DYI SHENG

AIR-OPERATED DOUBLE DIAPHRAGM PUMP

www.tdspump.com

CE AMTIVO ISO 9001 Quality Management UKAS MANAGEMENT SYSTEMS 8289 MIT MADE IN TAIWAN Ex II 2 GD c IIB T4/T5

DYI SHENG

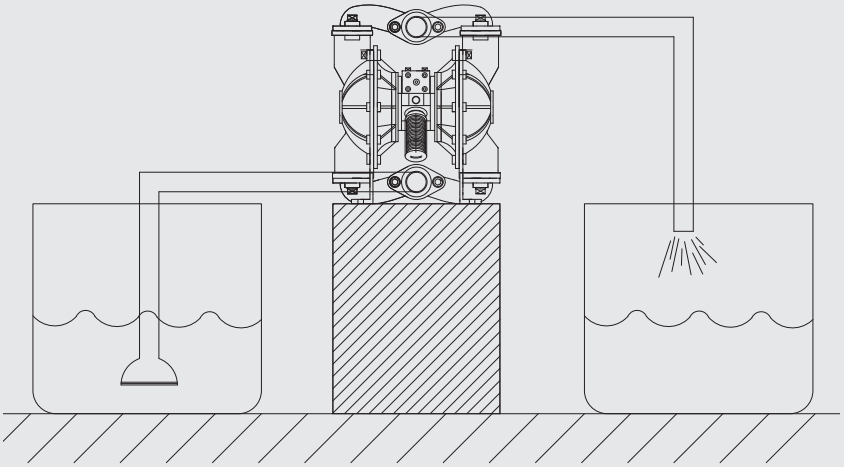
DYISHENG Industrial Co., Ltd., established in 1986, embarked on the research, manufacturing, and design of pneumatic double diaphragm pumps in 1988. Over the years, the company has obtained EU CE certification, ATEX explosion-proof certification, and ISO9001 quality certification. With a commitment to putting quality first, prioritizing service excellence, fostering technological innovation, and upholding integrity and steadfastness, DYISHENG has been selling its products worldwide for nearly 40 years, earning recognition and praise from customers. To strengthen the brand awareness of DYISHENG and consolidate customer rights, the global sales brand "TDS-DYISHENG" was launched in 2011. The company continues its efforts to meet the diverse needs of different customers and establish a reputable brand image.

DYISHENG adheres to high standards and strict control in all product processes, conducting 100% shipment testing and manufacturing all products in Taiwan. We refrain from using cheap materials. We place great importance on customer service and feedback, continuously striving for improvement and advancement, with the primary goal of producing high-quality and durable products.

DYISHENG's pneumatic double diaphragm pumps incorporate our patented design of the best air valve. These pumps can operate with a minimum air pressure of just 0.5 Bar and have been tested to operate smoothly without any stall situation, reaching 100% efficiency in normal operating conditions. Our products possess advantages such as high safety (explosion-proof), versatility, longevity, and low maintenance costs. The pump design itself does not require complex control systems, making it widely applicable in various industries, including automation, wastewater treatment, electronics, construction, mining, shipbuilding, electroplating, chemicals, petrochemicals, food, pharmaceuticals, and more. We continuously develop and improve our products to meet the needs of a wide range of customers in different industries.

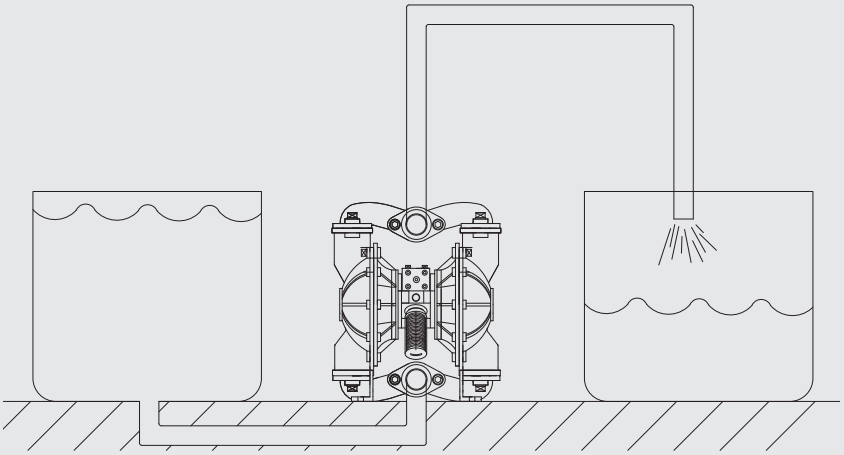
WELL KNOWN IN THE WORLD

APPLICATION SCOPE



Self-Priming

When the pump is initially running dry, it is recommended that the vertical suction lift be within 4.5 meters. When the suction side is fully pipe, the maximum vertical lift can reach up to 6.7 meters. (This data is based on water at room temperature; actual conditions may vary due to the density, viscosity, and other characteristics of the fluid itself.)



Positive Pressure Suction

These pumps are widely used for the transfer and circulation of chemical storage tanks and can also be applied to remove sediment from the bottom of tanks. It is recommended that the positive pressure be less than 0.7 Bar to achieve the most efficient operation of the pump.

BENEFITS

Explosion-Proof

Can be used in flammable and explosive environments.

Chemical Resistance

Suitable for transferring corrosive fluids.

Low Shear Force

Minimal agitation to the conveyed materials, ultra-low shear force.

Dry Running Capability

Can run dry for extended periods without damaging the pump.

Accuracy

Suitable for metering, dispensing, and filling applications.

High Safety

No electricity needed, no risk of sparks, and no overheating leading to shutdowns.

No Complex Control Systems

Operates on compressed air principles, resulting in low maintenance costs.

Pumps solids-laden fluids

Can transfer fluids containing particles and high-viscosity fluids without clogging.

