



First choice when  
quality counts.™

# Husky™ 307 Air-Operated Diaphragm Pump

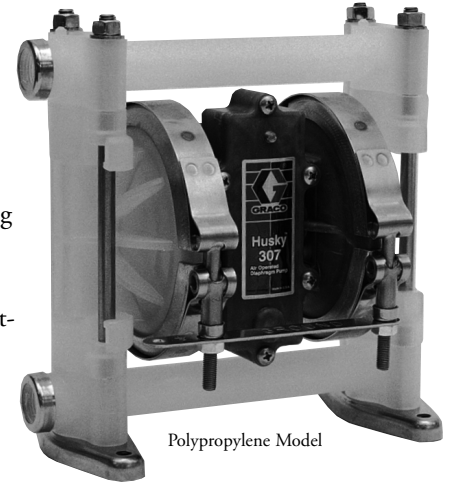
- **Fully groundable acetal model**
- **Delivery up to 26.5 l/Min.**
- **Operates on as little as 1.4 bar (0.1 MPa) air pressure**
- **Easy-to-service air valve & ball checks**
- **Quiet operation—75 dBA at 3.5 bar (0.3 MPa) and 60 cpm**

## Economical 3/8" Diaphragm Pump

Graco's Husky 307 diaphragm pump is designed to operate at low air pressure while delivering a smooth, reliable flow. Husky 307 pumps are ideal for transferring a wide variety of fluids.

Two models are offered:

- Acetal wetted construction suitable for water-, solvent- and petroleum-based fluids, with either Teflon® or Hytrel® diaphragms and ball checks.
- Polypropylene wetted construction for most acids and caustic fluids, with either Teflon or Hytrel diaphragms and ball checks.



Polypropylene Model

**Low cost,  
reliable transfer  
pump handles  
a variety of  
fluids**



## New Air Valve Design

The Husky 307 features Graco's new patented air valve design with the following advantages:

- Simplified design (only 15 parts) improves reliability and serviceability – air valve is accessed by removing only six screws and there are no pilot valves.
- Lubricated air is not required.
- Air valve uses compressed air very efficiently, for lower operating cost.
- Air valve will operate on as little as 1.4 bar (0.1 MPa). This allows the pump to cycle at low flow rates, producing a gentle pumping action – ideal for shear-sensitive fluids and for spraying coatings.
- Reset button offers convenient re-starting under tough service conditions.



Acetal Model

## Typical Applications

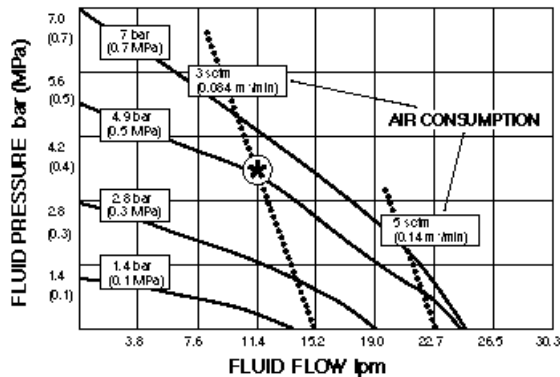
- Drum transfer for fluids up to 1000 centipoise
- Circulation of low viscosity inks, stains and dyes
- Coolant circulation and evacuation
- Waste fluid removal
- On-demand batch chemical metering
- Low viscosity adhesive supply
- Consistent low pressure air spray or HVLP supply

## Typical Fluids Handled

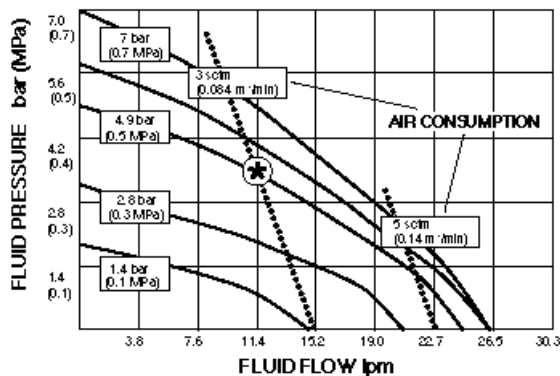
- Paints
- Lubricants
- Inks
- Stains
- Solvents
- Coatings
- Dyes

