

WILDEN®

Expert
Solutions
for Critical
Applications

ORIGINAL™
Brand Portfolio



Where Innovation Flows

wildenpump.com

ORIGINAL™ CLAMPED METAL PUMPS

ORIGINAL™ CLAMPED PLASTIC PUMPS

airpumping.co.uk

est. 1979

Unit 16, Upminster Trading Park, Watley St., Upminster, Essex, RM14 3PL, ENGLAND


a **DOVER** company

Wilden®: The Power Behind Fluid Transfer



Ceramics



Chemical



Dry Powder



Mining



Oil and Gas



Paint and Inks

Original™ Solutions

Since 1955, Wilden® Pump and Engineering LLC has been the global leader in air-operated double-diaphragm (AODD) pumps. Wilden is deeply committed to the pursuit of excellence, customer satisfaction, research and development, and market knowledge. As a premier organization, Wilden has the infrastructure, knowledge base and intellectual capital to exceed your expectations worldwide.

The Wilden world-class distributor network ensures that you have access to the latest pump technologies and fluid transfer services available. Wilden and its distributor network are devoted to your industries, applications and processes, servicing your needs with industry-leading products, delivery and best-of-class expertise. Put us to the test and contact your local distributor today at: wildendistributor.com

Unique Characteristics

- Superior flow rates and efficiency
- Air-operated pumps (non electrical)
- Self priming
- Run-dry capable
- Anti-freezing technology
- Deadhead without damage
- Variable flow and pressure
- Intrinsically safe
- Lube-free operation
- On/Off reliability
- Large solids passage
- Ease of operation and maintenance

Applications

- Solvents
- Acids
- Caustics
- High viscosity
- High pressure
- Large solids
- Abrasive media
- Hazardous and flammable liquids
- Cleanroom fluids



Plating and Finishing



Pulp and Paper



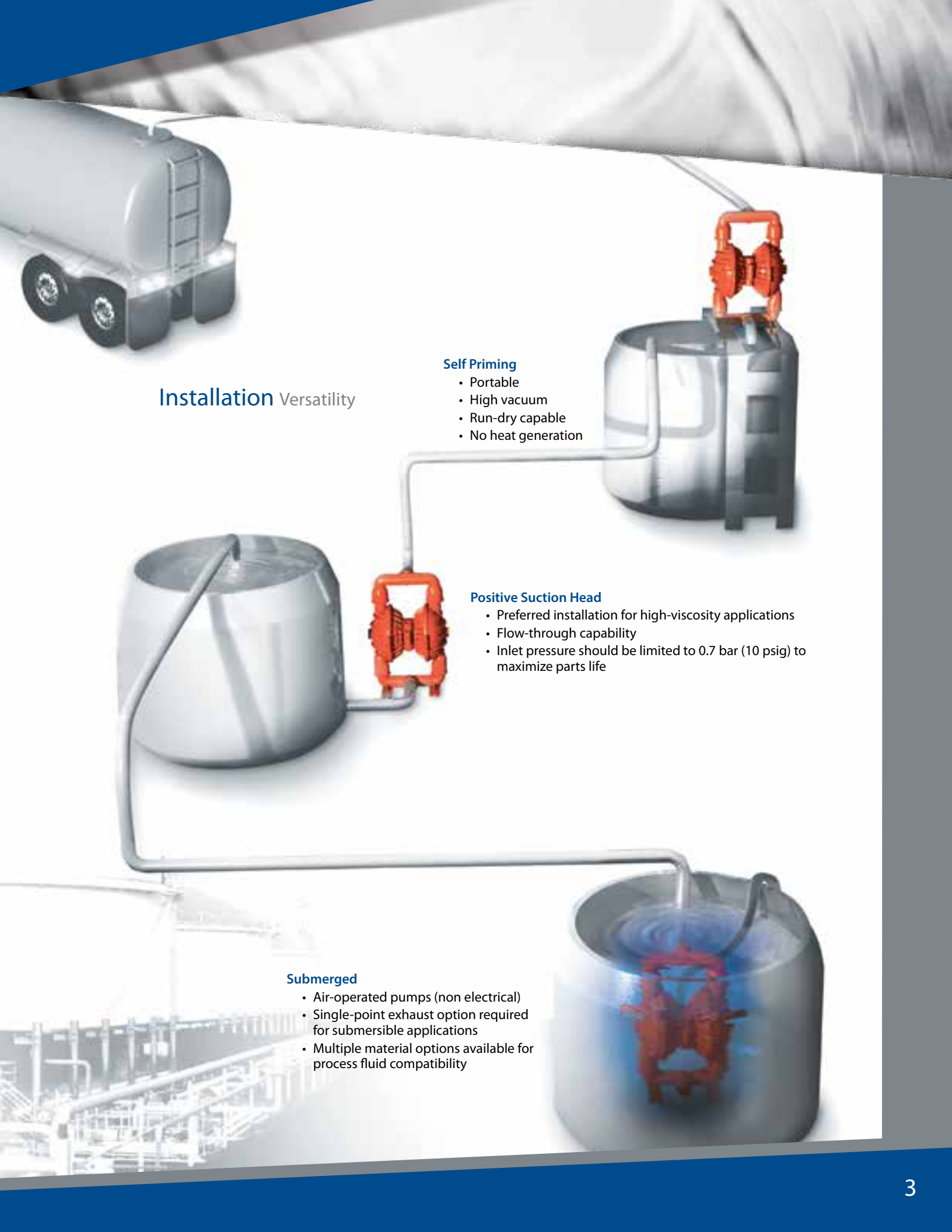
Sanitary



Semiconductor



Waste Treatment



Installation Versatility

Self Priming

- Portable
- High vacuum
- Run-dry capable
- No heat generation

Positive Suction Head

- Preferred installation for high-viscosity applications
- Flow-through capability
- Inlet pressure should be limited to 0.7 bar (10 psig) to maximize parts life

Submerged

- Air-operated pumps (non electrical)
- Single-point exhaust option required for submersible applications
- Multiple material options available for process fluid compatibility

MARKETS SERVED

ENERGY

Wilden pump solutions are leading the way in energy efficiency for storage terminals, biofuels and solar cell manufacturing. Wilden pumps play a vital role as transfer points from one mode of transportation to another and as safe, secure storage locations until product transfer is needed. Wilden is also committed to helping build a clean energy economy through the use of biofuels.

Typical Applications Handled:

- Raw crude oil
- Chemicals
- Caustics
- Ethanol
- Biodiesel
- Gases
- Crude oil
- Solvents
- Solar cell manufacturing
- Petroleum
- Lube oils
- Gasoline
- Diesel fuel
- Refined petroleum products

HYGIENIC

Wilden offers a wide range of hygienic and biopharmaceutical pumps for various food, beverage, dairy, personal care and pharmaceutical applications. When it comes to safety, performance and gentle transfer solutions, trust Wilden: the evolution of clean.

Typical Applications Handled:

- Personal care
- Confectionary
- Fruits and vegetables
- Poultry, fish and meat
- Filling/batching
- Dairy
- Pharmaceutical/biopharm
- Sauces, purees and beverages
- High purity product transfer
- Ingredient receiving/unloading

PROCESS

Wilden is a recognized leader in the process industries as you can find Wilden pumps in many of the top chemical, food and beverage, and pharmaceutical plants around the world.

Typical Applications Handled:

- Acids
- Solvents
- General chemicals
- Pulp and paper
- Low-solvent coating
- Caustics
- Soap and detergents
- Paints, inks and coatings
- Cosmetics
- Solventless coating
- Alcohols

WATER/WASTEWATER

Wilden plays a critical role in handling and transferring fluids used in municipal and industrial water and wastewater plants.

Typical Applications Handled:

- Wastewater systems
- Rehabilitation systems
- Distribution
- Water treatment supply
- Metal fabrication
- Potable water systems
- Collection and disposal





STATE OF THE ART

Air Distribution System

The innovative, yet simple, Pro-Flo® SHIFT Air Distribution System (ADS) is the new standard for AODD pumps, featuring an "air control spool" that automatically optimizes air consumption and eliminates the overfilling that can lead to overcharging of the air chamber, all while causing no corresponding reduction in flow rate. The results are a reduction in air consumption and operational costs while maximum operational efficiency and volumetric consistency are maintained.



Market Position:

- Cost efficient: 50% less expensive than an electronically-actuated ADS
- Faster return on investment
- Robust design for harsh operating conditions
- Metered air consumption for less product waste
- Creates the highest performance ratio
- Superior flow rate
- Superior anti-freezing
- Single-point exhaust option
- Lube-free operation
- Reduced maintenance costs
- On/Off reliability
- Environmental sensitivity

Features:

- Simple and durable pump design
- Simple components
- Faster, easier setup time
- Plug-N-Play operation
- No electricity needed
- Precise flow rate at start-up
- Non-stalling unbalanced spool

- Drop-in configuration capability
- Reduced energy consumption
- Lower carbon footprint
- ATEX-compatible for use in explosive atmospheres

Application Traits:

- Greater yield per SCFM of air used
- Wider application range
- Repeatable, predictable performance
- Less product waste
- Max. Mean Time Between Repair (MTBR)
- Increased application range/compatibility
- Minimum training required
- No special skill set needed for maintenance or operation

Availability:

- 13 mm (1/2")
- 38 mm (1-1/2")
- 51 mm (2")
- 76 mm (3")
- 102 mm (4")

SHIFTING PERFORMANCE TO A WHOLE NEW LEVEL.



Market Position:

- Variable control (discharge flow rates and air consumption)
- Superior flow rate
- Superior anti-freezing
- Single-point exhaust option
- Lube-free operation
- On/Off reliability
- ATEX models available

Features:

- Efficiency Management System (EMS™)
- Metal and plastic material options
- Non-stalling unbalanced spool
- Simple and durable design

Application Traits:

- Maximize performance and efficiency
- Process applications
- Max. Mean Time Between Repair (MTBR)

Availability:

- 13 mm (1/2")
- 25 mm (1")
- 38 mm (1-1/2")
- 51 mm (2")
- 76 mm (3")
- 102 mm (4")



Market Position:

- Anti-freezing
- On/Off reliability
- Longest-lasting wear parts
- Lube-free operation

Features:

- Plastic center block
- Non-stalling unbalanced spool
- Simple and durable design

Application Traits:

- Maximum reliability
- Process applications
- Max. Mean Time Between Repair (MTBR)

Availability:

- 6 mm (1/4"), 13 mm (1/2"), 25 mm (1"), 38 mm (1-1/2"), 51 mm (2")



Market Position:

- Direct electrical interface
- Superior On/Off reliability
- Reduced systems costs
- Lube-free operation

Features:

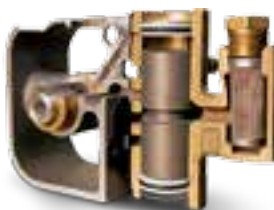
- Externally controlled
- Various voltage options
- Nema 4, Nema 7 or ATEX
- Simple installation

Application Traits:

- System automation
- 4-20 mA pH Adjusting
- Batching applications
- OEM accounts

Availability:

- 6 mm (1/4"), 13 mm (1/2"), 25 mm (1")



Market Position:

- Low initial cost
- Largest installed base
- Proven technology
- Originated the AODD pump industry

Features:

- Metal air distribution system
- Durable
- Fewest replaceable parts
- Ease of maintenance

Application Traits:

- Utilitarian type applications
- Robust design
- Submersible
- Portable

Availability:

- 13 mm (1/2"), 25 mm (1"), 38 mm (1-1/2"), 51 mm (2"), 76 mm (3"), 102 mm (4")



Progressive Diaphragm Technology

Thermoplastic Elastomer (TPE)

- Thermoplastic elastomers (TPE) are known for their superior abrasion-resistance and durability. Due to their wide temperature range capabilities and superior flex life, Wilden TPE diaphragms are an excellent option for general purpose applications.
- Wilden TPE elastomer options available include: Polyurethane, Wil-Flex™ (Santoprene®), Saniflex™ (Hytrel®) and Geolast® (Nitrile Buna-N).
- Also, diaphragm versions of Wil-Flex and Saniflex are available that comply with FDA 21 CFR 177 standards.