Lightweight and Portable

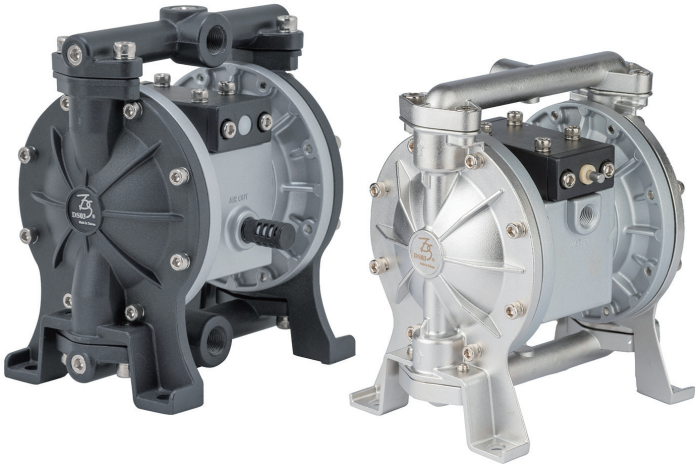
Compact size, lightweight, and easy to move

DS03 | Pneumatic Diaphragm Pump

METAL SERIES

DS03 - XXX - XXXX - OX

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
03 = 3/8"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy	**T** = Center Horizontal **D** = Double In/Out	**U** = UPE **T** = PTFE	**A** = Aluminum Alloy **E** = PE **O** = Santoprene® **S** = Stainless Steel	**T** = PTFE **S** = SUS316	**S** = Stainless Steel **E** = PE **O** = Santoprene® **T** = PTFE	**02** **03**



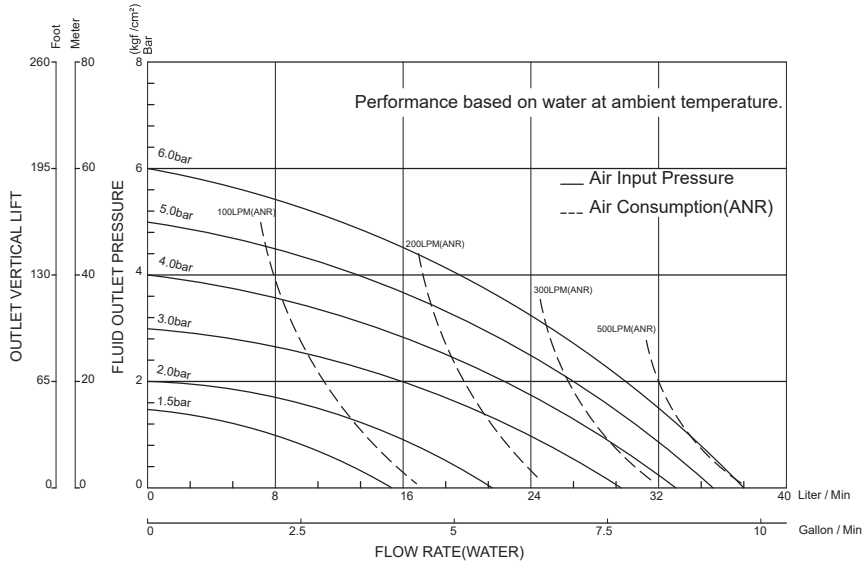
DIMENSIONAL DRAWING

DS03-A

DS03-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	3/8" PT (BSP)
Air Inlet/ Exhaust Port Size	1/4" PT (BSP)
Min Air Inlet Pressure	0.5 Bar (kgf/cm^2) | 7.25 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm^2) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	110 ml/cycle
Max Solids Handling	∅ 1.5mm
Max Air Consumption	500 Liter/Per Min 17.66 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	36 Liter/ Per Min 9.51 Gallon US/ Per Min
Packing Dimensions	22Lx17Wx26H(cm), 0.34Cuft
Net Weight	AL : 3.5 KG | SS : 5.0 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C PTFE(T) : -10 to +100°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 0.5 meters, and the horizontal lift at the outlet end is approximately 1 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS04 | Pneumatic Diaphragm Pump

DYI SHENG

D S 04 - X X X - X X X X - 0X

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
04 = 1/2"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy	**T** = Center Horizontal **I** = Side Horizontal **D** = Double In/Out	**U** = UPE **T** = TFM **O** = Santoprene®	**A** = Aluminum Alloy **S** = Stainless Steel **E** = PE **P** = PP **O** = Santoprene®	**T** = PTFE **S** = SUS316	**T** = PTFE **S** = Stainless Steel **P** = PP **E** = PE **O** = Santoprene®	**02** **03**

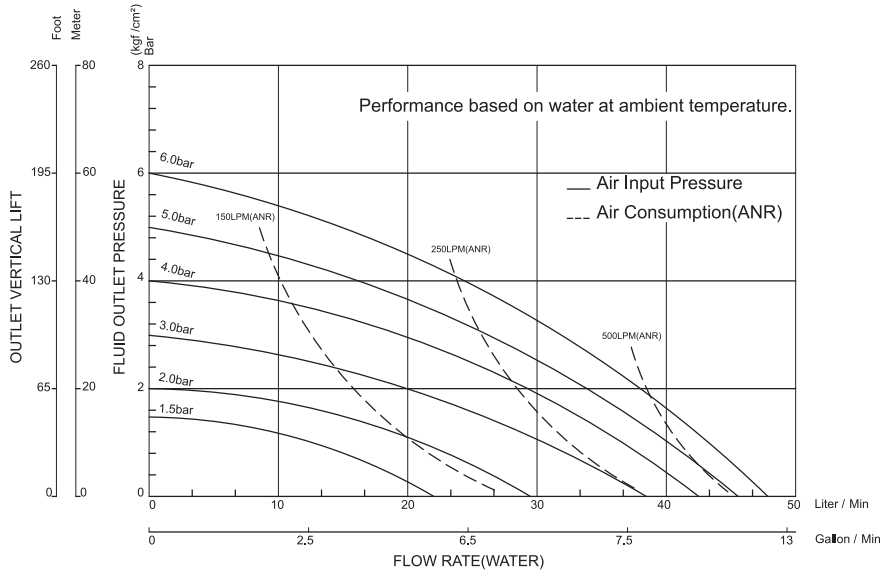
DIMENSIONAL DRAWING

DS04-A

DS04-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	1/2" PT (BSP)
Air Inlet/ Exhaust Port Size	1/4" PT (BSP)
Min Air Inlet Pressure	0.5 Bar (kgf/cm^2) | 7.25 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm^2) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	150 ml/cycle
Max Solids Handling	∅ 2mm
Max Air Consumption	550 Liter/Per Min 19.42 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	48 Liter/ Per Min 12.68 Gallon US/ Per Min
Packing Dimensions	26Lx21Wx29H(cm), 0.56Cuft
Net Weight	AL : 4.5 KG | SS : 7.0 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C TFM (T) : -30 to +130°C Santoprene®(O) : 0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 0.5 meters, and the horizontal lift at the outlet end is approximately 1 meter.

