Specialised Air Motors and Transmission

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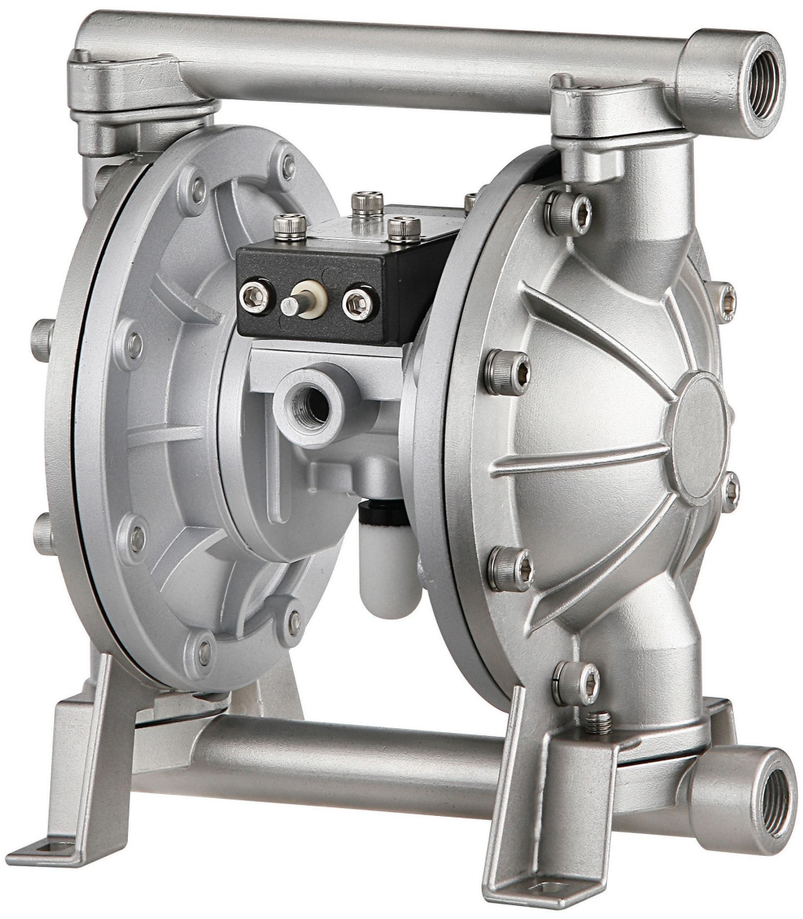


Air-Operated

Double Diaphragm Air Pump

Specialised Air Motors and Transmission

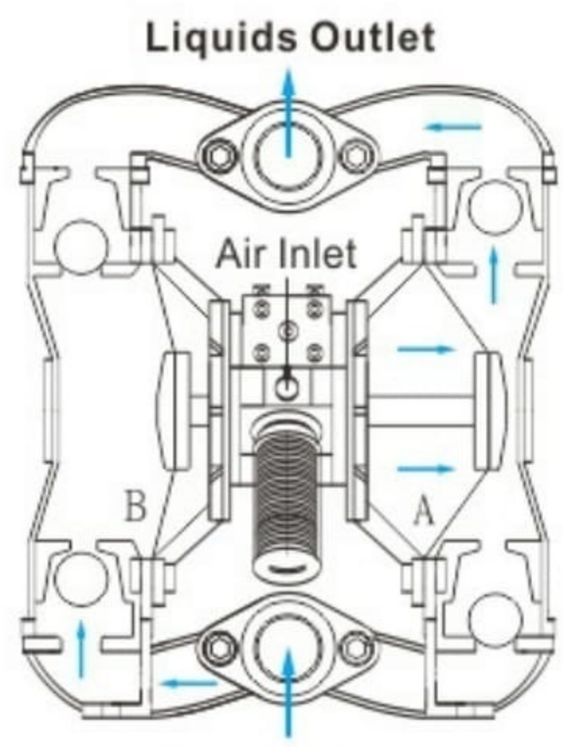
Company Profile

Specialised Air Motors & Transmission is committed to providing clever solutions for all hazardous environments and continues to develop smart ways to meet requirements from all different industries; our products meet CE standards ISO9002, ISO9001 and patents are registered globally including USA, Taiwan and China.

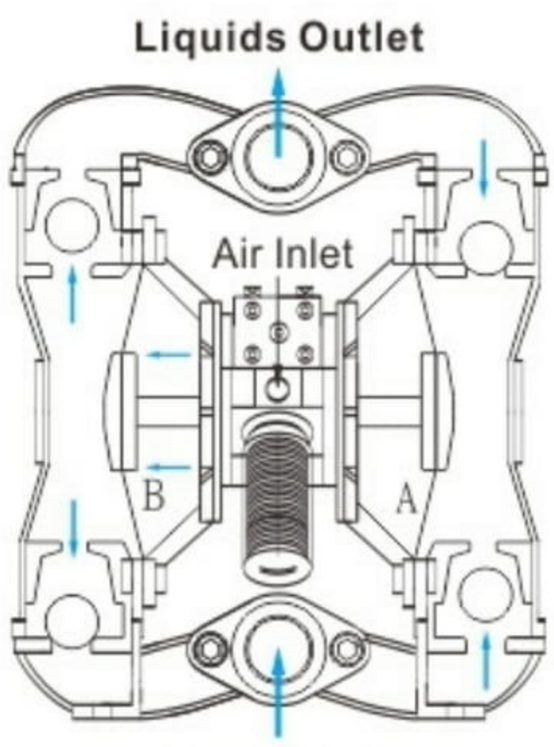
Unlike other conventional methods our products mainly use air instead of electricity as the source of power. This eliminates the chance of electricity shock and fire, which are the most crucial factors for industries involved in chemical, flammable or volatile contents.

Specialised Air Motors & Transmission products include air motors, air mixers and air fans which are engineered to meet the highest standards featuring 100% explosion-proof, low air consumption, light weight, high torque, reversible step less speed control, easy maintenance and various mounting method. And can be used in very harsh conditions such as humidity, high temperature and flammable environments.

Operating Diagram



A.



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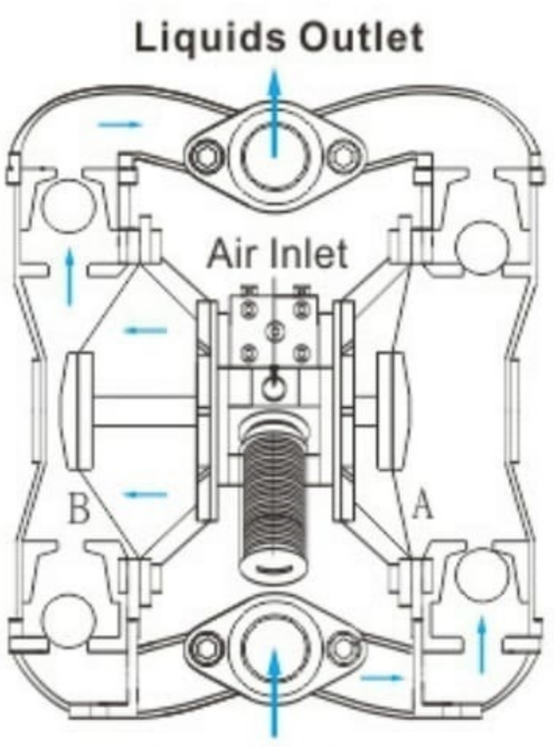


C.

Application Profession

- **Construction and building:** Cement, paint, sewage, pitch, etc.
- **Chemistry and petroleum:** Chemical Agent, latex, adhesive, solvent, heavy oil, gasoline, etc.
- **Electronics industry:** Resin, glaze, ceramics transferred and solvent, water circulatory system.
- **Fiber, leather, paper:** Adhesive, glue, antiseptic, sludge, waste water.
- **Transferred equipment:** Lubricating Oil, hydraulic Fluid, cutting oil, release agent, waste oil.
- **Others:** Ink, pottery clay thick liquid, motor oil.

Specialised Air Motors and Transmission

Type Specification Indication

SDSXX XXX XXXX XX

Size
03：3/8″
04：1/2″
06：3/4″
10：1″
14：1-1/2″
20：2″

Wetted Body
A: Aluminum
S: SUS316
P: PPG

Center Body
A: Aluminum

Pipe Type
T: Center
I: Flank
F: Center Flange
L: Flank Flange
D: Double out/in

Diaphragm
U: UPE
T: PTFE
O: Santoprene
F: PFA/TFM

Ball Cover
A: Aluminum
S: Stainless Steel
P: PP
E: PE
O: Santoprene
U: TPU

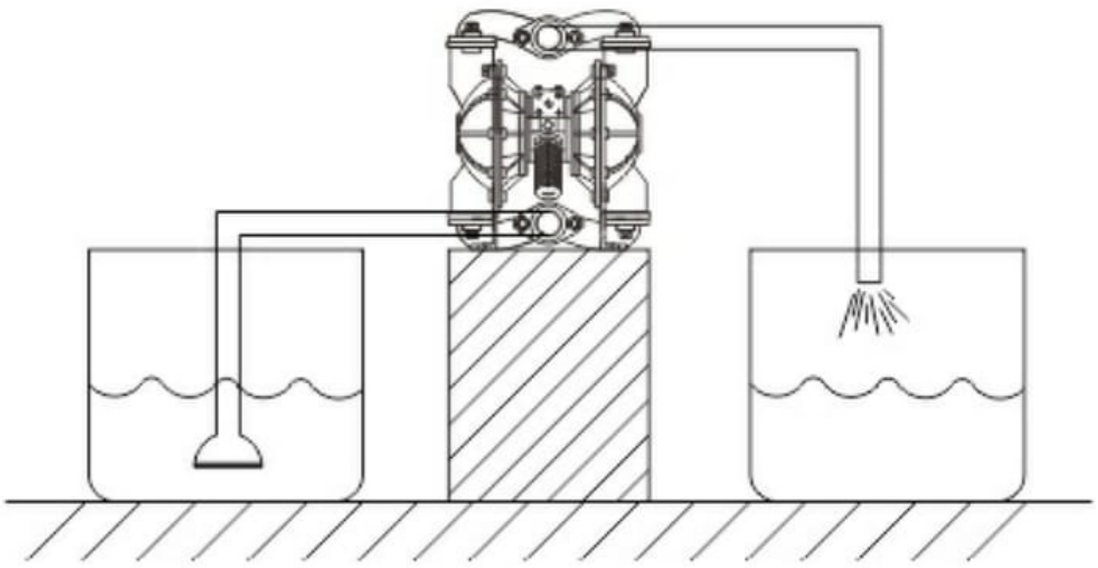
Ball
S: S.S#316
T: PTFE
B: Bakelite
U: TPU
C: Chromium
O: Santoprene

