

## 1" (25MM) HEAVY DUTY BOLTED STYLE SOLIDS HANDLING PUMP

Engineered for maximum fluid and chemical compatibility. Heavy duty, non-metallic air section ensures stall free and freeze free operation. Our patented "Max-Pass™" valve system allows operation under a variety of conditions, ranging from clean fluids to slurries, to large solids. Bolted design provides ease of maintenance and leak free operation. Available in a variety of materials and options.

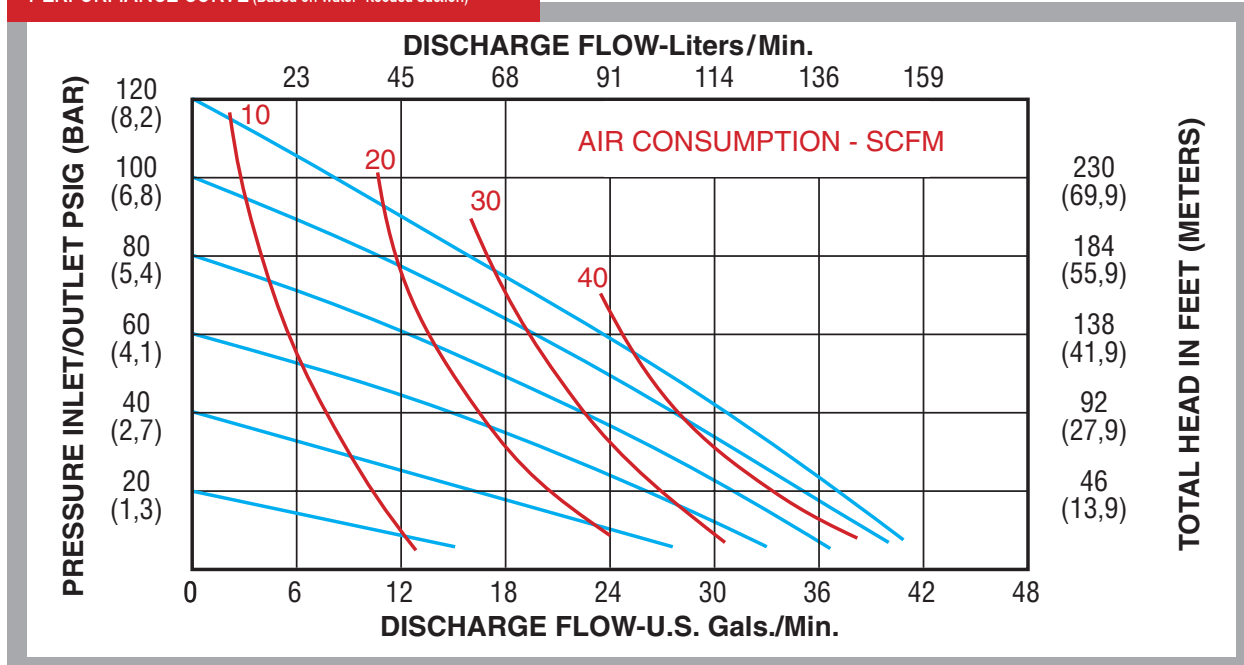
- Suitable for Clean Fluids, Slurries or up to 3/4" Solids
- All-Pür FDA Elastomers and Electropassivated Stainless Available
- Heavy Duty Air Valve
- Available in Metallic or Non-Metallic Wetted Components
- Muffler Included

## SPECIFICATIONS

Dimension	
Physical Dimensions	See Drawing Page 75/76
Air Inlet	1/4"
Liquid Inlet	1" (25 mm)
Liquid Outlet	1" (25 mm)
Weight	See Product Tables
Performance	
Maximum Flow	41 gpm (155.8 lpm)
Maximum Air Pressure	120 psi (8.2 bar)
Maximum Solids	3/4" (19 mm)
For Metal Pumps Maximum Solids	1/2"
Max Suction Lift Dry	18 ft (5.5 m)
Max Suction Lift Wet	26 ft (7.9 m)
Max Suction Lift Dry with PTFE	15 ft (4.5 m)
Max Temperature	See Product Tables
Noise Level (with muffler)	80 dBA



PERFORMANCE CURVE (Based on water-flooded suction)



# 1" (25mm) HEAVY DUTY BOLTED STYLE SOLIDS HANDLING PUMP

**1" (25mm) - ALUMINUM** - General purpose pump, suitable for water, oils, most solvents, and most paints. Please consult chemical compatibility tables or [www.all-flo.com](http://www.all-flo.com) for your particular application.

