

Air Operated Double Diaphragm Pumps



D500 Metallic Flap Valve

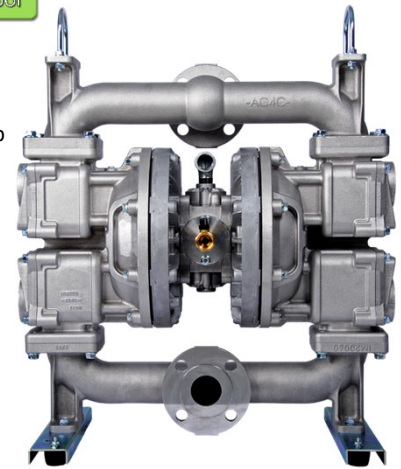
2" HD Metallic Flap Valve Pump Data Sheet

- Max Flow Rate:** 600 L/min. (Rubber)
- Max Discharge Pressure:** 0.7 MPa.
- Max Slurry Size:** Φ 30mm Spherical. Φ 15mm \times 45mm Oblong.
- Max Suction Lift:** Rubber Dry: 5.0m. Wet (Primed): 8.0m.
- Liquid Connection Size:** 2".
- Liquid Connection Configuration:** Flanged Centre Ports.
- Pump Wetted Material Options:** Aluminium.
- Air Motor Material:** Aluminium.
- Diaphragm Options:** NBR, TPO. *HNBR Check Valves.
- Check Valve Configuration:** Hinged Flap Type Check Valves.
- Air Motor Model:** Heavy Duty Mechanical Coil Spring Air Spool.
- Exhaust Configuration:** External Plastic Exhaust Silencer (\times 2).
- Base & Footprint:** Heavy Duty Steel Legs & Rubber Feet.

Mechanical HD Spool

D500A□J/AW-M

2" HD Aluminium Pump
Flap Check Valves
600 L/min.
73.0 Kg.



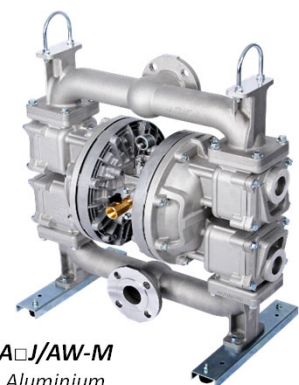
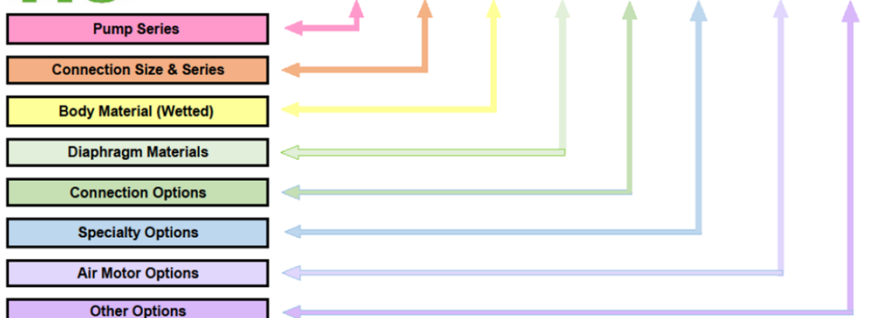
Description & Features: Powerful 2" Flap Valve Pumps specifically designed for very tough & demanding liquid transfer applications. Fitted with the heavy duty mechanically actuated shifting mechanism with non-centering coil spring assisted Air Spools. Will resist stalling and freezing in nearly all conditions. Able to achieve very high flow rates & high discharge heads reliability & efficiently. Reverse Suction configuration; top Inlet & bottom outlet to help facilitate the transfer of large solids or heavy slurry laden liquids with ease. Heavy duty HNBR rubber encapsulated steel Flap valves able to handle very large sized solids up to 45mm in size. Drop-in dimensions & footprint. Fully bolted body, heavy weight construction & wide sturdy steel base. Double external exhaust ports. 100% oil & grease lubrication free, offering clean, emissions free, environmentally friendly operation. Easily maintainable with modular replaceable wear parts & outside accessible Flap Valves and Air Spools. Fully torqued, leak and operation tested prior to shipment. Designed and manufactured in Japan.

500 HD Metallic Flap Valve Pump Specifications

Pump Model	AN AS
Max Flow Rate	600 L/min [158.5 GPM]
Max Solids Size	Φ 30mm Spherical. Φ 15mm \times 45mm Oblong.
Max Discharge Pressure	0.7 MPa [100 psi]
Supply Air Pressure Range	0.1 – 0.7 MPa [14 - 100 psi]
Max Suction Lift	Rubber Dry: 5.0 meters. Wet (Primed): 8.0 meters.
Max Air Consumption	6000 L/min (ANR) [211.9 SCFM]
Max Discharge Vol Per Cycle	3500 mL
Ambient Temp Range	0 – 70°C [32 – 158°F]
Liquid Temp Range	0 – 70°C [32 – 158°F]
Inlet & Outlet Connections	2" Flanged Centre Ports

