

# AA40 (1 1/2")

## Sales & Engineering Data Sheet

### Non-Metallic Polypropylene & PVDF

#### Specifications

Maximum fluid working pressure .....	125 psi (0.86 Mpa, 8.6 bar)
Air pressure operating range.....	20 to 125 psi (1.4 to 8.6 bar, 0.14 to 0.86 MPa)
Maximum air consumption.....	85 scfm
Air consumption at 70psi/60gpm.....	43 scfm (see chart)
Maximum free flow delivery .....	120 gpm (454 l/min)
Maximum pump speed.....	192 cpm
Gallons (litres)per cycle.....	0.63 (2.4)
Maximum suction lift.....	31 ft (9.4 m) wet/dry 16 ft (4.9 m)
Maximum size pumpable solids.....	1/4 in. (6.3 mm)
*Maximum noise level at 100psi, full flow.....	94 dBa
Sound power level.....	102.1 dBa
*Noise level at 70psi, 50 cycles/min.....	90.9 dBa
Maximum operating temperature .....	150°F (65.5°C)
Fluid inlet size .....	1-1/2 in. raised face flange
Fluid outlet size .....	1-1/2 in. raised face flange
Non-wetted external parts.....	polypropylene, 302 and 316 stainless steel, Polyester (labels)
Weight	
Polypropylene Pumps:.....	with polypropylene center section 57lb (25.9kg)
PVDF Pumps:.....	with polypropylene center section 74lb (33.6kg)



**AA40 PUMP**

#### Material Options

Choose from a wide selection of materials to handle numerous applications, including corrosive and abrasive fluid transfer.

##### Key Fluids

- Paints, coatings, inks & dyes
- Chemicals / Acids
- Corrosive and abrasive fluids
- Lubricants
- Ceramic glazes
- Sludge, slurry and waste fluid