# Husky 307 Performance

(with Teflon Diaphragm and Ball Checks)



(with Hytrel Diaphragm and Ball Checks)



## How to read the performance charts

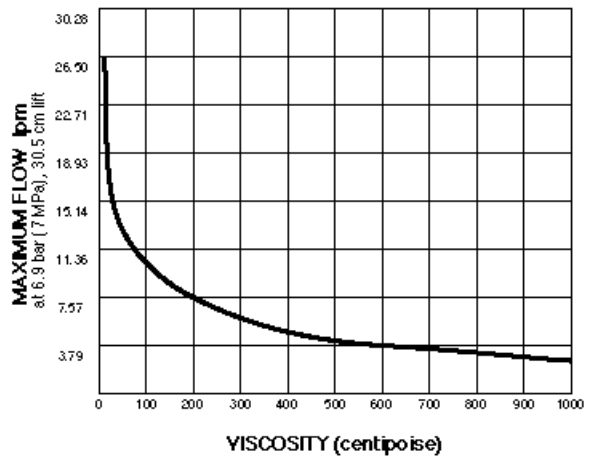
**To determine the fluid pressure:** Locate the desired *fluid flow* on the horizontal axis, and read up to the appropriate incoming *air pressure* curve. From that intersection, read across to find the *fluid pressure*.

**To determine the fluid flow:** Locate the desired *fluid pressure* on the vertical axis, and read across to the appropriate incoming *air pressure* curve. From that intersection, read down to the horizontal axis to find the maximum *fluid flow*.

**To determine the air consumption:** Find the intersection of the *fluid pressure* on the vertical axis and the appropriate incoming *air pressure* curve. Locate the nearest *air consumption* line to interpolate the air consumption.

*For Example (See \* on Performance Chart):  
For fluid pressure of 3.5 bar (0.3 MPa) at 4.9 bar (0.5 MPa) incoming air pressure, the maximum fluid flow is 11.4 lpm and air consumption is 3 scfm (0.084 m<sup>3</sup>/min).*

# Viscosity Correction Curve



## How to read the viscosity correction chart

**To determine the maximum flow rate for any viscosity:** On the horizontal axis, find the *viscosity* of the fluid. Move straight up to the intersection of the curve. From that point, read across to the *maximum flow* on the vertical axis.

**To adjust the performance chart for higher viscosity fluids:** (The performance charts are based on the viscosity of water, 1 centipoise). First determine (A) the *fluid flow* for water using the Performance Chart. Then find (B) the *maximum flow* using the Viscosity Correction Chart. Next, choose (C) the *maximum rated flow* for the pump:

Hytrel diaphragms	26.5 l/Min.
Teflon diaphragms	24.6 l/Min.

The *adjusted flow rate* of the higher viscosity fluid is equal to:

$$A \times B/C$$

*For example: A Teflon diaphragm pump operates at 2.8 bar (0.3 MPa) fluid pressure at 4.9 bar (0.5 MPa) incoming air pressure. What is the adjusted flow rate for a fluid with a viscosity of 600 centipoise?*

$$13.25 \text{ l/Min.} \times 3.8 \text{ l/Min.} / 24.6 \text{ l/Min.} = 2.04 \text{ l/Min.}$$

## Accessories

### 222-011 Grounding Wire and Clamp

7.5 m long

### 110-223 Air Bleed Valve

Maximum working pressure: 21 bar (2.1 MPa).  
Inlet and outlet: 1/4" npt(f).

### Air Line Quick Disconnect

208-536 Coupler 1/4" npt(f).

169-970 Fitting 1/4" npt(m).

### 110-147 Air Regulator and Gauge

Adjustment range: 0-11 bar (0-1.1 MPa).  
Maximum working pressure: 21 bar (2.1 MPa).  
Inlet and outlet: 1/4" npt(f).

