



# DIAPHRAGM PUMP SELECTION GUIDE



SHANGHAI HAORYANG PUMP VALVE MANUFACTURING CO.,LTD.

## Company profile

Shanghai Haoyang Pump Valve Manufacturing Co., Ltd. is located in Baoshan Industrial Park of Shanghai City, which is specialized in the integration of development, design, production, sales, trade and services of diaphragm pump.

The HY-series pneumatic diaphragm pump keeps the advantages of the same kind of products and produce the diaphragm pump and full sets of diaphragm pumps equipment on the basis of digestion specially, absorption and recreation. HY-series pneumatic diaphragm pump has the advantages of environmental friendly, energy-saving, explosion-proof, multi-occasion, highly-efficient and stable, stall free.

The products, using simple and operating convenient, are widely used in various industries, such as petroleum, metallurgy, chemical engineering, mine, coating materials, ceramics, food & drinks, pharmacy, printing, paper making, electron, textile, architecture, furnishing, environmental friendly, water treatment, automotive, shipbuilding and so on.

The Company meets the needs of customers with quality products, reasonable prices, and good pre-sale, in-sale and after-sale services. The products are exported to Southeast Asia, European, American, Australian and Middle East Countries. We are firmly convinced that we will continue to serve the new and old customers, carrying forward the cause and forging ahead into the future and creating resplendence together in accordance with the principle of "Satisfy the customers; Benefit the Customers". We are sincerely inviting all the agents to join us and strive for win-win results. Welcome the clients to visit our company for guidance and business negotiations.



## Haoyang pumps model selection guide

HY	25	B	PP	PP	TF	TF
Haoyang	Dimension	Connections	Pump Body	Valve Seat	Valve Ball	Diaphragm
<b>Pump inlet/outlet size</b> 06=1/4in(8 caliber) 10=3/8in(10 caliber) 15=1/2in(15 caliber) 20=3/4in(20 caliber) 25=1in(25 caliber) 40=1.5in(40 caliber) 50=2in(50 caliber) 80=3in(80 caliber) 100=4in(100 caliber)	<b>Connections</b> B= BSPP N= NPT F= Flange	<b>Material</b> AC= Acetal PP= Polyethylene KY= PVDF SS= 304SST LL= 316SST CI= Cast iron AL= Aluminum	<b>Material</b> AC= Acetal PP= Polyethylene AL= Aluminum SS= 304SST LL= 316SST HY= Hytrel SP= Santoprene KY= PVDF TF= PTFE BN= Buna N VT= Viton GE=Geolast	<b>Material</b> AC= Acetal PP= Polyethylene AL= Aluminum SS= 304SST LL= 316SST HY= Hytrel SP= Santoprene TF= PTFE BN= Buna N VT= Viton GE=Geolast CE=Ceramic	<b>Material</b> TF= PTFE HY= Hytrel SP= Santoprene CR= Neoprene BN= Buna N VT= Viton GE=Geolast	

### Materials and suitable temperature

#### • Sealing and diaphragm

Fluoroelastomer Viton	.....	-40° F(-40°C)–350° F(176.6°C)
PTFE, Teflon	.....	40° F(4.4°C)–350° F(176.6°C)
Santoprene	.....	-20° F(-28.9°C)–220° F(104.4°C)
TPE Hytrel	.....	-20° F(-28.9°C)–220° F(104.4°C)
UHMWPE, Polyethylene	.....	0° F(-17.7°C)–140° F(60°C)
Leather	.....	0° F(-17.7°C)–200° F(93.3°C)
Neoprene	.....	0° F(-17.7°C)–212° F(100°C)
Buna-N	.....	-40° F(-40°C)–250° F(121°C)
Polyurethane	.....	-40° F(-40°C)–200° F(93.3°C)

#### • Body cavity flow

Acetal	.....	40° F(4.4°C)–150° F(65.5°C)
PP, Polypropylene	.....	40° F(4.4°C)–150° F(65.5°C)
Kynar, PVDF	.....	40° F(4.4°C)–200° F(93.3°C)

### Haoyang AODD Pump Features:

- Explosion-proof, zero leak, simple operation
- Idling capability, Self suction, No complex control
- Can transmit the adhesive liquid and large particles
- low shearing, Not easy to destroy material structure
- Diversity of material, no rotating parts, applicable to various erosive situations
- By changing the air supply to adjust the flow delivery
- By changing the air pressure to adjust the pump lift
- Once over-loading, the pump will automatically stop
- No mechanical seat, easy maintenance, low cost.
- Modularization of main valve and air motor, No broken, easy to disassemble and repair.

#### Note:

- 1、 The above material temperature limit did not involve external conditions such as pressure difference.
- 2、 Suction height changes with the different combinations of ball, seat and the diaphragm materials.

## Haoyang pump components material characteristics&application

- ◆ **Acetal-apply to valve ball&seat**  
Good anti-solvent, anti-abrasion, low friction resistance, low moisture absorption

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- ◆ **Aluminum-apply to pneumatic motor & fluid-cavity**  
Very strong anti-hit, wear-resistance & heat resistance, moderate resistance to chemical corrosion, with the exception of HHCS fluid

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- ◆ **Groundable Acetal-apply to fluid-cavity**  
Good anti-solvent and anti-paint, and can be used for flammable fluid, not for acid & alkali

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- ◆ **Hytrel-apply to diaphragm, valve ball&seat**  
Good anti-abrasion, can replace Buna-N, apply to the majority of the neutral fluid

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- ◆ **PVDF-apply to fluid-cavity & valve seat**  
Strong chemical extrusion resistance, anti-abrasion, apply to high purity acids

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- ◆ **PP-apply to pneumatic motor, fluid-cavity & valve seat**  
Medium abrasion resistance, good chemical resistance, good versatility, especially for common acid & alkali

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- ◆ **Viton-apply to diaphragm, valve ball&seat**  
Highly acid-resistant, and resistant to unleaded fuel, food-grade

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- ◆ **Stainless Steel-apply to fluid-cavity, valve ball&seat**  
Excellent corrosion resistance, abrasion resistance, and apply to water-based, paints, viscous fluid

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- ◆ **Buna-N-apply to diaphragm, valve ball**  
Not suitable for strong solvents and chemical fluid, apply to gasoline-type fluid, food grade

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- ◆ **CI-apply to fluid-cavity**  
Good anti-abrasion, very suitable for transmitting filter mud

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- ◆ **Hardened Stainless Steel-apply to valve ball**  
Medium chemical resistance, good anti-abrasion

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- ◆ **Santoprene-apply to diaphragm, valve ball & seat**  
Good anti-abrasion, anti-soluble and heat-resistant, not suitable for soluble fluid, can replace EPDM/EPBR, food grade

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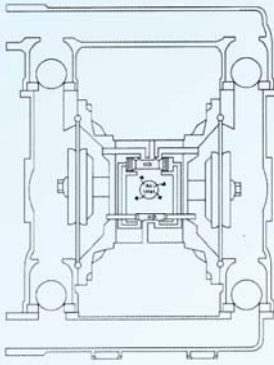
- ◆ **PTFE, Teflon-apply to diaphragm, valve ball & seat**  
Good anti-chemical, anti-solvent and medium abrasion resistance, high universality

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- ◆ **Geolast-apply to diaphragm, valve ball & seat**  
Anti-abrasion better than Hytrel, anti-chemical same with Buna-N

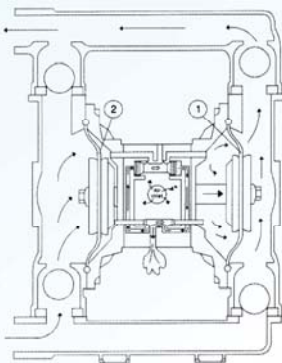
## Operating principle

1



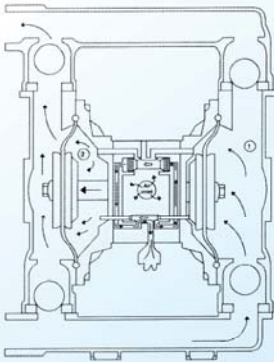
After connecting the compressed air, air valve control the compressed air impels diaphragm 1 moves toward right, meanwhile, the diaphragm 1 also extrude medium and cause it out of chamber. Diaphragm not only convey medium, also isolate compressed air and medium in the pump chamber. When one diaphragm 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

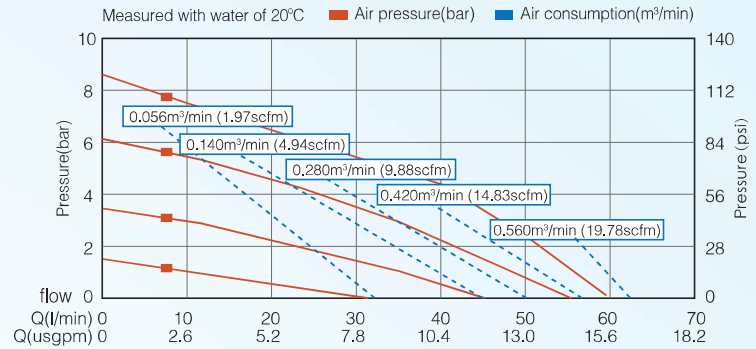


When one stroke finishes. The compressed air will enter into diaphragm 1 following space again through reversing valve. Simultaneously the diaphragm 2 following compressed air will discharge out through muffler.