Ball Seat
P: PP
S: Stainless Steel
N: NBR
O: Santoprene
U: TPU
T: PTFE
H: Hard Stainless Steel

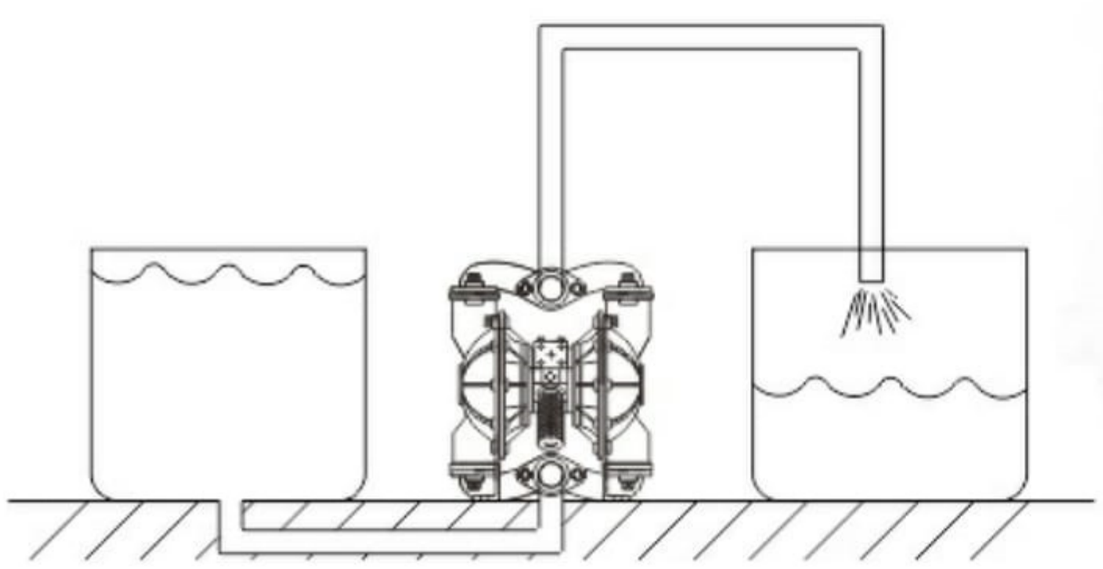
Edition
02

※**Note**: ◆ PPG-Polypropylene+Bolivian filament ent

Diagram of Assembling Way



Pump can operate in 1.5~6.5m depth within and it changed because of temperature, pressure, liquid thickness.



Pump use this way in clean barrel through popularly. It operates useful at 0.5~0.8 bar for inlet pressure.

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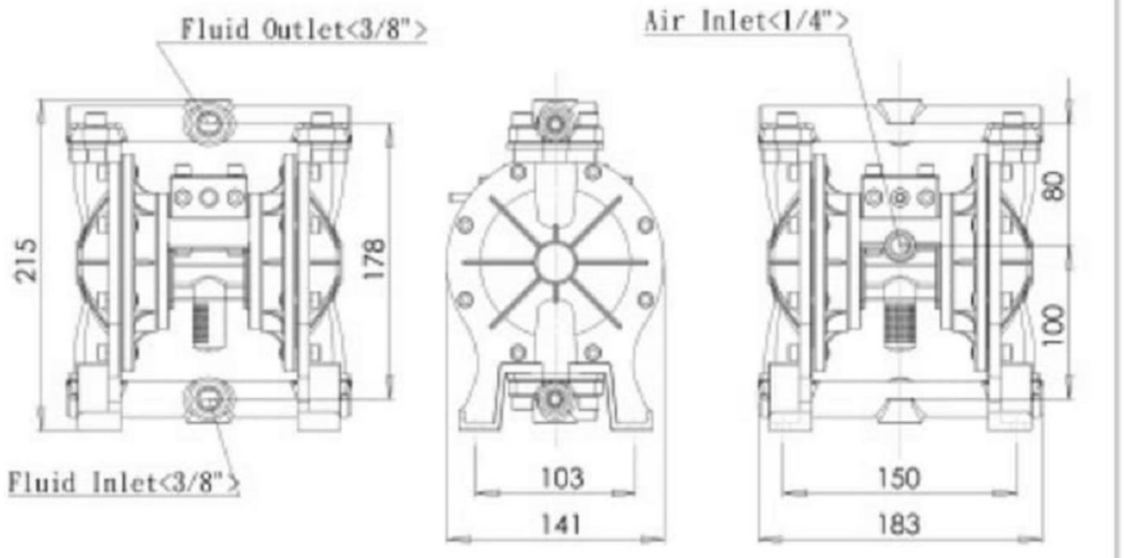
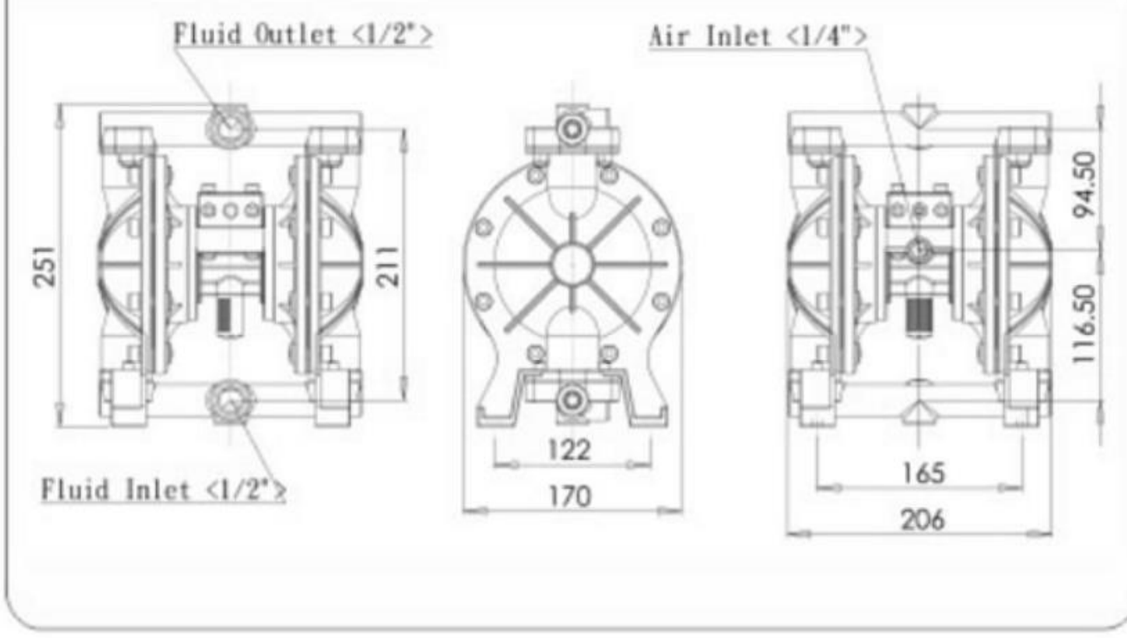
Dimensions