# Dimensional Drawing

## End Flange Models, Polypropylene & PVDF

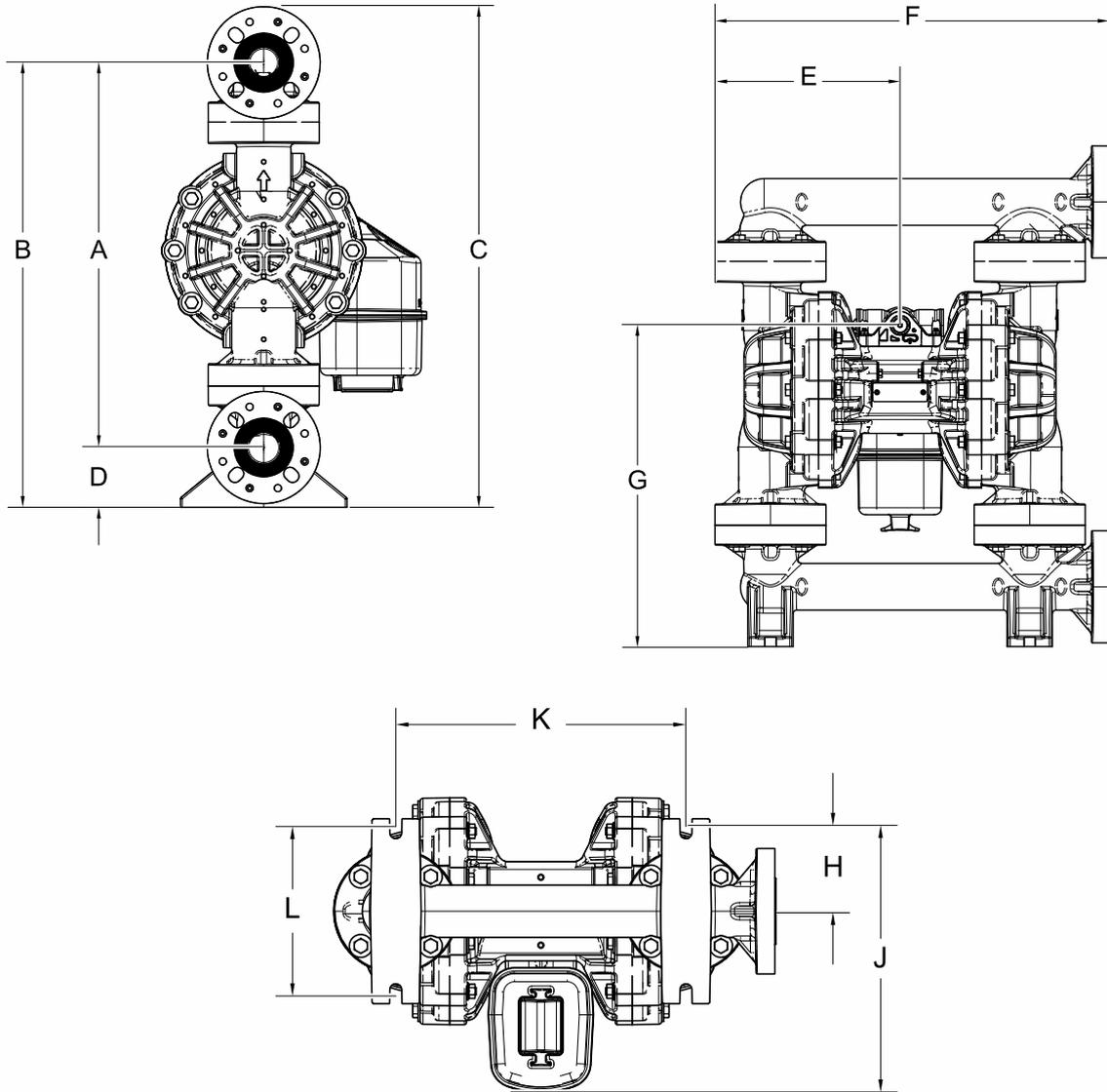


Table 1 Dimensions for Polypropylene or PVDF Pumps

Ref.	Inches	Centimeters
A	20.6	52.3
B	23.8	60.4
C	26.8	68.1
D	3.2	8.1
E	9.9	25.1
F	21.0	53.3