## HY06 Plastic pump



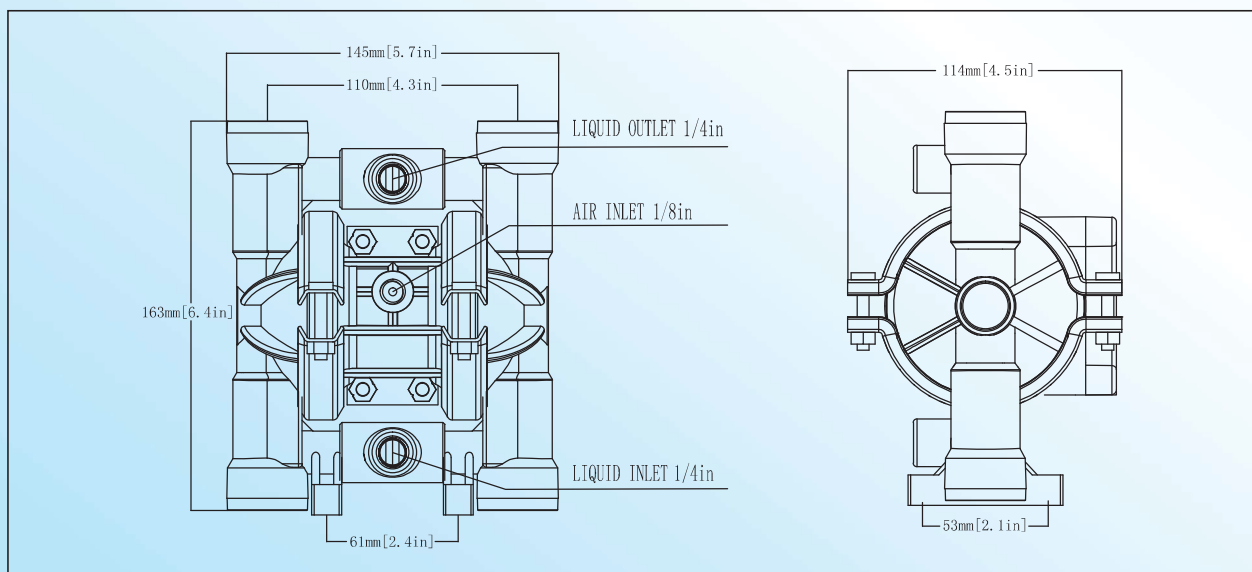
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 3m Wet 7m
Max. particle diameter	0.4mm
Suction and discharge size	1/4in /Npt
Air inlet size	1/8in /Npt
Max. flow rate	18 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	8.5scfm ( 0.24m³ /min )
Main body material	PP PVDF

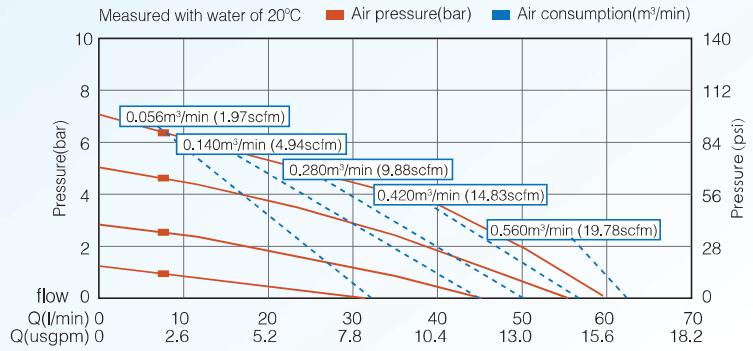
### Installation size



## HY15 HY20 Stainless steel pump



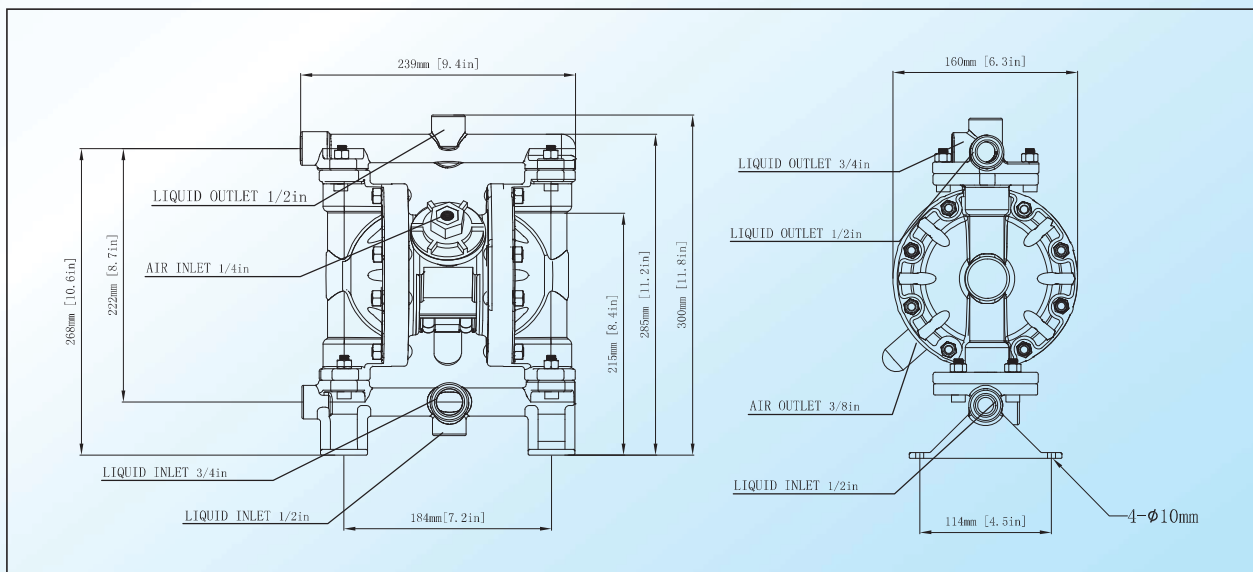
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 7.6m
Max. particle diameter	2.5mm
Suction and discharge size	1/2 3/4in /Npt
Air inlet size	1/4in
Max. flow rate	57 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	28scfm ( 0.672m³ /min )
Main body material	304SST 316SST

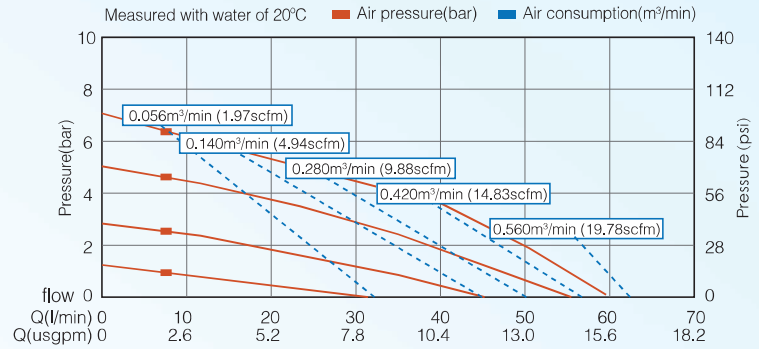
### Installation size



## HY15 HY20 Plastic pump



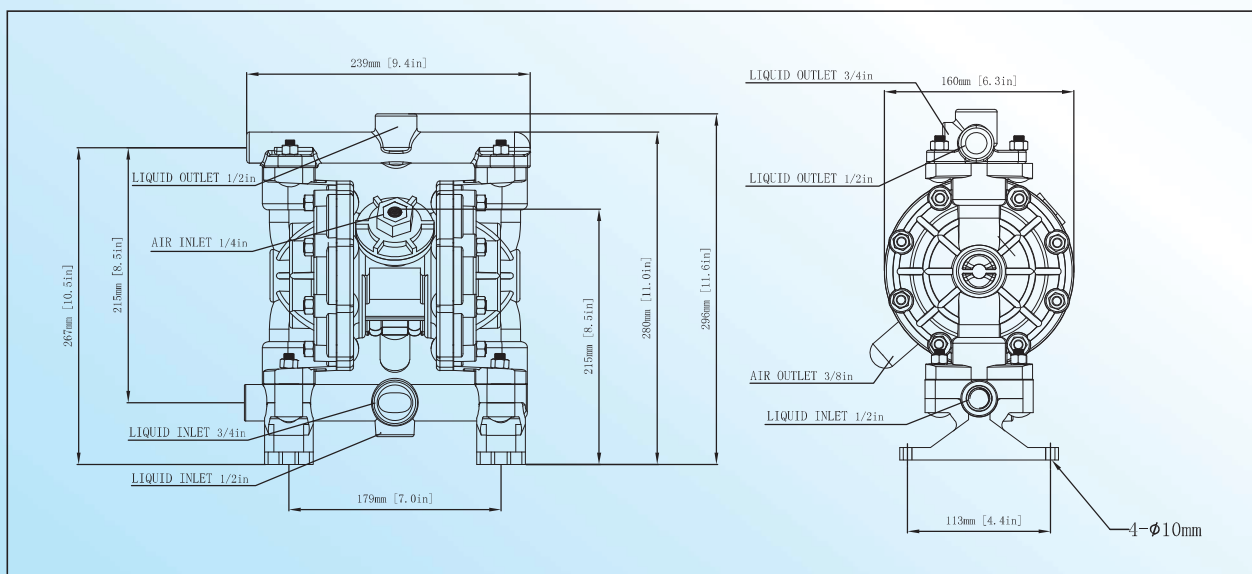
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 7.6m
Max. particle diameter	2.5mm
Suction and discharge size	1/2 3/4in /Npt
Air inlet size	1/4in
Max. flow rate	57 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	28scfm ( 0.672m <sup>3</sup> /min )
Main body material	PP Acetal PVDF