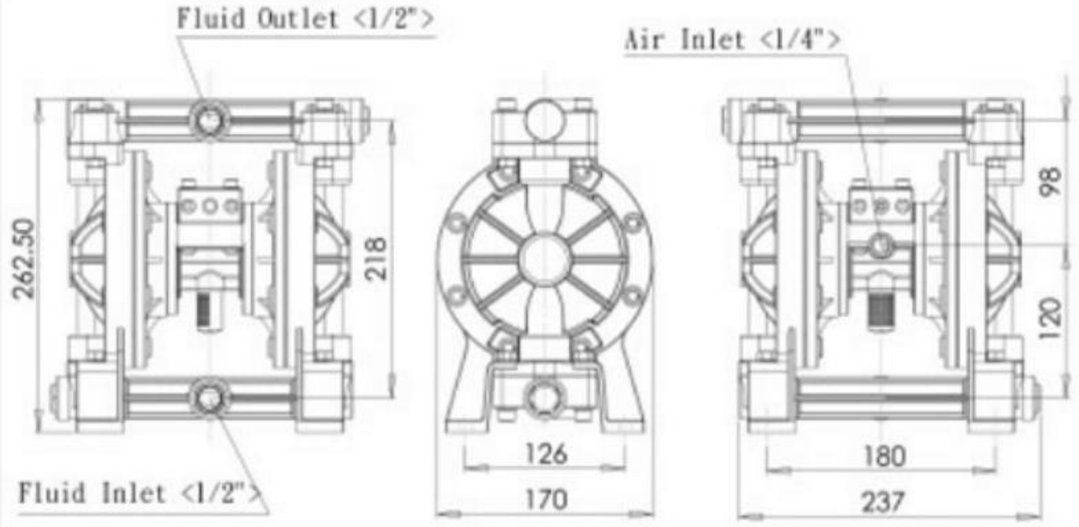
SDS03-A



SDS04-A



SDS04-P



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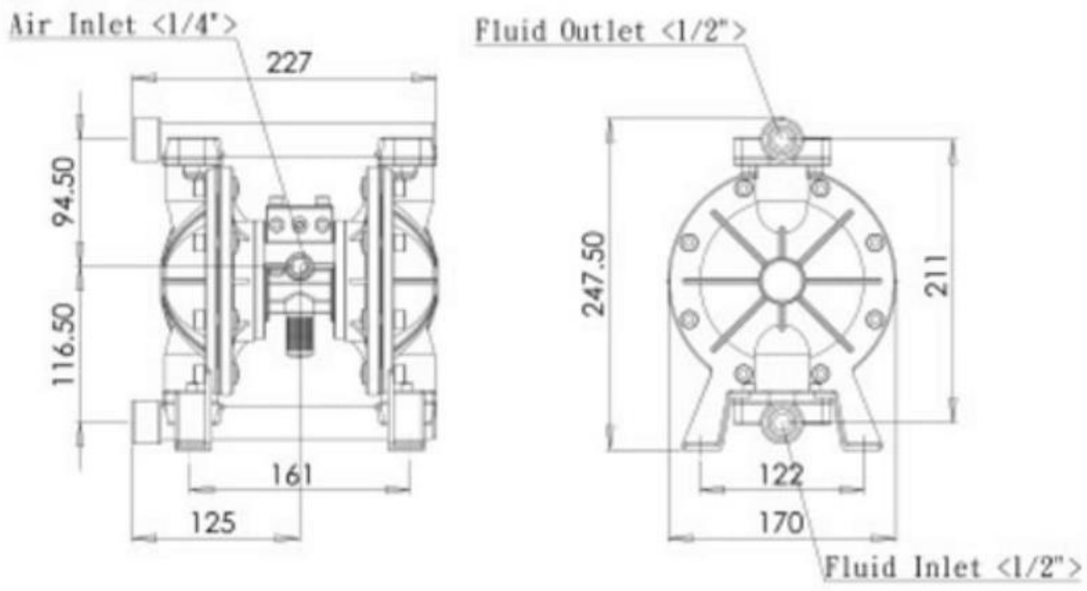
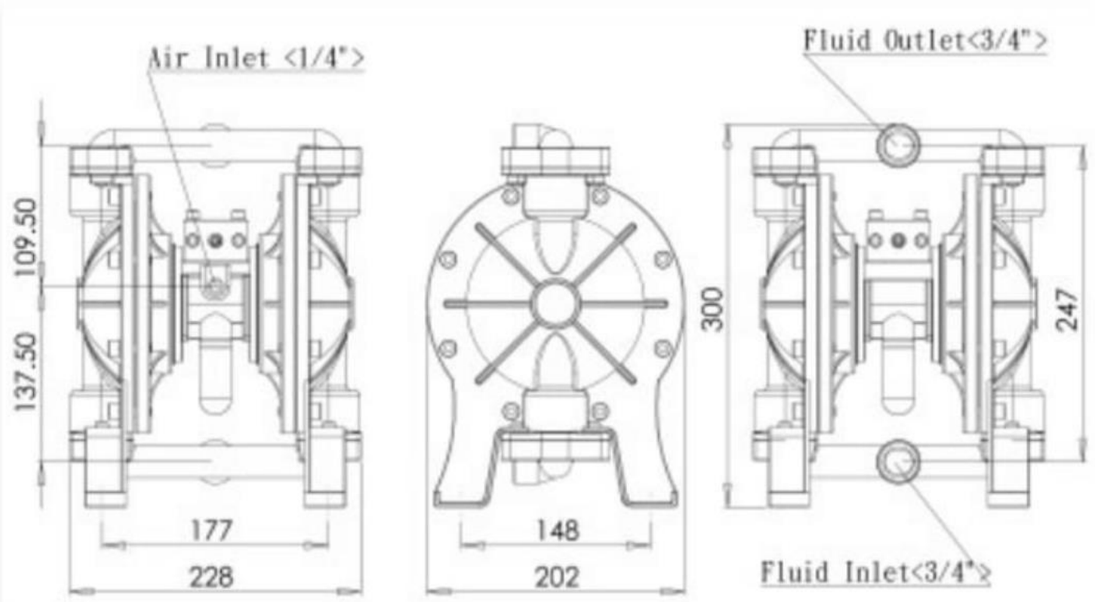
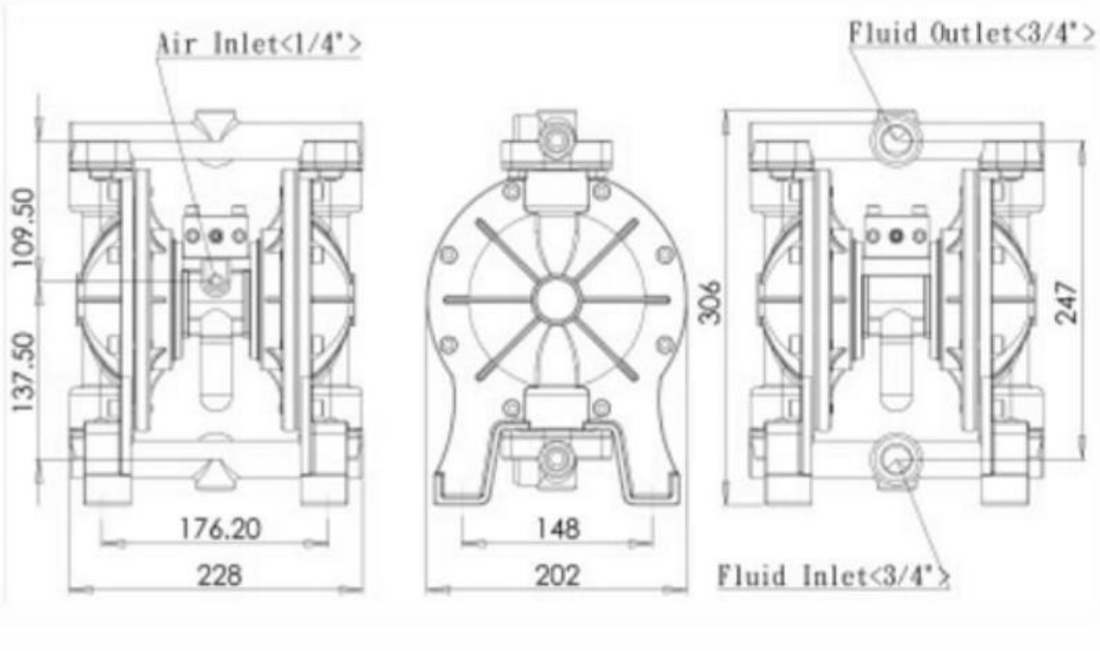


