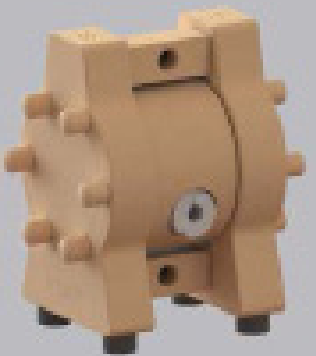


**AIR OPERATED DOUBLE
DIAPHRAGM PUMPS**



Tery **PRO**

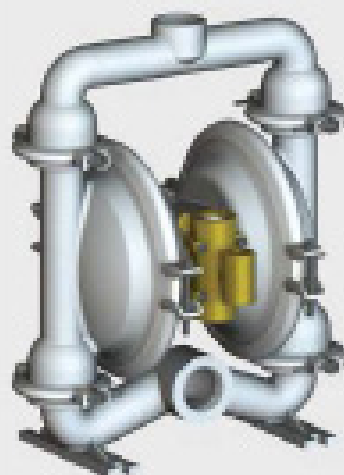
Tery **MARINE**



Tery **Chem**

Tery **BLOCK**

Tery **SAN**



Introduction



Who we are ?

Teryair is a market leader in pneumatic equipment and tools.

Our equipment boasts cutting-edge features, comparable with the world's best technologies, and we compete globally, feature for feature, with other industry-leading brands. While still maintaining competitive pricing.

Prominent among the lineup of Teryair pneumatic equipment is their growing program of Air Operated Double Diaphragm (AODD) pumps.

These pumps are currently being exported to over 40 countries, both as a Teryair product and under private label arrangements. In India and around the World, Teryair pumps are supported by strong, no-nonsense warranties and technical support.

Keen to show the market our current range of products, some of which are relatively new to the industry, we are proud to showcase our AODD range in this brochure.

Please contact us for further information or if you want to become a 'Teryair Partner'. We would love to hear from you.

Why Teryair AODD Pumps ?

Unlike some competitors, every pump is duration tested on a test bench at maximum load. Every pump performance parameter is recorded and traceable. This ensures consistent pump reliability.

Manufactured under an ISO 9001:2015 process environment. Pumps from Teryair are CE, UKCA and Ex-certified.

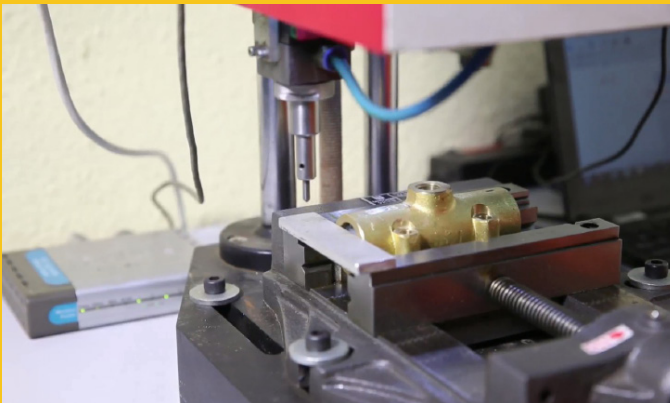
Certifications & Memberships



Why AODD Pumps

Special Advantages

- Pumps variety of fluids
- Easy startups, no priming
- Reduced foaming or shearing of the product being pumped
- No decrease in pumping efficiency occurs over time; replacing the diaphragm restores the pump to its original efficiency.
- No damage due to running without lubrication (MaxFlo fitted pumps)
- Solid particle handling
- No damage when stalled.
- Capable in submersible, flooded or negative suction applications
- Explosion-proof; ATEX certified.
- No mechanical seals to replace
- Variable flow
- Suited for fixed and portable applications.



Contact us today to learn more about our products and service
E :- info@teryair.com | T :- +91 887 903 2775 / +91 744 740 0655

Table Of Contents

Tery **PRO** Bolted Metal Pumps 06 / 07

Tery **MARINE** Clamped Metal Pumps 08 / 10

Tery **Chem** Bolted Polypropylene Pumps 11 / 12

Tery **BLOCK** PTFE Bolted Pumps 13 / 14

Tery **SAN** Stainless Steel Clamped Pumps 15 / 16

AODD vs Other Technologies 16

Operating Principle & Installation Methods 17

Diaphragm Specifications & Air Valves 18

How To Read A Pump Curve 19

Common Applications 20 / 21

Conditions & Terms 22



TeryPRO – Professional Pumps for Industrial Use

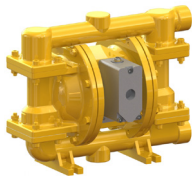
The 'Professional' range from Teryair is the next step for the existing portfolio. With its bolted construction and large range of options, it takes the traditional use of an AODD Pump into the broader section of the chemical and industrial markets.

TeryPro is the Professional's choice when an Air Operated Diaphragm Pump is the best solution for strength, high performance, cleaner and safer fluid transfer. AODD pumps can be held on standby for immediate use, with zero energy consumption. Coupled with Patented Air Valve Technology, TeryPro sets the standard for forward thinking consumers.

TeryPro Bolted Metal Pumps



1/2" Aluminium



1" Aluminium



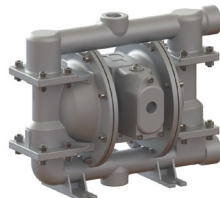
1-1/2" Aluminium



2" Aluminium



1/2" Stainless Steel



1" Stainless Steel



2" Stainless Steel



For more information or to buy online.
<https://www.terylair.com/>

MaxFlo Air Valve

- Non stalling,
- Air efficient design for our greenest range of Diaphragm pumps.
- Externally mounted for easy access without breaking into the flow path.

Multiple Elastomer Options

- Select the best materials for your diaphragms to ensure long life and minimal corrosion.
- See our elastomer chart on page 17 for available materials and common uses.

Various Porting Options

- Large choice of connections, threaded and flanged.
- Match with your factory standard fittings, making the pump useful across your site.

ATEX As Standard

- Use anywhere, even where flammable products need transfer.
- Ground the pump for immediate earthing if required.

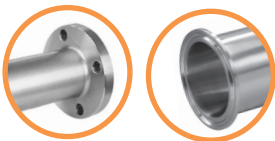
Comprehensive Range Of Sizes

- Find the perfect fit for your application.
- 'Go large' with your pump selection for best air efficiency and longer service intervals.

Bolted Construction

- Robust leak free applications.
- Improved structural integrity.

TeryPro Pump options



Flanged Option : 1 and 2 Inch Stainless Only
FDA Option : 2 Inch Stainless with Tri-Clamp ferrule and PTFE.



Pump Nomenclature

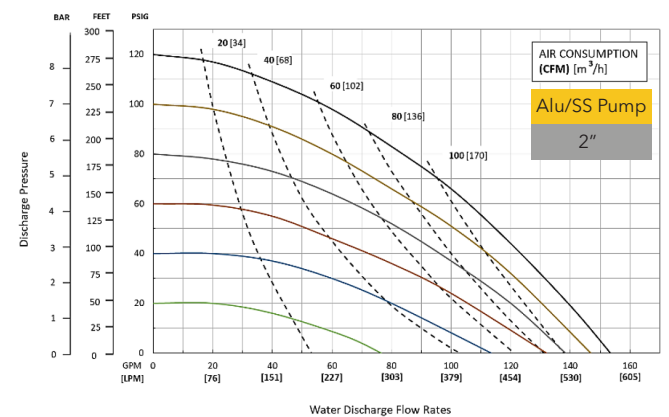
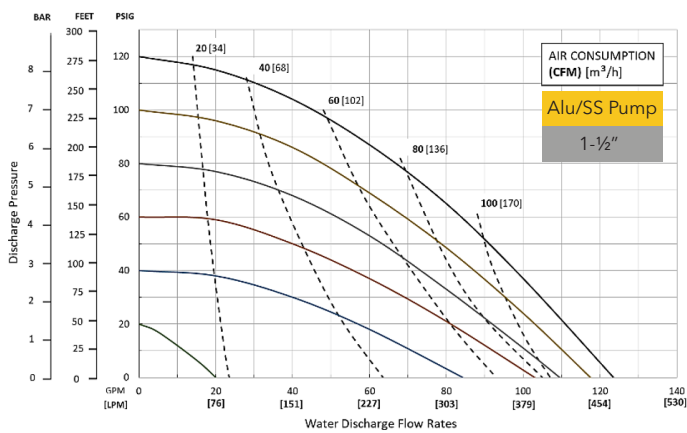
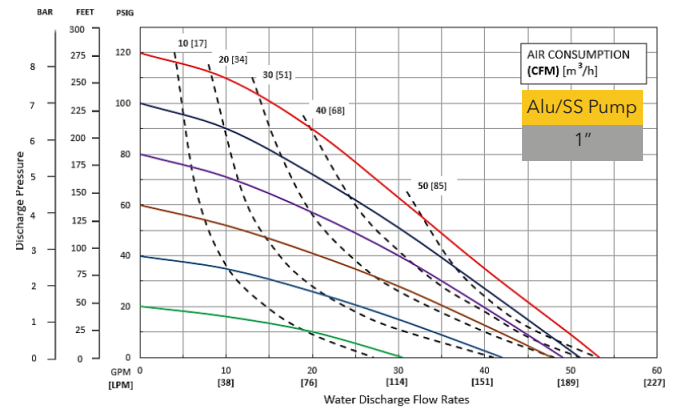
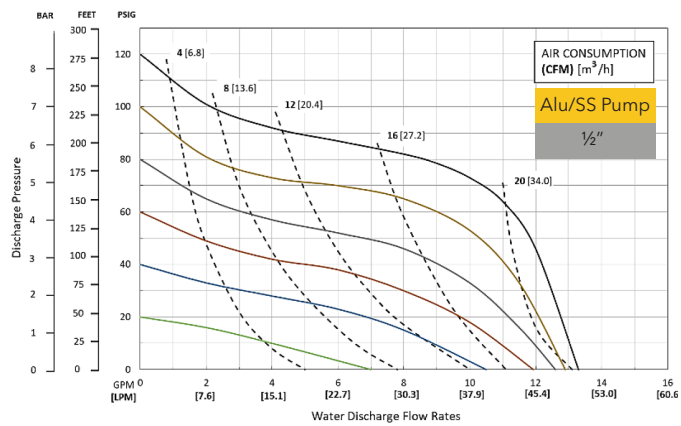
Position	1	2	3	4	5	6	7	8	9	10	11
Example:	TP	15	A	B	X	R	E	X	A	X	X
Example: TP25-ABX-GEX-AXX											
Position 1 Range	Position 2 Size	Position 3 Body	Position 4 Diaphragm/ Valve	Position 5 Back Up	Position 6 Port	Position 7 Port Position	Position 8 Speciality Code	Position 9 Safety Code	Position 10 Sanitary Code	Position 11 Speciality Code	
TP- Industrial	15 - ½"	A - Aluminium	B - Buna (Nitrile)	S - Santoprene	G - BSPT	C - Centre Ported, End Port Plugged	P - Pulse Dampener	A - ATEX/ IECEx	F - FDA / EN 1935/2004	S - Speed Controller	
	25 - 1"	S - Stainless Steel	T - PTFE	X - None	C - TriClamp BS 4825-3	E - End Ported	R - Remote Solenoid Driven		X - None	C - Cycle Counter	
	40 - 1-½"		S - Santoprene		F - Flanged ANSI/DIN		T - Trolley Mounted			A- Alu. Shaft Housing & Alu Air Valve Body	
	50 - 2"		N - Neoprene		R - NPT		X - None			B- SS Ball & Ball Seat	
			V - Viton		P - BSPP					D - Diaphragm Monitoring	
										X - None	
										O - See foot note	