### Installation size

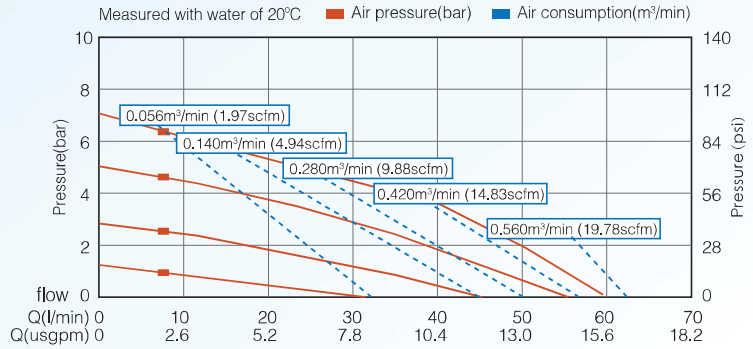




# HY15 HY20 Aluminum alloy pump



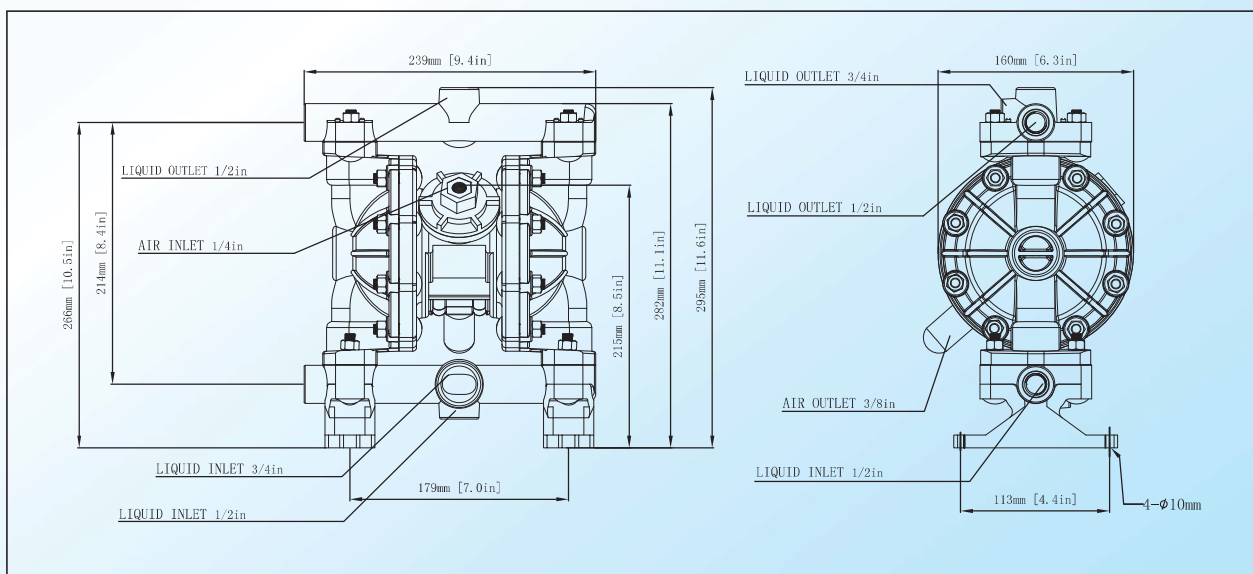
Performance curve:



## Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 7.6m
Max. particle diameter	2.5mm
Suction and discharge size	1/2 3/4in /Npt
Air inlet size	1/4in
Max. flow rate	57 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	28scfm ( 0.672m³ /min )
Main body material	Aluminum alloy

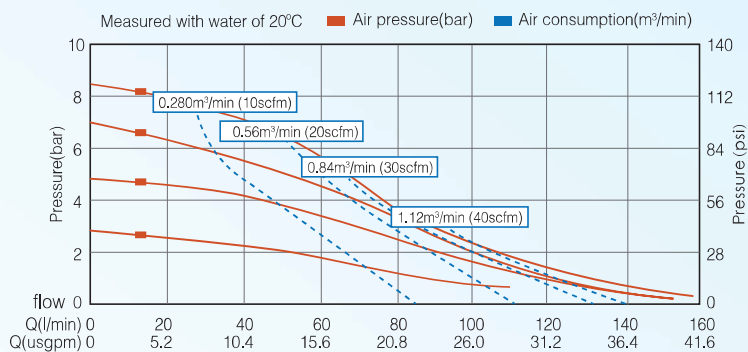
## Installation size





## HY25 Plastic pump

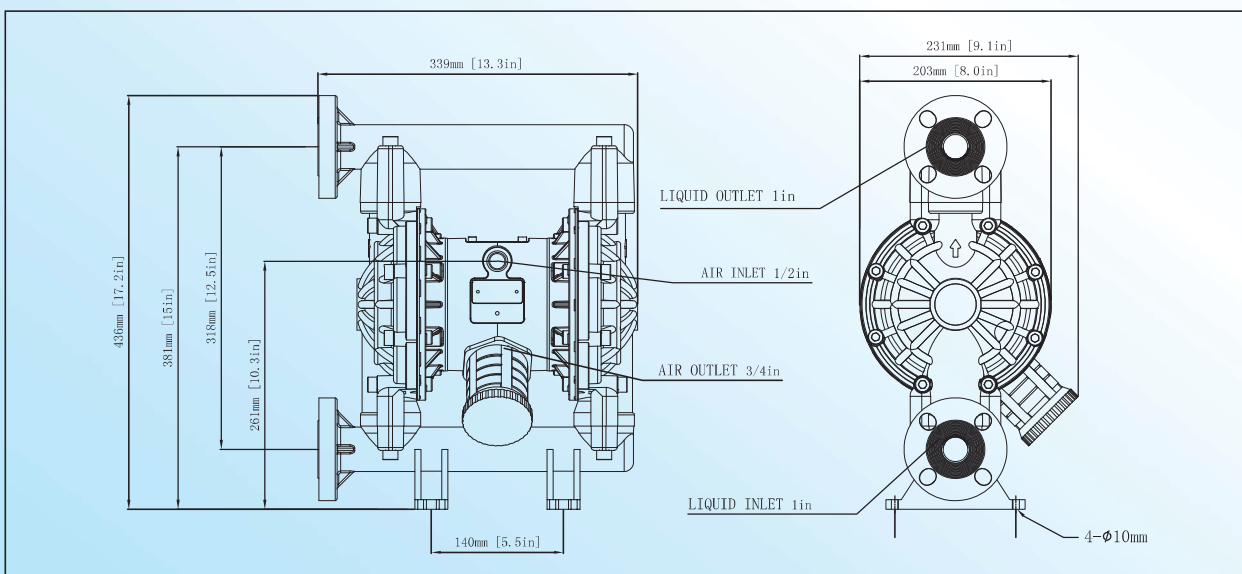
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 8m
Max. particle diameter	4mm
Suction and discharge size	1in /Npt /F
Air inlet size	1/2in
Max. flow rate	157 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	60scfm ( 1.7m <sup>3</sup> /min )
Main body material	PP Acetal PVDF

