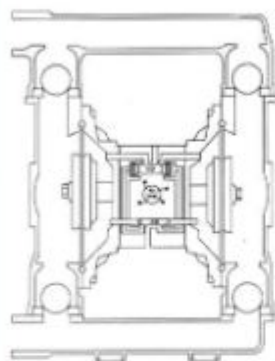




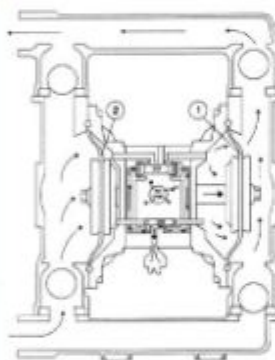
ATC PUMP



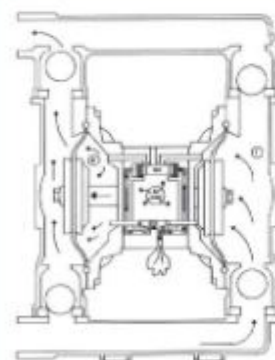
Operating principle



1 After connecting the compressed air, air valve control the compressed air impels diaphragm 1 moves toward right, meanwhile, the diaphragm 1 also extrude medium and cause it out of chamber. Diaphragm not only convey medium, also isolate compressed air and medium in the pump chamber. When one diaphragm is pushed away from the center body, another diaphragm will move toward center body for these two diaphragms are connected by one rod. When diaphragm 2 moves toward the center body, the following high pressure compressed air will be discharged out through the muffler; meanwhile, the pump inlet side will create a vacuum, then atmospheric pressure will push the medium into suction pipeline. The pump entry valve ball will be raised and away the valve seat. The medium will enter into pump chamber.



2 When the diaphragm 1 under high pressure, it will slowly move to maximum position of the stroke. Meanwhile, the compressed air will slowly enter into diaphragm 2 following space and impels the diaphragm 2 away the center body. The diaphragm 1 also will move toward center body for these two diaphragms are connected by one rod. The diaphragm 2 will extrude the medium and function on entry valve ball and seal up the suction pipeline through the water power. The water power also will function on exit valve ball and open the discharge pipeline. Meanwhile, exit valve ball of pump another side will shut down for pressure function, entry valve ball will open, and then the medium will enter into the pump chamber.



3 When one stroke finishes. The compressed air will enter into diaphragm 1 following space again through reversing valve. Simultaneously the diaphragm 2 following compressed air will discharge out through muffler.

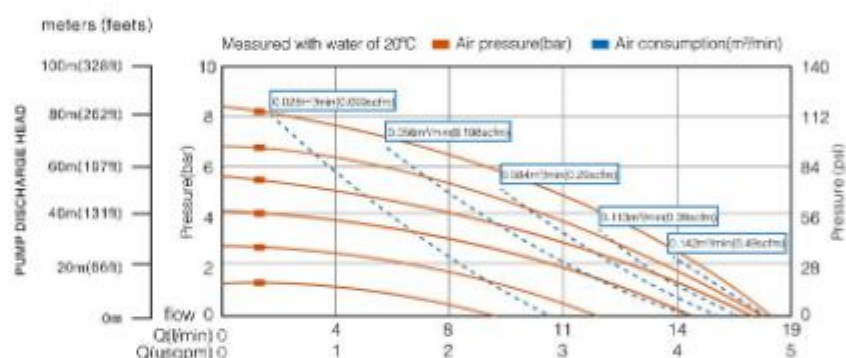
HY06 Plastic pump



Technical Data

Fluid inlet/outlet size	1/4" (DN06)
Max. flow rate	4.8Gpm(18L/m)
Max air pressure	8.48bar(120Psi)
Max delivery head	84m
Max air consumption	8.5 scfm(0.24m³/min)
Max Suction lift (Dry)	3m
Max Suction lift (Wet)	7m
Max Solid passing	0.4mm
Air inlet size	1/8" BSP
Air outlet size	-
Main body material	PP, PVDF, CP, ACETAL

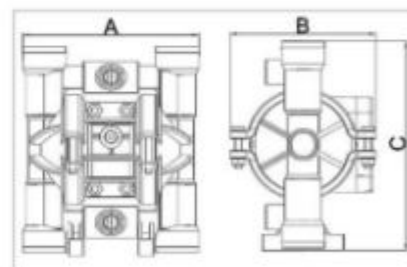
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	145	114	163	0.8(1.76)
PVDF	145	114	163	1.0(2.20)
CP	145	114	163	0.8(1.76)