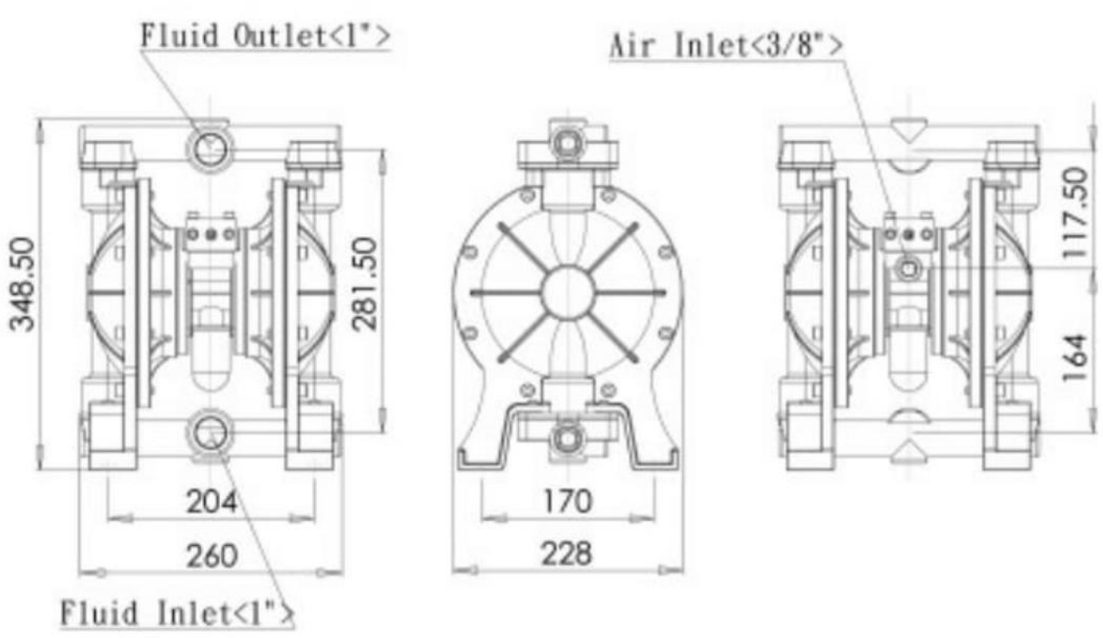
SDS06-S



SDS06-A



SDS10-A



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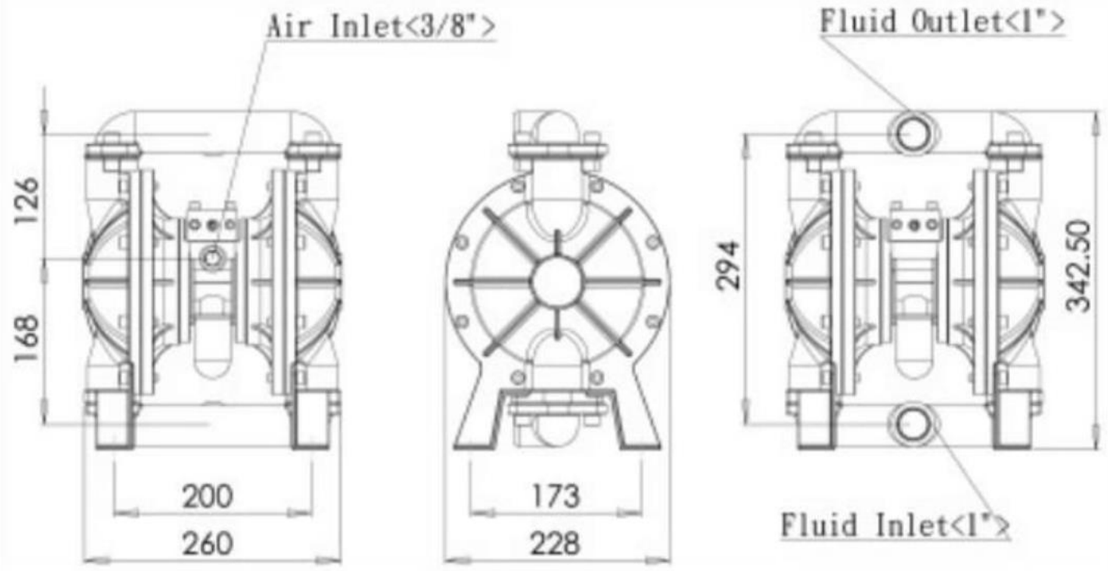
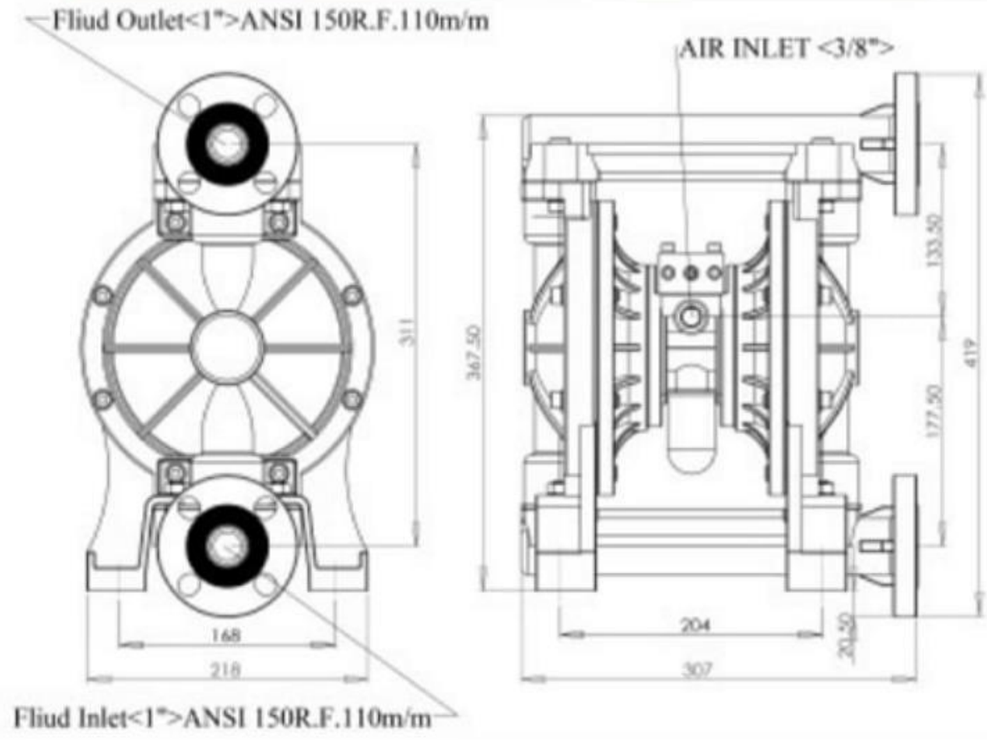
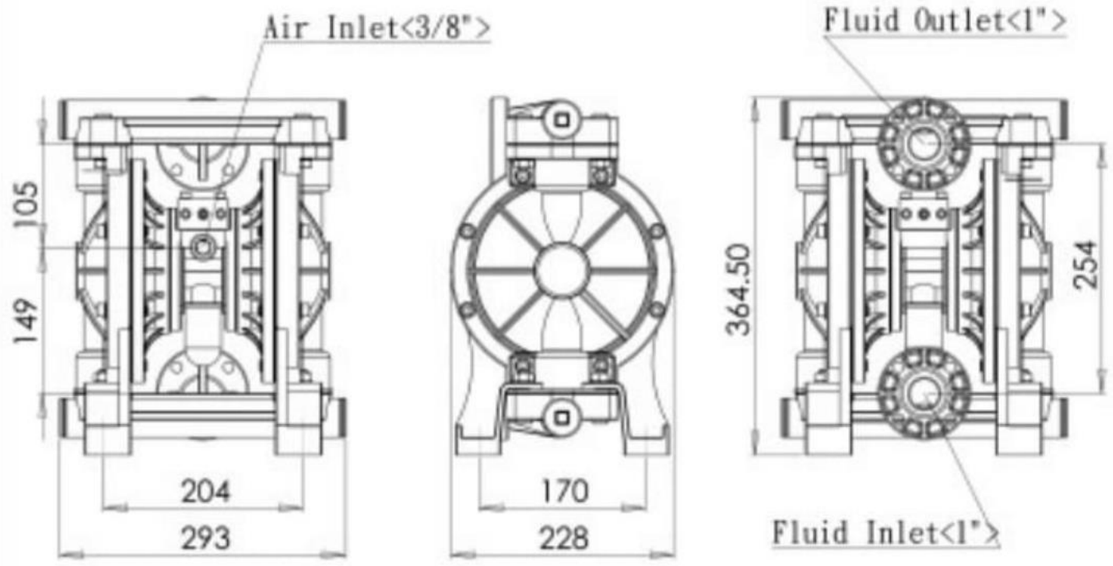
SDS10-S