Polytetrafluoroethylene (PTFE) Elastomers

- Because it is one of the most chemically inert compounds available, PTFE can be used with an extremely wide range of fluids, including highly aggressive fluids. Its properties provide excellent flex life and moderate abrasion resistance. In addition, PTFE complies with FDA 21 CFR 177 and USP Class VI standards for food, beverage and pharmaceutical applications. Because PTFE is non-elastic, a backup diaphragm of a different material must be used to provide flexibility and memory. Material options for backup diaphragms are Neoprene, Saniflex, EPDM and high-temperature Buna-N.



Elastomer Temperature Limits:

Rubber	Neoprene	-18° to 93°C [0° to 200°F]
	Buna-N	-12° to 82°C [10° to 180°F]
	EPDM	-51° to 138°C [-60° to 280°F]
	Viton®	-40 to 177°C [-40 to 350°F]
Thermoplastic (TPE)	Polyurethane	-12° to 66°C [10° to 150°F]
	Wil-Flex	-40° to 107°C [-40° to 225°F]
	Saniflex	-29° to 104°C [-20° to 220°F]
	Geolast	-40° to 82°C [-40° to 180°F]
PTFE	PTFE	4° to 104°C [40° to 220°F]

Teflon®, Hytrel® and Viton® are registered trademarks of DuPont Company
Geolast® and Santoprene™ are trademarks of ExxonMobil

CAUTION: Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Please verify the chemical resistance limitations of elastomers and all other pump components prior to pump installation. The Wilden online Chemical Guide and a Wilden distributor should be consulted for specifics in elastomer selection.

Go to wildenchemicalguide.com for your Wilden Chemical Compatibility Guide.



Rubber Elastomers

- Wilden's rubber elastomers are specifically engineered to increase chemical resistance, durability and allow for greater temperature spans, making this a general purpose diaphragm well-suited for a wide range of applications.
- Wilden material options available include: Neoprene, Buna-N, EPDM and Viton®.



Ultra-Flex™ Diaphragm Technology

- The diaphragm's convolute shape and controlled fabric placement decreases tensile loading to minimize stress concentration. This design reduces internal stress resulting in extremely long diaphragm life.
- Material availability: Neoprene, Buna-N, EPDM, Viton.

Visit WildenDiaphragms.com for more information on Genuine Wilden Diaphragms and to download the Wilden Chemical Compatibility Guide.

Genuine **WILDEN**
Accept Nothing Less



Accessories

Wilden accessory products add value to your liquid process and expand the application range of Wilden pumps by augmenting the performance and/or utility of the pump. Our electronic controllers automate your Wilden pump for batching and other electronically controlled dispensing applications. We can also create laminar process flow by eliminating pump pulsation or control the liquid level within a system of process.



WILDEN Wil-Gard™ III

The Wil-Gard™ detects diaphragm failure at the source: the primary diaphragm, not at the air chamber or the air exhaust as other systems do.

- Sensors are located between the primary and back-up (containment) diaphragms
- When the sensors detect a conductive liquid, an audible alarm, LED and an internal latching relay are activated
- Increase containment, reduce fugitive emissions and reduce downtime with 24-hour pump surveillance
- Power requirement: 110V AC or 220V AC



WILDEN Pump Cycle Monitor

The PCMI counts pump cycles by sensing the presence of the air valve piston (Turbo-Flo) or air valve spool (Pro-Flo).

- The sensor, located at the air valve and cap, detects the presence of a magnet located at the end of the air valve piston/spool
- The PCMI registers a complete pump cycle when the piston/spool shifts away from the sensor and subsequently returns to the original position
- The PCMI unit has a reset switch located on the face of the PCMI module
- PCMI has the ability to be reset from a remote location



WILDEN Drum Pump Kit

The inherent features of the Wilden air-operated pump and Accu-Flo pump technology allow it to excel as a utilitarian drum pump. Various speed and pressure capability, the ability to run dry, self-prime and dead-head offers you flexibility at a low cost. The Wilden universal drum pump kit enables Wilden 1/4" and 1/2" pumps to adapt directly to drums for cost-effective, efficient liquid transfer.

- Universal kit for 6 mm (1/4") and 13 mm (1/2") pumps
- Fits 51 mm (2") NPT bungholes
- Tube length can be cut to length
- Variety of materials are available



WILDEN SD Equalizer®

The Surge Dampener (SD) Equalizer® was designed to remove pressure variation on the discharge end of the pump. It has a flow-through design manufactured with existing Wilden pump parts. The SD Equalizer automatically sets and maintains the correct air pressure required, optimizing its effectiveness.

Features and Benefits:

- Reduces pipe vibration and shaking
- Protects in-line equipment
- Reduces water hammer
- Absorbs acceleration head
- Lowers system maintenance cost
- Suction stabilizer
- Helps prevent leaking at pipe fittings and joints
- Extends and improves pump performance
- Avoids damaging pressure surges
- Wide range of material and elastomer options
- Common parts with Wilden pumps
- Self adjusts to system pressure

Available Sizes:

- 13 mm (1/2")
- 25 mm (1")
- 38 mm (1-1/2")
- 51 mm (2")
- 76 mm (3")

Materials of Construction:

Wetted Housing

- Aluminum
- 316 and 316L Stainless Steel
- Ductile Iron
- Polypropylene
- PVDF

Air Distribution System

- Aluminum
- 316 Stainless Steel
- Polypropylene
- Glass-filled polypropylene
- Mild Steel PTFE-coated

ATEX Models Available



Original Clamped Pumps

The legendary Wilden Original™ pumps were designed for rugged utilitarian types of applications that require a robust design. Original pumps ensure reliability without sacrificing ease of maintenance.

The Wilden metal and plastic pump line lends itself to various processes and waste applications. Wilden Original pumps have the largest material and elastomer offerings in the industry to meet your abrasion, temperature and chemical compatibility challenges.

Original pumps are offered in aluminum, stainless steel, ductile iron, PVDF and polypropylene. A variety of elastomers, connection options and specialized air distribution systems are also available for your specific application needs.



Your Needs



Our Solutions

Original Pumps

- Intrinsically safe
- Self priming
- Variable speed
- Dry run without damage
- Single-point exhaust option
- Widest range of materials and pump sizes in the industry

Dependable

- Decades of proven application success
- Proven air distribution systems
- Simplicity of design
- Superior anti-freezing
- Increased On/Off reliability

Low Cost Alternatives

- Low cost
- Simple installation
- Ease of maintenance

The Results

Success

- Higher yields
- Shear sensitive
- Portability
- Large solids passage
- Strong suction-lift capabilities
- Externally serviceable air valve
- Screen base models available

Utilitarian Solutions

- Viscous and non-viscous product transfer
- Largest chemical compatibilities
- Longest Mean Time between Repair (MTBR)
- Transfer with confidence

Cost Savings

- Efficient ADS
- Proven track record
- Optimized applications
- Lower operational costs and downtime
- Saves you money



ORIGINAL Metal Clamped Pumps

Tech Data

- Sizes: 6 mm (1/4") through 102 mm (4")
- Materials: Aluminum, Ductile Iron, Stainless Steel, Alloy C
- Material Temperatures: Up to 177°C (350°F)
- Elastomers: Buna-N, Neoprene, EPDM, Viton, Wil-Flex, Saniflex, Polyurethane, PTFE, Geolast
- ADS: Pro-Flo® SHIFT, Pro-Flo X™, Pro-Flo®, Turbo-Flo™, Accu-Flo™

Performance Data

- Max. flow rate: 1211 lpm (320 gpm)
- Max. suction lift: 9.5 m (31.1') wet, 7.6 m (25.0') dry
- Max. disp. per stroke: 5.3 L (1.41 gal)
- Max. discharge pressure: 8.6 bar (125 psig)
- Max. solids passage: 35 mm (1-3/8")

METAL TECHNICAL SPECS

SIZING CONSIDERATIONS

CONNECTION TYPE

	MODELS	WETTED MATERIALS	LIQUID INLET	LIQUID DISCHARGE	BSPT/NPT	DIN/ANSI	*TRI-CLAMP® STYLE	SHIPPING WEIGHT
PRO-FLO SHIFT	PS1	Aluminum Stainless Steel Alloy C	13 mm (1/2")	13 mm (1/2")	•	—	•	6 kg (13 lb) 9 kg (20 lb) 9.5 kg (21 lb)
	PS4	Aluminum Stainless Steel Cast Iron	38 mm (1-1/2")	32 mm (1-1/4")	•	—	•	21 kg (46 lb) 28 kg (62 lb) 30 kg (66 lb)
	PS8	Aluminum Stainless Steel Cast Iron	51 mm (2")	51 mm (2")	•	—	•	35 kg (78 lb) 53 kg (117 lb) 49 kg (109 lb)
	PS15	Aluminum Stainless Steel Cast Iron	76 mm (3")	76 mm (3")	•	—	•	55 kg (121 lb) 105 kg (230 lb) 93 kg (205 lb)
	PS20	Cast Iron	102 mm (4")	102 mm (4")	—	•	—	223 kg (492 lb)
PRO-FLO X	PX1	Aluminum Stainless Steel	13 mm (1/2")	13 mm (1/2")	•	—	•	6 kg (13 lb) 9 kg (20 lb)
	PX4	Aluminum Stainless Steel Cast Iron	38 mm (1-1/2")	32 mm (1-1/4")	•	—	•	21 kg (46 lb) 28 kg (62 lb) 30 kg (66 lb)
	PX8	Aluminum Stainless Steel Cast Iron Alloy C	51 mm (2")	51 mm (2")	•	—	•	35 kg (78 lb) 53 kg (117 lb) 49 kg (109 lb) 54 kg (119 lb)
	PX15	Aluminum Stainless Steel Cast Iron	76 mm (3")	76 mm (3")	•	—	•	60 kg (132 lb) 90 kg (198 lb) 98 kg (216 lb)
	PX20	Cast Iron	102 mm (4")	102 mm (4")	—	•	—	223 kg (492 lb)
PRO-FLO	P025	Aluminum Stainless Steel Alloy C	6.4 mm (1/4")	6.4 mm (1/4")	•	—	—	2 kg (5 lb) 4 kg (9 lb) 4.3 kg (10 lb)
	P1	Aluminum Stainless Steel	13 mm (1/2")	13 mm (1/2")	•	—	•	6 kg (13 lb) 9 kg (20 lb)
	P2	Aluminum Stainless Steel	25 mm (1")	19 mm (3/4")	•	—	•	9 kg (20 lb) 17 kg (37 lb)
	P4	Aluminum Stainless Steel Cast Iron Alloy C	38 mm (1-1/2")	32 mm (1-1/4")	•	—	•	13 kg (29 lb) 20 kg (45 lb) 22 kg (49 lb) 23 kg (51 lb)
	P8	Aluminum Stainless Steel Cast Iron Alloy C	51 mm (2")	51 mm (2")	•	—	•	32 kg (70 lb) 51 kg (112 lb) 47 kg (104 lb) 52 kg (114 lb)