Foot note: Centre Port Horizontal, Center Port Vertical and End Port on Inlet and Outlet are all threaded and plugged. Pump is blue Painted, and comes with Brass Silencer

This is available only in 1/2" Aluminium for Paint Spray Application

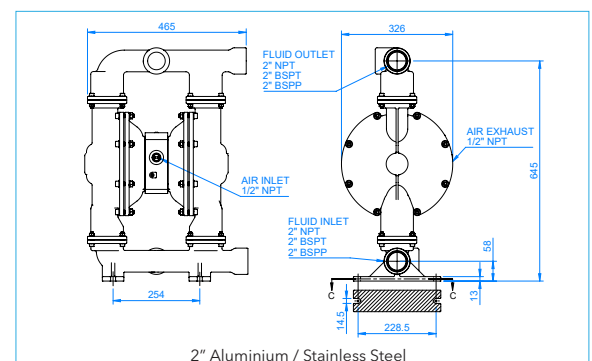
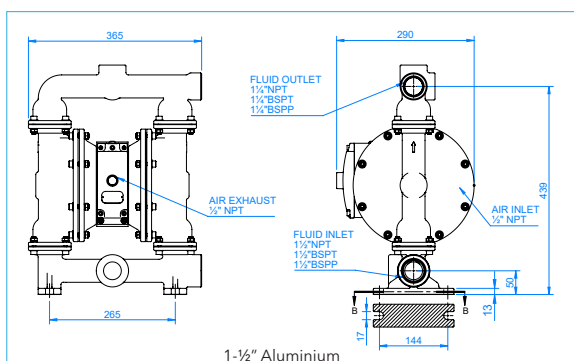
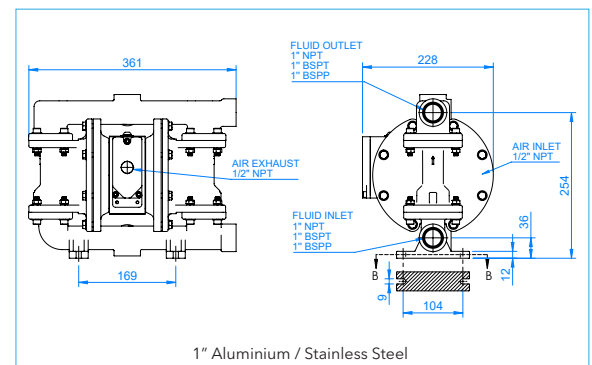
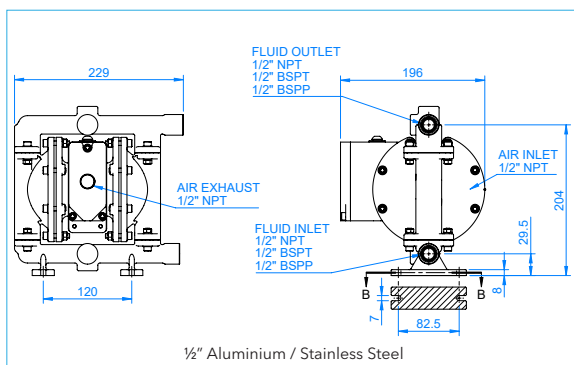


Performance Graphs



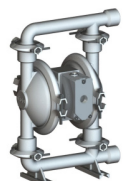
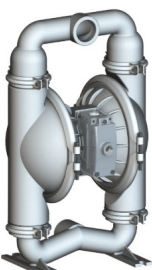
Note : Please refer our pump manuals for performance curves of other elastomers

Dimensions in mm





Outgoing SDP Clamped Pumps* V/S New Terypro Series High Performing, Air Efficient Bolted Pumps

Outgoing SDP Model Nos		New Terypro Bolted Series Model Nos		Description
	SDP12ALS-CR		TP15-ASX-RCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium Santoprene NPT Centre Port / Atex
	SDP12ALS-CG		TP15-ASX-GCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium Santoprene BSPT Centre Port / Atex
	SDP12ALS-CP		TP15-ASX-PCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium Santoprene BSPP Centre Port / Atex
	SDP12ALT-CR		TP15-ATS-RCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene NPT Centre Port / Atex
	SDP12ALT-CG		TP15-ATS-GCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPT Centre Port / Atex
	SDP12ALT-CP		TP15-ATS-PCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPP Centre Port / Atex
	SDP12SSS-CR		TP15-SSX-RCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel Santoprene NPT Centre Port / Atex
	SDP12SSS-CG		TP15-SSX-GCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPT Centre Port / Atex
	SDP12SSS-CP		TP15-SSX-PCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPP Centre Port / Atex
	SDP12SST-CR		TP15-STX-RCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene NPT Centre Port / Atex
	SDP12SST-CG		TP15-STX-GCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPT Centre Port / Atex
	SDP12SST-CP		TP15-STX-PCX-AXX	Teryair 1/2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPP Centre Port / Atex
	SDP25ALS-CR		TP25-ASX-REX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium Santoprene NPT End Port / Atex
	SDP25ALS-CG		TP25-ASX-GEX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium Santoprene BSPT End Port / Atex
	SDP25ALS-CP		TP25-ASX-PEX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium Santoprene BSPP End Port / Atex
	SDP25ALT-CR		TP25-ATS-REX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene NPT End Port / Atex
	SDP25ALT-CG		TP25-ATS-GEX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPT End Port / Atex
	SDP25ALT-CP		TP25-ATS-PEX-AXX	Teryair 1" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPP End Port / Atex
	SDP25SSS-CR		TP25-SSX-REX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel Santoprene NPT End Port / Atex
	SDP25SSS-CG		TP25-SSX-GEX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPT End Port / Atex
	SDP25SSS-CP		TP25-SSX-PEX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPP End Port / Atex
	SDP25SST-CR		TP25-STX-REX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene NPT End Port / Atex
	SDP25SST-CG		TP25-STX-GEX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPT End Port / Atex
	SDP25SST-CP		TP25-STX-PEX-AXX	Teryair 1" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPP End Port / Atex
	SDP40ALS-CR		TP40-ASX-RCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium Santoprene NPT Centre Port / Atex
	SDP40ALS-CG		TP40-ASX-GCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium Santoprene BSPT Centre Port / Atex
	SDP40ALS-CP		TP40-ASX-PCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium Santoprene BSPP Centre Port / Atex
	SDP40ALT-CR		TP40-ATS-RCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene NPT Centre Port / Atex
	SDP40ALT-CG		TP40-ATS-GCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPT Centre Port / Atex
	SDP40ALT-CP		TP40-ATS-PCX-AXX	Teryair 1-1/2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPP Centre Port / Atex
	SDP50ALS-CR		TP50-ASX-RCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium Santoprene NPT Centre Port / Atex
	SDP50ALS-CG		TP50-ASX-GCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium Santoprene BSPT Centre Port / Atex
	SDP50ALS-CP		TP50-ASX-PCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium Santoprene BSPP Centre Port / Atex
	SDP50ALT-CR		TP50-ATS-RCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene NPT Centre Port / Atex
	SDP50ALT-CG		TP50-ATS-GCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPT Centre Port / Atex
	SDP50ALT-CP		TP50-ATS-PCX-AXX	Teryair 2" Diaphragm Pump TeryPro Aluminium PTFE-Santoprene BSPP Centre Port / Atex
	SDP50SSS-CR		TP50-SSX-RCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel Santoprene NPT Centre Port / Atex
	SDP50SSS-CG		TP50-SSX-GCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPT Centre Port / Atex
	SDP50SSS-CP		TP50-SSX-PCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel Santoprene BSPP Centre Port / Atex
	SDP50SST-CR		TP50-STX-RCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene NPT Centre Port / Atex
	SDP50SST-CG		TP50-STX-GCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPT Centre Port / Atex
	SDP50SST-CP		TP50-STX-PCX-AXX	Teryair 2" Diaphragm Pump TeryPro Stainless Steel PTFE-Santoprene BSPP Centre Port / Atex

* SDP models will continue to be available through 2024, we recommend switching to the newer TeryPro series at the earliest, Equivalent models shown above for ready reference



Tery **MARINE** – Professional Pumps for Marine Use

With a Company Ethos of continuous Improvement and the innovation of manufacturing materials. Teryair have developed New Product Ranges allowing us to enter new markets and offer pumping solutions for more applications. To simplify the Introduction of these new products? Teryair have broken down their Portfolio into segments.