HY15/20 Plastic pump



PP



PVDF

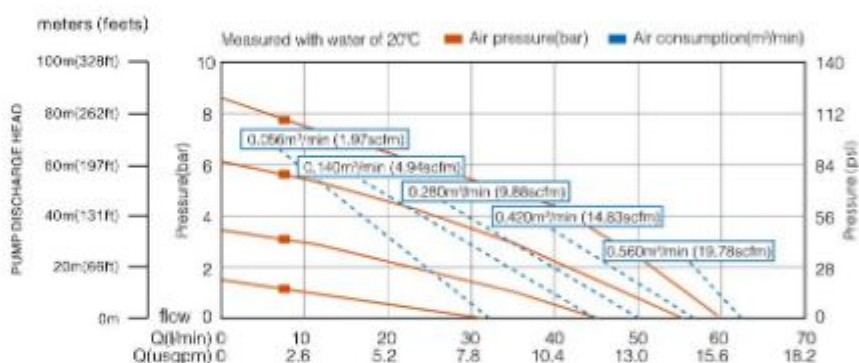


CP

Technical Data

Fluid inlet/outlet size	1/2" 3/4" (DN15/20)
Max. flow rate	15Gpm(57L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	28 scfm(0.79m³/min)
Max Suction lift (Dry)	4m
Max Suction lift (Wet)	7.6m
Max Solid passing	2.5mm
Air inlet size	1/4" BSP
Air outlet size	3/8" BSP
Main body material	PP, PVDF, CP, ACETAL

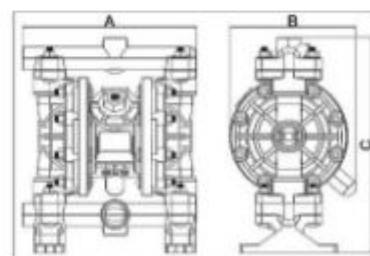
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	239	160	296	3.5(7.72)
ACETAL	239	160	296	3.5(7.72)
PVDF	239	160	296	4.0(8.82)



HY15/20 Metal pump



SS304/316



ALU

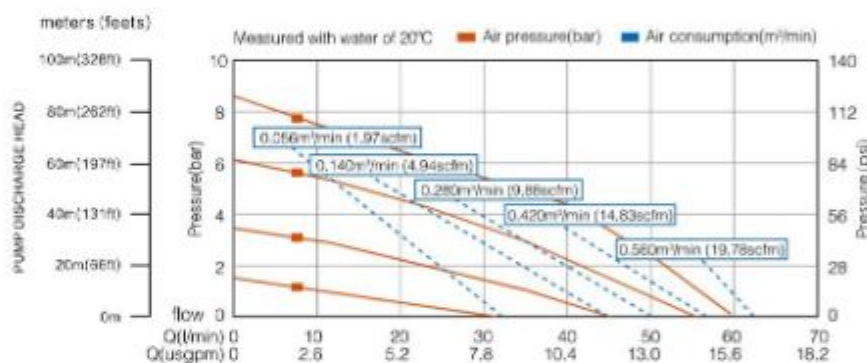


ALU-B

Technical Data

Fluid inlet/outlet size	1/2" 3/4" (DN15/20)
Max. flow rate	15Gpm(57L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	28 scfm(0.79m³/min)
Max Suction lift (Dry)	4m
Max Suction lift (Wet)	7.6m
Max Solid passing	2.5mm
Air inlet size	1/4"
Air outlet size	3/8"
Main body material	ALU, SS304/316/316L

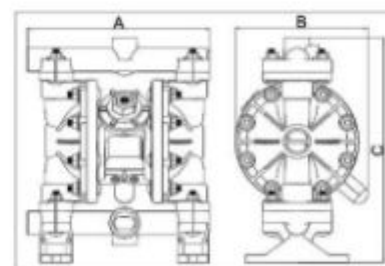
Performance curve

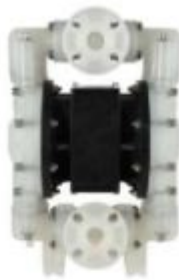


*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
SS304	239	160	300	8.5(18.7)
SS316	239	160	300	8.5(18.7)
ALU	239	160	296	4.7(10.4)





PP



PP (PP Center block)



