



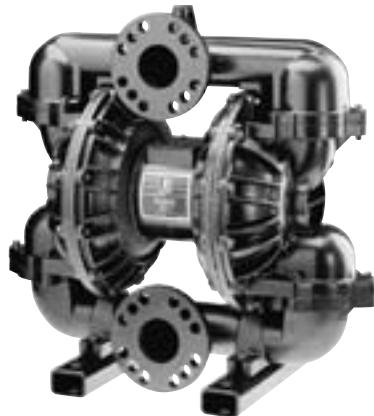
# Husky 3275 Aluminum Pumps

## Air-Operated Double-Diaphragm

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### Features

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



*Husky 3275 Aluminum  
DK3XXX*

### Typical Applications

- Chemical transfers
- Filter press-feed
- Dewatering

### Typical Fluids Handled

- Chemicals
- Bulk paint resins
- Ceramic slip

# Husky 3275

## Aluminum Pumps

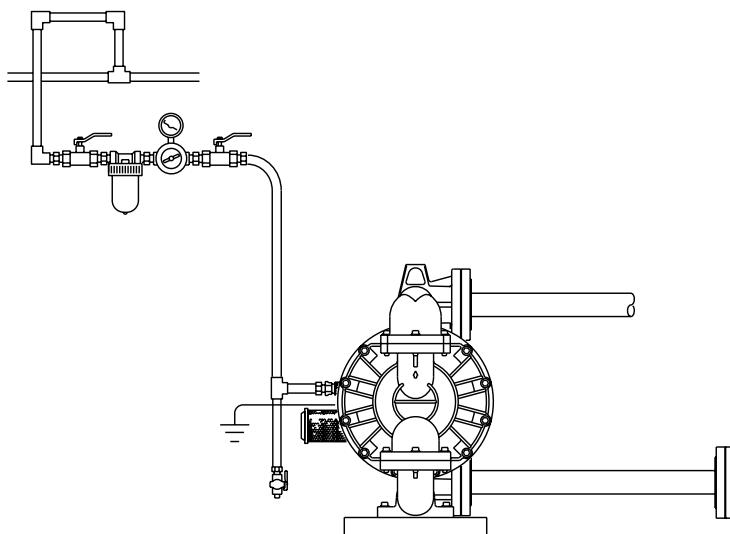
### Technical Specifications

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

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

### Typical System Drawing

#### Husky 3275 Above Ground Gravity Feed



# Husky 3275

## Aluminum Pumps

### Ordering Information

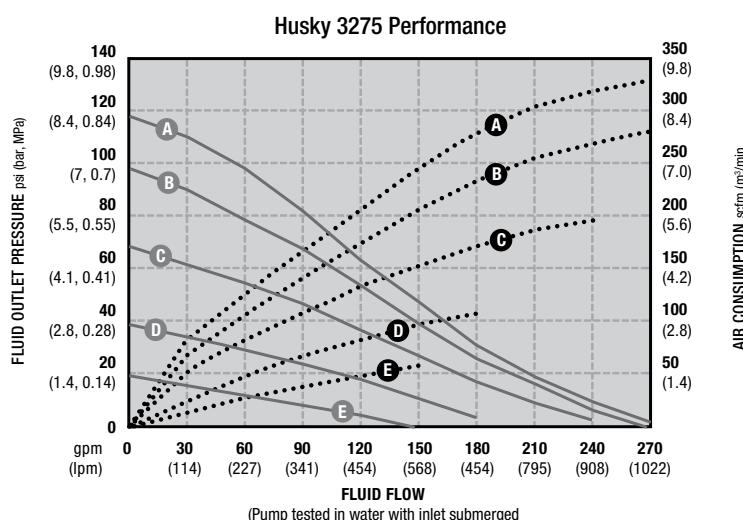
D      X      X      X      X      X  
 Diaphragm Pump      Pump Size      Wetted Parts      Seats      Balls/Checks      Diaphragms

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

### Accessories

See page 76 for additional accessories.

### Performance Chart



| 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)  |                       |