* SS wetted material only



PERFORMANCE

MAX. SUCTION LIFT

MAX. DISCHARGE PRESSURE	MAX. SOLIDS PASSAGE	RUBBER/TPE		PTFE		MAX. FLOW		
		DRY	WET	DRY	WET	RUBBER/TPE	PTFE	
8.6 bar (125 psig)	1.6 mm (1/16")	5.9 m (19.3')	9.8 m (32.3')	4.3 m (14.2')	9.7 m (31.7')	60.2 lpm (15.9 gpm)	59.8 lpm (15.8 gpm)	PRO-FLO SHIFT
8.6 bar (125 psig)	4.8 mm (3/16")	7.1 m (23.3')	8.6 m (28.4')	7.0 m (22.9')	8.6 m (28.4')	314 lpm (83 gpm)	375 lpm (99 gpm)	
8.6 bar (125 psig)	6.4 mm (1/4")	7.2 m (23.8')	9.0 m (29.5')	6.3 m (20.7')	8.6 m (28.4')	719 lpm (190 gpm)	723 lpm (191 gpm)	
8.6 bar (125 psig)	9.5 mm (3/8")	6.6 m (21.6')	8.6 m (28.4')	6.2 m (20.2')	8.6 m (28.4')	927 lpm (245 gpm)	916 lpm (242 gpm)	
8.6 bar (125 psig)	35 mm (1-3/8")	4.4 m (14.4')	8.6 m (28.4')	3.8 m (12.7')	8.6 m (28.4')	1048 lpm (277 gpm)	953 lpm (252 gpm)	
8.6 bar (125 psig)	1.6 mm (1/16")	5.9 m (19.3')	9.3 m (30.6')	4.7 m (15.3')	8.0 m (26.1')	62.8 lpm (16.6 gpm)	60.9 lpm (16.1 gpm)	PRO-FLO X
8.6 bar (125 psig)	4.8 mm (3/16")	6.9 m (22.7')	9.3 m (30.6')	4.0 m (13.1')	9.2 m (30.1')	347 lpm (92 gpm)	327 lpm (87 gpm)	
8.6 bar (125 psig)	6.4 mm (1/4")	7.1 m (23.3')	9.2 m (30.1')	4.5 m (14.8')	8.7 m (28.4')	675 lpm (178 gpm)	617 lpm (163 gpm)	
8.6 bar (125 psig)	9.5 mm (3/8")	6.7 m (22.1')	9.5 m (31.2')	4.8 m (15.9')	9.5 m (31.2')	918 lpm (243 gpm)	727 lpm (192 gpm)	
8.6 bar (125 psig)	35 mm (1-3/8")	4.3 m (14.1')	8.6 m (28.4')	-	-	1211 lpm (320 gpm)	-	
8.6 bar (125 psig)	0.4 mm (1/64")	4.1 m (13.6')	9.3 m (30.6')	4.0 m (13.0')	9.5 m (31.2')	18.9 lpm (5.0 gpm)	18.9 lpm (5.0 gpm)	PRO-FLO
8.6 bar (125 psig)	1.6 mm (1/16")	5.8 m (19.0')	9.5 m (31.0')	4.9 m (16.0')	9.5 m (31.0')	58.7 lpm (15.5 gpm)	54.4 lpm (14.4 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	7.6 m (25.0')	9.0 m (29.5')	2.8 m (9.1')	9.0 m (29.5')	172 lpm (46 gpm)	155 lpm (41 gpm)	
8.6 bar (125 psig)	4.8 mm (3/16")	5.8 m (19.0')	8.8 m (39.0')	3.7 m (12.0')	8.5 m (28.0')	307 lpm (81 gpm)	295 lpm (78 gpm)	
8.6 bar (125 psig)	6.4 mm (1/4")	6.9 m (22.7')	8.6 m (28.4')	4.6 m (15.0')	9.5 m (31.0')	630 lpm (166 gpm)	496 lpm (131 gpm)	

METAL TECHNICAL SPECS

SIZING CONSIDERATIONS

CONNECTION TYPE

	MODELS	WETTED MATERIALS	LIQUID INLET	LIQUID DISCHARGE	BSPT/NPT	DIN/ANSI	*TRI-CLAMP® STYLE	SHIPPING WEIGHT
TURBO-FLO	T1	Aluminum Stainless Steel	13 mm (1/2")	13 mm (1/2")	•	–	–	6 kg (13 lb) 9 kg (20 lb)
	T2	Aluminum Stainless Steel	25 mm (1/2")	19 mm (3/4")	•	–	•	12 kg (26 lb) 16 kg (36 lb)
	T4	Aluminum Stainless Steel Cast Iron	38 mm (1-1/2")	32 mm (1-1/4")	•	–	–	17 kg (38 lb) 26 kg (57 lb) 26 kg (57 lb)
	T8	Aluminum Cast Iron	51 mm (2")	51 mm (2")	•	–	–	33 kg (72 lb) 52 kg (114 lb)
	T15	Aluminum Stainless Steel Cast Iron	76 mm (3")	76 mm (3")	•	–	–	53 kg (116 lb) 79 kg (175 lb) 91 kg (200 lb)
	T20	Cast Iron	102 mm (4")	102 mm (4")	–	•	–	231 kg (500 lb)
ACCU-FLO	A.025P	Aluminum Stainless Steel Alloy C	6 mm (1/4")	6 mm (1/4")	•	–	–	2 kg (5 lb) 5 kg (11 lb) 5 kg (12 lb)
	A.025T	Aluminum Stainless Steel Alloy C	6 mm (1/4")	6 mm (1/4")	•	–	–	2 kg (5 lb) 5 kg (11 lb) 5 kg (12 lb)
	A1P	Aluminum Stainless Steel Alloy C	13 mm (1/2")	13 mm (1/2")	•	–	–	6 kg (13 lb) 9 kg (20 lb) 10 kg (22 lb)
	A1T	Aluminum Stainless Steel Alloy C	13 mm (1/2")	13 mm (1/2")	•	–	–	6 kg (13 lb) 9 kg (20 lb) 10 kg (22 lb)
	A2P	Aluminum Stainless Steel Alloy C	25 mm (1")	19 mm (3/4")	•	–	–	12 kg (26 lb) 16 kg (36 lb) 18 kg (40 lb)
	A2T	Aluminum Stainless Steel Alloy C	25 mm (1")	19 mm (3/4")	•	–	–	12 kg (26 lb) 16 kg (36 lb) 18 kg (40 lb)

* SS wetted material only



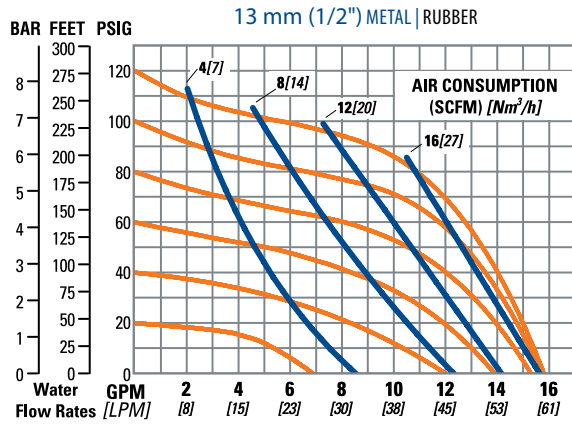
PERFORMANCE

MAX. SUCTION LIFT

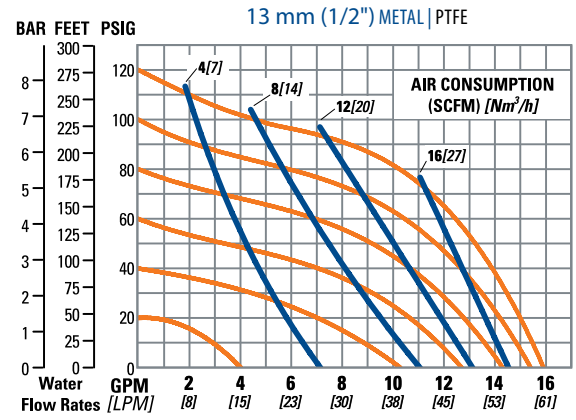
MAX. DISCHARGE PRESSURE	MAX. SOLIDS PASSAGE	RUBBER/TPE		PTFE		MAX. FLOW		
		DRY	WET	DRY	WET	RUBBER/TPE	PTFE	
8.6 bar (125 psig)	1.6 mm (1/16")	1.5 m (5.0')	9.5 m (31.0')	2.7 m (1.0')	9.1 m (30.0')	54.9 lpm (14.5 gpm)	53.0 lpm (14.0 gpm)	TURBO-FLO
8.6 bar (125 psig)	3.2 mm (1/8")	5.2 m (17.0')	9.5 m (31.0')	1.8 m (6.0')	9.5 m (31.0')	132 lpm (35 gpm)	95 lpm (25 gpm)	
8.6 bar (125 psig)	4.8 mm (3/16")	5.5 m (18.0')	8.5 m (28.0')	2.7 m (9.0')	8.5 m (28.0')	307 lpm (81 gpm)	235 lpm (62 gpm)	
8.6 bar (125 psig)	6.4 mm (1/4")	6.4 m (21.0')	9.5 m (31.0')	3.7 m (12.0')	9.5 m (31.0')	617 lpm (163 gpm)	534 lpm (141 gpm)	
8.6 bar (125 psig)	9.5 mm (3/8")	5.5 m (18.0')	9.5 m (31.0')	3.5 m (13.0')	8.5 m (28.0')	878 lpm (232 gpm)	704 lpm (186 gpm)	
8.6 bar (125 psig)	35 mm (1-3/8")	3.7 m (12')	9.1 m (30')	—	—	1041 lpm (275 gpm)	—	
8.6 bar (125 psig)	0.4 mm (1/64")	4.5 m (14.7')	9.3 m (30.6')	3.8 m (30.6')	9.3 m (30.6')	15.5 lpm (4.1 gpm)	15.1 lpm (4.0 gpm)	ACCU-FLO
8.6 bar (125 psig)	0.4 mm (1/64")	5.4 m (17.6')	10.0 m (32.9')	4.3 m (14.2')	10.0 m (32.9')	16.3 lpm (4.3 gpm)	14.0 lpm (3.7 gpm)	
8.6 bar (125 psig)	1.6 mm (1/16")	6.6 m (21.6')	9.7 m (31.8')	5.7 m (18.7')	9.2 m (30.1')	40.5 lpm (10.7 gpm)	42.0 lpm (11.1 gpm)	
8.6 bar (125 psig)	1.6 mm (1/16")	4.5 m (14.7')	9.7 m (31.8')	3.5 m (11.3')	9.3 m (30.6')	35.6 lpm (9.4 gpm)	31.4 lpm (8.3 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	7.4 m (24.4')	9.7 m (31.8')	6.6 m (21.5')	9.0 m (29.5')	129 lpm (34 gpm)	121 lpm (32 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	7.25 m (23.8')	8.66 m (28.4')	4.85 m (15.9')	8.66 m (28.4')	102 lpm (27 gpm)	68 lpm (18 gpm)	