What was the original Teryair range Has now been branded as TeryMarine. This range is still the most popular. and has a multitude of applications.

Not just for Marine, this range is also the 'workhorse' of the AODD range. All The TeryMarine range are ATEX compliant, for hazardous environments.

TeryMarine Clamped Metal Pumps



1/2" Aluminium
IMPA 591605



1" Aluminium
IMPA 591601



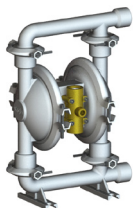
1-1/2" Aluminium
IMPA 591602



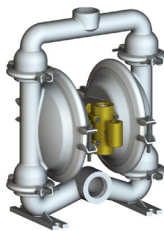
2" Aluminium
IMPA 591603



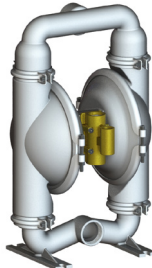
3" Aluminium
IMPA 591604



1" Stainless Steel
IMPA 591701



1-1/2" Stainless Steel
IMPA 591703



2" Stainless Steel
IMPA 591706



For more information or
to buy online.
<https://www.terair.com/>

For more information on our
IMPA range and for our dedicated brochure
Contact <https://www.terair.com/>

A few reasons why this is such a popular choice include

Our traditional Brass air valve.

- Giving better corrosion resistance than aluminium and more economic than stainless steel. Brass is a common choice for exposed applications. Especially wet and briny environments.
- Large internal clearances mean this traditional valve can handle the dirtiest of compressed air, only needing cleaning to remove the largest blockages, like rust from the air line.
- Being mounted externally, the valve can be removed for maintenance without removing it from the process line.

Easy strip clamp band construction

- If by chance a large solid is sucked up into the Pump, For example, rag or rope from off-deck. With as little as six bolts the entire wet side of the pump can be opened to remove these blockages.
- With just 12 bolts in total, the wet side can be removed completely allowing quick and easy cleaning between applications avoiding cross contamination of fluids.

Heavy duty epoxy paint.

- Resistant to knocks and general wear and tear.
- The TeryMarine range is ideal for submerged applications, just fit an airline into the muffler port, raising the exhaust above the liquid and lower into the fluid.
- This highly visible epoxy paint on the Aluminium range can be seen in low light. Perfect for on-deck or around a dimly lit factory floor.

Standard construction materials.

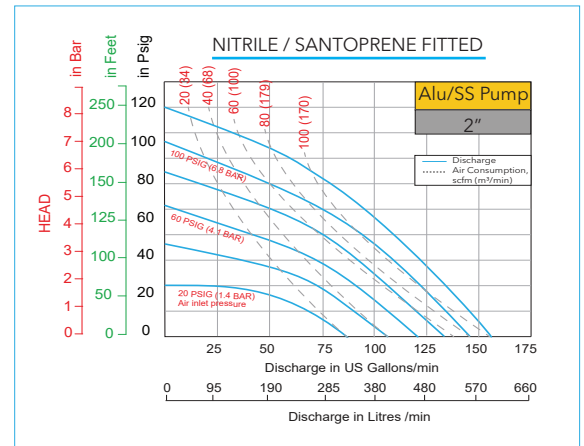
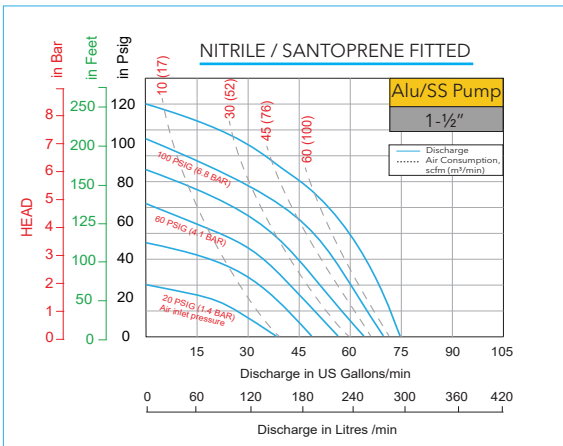
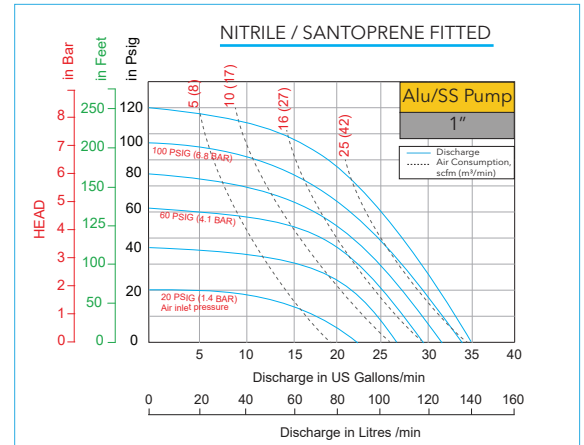
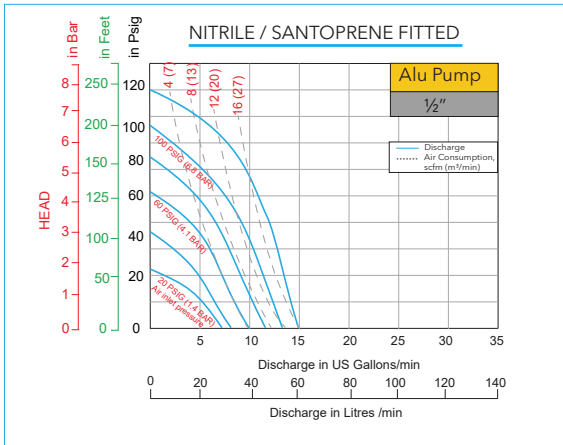
- Common construction materials are aluminium with nitrile, for Black and Grey Water, Washdown and general fuel oil transfer.
- Stainless Steel with Santoprene and the even more chemically resistant PTFE for harsher products. Often used for rust and corrosion inhibitors. Or just a general 'Pump Anything' spill containment unit.

Pump Nomenclature

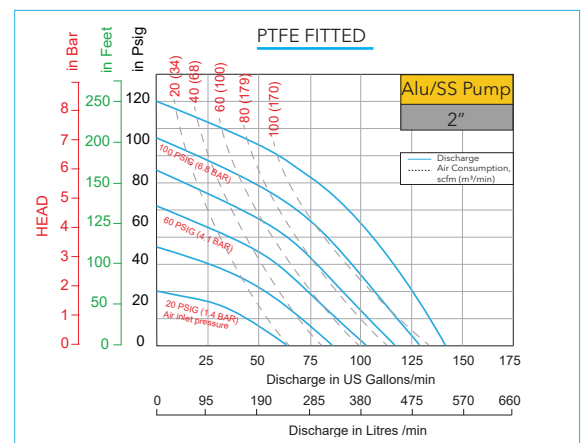
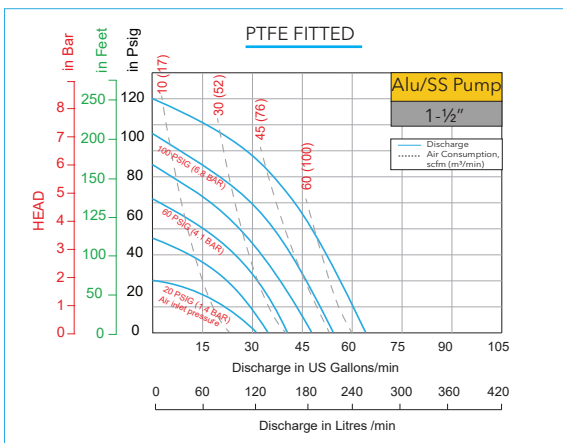
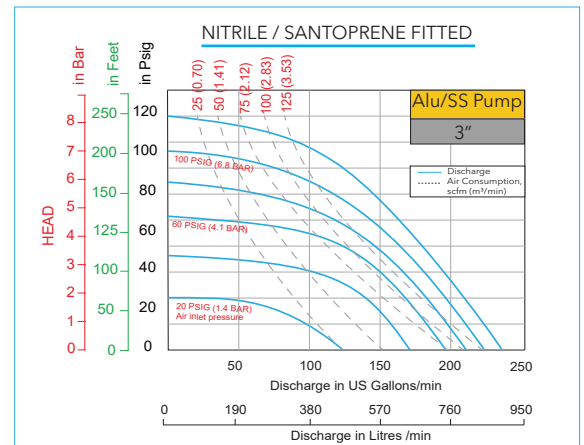
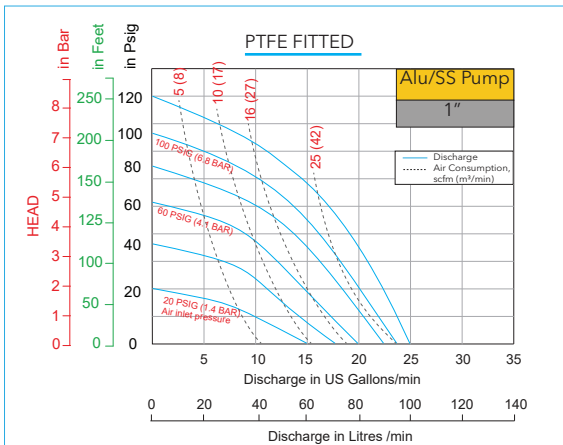
Position	1	2	3	4	5	6
Example:	TM	12	A	B	X	R
Example: DP12ABBR						
Position 1 Range		Position 2 Size	Position 3 Body	Position 4 Diaphragm/ Valve	Position 5 Back Up	Position 6 Port
DP-Classic		12 - ½"	A - Aluminium	B - Buna (Nitrile)	B - Bolted	R - NPT
		25 - 1"	S - Stainless Steel 316L	T - PTFE	C - Clamped	G - BSPT
		40 - 1-½"		S - Santoprene		P - BSPP
		50 - 2"		N - Neoprene		F - Flanged
		75 - 3"		V- Viton		
			H - Hytrel			