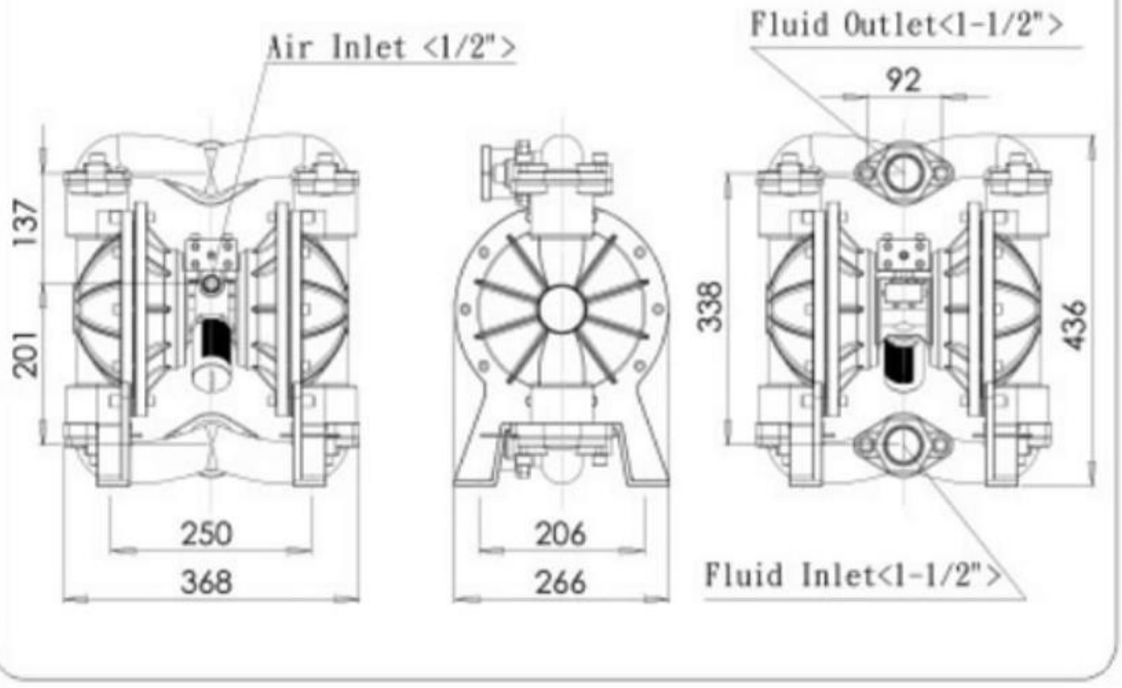
SDS10-PAL



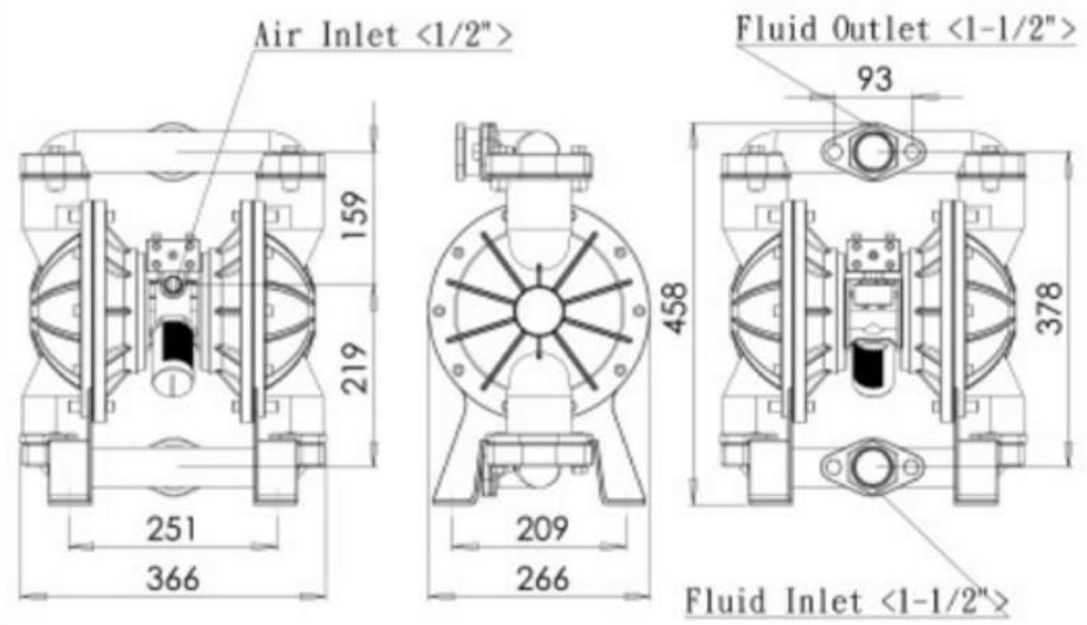
SDS10-PAF



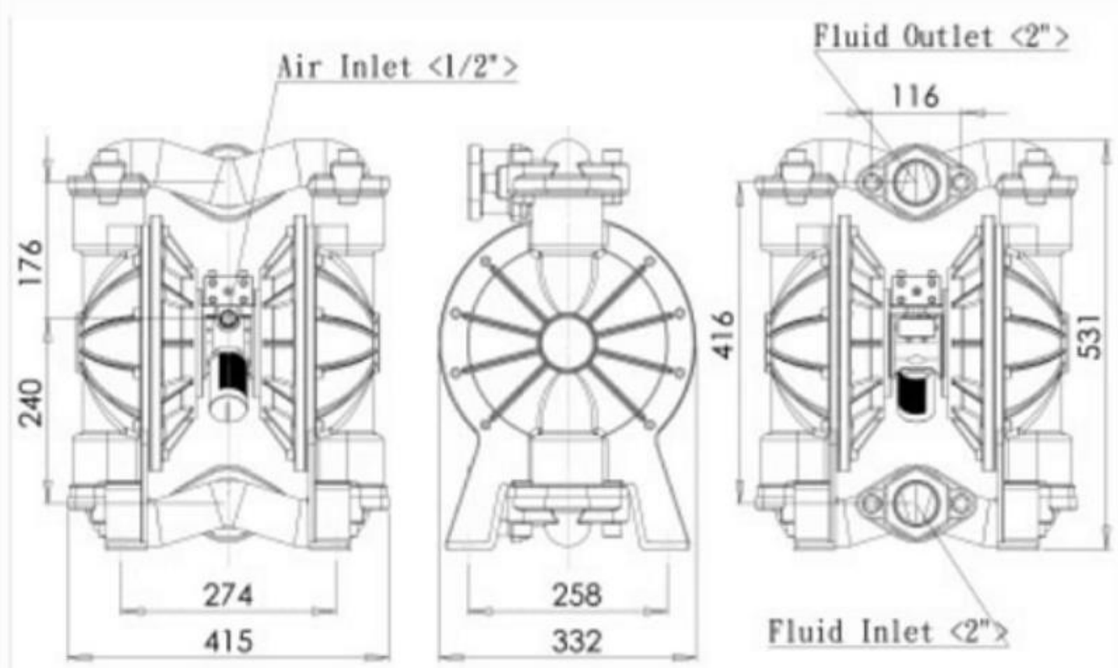
SDS14-A



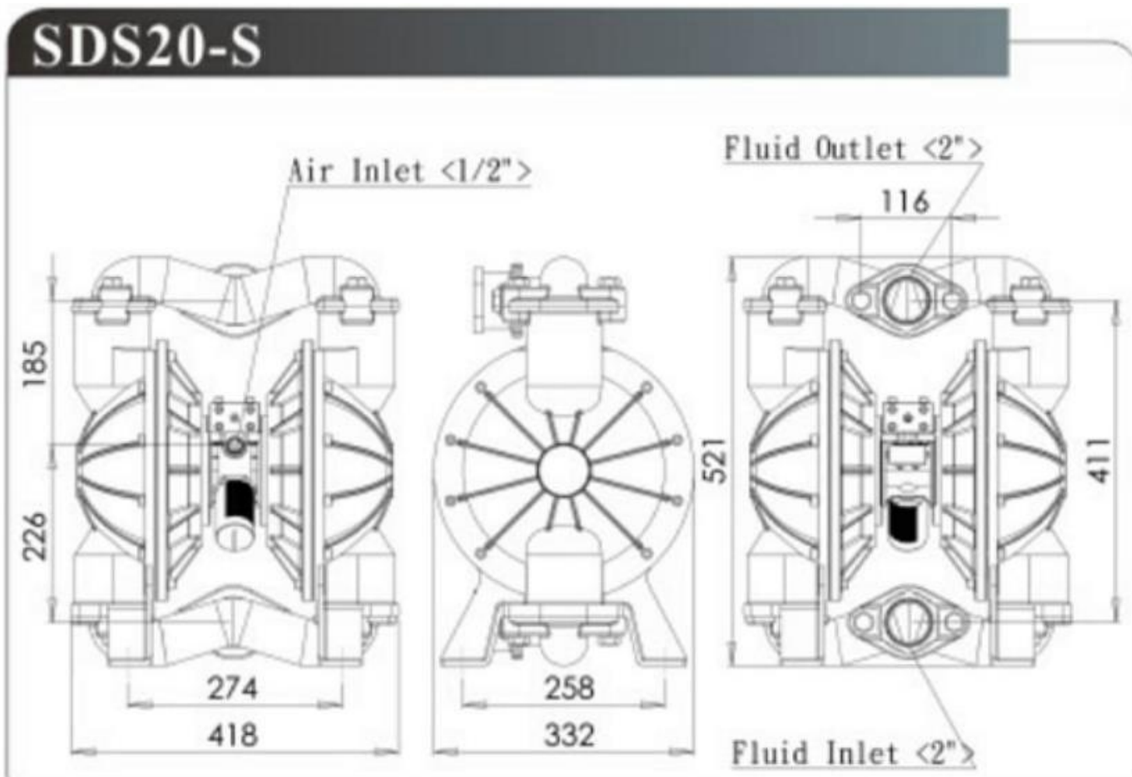
SDS14-S



SDS20-A



SDS20-S



Specialised Air Motors and Transmission

Air Operated Diaphragm Pump-SDS03 Old Mode: 15.16 Metallic Type

Net Weight

SDS03-AAX-XXXX-02: 4 KG

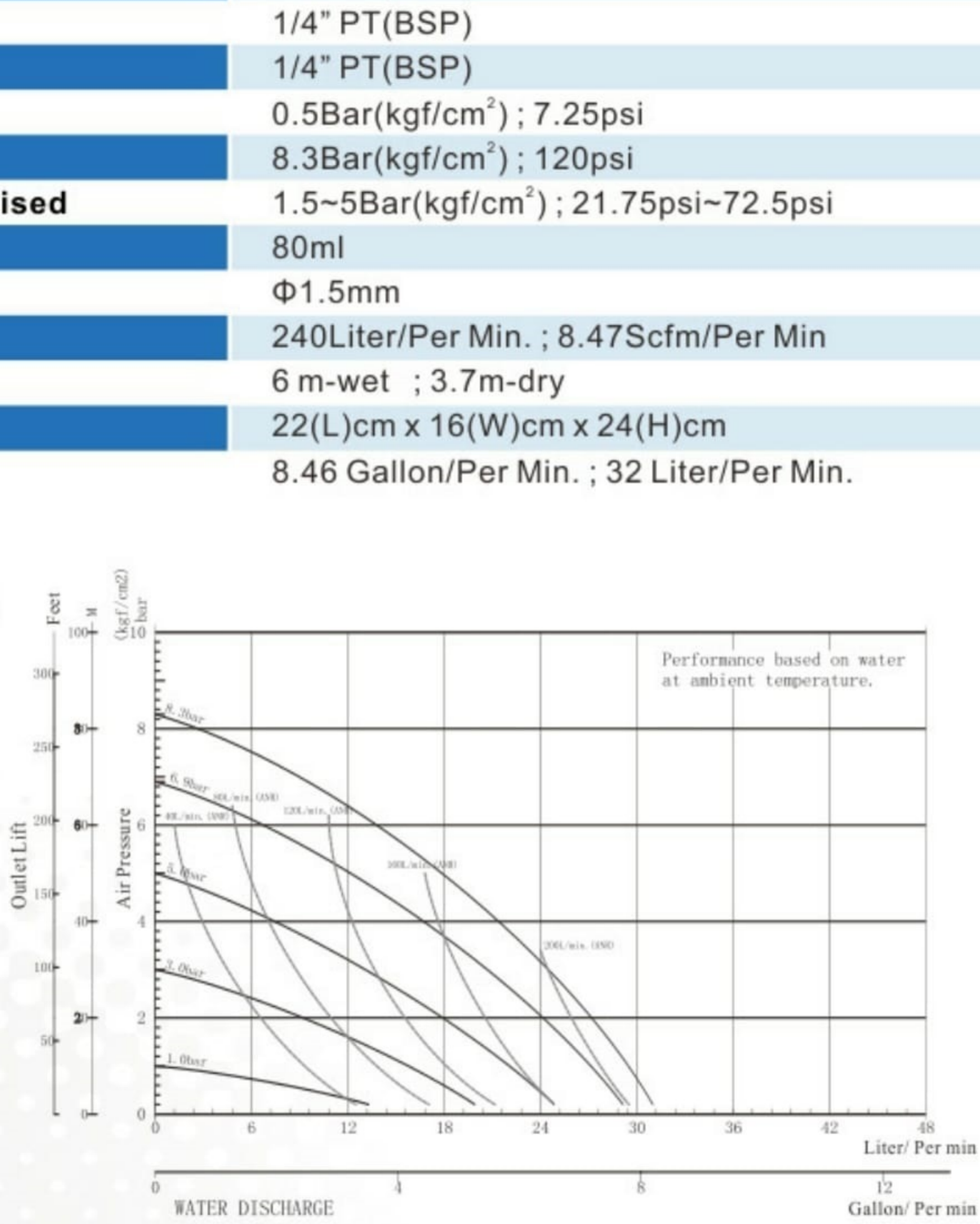
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃

Specification

Liquid inlet & outlet	3/8" PT(BSP)
Air inlet	1/4" PT(BSP)
Air outlet	1/4" PT(BSP)
Lowest pressure	0.5Bar(kgf/cm^2) ; 7.25psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	1.5~5Bar(kgf/cm^2) ; 21.75psi~72.5psi
Quantity / cycle	80ml
Solid limit	Φ1.5mm
Air consumption	240Liter/Per Min. ; 8.47Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	22(L)cm x 16(W)cm x 24(H)cm
Max flow rate	8.46 Gallon/Per Min. ; 32 Liter/Per Min.

Diagram of Curve



Specialised Air Motors and Transmission

Air Operated Diaphragm Pump-SDS04 Old Mode: 20.21 Metallic Type

Net Weight

SDS04-AAX-XXXX-02: 4.5 KG
SDS04-SAX-XXXX-02: 6.5 KG

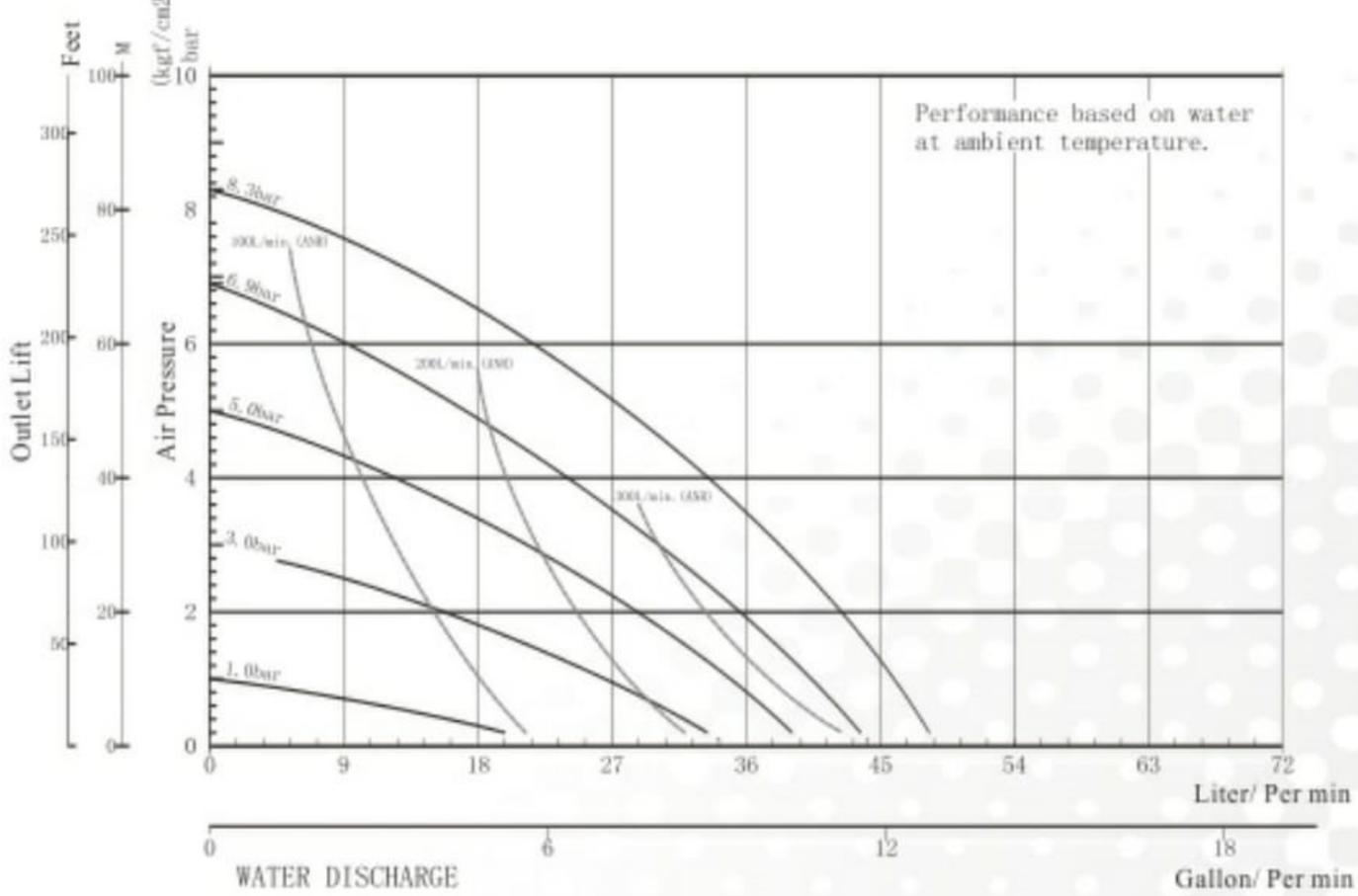
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
TFM (F)	-60 to +180℃
Santoprene® (O)	-10 to +80℃