METAL PERFORMANCE CURVES

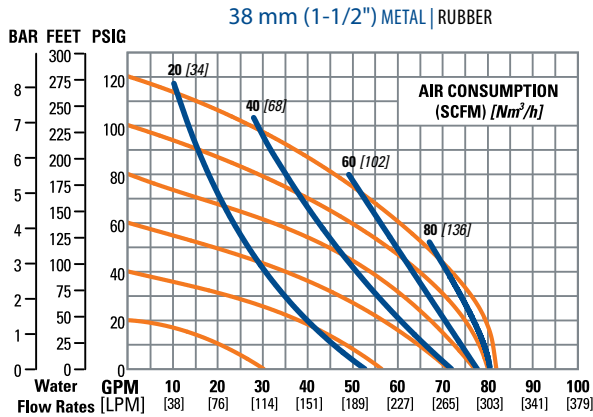
PS1



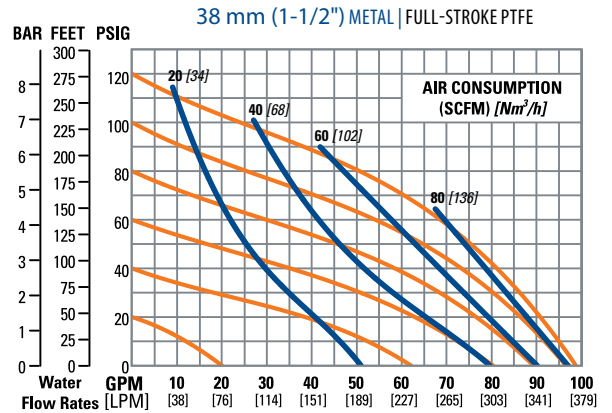
PS1



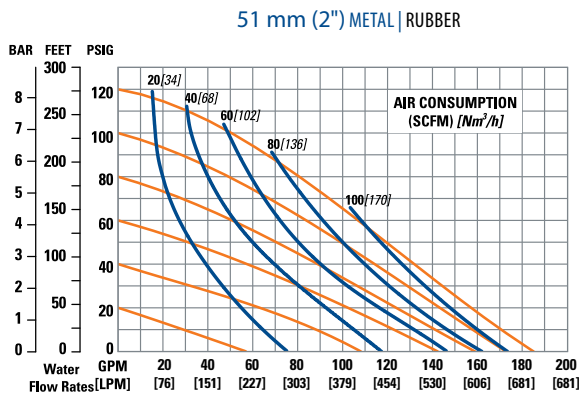
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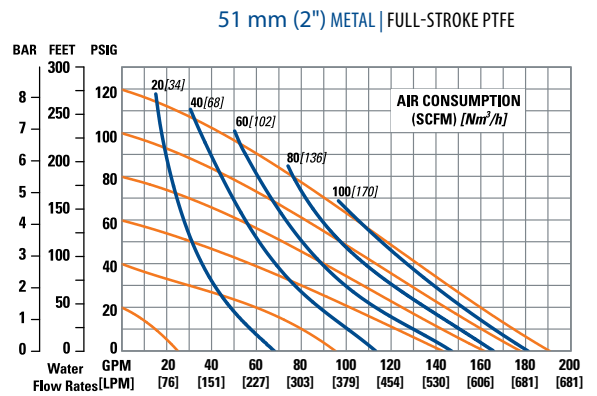
PS4



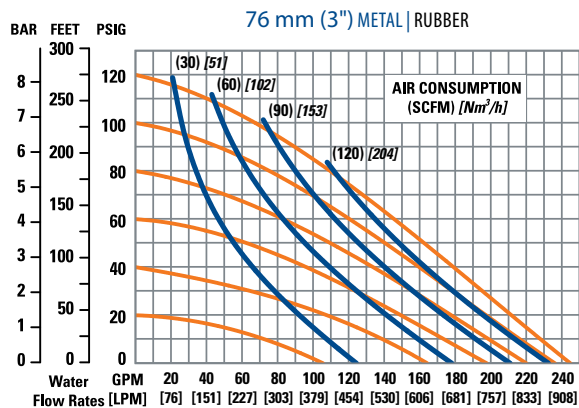
PS8



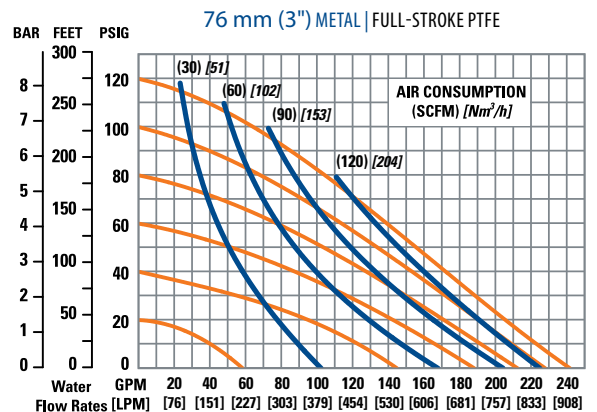
PS8



PS15

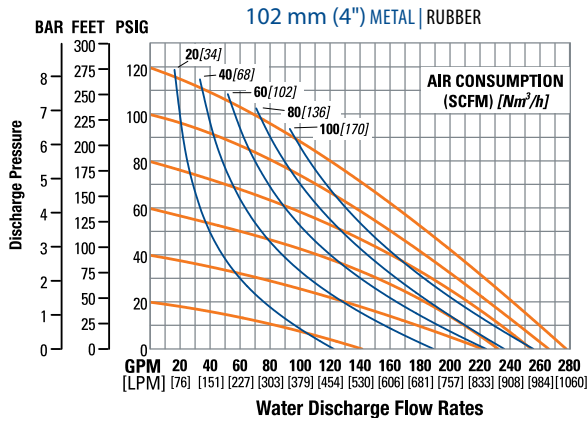


PS15

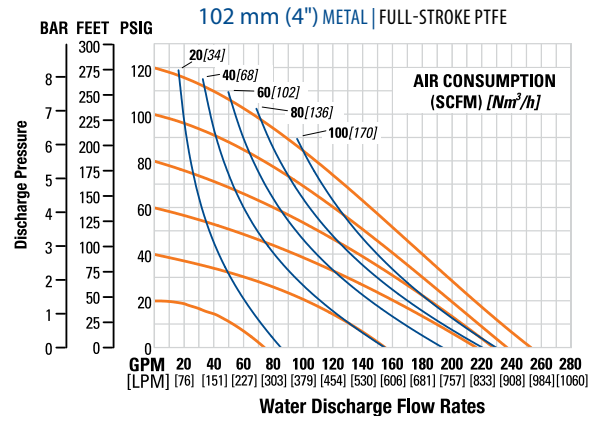


METAL PERFORMANCE CURVES

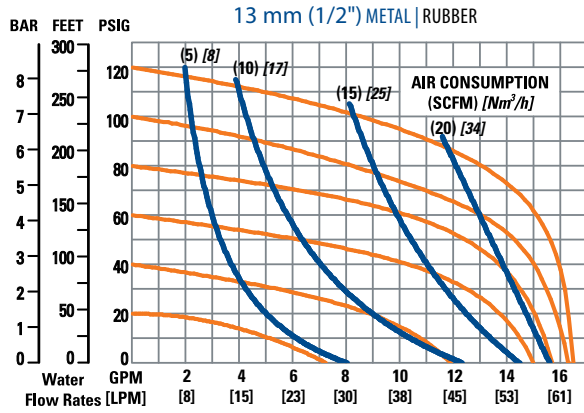
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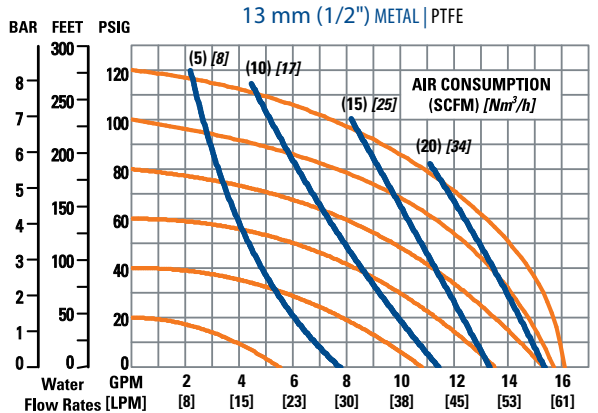
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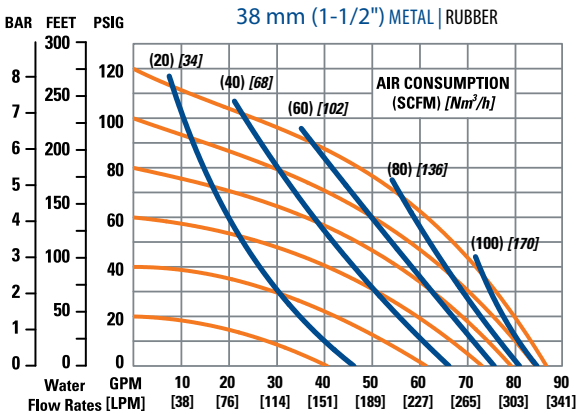
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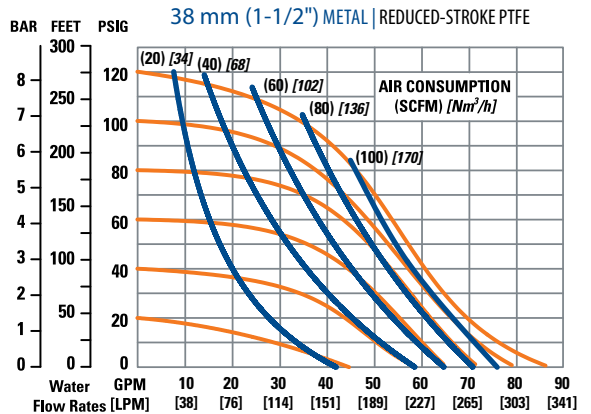
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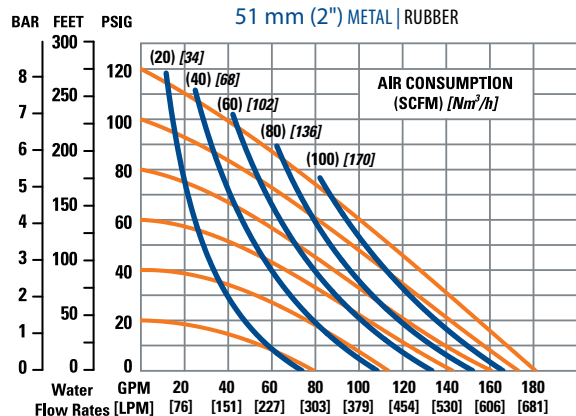
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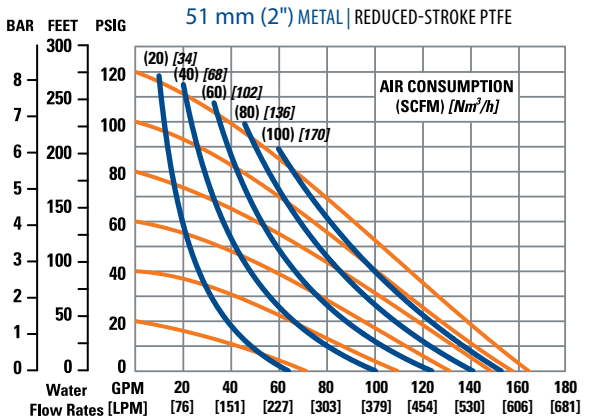
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PX8