PART NUMBER	DIAPHRAGM MATERIAL	VALVE/BALL MATERIAL	VALVE SEAT MATERIAL	O-RING MATERIAL	FASTENER MATERIAL	WEIGHT LBS (KG)	MAX TEMPERATURE °F (°C)	DIMENSIONAL DIAGRAM	CONNECT TYPE
AB-10-M4	Geolast®	Nitrile Max-Pass™	N/A	Nitrile	SS	28 (12.7)	180 (100)	Pg. 76	NPT
AE-10-M5	Santoprene®	EPDM Max-Pass™	N/A	EPDM	SS	28 (12.7)	212 (100)	Pg. 76	NPT
AV-10-M40	Viton®	Viton® Max-Pass™	N/A	VITON®	SS	28 (12.7)	212 (100)	Pg. 76	NPT

**1" (25mm) - 316 SS** - Corrosion resistant steel, suitable for nitric acid, chlorinated solvents, caustics and marine applications. Please consult chemical compatibility tables or [www.all-flo.com](http://www.all-flo.com) for your particular application.

PART NUMBER	DIAPHRAGM MATERIAL	VALVE/BALL MATERIAL	VALVE SEAT MATERIAL	O-RING MATERIAL	FASTENER MATERIAL	WEIGHT LBS (KG)	MAX TEMPERATURE °F (°C)	DIMENSIONAL DIAGRAM	CONNECT TYPE
SB-10-M4	Geolast®	Nitrile Max-Pass™	N/A	Nitrile	SS	56 (25.4)	180 (100)	Pg. 76	NPT
SE-10-M5	Santoprene®	EPDM Max-Pass™	N/A	EPDM	SS	56 (25.4)	212 (100)	Pg. 76	NPT
SV-10-M40	Viton®	Viton® Max-Pass™	N/A	Viton®	SS	56 (25.4)	212 (100)	Pg. 76	NPT

**ALL-PÜR 1" (25mm) - ELECTROPOLISHED & PASSIVATED 316 SS**- FDA elastomers and corrosion resistant steel. Suitable for food and sanitary applications. Please consult chemical compatibility tables or [www.all-flo.com](http://www.all-flo.com) for your particular application.

PART NUMBER	DIAPHRAGM MATERIAL	VALVE/BALL MATERIAL	VALVE SEAT MATERIAL	O-RING MATERIAL	FASTENER MATERIAL	WEIGHT LBS (KG)	MAX TEMP °F (°C)	DIMENSIONAL DIAGRAM	CONNECT TYPE
SB-10-M40-X44	FDA Hytrel®	FDA Viton® MAX-PASS™	N/A	FDA Nitrile	SS	56 (25.4)	180 (82)	Pg. 76	1 1/2" Tri-Clamp
SP-10-M40-X44	FDA PTFE	FDA Viton® MAX-PASS™	N/A	Viton®	SS	56 (25.4)	212 (100)	Pg. 76	1 1/2" Tri-Clamp
SE-10-M40-X44	FDA Santoprene®	FDA Viton® MAX-PASS™	N/A	FDA EPDM	SS	56 (25.4)	212 (100)	Pg. 76	1 1/2" Tri-Clamp

**1" (25mm) - POLYPROPYLENE** - A non-metallic material, suitable for water, caustics, soap solutions, mild acids and general purpose applications. Please consult chemical compatibility tables or [www.all-flo.com](http://www.all-flo.com) for your particular application.

PART NUMBER	DIAPHRAGM MATERIAL	VALVE/BALL MATERIAL	VALVE SEAT MATERIAL	O-RING MATERIAL	FASTENER MATERIAL	WEIGHT LBS (KG)	MAX TEMP °F (°C)	DIMENSIONAL DIAGRAM	CONNECT TYPE
PB-10-M4	Geolast®	Nitrile Max-Pass™	N/A	Nitrile	SS	26 (11.8)	150 (66)	Pg. 75	ANSI / DIN Flange
PE-10-M5	Santoprene®	EPDM Max-Pass™	N/A	EPDM	SS	26 (11.8)	150 (66)	Pg. 75	ANSI / DIN Flange
PV-10-M40	Viton®	Viton® Max-Pass™	N/A	Viton®	SS	26 (11.8)	150 (66)	Pg. 75	ANSI / DIN Flange

**1" (25mm) - PVDF** - Polyvinylidene fluoride suitable in applications requiring the highest purity, strength, and resistance to solvents, acids, and bases. Please consult chemical compatibility tables or [www.all-flo.com](http://www.all-flo.com) for your particular application.

