



Air Operated Double Diaphragm Pumps

2" D500 Metallic

2" Metallic Diaphragm Pump Data Sheet

Max Flow Rate: 800 L/min. (Rubber)
Liquid Connection Size: 2" Female Threaded / Flanged Centre Ports.
Max Slurry Size: 8.0 mm.
Max Suction Lift: PTFE Dry: 3.0m Rubber Dry: 5.5m. Wet (Primed): 8.0m.
Max Discharge Pressure: 0.85 MPa. (Rubber)
Check Valve Configuration: Ball Type Check Valves.
Pump Wetted Material Options: Aluminium, Stainless Steel.
Diaphragm Options: PTFE, CR, NBR, TPEE, TPO, EPDM, FKM, One-piece PTFE.
Air Motor Material: Aluminium.
Description: 2" Metallic AODD Pumps available in Al, SUS. Looped C® Spring Air Spool. Aluminium Air Motor. Choice of Threaded & Flanged Centre Port Connections.
Ball Check Valves. External Plastic Silencer.



D500A J/A
800L/min max



500 Metallic Pump Specifications

Pump Model	A S	AT•AW ST•SW
Max Flow Rate	800 L/min [211.4 GPM]	600 L/min [158.5 GPM]
Max Solids Size	8.0 mm	
Max Discharge Pressure	0.85 MPa [125 PSI]	0.7 MPa [100 PSI]
Supply Air Pressure Range	0.2 – 0.85 MPa [29 - 125 PSI]	0.2 – 0.7 MPa [29 - 100 PSI]
Max Suction Lift	PTFE Dry: 3.0 meters. Rubber Dry: 5.5 meters. Wet (Primed): 8.0 meters.	
Max Air Consumption	5800 L/min (ANR) [204.80 SCFM]	6000 L/min (ANR) [211.86 SCFM]
Max Discharge Vol Per Cycle	3500 mL	2000 mL
Ambient Temp Range	0 – 70°C [32 – 158°F]	
Liquid Temp Range	NBR/CR 0–70°C [32–158°F] TPEE/EPDM 0–80°C [32–176°F] FKM/TPO/PTFE/One-piece PTFE 0–100°C [32–212°F]	
Inlet & Outlet Connections	2" Female Threaded / Flanged Centre Ports	

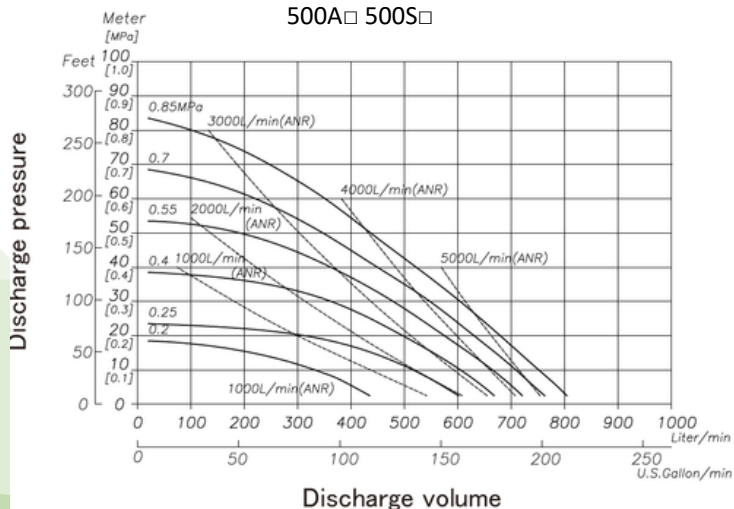
*Operating in the condition a fluid temperature is at 70°C or above might cause an early degradation of performance and required to change the material of air motor seal parts. Please contact your nearest distributor for details.

Note: Factors affecting a pumps stated liquid flow rate, suction lift & solids handling capabilities include but are not limited to; pump size, diaphragm, ball valve & ball seat, type & materials of construction, air inlet pressure & air flow capability, liquid viscosity, specific gravity, slurry content, ambient & liquid temperature, liquid inlet & liquid outlet width, piping type, piping length & overall piping configuration. A minimum supply air pressure of 30 PSI (0.2 MPa) is required to operate the pump.