Specification

Liquid inlet & outlet	1/2" PT(BSP)
Air inlet	1/4" PT(BSP)
Air outlet	1/4" PT(BSP)
Lowest pressure	0.5Bar(kgf/cm^2) ; 7.25psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	1.5~5Bar(kgf/cm^2) ; 21.75psi~72.5psi
Quantity / cycle	120ml
Solid limit	Φ2 mm
Air consumption	400Liter/Per Min. ; 14.12Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	26(L)cm x 19(W)cm x 30(H)cm
Max flow rate	12.74 Gallon/Per Min. ; 48 Liter/Per Min.

Diagram of Curve



Specialised Air Motors and Transmission

Air Operated Diaphragm Pump-SDS04 Old Mode: PP 21 Non-metallic Type

Net Weight

SDS04-PAT-XXXX-02: 4 KG

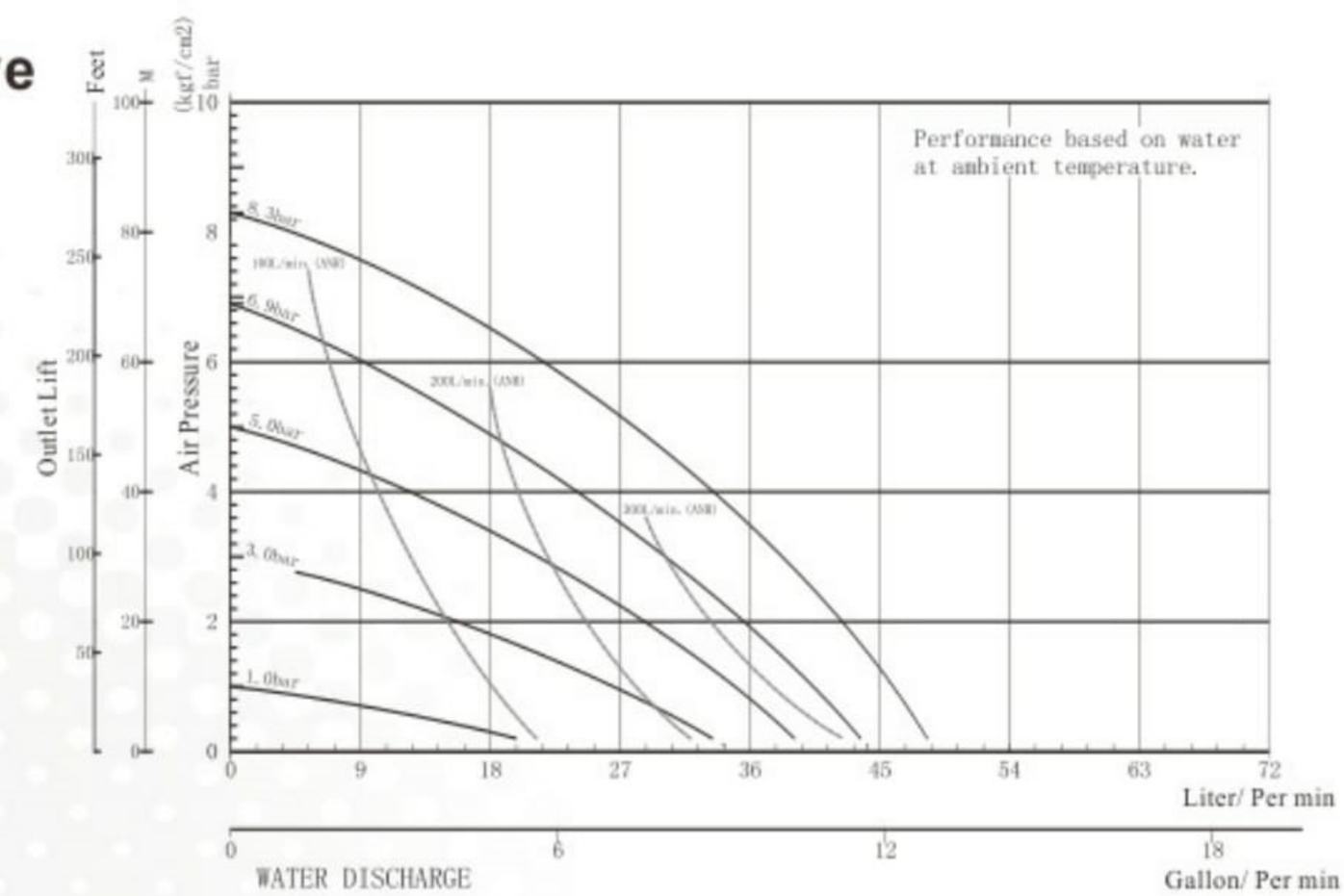
Diaphragm

Material	Temperature Range
TFM (F)	-60 to +180℃
Santoprene ® (O)	-10 to +80℃

Specification

Liquid inlet & outlet	1/2" PT(BSP)
Air inlet	1/4" PT(BSP)
Air outlet	1/4" PT(BSP)
Lowest pressure	0.8Bar(kgf/cm²) ; 11.6psi
Max pressure	7.0Bar(kgf/cm²) ; 101.5psi
Working pressure advised	1.5~5Bar(kgf/cm²) ; 21.75psi~72.5psi
Quantity / cycle	120ml
Solid limit	Φ2 mm
Air consumption	360Liter/Per Min. ; 12.71Scfm/Per Min
Inlet lift (deep)	6 m-wet; 3.7m-dry
Assemble size	29(L)cm x 20(W)cm x 30(H)cm
Max flow rate	11.08 Gallon/Per Min. ; 42 Liter/Per Min.

Diagram of Curve



Specialised Air Motors and Transmission

Air Operated Diaphragm Pump-SDS06 Old Mode: 27 Metallic Type

Net Weight

SDS06-AAX-XXXX-02 : 8 KG
SDS06-SAX-XXXX-02 : 12 KG

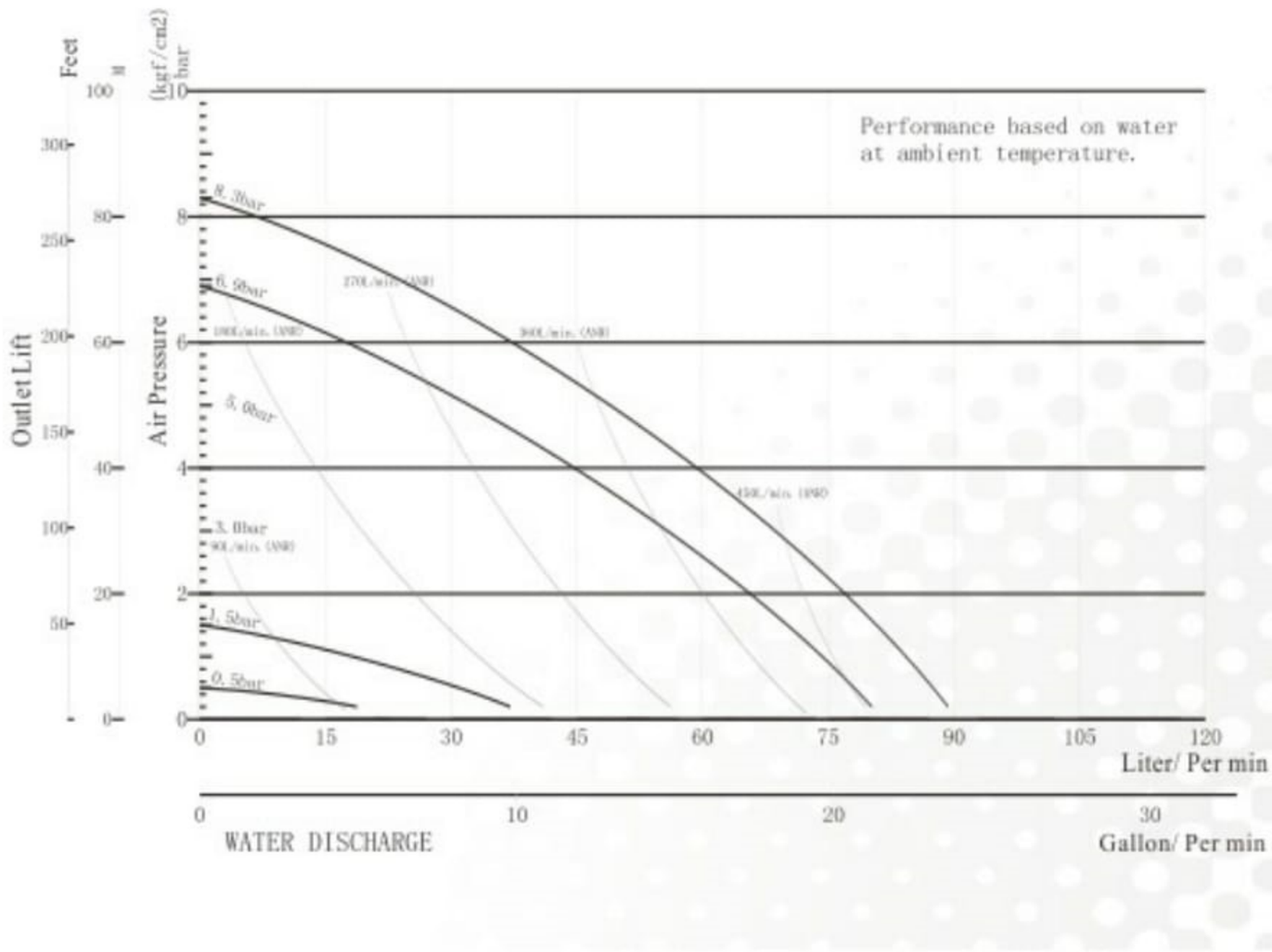
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
PFA® (F)	-60 to +180℃
Santoprene® (O)	-10 to +80℃

Specification

Liquid inlet & outlet	3/4" PT(BSP)
Air inlet	1/4" PT(BSP)
Air outlet	3/8" PT(BSP)
Lowest pressure	0.5Bar(kgf/cm^2) ; 7.25psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	1.5~5Bar(kgf/cm^2) ; 21.75psi~72.5psi
Quantity / cycle	225ml
Solid limit	Φ2.4 mm
Air consumption	540Liter/Per Min. ; 19.065Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 4.5m-dry
Assemble size	28(L)cm x 23(W)cm x 37(H)cm
Max flow rate	23.74 Gallon/Per Min. ; 90 Liter/Per Min.