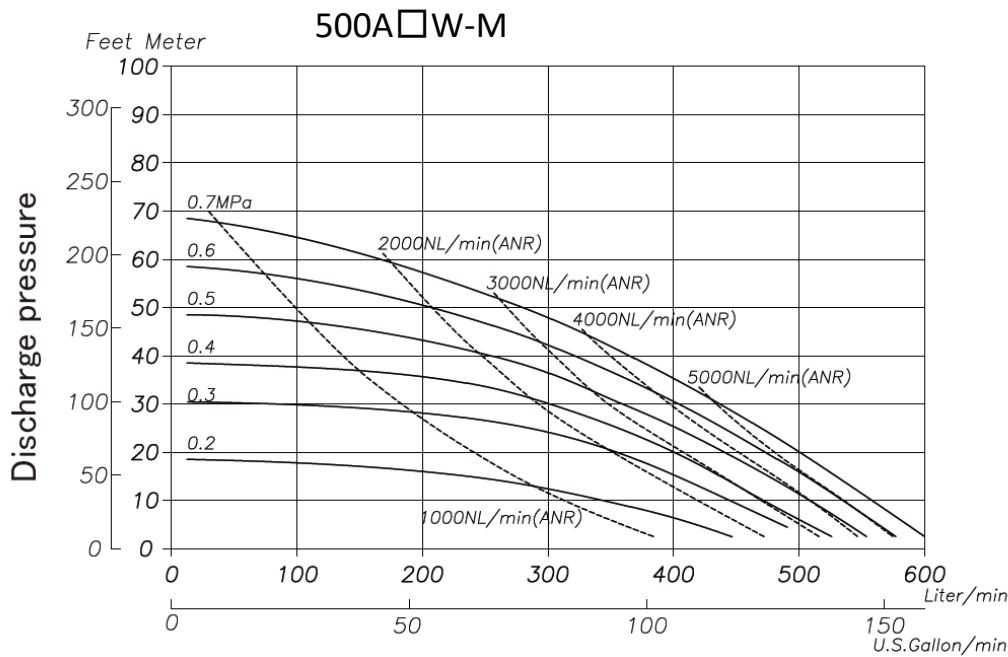
Note: Factors affecting a pumps stated liquid flow rate, suction lift & solids handling capabilities include but are not limited to; pump size, diaphragm, ball valve & ball seat, type & materials of construction, air inlet pressure & air flow capability, liquid viscosity, specific gravity, slurry content, ambient & liquid temperature, liquid inlet & liquid outlet width, piping type, piping length & overall piping configuration. A minimum supply air pressure of 14 psi (0.1 MPa) is required to operate the pump. If the supply pressure is less than 14 psi (0.1 MPa), the pump may not operate properly. Oil & Grease Lubrication is not required under normal operating conditions. All 500 Series Flap Valve Diaphragm Pumps are shipped complete with Heavy Duty Steel Legs, Rubber Feet, Lifting Hooks, Air Inlet Shutoff Valve & 2 \times External Plastic Exhaust Silencers as Standard Accessories.

Nomenclature



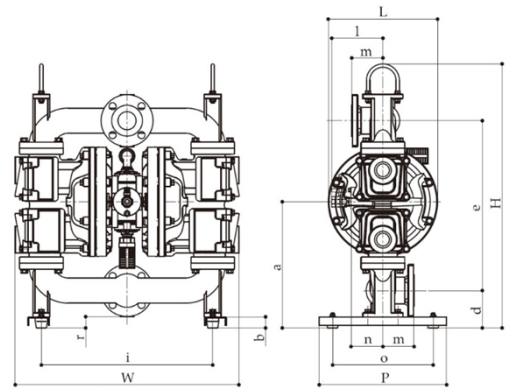
D500A□J/AW-M
2" HD Aluminium
Flap Valve AODD Pump

Pump Performance Curves



Wetted Materials Of Construction

MODEL	500ANJW-M [500ANJW-M]	500ASJW-M [500ASAW-M]
Pump Wetted Parts	AC4C	
Diaphragm	NBR	TPO
Flap Valve / Valve Seat	HNBR	
Center Disk	A5056	
Weight	73.0 kg [161.0 lbs]	



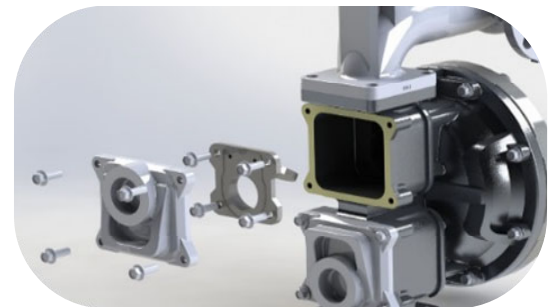
Dimensional Drawings

MODEL	H	W	L	a	b	d	e	i	l	m	n	o	P	r	AIR INLET	AIR EXH	LIQUID IN/OUT
500A □ JW-M [500A □ AW-M]	788 [31.02]	667 [26.26]	326 [12.83]	377 [14.84]	33 [1.30]	112 [4.41]	507 [19.96]	511 [20.12]	153 [6.02]	93 [3.66]	95 [3.74]	300 [11.81]	380 [14.96]	34 [1.34]	Rc3/4 [NPT3/4]	Rc3/4 [NPT3/4]	Equivalent to JIS Flange 10K50A [Equivalent to ANSI Flange 150 2B]

Pumps Design Features

Externally Accessible Flap Valve Design.

Four Fully Modular, Heavy Duty, HNBR Rubber Encapsulated Steel Flap Valves. Extended Flex Life, Abrasion Resistant, Impact Resistant & Cut Resistant Design and Materials. Special Outside Accessible Design. Maintain the pump Inline. Flap Valve Inspection, Cleaning & Service in Place. No need to pull the pump for routine Valve maintenance.



YTS®

Pumps Manufactured In Japan

AODD Pump Capabilities.

Self Priming.	Variable Discharge Pressures.	Inherently Safe Design.
Run Dry.	Transfer Liquid Slurries.	Portable & Easy to Use.
Run up to Dead Head.	Transfer Large Sized Solids.	Transfer Viscous Fluids.
Variable Flow Rates.	Handle Abrasives.	Frequent Start Stop Operation.
Shear Sensitivity.	Transfer Chemicals.	Powered by Compressed Air.

For more information about YTS Pumps please contact: sales@yts-pump.com

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Mechanical HD Spool

ATEX Compliant II 2GD c T5



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