

# Process Equipment

Air-Operated Pumps and Accessories for Process Industries



PROVEN QUALITY. LEADING TECHNOLOGY.

# Superior Pumping Technology



AIR-OPERATED PUMPS

## The Most Durable Piston and Diaphragm Pumps!

At Graco®, we provide durable pumping solutions for your applications. Every pump is manufactured with your productivity in mind – providing you a more reliable, efficient pump!

- **Rugged construction** resists corrosion and ensures clean fluid changes.
- **Heavy-duty design** offers long life, increased productivity and lower overall cost of ownership.
- **Air-powered** for increased reliability and lower costs.
- **Pneumatically driven** for increased reliability and power on demand service.

## KEY FLUIDS

- Paints, stains, coatings, inks and dyes
- Chemicals
- Acids
- Corrosive and abrasive fluids
- Lubricants
- Ceramic glazes
- Sludge, slurry and waste fluid
- Soaps, detergents and solvents

## KEY APPLICATIONS

- Transferring fluids from drums
- Sanitizing buildings and equipment
- Removing waste fluid
- Unloading fluids
- Draining tanks and sumps
- Transferring high temperature acids
- Skimming and transferring oil
- Servicing lubrication equipment

## THE LONGEST WARRANTY AVAILABLE IN THE INDUSTRY!

Graco is so confident in the design of our Husky products and the manufacturing process, we offer an extended warranty on most products – including the longest warranty in the industry for diaphragm pumps!





# Perfect for a Wide Range of Applications

## Bulk Tank Supply and Evacuation

Husky™ air-operated double diaphragm pumps are ideal for unloading above or below ground tanks of any size. They are available in a wide range of materials of construction in sizes including: 1/4 in (6.3 mm), 3/8 in (9.4 mm), 1/2 in (12.7 mm), 3/4 in (19.1 mm), 1 in (25.4 mm), 1-1/2 in (38.1 mm), 2 in (50.8 mm) and 3 in (76.2 mm).



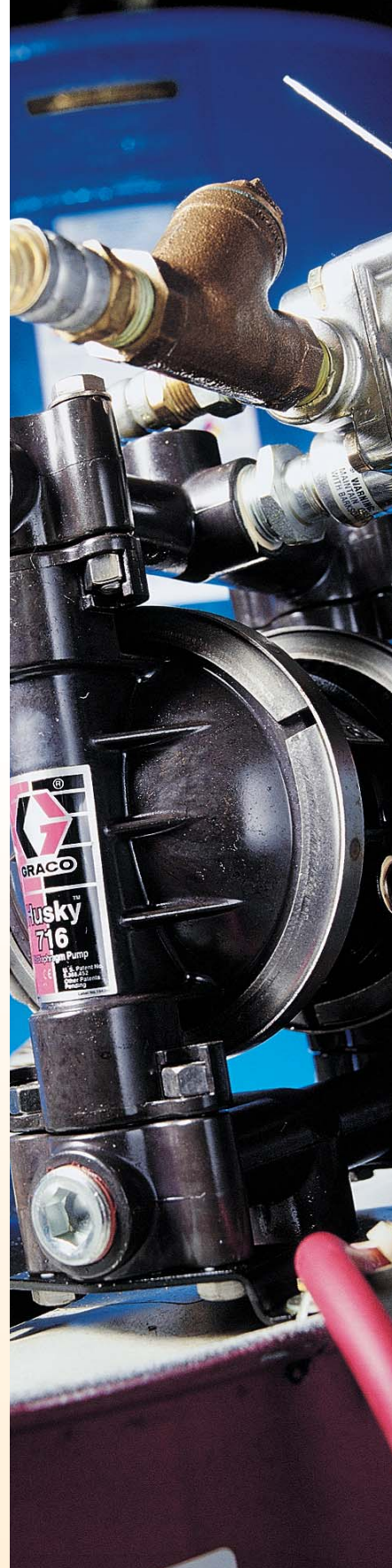
## 55 Gallon Drum Transfer and Supply

Pump from your 55 gallon drums with ease with one of two styles of pumps – double diaphragm or piston evacuation. They offer flow rates up to 12 gpm, and are available in several materials of construction including: aluminum, carbon steel, stainless steel, polypropylene and acetal.