Performance Graphs - Nitrile/Santoprene

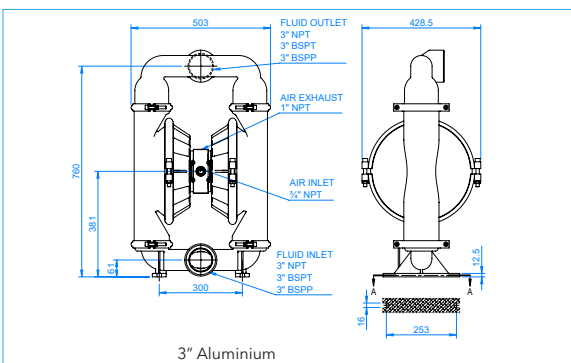
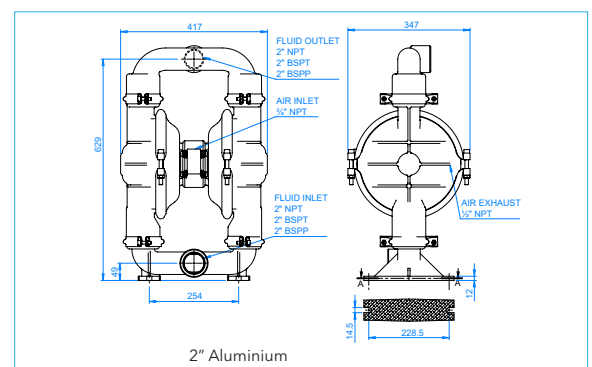
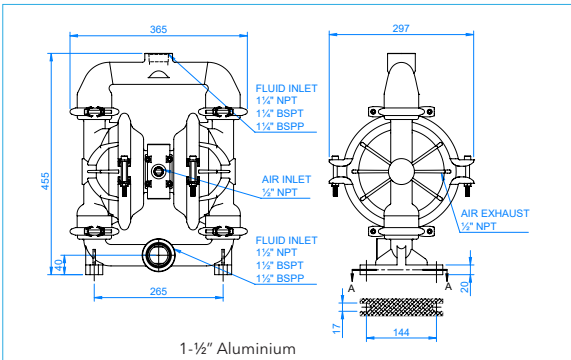
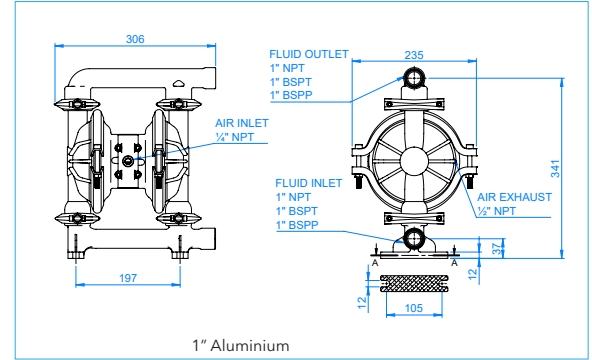
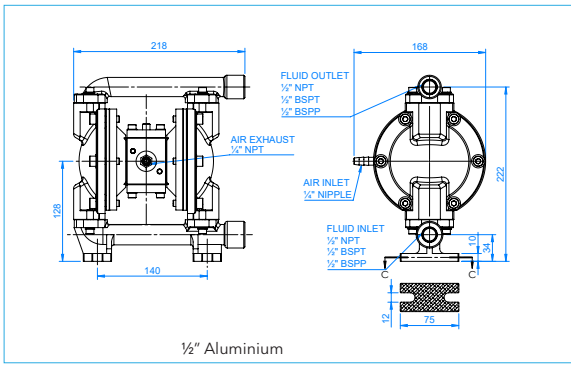


Performance Graphs - PTFE





Dimensions in mm - Aluminium



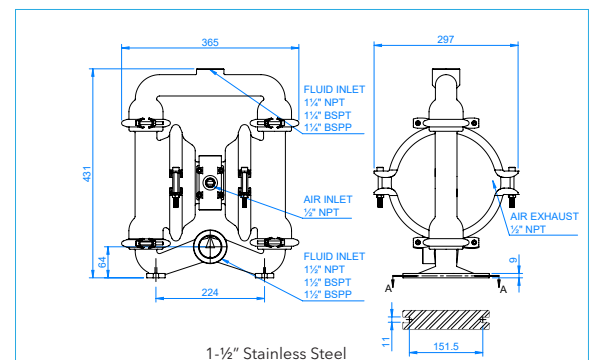
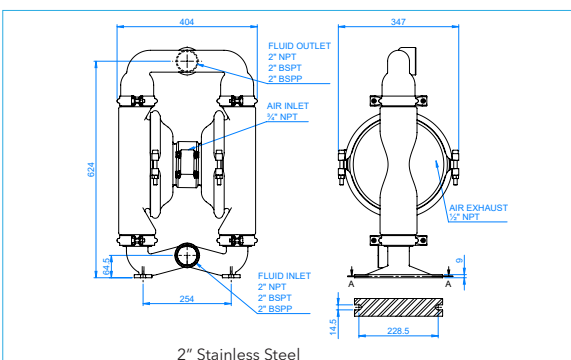
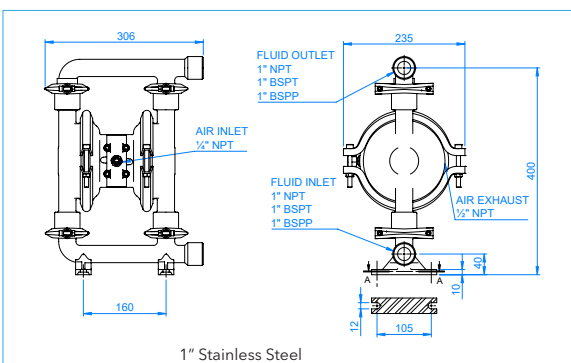
Brass Corrosion resistant Air valve for reliable performance in the most exposed environments.

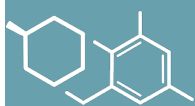
Large tolerances allow moisture laden air to pass through without freezing or long term damage.

Specify your best connection type.

- British Standard Pipe Tapered (BSPT). Used mainly in Europe and where British pipe forms are common. Female can be parallel, known as Rp or tapered as in our product range Rc.
- British Standard Pipe Parallel (BSPP). Using Parallel threads, in which the threads merely hold the pieces together but do not provide a seal. Alternate sealing is used e.g. O-rings, or Bonded Seals (Bonded Washers). Sometimes known as G (for Gas thread) e.g. G1/2.
- American National Standard Taper Pipe Thread (NPT). Thread common in the U.S. The taper on NPT threads allows them to form a seal when torqued as the flanks of the threads compress against each other.

Dimensions in mm - Stainless Steel





TeryChem – Professional Pumps for Industrial Use

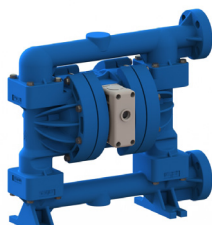
Since the introduction of Polypropylene as an option for the pump body, it has steadily grown to become the largest market for AODD Pumps, the ½" model in particular. With this in mind whilst developing our range of Chemical Pumps we modelled our ½" unit to dimensionally interchange with the existing market leaders in AODD Pumps.

By utilising new thermoplastic elastomers like Santoprene® instead of EPDM, we get similar chemical resistance, but a massively improved flex life. We also now have modified PTFE giving outstanding performance over conventional PTFE diaphragms, giving us all the chemical protection and millions of strokes before change is needed.

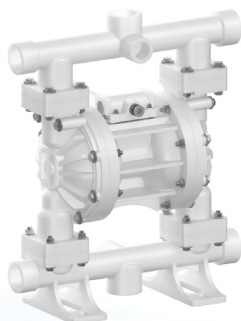
TeryChem Bolted Polypropylene Pumps



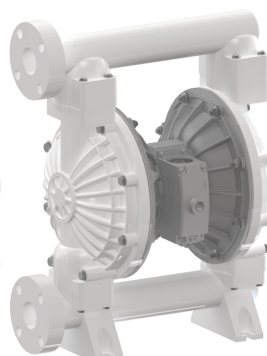
½" Polypropylene



1" Polypropylene



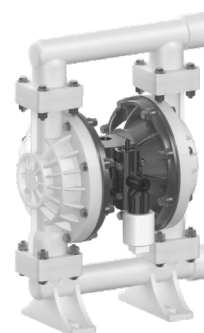
1-½" Polypropylene



2" Polypropylene



1" Polypropylene



1-½" Polypropylene

Polypropylene construction

- Lightweight compared to metal AODD Pumps
- Greater portability, smaller units can be hand carried with ease.

Multiple Port Options

- Order with your preferred connection
- Available with End, Centre and Down porting for drums, depending on size.
- Utilise extra ports for pulsation dampeners or pressure relief valves

½ Inch Universal Mountings

- Feet designed to align with common brands, allowing ease of mounting without re-drilling a base plate.
- Inlet and Discharge manifold ports spaced to ensure a trouble free retrofit when replacing a failed competitor unit.
- Inlet port raised for better clearance, to allow easier connection to pipe fittings.

Outdoor Use

- Unaffected by atmospheric oxygen, making it highly resistant to oxidation. Better than Cast Iron or Aluminium.
- Resistant to ultraviolet radiation and has higher weather resistance.

Chemical resistance

- Excellent chemical resistance, unaffected by most acids and alkalis, oxidising agents, reducing agents, and organic solvents. It is also resistant to corrosion.