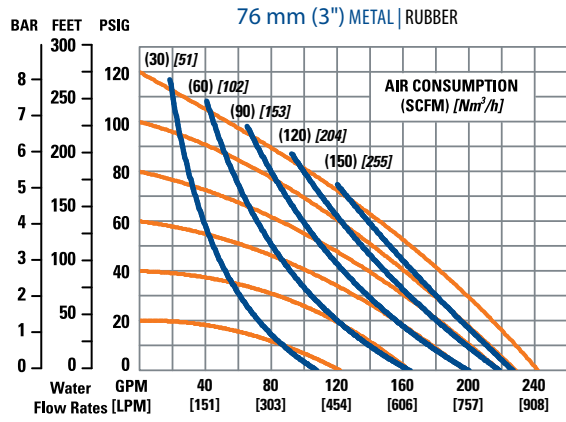


PX8

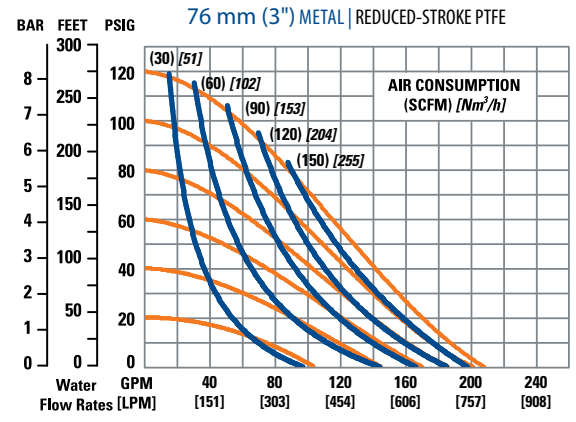


METAL PERFORMANCE CURVES

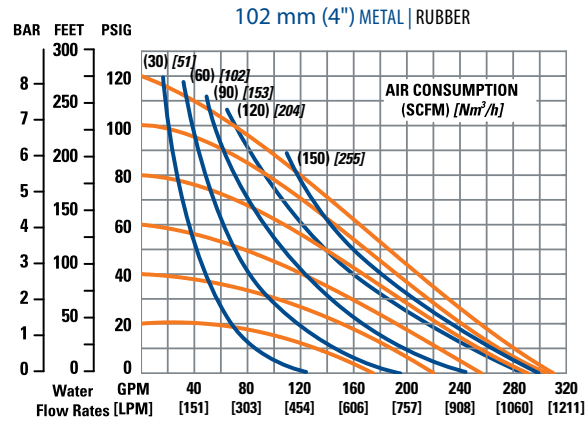
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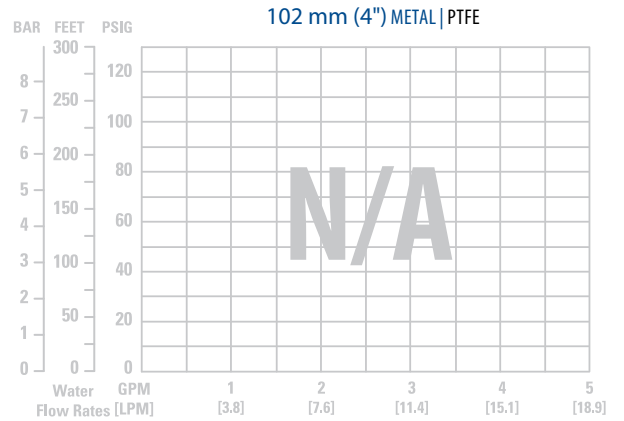
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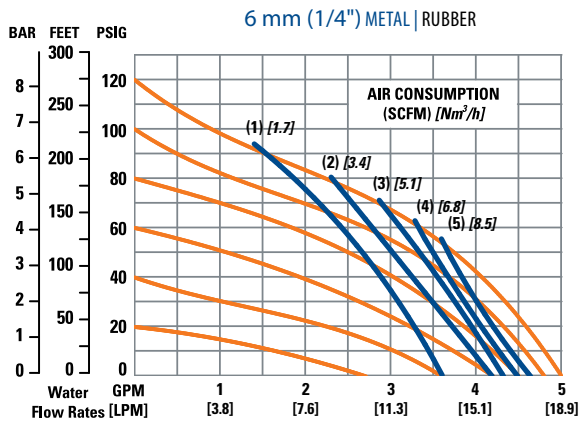
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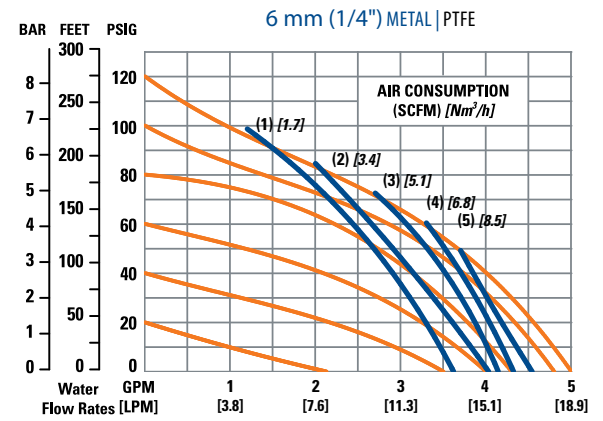
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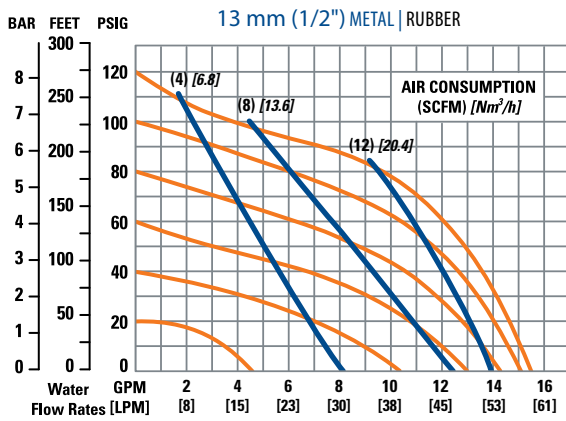
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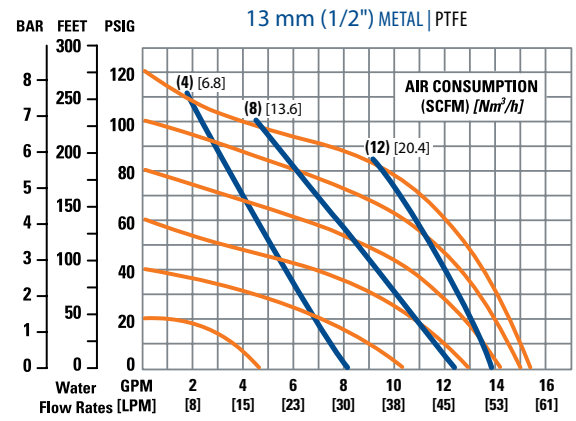
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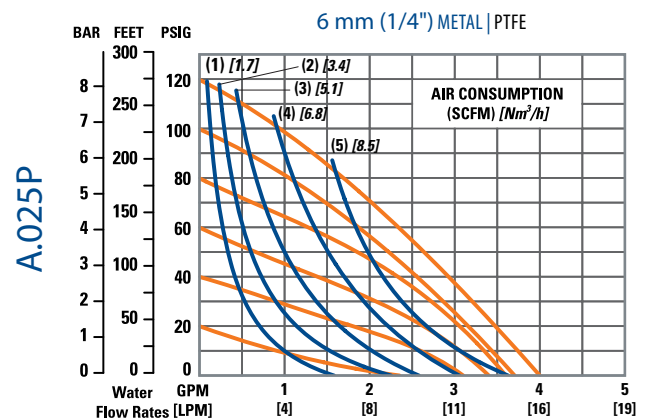
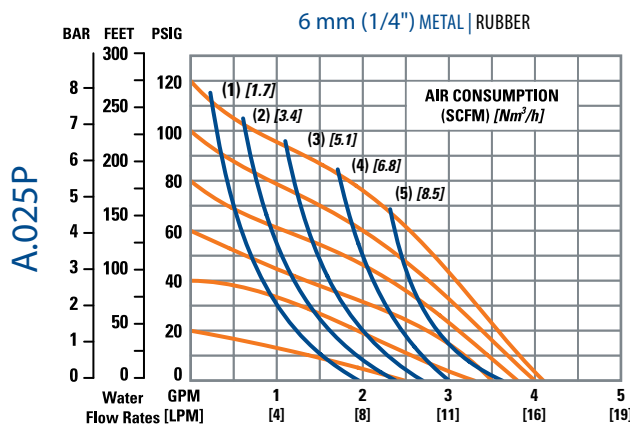
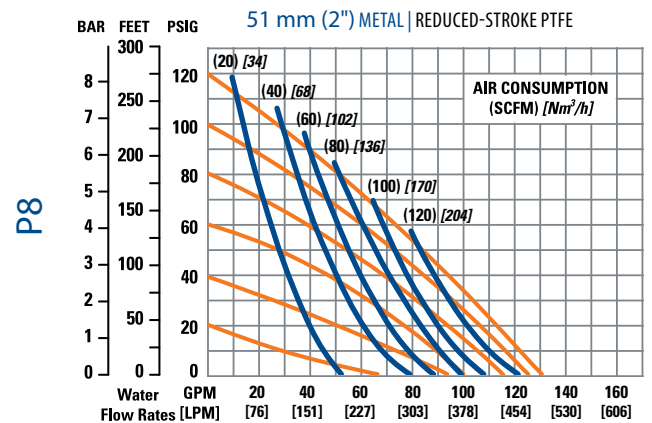
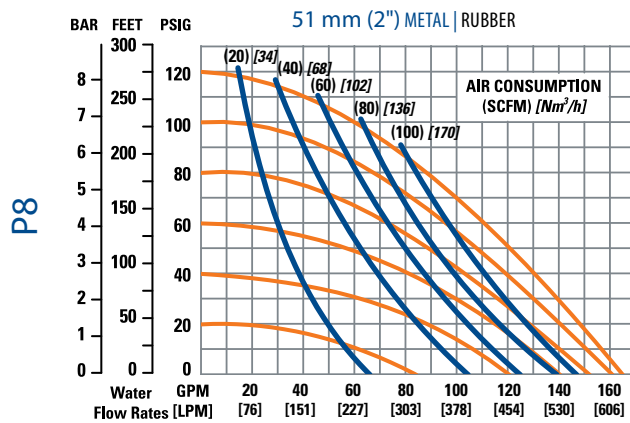
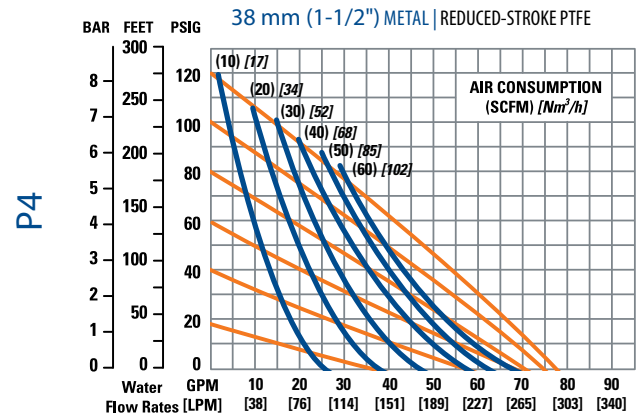
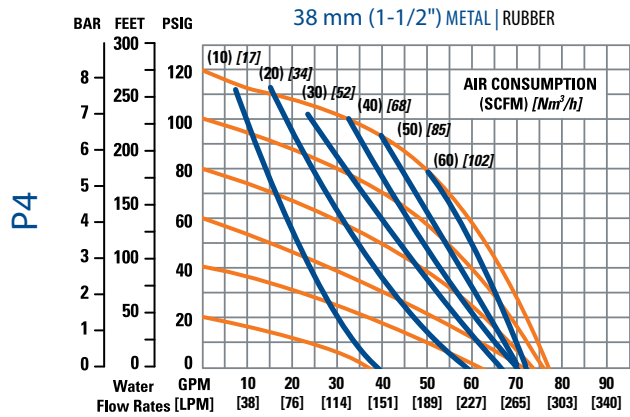
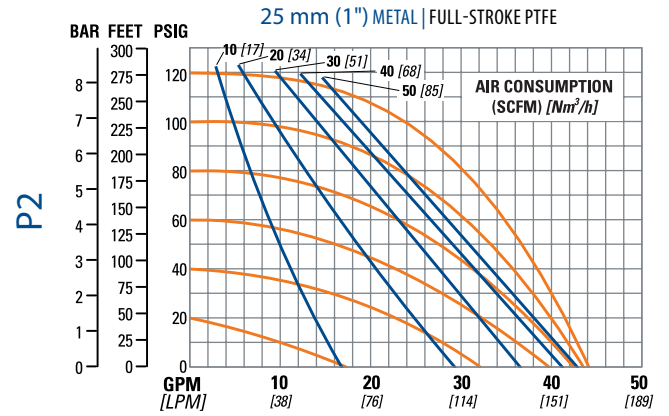
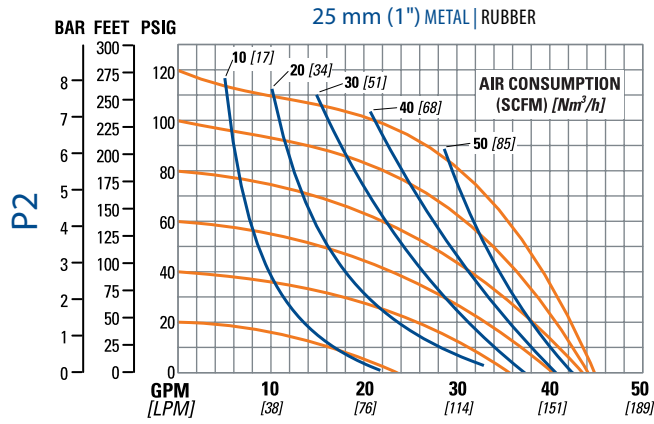
P1



