylene	Santoprene	D01096	238853	246946

* Requires Cycleflo or external valve control

** Air control includes air regulator and filter with gauge



Technical Specifications

Husky 205 Plastic Pumps	Acetal	Polypropylene	PVDF
Maximum fluid working pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	5.0 gpm (18.9 lpm)	5.0 gpm (18.9 lpm)	5.0 gpm (18.9 lpm)
Maximum pump speed	250 cpm	250 cpm	250 cpm
Displacement per cycle**	0.02 gallon (0.076 liter)	0.02 gallon (0.076 liter)	0.02 gallon (0.076 liter)
Maximum suction lift (D12096)	10 ft (3 m) dry	10 ft (3 m) dry	10 ft (3 m) dry
Maximum size pumpable solids	0.06 in (1.5 mm)	0.06 in (1.5 mm)	0.06 in (1.5 mm)
Maximum operating temperature***	180°F (82°C)	180°F (82°C)	180°F (82°C)
Maximum diaphragm operating temperature***			
PTFE	220°F (104.4°C)	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)	180°F (82.2°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	70 dBa	70 dBa	70 dBa
Maximum air consumption	9.0 scfm (0.252 m3/min)	9.0 scfm (0.252 m3/min)	9.0 scfm (0.252 m3/min)
Air pressure operating range	20 to 100 psi (1.4 to 7 bar, 0.14 to 0.7 MPa)	20 to 100 psi (1.4 to 7 bar, 0.14 to 0.7 MPa)	20 to 100 psi (1.4 to 7 bar, 0.14 to 0.7 MPa)
Air inlet size	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)
Air exhaust port size	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)
Fluid inlet & outlet size****	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)
Weight	2.5 lb (1.1 kg)	2.0 lb (0.9 kg)	2.8 lb (1.3 kg)
Wetted parts (in addition to ball, seat and diaphragm materials— which may vary by pump)	Acetal with Stainless Steel fibers, PTFE, Acetal, Santoprene	Glass-filled Polypropylene, Santoprene, PTFE, Polypropylene	PVDF, PTFE, Santoprene
Instruction manual	308652	308652	308652

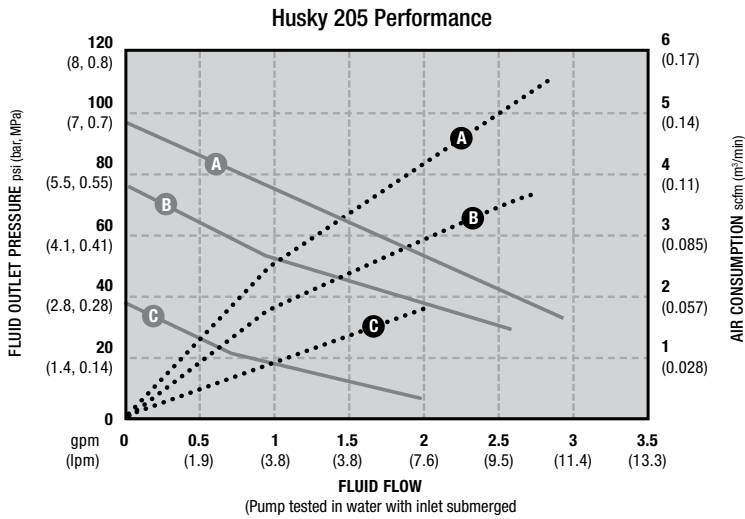
** Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

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

**** Hybrid thread allows for either 1/4 npt or 1/4 bspt fitting

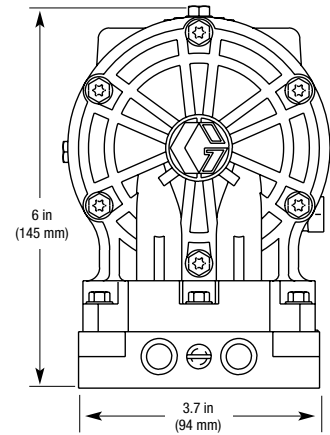
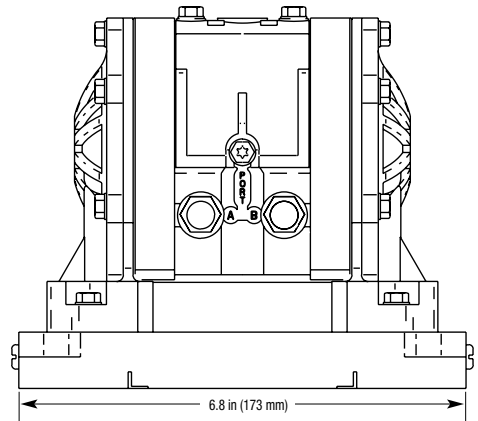
Husky 205 Plastic Pumps

Performance Charts



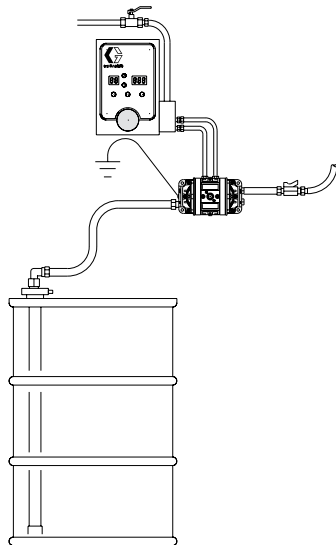
AIR PRESSURE	LEGEND
Ⓐ = at 100 psi (7 bar, 0.7 MPa)	Air Consumption.....
Ⓑ = at 70 psi (4.8 bar, 0.48 MPa)	Fluid Flow ———
Ⓒ = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Typical System Drawings

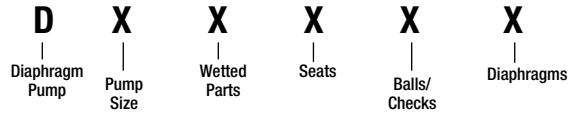
Husky 205 Wall-Mount with CycleFlo



Husky 307 Plastic Pumps

Air-Operated Double Diaphragm

Ordering Information



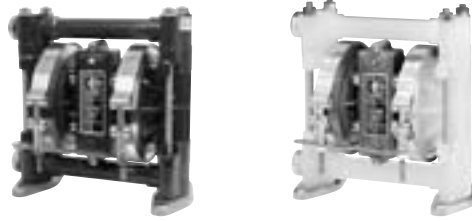
PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
3 = 3/8" (9.52 mm) Standard: polypropylene center section	1 = Acetal (npt) 2 = Poly (npt) A = Acetal * (bsp) B = Poly * (bsp)	2 = Acetal 3 = Stainless Steel 9 = Polypropylene	1 = PTFE 3 = SST 5 = TPE 6 = Santoprene 7 = Buna N	1 = PTFE 5 = TPE 6 = Santoprene 7 = Buna N

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

Husky 307 Plastic Pumps



Technical Specifications

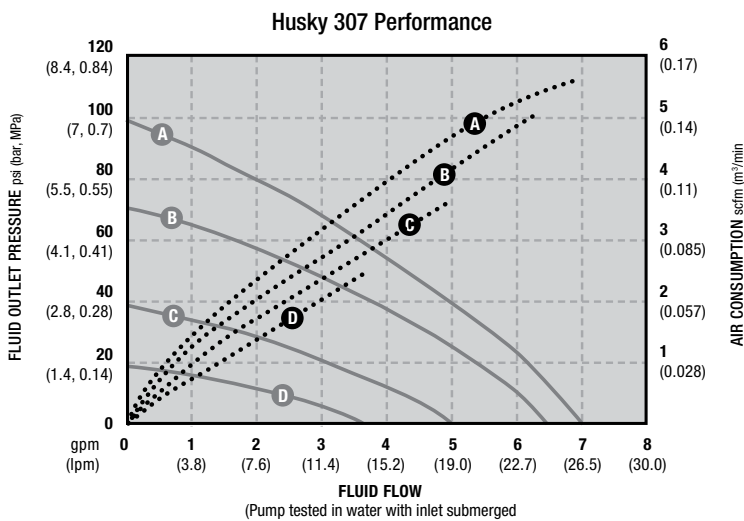
Husky 307 Plastic Pumps	Acetal	Polypropylene
Maximum fluid working pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	7.0 gpm (26.5 lpm)	7.0 gpm (26.5 lpm)
Maximum pump speed	330 cpm	330 cpm
Displacement per cycle**	0.02 gallon (0.076 liter)	0.02 gallon (0.076 liter)
Maximum suction lift (D31255)	12 ft (3.7 m) dry	12 ft (3.7 m) dry
Maximum size pumpable solids	0.06 in (1.5 mm)	0.06 in (1.5 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 50 psi (3.5 bar, 0.35 MPa) air @ 50 cpm	75 dBa	75 dBa
Maximum air consumption	6 scfm (0.17 m3/min)	6 scfm (0.17 m3/min)
Air pressure operating range	20 to 100 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)	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)	1/4 npt(f) or bspt(f)
Fluid inlet & outlet size****	3/8 npt(f)	3/8 npt(f)
Weight	5.2 lb (2.4 kg)	4.75 lb (2.2 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	Acetal with Stainless Steel fibers, PTFE	Polypropylene, PTFE
Instruction manual	308553	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

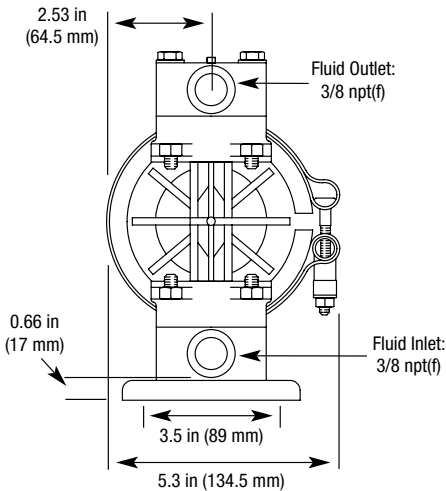
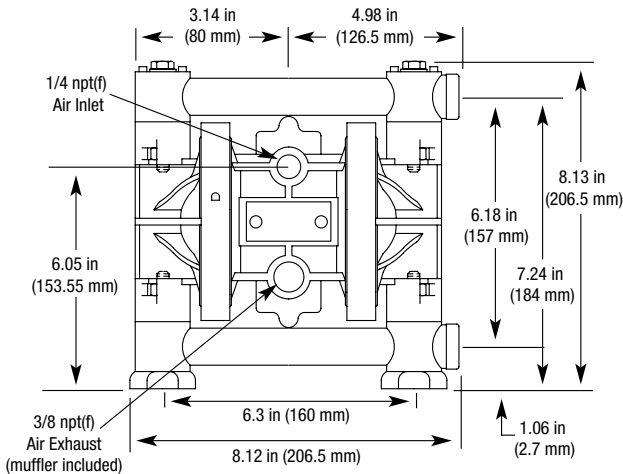
***Actual pump performance may be affected by prolonged usage at temperature

Performance Chart



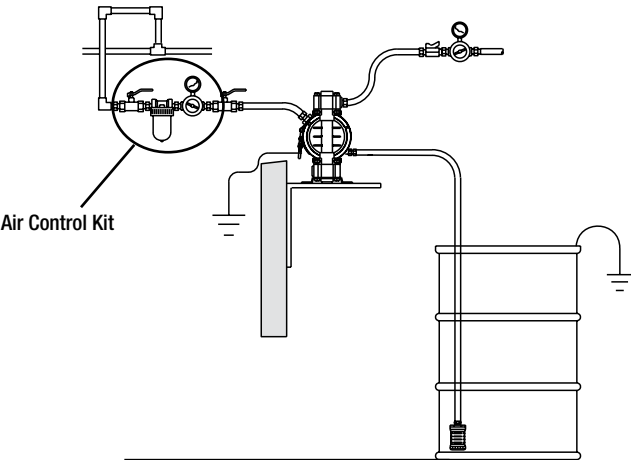
AIR PRESSURE	LEGEND
Ⓐ = at 100 psi (7 bar, 0.7 MPa)	Air Consumption.....
Ⓑ = at 70 psi (4.8 bar, 0.48 MPa)	Fluid Flow ———
Ⓒ = at 40 psi (2.8 bar, 0.28 MPa)	
Ⓓ = at 20 psi (1.4 bar, 0.14 MPa)	

Dimensions

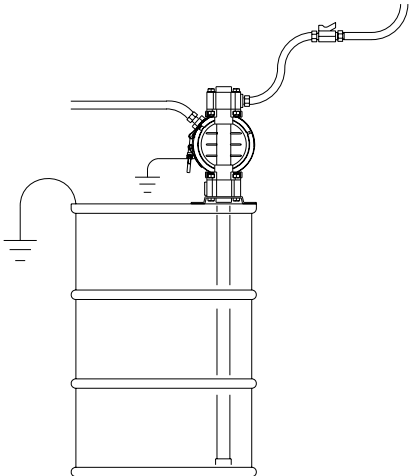


Typical System Drawings

Husky 307 Wall-Mount with Siphon Feed



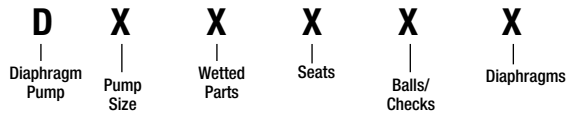
Husky 307 Drum-Mount with Siphon Feed



Husky 515 Plastic Pumps

Air-Operated Double Diaphragm

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)	9 = Polypropylene	5 = TPE	6 = Santoprene
	A = Acetal * (bsp)	A = PVDF	6 = Santoprene	7 = Buna N
	B = Poly * (bsp)	D = Urethane Duckbill	7 = Buna N	8 = Fluoroelastomer
	E = PVDF (bsp)		8 = Fluoroelastomer	
			0 = Duckbill	

* = BSP plastic in 1/2" (12.7 mm) 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 or external valve control

** Air control includes air regulator and filter with gauge

Husky 515 Plastic Pumps

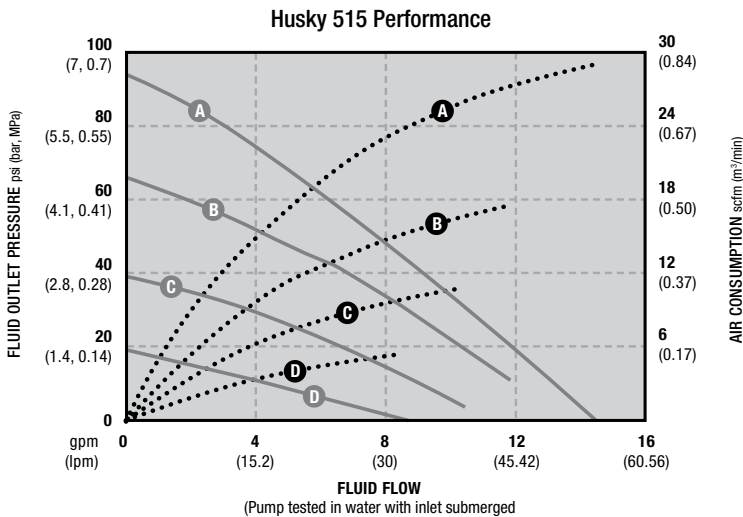


Technical Specifications

Husky 515 Plastic Pumps	Acetal	Polypropylene	PVDF
Maximum fluid working pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	15 gpm (57 lpm)	15 gpm (57 lpm)	15 gpm (57 lpm)
Maximum pump speed	400 cpm	400 cpm	400 cpm
Displacement per cycle**	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)
Maximum suction lift	15 ft (4.5 m) dry	15 ft (4.5 m) dry	15 ft (4.5 m) dry
Maximum size pumpable solids	0.09 in (2.5 mm)	0.09 in (2.5 mm)	0.09 in (2.5 mm)
Maximum operating temperature***	180°F (82°C)	150°F (66°C)	225°F (107°C)
Maximum diaphragm operating temperature***			
PTFE	220°F (104.4°C)	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)	250°F (121.1°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	74 dBa	74 dBa	74 dBa
Maximum air consumption	28 scfm (0.672 m3/min)	28 scfm (0.672 m3/min)	28 scfm (0.672 m3/min)
Air pressure operating range	30 to 100 psi (2.1 to 7 bar, 0.21 to 0.7 MPa)	30 to 100 psi (2.1 to 7 bar, 0.21 to 0.7 MPa)	30 to 100 psi (2.1 to 7 bar, 0.21 to 0.7 MPa)
Air inlet size	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)
Air exhaust port size	3/8 npt(f)	3/8 npt(f)	3/8 npt(f)
Fluid inlet & outlet size****	1/2 npt(f) or bspt(f)	1/2 npt(f) or bspt(f)	1/2 npt(f) or bspt(f)
Weight	7.8 lb (3.5 kg)	6.5 lb (2.9 kg)	8.5 lb (3.9 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	Groundable Acetal, PTFE, SST	Polypropylene, PTFE, SST	PVDF, PTFE
Instruction manual	308981	308981	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. *Hybrid thread allows for either 1/4 npt or 1/4 bspt fitting