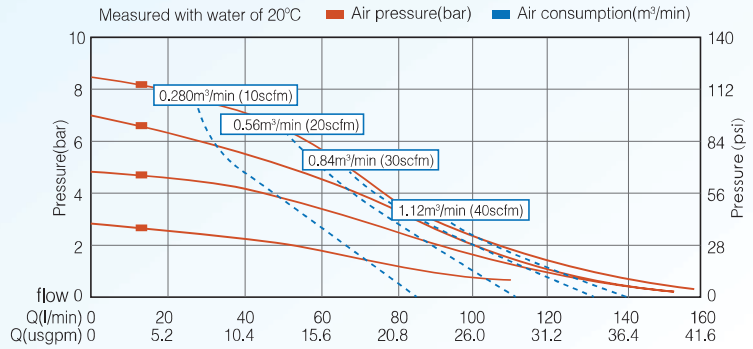
### Installation size





## HY25 Aluminum alloy pump

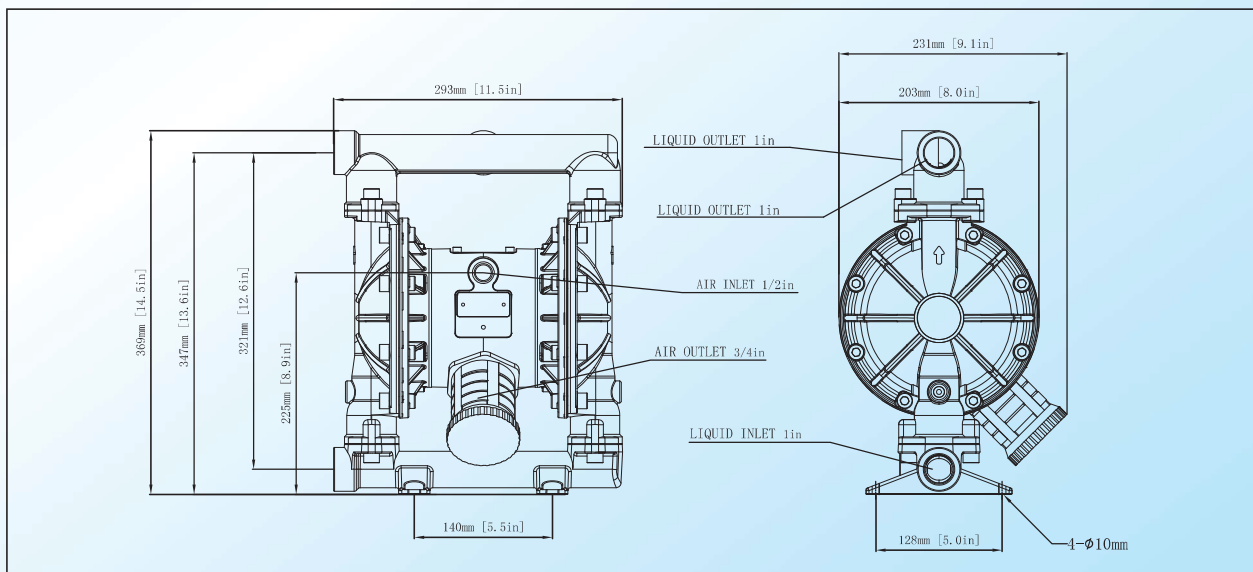
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 8m
Max. particle diameter	4mm
Suction and discharge size	1in /Npt /F
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Main body material	Aluminum alloy

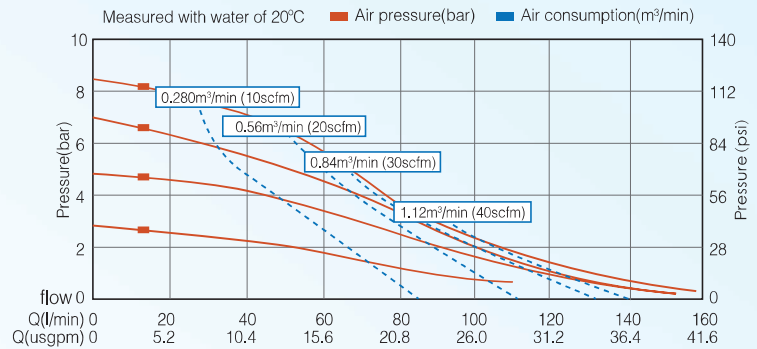
### Installation size





## HY25 Stainless steel pump

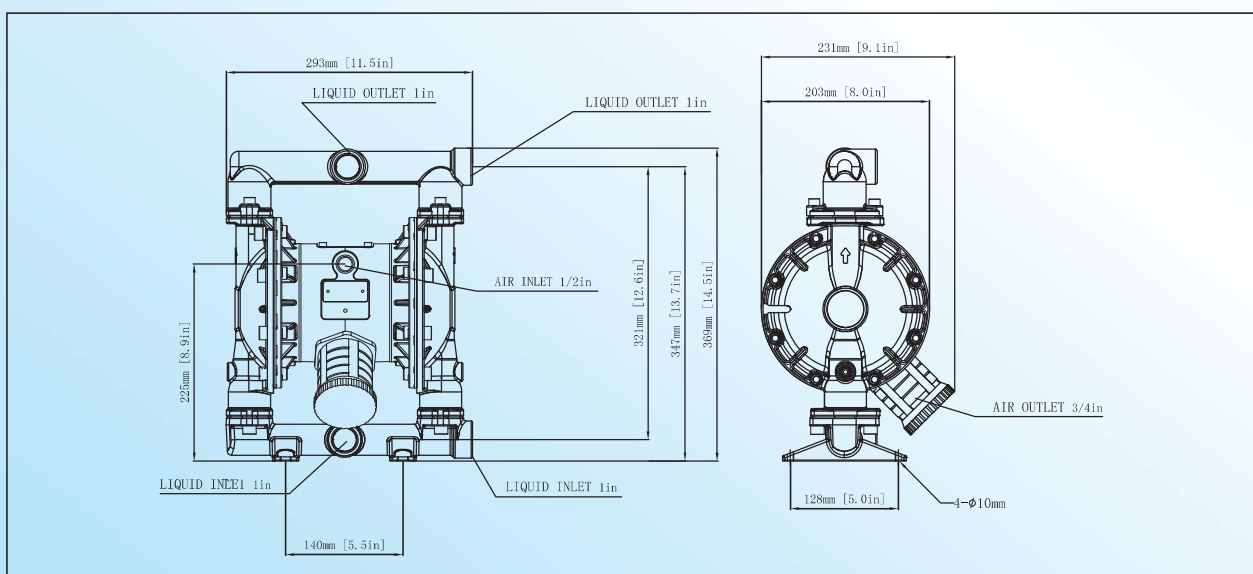
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 4m Wet 8m
Max. particle diameter	4mm
Suction and discharge size	1in /Npt /F
Air inlet size	1/2in
Max. flow rate	157 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	60scfm ( 1.7m <sup>3</sup> /min )
Main body material	304SST 316SST

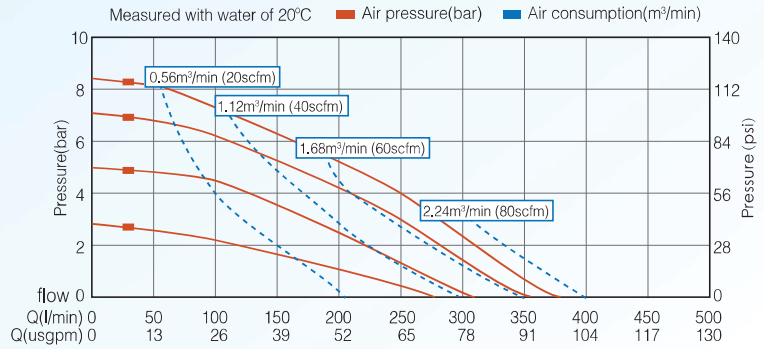
### Installation size



## HY40 Plastic pump



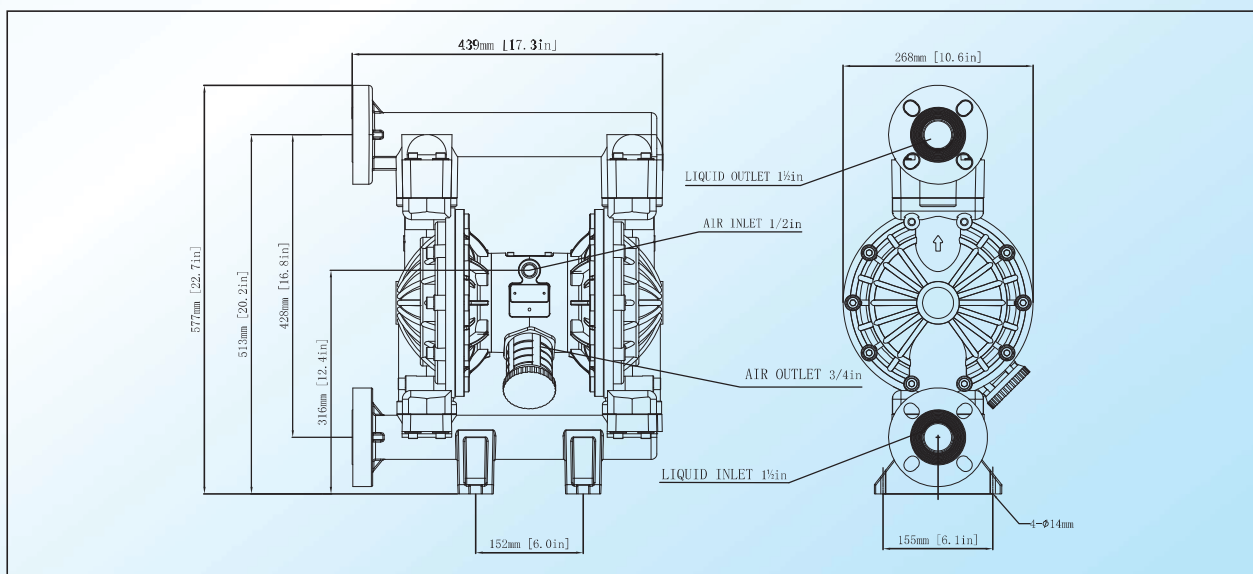
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
Max. particle diameter	5mm
Suction and discharge size	1 1/2 in /Npt /F
Air inlet size	1/2in
Max. flow rate	358 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	125scfm ( 3.5m³ /min )
Main body material	PP Acetal PVDF