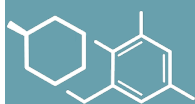
For more information or to buy online.
<https://www.terylair.com/>

Pump Nomenclature

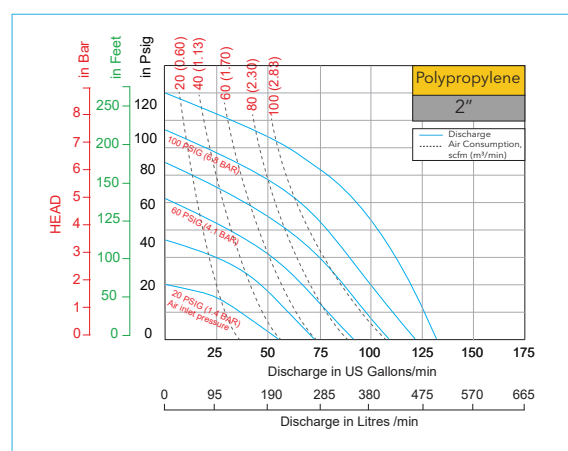
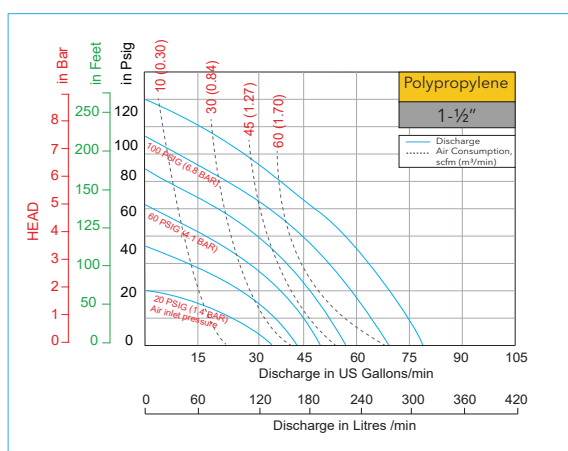
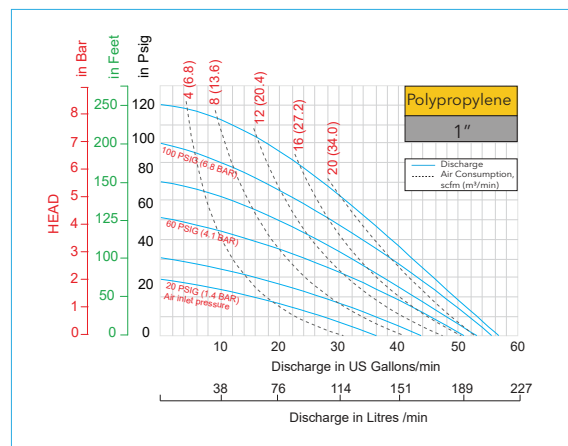
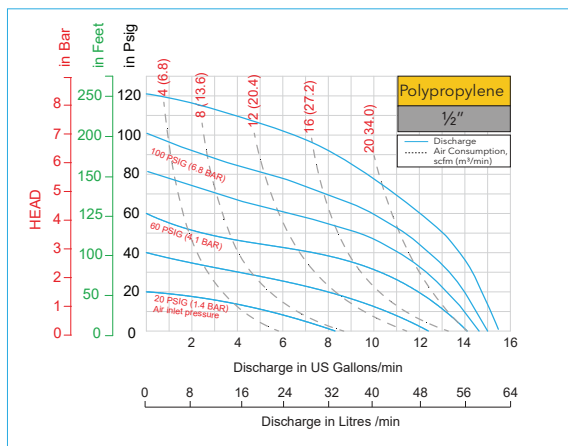
Position	1	2	3	4	5	6	7	8	9	10	11
Example	TC	15	P	T	I	G	E	X	X	X	X
Example: TC15-PTI-GEX-XXX											
Position 1 Range	Position 2 Size	Position 3 Body	Position 4 Diaphragm/ Valve	Position 5 Back Up	Position 6 Port	Position 7 Port Position	Position 8 Speciality Code	Position 9 Safety Code	Position 10 Sanitary Code	Position 11 Speciality Code	
TC - Chemical 15 - 1/2"	15 - ½"	P - Polypropylene	S - Santoprene	S - Santoprene X - None	G - BSPT	C - Centre Ported Vertical , End Port Plugged, See Foot Note 1 E - End Ported	P - Pulse Dampener	X - None	X - None	S - Speed Controller	
	25 - 1"		O - One Piece PTFE		F - Flanged ANSI/DIN		R - Remote Solenoid Driven				C - Cycle Counter
	40 - 1-½"		T - PTFE		R - NPT		T - Trolley Mounted				D - Diaphragm Monitoring
	50 - 2"				P - BSPP See Foot Note 2		X - None				X - None

Foot note 1 - This option available only in 1/2"

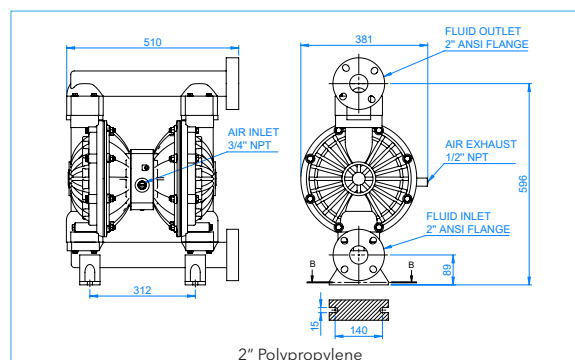
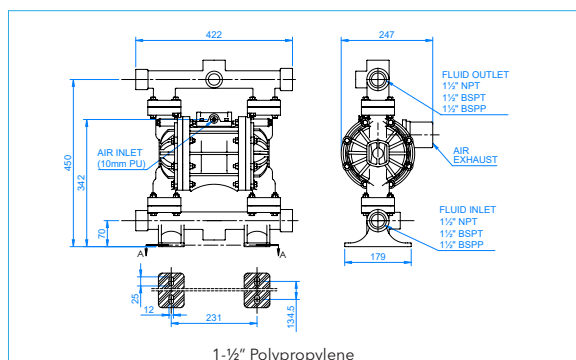
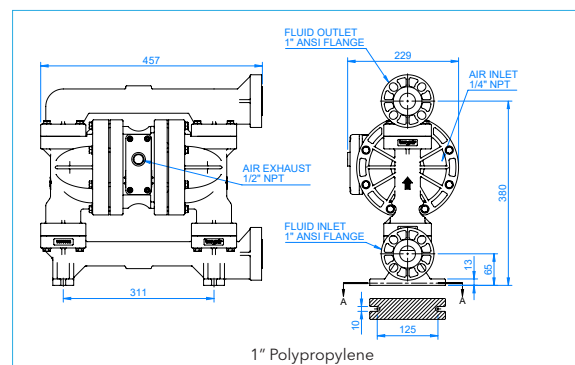
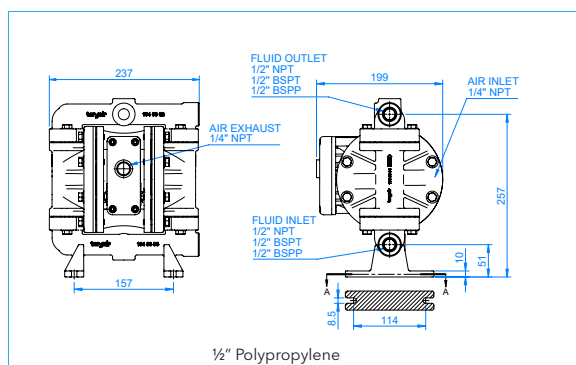
Foot note 2 - F - indicates Default Flange Pump, R Indicates Defaults Flange with NPT Thread on Companion Flange, G Indicates Defaults Flange with BSPT Thread on Companion Flange, P Indicates Defaults Flange with BSPP Thread on Companion Flange,



Performance Graphs



Dimensions in mm

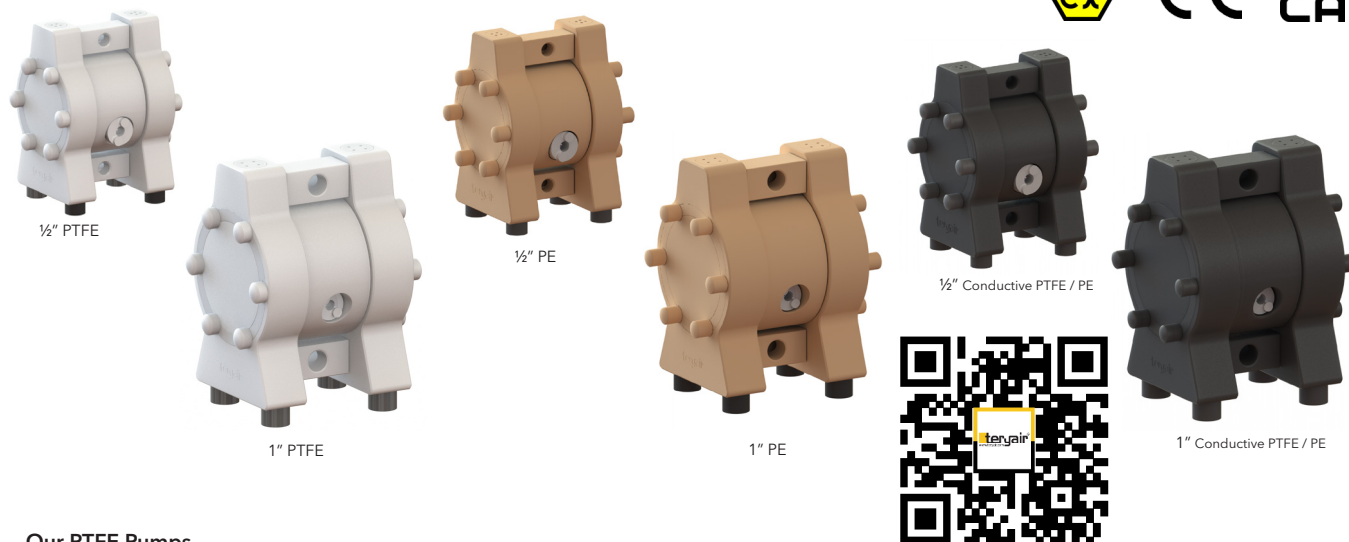




Tery BLOCK – Professional Pumps for Industrial Use

Teryair Polyethylene (PE) and Polytetrafluoroethylene (PTFE) Pumps are available in FDA compliant forms and can easily be made into conductive versions suitable for ATEX environments. Our Ultra High Molecular Weight (UHMW) PE and PTFE pumps have some major advantages over other materials and other types of PE.