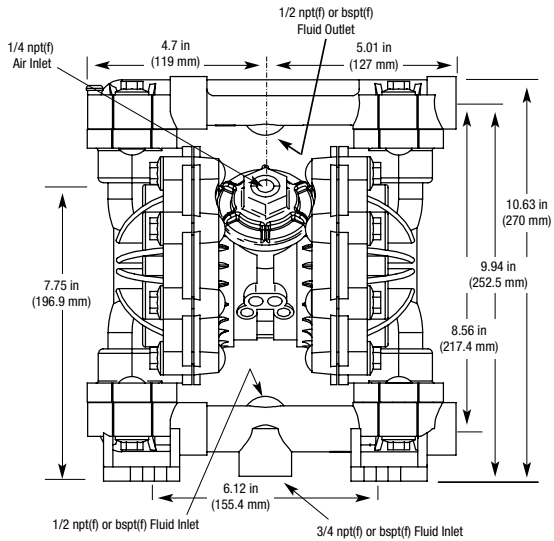
Performance Charts



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)	

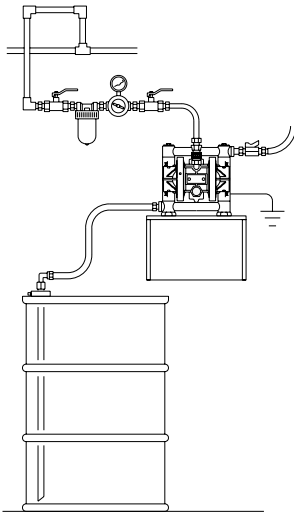
Husky 515 Plastic Pumps

Dimensions

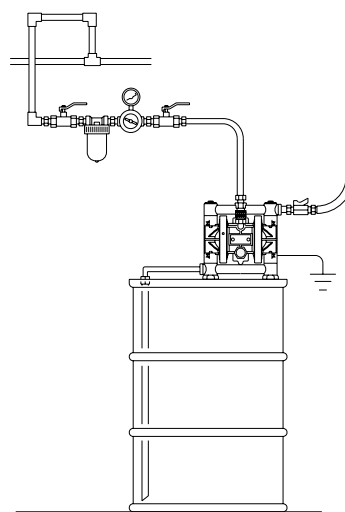


Typical System Drawings

Husky 515 Wall-Mount with Drum Feed



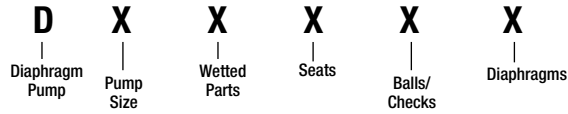
Husky 515 Drum-Mount with Siphon Feed



Husky 716 Metal Pumps

Air-Operated Double Diaphragm

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
		D = Duckbill	7 = Buna N	8 = Fluoroelastomer
			8 = Fluoroelastomer	

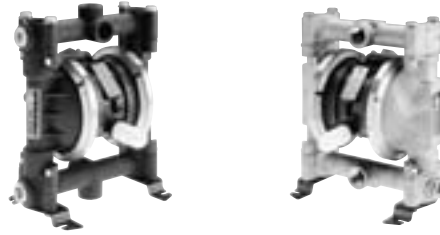
Popular Models

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

Husky 716 Metal Pumps

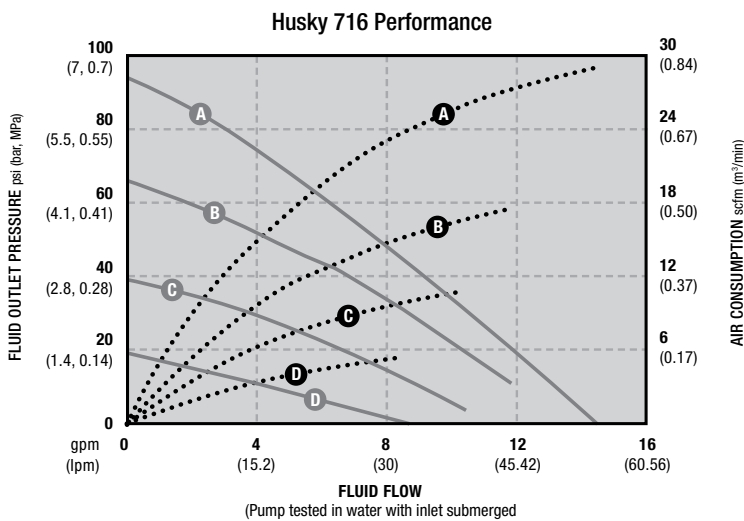


Technical Specifications

Husky 307 Plastic Pumps	Aluminum	Stainless Steel
Maximum fluid working pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	16 gpm (61 lpm)	16 gpm (61 lpm)
Maximum pump speed	400 cpm	400 cpm
Displacement per cycle**	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)
Maximum suction lift	15 ft (4.5 m) dry	15 ft (4.5 m) dry
Maximum size pumpable solids	0.09 in (2.5 mm)	0.09 in (2.5 mm)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Typical sound level at 70 psi air (4.9 bar, 0.49 MPa) air @ 200 cpm	74 dBa	74 dBa
Maximum air consumption	28 scfm (0.672 m3/min)	28 scfm (0.672 m3/min)
Air pressure operating range	30 to 100 psi (2.1 to 7 bar, 0.21 to 0.7 MPa)	30 to 100 psi (2.1 to 7 bar, 0.21 to 0.7 MPa)
Air inlet size	1/4 npt(f)	1/4 npt(f)
Air exhaust port size	3/8 npt(f)	3/8 npt(f)
Fluid inlet & outlet size	3/4 npt(f) or bspt(f)	3/4 npt(f) or bspt(f)
Weight	8.5 lb (3.9 kg)	18 lb (8.2 kg)
Wetted parts (in addition to ball, seat and diaphragm materials—which may vary by pump)	Aluminum, Stainless Steel, PTFE, Buna-N, Santoprene, Zinc-Plated Steel	Acetal, Polypropylene, Stainless Steel, Polyester, Santoprene, Fluoroelastomer, Nickel-Plated Brass, Epoxy-Coated Steel
Instruction manual	308981	308981

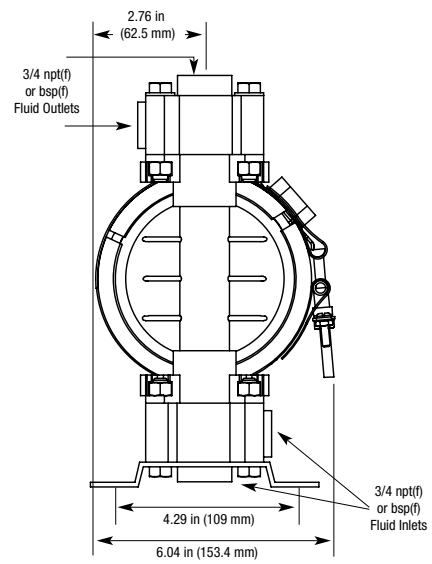
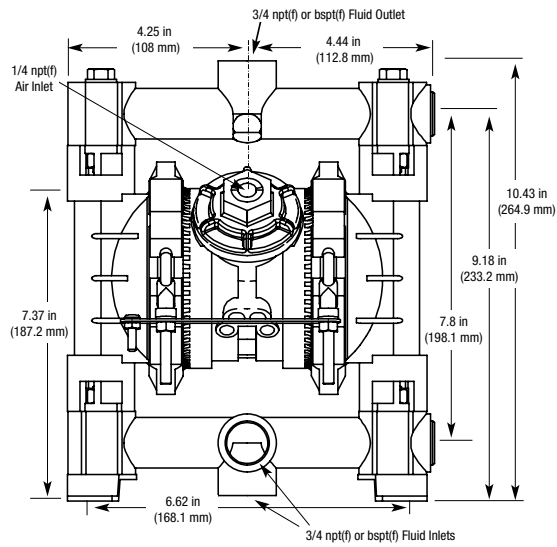
*Flow rates are with muffler and do not vary based on diaphragm material
 **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type
 ***Actual pump performance may be affected by prolonged usage at temperature

Performance Charts



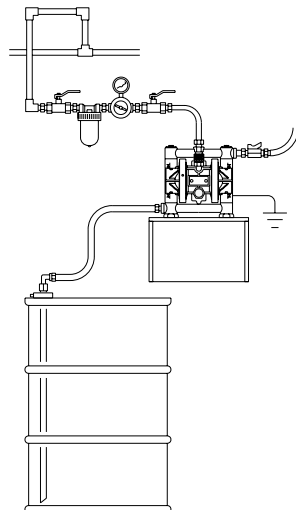
AIR PRESSURE	LEGEND
Ⓐ = at 100 psi (7 bar, 0.7 MPa)	Air Consumption.....
Ⓑ = at 70 psi (4.8 bar, 0.48 MPa)	Fluid Flow ———
Ⓒ = at 40 psi (2.8 bar, 0.28 MPa)	
Ⓓ = at 20 psi (1.4 bar, 0.14 MPa)	

Dimensions

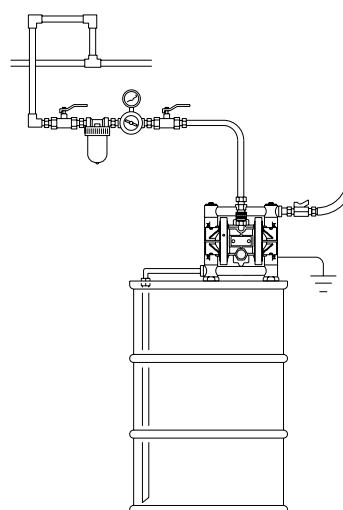


Typical System Drawings

Husky 716 Wall-Mount with Drum Feed



Husky 716 Drum-Mount with Siphon Feed

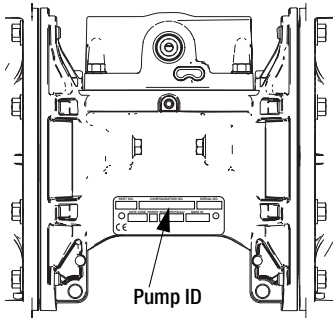


Husky 1050 Plastic Pumps

Air-Operated Double Diaphragm

NEW! Husky 1050 Selector Tool

To order a Husky 1050, use the online selector tool at www.graco.com/process or contact your distributor.



NOTE: Options for seats, check balls, diaphragms, and seals vary for the 1050A, 1050C, 1050P, and 1050S pump models.



Example of Product Selector Tool on www.graco.com/process.

Pump Configurations

Pump (1 inch ports, 50 gpm)	Center Section and Air Valve Material	Air Valve/Monitoring	Fluid Covers and Manifolds
1050C ★ Conductive Polypropylene	Conductive Polypropylene	C01A Standard	C1 Conductive polypropylene, center flange
		C01B Pulse Count ✘	C2 Conductive polypropylene, end flange
		C01C DataTrak ✘	
		C01D Remote	
1050P Polypropylene	Polypropylene	P01A Standard	P1 Polypropylene, center flange
		P01B Pulse Count ✘	P2 Polypropylene, end flange
		P01C DataTrak ✘	
		P01D Remote	

★, †, or ✘: See ATEX Certifications below.

Check Valve Seats	Check Valve Balls	Diaphragm	Manifold O-Rings
AC Acetal	AC Acetal	BN Buna-N	— None
FK FKM Fluoroelastomer	BN Buna-N	CO Polychloroprene Overmolded	PT PTFE
PP Polypropylene	FK FKM Fluoroelastomer	FK FKM Fluoroelastomer	
PV PVDF	PT PTFE	PO PTFE/EPDM Overmolded	
SP Santoprene®	SP Santoprene	PT PTFE/EPDM Two-Piece	
SS 316 Stainless Steel	SS 316 Stainless Steel	SP Santoprene	
BN Buna-N	TP TPE	TP TPE	
AL Aluminum	GE Geolast	GE Geolast	
GE Geolast	CR Polychloroprene		
TP TPE	CW Polychloroprene w/SST Core		

ATEX Certifications

★ All **1050C** (Conductive Polypropylene) pumps are certified:



✘ DataTrak and Pulse Count are certified:



EEx ia IIA T3
Nemko
06ATEX1124

Popular Models

Material	Part Number	Materials for Seats	Materials for Balls	Materials for Diaphragms	Air Valve Replacement Kit	Seat Kit	Ball Kit	Diaphragm Kit	Flange
	Standard Air Valve								
Polypropylene	649001	Polypropylene	Santoprene	Santoprene	24B773	24B635	24B646	24B628	Center
	649006	Polypropylene	PTFE	PTFE/EPDM 2 Piece	24B773	24B635	24B645	24B627	Center
	649034	Polypropylene	PTFE	PTFE/EPDM 2 Piece	24B773	24B635	24B645	24B627	End
Conductive Polypropylene	649218	Acetal	PTFE	PTFE/EPDM 2 Piece	24B775	24B630	24B645	24B627	End
	649211	316 SST	PTFE	PTFE/EPDM 2 Piece	24B775	24B637	24B645	24B627	End
PVDF	649392	316 SST	PTFE	PTFE/EPDM 2 Piece	24B773	24B637	24B645	24B627	End
	649398	PVDF	PTFE	PTFE/EPDM 2 Piece	24B773	24C721	24B645	24B627	End



Technical Specifications

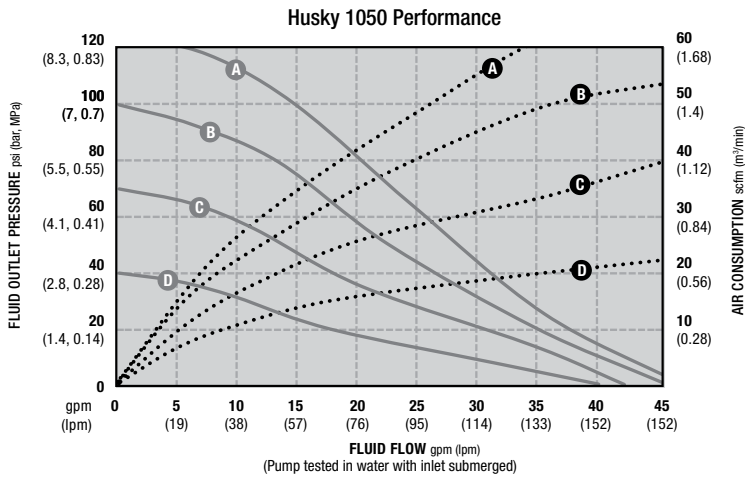
Husky 1050 Plastic Pumps	Conductive Polypropylene	Polypropylene	PVDF
Maximum fluid working pressure	125 psi (8.6 bar, 0.86 MPa)	125 psi (8.6 bar, 0.86 MPa)	125 psi (8.6 bar, 0.86 MPa)
Maximum free flow delivery	50 gpm (189 lpm)	50 gpm (189 lpm)	50 gpm (189 lpm)
Maximum pump speed	280 cpm	280 cpm	280 cpm
Displacement per cycle	0.17 gal (0.64 liters)	0.17 gal (0.64 liters)	0.17 gal (0.64 liters)
Maximum suction lift	16 ft (4.9 m) dry, 29 ft (8.8 m) wet	16 ft (4.9 m) dry, 29 ft (8.8 m) wet	16 ft (4.9 m) dry, 29 ft (8.8 m) wet
Maximum size pumpable solids	1/8 in (3.2 mm)	1/8 in (3.2 mm)	1/8 in (3.2 mm)
Sound Power* at 70 psi (4.8 bar, 0.48 MPa) and 50 cpm at 100 psi (7.0 bar, 0.7 MPa) and full flow	78 dBa 90 dBa	78 dBa 90 dBa	78 dBa 90 dBa
Sound Pressure** at 70 psi (4.8 bar, 0.48 MPa) and 50 cpm at 100 psi (7.0 bar, 0.7 MPa) and full flow	84 dBa 96 dBa	84 dBa 96 dBa	84 dBa 96 dBa
Maximum air consumption	67 scfm	67 scfm	67 scfm
Air consumption at 70 psi (4.8 bar, 0.48 MPa), 20 gpm (76 lpm)	25 scfm	25 scfm	25 scfm
Air pressure operating range	20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)	20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)	20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)
Fluid inlet size	1 in raised face ANSI/DIN flange	1 in raised face ANSI/DIN flange	1 in raised face ANSI/DIN flange
Fluid outlet size	1 in raised face ANSI/DIN flange	1 in raised face ANSI/DIN flange	1 in raised face ANSI/DIN flange
Weight	18 lb (8.2 kg)	18 lb (8.2 kg)	21 lb (9.5 kg)
Wetted parts	polypropylene and material(s) chosen for seat, ball, and diaphragm options	polypropylene and material(s) chosen for seat, ball, and diaphragm options	polypropylene and material(s) chosen for seat, ball, and diaphragm options
Non-wetted Parts Center Bolts	polypropylene stainless steel	polypropylene stainless steel	polypropylene stainless steel
Instruction manual	312877	312877	312877
Repair/parts manual	313435	313435	313435

* Sound power measured per ISO-9614-2.