## Maintenance and Production Cleaning

Designed for rugged dependability, pneumatically-driven pumps offer simplicity in design, operation and maintenance. They provide high pressure for water and cleaning chemicals up to 3,400 psi, and flow rates up to 9 gpm.



# Air-Operated Double Diaphragm Pumps

## Model Overview



MODEL	HUSKY 205	HUSKY 307	HUSKY 515	HUSKY 716
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)
Maximum Flow Rate*	5 gpm (19 lpm)	7 gpm (26 lpm)	15 gpm (57 lpm)	16 gpm (61 lpm)
Materials of Construction Available	Polypropylene, Kynar (PVDF), Acetal	Polypropylene, Acetal	Polypropylene, Kynar (PVDF), Acetal	Aluminum, 316 Stainless Steel
Center Section Available	Polypropylene	Coated Aluminum	Polypropylene	Polypropylene
Typical Fluids Handled	Waterborne materials, paint, coatings, inks, car wash chemicals	Paints, lubricants, inks, stains, solvents, coatings and dyes	Cleaning fluids, detergents, chemicals, ceramic glazes, inks	Oil, water and most solvents

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

Note: Husky 307 and Husky 3275 are only available with standard air valves. All other pumps are available with standard or remote air valves

## Accessories



### FLANGE KIT

- Converts a thread pump connection to ANSI
- Converts ANSI pump connection to thread



### INLET FLOW CONTROL

- Agitators or mixers that keep fluid in suspension within a tank, vat or drum



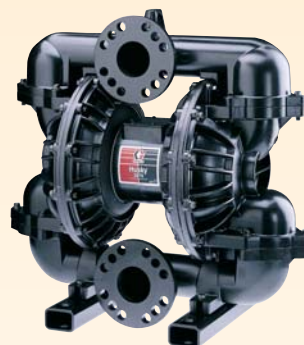
### MUFFLERS

- Reduces sound level of pump during exhaust
- Comes standard on all Graco models



### AIR INLET CONTROL

- Regulators control speed and pressure of pump



### HUSKY 1040

1 in (25.4 mm)

40 gpm  
(151 lpm)

Polypropylene,  
Kynar (PVDF),  
Aluminum,  
316 Stainless Steel

Coated Aluminum,  
316 Stainless Steel

Chemicals, contaminated  
surface water, acids,  
adhesives and varnishes

### HUSKY 1590

1-1/2 in (38.1 mm)

90 gpm  
(340 lpm)

Polypropylene,  
Kynar (PVDF),  
Aluminum,  
316 Stainless Steel

Coated Aluminum,  
316 Stainless Steel

Chemicals, corrosive fluids,  
acids, latex, abrasive fluids,  
slurries and sludge

### HUSKY 2150

2 in (50.8 mm)

150 gpm  
(568 lpm)

Polypropylene,  
Kynar (PVDF),  
Aluminum,  
316 Stainless Steel,  
Ductile Iron

Coated Aluminum,  
316 Stainless Steel

Acids, gases, ship cleaning,  
stripping chemicals, alkalies,  
solvents, paints and varnishes

### HUSKY 3275

3 in (76.2 mm)

275 gpm  
(1041 lpm)

Aluminum

Coated Aluminum

Chemicals, bulk paint resins  
and ceramic slip



### OUTLET CONTROL

- Surge suppressor reduces pressure spikes during pump changeover
- Filter and strainer removes large particles from out-bound fluid stream



### LEAK DETECTOR

- Contains leakage if diaphragm fails
- Signals automatic pump shut down and sounds optional alarm



### CYCLEFLO™

- Controls speed and pressure on remote pumps
- Used in dosing applications



# The Husky Diaphragm Pump Advantage

## The Simplicity of the Husky Air Valve

Our Husky air-operated double diaphragm pumps feature extremely reliable, externally serviceable air valves – making these Husky pumps among the best in the industry!



*Top view of air valve*

### FEATURES AND BENEFITS

- Fewer moving parts means increased durability and less repair time
- Three-way pilot valve for true non-sticking operation
- Externally serviceable for quick, inexpensive repairs
- The elimination of o-rings and a spool valve prevents centering; a common problem with competitive pumps
- Lube-free for cleaner operation – essential when handling food products

## Reduce Downtime and Save Money!

When it comes to chemical, sanitary and ink applications, it's tough to beat these Graco pumps! Our Husky air-operated double diaphragm pumps are loaded with features to help you get the job done right, every time, and are built to save you money.