Diagram of Curve



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Air Operated Diaphragm Pump-SDS10 Old Mode: 31 Metallic Type

Net Weight

SDS10-AAX-XXXX-02 : 10KG
SDS10-SAX-XXXX-02 : 14KG

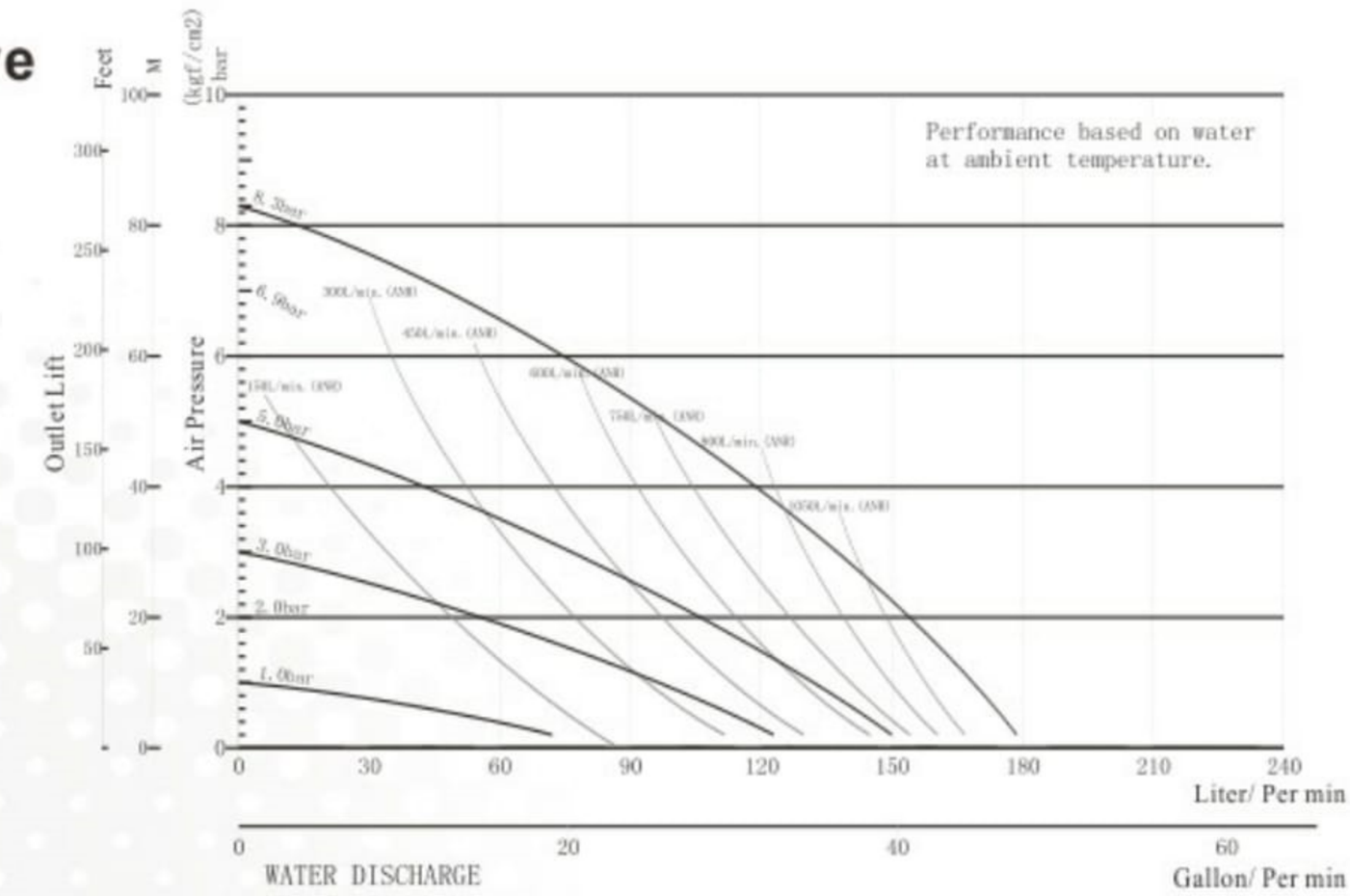
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
Santoprene® (O)	-10 to +80℃
PFA® (F)	-60 to +180℃

Specification

Liquid inlet & outlet	1" PT(BSP)
Air inlet	3/8" PT(BSP)
Air outlet	3/8" PT(BSP)
Lowest pressure	0.5Bar(kgf/cm^2) ; 7.25psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	1.5~5Bar(kgf/cm^2) ; 21.75psi~72.5psi
Quantity / cycle	450ml
Solid limit	Φ3mm
Air consumption	1200Liter/Per Min. ; 42.36Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	29(L)cm x 26(W)cm x 39(H)cm
Max flow rate	47.49 Gallon/Per Min. ; 180 Liter/Per Min.

Diagram of Curve



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Air Operated Diaphragm Pump-SDS10 Old Mode: PP 31 Non-metallic Type

Net Weight

SDS10-PAX-XXXX-02: 7.5 KG

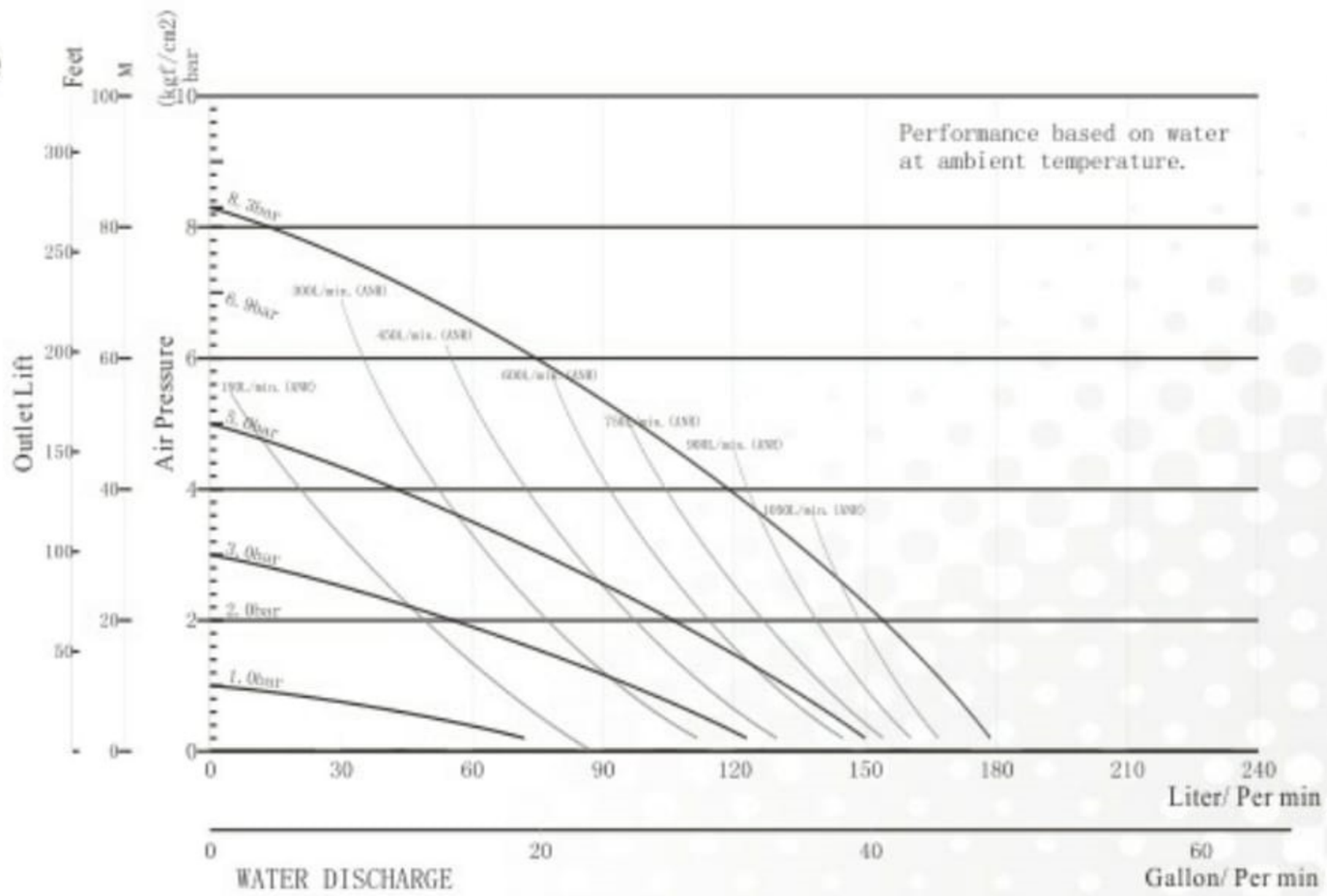
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
Santoprene® (O)	-10 to +80℃
PFA (F)	-60 to +180℃

Specification

Liquid inlet & outlet	L: ANSI 150R.F. Φ110m/m F: JIS B 2211-1977 ; 5 kg/cm² Φ25m/m
Air inlet	3/8" PT(BSP)
Air outlet	3/8" PT(BSP)
Lowest pressure	0.5Bar(kgf/cm²) ; 7.25psi
Max pressure	7Bar(kgf/cm²) ; 101.5psi
Working pressure advised	1.5~5Bar(kgf/cm²) ; 21.75psi~72.5psi
Quantity / cycle	450ml
Solid limit	Φ3mm
Air consumption	1080Liter/Per Min. ; 38.12Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	(F) 32(L)cm x 26(W)cm x 41(H)cm (L) 34(L)cm x 26(W)cm x 48(H)cm
Max flow rate	44.32 Gallon/Per Min. ; 168 Liter/Per Min.