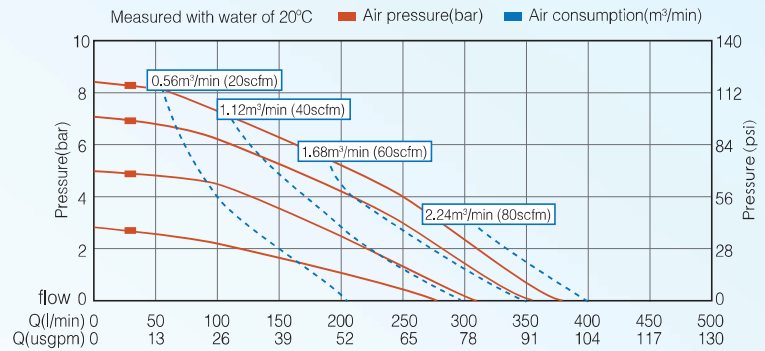
### Installation size





## HY40 Aluminum alloy pump

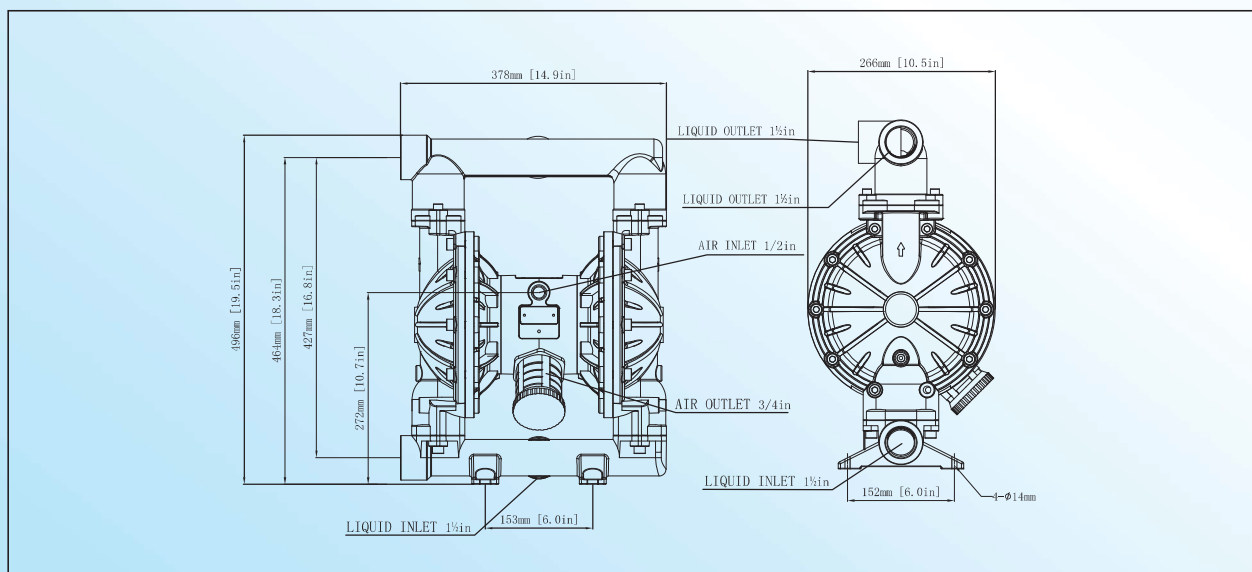
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
Max. particle diameter	5mm
Suction and discharge size	1 1/2 in /Npt /F
Air inlet size	1/2in
Max. flow rate	358 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	125scfm ( 3.5m³ /min )
Main body material	Aluminum alloy

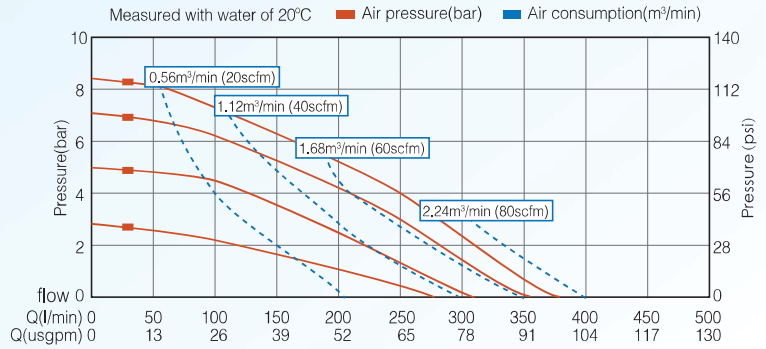
### Installation size



## HY40 Stainless steel pump



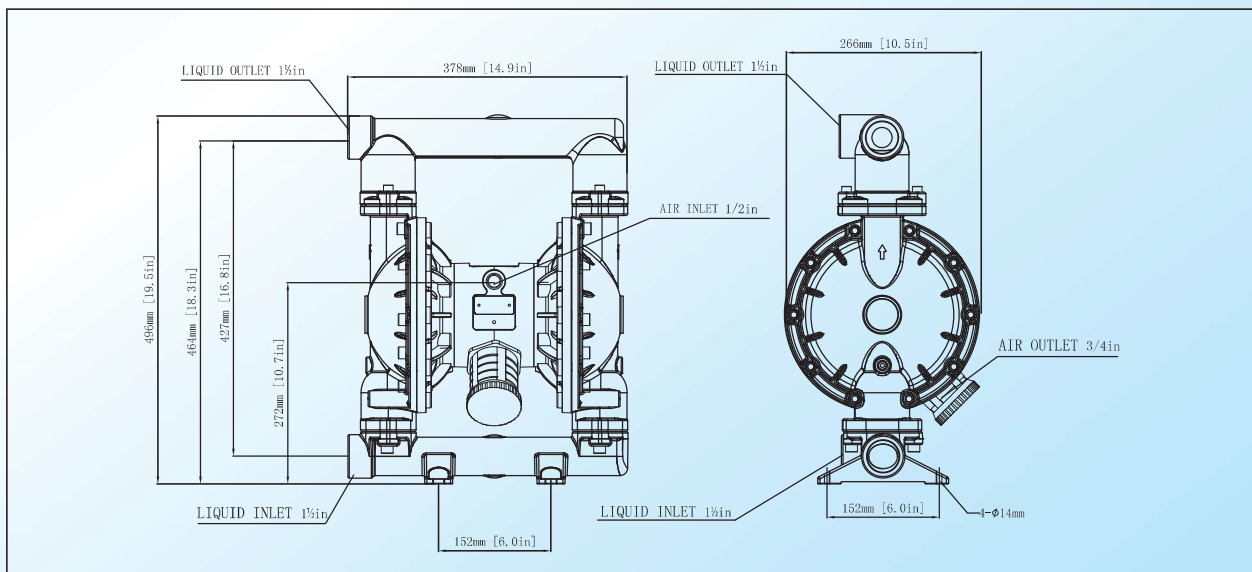
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
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Max. air inlet pressure	8.4bar
Max. air consumption	125scfm ( 3.5m³ /min )
Main body material	304SST 316SST