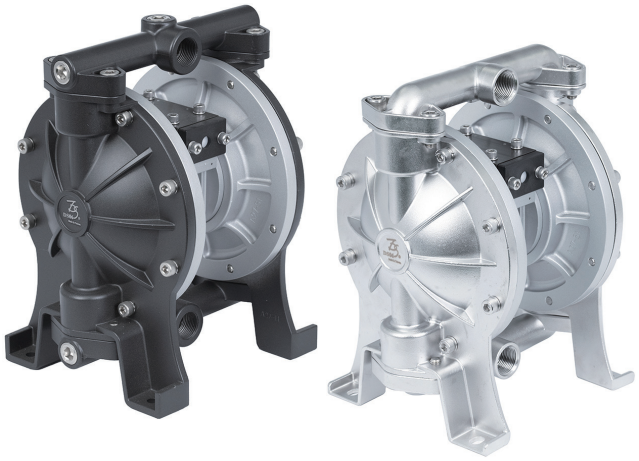
(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS06 | Pneumatic Diaphragm Pump

METAL SERIES

DS06 - XXX - XXXX - 0X

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
06 = 3/4"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy	**T** = Center Horizontal **D** = Double In/Out	**U** = UPE **T** = TFM **O** = Santoprene®	**A** = Aluminum Alloy **S** = Stainless Steel **P** = PP **O** = Santoprene®	**T** = PTFE **S** = SUS316	**T** = PTFE **S** = Stainless Steel **P** = PP **O** = Santoprene®	**02**



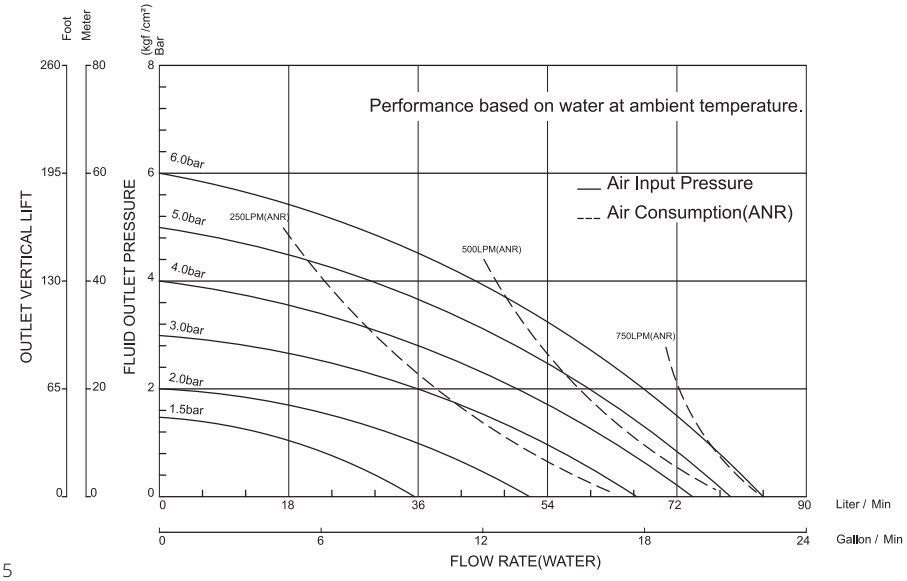
DIMENSIONAL DRAWING

DS06-A

DS06-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	3/4" PT (BSP)
Air Inlet/ Exhaust Port Size	1/4" PT (BSP) Exhaust 3/8"PT(BSP)
Min Air Inlet Pressure	0.5 Bar (kgf/cm²) | 7.25 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm²) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm²) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	310 ml/cycle
Max Solids Handling	∅ 2.4mm
Max Air Consumption	750 Liter/Per Min 26.49 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	85 Liter/ Per Min 22.45 Gallon US/ Per Min
Packing Dimensions	26Lx24Wx35H(cm), 0.77Cuft
Net Weight	AL : 6.5 KG | SS : 11.5 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C TFM (T) : -30 to +130°C Santoprene®(O) : 0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 0.5 meters, and the horizontal lift at the outlet end is approximately 1 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

METAL SERIES

DS10 | Pneumatic Diaphragm Pump

DYI SHENG

DS10 - XXX - XXXX - OX

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
10 =1"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy **P** = Polypropylene (PPG)	**T** = Center Horizontal **D** = Double In/Out **U** = Center Vert	**U** = UPE **T** = TFM **O** = Santoprene®	**A** = Aluminum Alloy **S** = Stainless Steel **P** = PP **U** = TPU **O** = Santoprene®	**T** = PTFE **S** = SUS316 **O** = Santoprene **B** = Bakelite **C** = Chromium **U** = TPU	**T** = PTFE **S** = Stainless Steel **O** = Santoprene® **H** = Hard Stainless Steel **U** = TPU	**02** **03**