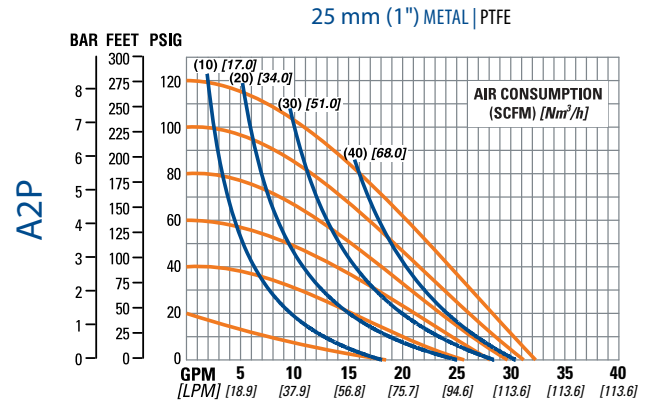
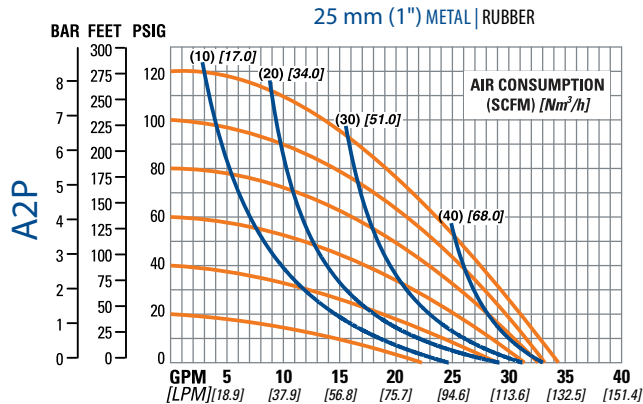
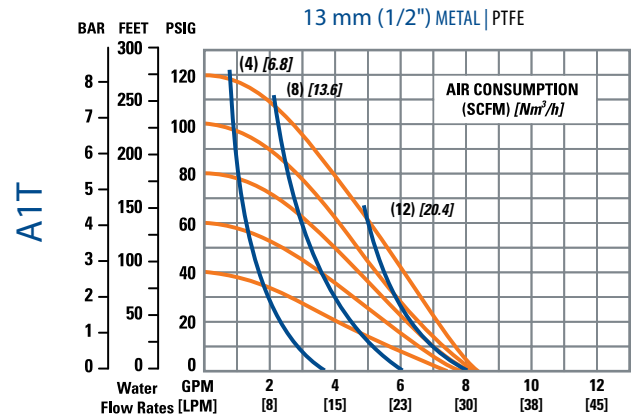
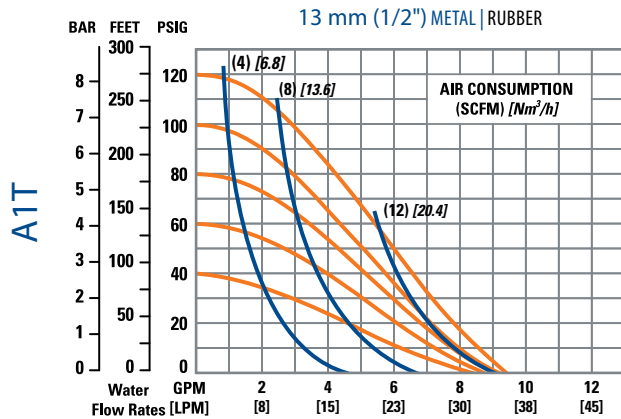
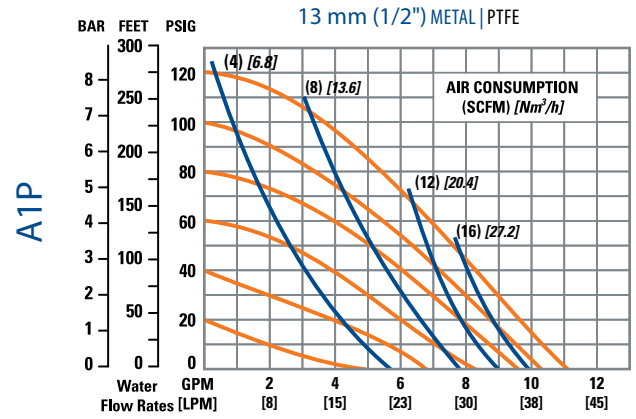
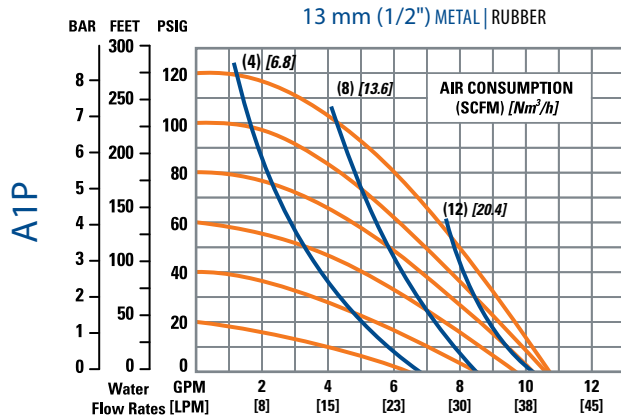
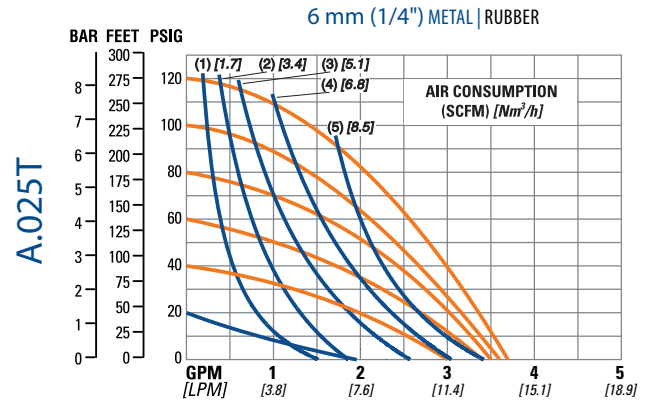
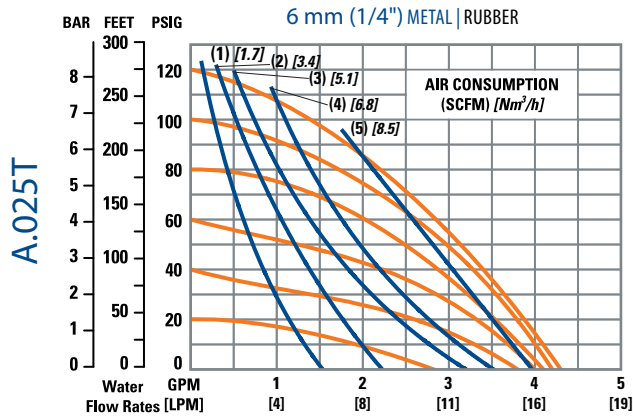
P1