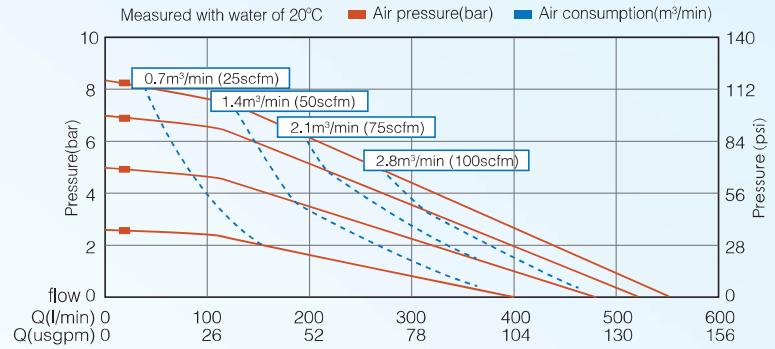
### Installation size



## HY50 Plastic pump



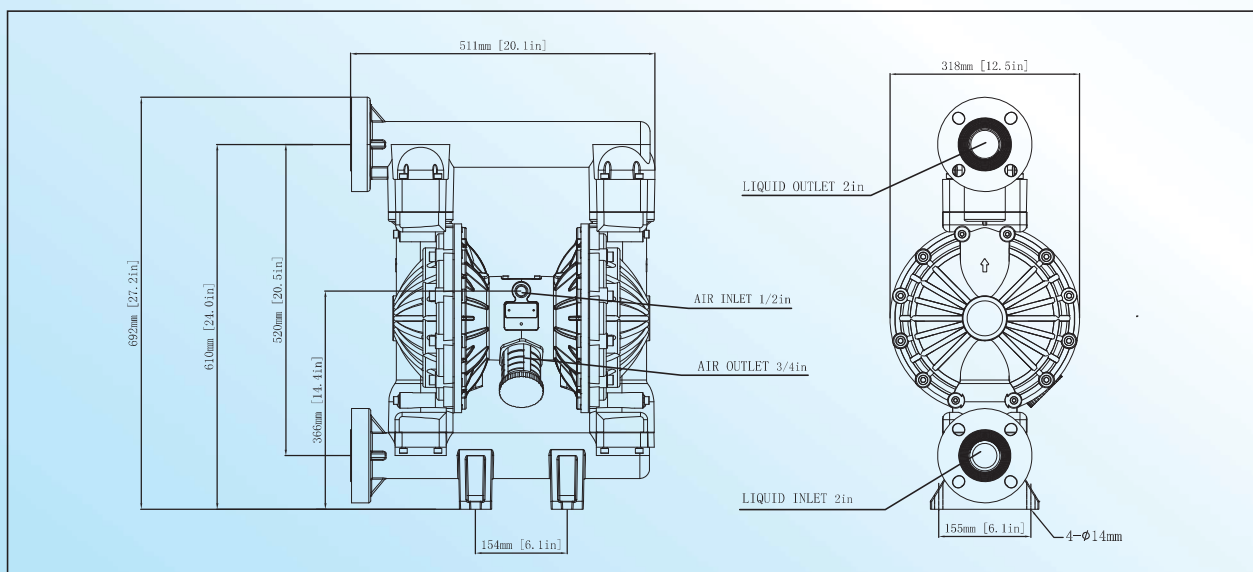
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
Max. particle diameter	6mm
Suction and discharge size	2in /Npt /F
Air inlet size	1/2in
Max. flow rate	587 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	175scfm ( 4.9m³ /min )
Main body material	PP Acetal PVDF

### Installation size

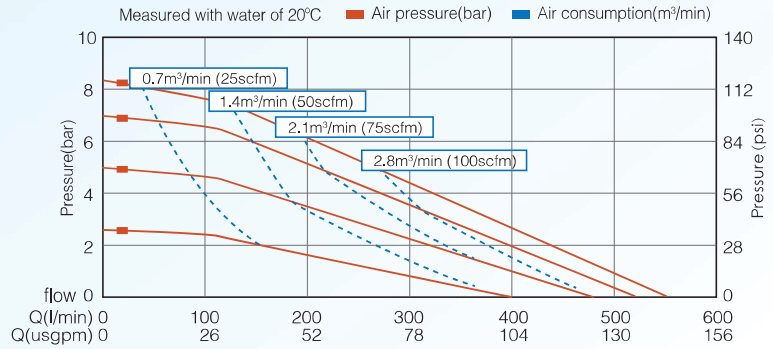




## HY50 Aluminum alloy pump



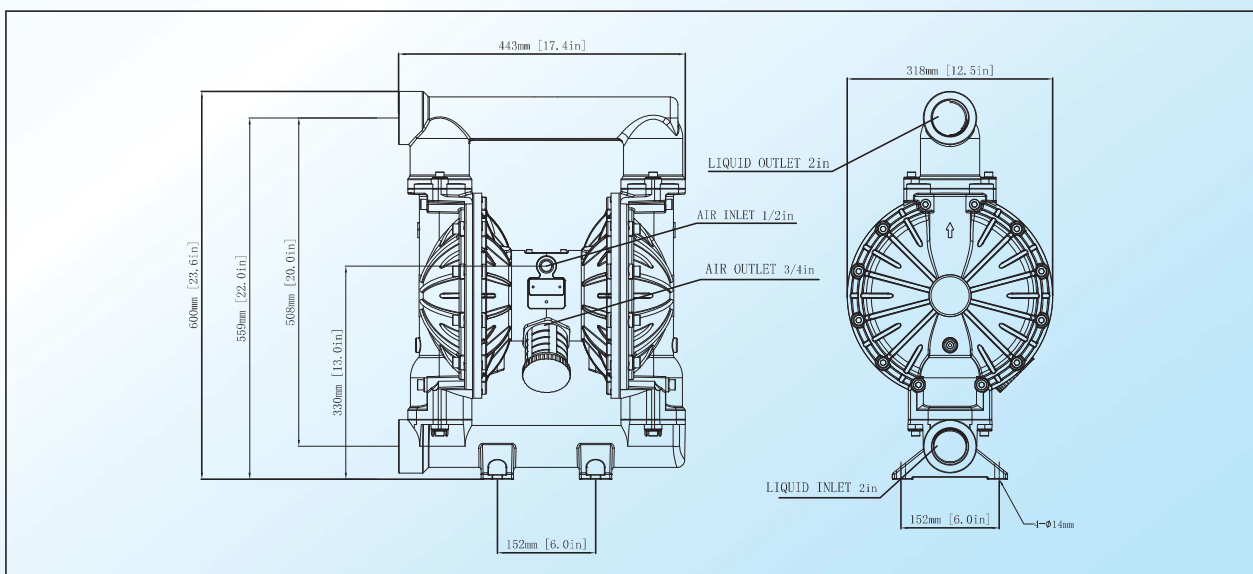
Performance curve:



### Technical parameters

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Max. air consumption	175scfm ( 4.9m <sup>3</sup> /min )
Main body material	Aluminum alloy

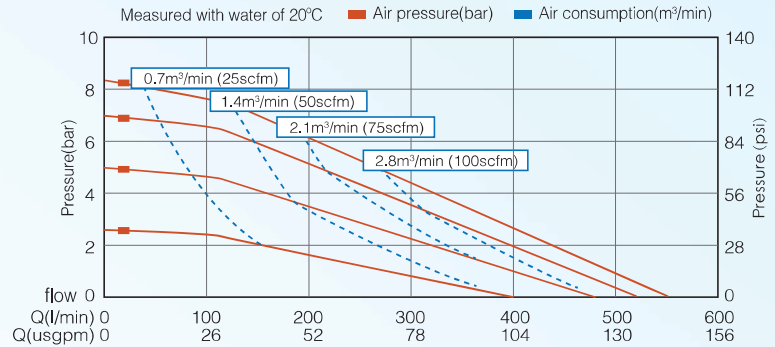
### Installation size





## HY50 Stainless steel pump

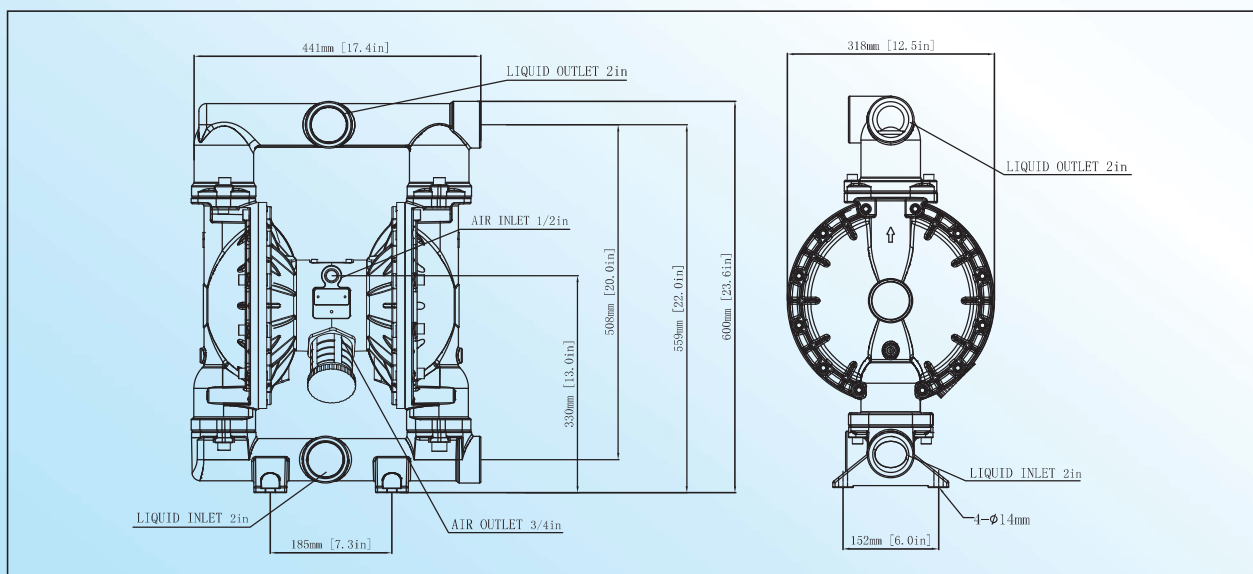
Performance curve:



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Max. air inlet pressure	8.4bar
Max. air consumption	175scfm ( 4.9m³ /min )
Main body material	304SST 316SST