PART NUMBER	DIAPHRAGM MATERIAL	VALVE/BALL MATERIAL	VALVE SEAT MATERIAL	O-RING MATERIAL	FASTENER MATERIAL	WEIGHT LBS (KG)	MAX TEMP °F (°C)	DIMENSIONAL DIAGRAM	CONNECT TYPE
KE-10-M5	Santoprene®	EPDM Max-Pass™	N/A	EPDM	SS	36 (16.3)	200 (93)	Pg. 75	ANSI / DIN Flange
KV-10-M40	Viton®	Viton® Max-Pass™	N/A	Viton®	SS	36 (16.3)	200 (93)	Pg. 75	ANSI / DIN Flange

**AVAILABLE OPTIONS** - Each pump can be configured to suit a particular application. Please see the options section for detailed product information on the following available options.

<b>AIR VALVE OPTIONS</b>		SEE PAGE 67
CYCLE COUNT VALVE	SOLENOID ADAPTOR VALVE	
<b>BALL VALVE OPTIONS</b>		SEE PAGE 67
GEOLAST®	PTFE	
SANTOPRENE®	HEAVY NITRILE	
FDA NITRILE	STAINLESS STEEL	
<b>HARDWARE OPTIONS</b>		SEE PAGE 67
PTFE COATED HARDWARE		
<b>O-RINGS</b>		SEE PAGE 67
PTFE O-RINGS	NITRILE O-RINGS	
EPDM O-RINGS	VITON® O-RINGS	
<b>PORTING OPTIONS</b>		SEE PAGE 68
BSP THREADS	ALL PORTS OPEN	
DISCHARGE AIR INLET / EXHAUST		
SUCTION / AIR INLET / EXHAUST		
SUCTION / DISCHARGE LEFT		
SUCTION RIGHT & DISCHARGE LEFT		
SUCTION LEFT & DISCHARGE RIGHT		

**AVAILABLE ACCESSORIES** - Please see the accessories section for detailed product information on the following available accessories.

AIR	SEE PAGE
FILTER / REGULATOR / GAUGE	60
SOLENOID VALVES	60
AIR FLOW CONTROL VALVES	60
NEEDLE VALVE	60
<b>LIQUID</b>	
COMPANION FLANGE KIT	61
SUCTION STRAINER	61
<b>PUMP</b>	
GROUNDING LUG	64

**MAX-PASS SOLIDS HANDLING VALVE**

- Increased suction lift
- Up to 3/4" solids
- Mounts in any position



**METALLIC**

Our 1" metallic pumps, available in both stainless steel and aluminum, can be fitted with a wide variety of elastomers to suit your application.



**NON-METALLIC**

Wetted chambers available in polypropylene or PVDF. Diaphragms available in PTFE, Santoprene® or Viton®. Multiple liquid porting options available.