** Sound pressure was tested 3.28 ft (1 m) from equipment.

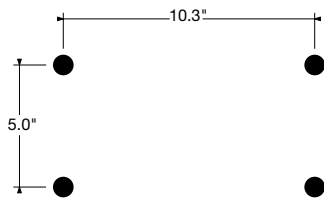
Husky 1050 Plastic Pumps

Performance Charts

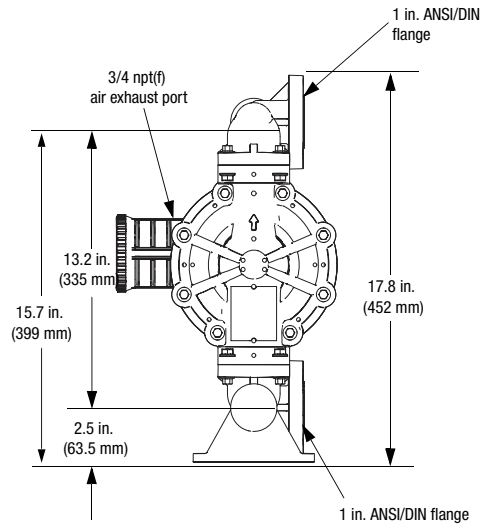
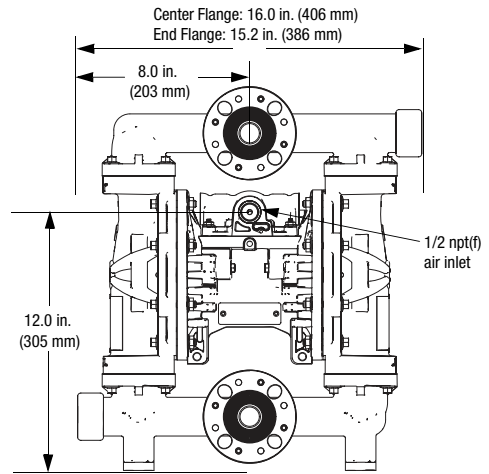


AIR PRESSURE	LEGEND
(A) = at 125 psi (8.3 bar, 0.83 MPa)	Air Consumption •••••
(B) = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
(C) = at 70 psi (4.8 bar, 0.48 MPa)	
(D) = at 40 psi (2.8 bar, 0.28 MPa)	

Mounting Pattern

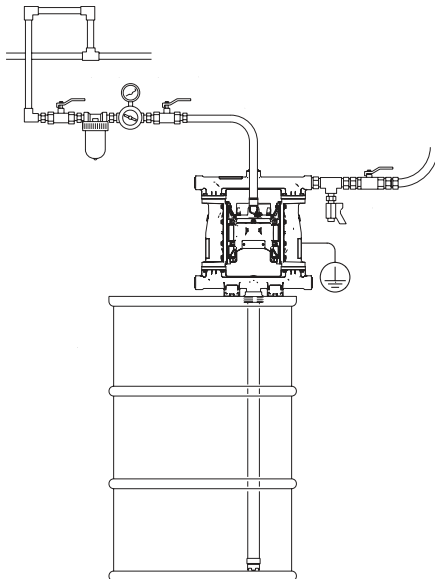


Dimensions

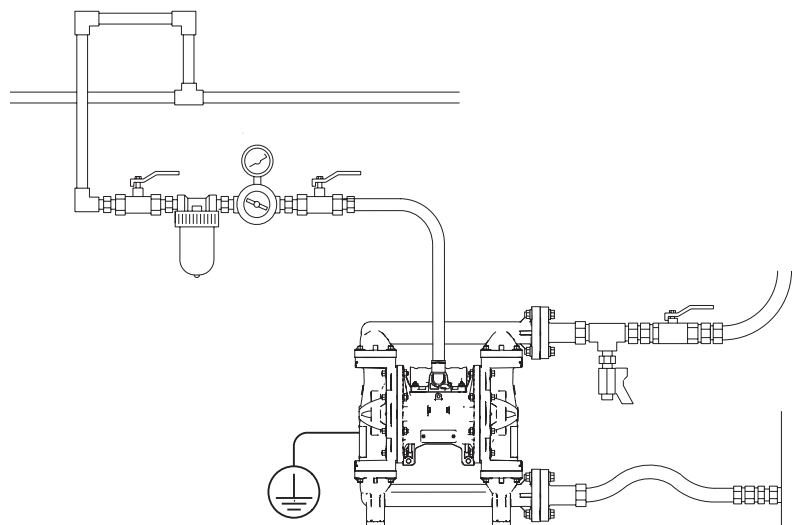


Typical System Drawings

Husky 1050 Bung-Mount



Husky 1050 Floor-Mount

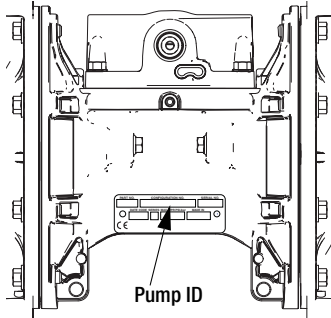


Husky 1050 Metal Pumps

Air-Operated Double Diaphragm

NEW! Husky 1050 Selector Tool

To order a Husky 1050, use the online selector tool at www.graco.com/process or contact your distributor.



NOTE: Options for seats, check balls, diaphragms, and seals vary for the 1050A, 1050C, 1050P, and 1050S pump models.



Example of Product Selector Tool on www.graco.com/process.

Pump Configurations

Pump (1 inch ports, 50 gpm)	Center Section and Air Valve Material	Air Valve/Monitoring	Fluid Covers and Manifolds
1050A ★ Aluminum	Aluminum	A01 Standard	A1 Aluminum, standard ports, inch
		A01B Pulse Count ✖	A2 Aluminum, standard ports, metric
1050S ‡ Stainless Steel		A01C DataTrak ✖	S1 Stainless steel, standard ports, inch
		A01D Remote	S2 Stainless steel, standard ports, metric

★, ‡, or ✖: See ATEX Certifications below.

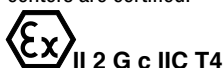
Check Valve Seats		Check Valve Balls		Diaphragm		Manifold O-Rings	
AC Acetal		AC Acetal		BN Buna-N		—	None
AL Aluminum		BN Buna-N		CO Polychloroprene Overmolded		PT	PTFE
BN Buna-N		CR Polychloroprene Standard		FK FKM Fluoroelastomer			
FK FKM Fluoroelastomer		CW Polychloroprene Weighted		GE Geolast			
GE Geolast®		FK FKM Fluoroelastomer		PO PTFE/EPDM Overmolded			
PP Polypropylene		GE Geolast		PT PTFE/EPDM Two-Piece			
SP Santoprene®		PT PTFE		SP Santoprene			
SS 316 Stainless Steel		SP Santoprene		TP TPE			
TP TPE		SS 316 Stainless Steel					
		TP TPE					

ATEX Certifications

★ All **1050A** (Aluminum) pumps are certified:



‡ **1050S** (Stainless Steel) pumps with aluminum or conductive polypropylene centers are certified:



✖ DataTrak and Pulse Count are certified:



EEx ia IIA T3
Nemko
06ATEX1124

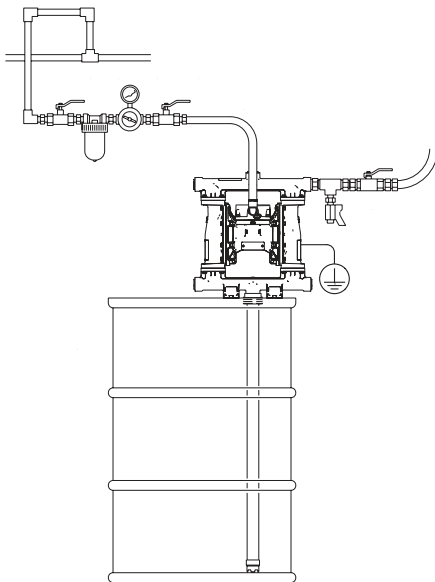
Husky 1050 Metal Pumps

Popular Models

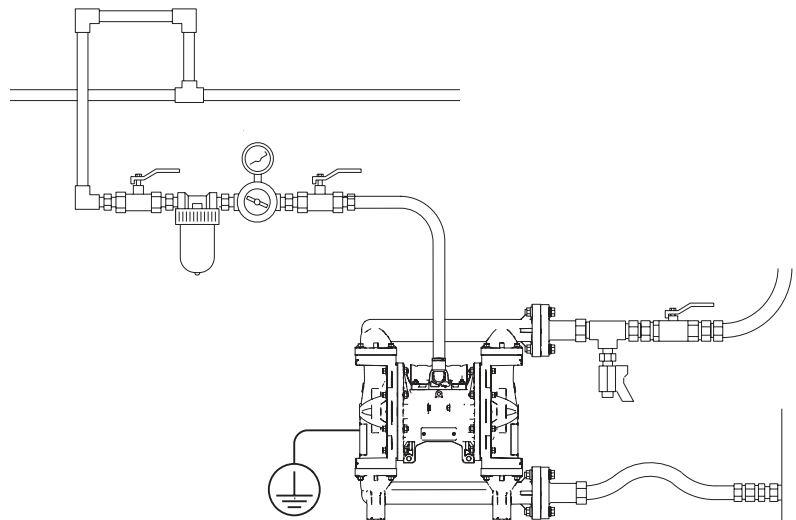
Material	Part Number		Materials for Seats	Materials for Balls	Materials for Diaphragms	Air Valve Replacement Kit	Seat Kit	Ball Kit	Diaphragm Kit
	Standard Air Valve	Remote Air Valve							
Aluminum	647666	647502	Thermoplastic Polyester Elastomer	Acetal	Thermoplastic Polyester Elastomer	24B766	24B634	24B639	24B624
	647016 (UL Certified)		Thermoplastic Polyester Elastomer	Acetal	Thermoplastic Polyester Elastomer	24B766	24B634	24B639	24B624
	647075	647561	Acetal	PTFE	PTFE/EPDM 2 Piece	24B766	24B630	24B645	24B627
	647040	647526	Geolast	Geolast	Geolast	24B766	24B633	24B641	24B623
	647035	647521	Santoprene	Santoprene	Santoprene	24B766	24B636	24B646	24B628
	647028	647514	316 SST	PTFE	PTFE/EPDM 2 Piece	24B766	24B637	24B645	24B627
	647004	647490	Polypropylene	PTFE	PTFE/EPDM 2 Piece	24B766	24B635	24B645	24B627
	647018	647504	316 SST	316 SST	PTFE/EPDM 2 Piece	24B766	24B637	24B647	24B627
Stainless Steel	651009	651125	316 SST	PTFE	PTFE/EPDM 2 Piece	24B766	24B637	24B645	24B627

Typical System Drawings

Husky 1050 Bung-Mount



Husky 1050 Floor-Mount



Husky 1050 Metal Pumps

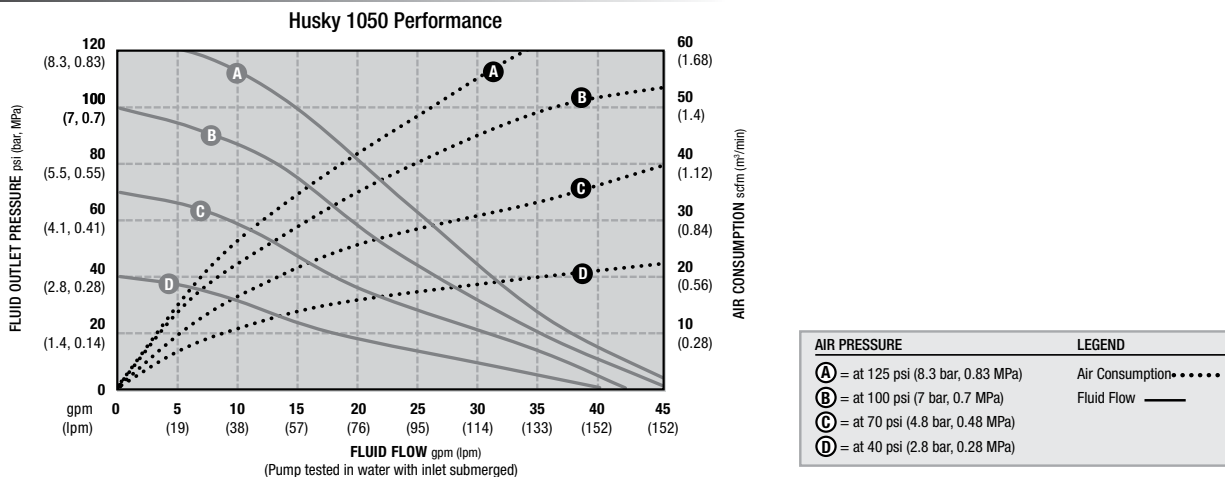


Technical Specifications

Husky 1050 Metal Pumps	Aluminum	Stainless Steel		Hastelloy
Maximum fluid working pressure	125 psi (8.6 bar, 0.86 MPa)	125 psi (8.6 bar, 0.86 MPa)		125 psi (8.6 bar, 0.86 MPa)
Maximum free flow delivery	50 gpm (189 lpm)	50 gpm (189 lpm)		50 gpm (189 lpm)
Maximum pump speed	280 cpm	280 cpm		280 cpm
Displacement per cycle	0.17 gal (0.64 liters)	0.17 gal (0.64 liters)		0.17 gal (0.64 liters)
Maximum suction lift	16 ft (4.9 m) dry, 29 ft (8.8 m) wet	16 ft (4.9 m) dry, 29 ft (8.8 m) wet		16 ft (4.9 m) dry, 29 ft (8.8 m) wet
Maximum size pumpable solids	1/8 in (3.2 mm)	1/8 in (3.2 mm)		1/8 in (3.2 mm)
Sound Power* at 70 psi (4.8 bar, 0.48 MPa) and 50 cpm at 100 psi (7.0 bar, 0.7 MPa) and full flow	78 dBa 90 dBa	78 dBa 90 dBa		78 dBa 90 dBa
Sound Pressure** at 70 psi (4.8 bar, 0.48 MPa) and 50 cpm at 100 psi (7.0 bar, 0.7 MPa) and full flow	84 dBa 96 dBa	84 dBa 96 dBa		84 dBa 96 dBa
Maximum air consumption	67 scfm	67 scfm		67 scfm
Air consumption at 70 psi (4.8 bar, 0.48 MPa), 20 gpm (76 lpm)	25 scfm	25 scfm		25 scfm
Air pressure operating range	20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)	20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)		20-125 psi (1.4-8.6 bar, 0.14-0.86 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)		1/2 npt(f)
Fluid inlet size	1 in npt(f) or 1 in bspt	1 in npt(f) or 1 in bspt		1 in npt(f) or 1 in bspt
Fluid outlet size	1 in npt(f) or 1 in bspt	1 in npt(f) or 1 in bspt		1 in npt(f) or 1 in bspt
Weight	23 lb (10.5 kg)	with conductive polypropylene center with polypropylene center with aluminum center	36.3 lb (16.5 kg) 37.3 lb (16.9 kg) 41.4 lb (18.8 kg)	41 lb (18.6 kg)
Wetted parts	aluminum and material(s) chosen for seat, ball, and diaphragm options	stainless steel and material(s) chosen for seat, ball, and diaphragm options		hastelloy, stainless steel and material(s) chosen for seat, ball, and diaphragm options
Non-wetted Parts Center Bolts	aluminum coated carbon steel	polypropylene stainless steel	aluminum stainless steel	polypropylene stainless steel
Instruction manual	312877	312877		312877
Repair/parts manual	313435	313435		313435

* Sound power measured per ISO-9614-2. ** Sound pressure was tested 3.28 ft (1 m) from equipment.