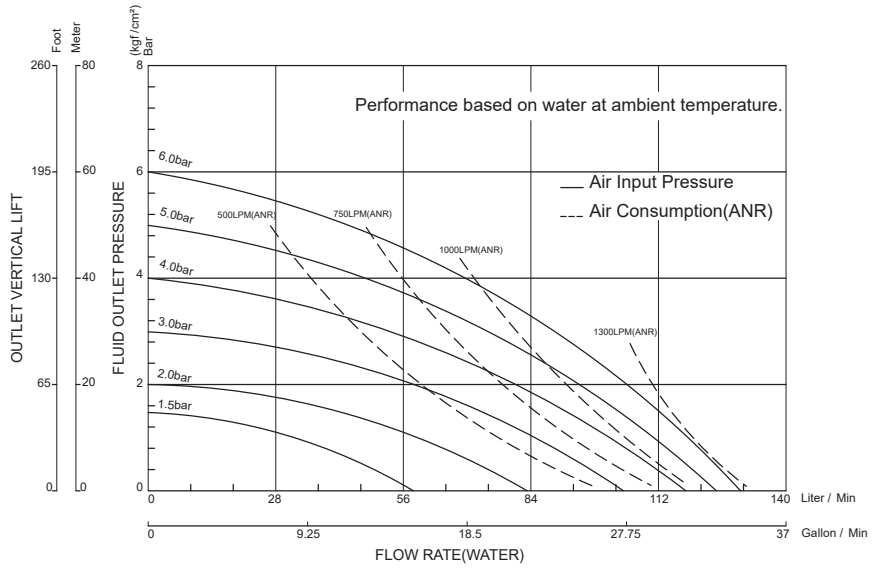
DIMENSIONAL DRAWING

DS10-A

DS10-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	1" PT (BSP)
Air Inlet/ Exhaust Port Size	3/8" PT (BSP)
Min Air Inlet Pressure	1.2 Bar (kgf/cm^2) | 17.4 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm^2) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	900 ml/cycle
Max Solids Handling	∅ 3mm
Max Air Consumption	1300 Liter/Per Min 45.91 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	130 Liter/ Per Min 34.34 Gallon US/ Per Min
Packing Dimensions	28Lx26Wx39H(cm), 1.0Cuft
Net Weight	AL : 9.5 KG | SS : 15.0 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C TFM (T) : -30 to +130°C Santoprene®(O) : 0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 1 meters, and the horizontal lift at the outlet end is approximately 1.5 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS14 | Pneumatic Diaphragm Pump

METAL SERIES

DS14 - XXX - XXXX - OX

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
14 = 1-1/2"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy	**T** = Center Horizontal **I** = Side Horizontal **D** = Double In/Out	**U** = UPE **T** = TFM **O** = Santoprene®	**A** = Aluminum Alloy **S** = Stainless Steel **P** = PP **O** = Santoprene®	**T** = PTFE **S** = SUS316 **B** = Bakelite **C** = Chromium	**T** = PTFE **S** = Stainless Steel **P** = PP **O** = Santoprene®	**01** **02**

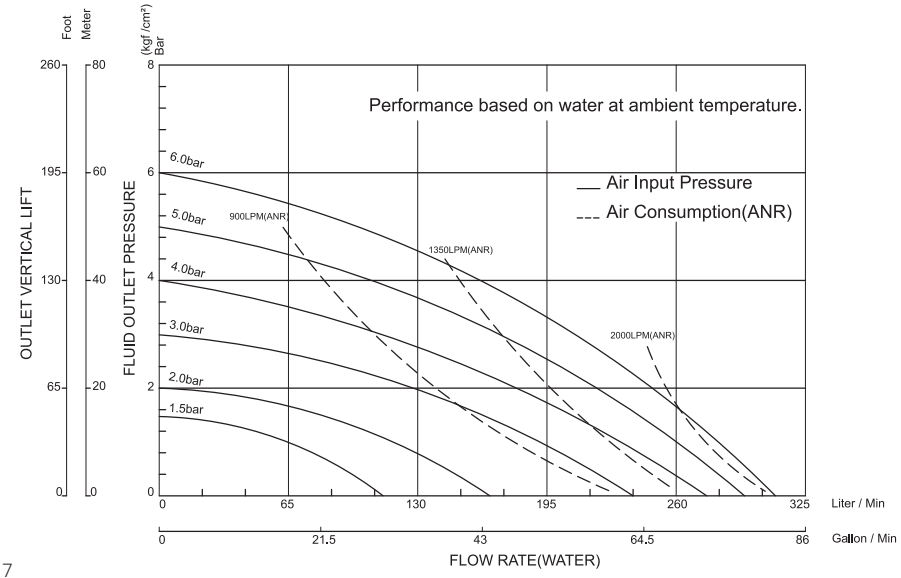
DIMENSIONAL DRAWING

DS14-A

DS14-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	1-1/2" PT (BSP)
Air Inlet/ Exhaust Port Size	Inlet 1/2" PT (BSP) Exhaust 1" PT(BSP)
Min Air Inlet Pressure	1.2 Bar (kgf/cm^2) | 17.4 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm^2) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	Edition01 | 2850 ml/cycle Edition02 | 2250 ml/cycle
Max Solids Handling	∅ 4.5mm
Max Air Consumption	2300 Liter/Per Min 81.22 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	310 Liter/ Per Min 81.89 Gallon US/ Per Min
Packing Dimensions	38Lx29Wx50H(cm), 1.95Cuft
Net Weight	AL : 19.0 KG/ SS : 34.5 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C TFM (T) : -30 to +130°C Santoprene®(O) : 0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 1 meters, and the horizontal lift at the outlet end is approximately 1.5 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

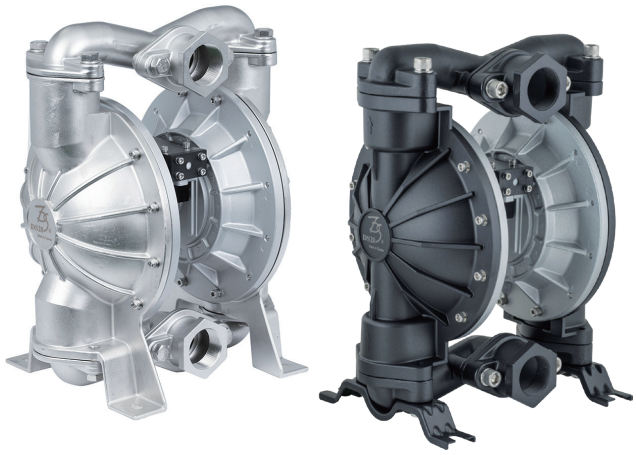
METAL SERIES

DS20 | Pneumatic Diaphragm Pump

DYI SHENG

D S 20 - X X X - X X X X - 0X

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
20 = 2"	**A** = Aluminum Alloy **S** = SUS316	**A** = Aluminum Alloy	**T** = Center Horizontal	**U** = UPE **T** = TFM **O** = Santoprene®	**A** = Aluminum Alloy **S** = Stainless Steel **O** = Santoprene®	**T** = PTFE **S** = SUS316 **B** = Bakelite	**T** = PTFE **S** = Stainless Steel **P** = PP **O** = Santoprene®	**01** **02**