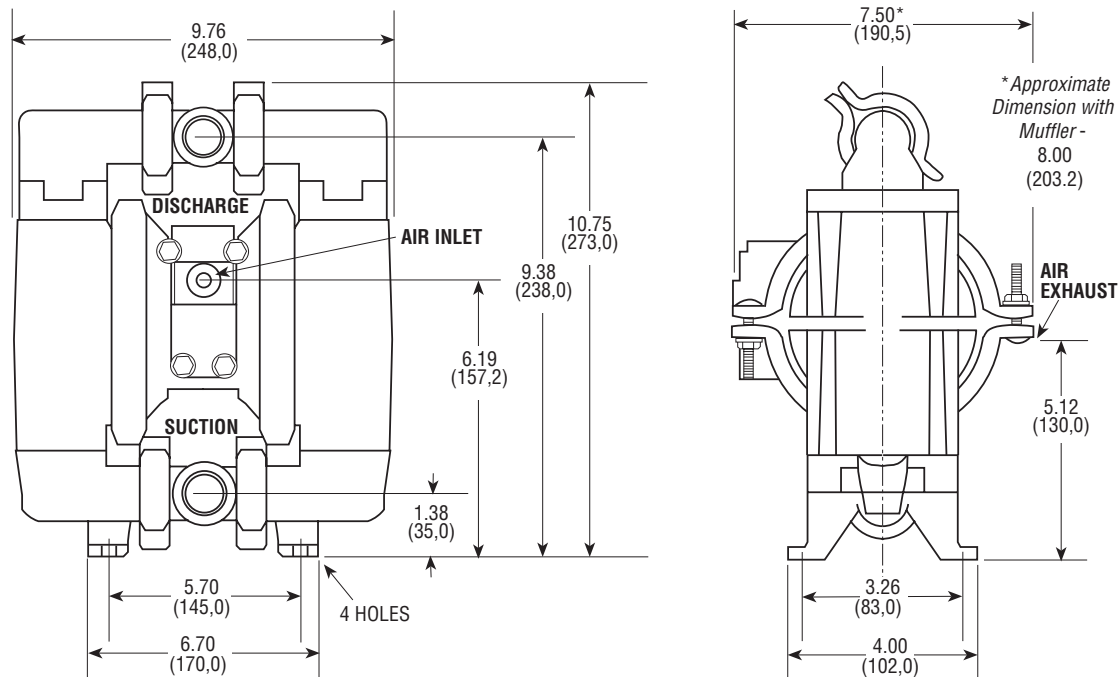


**ALL-PUR FDA PUMPS**

Electropolished and passivated 316 SS with FDA approved elastomers and tri-clamps for sanitary applications.

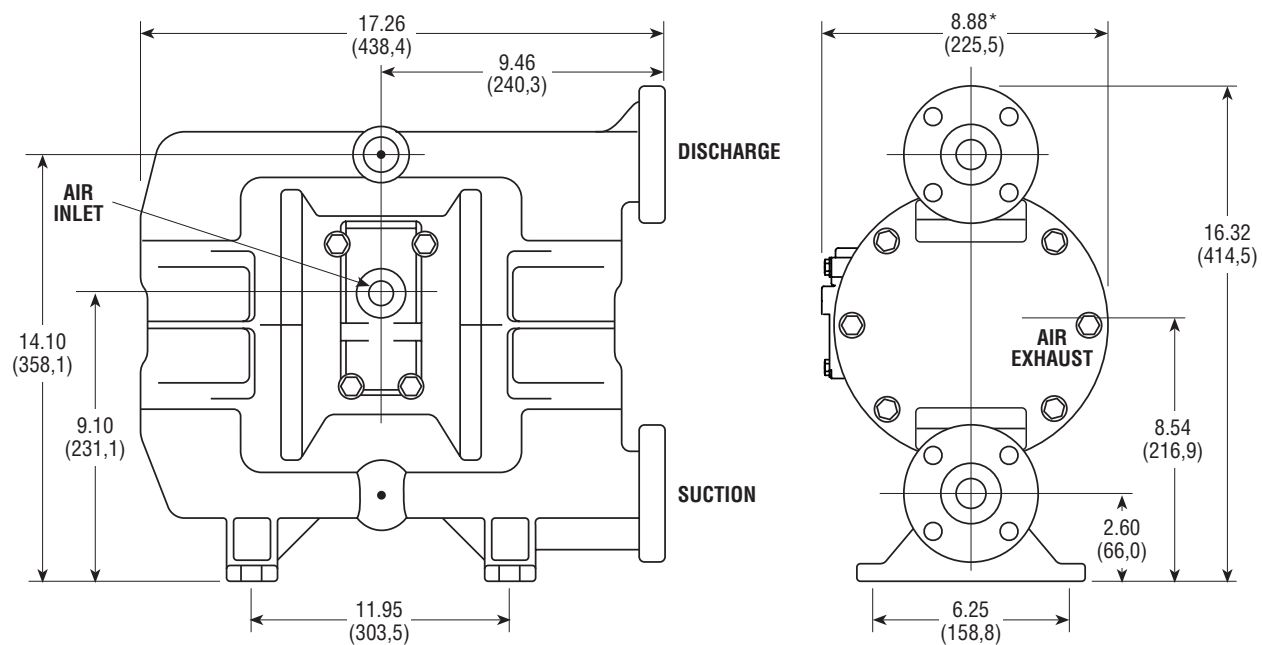
### 1/2" CLAMPED STYLE HEAVY DUTY PUMP (PLASTIC)