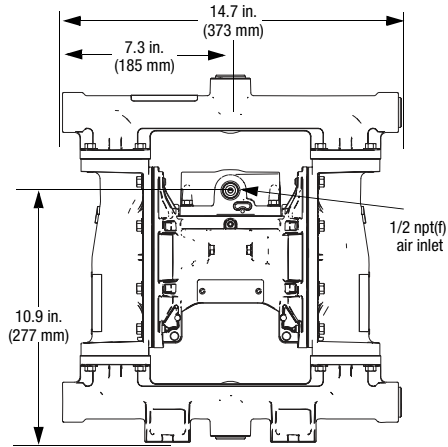
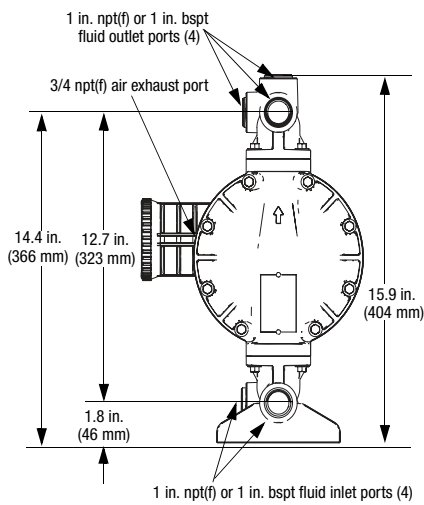
Performance Charts



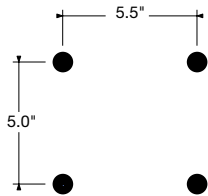
Husky 1050 Metal Pumps

Dimensions

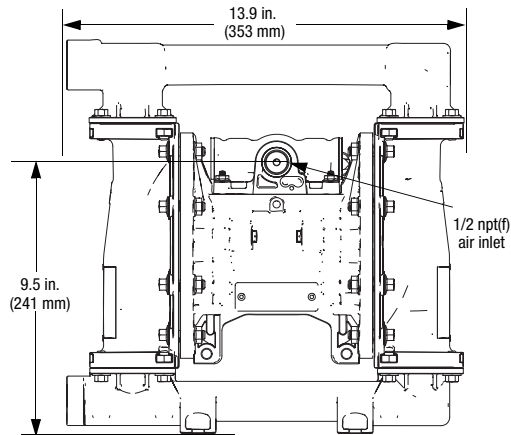
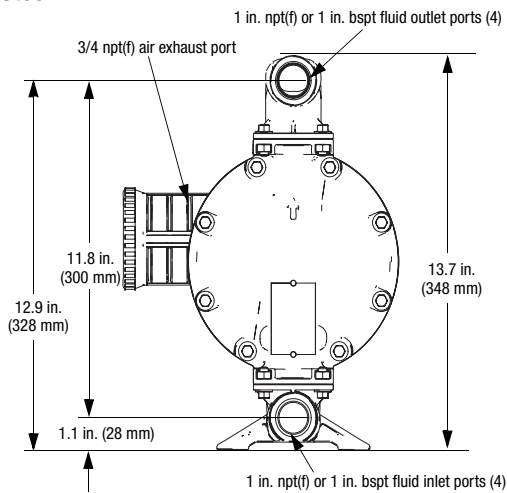
Aluminum



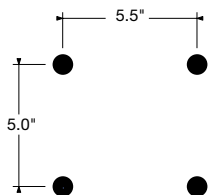
Mounting Pattern



Stainless Steel



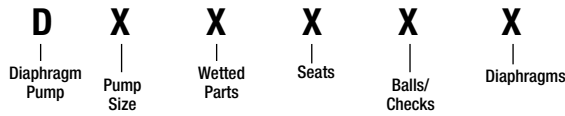
Mounting Pattern



Husky 1590 Plastic Pumps

Air-Operated Double Diaphragm

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		

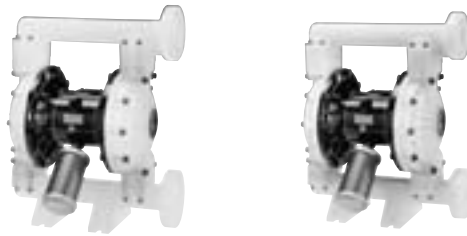
Popular Models

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							
Standard Pumps with Aluminum Center Section											
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	DC5811			Fluoroelastomer	PTFE	PTFE	DOC811	236273	246947
		DB5888	DC5888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	DOC888	236273	246947
DB5A11		DC5A11			PVDF	PTFE	PTFE	DOCA11	236273	246947	
DB5A88				PVDF	Fluoroelastomer	Fluoroelastomer	DOCA88	236273	246947		
Corrosion Resistant Pumps with Stainless Steel Center Section											
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		DU5A88			PVDF	Fluoroelastomer	Fluoroelastomer	DOCA88	236273	246947	

*Requires CycleFlo or external valve control

** Air control includes air regulator and filter with gauge

Husky 1590 Plastic Pumps



Technical Specifications

Husky 1590 Plastic Pumps	Polypropylene	PVDF
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	100 gpm (378.5 lpm)	100 gpm (378.5 lpm)
Maximum pump speed	200 cpm	200 cpm
Displacement per cycle**	0.5 gallon (1.96 liter)	0.5 gallon (1.96 liter)
Maximum suction lift (DB2366)	20 ft (6.1 m) dry	20 ft (6.1 m) dry
Maximum size pumpable solids	0.19 in (4.8 mm)	0.19 in (4.8 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	77 dBa	77 dBa
Maximum air consumption	125 scfm (3.5 m3/min.)	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)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	1-1/2 in (38.1 mm) ANSI-flange	1-1/2 in (38.1 mm) ANSI-flange
Weight	35 lb (16 kg)	49 lb (22 kg)
Weight with stainless steel center section	48.3 lb (21.9 kg)	62.3 lb (28.2 kg)
Instruction manual	308549	308549

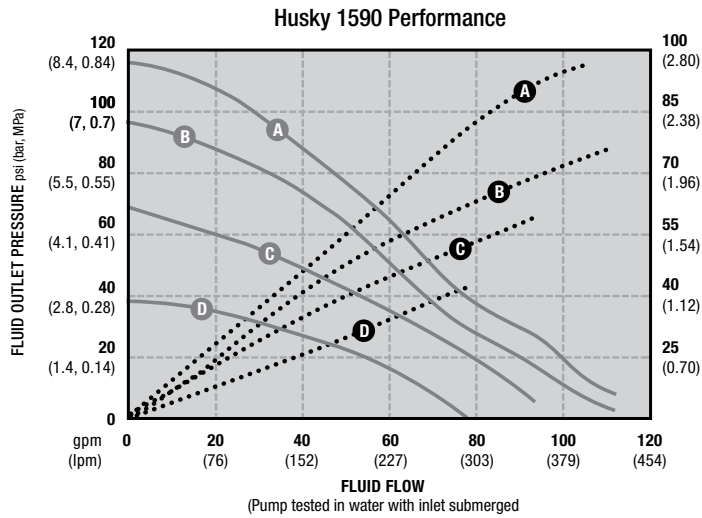
* Flow rates are with muffler and do not vary based on diaphragm material

** 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

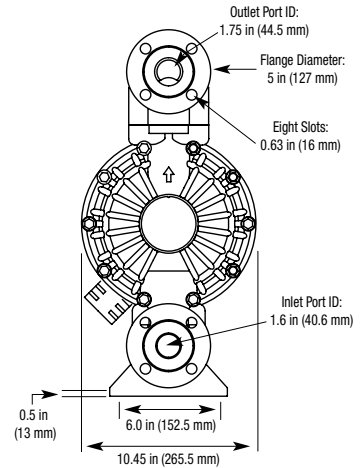
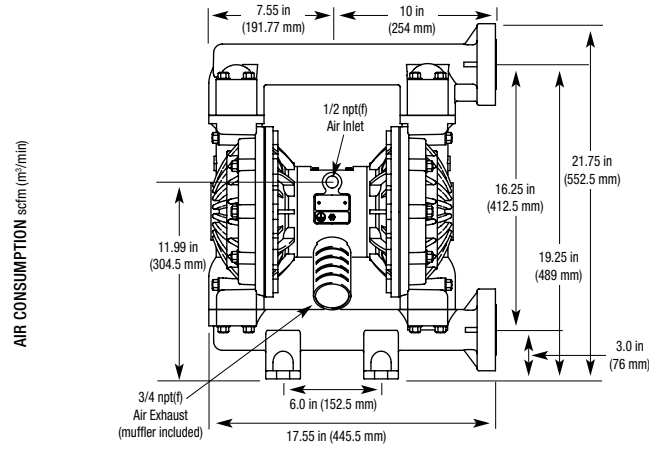
Husky 1590 Plastic Pumps

Performance Charts



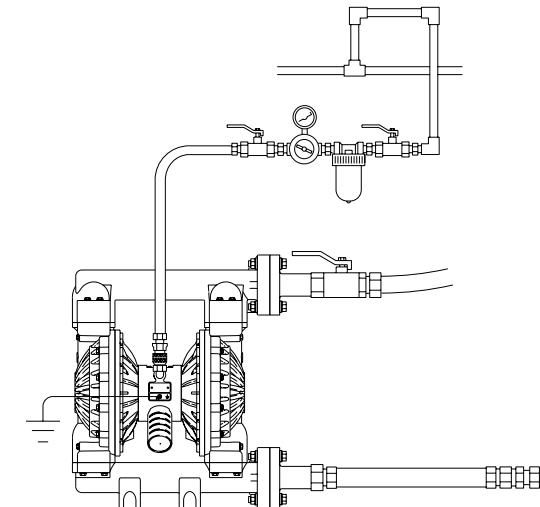
AIR PRESSURE	LEGEND
Ⓐ = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption.....
Ⓑ = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
Ⓒ = at 70 psi (4.8 bar, 0.48 MPa)	
Ⓓ = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Typical System Drawings

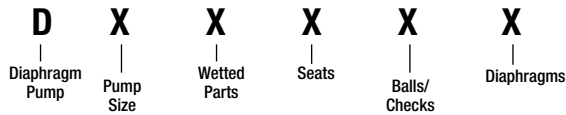
Husky 1590 Above Ground Gravity Feed



Husky 1590 Metal Pumps

Air-Operated Double Diaphragm

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		

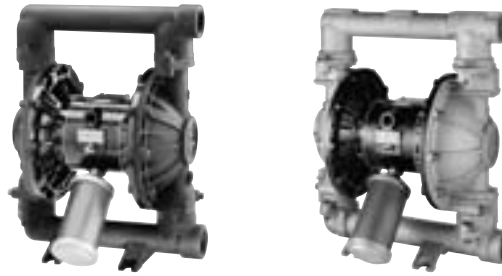
Popular Models

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						
Standard Pumps with Aluminum Center Section										
Aluminum	DB3311	DC3311	DBC311	DCC311	Stainless Steel	PTFE	PTFE	D0B311	236273	246947
	DB3341		DBC341		Hardened SST	Stainless Steel	PTFE	D0B331	236273	246947
	DB3366	DC3366	DBC366	DCC366	Stainless Steel	Santoprene	Santoprene	D0B366	236273	246947
	DB3377	DC3377	DBC377	DCC377	Stainless Steel	Buna	Buna	D0B377	236273	246947
	DB3525	DC3525	DBC525	DCC525	TPE	Acetal	TPE	D0B525	236273	246947
	DB3555		DBC555		TPE	TPE	TPE	D0B555	236273	246947
	DB3666	DC3666	DBC666	DCC666	Santoprene	Santoprene	Santoprene	D0B666	236273	246947
	DB3777	DC3777	DBC777	DCC777	Buna	Buna	Buna	D0B777	236273	246947
	DB3888	DC3888	DBC888	DCC888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0B888	236273	246947
	DB3GGG	DC3GGG	DBCGGG	DCCGGG	Geolast	Geolast	Geolast	D0BGGG	236273	246947
	DB3911		DBC911		Polypropylene	PTFE	PTFE	D0B911	236273	246947
	DB3977		DBC977		Polypropylene	Buna	Buna	D0B977	236273	246947
	Stainless Steel	DB4311	DC4311	DBD311	DCD311	Stainless Steel	PTFE	PTFE	D0B311	236273
DB4341			DBD341		Stainless Steel	Hardened SST	PTFE	D0B341	236273	246947
DB4377		DC4377	DBD377	DCD377	Stainless Steel	Buna	Buna	D0B377	236273	246947
DB4525			DBD525		TPE	Acetal	TPE	D0B525	236273	246947
DB4666		DC4666	DBD666	DCD666	Santoprene	Santoprene	Santoprene	D0B666	236273	246947
DB4777		DC4777	DBD777	DCD777	Buna	Buna	Buna	D0B777	236273	246947
DB4888		DC4888	DBD888	DCD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0B888	236273	246947
DB4GGG		DC4GGG	DBDGGG	DCDGGG	Geolast	Geolast	Geolast	D0BGGG	236273	246947
DB4911			DBD911		Polypropylene	PTFE	PTFE	D0B911	236273	246947
Corrosion Resistant Pumps with Stainless Steel Center Section										
Stainless Steel	DT4311	DU4311	DTD311	DUD311	Stainless Steel	PTFE	PTFE	D0B311	236273	246947
	DT4377	DU4377	DTD377	DUD377	Stainless Steel	Buna	Buna	D0B377	236273	246947
	DT4388	DU4388	DTD388	DUD388	Stainless Steel	Fluoroelastomer	Fluoroelastomer	D0B388	236273	246947
	DT4666	DU4666	DTD666	DUD666	Santoprene	Santoprene	Santoprene	D0B666	236273	246947
	DT4888	DU4888	DTD888	DUD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0B888	236273	246947
	DT4911	DU4911	DTD911	DUD911	Polypropylene	PTFE	PTFE	D0B911	236273	246947

*Requires CycleFlo or external valve control

** Air control includes air regulator and filter with gauge

Husky 1590 Metal Pumps



Technical Specifications

Husky 1590 Metal Pumps	Aluminum	Stainless Steel
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	100 gpm (378.5 lpm)	100 gpm (378.5 lpm)
Maximum pump speed	200 cpm	200 cpm
Displacement per cycle**	0.5 gallon (1.96 liter)	0.5 gallon (1.96 liter)
Maximum suction lift (DB2366)	20 ft (6.1 m) dry	20 ft (6.1 m) dry
Maximum size pumpable solids	0.19 in (4.8 mm)	0.19 in (4.8 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	77 dBa	77 dBa
Maximum air consumption	125 scfm (3.5 m3/min.)	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)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	1-1/2 npt(f) or bspt(f)	1-1/2 npt(f) or bspt(f)
Weight	33.5 lb (15.2 kg)	85.5 lb (38.6 kg)
Weight with stainless steel center section	n/a	98.8 lb (44.8 kg)
Instruction manual	308441	308441

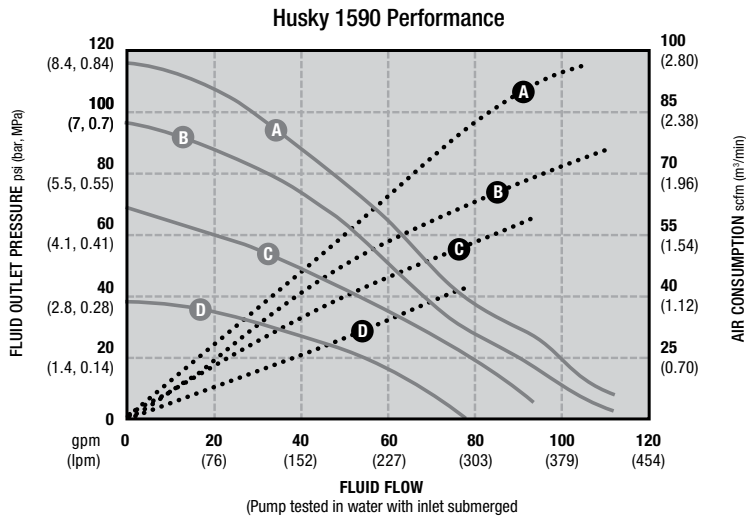
*Flow rates are with muffler and do not vary based on diaphragm material

**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

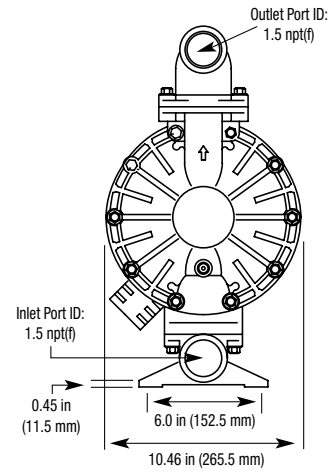
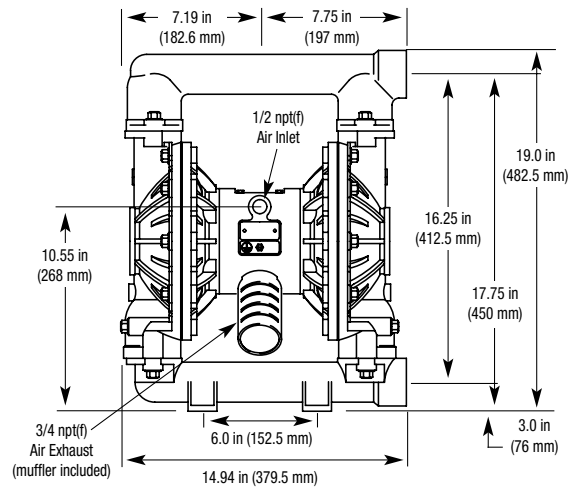
Husky 1590 Metal Pumps