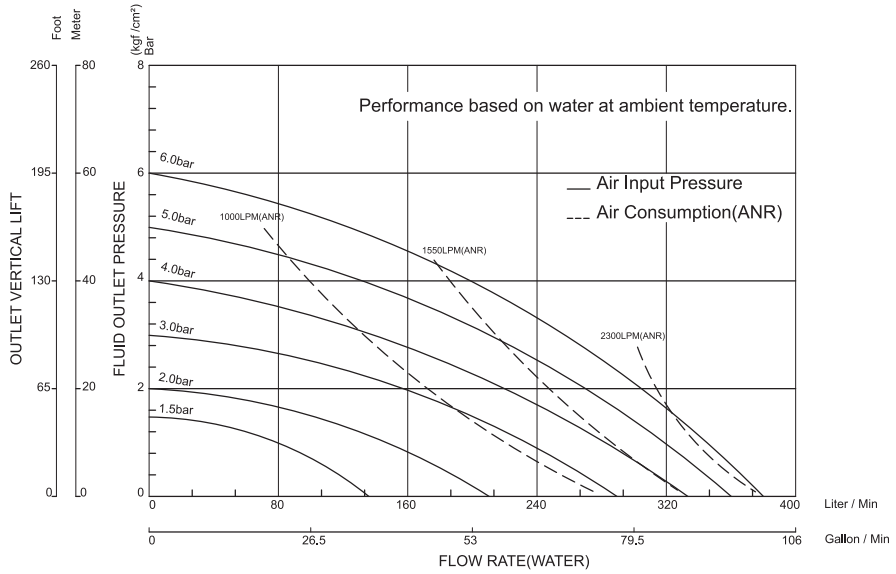
DIMENSIONAL DRAWING

DS20-A

DS20-S

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	2" PT (BSP)
Air Inlet/ Exhaust Port Size	Inlet 1/2" PT (BSP) Exhaust 1" PT(BSP)
Min Air Inlet Pressure	1.2 Bar (kgf/cm^2) | 17.4 psi
Max Air Inlet Pressure	8.0 Bar (kgf/cm^2) | 116 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	Edition01 | 4600 ml/cycle Edition02 | 3400 ml/cycle
Max Solids Handling	∅ 6.5mm
Max Air Consumption	2500 Liter/Per Min 88.29 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	380 Liter/ Per Min 100.39 Gallon US/ Per Min
Packing Dimensions	45Lx36Wx57H(cm), 3.26Cuft
Net Weight	AL : 31.0 KG | SS : 53.0 KG
Temperature Range of Diaphragm	UPE(U) : +5 to +50°C TFM (T) : -30 to +130°C Santoprene®(O) : 0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 1 meters, and the horizontal lift at the outlet end is approximately 1.5 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS02 | Pneumatic Diaphragm Pump

PLASTIC SERIES

DS02 - XXX - XXXX - OX

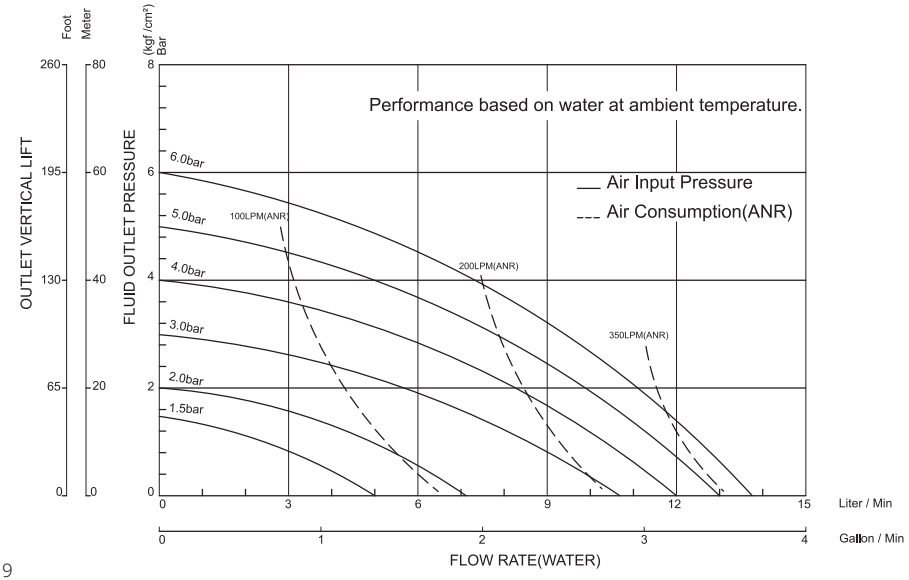
Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
02 = 1/4"	**P** = Polypropylene (PPG)	**P** = Polypropylene (PPG)	**T** = Center Horizontal	**T** = PTFE **O** = Santoprene®	**P** = PP	**T** = PTFE	**T** = PTFE **P** = PP **E** = PE	**03**

DIMENSIONAL DRAWING

DS02-PP

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	1/4" PT (BSP)
Air Inlet/ Exhaust Port Size	1/4" PT (BSP)
Min Air Inlet Pressure	0.8 Bar (kgf / cm^2) | 11.6 psi
Max Air Inlet Pressure	7.0 Bar (kgf / cm^2) | 101.5 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	50 ml/cycle
Max Solids Handling	∅ 1mm
Max Air Consumption	370 Liter/Per Min 13.07 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	14 Liter/ Per Min 3.70 Gallon US/ Per Min
Packing Dimensions	23.5Lx16.5Wx17H(cm), 0.23Cuft
Net Weight	1.3 KG
Temperature Range of Wetted Material	Polypropylene(P)：0 to +80°C
Temperature Range of Diaphragm	PTFE(T)：-10 to +100°C Santoprene®(O)：0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 0.5 meters, and the horizontal lift at the outlet end is approximately 1 meter.