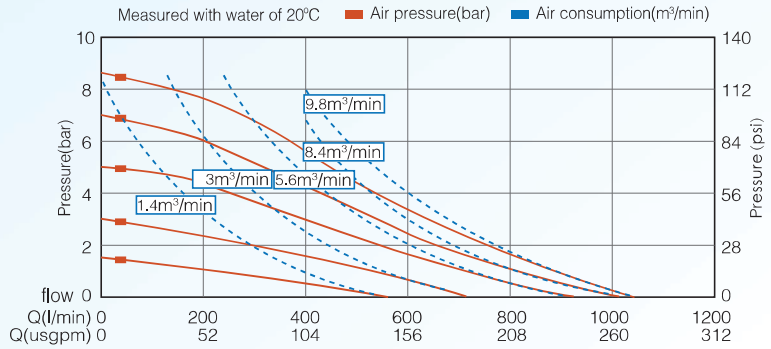
### Installation size



## HY80 Plastic pump



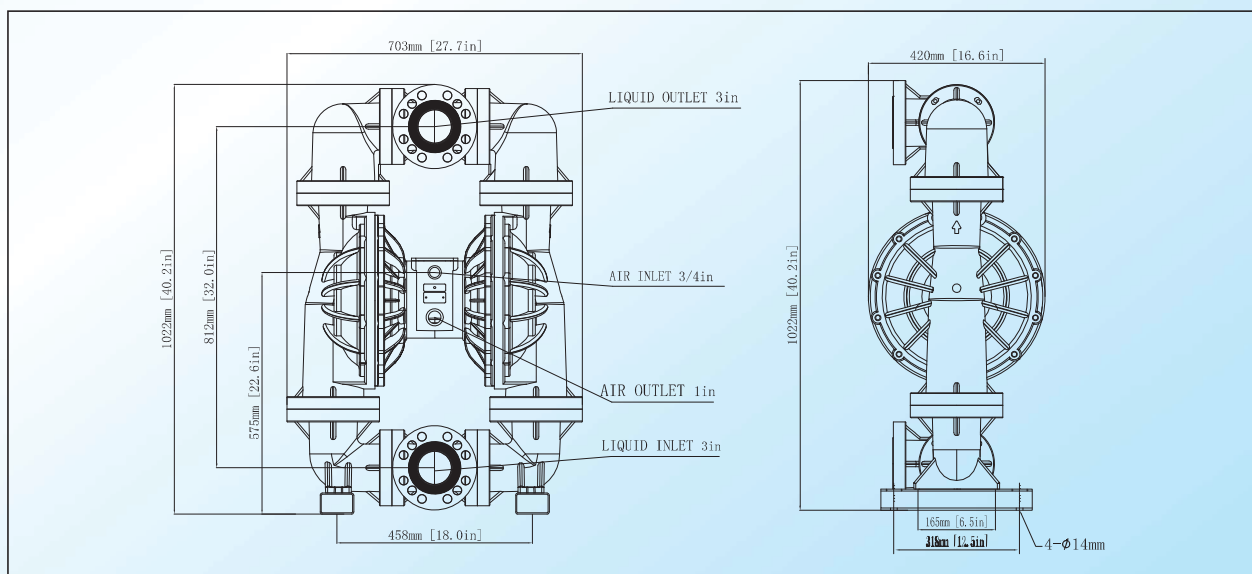
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
Max. particle diameter	9.4mm
Suction and discharge size	3in /Npt /F
Air inlet size	3/4 in
Max. flow rate	1060 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	325scfm ( 9.1m <sup>3</sup> /min )
Main body material	PP PVDF

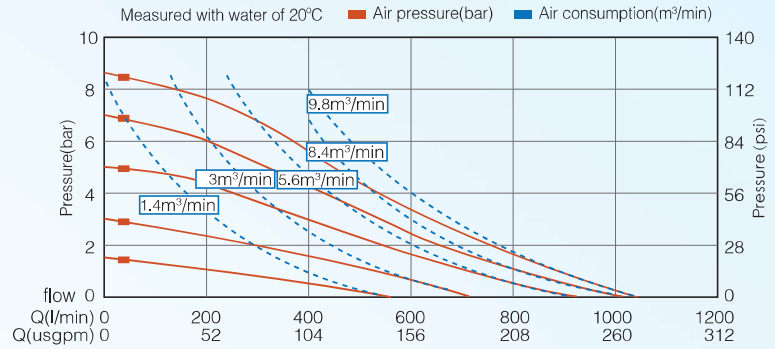
### Installation size



## HY80 Aluminum alloy pump



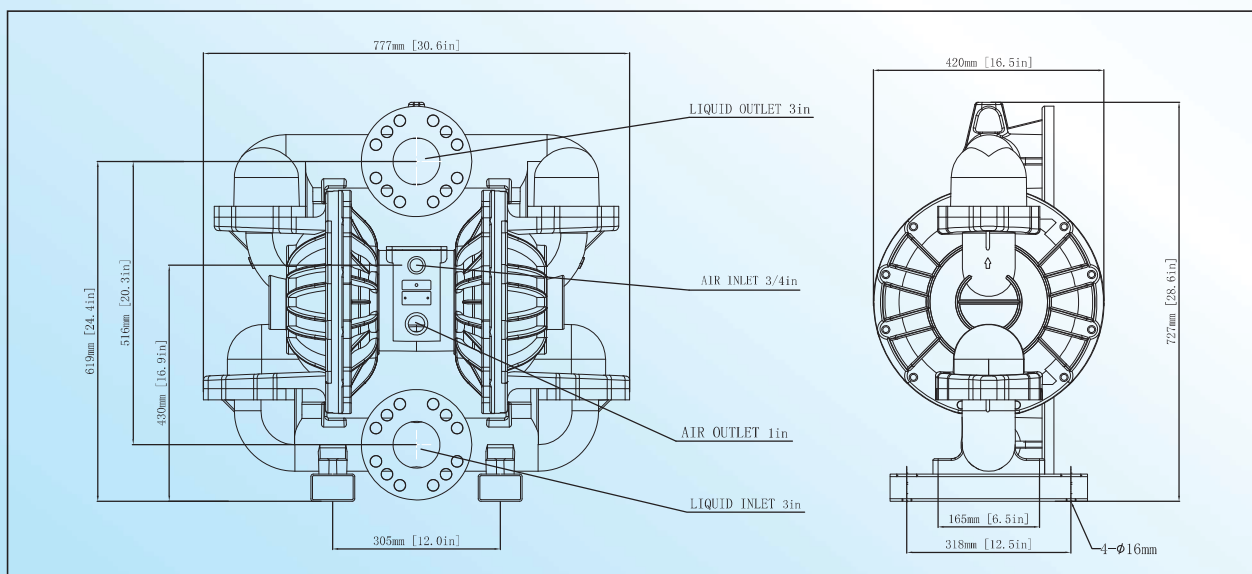
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
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Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	325scfm ( 9.1m³ /min )
Main body material	Aluminum alloy

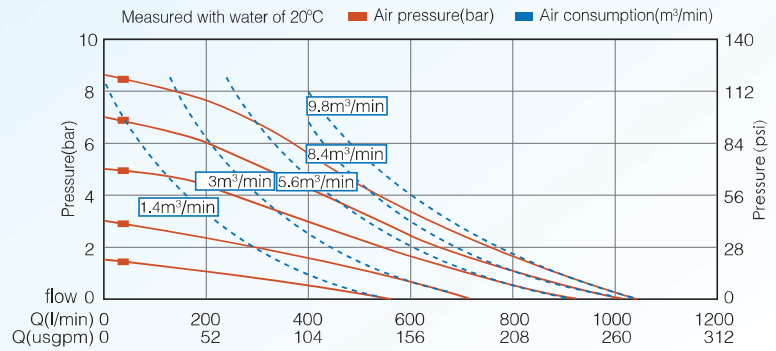
### Installation size



## HY80 Stainless steel pump



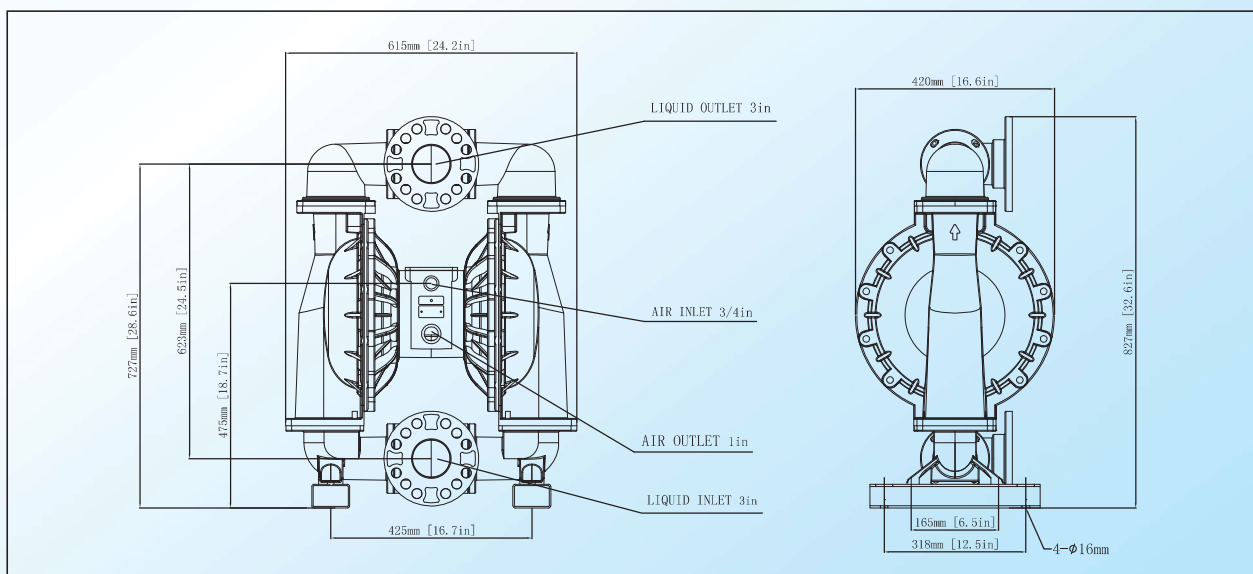
Performance curve:



### Technical parameters

Max. Suction Lift Suction height changes with the different combinations of ball, seat and the diaphragm materials.	Dry 5m Wet 8m
Max. particle diameter	9.4mm
Suction and discharge size	3in /Npt /F
Air inlet size	3/4 in
Max. flow rate	1060 L/min
Max. head	84m
Max. air inlet pressure	8.4bar
Max. air consumption	325scfm ( 9.1m <sup>3</sup> /min )
Main body material	304SST 316SST

### Installation size



## Corrosive fluid parameter & Wetted parts of pump select

Wetted parts of pump Corrosive fluid	Aluminium	Stainless steel	Polypropylene	Alcelyde Resin	Buna N	EPDM	VITON	Tellon	TPPE	Polyethylene elastomer
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		✓	✓	✓		✓	✓	✓		
Xylo/mixed xylo	✓	✓		✓			✓	✓		
Formic acid			✓					✓		
Volatile oil (boron oil)	✓	✓		✓				✓		
Citric acid		✓				✓	✓	✓	✓	
Grease	✓	✓			✓		✓	✓	✓	
Tar	✓	✓	✓		✓	✓	✓	✓	✓	
Glycol	✓	✓	✓	✓	✓		✓	✓		✓
Creosote	✓	✓			✓		✓	✓		
Cresylic acid		✓					✓	✓		

Wetted parts of pump Corrosive fluid	Aluminium	Stainless steel	Polypropylene	Alcelyde Resin	Buna N	EPDM	VITON	Tellon	TPPE	Polyethylene elastomer
Chloroform(dry)		✓		✓				✓	✓	
Sodium silicate		✓	✓					✓	✓	
Corn oil		✓	✓	✓				✓	✓	
Acetic acid	✓	✓						✓	✓	✓
Isopropyl acetate	✓	✓						✓		
Acetic acid isopropyl ester	✓	✓						✓		
Ethyl acetate	✓	✓		✓				✓		
Calcium acetate				✓				✓		
Butyl acetate	✓	✓						✓		
Cane sugar solution	✓	✓	✓	✓				✓		
Beet	✓	✓	✓					✓		
Oxygen	✓	✓			✓			✓		
Potassium cyanide		✓	✓	✓	✓	✓	✓	✓		✓
Sodium cyanide (thin)		✓	✓	✓	✓	✓	✓	✓	✓	
Cyclohexane				✓				✓	✓	✓
Oxalic acid		✓	✓		✓	✓		✓		
Silicone oil	✓	✓		✓	✓			✓	✓	✓
Jet fuel	✓	✓		✓				✓	✓	✓
Fatty acid	✓	✓						✓	✓	
Oilstone 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		✓	✓	✓	✓	✓	✓	✓		✓

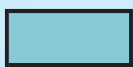
### Corrosive fluid parameter & Wetted parts of pump select


Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Aldehyde Resin	Buna N	EPDM	VITON	Tellon	TPPE	Polyethylene elastomer
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	✓	✓	✓	✓	✓	✓		✓		
Palmitic acid		✓	✓					✓		
White liquid (paper mill)		✓						✓		
Castor oil		✓				✓		✓		
Picric acid	✓	✓					✓	✓		
Beer		✓	✓			✓		✓		
Freon		✓		✓		✓	✓	✓		


Wetted parts of pump Corrosive fluid	Aluminum	Stainless steel	Polypropylene	Aldehyde Resin	Buna N	EPDM	VITON	Tellon	TPPE	Polyethylene elastomer
Propane	✓	✓		✓	✓		✓	✓		
Propylene glycol	✓	✓	✓	✓	✓	✓	✓	✓		
Butane	✓	✓		✓	✓		✓	✓	✓	
Butyl alcohol	✓	✓	✓		✓		✓	✓		
Butyl ethylene	✓	✓		✓	✓			✓		
Glucose	✓	✓	✓			✓	✓	✓		
Fluoride 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		✓		✓				✓		
Linolenic acid	✓	✓	✓					✓		
Ammonium phosphate			✓		✓	✓	✓	✓	✓	✓
Sodium phosphate			✓	✓		✓	✓	✓	✓	✓
Sodium sulfide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Barium sulfide			✓	✓	✓	✓	✓	✓		
Aluminum sulfide		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonium sulphate		✓	✓	✓	✓	✓	✓	✓	✓	✓
Potassium sulphate		✓	✓	✓	✓	✓	✓	✓		
Sodium sulphate		✓	✓	✓	✓	✓	✓	✓	✓	✓
Magnesium sulfate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zinc sulfate			✓		✓	✓		✓	✓	✓
Ferrous sulfate			✓		✓	✓	✓	✓		
Rosin	✓	✓	✓	✓	✓	✓		✓		
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)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	SS	SS	SS	
Acetic Acid(Hot)	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
Acetic Acid(Boiling)	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	PP	PP	PP
Chromic Acids(Conc)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Nitric Acid	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
Phosphoric Acid(Ambient)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Phosphoric Acid(Hot)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Phosphoric Acid(Boiling)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Potassium Hydroxide (<60°C)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Potassium Hydroxide (<85°C)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	SS	SS	SS
Sodium Hypochloride	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Magnesium Hydroxide	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Sodium Hydroxide	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Hydrochloric Acid	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Hydrochloric Acid(Boiling)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Hydrofluoric Acid(Ambient)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Hydrofluoric Acid(Boiling)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Hydrofluoric Acid(Conc)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Sulfuric Acid (<51.6°C)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Sulfuric Acid (>51.6°C<79.4°C)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Sulfuric Acid(Biling)	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP

  
Polypropylene

  
Stainless steel

  
Kynar (PVDF)



## The Main Application Areas Of Pneumatic Diaphragm Pump& The Suitable Fluid

- Tanker / Truck / Train Unloading
- Waste Water Treatment / Fluid Filtration
- Formulation
- Basic Transfer / Supply
- Packaging / Filling
- Batching / Blending
- System Flush
- Recirculation / Reclamation



water treatment



Environmental Industry



Sanitary



Paint/Ink



construction industry



Daily chemical industry



Mining



Chemical/ Pharmacy

## Applications and Industry

**Chemical industry:** Acid, alkalis, solvents, suspended solids, decentralized system

**Petrochemical industry:** Crude oil, dense oil, grease, slurry, mire, etc.

**Coating industry:** Resins, solvents, coloring agents, paints, etc.

**Daily chemical industry:** Detergent, shampoo, latex, emulsio, hand cream, surfactants.

**Ceramic industry:** Slurry, ceramic mud, lime mud, clay, etc

**Mining industry:** Coal mud, lava, mud, slurry, explosives slurry, lubricants, etc.

**water treatment:** Lime mud, soft sediments, sewage, chemicals, waste water.

**Food industry:** Emi-solid liquid, chocolate, salt water, vinegar, syrup, vegetable oil, soybean oil, honey, animal blood

**Beverage industry:** Yeast, syrups, concentrates, gas-liquid mixture, wine, juice, corn liquor, etc.

**Medicine industry:** Solvents, acids, alkali, plant extracted liquid, ointment, plasma and other drugs liquid

**Papermaking industry:** Adhesives, resins, paints, inks, pigments, H<sub>2</sub>O<sub>2</sub>, etc.

**Electronic industry:** Solvents, plating solutions, cleaning agents, H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, waste acids, corrosive acid,

**Textile industry:** Dyes chemicals, resins, glue etc

**Construction industry:** Cement, ceramic tile adhesive, rock slurry, the ceiling paint

**Automobile Industry:** Polishing emulsion, oil, coolant, automotive paint, oil emulsions, varnish, varnish additives, skim paint, paint, etc.

**Furniture industry:** Additives, varnish, solvents, decentralized system, color agent, white glue, epoxy, starch adhesives.

**Metallurgical, forging & dyeing industry:** Metal slurry, hydroxides and carbide slurry, dust-washingslurry.

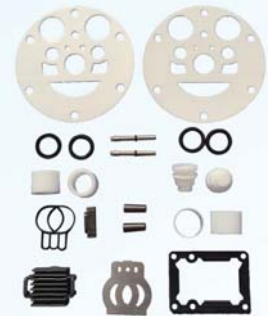




Damper



Pump parts



Pump parts



Ball valve



Quick coupler



Conversion joint



Check valve



Flow meter



Meter nozzle



oil-water separator



Solenoid valve



Products exhibition area



Warehouse corner

# MARKETING NETWORK



**SHANGHAI HAORYANG PUMP VALVE MANUFACTURING CO.,LTD.**

Add: No.1438 Jinshao Road Baoshan District Shanghai

Tel: +86-21-66769112 66769113

Fax: +86-21-51685718 Zip code:200949

Website:www.chnpump.cn

E-mail: sales@chnpump.cn Skype: hypump



Invite agents to join

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