Performance Charts



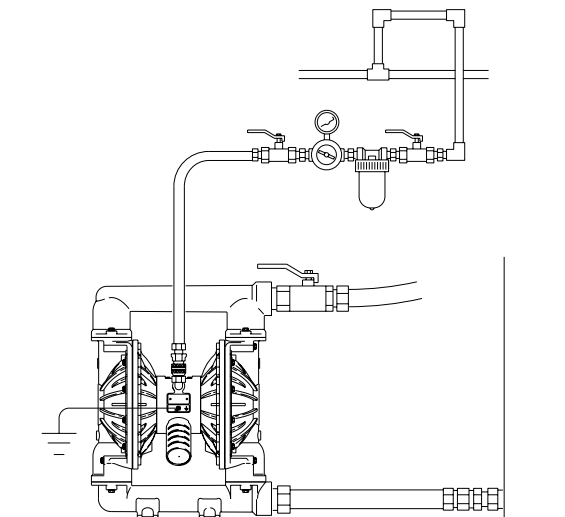
AIR PRESSURE	LEGEND
(A) = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption - -
(B) = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow - - - - -
(C) = at 70 psi (4.8 bar, 0.48 MPa)	
(D) = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Typical System Drawings

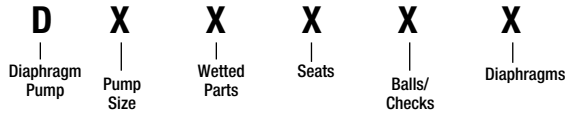
Husky 1590 Above Ground Gravity Feed



Husky 2150 Plastic Pumps

Air-Operated Double Diaphragm

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
		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		

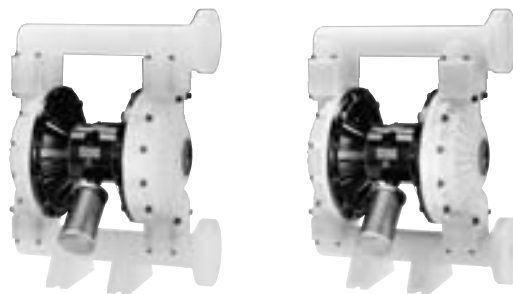
Popular Models

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						
Standard Pumps with Aluminum Center Section										
Polypropylene	DF2311				Stainless Steel	PTFE	PTFE	D0G311	236273	246947
	DF2377	DG2377			Stainless Steel	Buna	Buna	D0G377	236273	246947
	DF2777	DG2777			Buna	Buna	Buna	D0G777	236273	246947
	DF2888	DG2888			Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
	DF2911	DG2911			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	DG29GG			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
	Corrosion Resistant Pumps with Stainless Steel Center Section									
Polypropylene	DV2311				Stainless Steel	PTFE	PTFE	D0G311	236273	246947
	DV2341				Stainless Steel	Hardened SST	PTFE	D0G341	236273	246947
	DV2377				Stainless Steel	Buna	Buna	D0G377	236273	246947
	DV2888				Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
	DV2911				Polypropylene	PTFE	PTFE	D0G911	236273	246947
	DV2977				Polypropylene	Buna	Buna	D0G977	236273	246947
	DV2988				Polypropylene	Fluoroelastomer	Fluoroelastomer	D0G988	236273	246947
	DV2A11				PVDF	PTFE	PTFE	D0GA11	236273	246947
	DV2A88				PVDF	Fluoroelastomer	Fluoroelastomer	D0GA88	236273	246947
	PVDF	DV5311				Stainless Steel	PTFE	PTFE	D0G311	236273
DV5811					Fluoroelastomer	PTFE	PTFE	D0G811	236273	246947
DV5888					Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0G888	236273	246947
DV5A11					PVDF	PTFE	PTFE	D0GA11	236273	246947
DV5A88					PVDF	Fluoroelastomer	Fluoroelastomer	D0GA88	236273	246947

*Requires CycleFlo or external valve control

** Air control includes air regulator and filter with gauge

Husky 2150 Plastic Pumps



Technical Specifications

Husky 2150 Plastic Pumps	Polypropylene	PVDF
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	150 gpm (568 lpm)	150 gpm (568 lpm)
Maximum pump speed	145 cpm	145 cpm
Displacement per cycle**	1.03 gallon (3.90 liter)	1.03 gallon (3.90 liter)
Maximum suction lift	18 ft (5.48 m) wet or dry	18 ft (5.48 m) wet or dry
Maximum size pumpable solids	0.25 in (6.3 mm)	0.25 in (6.3 mm)
Maximum operating temperature***	150°F (65.5°C)	150°F (65.5°C)
Maximum diaphragm operating temperature***		
PTFE	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	78 dBA	78 dBA
Maximum air consumption	175 scfm (4.9 m3/min)	175 scfm (4.9 m3/min)
Air consumption at 70 psi/60 gpm	60 scfm (1.7 m3/min)	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)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	2 in (51 mm) ANSI-flange	2 in (51 mm) ANSI-flange
Weight	49 lb (22 kg)	68 lb (30.8 kg)
Weight with stainless steel center section	68.5 lb (31 kg)	87.5 lb (39.6 kg)
Instruction manual	308550	308550

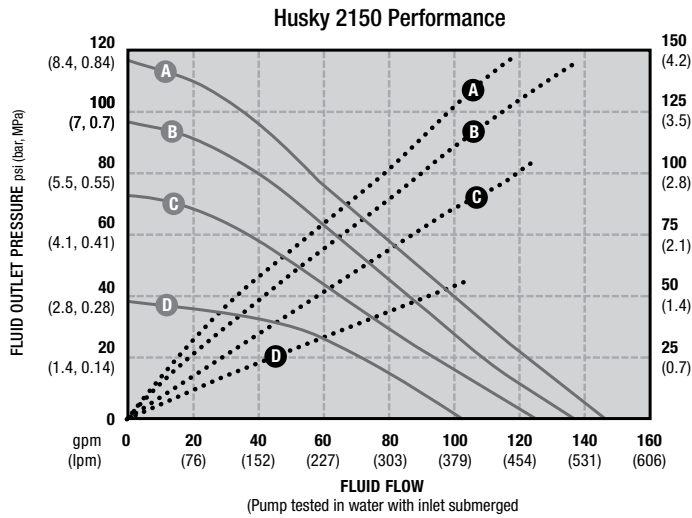
* Flow rates are with muffler and do not vary based on diaphragm material

** 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

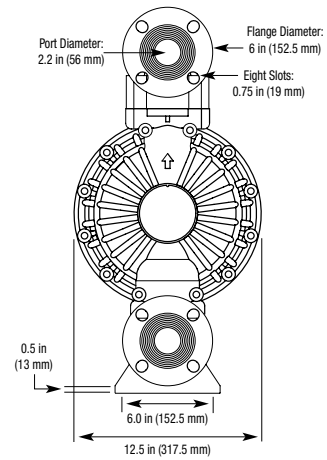
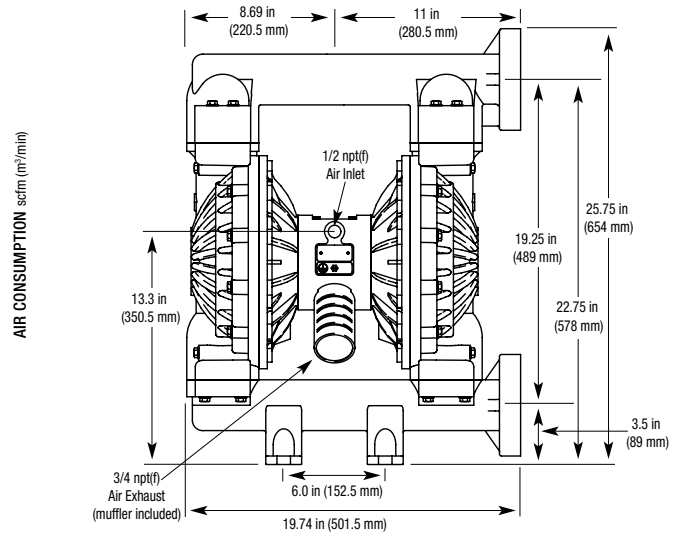
Husky 2150 Plastic Pumps

Performance Charts



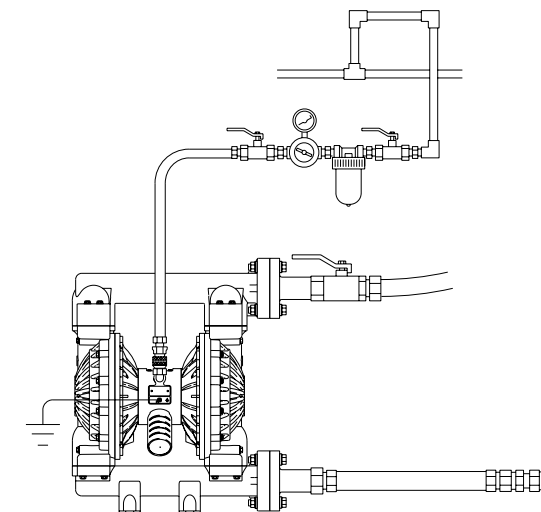
AIR PRESSURE	LEGEND
A = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption - -
B = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow - ——— -
C = at 70 psi (4.8 bar, 0.48 MPa)	
D = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



Typical System Drawings

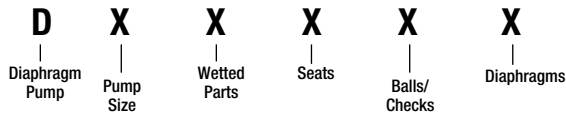
Husky 2150 Above Ground Gravity Feed



Husky 2150 Metal Pumps

Air-Operated Double Diaphragm

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
	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		

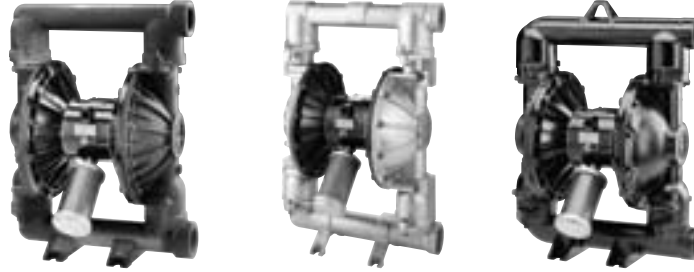
Popular Models

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						
Standard Pumps with Aluminum Center Section										
Aluminum***	DF3311	DG3311	DFC311	DGC311	Stainless Steel	PTFE	PTFE	D0F311	236273	246947
	DF3341	DG3341	DFC341	DGC341	Stainless Steel	Hardened SST	PTFE	D0F341	236273	246947
	DF3366	DG3366	DFC366	DGC366	Stainless Steel	Santoprene	Santoprene	D0F366	236273	246947
	DF3377	DG3377	DFC377	DGC377	Stainless Steel	Buna	Buna	D0F377	236273	246947
	DF3525	DG3525	DFC525	DGC525	TPE	Acetal	TPE	D0F525	236273	246947
	DF3555		DFC555		TPE	TPE	TPE	D0F555	236273	246947
	DF3666	DG3666	DFC666	DGC666	Santoprene	Santoprene	Santoprene	D0F666	236273	246947
	DF3777	DG3777	DFC777	DGC777	Buna	Buna	Buna	D0F777	236273	246947
	DF3888	DG3888	DFC888	DGC888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0F888	236273	246947
	DF3GGG	DG3GGG	DFCGGG	DGCGGG	Geolast	Geolast	Geolast	D0FGGG	236273	246947
	DF3911	DG3911	DFC911	DGC911	Polypropylene	PTFE	PTFE	D0F911	236273	246947
	DF3977	DG3977	DFC977		Polypropylene	Buna	Buna	D0F977	236273	246947
	Stainless Steel	DF4311	DG4311	DFD311	DGD311	Stainless Steel	PTFE	PTFE	D0F311	236273
DF4341			DFD341		Stainless Steel	Hardened SST	PTFE	D0F341	236273	246947
DF4366		DG4366	DFD366	DGD366	Stainless Steel	Santoprene	Santoprene	D0F366	236273	246947
DF4377		DG4377	DFD377	DGD377	Stainless Steel	Buna	Buna	D0F377	236273	246947
DF4525			DFD525		TPE	Acetal	TPE	D0F525	236273	246947
DF4666		DG4666	DFD666	DGD666	Santoprene	Santoprene	Santoprene	D0F666	236273	246947
DF4777		DG4777	DFD777	DGD777	Buna	Buna	Buna	D0F777	236273	246947
DF4888		DG4888	DFD888	DGD888	Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0F888	236273	246947
DF4GGG		DG4GGG	DFDGGG	DGDGGG	Geolast	Geolast	Geolast	D0FGGG	236273	246947
DF4911			DFD911		Polypropylene	PTFE	PTFE	D0F911	236273	246947
Ductile	DF6311		DFF311		Stainless Steel	PTFE	PTFE	D0F311	236273	246947
	DF6366		DFF366		Stainless Steel	Santoprene	Santoprene	D0F366	236273	246947
	DF6441		DFF441		Hardened SST	Hardened SST	PTFE	D0F441	236273	246947
	DF6466	DG6466	DFF466	DGF466	Hardened SST	Santoprene	Santoprene	D0F466	236273	246947
	DF6525		DFF525		TPE	Acetal	TPE	D0F525	236273	246947
	DF6666	DG6666	DFF666	DGF666	Santoprene	Santoprene	Santoprene	D0F666	236273	246947
	DF6A11		DFFA11		PVDF	PTFE	PTFE	D0FA11	236273	246947
	DF6A88		DFFA88		PVDF	Fluoroelastomer	Fluoroelastomer	D0FA88	236273	246947
	DF6GGG	DG6GGG	DFFGGG	DGFGGG	Geolast	Geolast	Geolast	D0FGGG	236273	246947
Corrosion Resistant Pumps with Stainless Steel Center Section										
Stainless Steel	DV4311		DVD311		Stainless Steel	PTFE	PTFE	D0F311	236273	246947
	DV4377		DVD377		Stainless Steel	Buna	Buna	D0F377	236273	246947
	DV4388		DVD388		Stainless Steel	Fluoroelastomer	Fluoroelastomer	D0F388	236273	246947
	DV4666		DVD666		Santoprene	Santoprene	Santoprene	D0F666	236273	246947
	DV4888		DVD888		Fluoroelastomer	Fluoroelastomer	Fluoroelastomer	D0F888	236273	246947
	DV4911		DVD911		Polypropylene	PTFE	PTFE	D0F911	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

Husky 2150 Metal Pumps

Technical Specifications



Husky 2150 Metal Pumps	Aluminum	Stainless Steel	Ductile Iron
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)	120 psi (8.4 bar, 0.84 MPa)
Maximum free flow delivery*	150 gpm (568 lpm)	150 gpm (568 lpm)	150 gpm (568 lpm)
Maximum pump speed	145 cpm	145 cpm	145 cpm
Displacement per cycle**	1.03 gallon (3.90 liter)	1.03 gallon (3.90 liter)	1.03 gallon (3.90 liter)
Maximum suction lift (DF3666)	20 ft (6.1 m) dry	20 ft (6.1 m) dry	20 ft (6.1 m) dry
Maximum size pumpable solids	0.25 in (6.3 mm)	0.25 in (6.3 mm)	0.25 in (6.3 mm)
Maximum diaphragm operating temperature***			
PTFE	220°F (104.4°C)	220°F (104.4°C)	220°F (104.4°C)
Santoprene	180°F (82.2°C)	180°F (82.2°C)	180°F (82.2°C)
Buna-N	180°F (82.2°C)	180°F (82.2°C)	180°F (82.2°C)
TPE	150°F (65.5°C)	150°F (65.5°C)	150°F (65.5°C)
Fluoroelastomer	250°F (121.1°C)	250°F (121.1°C)	250°F (121.1°C)
Geolast	150°F (65.5°C)	150°F (65.5°C)	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	78 dBa	78 dBa	78 dBa
Maximum air consumption	175 scfm (4.9 m3/min)	175 scfm (4.9 m3/min)	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)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)	20 to 120 psi (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
Air inlet size	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)
Fluid inlet & outlet size****	2 in (51 mm) ANSI-flange	2 in (51 mm) ANSI-flange	2 in (51 mm) ANSI-flange
Weight	58 lb (26.3 kg) 62 lb (28.1 kg) - Extended	111 lb (50 kg)	130 lb (59 kg)
Weight with stainless steel center section	n/a	134 lb (60 kg)	n/a
Instruction manual	308368	308368	308368

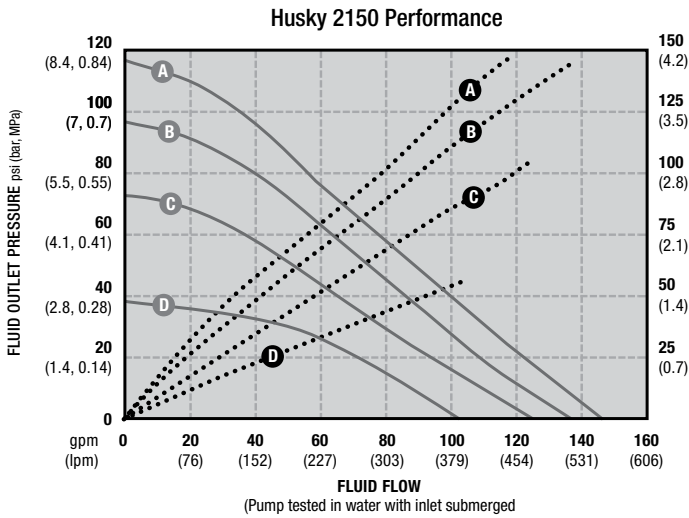
* Flow rates are with muffler and do not vary based on diaphragm material