Ref.	Inches	Centimeters
G	17.2	43.7
H	3.8	9.6
J	12.4	31.5
K	13.8	35.1
L	7.5	19.1

## Dimensional Drawing

Center Flange Models, Polypropylene Only

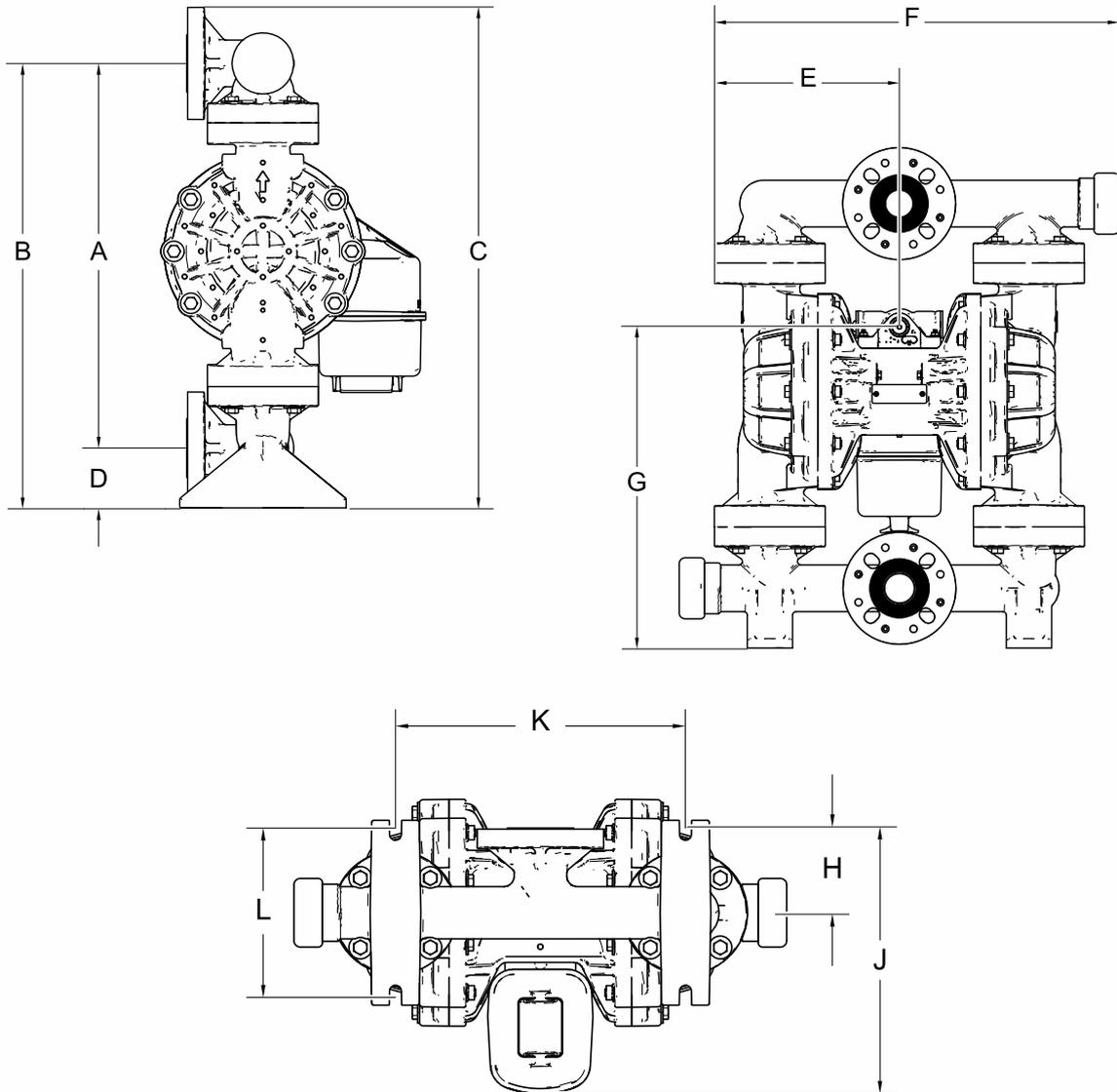


Table 2 Dimensions for Polypropylene Pumps

Ref.	Inches	Centimeters
A	20.6	52.3
B	23.8	60.4
C	26.8	68.1
D	3.2	8.1
E	9.9	25.1
F	21.0	53.3

Ref.	Inches	Centimeters
G	17.2	43.7
H	3.8	9.6
J	12.4	31.5
K	13.8	35.1
L	7.5	19.1

# Performance Chart Ashton AA40

Test Conditions: Pump tested in water with inlet submerged.

## Single Part Diaphragms

### Operating Air Pressure

**A**

125 psi (0.86 MPa, 8.6 bar)

**B**

100 psi (0.7 MPa, 7.0 bar)

**C**

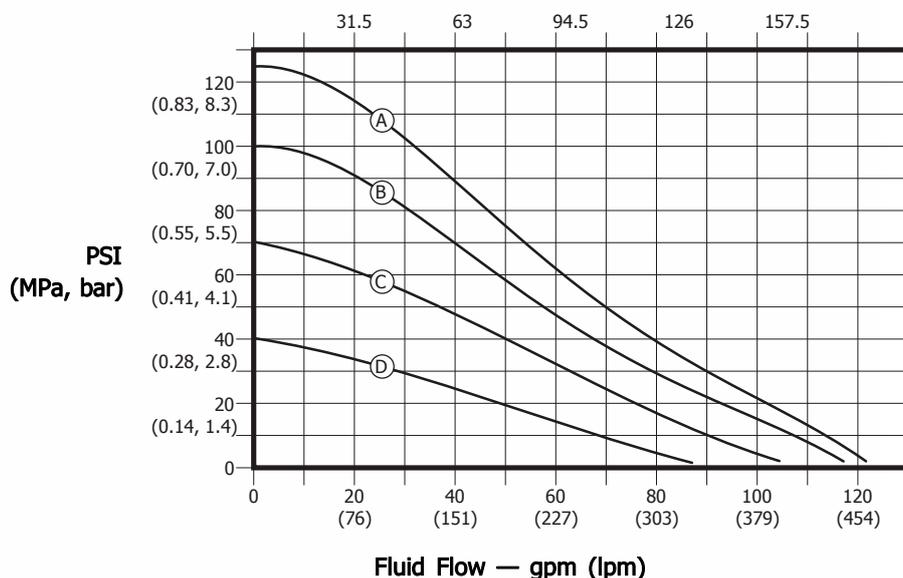
70 psi (0.48 MPa, 4.8 bar)

**D**

40 psi (0.28 MPa, 2.8 bar)