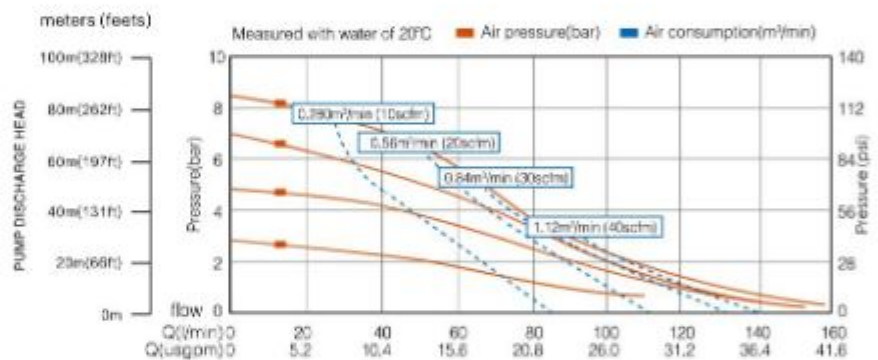
PVDF

HY25 Plastic Pump

Technical Data

Fluid inlet/outlet size	1" (DN25)
Max. flow rate	40Gpm(157L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	60 scfm(1.7m³/min)
Max Suction lift (Dry)	4m
Max Suction lift (Wet)	8m
Max Solid passing	4mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	PP, PVDF, CP, ACETAL

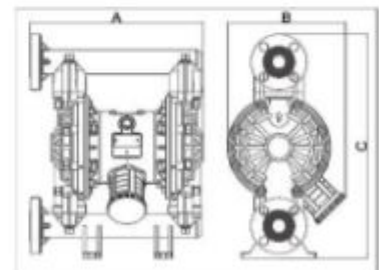
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	339	231	436	8.5(18.7)
PVDF	339	231	436	11(24.3)
ACETAL	339	231	436	8.5(18.7)



HY25 Metal pump



SS304/316



ALU (PP Center block)

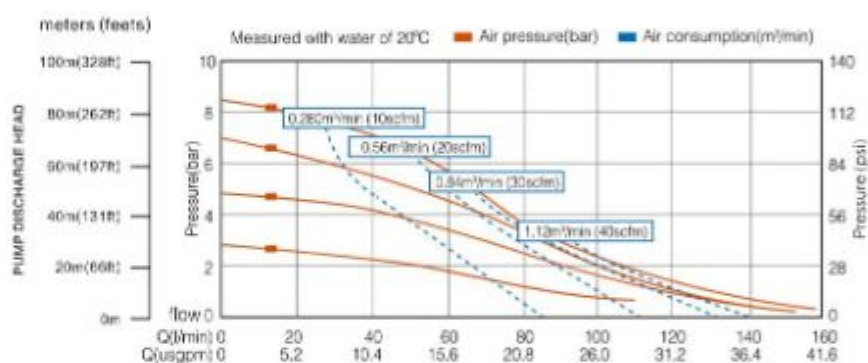


ALU

Technical Data

Fluid inlet/outlet size	1" (DN25)
Max. flow rate	40Gpm(157L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	60 scfm(1.7m³/min)
Max Suction lift (Dry)	4m
Max Suction lift (Wet)	8m
Max Solid passing	4mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	ALU, SS304/316/316L

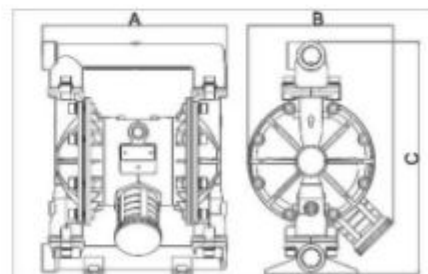
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
SS304	293	231	369	14.5(32)
SS316	293	231	369	14.5(32)
ALU	293	231	369	8.5(18.7)





PP



PP (PP Center block)



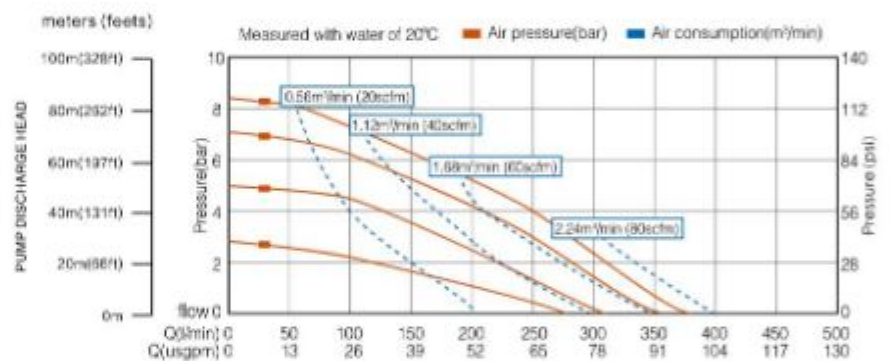
PVDF

HY40 Plastic Pump

Technical Data

Fluid inlet/outlet size	1-1/2" (DN40)
Max. flow rate	95Gpm(358L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	125 scfm(3.5m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	5mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	PP, PVDF, CP, ACETAL