### Graco Air Valve



### Competitor Air Valve



# System Components

## **A EASY MAINTENANCE**

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

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

- Three-way pilot valve for no-stick operation
- All parts are easily accessible
- No air-line lubrication required

## **C PRECISION-FITTED PARTS**

- Long-wearing end bearings assure positive rod alignment and are easy to replace

## **D PROTECTIVE EXHAUST PORT**

- Common port for all exhaust prevents vapors in room from attacking air motor seals
- Easily submerges for sump or disposal operations sitting idle

## **E RUGGED EXTERIOR CONSTRUCTION**

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

## **F FLUID COMPATIBILITY**

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

## **G POSITIVE SEAL DESIGN**

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

## **H HEAVY DUTY DIAPHRAGM PLATES**

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



## **I LONG LASTING ROD DESIGN**

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

## **J EASY ALIGNMENT**

- Bolted, self-aligning air and fluid sections

## **K CHOICE OF ELASTOMERS**

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

# Transfer Pumps



**FAST-FLO® 1:1**



**HUSKY 515 TRANSFER**



**HUSKY 716 TRANSFER**

## Air-Powered for High Reliability at an Affordable Price!

Perfect for low to medium viscosity fluids and shear sensitive materials. Transfer pumps offer superior reliability at an affordable price!

### PISTON PUMPS

- Flow rates up to 5 gpm
- Stainless steel and carbon steel options
- Drum length versions have inlet immersed in material for quicker priming of heavier fluid
- Immersed inlets hold prime better than non-immersed
- Available with optional stubby and drum length models
- Air-powered for high reliability and low cost
- Plate (flat) check options for lower viscosity fluids
- UL and CE options available when installed in accordance with NFPA

### HUSKY TRANSFER PUMPS

- Excellent for abrasive, low to medium viscosity fluids and shear sensitive materials
- Suction tube is immersed inside the drum – not the pump
- Quick-priming and immediate flow of product
- Handles fluid viscosities up to 5,000 cps and solids up to 0.09 in (2.29 mm)
- Runs dry without damaging the pump
- Provides air tight seal for moisture-sensitive fluids
- Bung adapter fits into any 2 in (50.8 mm) bung opening
- Easy-out seal provides fast slide in and out of drums without disconnecting hoses and accommodates slightly off-sized drums up to 2-1/2 in (63.5 mm)



# Hydra-Clean® Pumps

## On-Demand High Pressure Cleaning Pumps

Graco Hydra-Clean heavy-duty pressure washers support multiple guns and are perfect for use in a variety of in-plant cleaning applications.

### FEATURES AND BENEFITS

- Versatility in variable pressure, flow and chemical injection provides best cleaning action
- Some models available with chemical injectors
- Configurations available to fit most in plant application requirements
- On demand supply pump stops when valve is closed and runs when valve open
- Does not require an automatic shut off when not in use
- Cleaning chemical passes through pump, providing concentrate levels above 5%
- Multiple gun capacity (determined by the tip size)
- For use with cold or hot water up to 200°F (93°C)

### TYPICAL APPLICATIONS

- Oil refineries
- Vehicle fleets, buses and transit systems
- Heavy construction equipment, off-highway vehicles
- General industrial equipment
- Sanitizing