** 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

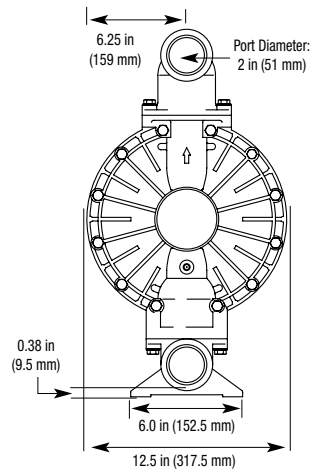
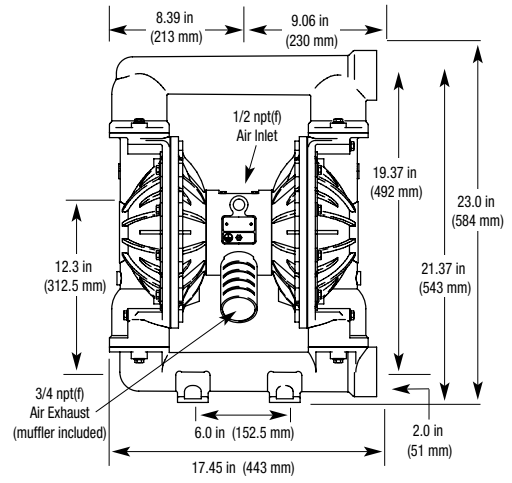
Husky 2150 Metal Pumps

Performance Charts



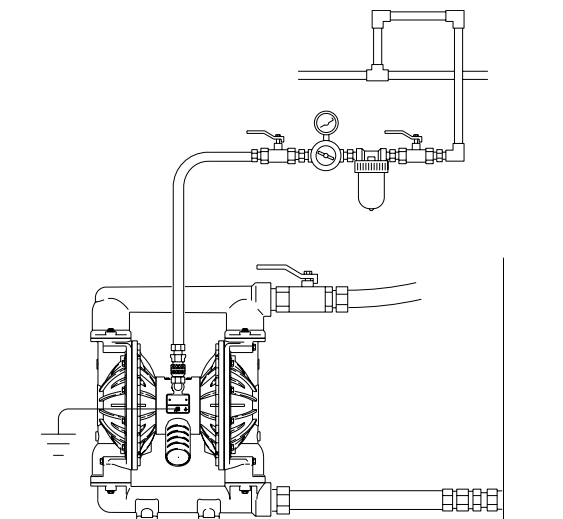
AIR PRESSURE	LEGEND
A = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption - - - - -
B = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
C = at 70 psi (4.8 bar, 0.48 MPa)	
D = at 40 psi (2.8 bar, 0.28 MPa)	

Dimensions



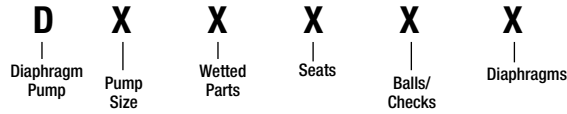
Typical System Drawings

Husky 2150 Above Ground Gravity Feed



Husky 3275 Aluminum Pumps Air-Operated Double Diaphragm

Ordering Information

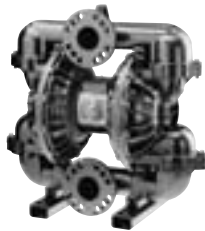


PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
K = 3" (76.2 mm) Standard: aluminum center section	3 = Aluminum (npt)	3 = Stainless Steel 5 = TPE 6 = Santoprene G = Geolast	1 = PTFE 2 = Acetal 6 = Santoprene G = Geolast	1 = PTFE 5 = TPE 6 = Santoprene G = Geolast P = Bolt through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

Popular Models

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

* Air control includes air regulator and filter with gauge



Technical Specifications

Husky 3275 Aluminum Pumps	Aluminum
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 (DF3666)	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)
Fluoroelastomer	250°F (121.1°C)
Geolast	150°F (65.5°C)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 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)

Husky 3275 Aluminum Pumps	Aluminum
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
Weight	150 lb (68 kg)
Instruction manual	308639

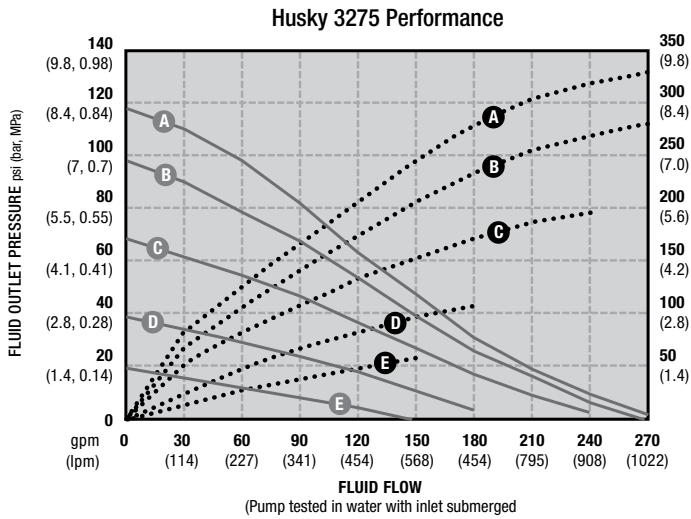
* Flow rates are with muffler and do not vary based on diaphragm material

** 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

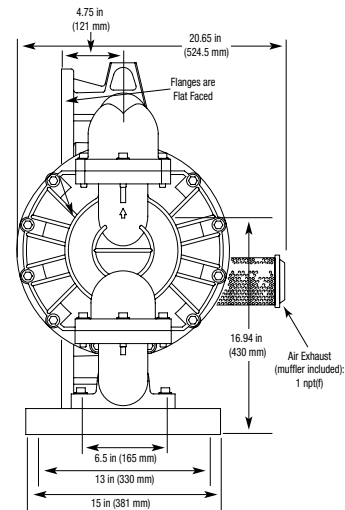
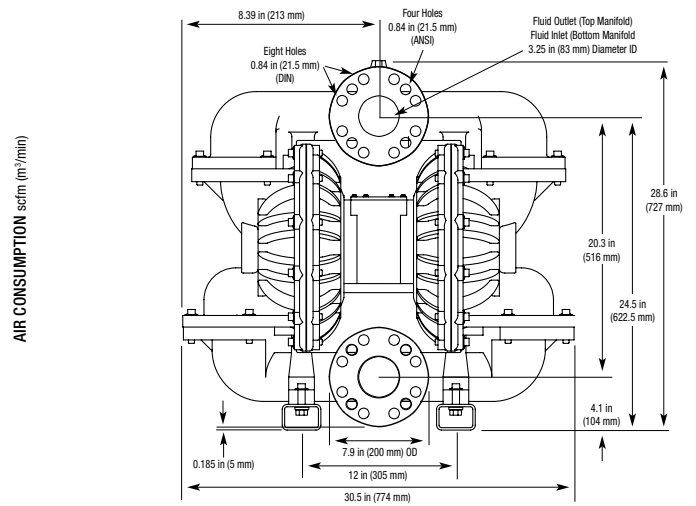
Husky 3275 Aluminum Pumps

Performance Charts



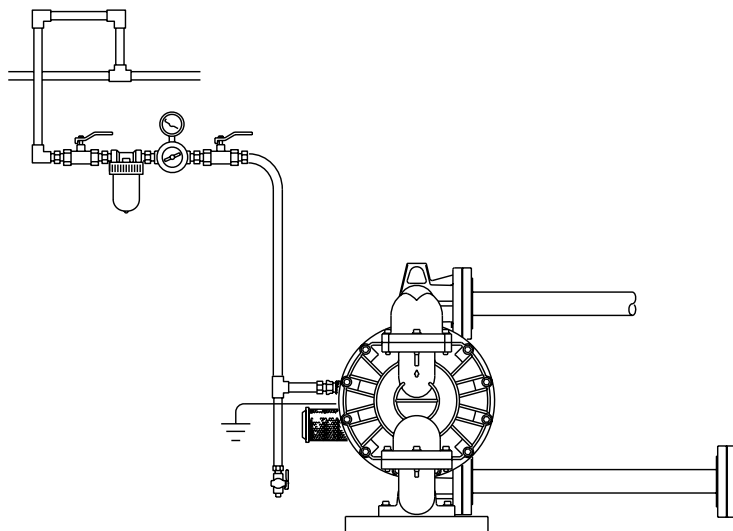
AIR PRESSURE	LEGEND
A = at 120 psi (8.4 bar, 0.84 MPa)	Air Consumption.....
B = at 100 psi (7 bar, 0.7 MPa)	Fluid Flow ———
C = at 70 psi (4.8 bar, 0.48 MPa)	
D = at 40 psi (2.8 bar, 0.28 MPa)	
E = at 20 psi (1.4 bar, 0.14 MPa)	

Dimensions



Typical System Drawings

Husky 3275 Above Ground Gravity Feed



Fast-Flo 1:1 Air-Operated Piston Transfer Pumps

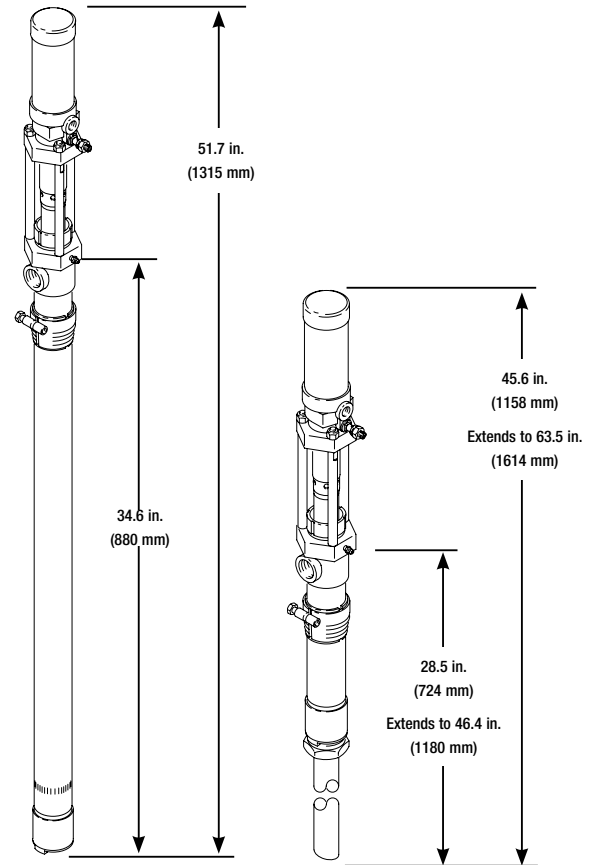
Ordering Information

PART NUMBER	CONSTRUCTION	PACKING
226940	Drum/CS/SST (UL, CE)	T&L
226941	Drum/CS/SST (UL, CE)	PE
226942	Drum/SST (UL, CE)	PE
226943	Stubby/CS/SST (UL, CE)	L
226944	Stubby/CS/SST (UL, CE)	PE
226945	Stubby/SST (UL, CE)	PE
226946	Drum/CS/SST (CE)	T
237129	Drum/SST (CE)	T
237130	Stubby/CS (CE)	L
237131	Stubby/CS (CE)	T
237132	Stubby/CS (CE)	T
237133	Drum/CS (CE)	L
237134	Drum/CS (CE)	T

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



Dimensions




Technical Specifications


Fast-Flo 1:1	Priming Piston
Maximum fluid working pressure	180 psi (12.4 bar, 1.24 MPa)
Maximum pump speed	100 cpm
Pump cycles per gallon (3.8 l)	25
Maximum air input pressure	180 psi (12.4 bar, 1.24 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

Ordering Information


Wall Mount Hydra-Clean Package

PACKAGE ORDER NO.	247550	247552	247554	258665	Pump Package
Air Motor Part No.	N34DN0	N65DN0	N65DN0	N65DN0	
Pump Lower Part No.	247599	241648	687055	24B923	
Pump Construction	SST	SST	SST	SST	
Standard Seal Repair Kit	247881	222880	See manual 311825	24C162	
Standard Seal Construction	PTFE/ CF-PTFE	UHMWPE/ CF-PTFE	UHMWPE/ CF-PTFE	UHMWPE/ CF-PTFE	
Optional Seal Repair Kits	207581	222875	222845	237713	
Optional Seal Construction	PTFE	UHMWPE/PTFE	UHMWPE/PTFE	UHMWPE/PTFE	
Flyer	338026	338026	338026	338026	
Instruction Manual	312585	312585	312585	312585	

Cart Mount Hydra-Clean Package

Package Order No.	247549	247551	247553	258664	Pump Package
Air Motor Part No.	N34DN0	N65DN0	N65DN0	N65DN0	
Pump Lower Part No.	247599	241648	687055	24B923	
Pump Construction	SST	SST	SST	SST	
Standard Seal Repair Kit	247881	222880	See manual 311825	24C162	
Standard Seal Construction	PTFE/ CF-PTFE	UHMWPE/ CF-PTFE	UHMWPE/ CF-PTFE	UHMWPE/ CF-PTFE	
Optional Seal Repair Kits	207581	222875	222845	237713	
Optional Seal Construction	PTFE	UHMWPE/PTFE	UHMWPE/PTFE	UHMWPE/PTFE	
Flyer	338026	338026	338026	338026	
Instruction Manual	312585	312585	312585	312585	

Drum Mount Hydra-Clean Package

Package Order No.	206515	Pump Package
Air Motor Part No.	207352	
Pump Lower Part No.	224344	
Pump Construction	SST	
Standard Seal Repair Kit	224402	
Standard Seal Construction	UHMWPE/Polychloroprene	
Optional Seal Construction	UHMWPE/PTFE	
Instruction Manual	306817	

Technical Specifications

Part Number	Pump Package	Max. Working Pressure psi (bar, MPa)	Max. Air Input Pressure psi (bar, MPa)	Fluid Flow at 60 cpm gpm (lpm)	Vol. per Cycle oz (cc)	Air Inlet Size	Fluid Inlet Size	Fluid Outlet Size*	Flyer	Manual
247549	12:1 Cart Mount	1250 (86, 8.6)	100 (7, 0.7)	8.7 (33.0)	18.6 (550)	3/4 npt(f)	1 in	3/8 in	338026	312585
247550	12:1 Wall Mount	1250 (86, 8.6)	100 (7, 0.7)	8.7 (33.0)	18.6 (550)	3/4 npt(f)	1 in	3/8 in	338026	312585
247551	23:1 Cart Mount	2275 (157, 15.7)	100 (7, 0.7)	9.2 (34.7)	19.6 (580)	3/4 npt(f)	1 in	3/8 in	338026	312585
247552	23:1 Wall Mount	2275 (157, 15.7)	100 (7, 0.7)	9.2 (34.7)	19.6 (580)	3/4 npt(f)	1 in	3/8 in	338026	312585
247553	30:1 Cart Mount	3065 (211, 21.1)	100 (7, 0.7)	6.8 (25.9)	14.5 (430)	3/4 npt(f)	1 in	3/8 in	338026	312585
247554	30:1 Wall Mount	3065 (211, 21.1)	100 (7, 0.7)	6.8 (25.9)	14.5 (430)	3/4 npt(f)	1 in	3/8 in	338026	312585
258664	45:1 Cart Mount	4500 (310, 31.0)	100 (7, 0.7)	4.6 (17.4)	9.8 (290)	3/4 npt(f)	1 in	3/8 in	338026	312585
258665	45:1 Wall Mount	4500 (310, 31.0)	100 (7, 0.7)	4.6 (17.4)	9.8 (290)	3/4 npt(f)	1 in	3/8 in	338026	312585
206515	10:1 Drum Mount	1800 (125, 12.5)	180 (12.5, 1.2)	3.0 (11.4)	6.4 (189)	1/2 npt(f)	1/2 in	3/4 in	—	306817

*Includes two outlet ports per unit

Accessories

Guns and Wands

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

Hoses

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

Other

- 15T284 60 mesh inlet strainer with 1" NPT(f) connection
- 15T284 60 mesh inlet strainer with 1" NPT(f) connection
- 191635 0 mesh inlet strainer with 1" NPT(f) connection