### 205-090 Air Control Needle Valve

Maximum working pressure: 21 bar (2.1 MPa).  
Inlet: 1/4" npt(m). Outlet: 1/4" npt(f).

### 110-146 Air Line Filter

Maximum working pressure: 21 bar (2.1 MPa).  
Reusable 20 micron filter and drain cock.  
Inlet and outlet: 1/4" npt(f).

### 221-169 Air Hose

Maximum working pressure: 21 bar (2.1 MPa).  
13mm x 3 m. Coupled 1/2" npt(m) x 1/4" npt(m).

### Dynamic Surge Suppressors

Maximum working pressure: 7 bar (0.7 MPa).  
Fluid inlet and outlet: 3/4" npt(f). Air inlet: 1/4" npt(f).

224-892 Aluminum/Teflon diaphragm

224-893 Aluminum/Buna-N diaphragm

224-894 SST/Teflon diaphragm

224-895 SST/Buna-N diaphragm

### Groundable Fluid Hoses

Maximum working pressure: 21 bar (2.1 MPa). Nylon core, synthetic rubber cover. Inside diameter: 10 mm, 3/8 npt(fbe).

205-169 0.9 m long

205-398 1.8 m long

235-651 3 m long

205-142 7.5 m long

### Fluid Drain Valves

236-621 SST/Teflon  
3/8" npt(m) x 3/8" npt(f).

208-391 Carbon Steel/Teflon  
3/8" npt(m) x 3/8" npt(f).

### 235-344 Fluid Regulation Kit

Maximum working pressure: 17.5 bar (1.7 MPa).  
Regulated pressure range: 0.3-7 bar (0.03-0.7 MPa).  
Includes SST regulator with Teflon diaphragm, gauge and fittings. Inlet: 3/8" npsm(f).  
Outlet: 3/8" npt(f) outlet.

### 110-134 Fluid Pressure Relief Valve

Prevents overpressurization of pump due to thermal expansion or fluid backup in the outlet line. Venting pressure: 10.5 bar (1.0 MPa). Brass and Buna-N, 1/4" npt(m x f).

### 235-654 19 Litre Pail-Cover Mount

Includes SST pail cover, agitator port (plugged), nylon suction tube with strainer.

### 6880-173 19 Litre Pail-Cover Mount

Same as 235-654, but for European pail dimensions.

### 224-834 Acetal Transfer Kit

200 litre. Drum kit includes bung adapter, suction tube and fittings.

### 188-181 Acetal Bung Adapter

Adapter screws into the two-inch opening on a closed-head drum to accept a 19 mm OD rigid suction tube.

### 235-509 Bung Adapter Vent

Installs on bung adapter (188-181 or 188-182) to minimize escape of vapor fumes from drum.

### 235-500 Acetal Remote Suction Kit

200 litre. Drum kit contains bung adapter, suction tube, hose and fittings for feeding a remote wall-mounted pump from a 200 litre drum.

### 235-643 Acetal Inlet Strainer Kit

20 mesh strainer mounts ahead of pump inlet to filter fluid coming from drum.

### 112-032 100 Mesh Strainer Insert

### Diaphragm Kits

Includes diaphragm, bearing, U-cup, O-rings, and sealant.

### D03-001 Teflon Diaphragm Kit

For models D31-211, D31-331, et D37-911.

### D03-005 Hytrel Diaphragm Kit

For models D31-255 and D31-955.

### Repair Kits

Includes ball, ball guide and seat, and O-ring.

### D03-210 Teflon Ball Repair Kit

For D31-211 acetal pump.

### D03-250 Hytrel Ball Repair Kit

For D31-255 acetal pump.

### D03-910 Teflon Ball Repair Kit

For D32-911 polypropylene pump.

### D03-950 Hytrel Ball Repair Kit

For D32-955 polypropylene pump.

### D03-330 Stainless Steel Ball Repair Kit

For D31-331 acetal pump.

### 224-820 Air Valve Kit

Replacement air valve assembly.