# Husky 3275

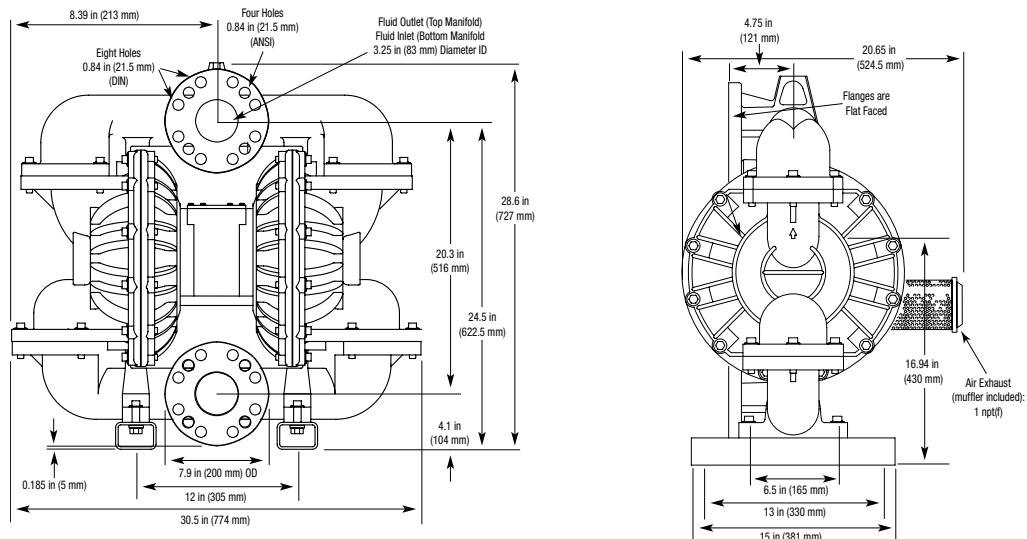
## Aluminum Pumps

### Popular Models

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

\*Air control includes air regulator and filter with gauge

### Dimensions



# Pump Selection Key

## Wetted Parts Material Options

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

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

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

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

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

- High abrasion resistance
- Low cost alternative to stainless steel

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

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

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

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

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

- Wide chemical compatibility
- General purpose
- Inexpensive alternative

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

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

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

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

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

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

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

- Good abrasion resistance
- Often substituted for Buna-N

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

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

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

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

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

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

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# Diaphragm Compatibility



## Diaphragm Material Compatibility

| Material   | Resistance to: |          |          |                 |                   |                 |                |               |                 |               |                      |             |                      |             |       |       |
|------------|----------------|----------|----------|-----------------|-------------------|-----------------|----------------|---------------|-----------------|---------------|----------------------|-------------|----------------------|-------------|-------|-------|
|            | Acids          | Alcohols | Solvents | Detergents/Soap | Gasoline Unleaded | Gasoline Leaded | Animal Fat/Oil | Vegetable Oil | Vegetable Juice | Milk Products | Ketchup/Tomato Juice | Fruit Juice | Petroleum-based Oils | Natural Gas | Water | Steam |
| PTFE       | E              | E        | E        | E               | E                 | E               | E              | E             | E               | E             | E                    | E           | E                    | E           | E     | E     |
| Viton      | E              | E        | P        | E               | E                 | E               | E              | E             | E               | E             | E                    | E           | E                    | E           | E     | E     |
| Buna-N     | P              | E        | P        | E               | P                 | E               | E              | E             | E               | E             | E                    | E           | E                    | E           | E     | P     |
| EPDM*      | F              | F        | P        | E               | P                 | P               | F              | F             | F               | E             | E                    | P           | P                    | E           | E     | E     |
| Santoprene | E              | E        | P        | F               | P                 | P               | F              | E             | E               | E             | E                    | P           | P                    | E           | P     | P     |
| Geolast    | P              | E        | P        | E               | P                 | P               | E              | F             | E               | E             | E                    | E           | E                    | E           | E     | P     |
| Hytrel     | P              | F        | F        | E               | ?                 | ?               | ?              | ?             | ?               | E             | ?                    | ?           | ?                    | P           | E     | P     |
| Neoprene   | P              | F        | P        | F               | P                 | P               | P              | P             | P               | P             | ?                    | P           | F                    | E           | F     | P     |
| EPDM (3A)  | F              | F        | P        | E               | P                 | P               | F              | F             | F               | E             | E                    | P           | P                    | E           | E     | E     |

### Key

- E Excellent Compatibility
- F Fair Compatibility
- P Poor Compatibility
- ? Unknown

\* Used only as backer for PTFE diaphragm



# Diaphragm Compatibility

| Material  | Strengths   | Weakness   |
|---|---|--|
| PTFE/EPDM Two Piece   | Widest chemical compatibility, extreme corrosion resistance, very low frictional coefficient, non-adhesive, high heat resistance.   | Poor abrasive resistance.  |
| PTFE/EPDM Over-molded   | Same as above. Over-molded design does not entrap materials, making it easier to clean. Longer life than above.   | Same as above. Higher cost.  |
| Thermoplastic Polyester Elastomer (Hytrell)                       | Good low temp properties. Good abrasion resistance. Often substituted for Buna-N.   | Not good with acids. Poor with solvents and alcohols.  |
| Santoprene  | Good abrasion and chemical resistance. OK for use with some solvents (e. g. MEK, Acetone), caustic solutions, dilute acids, and alcohols. Often substituted for EPDM or EPR.  | Not for use with most solvents.  |
| Buna  | Good for petroleum-based fluids, water, oils, hydrocarbons and MILD chemicals (e. g. mineral spirits).  | Not for use with strong solvents or chemicals (e.g. acetone, MEK, ozone, chlorinated hydrocarbons, and nitro hydrocarbons) |
| Fluoroelastomer (Viton)   | High heat resistance. Good resistance to aggressive chemicals including acids and some solvents (e.g. xylene and mineral spirits). Good resistance to steam as well as animal, vegetable, and petroleum oils. Resists unleaded fuels. | Not for use with ketones, low molecular weight esters and nitro containing compounds.                                      |
| Gelast  | Good abrasion resistance. Approximately same chemical compatibility as Buna-N.  | Not for use with strong solvents or chemicals (e.g. acetone, MEK, ozone, chlorinated hydrocarbons, and nitro hydrocarbons) |
| Polychloroprene Over-molded (Neoprene)                            | High resilience. Good with whiskey, wine, beer and natural gas. One source calls an "all purpose polymer". About 30% higher abrasion resistance than Buna.  | Not for use with strong oxidizing acids, esters, ketones, chlorinated aromatic and nitro hydrocarbons.                     |
| EPDM, used with 3A pump (Ethylene Propylene Diene M-class rubber) | High heat resistance. Good resistance to gas permeability and to steam. OK with caustic solutions, dilute acids, ketones and alcohols. Recommended for use with CIP Sanitizing Agent OXONIA.  | Poor petroleum oil and solvent resistance. Not for use with aromatic hydrocarbons.   |

# Material Viscosity Considerations

- The Husky 205 can handle up to 500 cps material
- The Husky 3275 can handle up to 25,000 cps material