Stainless Steel Tips

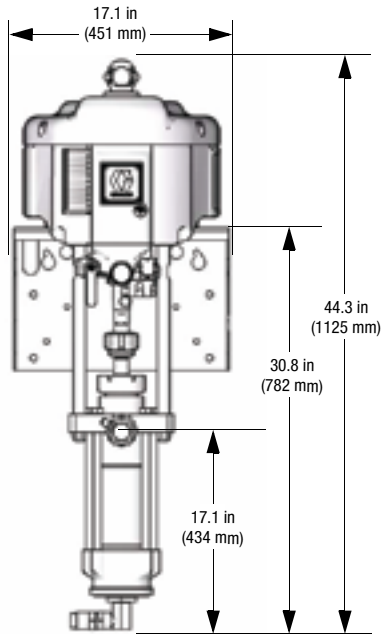
Part Number	Orifice Size in (mm)	Fan Width Angle at 40 psi (3 bar, 0.03 MPa)	Capacity at 1000 psi (68.9 bar, 6.89 MPa) GPM (lpm)
805534	0.020 (0.51)	40°	1.00 (3.78)
805538*	0.030 (0.76)	40°	1.50 (5.68)
805542	0.035 (0.89)	40°	1.75 (6.62)
805549*	0.045 (1.14)	25°	2.25 (8.52)
805561	0.060 (1.52)	25°	3.00 (11.36)
805566*	0.065 (1.65)	40°	3.25 (12.30)
805569	0.070 (1.78)	25°	3.50 (13.25)
805574	0.075 (1.91)	40°	3.75 (14.20)
805575*	0.080 (2.03)	0°	4.00 (15.14)
805584	0.090 (2.28)	15°	4.50 (17.03)
805587	0.100 (2.54)	0°	5.00 (18.93)

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

Hydra-Clean Pressure Washers

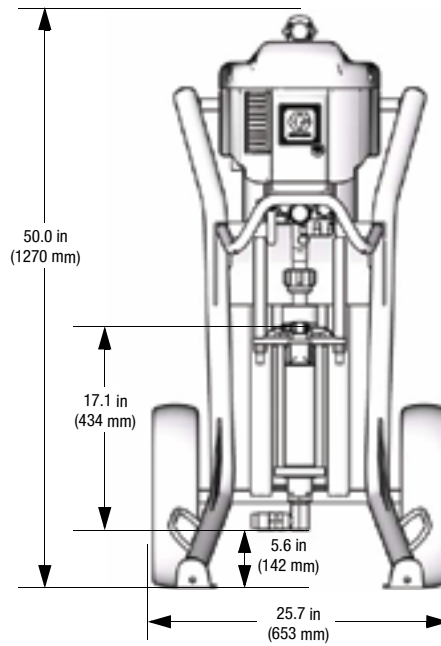
Dimensions

Wall Mount Package 247550



Refer to manual 312585 for additional package dimensions

Cart Mount Package 247549



Husky Transfer Pump Packages

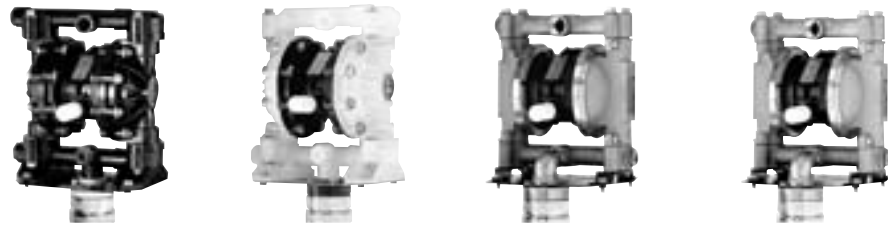
55 Gallon (208 liter) Size

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

Accessories

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



Technical Specifications

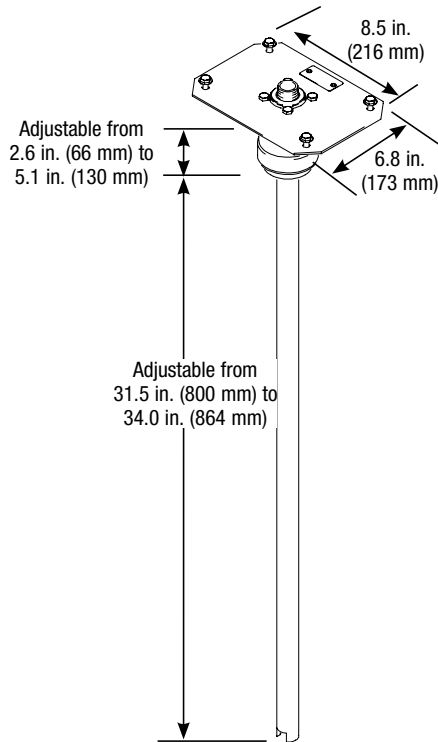
Husky 55 gal Transfer Pump	Acetal Husky 515	Polypropylene Husky 515	Aluminum Husky 716	Stainless Steel Husky 716
Maximum fluid working pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum free flow delivery*	12 gpm (57 lpm)	12 gpm (57 lpm)	14 gpm (61 lpm)	14 gpm (61 lpm)
Maximum pump speed	400 cpm	400 cpm	400 cpm	400 cpm
Displacement per cycle**	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)	0.04 gallon (0.15 liter)
Maximum size pumpable solids	0.094 in (2.5 mm)	0.094 in (2.5 mm)	0.094 in (2.5 mm)	0.094 in (2.5 mm)
Typical sound level at 70 psi (4.9 bar, 0.49 MPa) air @ 125 cpm	67 dBA	67 dBA	67 dBA	67 dBA
Maximum air consumption	28 scfm (0.672 m3/min)	28 scfm (0.672 m3/min)	28 scfm (0.672 m3/min)	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)	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)	25 to 100 psi (1.8 to 7 bar, 0.18 to 0.7 MPa)
Air inlet size	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)
Air exhaust port size	3/8 npt(f)	3/8 npt(f)	3/8 npt(f)	3/8 npt(f)
Fluid inlet size	3/4 npt(f)	3/4 npt(f)	3/4 npt(f)	3/4 npt(f)
Fluid outlet size	1/2 and 3/4 npt(f)	1/2 and 3/4 npt(f)	3/4 npt(f)	3/4 npt(f)
Wetted parts (fluid covers and manifolds)	groundable acetal, PTFE	polypropylene, PTFE	aluminum, stainless steel, PTFE, zinc-plated steel	stainless steel, PTFE
Pump weight	7.8 lb (3.5 kg)	6.5 lb (2.9 kg)	8.5 lb (3.9 kg)	18 lb (8.2 kg)
Drum package weight tube material	12.3 lb (5.6 kg) aluminum	14.3 lb (6.5 kg) stainless steel	10.5 lb (4.8 kg) polypropylene	13.0 lb (5.9 kg) aluminum
Drum kit weight easy-out seal material	4.5 lb (2.0 kg) aluminum	6.5 lb (2.9 kg) stainless steel	4.0 lb (1.8 kg) polypropylene	4.5 lb (2.0 kg) acetal
Drum package instruction manual	309116	309116	309116	309116
Instruction manual	308981	308981	308981	308981

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

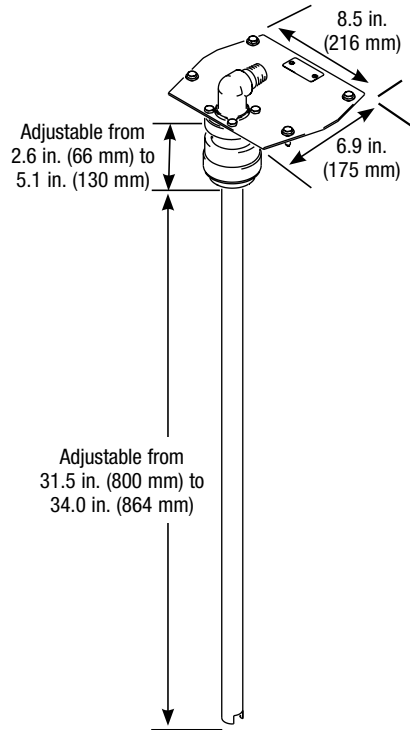
** Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

Husky Transfer Pump Packages

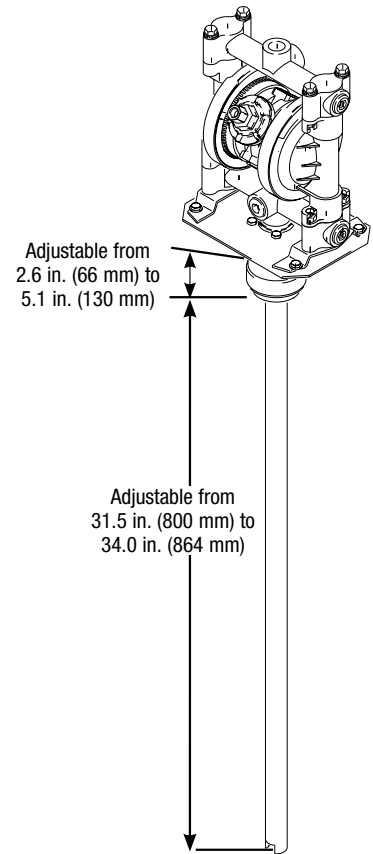
Dimensions



Poly, Acetal and Aluminum Pumps



Stainless Steel Pumps



*Overall height depends on pump.
See page 12 or 15 for pump dimensions*

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

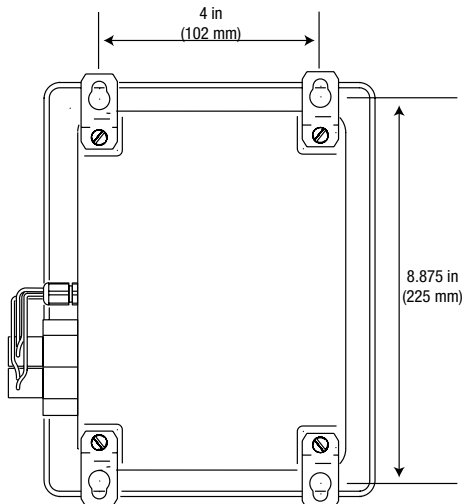
Product Selector

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.

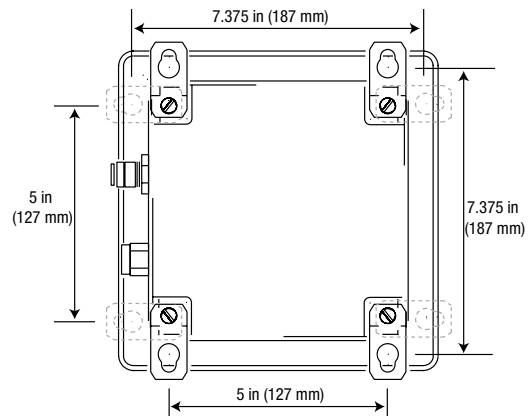
PUMP SIZE (AIR MOTOR TYPE AND MATERIAL)	WETTED PARTS	SEATS	BALLS	DIAPHRAGM
2 = 1/4" (6.35 mm) Remote: polypropylene center section	1 = Acetal (npt)	0 = Seat with ball	1 = PTFE	1 = PTFE
4 = 1/2" (12.7 mm) Remote: polypropylene center section	2 = Poly (npt)	2 = Acetal	2 = Acetal	5 = TPE
4 = 3/4" (19.05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

Mounting Dimensions

CycleFlo



CycleFlo II



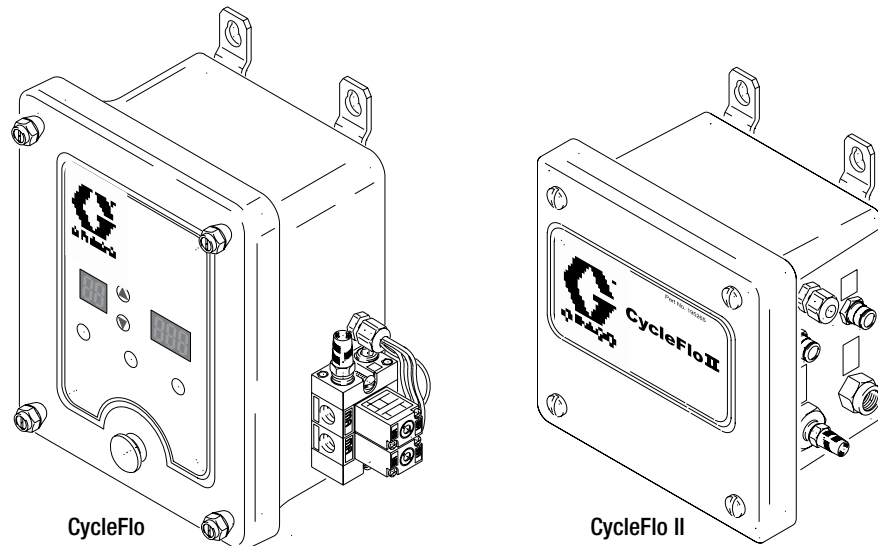
CycleFlo and CycleFlo II

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

Volume/cycle	Husky 205	Husky 515	Husky 716	NEW	Husky 1590	Husky 2150
	1/4 in	1/2 in	3/4 in	Husky 1050 1 in	1-1/2 in	2 in
Cubic centimeters (cc)	46	150	150	644	1960	3000
Liters	0.05	0.15	0.15	0.64	1.96	3.9
Grams (assumes s.g = 1.0)	46	150	150	644	1960	3900
Kilograms (kg)	0.05	0.15	0.15	0.64	1.96	3.9
Gallons	0.01	0.04	0.04	0.17	0.50	1.03
Quarts	0.05	0.16	0.16	0.68	2.0	4.12
Pints	0.1	0.32	0.32	1.36	4.0	8.24
Ounces	1.54	5.12	5.12	21.8	64.0	131.84
Cubic inch	2.77	9.24	9.24	39.27	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.



* Displacement values are estimates based on average running conditions.

Surge Suppressors Husky 750 and Husky 2000

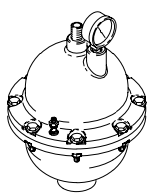
Ordering Information

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

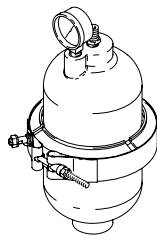
Automatic	Polypropylene wetted bottom housing and non-wetted top housing	Stainless Steel wetted bottom housing and non-wetted top housing	Acetal wetted bottom housing and non-wetted top housing
Weight	9 lb (4.1 kg)	16 lb (7.3 kg)	9 lb (4.1 kg)
Suppressor with Buna-N bladder	239096	239095	239094
Suppressor with PTFE bellows	239121	239123	239125
Suppressor with Fluoroelastomer bladder	239122	239124	n/a
Adjustable	Polypropylene wetted bottom housing and non-wetted top housing	Stainless Steel wetted bottom housing and non-wetted top housing	Acetal wetted bottom housing and non-wetted top housing
Weight	9 lb (4.1 kg)	16 lb (7.3 kg)	9 lb (4.1 kg)
Suppressor with Buna-N bladder	239091	239090	239089
Suppressor with PTFE bellows	239129	239131	239133
Suppressor with Fluoroelastomer bladder	239130	239132	n/a

Husky 2000, 2 in npt(f) Surge Suppressors

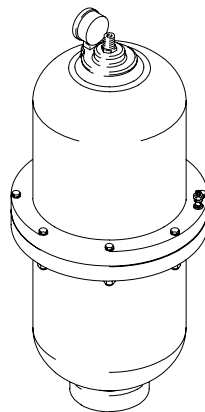
Automatic	Polypropylene wetted bottom housing and non-wetted top housing	Stainless Steel wetted bottom housing, polypropylene non-wetted top housing
Weight	18 lb (8.2 kg)	36 lb (16.3 kg)
Suppressor with Buna-N bladder	239092	239093
Suppressor with PTFE bellows	239128	239126
Suppressor with Fluoroelastomer bladder	n/a	239127
Adjustable	Polypropylene wetted bottom housing and non-wetted top housing	Stainless Steel wetted bottom housing, polypropylene non-wetted top housing
Weight	18 lb (8.2 kg)	36 lb (16.3 kg)
Suppressor with Buna-N bladder	239087	239088
Suppressor with PTFE bellows	239136	239134
Suppressor with Fluoroelastomer bladder	n/a	239135



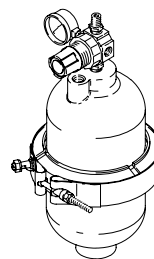
239095
Automatic



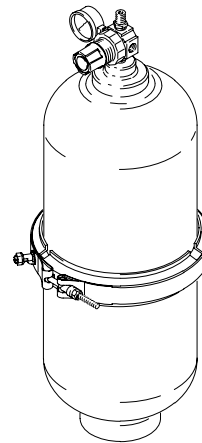
239096
Automatic



239126
Automatic



239091
Adjustable



239088
Adjustable

Technical Specifications

Surge Suppressors	Husky 750	Husky 2000
Max. air input pressure	120 psi (0.84 MPa, 8.4 bar)	120 psi (0.84 MPa, 8.4 bar)
Air line connection	1/4 npt	1/4 npt
Fluid inlet size	3/4 in npt(f)	2 in npt(f)
Instruction manual	308703	308703

Pump Accessories

Air-Operated Double Diaphragm

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)	208536
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)	208536
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
--	-----

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

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)	208536
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
---	--------

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

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
Adjustable Husky 750, 3/4" (19.05 mm)	
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)	113870

Husky 1050, 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) 1050 pumps	112182
Air Muffler (comes with pump) 1590 and 2150 pumps	102656
Center Section Conversion Kit (converts an aluminum center section to sst. Includes air covers).	
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
--	--------

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 1050 only	24D205
--------------------------	--------

Husky 1050, 1590, 2150 Accessories (continued)

Part Number

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 1050 for use with leaded fuel (seat, ball, diaphragm)	647016
Same as 236265, maximum inlet of 50 psi (3.4 bar, 0.3 MPa)	647648

PTFE/EPDM OVERMOLDED DIAPHRAGMS

Industrial upgrade kits – includes new airside diaphragm plate

Upgrade kit for 1 inch pump	289224
Upgrade kit for 1.5 inch pump	289225
Upgrade kit for 2 inch pump	289226

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)	113870

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 inch (24.14 mm) flange for Husky 1050 D72XXX pumps. 1" ANSI x 1" npt (f)	239005
Stainless Steel 1 inch (24.14 mm) flange for Husky 1050 D71XXX and D74XXX pumps 1" ANSI x 1" npt (f)	239008
PVDF 1 inch (24.14 mm) flange for Husky 1050 D75XXX pump 1" ANSI x 1" npt (f)	239009
Polypropylene 1-1/2 inch (36.84 mm) flange for Husky 1590 DB2XXX pump 1-1/2" ANSI x 1-1/2" (f)	239006
PVDF 1-1/2 inch (36.84 mm) flange for Husky 1590 DB5XXX pump. 1-1/2" ANSI x 1-1/2" (f)	239010
Polypropylene 2 inch (48.28 mm) flange for Husky 2150 DF2XXX pump. 2" ANSI x 2" (f)	239007
PVDF 2 inch (48.28 mm) flange for Husky 2150 DF5XXX pump 2" ANSI x 2" (f)	239011

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
--	-----

REMOTE PUMP CONTROLLERS

Husky 307 pumps are not equipped to run in remote mode	N/A
--	-----

SPLIT MANIFOLD KITS

There are no Husky 3275 with a split manifold option	N/A
--	-----

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.