Diagram of Curve



Specialised Air Motors and Transmission

Air Operated Diaphragm Pump-SDS14 Old Mode: 41 Metallic Type

Net Weight

SDS14-AAX-XXXX-02 : 18 KG
SDS14-SAX-XXXX-02 : 28 KG

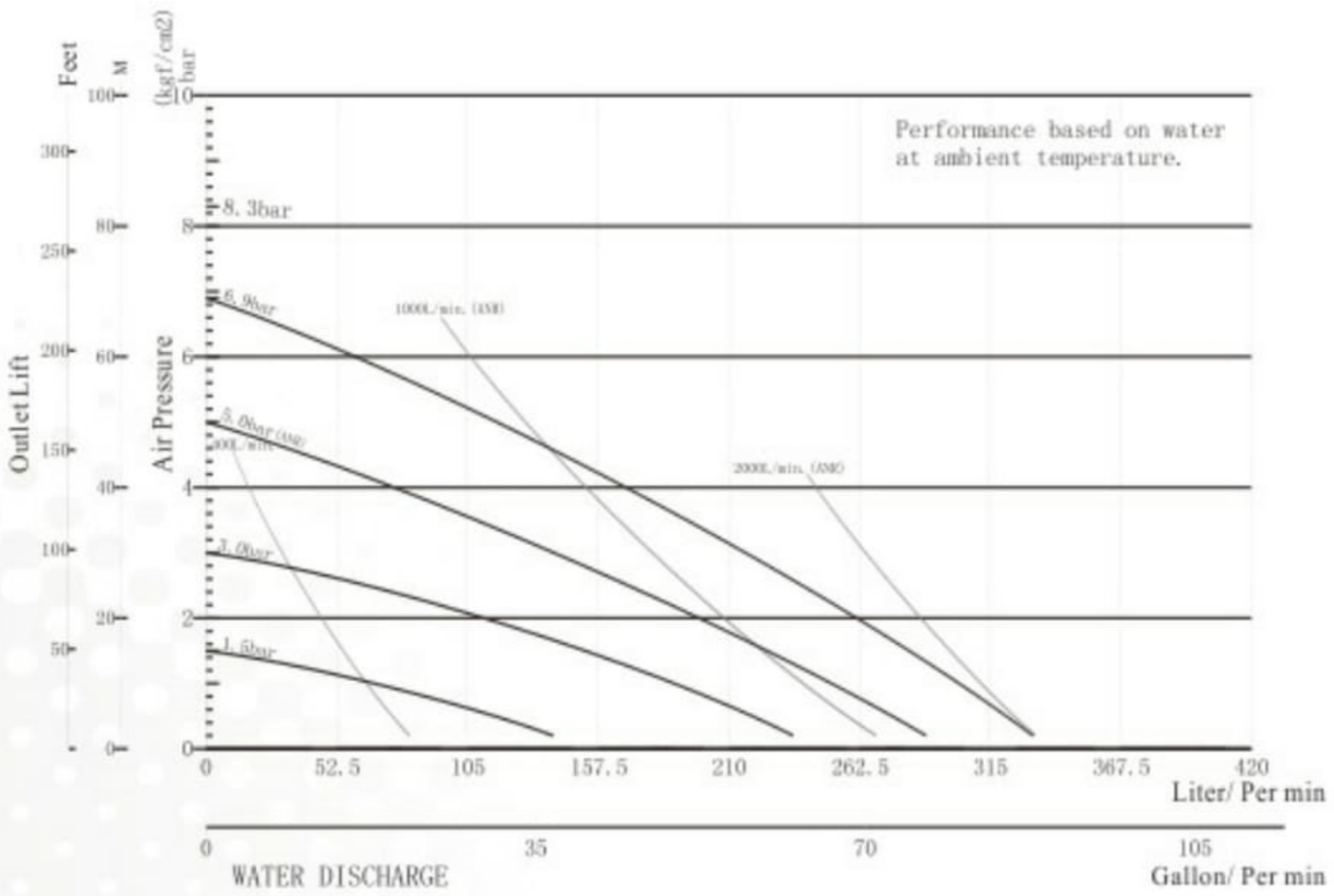
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
Santoprene® (O)	-10 to +80℃
TFM (F)	-60 to +180℃

Specification

Liquid inlet & outlet	1-1/2" PT(BSP)
Air inlet	1/2" PT(BSP)
Air outlet	1" PT(BSP)
Lowest pressure	1.2Bar(kgf/cm^2) ; 17.4psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	2~5.5Bar(kgf/cm^2) ; 29psi~79.75psi
Quantity / cycle	1.45L
Solid limit	Φ4.8~6mm
Air consumption	2400Liter/Per Min. ; 84.72Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	39(L)cm x 29(W)cm x 46(H)cm
Max flow rate	89.7 Gallon/Per Min. ; 340 Liter/Per Min.

Diagram of Curve



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Air Operated Diaphragm Pump-SDS20 Old Mode: 51 Metallic Type

Net Weight

SDS20-AAX-XXXX-02: 28 KG
SDS20-SAX-XXXX-02: 54 KG

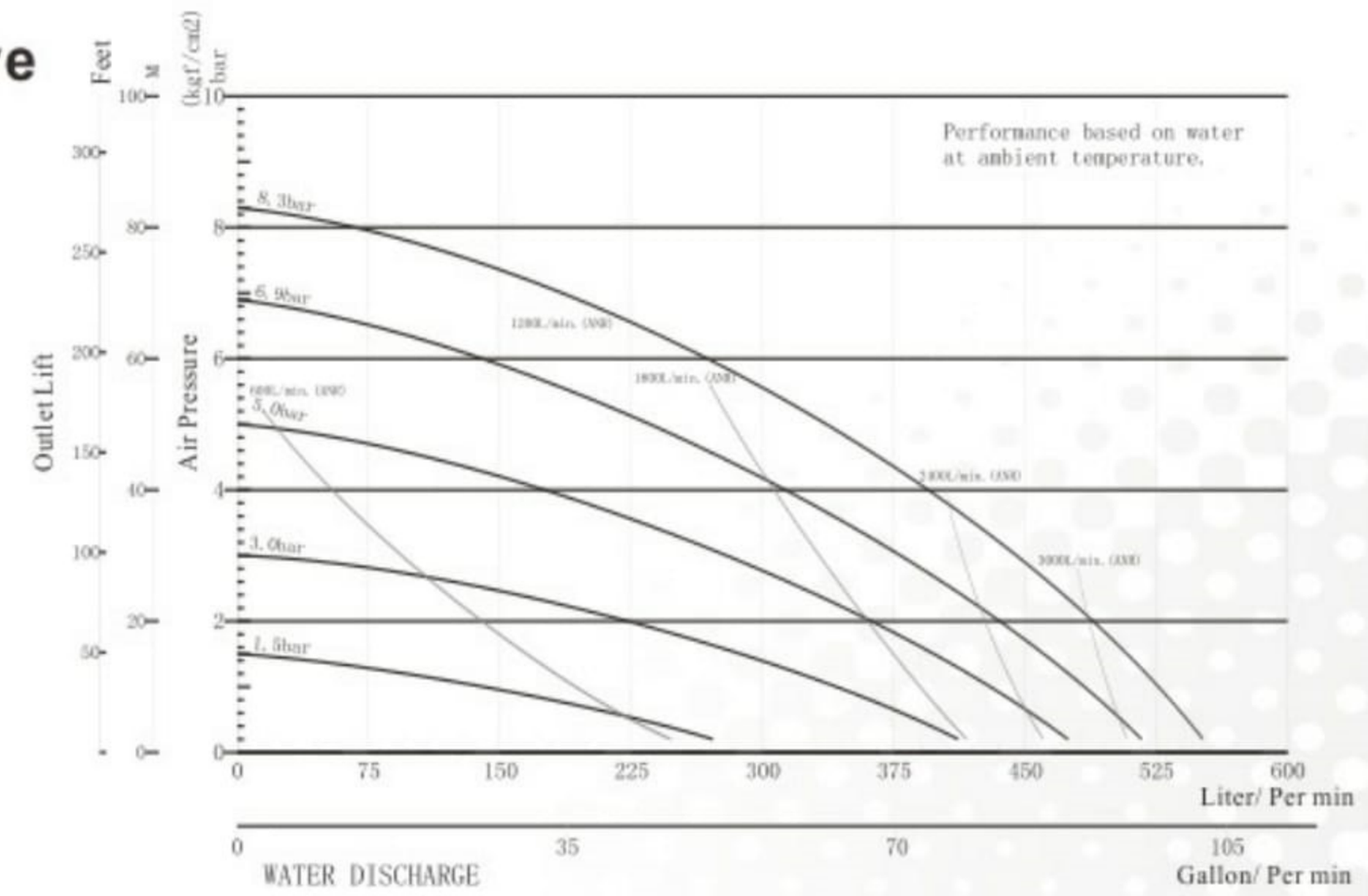
Diaphragm

Material	Temperature Range
UPE (U)	-5 to +60℃
PTFE (T)	-30 to +120℃
Santoprene® (O)	-10 to +80℃

Specification

Liquid inlet & outlet	2" PT(BSP)
Air inlet	1/2" PT(BSP)
Air outlet	1" PT(BSP)
Lowest pressure	1.2Bar(kgf/cm^2) ; 17.4psi
Max pressure	8.3Bar(kgf/cm^2) ; 120psi
Working pressure advised	2~5.5Bar(kgf/cm^2) ; 29psi~79.75psi
Quantity / cycle	2.5L
Solid limit	Φ6.4~8mm
Air consumption	3600Liter/Per Min. ; 127.08Scfm/Per Min
Inlet lift (deep)	6 m-wet ; 3.7m-dry
Assemble size	43(L)cm x 34(W)cm x 54(H)cm
Max flow rate	147.75 Gallon/Per Min. ; 560 Liter/Per Min.

Diagram of Curve



SAMT®

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