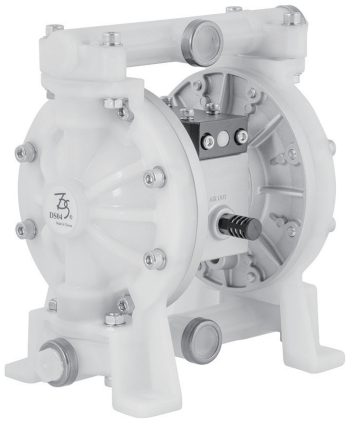
(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS04 | Pneumatic Diaphragm Pump

DYI SHENG

DS04 - XXX - XXXX - OX

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
04 = 1/2"	**P** = Polypropylene (PPG)	**A** = Aluminum Alloy	**T** = Center Horizontal	**T** = PTFE **O** = Santoprene®	**P** = PP **E** = PE	**T** = PTFE	**T** = PTFE **P** = PP **E** = PE	**02** **03**

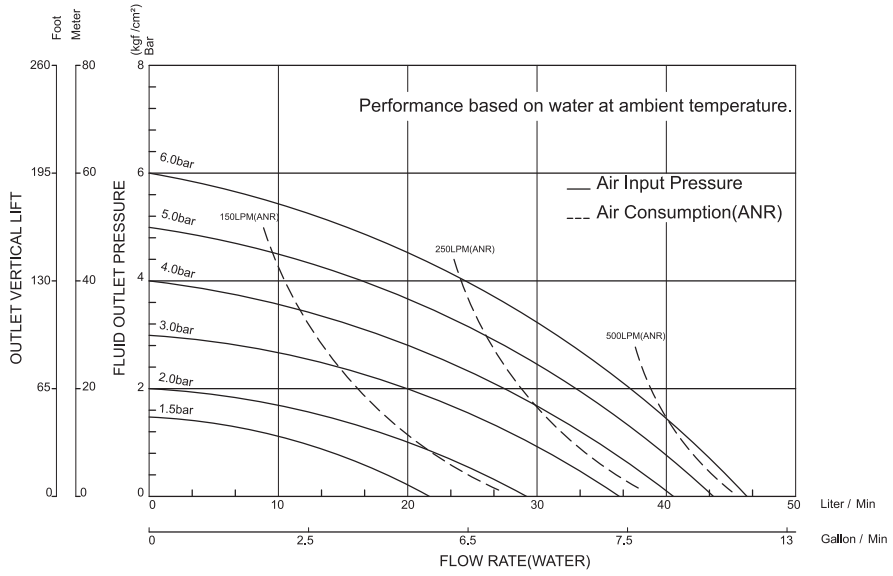


DIMENSIONAL DRAWING

DS04-PA

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	1/2" PT (BSP)
Air Inlet/ Exhaust Port Size	1/4" PT (BSP)
Min Air Inlet Pressure	0.8 Bar (kgf/cm^2) | 11.6 psi
Max Air Inlet Pressure	7.0 Bar (kgf/cm^2) | 101.5 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm^2) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	140 ml/cycle
Max Solids Handling	∅ 2mm
Max Air Consumption	530 Liter/Per Min 18.72 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	46 Liter/ Per Min 12.16 Gallon US/ Per Min
Packing Dimensions	29Lx20Wx30H(cm), 0.62Cuft
Net Weight	4.0 KG
Temperature Range of Wetted Material	Polypropylene(P)：0 to +80°C
Temperature Range of Diaphragm	TFM (T)：-60 to 130°C Santoprene®(O)：-10 to 80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 0.5 meters, and the horizontal lift at the outlet end is approximately 1 meter.

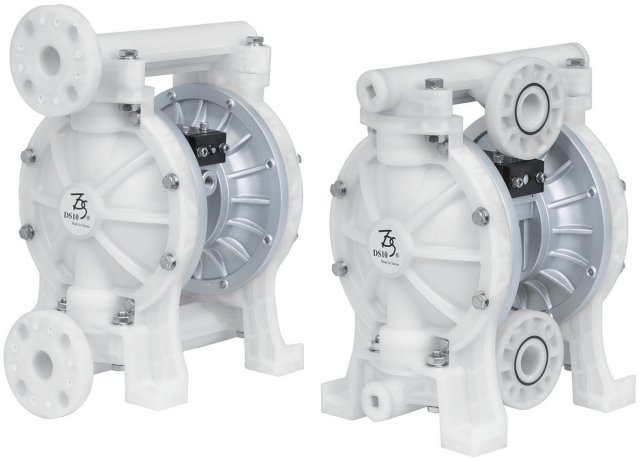
(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS10 | Pneumatic Diaphragm Pump

PLASTIC SERIES

DS10 - XXX - XXXX - 0X

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
10 =1"	**P** = Polypropylene (PPG)	**A** = Aluminum Alloy	**L** = Side ANSI Flange **F** = Center JIS Flange	**U** = UPE **T** = TFM **O** = Santoprene®	**P** = PP **E** = PE	**T** = PTFE	**T** = PTFE **P** = PP **E** = PE	**02**