Automatic Husky 2000, 2 in (50.8 mm)	
Polypropylene (wetted bottom and top housings) with a Buna N bladder	239092
with PTFE bellows	239128
Adjustable Husky 2000, 2 in (50.8 mm)	
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)	113870

Piston Pumps for Ink Applications

Ink Applications

Ordering Information and Technical Specifications

Name of Pump	Senator 19:1	Viscount II 1900	Bulldog 31:1	Viscount II 3100
Lower size	800	800	800	800
Maximum fluid pressure	1900 psi (131 bar, 13.1 MPa)	1900 psi (131 bar, 13.1 MPa)	3100 psi (213 bar, 21.3 MPa)	3100 psi (213 bar, 21.3 MPa)
Maximum motor inlet pressure	100 psi (air) (6.9 bar, 0.69 MPa)	450 psi (oil) (31 bar, 3.1 MPa)	100 psi (air) (6.9 bar, 0.69 MPa)	750 psi (oil) (51.7 bar, 5.1 MPa)
Flow rate @ 60 cpm	2.8 gpm (10.6 lpm)	2.8 gpm (10.6 lpm)	2.8 gpm (10.6 lpm)	2.8 gpm (10.6 lpm)
Cfm or gpm required per gallon	24 cfm	4.3 gpm (16.2 lpm)	32 cfm	4.3 gpm (16.2 lpm)
Fluid pump outlet size	1" npt (f)	1" npt (f)	1" npt (f)	1" npt (f)
Motor inlet size	3/4" npt (f)	3/4" npt (f)	3/4" npt (f)	3/4" npt (f)
Weight of pump	160 lb (73 kg)	177 lb (80 kg)	160 lb (73 kg)	177 lb (80 kg)
Instruction manual	308351	308351	308351	308351

Bin Supply	Senator 19:1	Viscount II 1900	Bulldog 31:1	Viscount II 3100
Pump	246941	246938	246940	246938
Air controls: FRL, 1/2"	217072		217072	
Air run away control, 3/4"	224040		224040	
Air speed control, 1/2"(f)	510441		510441	
Floor stand (3" inlet)	222780	222780	222780	222780
Hydraulic controls*		236865		236865
Outlet hydraulic hose connector 1"(m) x 1-1/2"(f), 1500 psi rated		Not included		Not included

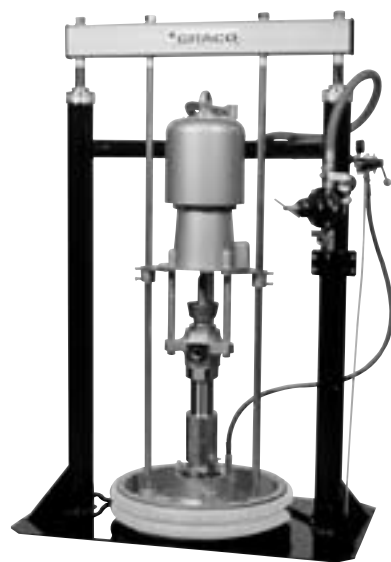
55-Gallon Drum Supply	Senator 19:1	Viscount II 1900	Bulldog 31:1	Viscount II 3100
Ram package with pump	234377	234378	234374	234378
Air run away control, 3/4"	224040		224040	
Air speed control, 1/2"	510441		510441	
Hydraulic controls*		236865		236865
Outlet hydraulic hose connector 1"(m) x 1-1/2"(f), 1500 psi rated		Not included		Not included

Misc. Information	Senator 19:1	Viscount II 1900	Bulldog 31:1	Viscount II 3100
Pump lower section	246939	246939	246939	246939
Ram plate replacement seals	165601	165601	165601	165601

*Hydraulic controls include hydraulic flow and pressure control, ball valves, 3 ft supply and return hose



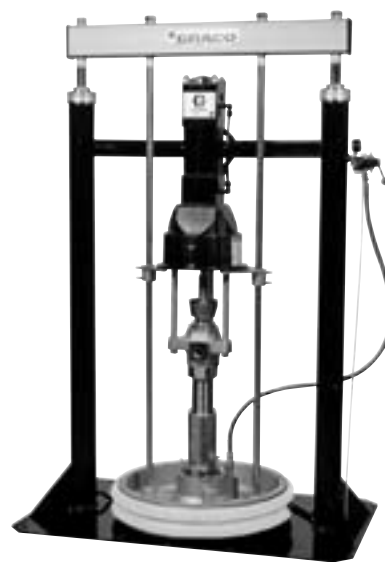
19:1 Senator



19:1 Senator on
55 gallon ram



31:1 Bulldog



Viscount II 3100 on
55 gallon ram

Piston Pumps for Ink Applications

Name of Pump	Bulldog 12:1	Viscount II 1200	King 24:1	Viscount II 2400
Lower size	2100	2100	2100	2100
Maximum fluid pressure	1200 psi (82.8 bar, 8.28 MPa)	1200 psi (82.8 bar, 8.28 MPa)	2400 psi (165 bar, 16.5 MPa)	2400 psi (165 bar, 16.5 MPa)
Maximum motor inlet pressure	100 psi (air) (6.9 bar, 0.69 MPa)	750 psi (oil) (51.7 bar, 5.1 Mpa)	100 psi (air) (6.9 bar, 0.69 MPa)	1500 psi (oil) (103 bar, 10.3 Mpa)
Flow rate @ 60 cpm	7.5 gpm (28.4 lpm)	7.5 gpm (28.4 lpm)	7.5 gpm (28.4 lpm)	7.5 gpm (28.4 lpm)
Cfm or gpm required per gallon	20 cfm	1.6 gpm (6 lpm)	25 cfm	1.6 gpm (6 lpm)
Fluid pump outlet size	1-1/2" npt (m)	1-1/2" npt (m)	1-1/2" npt (m)	1-1/2" npt (m)
Motor inlet size	3/4" npt (f)	3/4" npt (f)	3/4" npt (f)	3/4" npt (f)
Weight of pump	142 lb (65 kg)	196 lb (89 kg)	160 lb (73 kg)	196 lb (89 kg)
Instruction manual	308149	308149	308149	308149

Bin Supply	Bulldog 12:1	Viscount II 1200	King 24:1	Viscount II 2400
Pump	246935	246937	246936	246937
Air controls: FRL, 1/2"	217072		217072	
Air run away control, 3/4"	224040		224040	
Air speed control, 1/2"(f)	510441		510441	
Floor stand (3" inlet)	222780	222780	222780	222780
Hydraulic controls*		236865		236865
Outlet hydraulic hose connector 1"(m) x 1-1/2" (f), 1500 psi rated		Not included		Not included

55-Gallon Drum Supply	Bulldog 12:1	Viscount II 1200	King 24:1	Viscount II 2400
Ram package with pump	234371	234376	234372	234376
Air run away control, 3/4"	224040		224040	
Air speed control, 1/2"(f)	510441		510441	
Hydraulic controls*		236865		236865
Outlet hydraulic hose connector 1"(m) x 1-1/2" (f), 1500 psi rated		Not included		Not included

Misc. Information	Bulldog 12:1	Viscount II 1200	King 24:1	Viscount II 2400
Pump lower section	246934	246934	246934	246934
Ram plate replacement seals	165601	165601	165601	165601

*Hydraulic controls include hydraulic flow and pressure control, ball valves, 3 ft supply and return hose



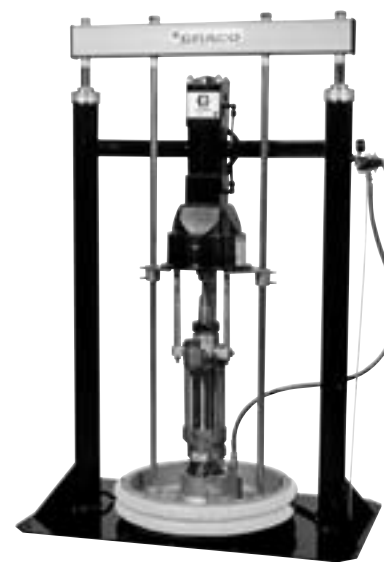
12:1 Bulldog



Viscount II 2100



24:1 King



Viscount II 2400 on
55 gallon ram

Piston Pumps for Ink Applications

Ordering Information and Technical Specifications

Piston Pumps	President 20:1
Lower size	450
Maximum fluid pressure	2000 psi (140 bar, 14 MPa)
Maximum motor inlet pressure	100 psi (7 bar, 0.7 MPa)
Flow rate @ 60 cpm	1.2 gpm (4.5 lpm)
Cfm or gpm required per gallon	35 cfm
Fluid pump outlet size	3/4" npt (f)
Motor inlet size	1/2" npt (f)
Weight of pump	50 lb (22.7 kg)
Instruction manual	308017

Bin Supply	President 20:1
Pump	246933
Air controls: FRL, 3/8"(f)	110150
Floor stand (3" inlet)	222780
Air run away control, 3/4"(f)	224040
Air speed control 1/2"(f)	510441

55-Gallon Drum Supply	President 20:1
Ram package with pump and air regulator	234369
Air run away control, 3/4"(f)	224040
Air speed control, 1/2"(f)	510441

5-Gallon Pail Supply	President 20:1
Cart package with pump	234370
Air run away control, 3/4"(f)	224040
Air speed control, 1/2"(f)	510441

Misc. Information	President 20:1
Pump lower section	246932
Ram plate replacement seals	165601



20:1 President



20:1 President
for 5 gallon pail supply
(mounted inductor setup)

Ordering Information and Technical Specifications

Piston Pumps with Sealed Wet Cup

Ink Pump Package							Maximum Air or Hydraulic Input Pressure	Maximum Fluid Working Pressure
Part No.	Series	Ratio	DataTrak	Remote DataTrak	Power Source	Displacement Pump Size	psi (MPa, bar)	psi (MPa, bar)
258744	A	14:1			Air	500 cc	100 (0.7, 7.0)	1400 (9.7, 97)
258745	A	14:1	x		Air	500 cc	100 (0.7, 7.0)	1400 (9.7, 97)
258746	A	14:1		x	Air	500 cc	100 (0.7, 7.0)	1400 (9.7, 97)
258747	A	23:1			Air	200 cc	100 (0.7, 7.0)	2300 (15.9, 159)
258748	A	23:1	x		Air	200 cc	100 (0.7, 7.0)	2300 (15.9, 159)
258749	A	23:1		x	Air	200 cc	100 (0.7, 7.0)	2300 (15.9, 159)
258750	A	26:1			Air	500 cc	100 (0.7, 7.0)	2600 (17.9, 179)
258751	A	26:1	x		Air	500 cc	100 (0.7, 7.0)	2600 (17.9, 179)
258752	A	26:1		x	Air	500 cc	100 (0.7, 7.0)	2600 (17.9, 179)
258753	A	1.6:1			Hydraulic Oil	500 cc	1500 (10, 103)	2300 (15.9, 159)

Motor Conversion Kits

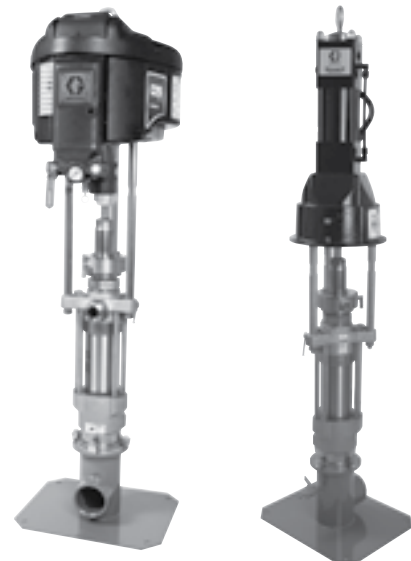
Part No.	Description
24C743	To install an L200CM Check-Mate displacement pump on an existing King air motor
24C744	To install an L500CM Check-Mate displacement pump on an existing King air motor
24D625	To install an L500CM Check-Mate displacement pump on an existing Viscount II hydraulic motor

Piston Pumps with Sealed Wet Cup	
Stroke length	
Pneumatic	4.75 in (120.65 mm)
Hydraulic	4.69 in (119.13 mm)
Maximum fluid operating temperature	180° F (82.3° C)
Air or Hydraulic Inlet Size	3/4 npt (f)
Fluid outlet size	200 cc displacement pump: 1 npt (f) 500 cc displacement pump: 1-1/2 npt (f)
Maximum pump speed	60 cpm

(Do not exceed maximum recommended speed of fluid pump, to prevent premature pump wear)

Other

Part No.	Description
222780	Floor Stand Kit See manual 307971



Pneumatic

Hydraulic

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.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

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.



ABOUT GRACO

PROVEN QUALITY. LEADING TECHNOLOGY.

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

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.

GRACO LOCATIONS

MAILING ADDRESS

P.O. Box 1441
Minneapolis, MN 55440-1441
Tel: 612-623-6000
Fax: 612-623-6777

AMERICAS

MINNESOTA

Worldwide Headquarters
Graco Inc.
88-11th Avenue N.E.
Minneapolis, MN 55413

EUROPE

BELGIUM

European Headquarters
Graco N.V.
Industrieterrein-Oude Bunders
Slakweidestraat 31
3630 Maasmechelen,
Belgium
Tel: 32 89 770 700
Fax: 32 89 770 777

ASIA PACIFIC

AUSTRALIA

Graco Australia Pty Ltd.
Suite 17, 2 Enterprise Drive
Bundoora, Victoria 3083
Australia
Tel: 61 3 9467 8558
Fax: 61 3 9467 8559

CHINA

Graco Hong Kong Ltd.
Shanghai Representative Office
Room 118 1st Floor
No.2 Xin Yuan Building
No.509 Cao Bao Road
Shanghai, 200233
The People's Republic of China
Tel: 86 21 649 50088
Fax: 86 21 649 50077

INDIA

Graco Hong Kong Ltd.
India Liaison Office
Room 432, Augusta Point
Regus Business Centre 53
Golf Course Road
Gurgaon, Haryana
India 122001
Tel: 91 124 435 4208
Fax: 91 124 435 4001

JAPAN

Graco K.K.
1-27-12 Hayabuchi
Tsuzuki-ku
Yokohama City, Japan 2240025
Tel: 81 45 593 7300
Fax: 81 45 593 7301

KOREA

Graco Korea Inc.
Shinhan Bank Building
4th Floor #1599
Gwanyang-Dong, Dongan-Ku,
Anyang-si, Korea 431-060
Tel: 82 31 476 9400
Fax: 82 31 476 9801

SALES/ DISTRIBUTION/ SERVICE

Call today for product information or to request a demonstration.

877-84GRACO (1-877-844-7226) or visit us at www.graco.com.

Graco Inc. is registered to I.S. EN ISO 9001



North America
Customer Service
800-328-0211
Fax 877-340-6427