## Fluid Pressure

Approximate Cycles per Minute

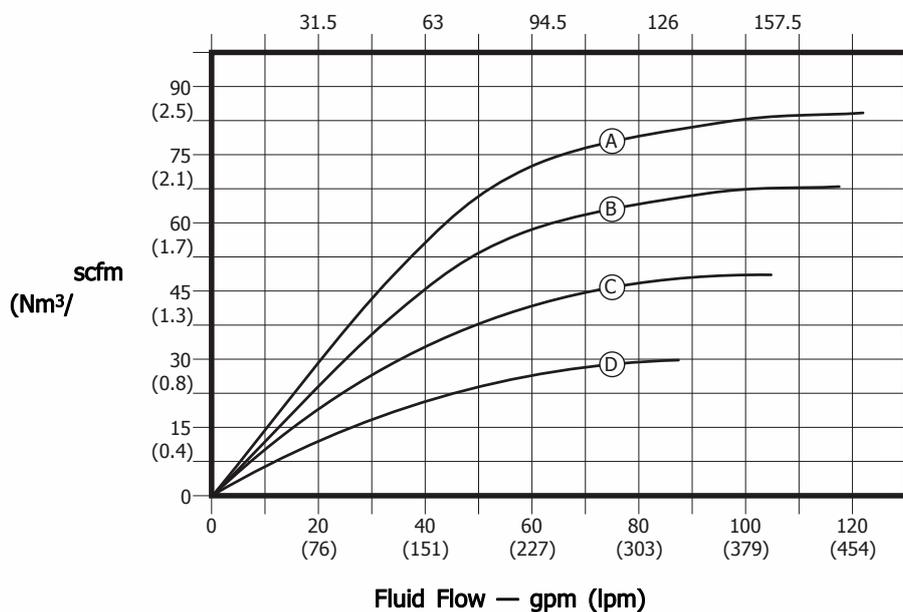


### How to Read the Charts

1. Locate fluid flow rate along bottom of chart.
2. Follow vertical line up to intersection with selected operating air pressure curve.
3. Follow left to scale to read **fluid outlet pressure** (top chart) or **air consumption** (bottom chart)

## Air Consumption

Approximate Cycles per Minute



# Performance Chart Ashton AA40

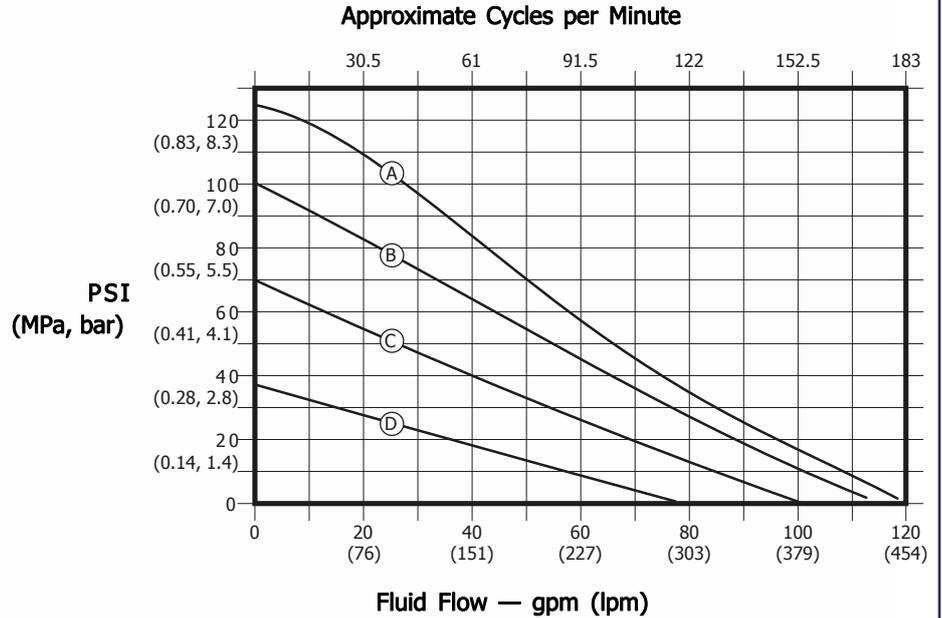
Test Conditions: Pump tested in water with inlet submerged.

## Two Part Diaphragms

### Operating Air Pressure

- A**  
125 psi (0.86 MPa, 8.6 bar)
- B**  
100 psi (0.7 MPa, 7.0 bar)
- C**  
70 psi (0.48 MPa, 4.8 bar)
- D**  
40 psi (0.28 MPa, 2.8 bar)