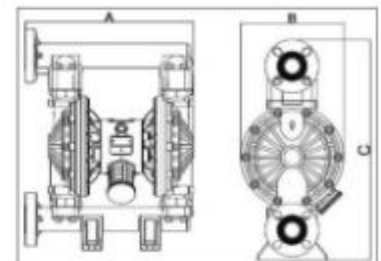
Performance curve



*Suction height varies with the different combinations of balls, seals and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	439	268	577	16(35.3)
PVDF	439	268	577	21(46.3)
ACETAL	439	268	577	16(35.3)



HY40 Metal pump



SS304/316



ALU (PP Center block)

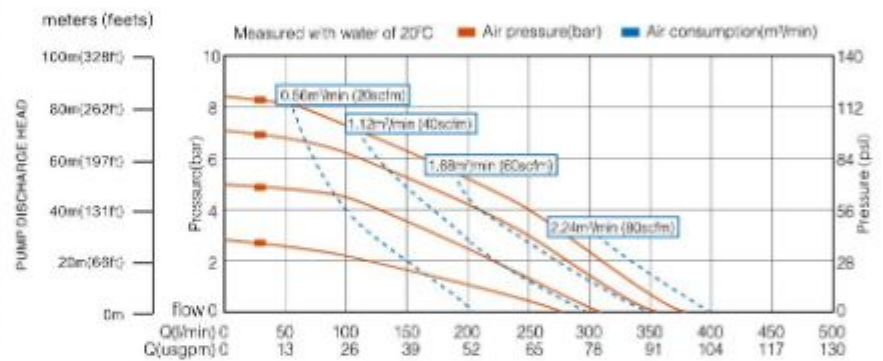


ALU

Technical Data

Fluid inlet/outlet size	1-1/2" (DN40)
Max. flow rate	95Gpm(358L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	125 scfm(3.5m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	5mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	ALU, SS304/316/316L

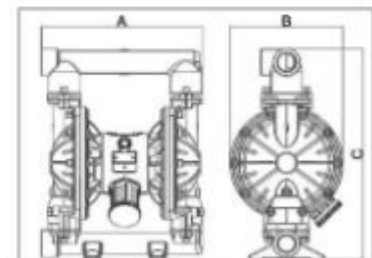
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
SS304	378	266	496	29(63.9)
SS316	378	266	496	29(63.9)
ALU	378	266	496	16(35.3)





PP



PP (PP Center block)



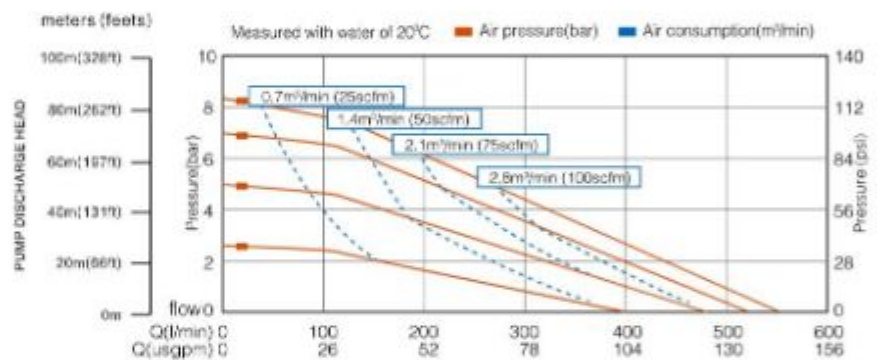
PVDF

HY50 Plastic Pump

Technical Data

Fluid inlet/outlet size	2" (DN50)
Max. flow rate	155Gpm(587L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	175 scfm(4.9m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	6mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	PP, PVDF, CP, ACETAL

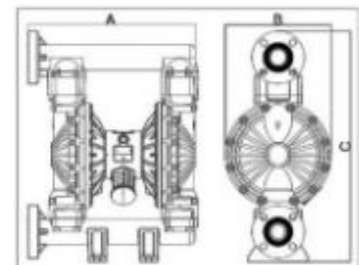
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	511	318	692	24.5(54)
PVDF	511	318	692	33(72.8)
ACETAL	511	318	692	24.5(54)