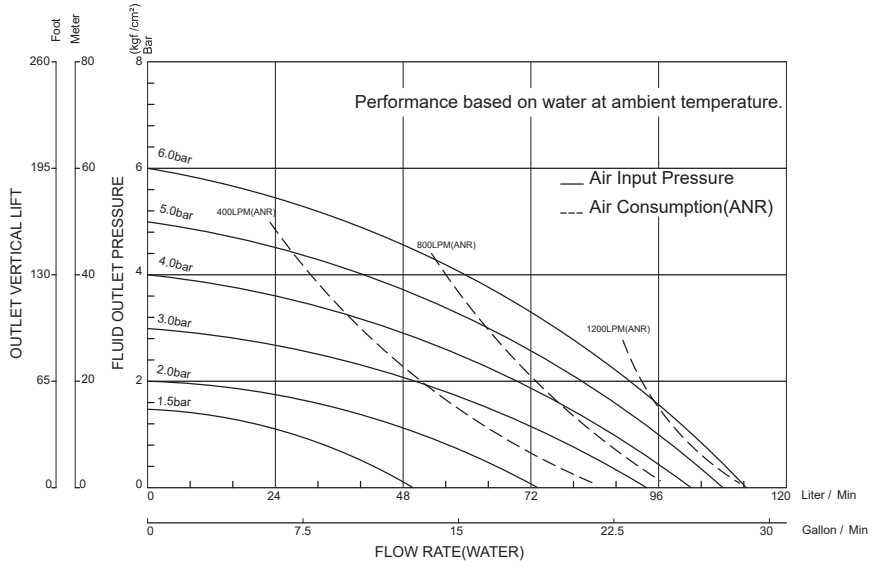


DIMENSIONAL DRAWING

DS10-PA

Specification (Tested with water at room temperature)	
Suction/ Discharge Port Size	L：ANSI 150R.F. ∅ 110m/m F：JIS B 2211-1977 | 5kg/cm²
Air Inlet/ Exhaust Port Size	3/8" PT(BSP)
Min Air Inlet Pressure	1.2 Bar (kgf/cm²) | 17.4 psi
Max Air Inlet Pressure	7.0 Bar (kgf/cm²) | 101.5 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm²) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	900ml/cycle
Max Solids Handling	∅ 3mm
Max Air Consumption	1250 Liter/Per Min 44.14 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	120 Liter/Per Min 31.7 Gallon US/Per Min
Packing Dimensions	L：35Lx25Wx50H(cm) | 1.54Cuft F：32Lx25Wx41H(cm) | 1.27Cuft
Net Weight	8.5 KG
Temperature Range of Wetted Material	Polypropylene(P)：0 to +80°C
Temperature Range of Diaphragm	UPE(U)：+5 to +50°C TFM (T)：-30 to +130°C Santoprene®(O)：0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 1 meters, and the horizontal lift at the outlet end is approximately 1.5 meter.

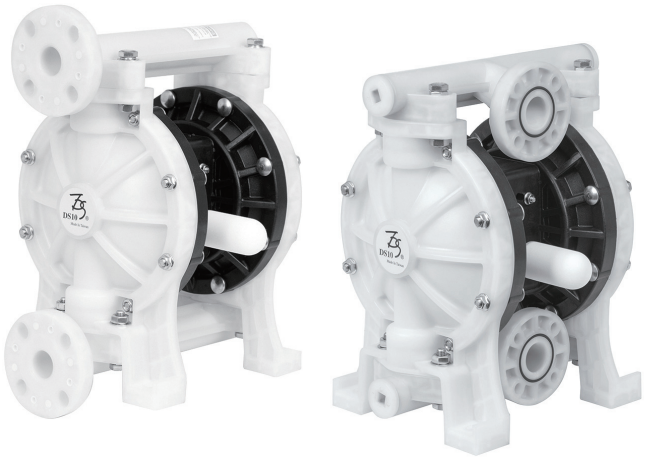
(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

DS10 | Pneumatic Diaphragm Pump

DYI SHENG

DS10 - XXX - XXXX - 0X

Size	Wetted Material	Body Material	Porting Option	Diaphragm	Ball Cover	Ball	Ball Seat	Edition
10 =1"	**P** = Polypropylene (PPG)	**P** = Polypropylene (PPG)	**L** = Side ANSI Flange **F** = Center JIS Flange	**U** = UPE **T** = TFM **O** = Santoprene®	**P** = PP **E** = PE	**T** = PTFE	**T** = PTFE **P** = PP **E** = PE	**03**



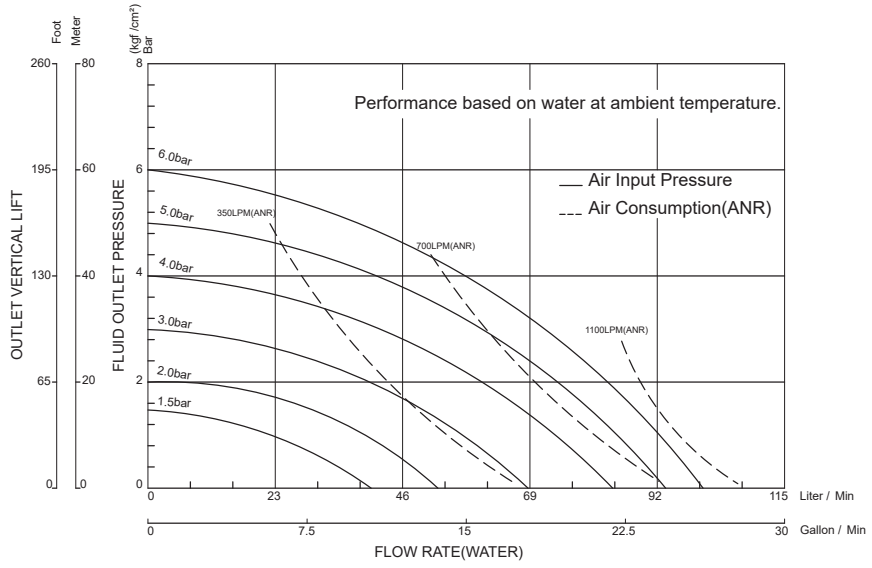
DIMENSIONAL DRAWING

DS10-PP

Specification (Tested with water at room temperature)

Suction/ Discharge Port Size	L： ANSI 150R.F. ∅ 110m/m F：JIS B 2211-1977 | 5kg/cm²
Air Inlet/ Exhaust Port Size	Inlet 3/8" PT (BSP) | Exhaust 1/2" PT(BSP)
Min Air Inlet Pressure	1.2 Bar (kgf/cm²) | 17.4 psi
Max Air Inlet Pressure	7 Bar (kgf/cm²) | 101.5 psi
Best Air Inlet Pressure Range	1.5~3.5 Bar (kgf/cm²) 21.75 psi~50.76 psi
Discharge Volume Per Cycle	650 ml/cycle
Max Solids Handling	∅ 3mm
Max Air Consumption	1150 Liter/Per Min 40.61 SCFM
Max Wet Suction Lift	6.7 meter
Max Flow Rate	110 Liter/Per Min 29.06 Gallon US/Per Min
Packing Dimensions	L：35Lx25Wx50H(cm) | 1.54Cuft F：32Lx25Wx41H(cm) | 1.27Cuft
Net Weight	7.5 KG
Temperature Range of Wetted Material	Polypropylene(P)：0 to +80°C
Temperature Range of Diaphragm	UPE(U)：+5 to +50°C TFM (T)：-30 to +130°C Santoprene®(O)：0 to +80°C

Performance Curve



(1) The performance curve was tested under the following conditions: the compressed air supply source is within 10 meters, the air supply pipe diameter is not smaller than the pump's air inlet specification, the vertical lift at the fluid suction end is approximately 1 meters, and the horizontal lift at the outlet end is approximately 1.5 meter.