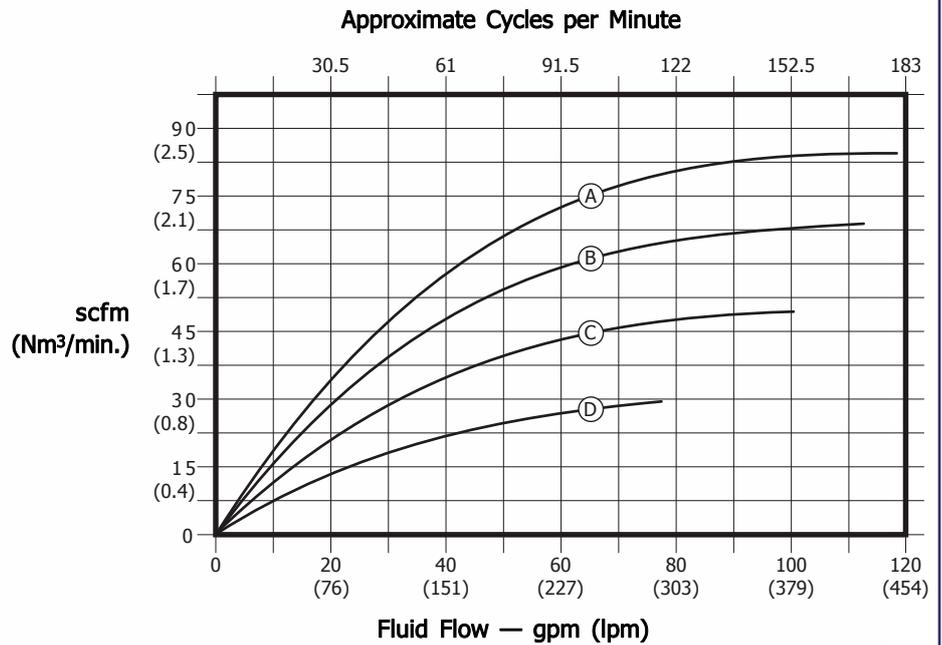
## Fluid Pressure



### How to Read the Charts

1. Locate fluid flow rate along bottom of chart.
2. Follow vertical line up to intersection with selected operating air pressure curve.
3. Follow left to scale to read **fluid outlet pressure** (top chart) or **air consumption** (bottom chart)

## Air Consumption



# Performance Chart Ashton AA40

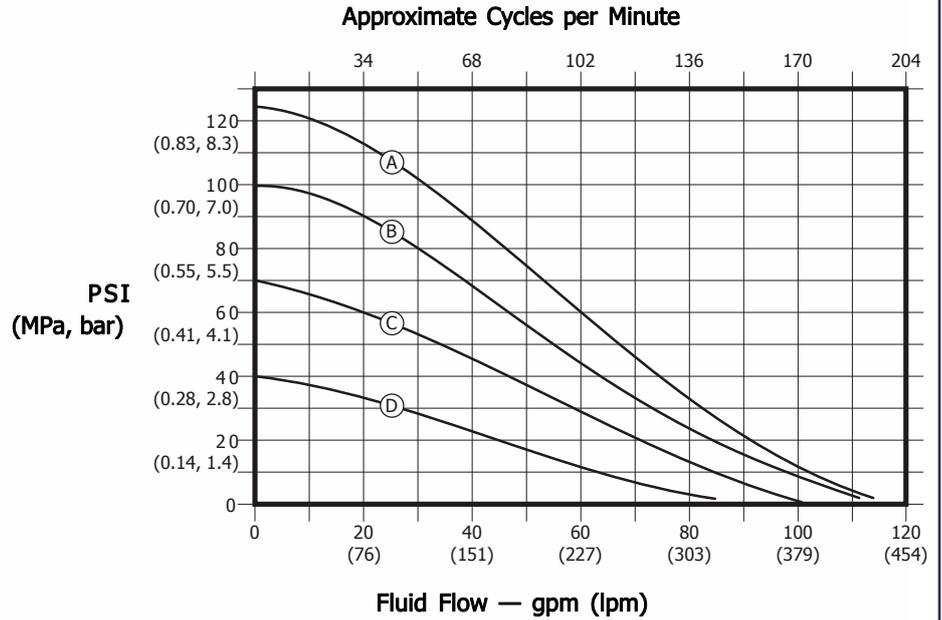
Test Conditions: Pump tested in water with inlet submerged.

## Over-Moulded Diaphragms

### Operating Air Pressure

- A**  
125 psi (0.86 MPa, 8.6 bar)
- B**  
100 psi (0.7 MPa, 7.0 bar)
- C**  
70 psi (0.48 MPa, 4.8 bar)
- D**  
40 psi (0.28 MPa, 2.8 bar)

## Fluid Pressure



### How to Read the Charts

1. Locate fluid flow rate along bottom of chart.
2. Follow vertical line up to intersection with selected operating air pressure curve.
3. Follow left to scale to read **fluid outlet pressure** (top chart) or **air consumption** (bottom chart)

## Air Consumption