HY50 Metal pump



SS304/316



ALU

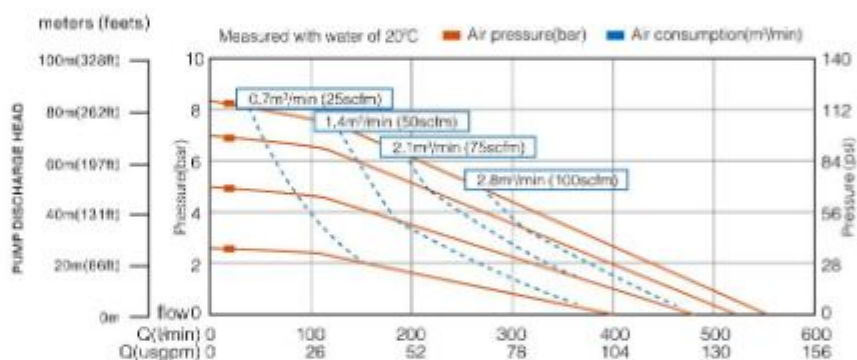


ALU(PP Center block)

Technical Data

Fluid inlet/outlet size	2" (DN50)
Max. flow rate	155Gpm(587L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	175 scfm(4.9m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	6mm
Air inlet size	1/2"
Air outlet size	3/4"
Main body material	ALU, SS304/316/316L

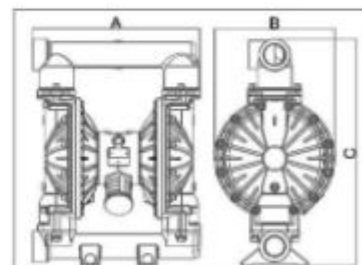
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
SS304	443	318	600	44.5(98)
SS316	443	318	600	44.5(98)
ALU	443	318	600	25(55)





PP



PP (PP Center block)



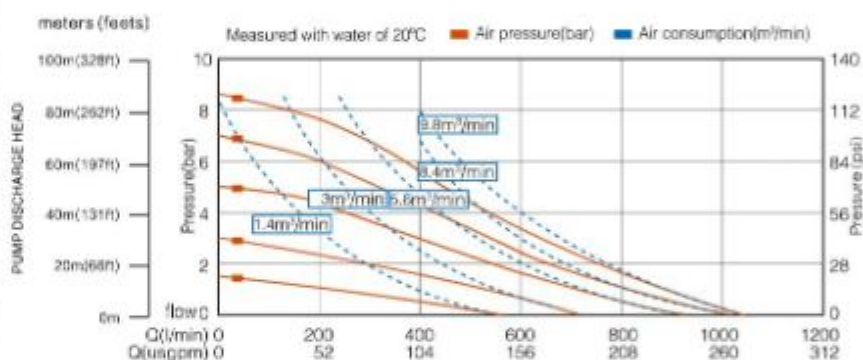
PVDF

HY80 Plastic Pump

Technical Data

Fluid inlet/outlet size	3" (DN80)
Max. flow rate	280Gpm(1060L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	325 scfm(9.1m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	9.4mm
Air inlet size	3/4"
Air outlet size	1"
Main body material	PP, PVDF, CP, ACETAL

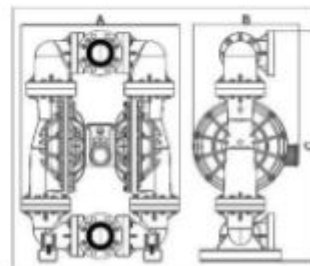
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
PP	703	472	1022	65(143)
PVDF	703	472	1022	85(187.4)
ACETAL	703	472	1022	65(143)