METAL PERFORMANCE CURVES

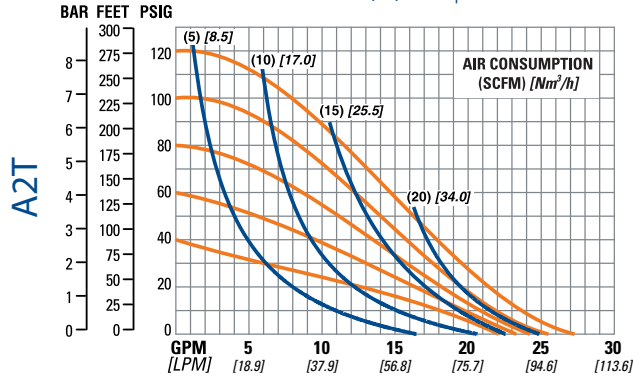


METAL PERFORMANCE CURVES

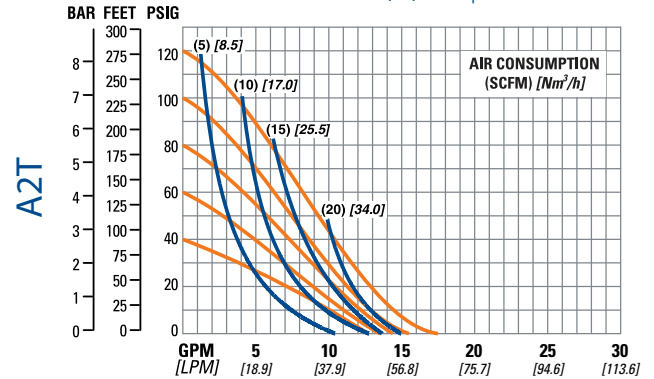


METAL PERFORMANCE CURVES

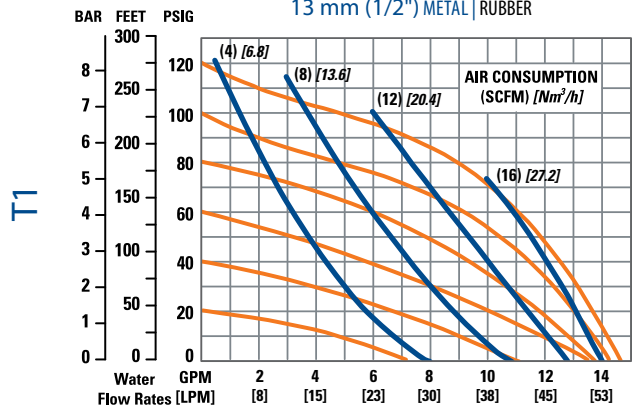
25 mm (1") METAL | RUBBER



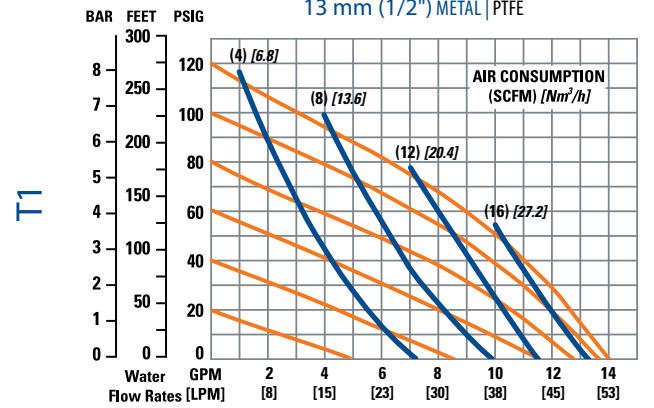
25 mm (1") METAL | PTFE



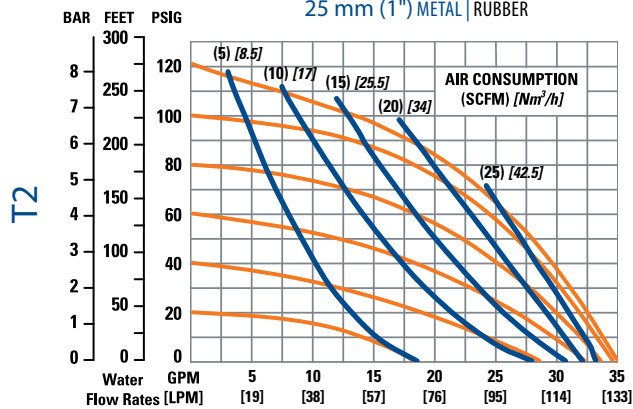
13 mm (1/2") METAL | RUBBER



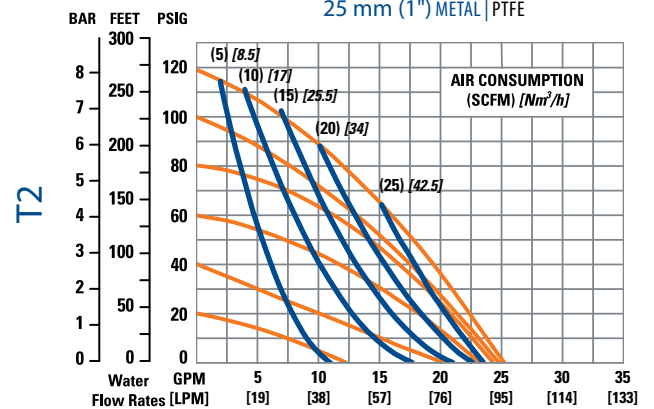
13 mm (1/2") METAL | PTFE



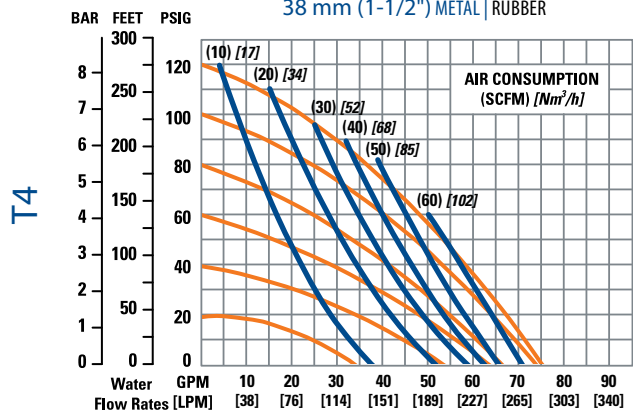
25 mm (1") METAL | RUBBER



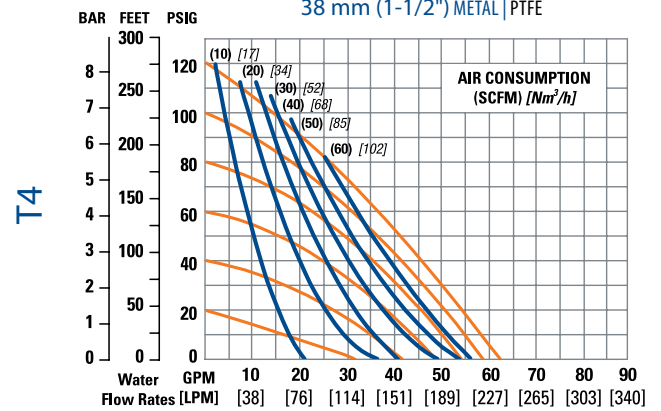
25 mm (1") METAL | PTFE



38 mm (1-1/2") METAL | RUBBER

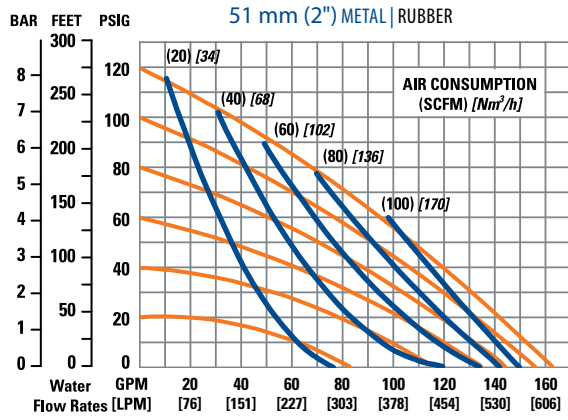


38 mm (1-1/2") METAL | PTFE

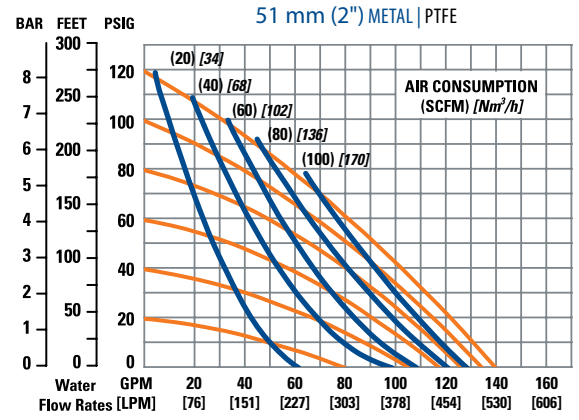


METAL PERFORMANCE CURVES

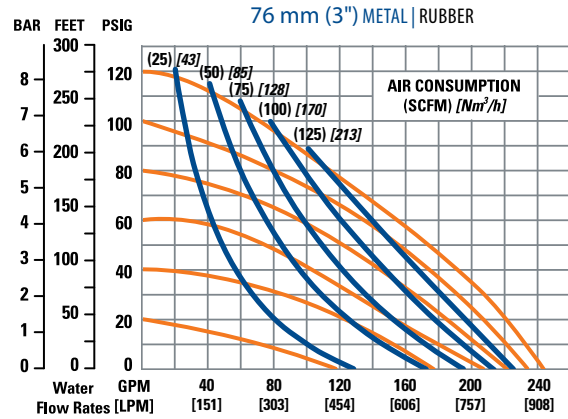
T8



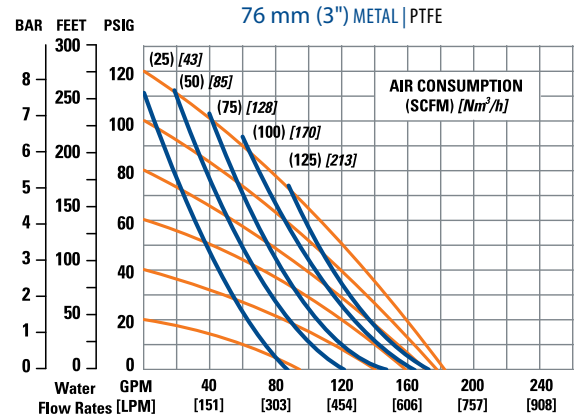
T8



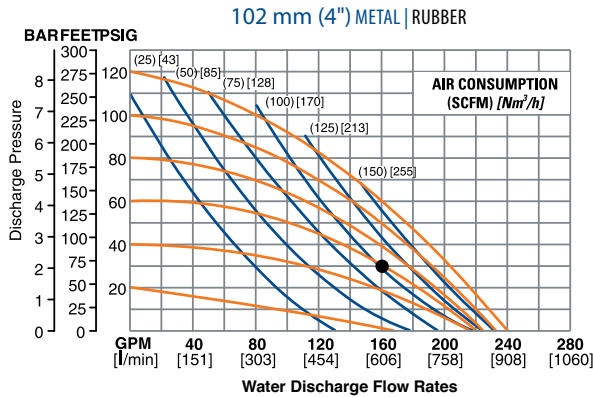
T15



T15



T20





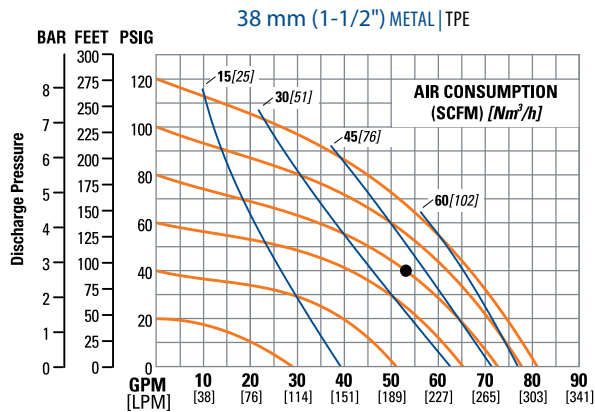
Stallion® Solids Handling Pumps

Stallion® pumps can handle what miners demand: durability, portability and ease of maintenance. The Stallion pump is designed to transfer solid-laden slurries safely and effectively. Large internal clearance and flow-through design keep the pump from clogging while the Wilden patented air distribution system maintains On/Off reliability. Put us to the test today!

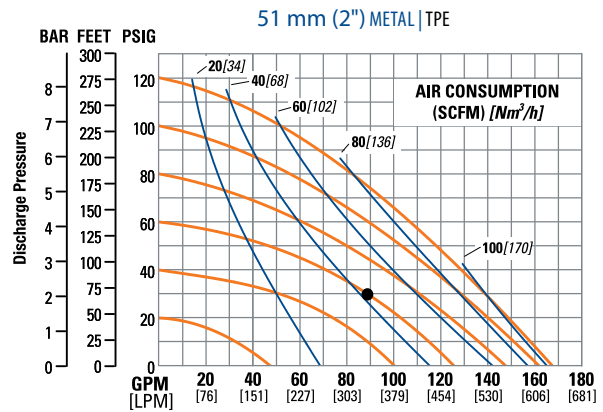
Features

- Large solids to 25 mm (1")
- Intrinsically safe operation
- Collapsible handles
- Screen base models
- Shock absorbing base