TeryBlock PTFE and UHME PE Bolted Pumps



Our PTFE Pumps

- Many pumps are fitted with PTFE elastomers. It makes sense to have ALL the contact parts in PTFE. Giving a longer working life than materials subject to corrosion.

Solid Machined Block

- Unlike many injection-moulded pumps, tolerances are far better with machined components. A pump that fits together better has more structural integrity and is less likely to leak. Ideal when handling a variety of chemicals, which could cause environmental or personal harm.
- An excellent choice of materials when dealing with spills, as they can safely handle so many liquids.
- Mounted on a trolley for portability, they can quickly be taken to a point of need. With just an airline connection, no waiting for an electrician to connect, they are 'click and go'.

For more information or to buy online.
<https://www.terair.com/>

Infinite Porting Options

- Due to the natural self-lubricating properties of plastics, the inlet and discharge manifolds can be rotated to suit your needs exactly.
- Comes as standard with Parallel threads, but flange adaptors are available to give even more choice on mounting into your pipework.

The Ultra High Molecular Weight PE (UHMW PE) range

- Massively Enhanced abrasion resistance (friction wear). Much more than Polypropylene and better than many steels.
- Other brands use lesser grades of PE to reduce costs and lose these benefits

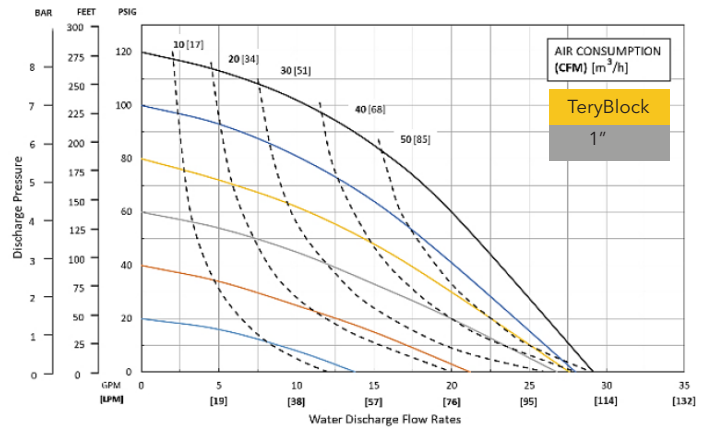
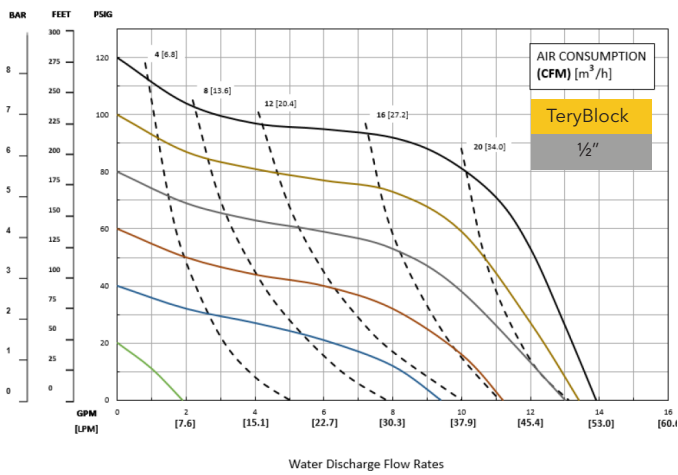
Pump Nomenclature

Position	1	2	3	4	5	6	7	8	9	10	11
Example:	TB	15	A	B	X	R	E	X	A	X	X
Example: TB25-ZTI-PCX-AXX											
Position 1 Range	Position 2 Size	Position 3 Body	Position 4 Diaphragm/ Valve	Position 5 Back Up	Position 6 Port	Position 7 Port Position	Position 8 Speciality Code	Position 9 Safety Code	Position 10 Sanitary Code	Position 11 Speciality Code	
TB- Block	15 - ½” 25 - 1”	U - UHMW / PE Z - Conductive PE P - PTFE C - Conductive PTFE	T - PTFE	I - Integrated Buna	G - BSPT F - Flanged ANSI/DIN R - NPT P - BSPP	C - Centre Ported Swiveling, See Foot Note	P - Pulse Dampener R - Remote Solenoid Driven T - Trolley Mounted X - None	A - ATEX/ IECEx X - None	F - FDA / EN 1935/2004 X - None	S - Speed Controller C - Cycle Counter D - Diaphragm Monitoring X - None	

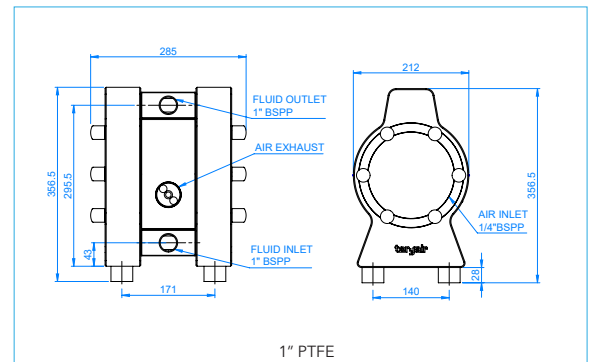
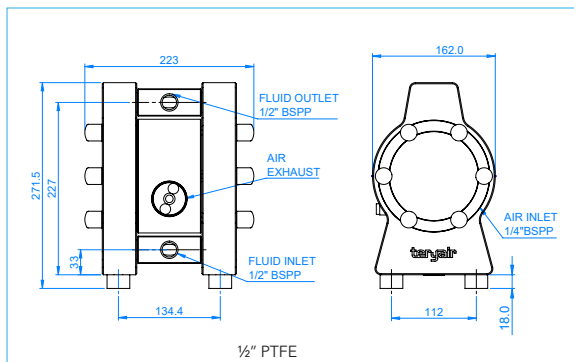
Foot note 1 - Can be swivled to any degree between hozontal and vertical



Performance Graphs



Dimensions in mm





TerySAN – Professional Pumps for Industrial Use

TerySan was developed not for low viscosity liquids, those are quite capable of being handled by our FDA and EC1935/2004 ranges, which form part of the TeryPro & TeryBlock ranges. The TerySan range of Polished Stainless Steel pumps is for the food and pharma applications which require cleanliness standards in line with 3A & EHEDG.

These pumps are not about flow rates and more about flow capabilities. Their design and internal clearances enable us to pump Highly viscous products other pumps just cannot match. From Tomato Paste or Caramel in the food industry to Ointments, Creams and Gels in the pharmaceutical market. Whatever they may be, the TerySan was designed for them.

TerySan Stainless Steel Clamped Pumps



Clean Pump No Manifolds



2" Mainfolds



3" Mainfolds



For more information or to buy online.
<https://www.terair.com/>

Universal Centre

- Based on the optimum delivery of highly viscous products, there really only needs 1 size of pump centre, as the performance is generally dictated by the friction losses in the diameter and length of the system pipe work

CIP (Clean in Place)

- The lack of bug traps and the smooth highly polished internals ensure the maximum opportunity to clean the pump in place.
- Should this not be sufficient, with just a few clamp bands, the wetted components can be removed to manually clean or soak in sterilising fluids.

2 Inch Manifolds

- Designed for thinner liquids or liquids with particulates where velocities can be maintained to avoid settling.

3 Inch Manifolds

- For those really viscous applications, where friction loss needs keeping to a minimum.
- A combination of 3" inlet and 2" outlet help improve the suction conditions, avoiding cavitation and still deliver through cheaper 2" piping down stream.

No Manifolds

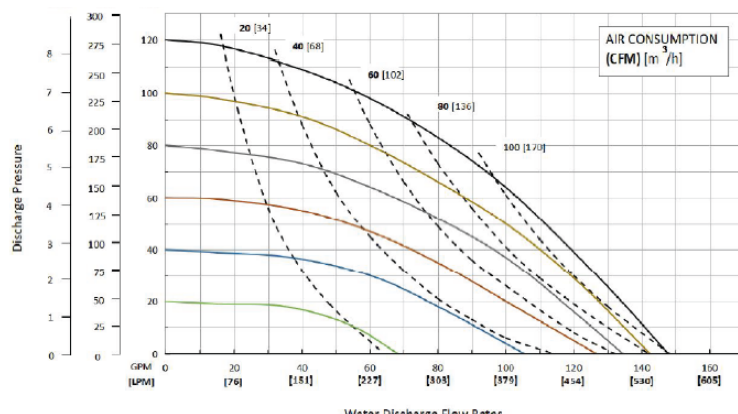
- Supplying the unit without manifolds reduces costs and enables the user to add industry standard pipework direct to the pump valves.
- Multiple permutations are available, with options like, Vertical Discharge through a "Y" type manifold; Dual inlet & Single outlet to name a few.