Dimensions in inches and (mm). Ports shown facing front for dimensional purposes.  
For detailed dimensional drawings, please visit [www.all-flo.com](http://www.all-flo.com)



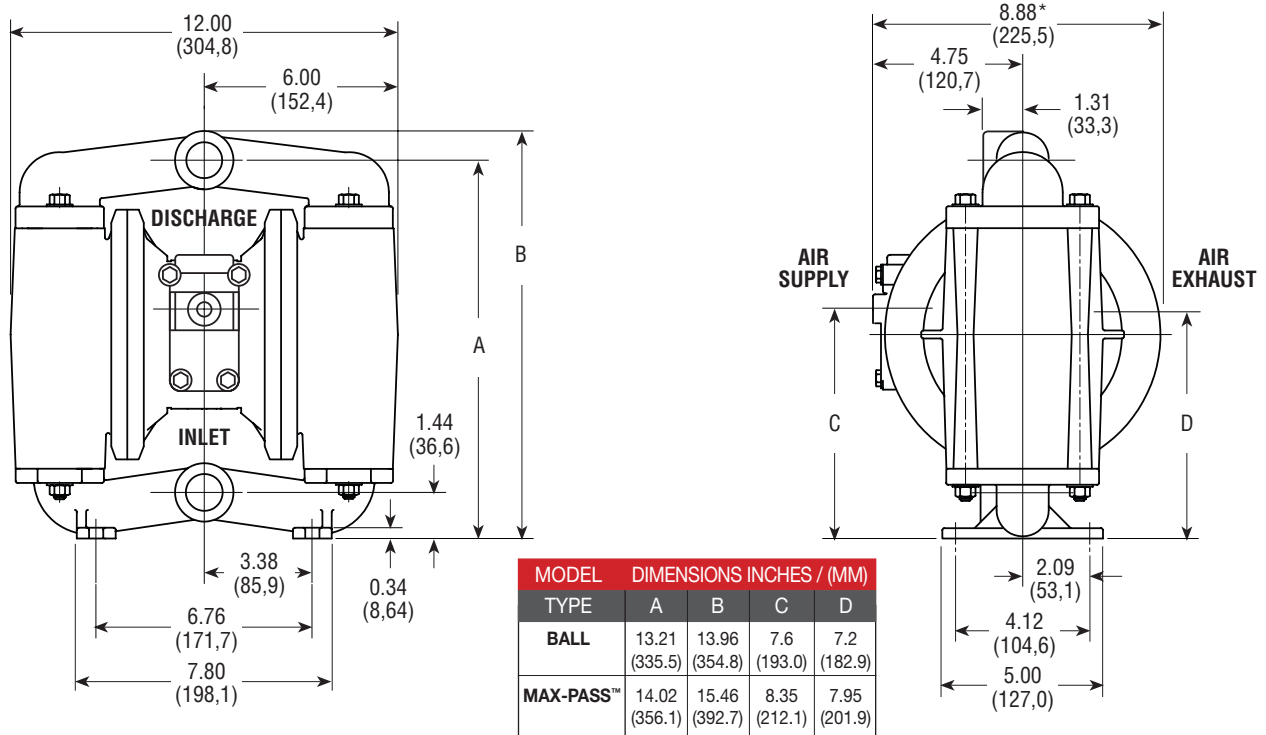
### 1" BOLTED STYLE HEAVY DUTY PUMP (PLASTIC)

Dimensions in inches and (mm). For detailed dimensional drawings, please visit [www.all-flo.com](http://www.all-flo.com)



### 1" BOLTED STYLE HEAVY DUTY PUMP (METALLIC)

Dimensions in inches and (mm). For detailed dimensional drawings, please visit [www.all-flo.com](http://www.all-flo.com)



### 1" CLAMPED STYLE HEAVY DUTY PUMP (PLASTIC)

Dimensions in inches and (mm). For detailed dimensional drawings, please visit [www.all-flo.com](http://www.all-flo.com)