HY80 Metal pump



SS304/316



ALU-B

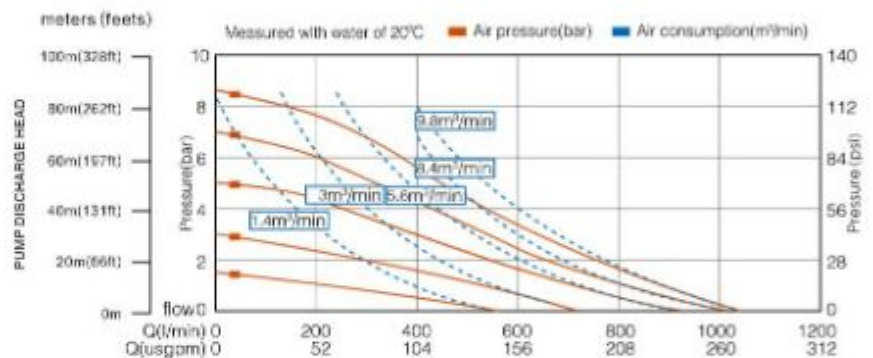


ALU

Technical Data

Fluid inlet/outlet size	3" (DN80)
Max. flow rate	280Gpm(1060L/m)
Max air pressure	8.4Bar(120Psi)
Max delivery head	84m
Max air consumption	325 scfm(9.1m³/min)
Max Suction lift (Dry)	5m
Max Suction lift (Wet)	8m
Max Solid passing	9.4mm
Air inlet size	3/4"
Air outlet size	1"
Main body material	ALU, SS304/316/316L

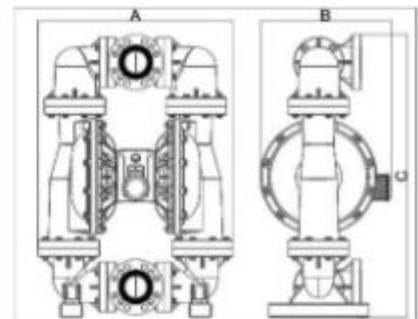
Performance curve



*Suction height varies with the different combinations of balls, seats and the diaphragms.

Installation size and weight

Material	L A (mm)	W B (mm)	H C (mm)	Net weight kg (lbs)
SS304	615	472	827	113(249)
SS316	615	472	827	113(249)
ALU-B	615	472	827	71(156.5)
ALU	777	472	619	65(143)



Corrosive fluid parameter & Wetted parts of pump select

Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Additive Resin	Buna N	EPDM	WTFM	Teflon	TFEE	Polyethylene acetone
Asphalt	✓	✓	✓				✓			
Glycosylamine	✓	✓				✓	✓			✓
Acetylene	✓	✓		✓	✓		✓	✓		
Linseed oil		✓				✓	✓			
Acetone	✓	✓		✓		✓	✓			✓
Ethanol	✓	✓	✓		✓		✓	✓		✓
Methanol	✓	✓	✓		✓		✓	✓		✓
Ammonia	✓	✓	✓	✓		✓	✓			✓
Sulfurous acid solvent		✓					✓	✓		✓
Whiskey		✓	✓			✓	✓			
Ethyl ether	✓	✓					✓			
Ethanol amine	✓	✓					✓			
Ethanol	✓	✓	✓	✓	✓		✓	✓		✓
Glycol	✓	✓	✓	✓	✓	✓	✓	✓		✓
Liquefied petroleum gas										
Zinc chloride		✓	✓			✓	✓			✓
Chlorinated alkane(dry)		✓			✓	✓	✓			
Hydrogen chloride gas		✓					✓	✓		
Cupric chloride			✓	✓	✓	✓	✓	✓		✓
Sodium chloride		✓	✓	✓	✓	✓	✓	✓		✓
Nickel chloride			✓		✓	✓	✓			
Barium chloride			✓	✓	✓	✓	✓			
Magnesium chloride		✓	✓	✓	✓	✓	✓			✓
Methylene chloride		✓					✓			
Chlorine		✓	✓	✓	✓	✓	✓	✓		✓
Chlorine(dry)							✓	✓		
Octane	✓	✓					✓	✓		
Oleic acid				✓			✓			
Gasoline (refined)	✓	✓		✓			✓	✓		
Gasoline (crude)	✓	✓		✓			✓	✓		
Sodium chloride							✓	✓		
Fruit juice		✓					✓	✓		
Sodium perborate		✓	✓	✓		✓	✓	✓		
Xyloimixid xylol	✓	✓		✓			✓	✓		
Formic acid			✓				✓			
Volatile oil (boron oil)	✓	✓		✓			✓			
Citric acid		✓					✓	✓	✓	✓
Grease	✓	✓			✓		✓	✓	✓	✓
Tar	✓	✓	✓		✓	✓	✓	✓	✓	✓
Glycol	✓	✓	✓	✓	✓		✓	✓		✓
Creosote	✓	✓			✓		✓	✓		
Cresylic acid		✓					✓	✓		

Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Additive Resin	Buna N	EPDM	WTFM	Teflon	TFEE	Polyethylene acetone
Chloroform(dry)		✓		✓				✓	✓	
Sodium silicate		✓	✓				✓	✓		
Cam oil		✓	✓				✓	✓	✓	
Acetic acid		✓	✓				✓	✓		✓
Isopropyl acetate		✓	✓					✓		
Acetic acid isopropyl ester		✓	✓					✓		
Ethyl acetate		✓	✓		✓		✓	✓		
Calcium acetate				✓		✓	✓			
Butyl acetate		✓	✓					✓		
Cane sugar solution		✓	✓	✓		✓	✓			
Beer		✓	✓	✓			✓			
Oxygen		✓	✓		✓			✓		
Potassium cyanide			✓	✓	✓	✓	✓	✓		✓
Sodium cyanide (thin)			✓	✓	✓	✓	✓	✓		✓
Cyclohexane				✓				✓	✓	✓
Oxalic acid			✓	✓		✓	✓			
Silicone oil		✓	✓		✓	✓		✓	✓	✓
Jet fuel		✓	✓	✓			✓	✓	✓	
Fatty acid		✓	✓					✓	✓	
Chloroform acid		✓	✓	✓				✓	✓	✓
Nitric acid		✓						✓		
Aluminum nitrate			✓	✓	✓	✓	✓	✓		
Ammonium nitrate				✓	✓	✓	✓	✓		✓
Zinc nitrate			✓	✓			✓	✓		
Potassium nitrate		✓	✓	✓	✓	✓	✓	✓		✓
Calcium nitrate			✓	✓	✓	✓	✓	✓		✓
Ferric nitrate			✓	✓	✓	✓	✓	✓		
Sodium nitrate		✓	✓	✓	✓	✓	✓	✓	✓	✓
Magnesium nitrate			✓	✓	✓	✓	✓	✓		
Hydrated lime				✓		✓	✓	✓		
Vegetable oil		✓	✓		✓	✓	✓	✓		
Calcium sulfite			✓	✓		✓	✓	✓		
Inscription acid potassium		✓	✓	✓		✓	✓	✓		
Sodium bicarbonate		✓	✓	✓	✓	✓	✓	✓		
Stearic acid			✓	✓				✓	✓	
Butyl stearate			✓	✓	✓			✓		
Vinegar		✓	✓				✓	✓	✓	
Mercury		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonium hydroxide		✓	✓					✓		
Calcium hydroxide			✓	✓	✓	✓	✓	✓		
Sodium hydroxide			✓	✓	✓			✓	✓	✓
Barium hydroxide			✓	✓	✓	✓	✓	✓		✓

Corrosive fluid parameter & Wetted parts of pump select

Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Acetal resin	Butyl N	EPDM	Viton	Teflon	TPU	Hydrogen peroxide
Magnesium hydroxide	✓	✓	✓	✓	✓	✓	✓	✓		
Hydrogen										
Gelatin	✓	✓	✓	✓	✓	✓	✓	✓		
Carbonic acid (phenol)		✓					✓	✓		
Petroleum crude oil	✓	✓	✓				✓	✓		
Refined oil	✓	✓	✓				✓	✓		
Hydrofluoric acid										
Lime sulfuric acid		✓	✓			✓	✓	✓		
soap-suds		✓	✓	✓	✓	✓	✓	✓	✓	✓
Washing powder(synthetic)		✓	✓		✓	✓	✓	✓	✓	✓
Baking soda		✓			✓		✓	✓		
Tar	✓	✓					✓	✓		
Soybean oil	✓	✓		✓	✓	✓	✓	✓		
Carbonate	✓	✓	✓	✓			✓	✓		
Sodium carbonate		✓				✓	✓	✓		
Magnesium carbonate	✓		✓	✓	✓		✓	✓		
Tannic acid (thin)	✓	✓	✓				✓	✓	✓	✓
Sodium thiosulfate	✓	✓	✓		✓	✓	✓	✓		
Diesel oil	✓	✓		✓	✓		✓	✓		
Tetrafluoroethylene		✓	✓				✓	✓		
Natural gas		✓								
Trichloroethylene		✓	✓				✓	✓		
Toluene	✓	✓		✓			✓	✓		
Molasses	✓	✓	✓	✓			✓	✓		
kerosene	✓	✓		✓	✓		✓	✓	✓	
Crude gasoline	✓	✓		✓			✓	✓	✓	
Naphthalene		✓	✓	✓			✓	✓		
Naphthenic acid		✓					✓	✓		
Gelatin	✓	✓	✓		✓		✓	✓	✓	
Methylamine nitrate		✓					✓	✓		
Vinyl chloride (dry)		✓					✓	✓		
Carbon disulfide		✓		✓			✓	✓		
Lactic acid	✓	✓	✓			✓	✓	✓	✓	✓
Urea		✓	✓	✓			✓	✓	✓	✓
Tetrachloroethylene		✓		✓			✓	✓		
Paraffin wax	✓	✓	✓	✓	✓	✓	✓	✓		
Palmic acid		✓	✓				✓	✓		
White liquid (paper mill)		✓					✓	✓		
Castor oil		✓				✓	✓	✓		
Phoric acid	✓	✓					✓	✓		
Beer		✓	✓			✓	✓	✓		
Freon		✓		✓		✓	✓	✓		

Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Acetal resin	Butyl N	EPDM	Viton	Teflon	TPU	Hydrogen peroxide
Propane	✓	✓		✓	✓		✓	✓		
Propylene glycol	✓	✓	✓	✓	✓	✓	✓	✓		
Butane	✓	✓		✓	✓		✓	✓	✓	
Butyl alcohol	✓	✓	✓		✓		✓	✓		
Butyl ethylene	✓	✓		✓	✓		✓	✓		
Glucose	✓	✓	✓			✓	✓	✓		
Fluoric aluminum (dry)	✓		✓	✓	✓		✓	✓		
Ethane	✓	✓		✓	✓		✓	✓	✓	
Benzene		✓		✓				✓		
Volatile oil		✓	✓	✓				✓		
Formalin	✓	✓	✓	✓		✓	✓	✓		
Methanol	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boric acid	✓	✓	✓	✓	✓	✓	✓	✓		
Sodium borate		✓		✓	✓		✓	✓		
Milk	✓	✓	✓	✓		✓	✓	✓	✓	✓
Alum			✓		✓	✓	✓	✓		
Anhydrous ammonia	✓	✓	✓			✓	✓	✓		
Acetic anhydride		✓						✓		
Phthalic anhydride		✓						✓		
Methanol		✓	✓	✓	✓	✓	✓	✓	✓	✓
Methane	✓	✓		✓	✓		✓	✓		
Toluene	✓	✓						✓		
Cottonseed oil		✓	✓			✓	✓	✓	✓	
Lard	✓	✓					✓	✓		
Paint		✓		✓				✓		
Lithenic acid	✓	✓	✓					✓		
Ammonium phosphate			✓		✓	✓	✓	✓	✓	✓
Sodium phosphate			✓	✓		✓	✓	✓	✓	✓
Sodium sulfide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Barium sulfide			✓	✓	✓	✓	✓	✓		
Aluminum sulfide		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonium sulphate		✓	✓	✓	✓	✓	✓	✓	✓	✓
Potassium sulphate		✓	✓	✓	✓	✓	✓	✓	✓	
Sodium sulphate		✓	✓	✓	✓	✓	✓	✓	✓	✓
Magnesium sulfate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zinc sulfate			✓	✓	✓	✓	✓	✓	✓	✓
Ferrous sulfate			✓		✓	✓	✓	✓		
Rose	✓	✓	✓	✓	✓	✓	✓	✓		
Wine		✓	✓	✓	✓	✓	✓	✓	✓	✓
Varnish	✓	✓						✓	✓	

Corrosive fluid and Wetted parts of pump Matching table

Corrosive fluid concentration (%)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Acetic Acid(Ambient)																				
Acetic Acid(Hot)																				
Acetic Acid(Boiling)																				
Chromic Acids(Conc)																				
Nitric Acid																				
Phosphoric Acid(Ambient)																				
Phosphoric Acid(Hot)																				
Phosphoric Acid(Boiling)																				
Potassium Hydroxide <60																				
Potassium Hydroxide <85																				
Sodium Hypochloride																				
Magnesium Hydroxide																				
Sodium Hydroxide																				
Hydrochloric Acid																				
Hydrochloric Acid(Boiling)																				
Hydrofluoric Acid(Ambient)																				
Hydrofluoric Acid(Boiling)																				
Hydrofluoric Acid(Conc)																				
Sulfuric Acid <51.6C																				
Sulfuric Acid >51.6 <79.4																				
Sulfuric Acid(Biling)																				

Polypropylene

Stainless steel

Kynar (PVDF)



Damper



Wetted end kits



Air end kits



Ball valve



Quick coupler



Conversion joint



Check valve



Flow meter



Meter nozzle



Air Regulator



Solenoid valve



Bladder damper



Corner of warehouses



CNC machining



Injection molding