Pump Nomenclature

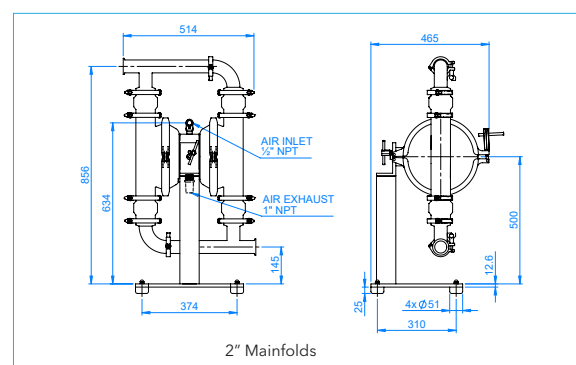
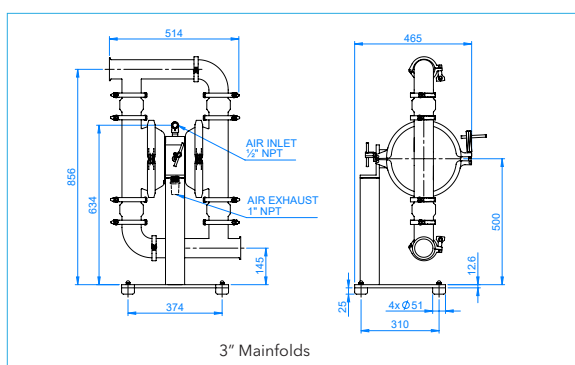
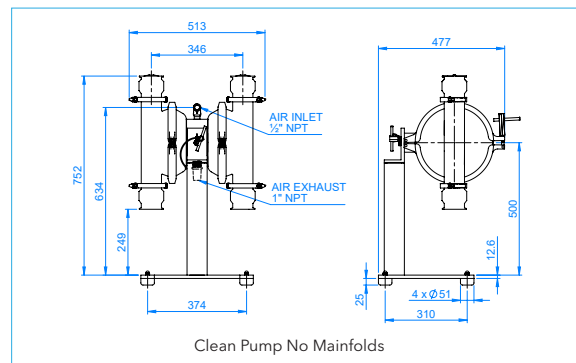
Position	1	2	3	4	5	6	7	8	9	10	11
Example:	TS	12	A	B	X	R	E	X	A	X	X
Example: TS50-SOX-CEX-AFX											
Position 1 Range	Position 2 Size	Position 3 Body	Position 4 Diaphragm/ Valve	Position 5 Back Up	Position 6 Port	Position 7 Port Position	Position 8 Speciality Code	Position 9 Safety Code	Position 10 Sanitary Code	Position 11 Speciality Code	
TS- Sanitary	50 - 2"	S - Polished Stainless 316	O - FDA-EPDM	X - None	C - TriClamp BS 4825-3	E - End Port X - None	P - Pulse Dampener	A - ATEX/ IECEx X - None	F - FDA / EN 1935/2004	S - Speed Controller	
	R - Remote Solenoid Driven						C - Cycle Counter				
	T - Trolley Mounted						D - Diaphragm Monitoring				
	X - None						X - None				



Performance Graphs



Dimensions in mm



AODD vs Other Technologies

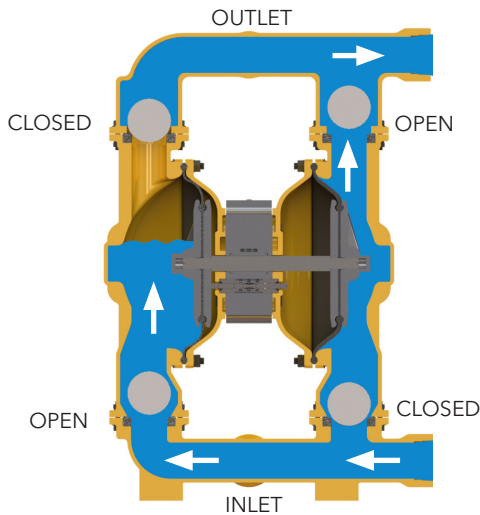
Pump Type							
	AODD	Centrifugal	Lobe	Gear	Progressive (screw)	Peristaltic (hose)	Piston / Plunger
Technology	PD Reciprocating	Kinetic	PD Rotary	PD Rotary	PD Rotary	PD Rotary	PD Reciprocating
Variable Flow & Head Control	✓	!	!	!	!	!	!
Deadheads Safely	✓	!	!	!	!	!	!
Dry-Running	✓	✗	✗	✗	✗	✗	✗
No Installation Alignment Required	✓	✗	✗	✗	✗	✗	!
No Electrical Installation Required	✓	✗	✗	✗	✗	✗	✗
Portability	✓	✗	✗	✗	✗	✗	✗
Submersible	✓	!	✗	✗	✗	✗	✗
Sealless	✓	!	!	!	!	!	!
No Slip	✓	!	!	!	!	!	!
Cavitation Tolerance	✓	✗	!	!	!	!	!
Low Shear & Degradation	✓	✗	!	!	!	!	!

✓ Excellent ! With Limitations ✗ Not Recommended

Operating Principle

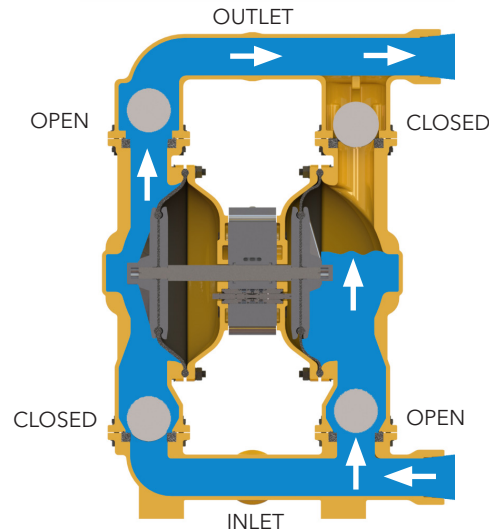
Air operated double diaphragm pumps are positive displacement pumps that use a combination of the reciprocating action of two flexible diaphragms, two inlet and two outlet ball check valves to pump a fluid.

There are two pump chambers which are divided by the diaphragms into air and fluid regions. The two diaphragms are connected to a common shaft located in the center section. This creates the effect that during a cycle one side is pumping fluid while the other side is filling.



Diaphragms stroking right

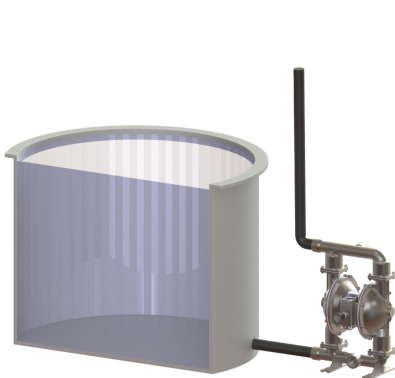
As the common shaft located in the center section moves to the right, the diaphragm in the left chamber moves towards the center section. This movement creates a vacuum on the liquid side of the left diaphragm, lifting the lower ball check valve, allowing liquid to flow through the suction manifold into the liquid chamber. At the same time, any fluid in the right chamber is discharged.



Diaphragms stroking left

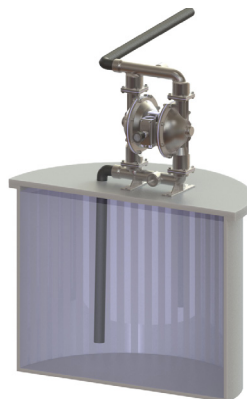
The air distribution system senses that the diaphragm in the right chamber reaches the end of its discharge stroke and causes the common shaft to shift. This moves the diaphragm to the left pressurizing the liquid, lifting the upper ball check valve, allowing fluid to flow through the discharge manifold and out of the pump. Simultaneously filling the right chamber for the next cycle.

Installation Methods



Flooded

The piping system is engineered with a positive suction head, making it the ideal installation method for situations requiring complete liquid evacuation from the container or when handling viscous (thick) products. Limit positive suction pressure to maximum 0.7 Bar (10 psi).



Self-priming

The Teryair pump is engineered to achieve a strong vacuum, effectively emptying a container without causing harm to the pump. It can perform a suction lift of up to 5 meters (16.4') from an empty suction pipe and up to 8 meters (26.2') from a wetted pipe. The suction capacity is contingent upon the pump size.



Submerged

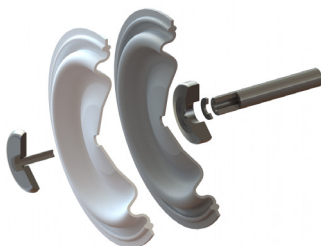
Every Teryair pump is suitable for submersion in the liquid. It is crucial to verify the chemical compatibility of all components in contact with the liquid. The air exhaust should be directed to the atmosphere using a hose.

Diaphragm Specifications & Air Valves



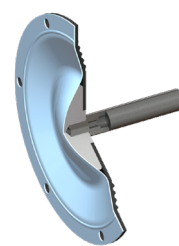
Conventional Diaphragm

- The traditional design featuring an Annular-Vault shape, enhances the lifespan of the diaphragm.
- Low start-up pressure requirement.
- Conventional design with an exposed Fluid Piston.
- Options include NBR (Buna-N) Rubber and Santoprene®
- Special materials available on request



2-Piece PTFE Diaphragm

- Laminated PTFE layer for use with aggressive chemicals.
- Annular-Vault shape design in diaphragm and backer for additional support.
- Exposed Fluid Piston, conventional design.
- Lower start-up pressure than Bonded construction



Integrated Diaphragm

- No exposed piston to trap particles that could damage the diaphragm
- Smooth surface without exposed piston, improving flow path.
- Leak free due to removal of the central mounting hole.
- Quick and easy diaphragm replacement without torquing.
- Modified PTFE gives improved flex life over conventional 2-piece PTFE Diaphragms, reducing downtime and maintenance.

Diaphragm Materials

Nitrile (Buna-N)	Ideal for petroleum-based fluids. Water, Oils and mild chemicals. Fabric layer for shape and strength.
Santoprene	Suitable for mild acids or caustics. Offers good abrasion resistance. Demonstrates high flex-life. A preferred option for low-temperature applications. Economically efficient diaphragm material.
PTFE	Exceptional performance with highly aggressive fluids, including strong solvents, acids, and caustics. Very low frictional coefficient.
Modified PTFE	Longer diaphragm life in more abrasive applications that still require PTFE. Available for sanitary and industrial diaphragm pumps.



Buna-N



Santoprene



PTFE



Modified PTFE



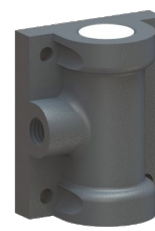
Our 'Classic' air valve is designed for offshore and 'Marine' applications, or applications where the air may contain high levels of moisture or oil. Made with corrosion resistant materials and generous tolerances, these traditional valves are ideal for arduous transfer applications.