Pump Performance Curves

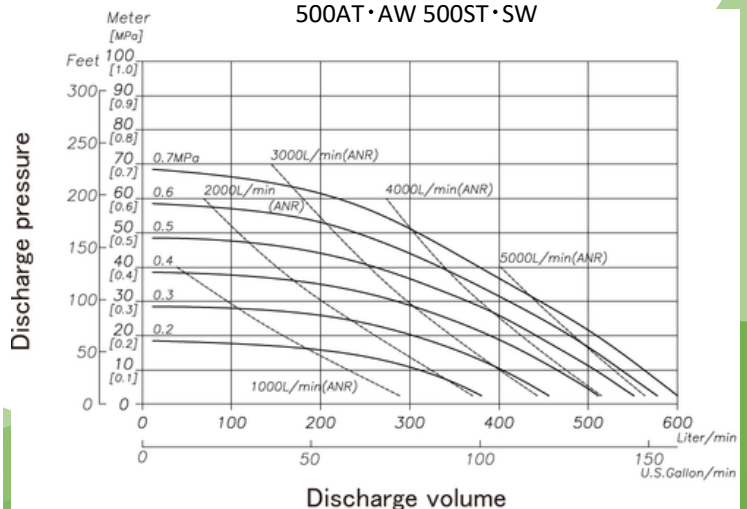
Rubber Diaphragm Curves

500A□ 500S□



PTFE Diaphragm Curves

500AT•AW 500ST•SW



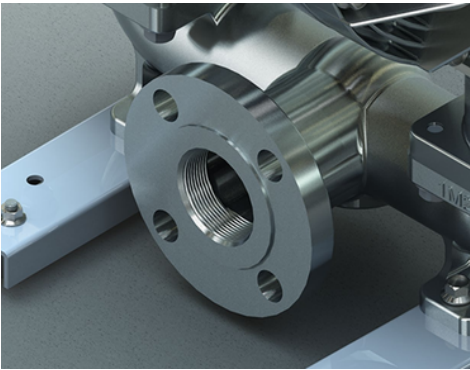
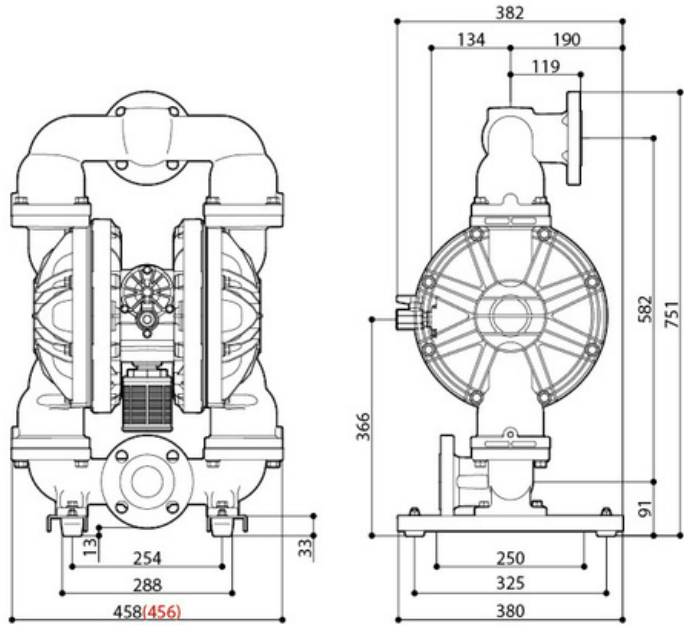
Wetted Materials Of Construction

MODEL	500AC □	500AN □	500AE □	500AV □	500AT □	500AH □	500AS □	500AW □	500SC □	500SN □	500SE □	500SV □	500ST □	500SH □	500SS □	500SW □
Pump Wetted Parts	ADC12 • AC4C								SCS14							
Diaphragm	CR	NBR	EPDM	FKM	PTFE	TPEE	TPO	PTFE • EPDM	CR	NBR	EPDM	FKM	PTFE	TPEE	TPO	PTFE • EPDM
Ball Valve	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE
Valve Seat	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE
Center Disk	A5056								SUS316							
Weight	A □ [A □ N] : 37.4 kg [82.5 lbs] A □ J [A □ A] : 39.4 kg [86.9 lbs]								S □ [S □ N] : 64.0 kg [141.1 lbs] S □ J [S □ A] : 69.0 kg [152.1 lbs]							

MODEL	500FC □	500FN □	500FE □	500FV □	500FT □	500FH □	500FS □	500FW □
Pump Wetted Parts	S45C							
Diaphragm	CR	NBR	EPDM	FKM	PTFE	TPEE	TPO	PTFE • EPDM
Ball Valve	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE
Valve Seat	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	PTFE
Center Disk	SS400							
Weight	F □ [F □ N] : 64.0 kg [141.1 lbs] F □ J [F □ A] : 69.0 kg [152.1 lbs]							

Dimensional Drawings

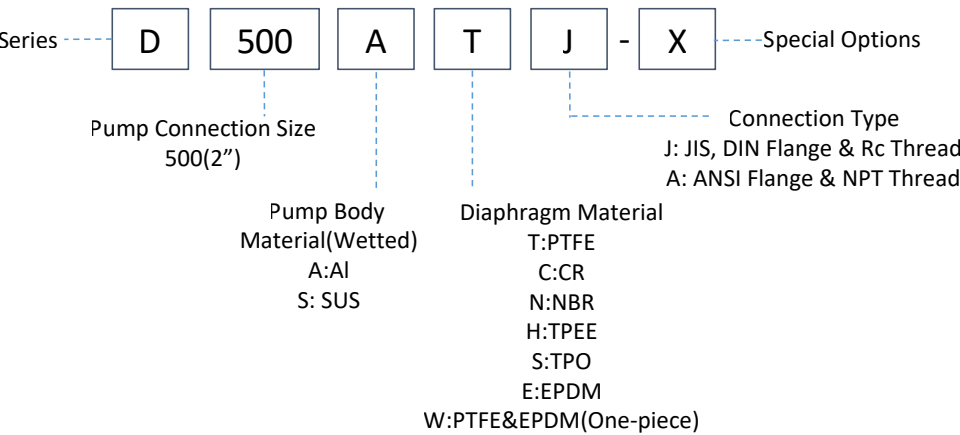
500 A J/A • S J/A



Threaded Flange Manifold

This model comes with threaded flange manifolds as standard that provides both flange and thread connection.

Nomenclature



D500AJ/A
2" AODD Pump.