**BULLDOG® 10:1  
CART MOUNT**



**PRESIDENT® 10:1  
OPEN DRUM MOUNT**

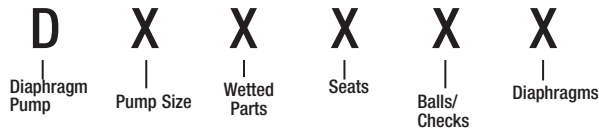


**PREMIER® 34:1**

# Selection Key

## Diaphragm 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: polypropylene 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 7 = 1" (25.4 mm) Standard: aluminum center section 8 = 1" (25.4 mm) Remote: aluminum center section R = 1" (25.4 mm) Standard: stainless steel center section 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 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 K = 3" (76.2 mm) Standard: aluminum center section	1 = Acetal (npt) 2 = Poly (npt) 3 = Aluminum (npt) 4 = Stainless Steel (npt) 5 = Kynar (npt) 6 = Ductile Iron (npt)  A = Acetal * (bsp) B = Poly * (bsp) C = Aluminum (bsp) D = Stainless Steel (bsp) E = Kynar (bsp) F = Ductile Iron (bsp)  H = 2 npt Alum Extended G = 2 bsp Alum Extended	2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = Hytrel 6 = Santoprene 7 = Buna N 8 = Viton 9 = Polypropylene A = Kynar G = Geolast  B = SST with viton seal C = Santoprene with viton seal	1 = PTFE 2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = Hytrel 6 = Santoprene 7 = Buna N 8 = Viton 9 = Polypropylene A = Kynar G = Geolast	1 = PTFE 5 = Hytrel 6 = Santoprene 7 = Buna N 8 = Viton G = Geolast

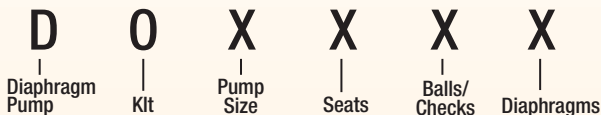
\* = BSP plastic in 1/2" (12.7mm) pumps

≥1" Plastic pumps flange connections

3" Aluminum pumps flange connections

## 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) 7 = 1 in (25.4 mm) metal pump 8 = 1 in (25.4 mm) plastic pump 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 = Hytrel 6 = Santoprene 7 = Buna N 8 = Viton 9 = Poly A = Kynar B = SST with viton seal C = Santoprene with viton seal G = Geolast	1 = PTFE 2 = Acetal 3 = Stainless Steel 4 = Hardened SST 5 = Hytrel 6 = Santoprene 7 = Buna-N 8 = Viton 9 = Poly A = Kynar G = Geolast  0 = No Balls/Checks	1 = PTFE 5 = Hytrel 6 = Santoprene 7 = Buna-N 8 = Viton G = Geolast  0 = No Diaphragm

# Ordering Information

## PISTON PUMPS

Part Number	Pump Material	Seat Material	Packings	Certificates
226940	Carbon Steel	Disc	PTFE/Leather	UL, CE
226941	Carbon Steel	Disc	Polyethylene	UL
226942	Stainless Steel	Ball	Polyethylene	UL
226944	Carbon Steel	Disc	Polyethylene	UL, CE
226945	Stainless Steel	Ball	Polyethylene	UL
226946	Stainless Steel	Ball	PTFE	
237129	Stainless Steel	Ball	PTFE	
237132	Stainless Steel	Ball	PTFE	

## HYDRA-CLEAN PUMPS

Model	10:1 President	10:1 Bulldog	34:1 Premier
Part Number	206515	226314	965389
Max. Flow Rate	3 gpm (11.4 lpm)	8 gpm (29 lpm)	9.2 gpm (34.8 lpm)
Mounting	Side drum	Portable cart	Portable cart
Hose Length*	40' x 3/8"	40' x 3/8"	40' x 3/8"
Hydra-Clean Gun*	208008	208008	208008
Tip*	103921	103921	103921
Flow rate @ 700 psi	2.3 gpm (8.9 lpm)	2.3 gpm (8.9 lpm)	2.3 gpm (8.9 lpm)
Flow rate @ 1000 psi	2.7 gpm (10.2 lpm)	2.7 gpm (10.2 lpm)	2.7 gpm (10.2 lpm)
Chemical Injector	Not included	Not included	Included

*\*Included with standard Hydra-Clean order*

## TRANSFER PUMPS

Part Number	Description	Tube Type
233051	D52911	Polypropylene tube
233052	D51211	Stainless Steel tube
233053	D51211	Aluminum tube
233054	D53266	Aluminum tube
233055	D53277	Aluminum tube
233056	D53211	Aluminum tube
233057	D54311	Stainless Steel tube





## 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.

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## SALES/DISTRIBUTION/SERVICE

Call today for product information or to request a demonstration.

**1.877.84GRACO** (1-877-844-7226) or visit us at [www.graco.com](http://www.graco.com).

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