The **Teryair MaxFlo air valve** is **Teryair's US patented design**, ensuring the highest levels of air efficiency. A guaranteed nonstalling valve gives the best performance of your pump with the least use of compressed air. Now fitted as standard on our 'Pro' and 'Chem' range of pumps.



Some applications require the air valve to be inside the pump away from external attack from the environment or just the action of CIP. Fitted in our 'Block' and 'Sanitary' range to avoid the risk of bug traps, thus ensuring your process is kept within FDA and EN 1935/2004 guidelines.



Alongside our 3 main air valve types, we have a number of legacy valves and specialist designs, used by our larger customers for brand identity or a specific purpose. Over time these will be replaced with our Max-Pro valve, That has all the benefits they currently enjoy plus the most economic use of air. This can only benefit everyone. If you have a special requirement, which is not accommodated by our latest designs then please ask.

How to read a pump curve

A Pump performance chart provides data on how a particular pump performs at certain conditions. The left vertical scale of the chart shows discharge outlet pressure and the bottom horizontal scale on the chart shows the flow rate. The performance chart can also show the pump air consumption (dotted line on the chart).

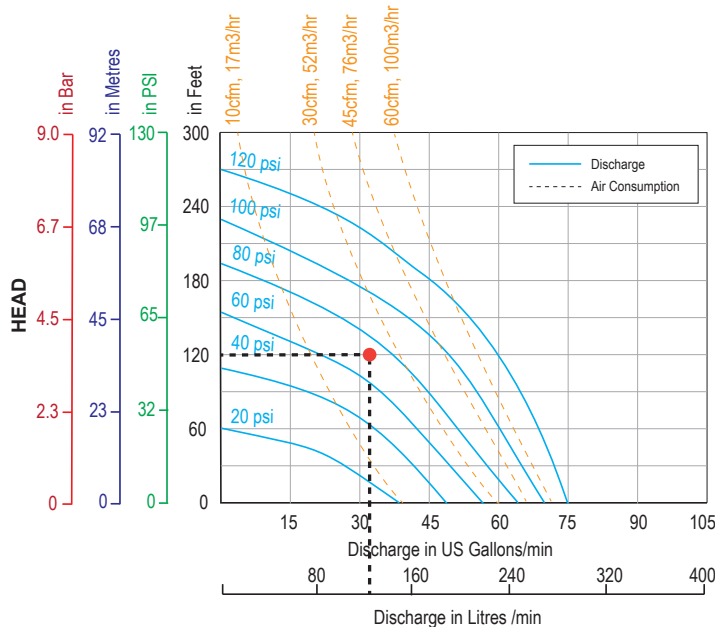


Chart obtained with water at room temperature (20 °C - 70 °F).

To Find The Pump Discharge Pressure

1. Locate the desired flow rate along the bottom of the chart (120 l/min).
2. Follow the vertical line up to as near to the intersection with the pump capacity curve at the fixed air inlet pressure, approximately 5 Bar (72 PSI).
3. Follow this point left and read the pump discharge pressure, roughly 3.6 Bar (120 Ft H2O).

To Find The Pump Flow Rate

1. Locate the known discharge pressure on the left of the chart, roughly 3.6 Bar (120 Ft H2O).
2. Follow a horizontal line to the intersection with the pump capacity curve at the fixed air inlet pressure, approximately 5 Bar (72 PSI) feeding the pump.
3. Follow this point down and read the pump flow rate (120 l/min).
4. Air consumption in this case is roughly 25 SCFM.

To Find The Air Inlet Pressure And Air Consumption

1. Locate the desired flow rate along the bottom of the chart (120 l/min) and follow a vertical line.
2. Locate the known discharge pressure on the left of the chart, roughly 3.6 Bar (120 Ft H2O) and follow a horizontal line.
3. The intersection of these two lines determine the pump operating point. Air inlet pressure should be set at approximately 5 Bar (72 PSI) and the air consumption would be roughly 25 SCFM.

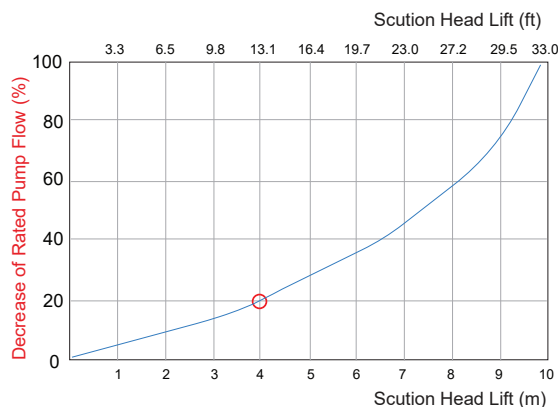
Recommendation

- The desired flow rate and discharge pressure required can be met, for most applications, by multiple pump sizes. The optimal size is achieved when the expected pump working conditions are in the middle part of its Performance Chart. Selecting a larger size pump will result in less repair downtimes, fewer parts usage with subsequent labour and energy cost reductions, thus bringing down the apparent initial investment.

Disclaimer

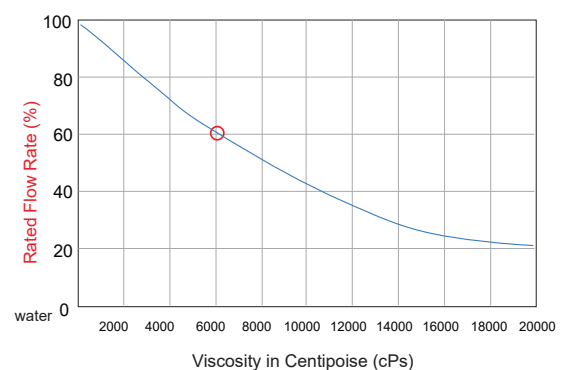
- Performance curves based on an rubber fitted pump, flooded suction with water at ambient conditions. Due to varying materials of construction, assembly configurations and operating conditions, published data is for reference only and should be treated as a performance guide.

Specified Suction Lift



- With a suction lift of 4 m, pump rate decreases by approximately 20%. For guidance only. Data varies with pump size and configuration.

Viscous Liquids Performance Data



- Pumping a fluid with a viscosity of 6000cPs, the pump rate decreases to 60% of its rated value (100% = water). For guidance only. Data varies with pump size and configuration.

Common Applications



OIL AND GAS. PETROCHEMICAL

- General utility transfer.
- Cellar pump-out.
- Oil spill clean-up / response.
- Drilling mud make-up.
- Loading and unloading of tanks, totes, and drums.
- Saltwater transfer and disposal.
- Fuel transfer.
- Well stimulation - acidization.
- Glycol feed.
- Slurry transfer.



MINING AND CONSTRUCTION

- Cement additives mixing.
- Dewatering.
- Plaster spraying.
- Soil testing.
- Loading and unloading of tanks and totes.
- Fuel and lubricants transfer.
- Waste fluids and water evacuation.



CHEMICAL PLANT PROCESSING

- Acids, alkalis, esters, ethers, alcohols, solvents and polymers transfer.
- Chemical effluent transfers.
- Loading and unloading tanks, totes and drums.
- Dosing.
- Packaging.



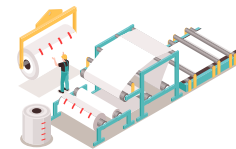
PAINTS AND COATINGS

- Loading and unloading of tanks, totes and drums.
- Pigments, solvents and resins transfer.
- Dosing of chemical additives
- Paint filtration.
- Solvent reclamation.
- Filling machines.



TEXTILES, LEATHER & GARMENTS

- Loading and unloading tanks, totes and drums.
- Filter press.
- Dosing.
- Transfer of chemicals agents for desizing, scouring, bleaching, mercerizing, etc.
- Transfer of dyes, pigments, colours, etc.
- Colour formulation and colour spraying.
- Slurry transfer.
- Filtration.
- Effluent & wastewater disposal / dispensing.



PULP AND PAPER

- Loading and unloading tanks, totes and drums.
- Filter press.
- Dosing.
- Transfer of chemicals agents for desizing, scouring, bleaching, mercerizing, etc.
- Transfer of dyes, pigments, colours, etc.
- Colour formulation and colourspraying.
- Slurry transfer.
- Filtration.
- Effluent & wastewater disposal / dispensing.



Common Applications



PLANT AND MECHANICAL ENGINEERING

- Loading and unloading tanks, totes and drums.
- Filtration.
- Cleaning processes.
- Metal refining.
- Surface treatment (galvanizing, zinc plating, etc.).



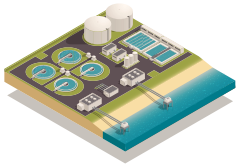
POWER STATIONS (ENERGY)

- Loading and unloading tanks, totes and drums.
- Transfer of heat transfer fluids in solar plants.
- Water transfer and evacuation.
- Refrigeration.



TANK FARMS / BULK TRANSFER

- Loading and unloading tanks, totes and drums.
- Product storage.
- Field treatment.
- Fermentation.
- CIP (Solvent / Nitric Acid / Sodium Hydroxide) transfer.



WASTEWATER AND WATER TREATMENT

- Mobile water systems.
- Wastewater and sewage treatment.
- pH neutralization.
- Sludge removal.
- Irrigation.
- Sampling.
- Drum unloading for chemical injection skids.
- Filtration.



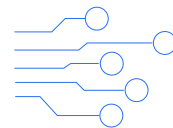
MARINE

- Loading and unloading tanks, totes and drums.
- Lubricants and fuel transfer.
- Seepage clean-up.
- Tank strip-outs.
- Dewatering.
- Bilge pumping.



CERAMICS

- Mould filling and cleaning.
- Ceramic slip transfer.
- Glazing and glaze transfer.
- Filter press.
- Wastewater transfer and evacuation.



ELECTRONICS

- Loading and unloading tanks, totes and drums.
- Acid washing.
- Chemical treatment of wafers.
- Silicon slurry transfer.
- Wastewater transfer.



Specifications: In spite of our efforts to ensure the accuracy of this catalog at the time of printing, our policy of continual improvement allows us to change specifications without notice.

Notes

“THINGS GO BETTER WITH TERYAIR”

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