(2) The actual output flow rate and pressure values may be affected by factors such as fluid density, viscosity, pipe resistance, pipe diameter, valves, distance from the compressed air source, and the specifications of the air compressor.

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Easy Coating Transport Set

COATING TRANSPORT SET

D S P X X - A N A - O X

Size	Contents	Edition
03 = 3/8" **04** = 1/2" **06** = 3/4"	Air-Operated Diaphragm Pump + Single Port Air Pressure Regulator + Pressure Storage Tank + Feed and return hose + Suction cup filter	**02** **03**

Port Size	3/8"	1/2"	3/4"
Wetted Material	AL	AL	AL
Pressure Storage Tank	Cylinder	Cylinder	Cylinder
Pressure Storage Tank Size	∅ 63xH153 m/m	∅ 63xH153 m/m	∅ 100xH153 m/m
Feed and return hose Material	PE	PE	NBR
Suction cup filter size	8.5cm	8.5cm	8.5cm
Suction cup filter material	AL	AL	AL
Screen Filter Material	60 Mesh/SUS	60 Mesh/SUS	60 Mesh/SUS
Pump stand	○	○	○
Max Flow Rate	18LPM	28LPM	55LPM

Easy Coating Transport Set is suitable for general paint transfer. The pressure storage tank itself has the function of stabilizing discharge pressure. The feed and return hoses are compatible with most solvents and paints without deterioration. The screen filter can filter particles and impurities with a diameter of 0.1 mm. Some components can also be customized according to customer requirements.

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Advanced Coating Transport Set

COATING TRANSPORT SET

D S P X X - A O B R F G - O X

Size	Contents	Edition
03 = 3/8" **04** = 1/2"	Air-Operated Diaphragm Pump + F.R.L. + Pressure Storage Tank + Fluid Pressure Regulator + Low-pressure paint filter + Feed and return hose + Suction cup filter + Pump Stand	**02** **03**

Port Size	3/8"	1/2"
Fluid Pressure Regulator Material	AL	AL
Pressure Storage Tank	Ellipse	Ellipse
Pressure Storage Tank Size	∅ 75xH130m/m	∅ 75xH130m/m
Feed and return hose Material	PE	PE
Suction cup filter size	8.5cm	8.5cm
Suction cup filter material	AL	AL
Screen Filter Material	60 Mesh/SUS	60 Mesh/SUS
Pump stand	○	○
Max Flow Rate	15LPM	25LPM

Advanced Coating Transport Set, in addition to the advantages of the basic type, offers more stable discharge, better filtration efficiency, and more consistent pump performance. Some components can also be customized according to customer requirements.

AODD Pump Chemical Compatibility Chart

Wetted Material \ Diaphragm	UPE	PTFE/TFM	Santoprene®
Aluminum Alloy	• Hexanol • Toluene • Acetaldehyde • Butane • Motor Oil • Mineral Oil • Glycerol • Gear Oil • Propyl Alcohol • Paint • Diesel Oil • Cutting Fluid • Ink • Gasoline • Ethylene Glycol	• Xylene • Ethyl Acetate • Grease • Tannic Acid • Heavy Oil • Acetone • Organic Solvent • Asphalt • Hydrogen Peroxide • Kerosine • Methyl Butyl Ketone • High Temperature Neutral Liquid	• Sludge • Wood spirit • Glue • Hydraulic Oil • Resin • Release Agent • Methanol • Lubricating Oil • Turbine Oil •Neutral Sewage • Electric Discharge Machining Oil (EDM Oil)
Stainless Steel (SUS316)	• Enzyme • Carbonic Acid • Wastewater • Sodium Nitrate • Butanediol • Alpha Hydroxy Acids	• Jam • Essential Oil • Juice • Ethyl Ether • Edible Oil • Acetic Acid • Rosin Oil • Sulfuric Acid (70%↑) • Detergent • Sodium Hydroxide • Nitric Acid • Electroplating Solution • High Temperature Sauce	• Swill • Cream • Glaze • Clay Slip • Defoaming Agent • Neutral Metal Scrap Spent Fluid
Polypropylene (PPG)		•Yeast •Palmitic Acid •Ethane •Chromic Acid •Propane •Phosphoric Acid •Chloroform •Hydrochloric Acid •Lactic Acid •Sodium Hydroxide •Sodium Hypochlorite •Dilute Sulfuric Acid (70%↓)	•Vinegar •Ethanedioic acid •Sea Water •Ammonia Water •Citric Acid •Propylene Glycol •Boric Acid •Sodium Carbonate •Lime Water •Developer Solution •Sodium Bicarbonate •Ethanol/ Ethyl Alcohol

Note:

1. PPG refers to polypropylene reinforced with glass fibers.
2. The compatibility table lists only some commonly used fluids. For more information, scan the QR code on the right.
3. The compatibility table is for reference only. Fluids may have different effects due to variations in temperature, concentration, pressure, and other conditions.
4. It is recommended to contact our sales department to confirm the appropriate specifications and materials before purchasing.

Applications

- Chemical Processing
- Water & Wastewater
- Oil And Gas
- Paints And Coatings
- Mining Applications
- Ceramics Industry
- Beer And Wine
- Electronics Industry
- Cosmetics & Pharmaceuticals
- Metal CNC Processing Industry
- Lubrication & Machinery
- Metal Forging Industry
- Metal Surface Treatment Industry









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