PS4



PS8



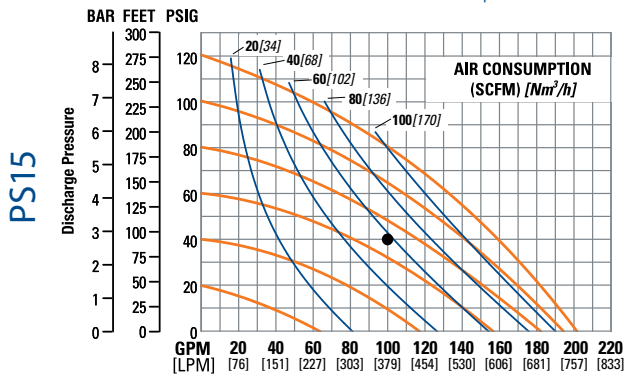
METAL TECHNICAL SPECS

SIZING CONSIDERATIONS						PERFORMANCE							
CONNECTION TYPE						MAX. SUCTION LIFT							
						RUBBER/TPE		PTFE		MAX. FLOW			
MODELS	WETTED MATERIALS	LIQUID INLET	LIQUID DISCHARGE	BSPT/NPT	SHIPPING WEIGHT	MAX. DISCHARGE PRESSURE	MAX. SOLIDS PASSAGE	DRY	WET	DRY	WET	RUBBER/TPE	PTFE
PRO-FLO SHIFT STALLION	PS4	Aluminum Ductile Iron	38 mm (1-1/2")	32 mm (1-1/4")	•	22 kg (49 lb) 30 kg (66 lb)	13 mm (1/2")	5.7 m (18.7')	9.0 m (29.5')	N/A	N/A	307 lpm (81 gpm)	N/A
	PS8	Aluminum Ductile Iron	51 mm (2")	51 mm (2")	•	22 kg (79 lb) 49 kg (109 lb)	19 mm (3/4")	5.3 m (17.5')	9.0 m (29.5')	N/A	N/A	634 lpm (168 gpm)	N/A
	PS15	Aluminum	76 mm (3")	76 mm (3")	•	63 kg (138 lb)	25 mm (1")	4.7 m (15.3')	9.0 m (29.5')	N/A	N/A	764 lpm (202 gpm)	N/A
PRO-FLO X STALLION	PX4	Aluminum Ductile Iron	38 mm (1-1/2")	32 mm (1-1/4")	•	22 kg (49 lb) 30 kg (66 lb)	13 mm (1/2")	6.4 m (21.0)	9.2 m (30.1)	N/A	N/A	305 lpm (81 gpm)	N/A
	PX8	Aluminum Ductile Iron	51 mm (2")	51 mm (2")	•	36 kg (79 lb) 49 kg (109 lb)	19 mm (3/4")	5.7 m (18.7)	9.2 m (31.1)	N/A	N/A	609 lpm (161 gpm)	N/A
	PX15	Aluminum	76 mm (3")	76 mm (3")	•	63 kg (138 lb)	25 mm (1")	5.7 m (18.7)	9.2 m (31.1)	N/A	N/A	776 lpm (205 gpm)	N/A

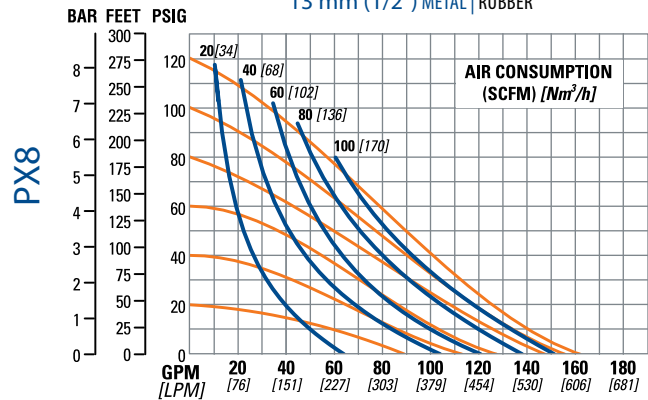


METAL PERFORMANCE CURVES

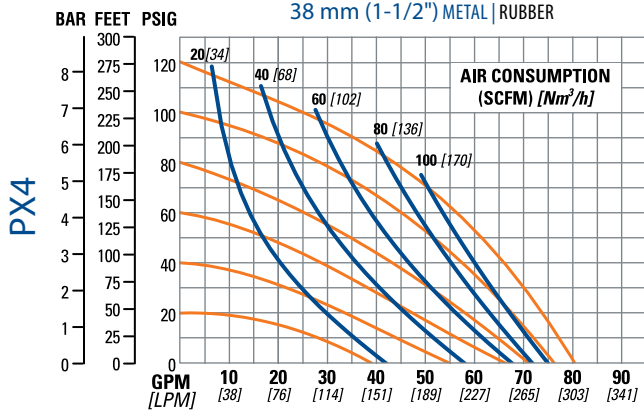
76 mm (3") METAL | TPE



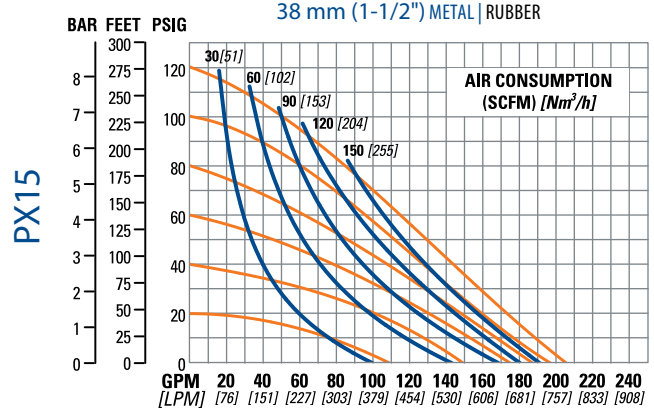
13 mm (1/2") METAL | RUBBER

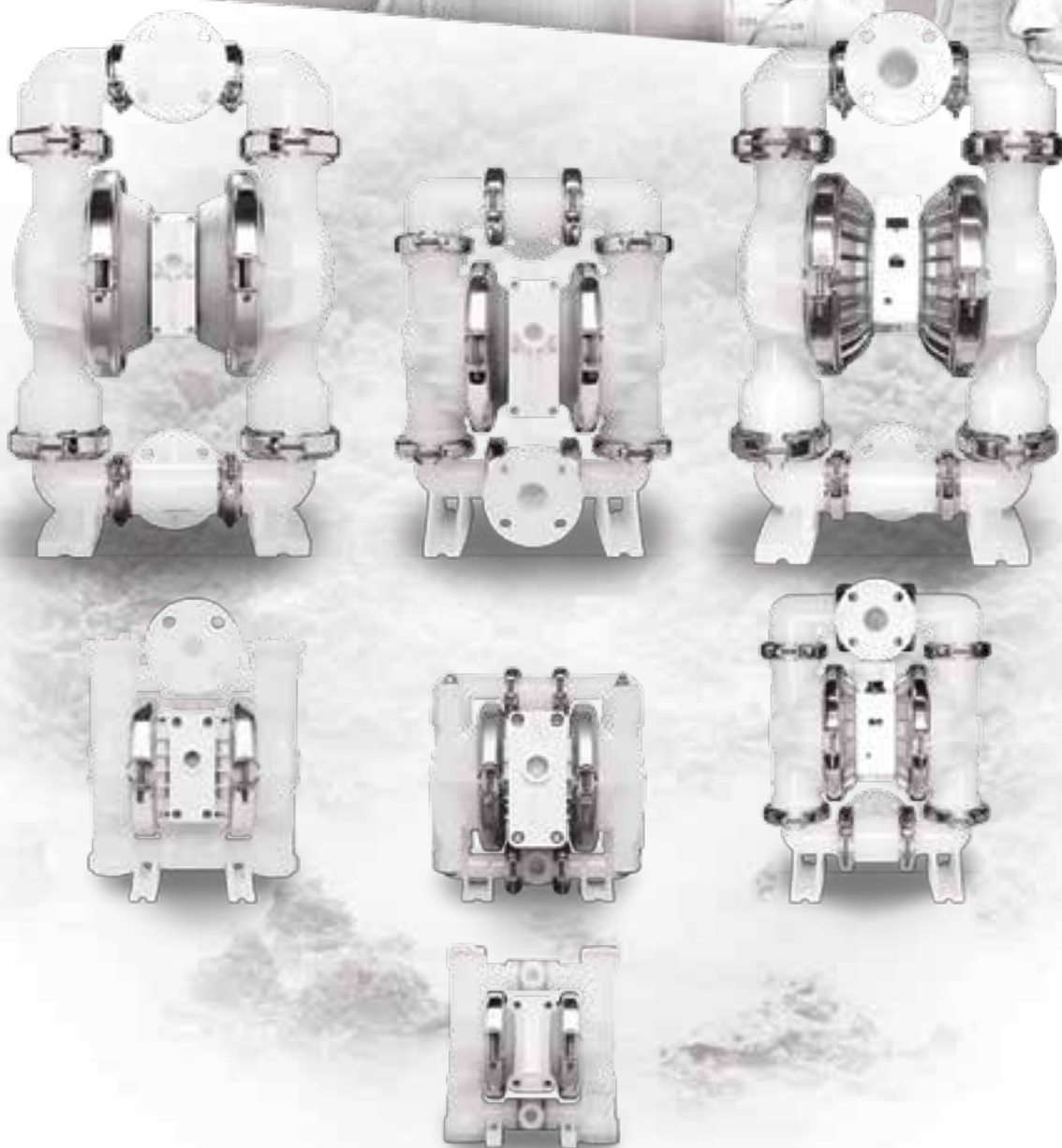


38 mm (1-1/2") METAL | RUBBER



38 mm (1-1/2") METAL | RUBBER





ORIGINAL Plastic Clamped Pumps

Tech Data

- Sizes: 6 mm (1/4") through 51 mm (2")
- Materials: Polypropylene, PVDF, and PTFE PFA
- Material Temperatures: Up to 107°C (225°F)
- Elastomers: Buna-N, Neoprene, EPDM, Viton, Wil-Flex, Saniflex, Polyurethane, PTFE, Geolast
- ADS: Pro-Flo SHIFT, Pro-Flo X, Pro-Flo, Accu-Flo

Performance Data

- Max flow rate: 643 lpm (170 gpm)
- Max suction lift: 9.8 m (32.0') Wet, 7.8 m Dry (25.5') Dry
- Max disp. per stroke: 2.8 L (0.75 gal)
- Max discharge pressure: 8.6 bar (125 psig)
- Max size solids: 6.4 mm (1/4")

PLASTIC TECHNICAL SPECS

SIZING CONSIDERATIONS

CONNECTION TYPE							
	MODELS	WETTED MATERIALS	LIQUID INLET	LIQUID DISCHARGE	BSPT/NPT	DIN/ANSI	TRI-CLAMP® STYLE
PRO-FLO SHIFT	PS4	Polypropylene PVDF	38 mm (1-1/2")	38 mm (1-1/2")	-	•	-
	PS8	Polypropylene	51 mm (2")	51 mm (2")	-	•	-
PRO-FLOX	PX4	Polypropylene PVDF	38 mm (1-1/2")	38 mm (1-1/2")	-	•	-
	PX8	Polypropylene PVDF	51 mm (2")	51 mm (2")	-	•	-
PRO-FLO	P.025	Polypropylene PVDF	6 mm (1/4")	6 mm (1/4")	•	-	-
	P1	Polypropylene PVDF PTFE PFA	13 mm (1/2")	13 mm (1/2")	•	-	-
	P2	Polypropylene PVDF	25 mm (1")	25 mm (1")	-	•	-
	P4	Polypropylene PVDF PTFE PFA	38 mm (1-1/2")	38 mm (1-1/2")	-	•	-
	P8	Polypropylene PVDF	51 mm (2")	51 mm (2")	•	-	-
ACCU-FLO	A.025P	Polypropylene PVDF	6 mm (1/4")	6 mm (1/4")	•	-	-
	A.025T	Polypropylene	6 mm (1/4")	6 mm (1/4")	•	-	-
	A1P	Polypropylene PVDF	13 mm (1/2")	13 mm (1/2")	•	-	-
	A1T	Polypropylene PVDF	13 mm (1/2")	13 mm (1/2")	•	-	-
	A2P	Polypropylene PVDF	25 mm (1")	25 mm (1")	•	-	-
	A2T	Polypropylene PVDF	25 mm (1")	25 mm (1")	•	-	-



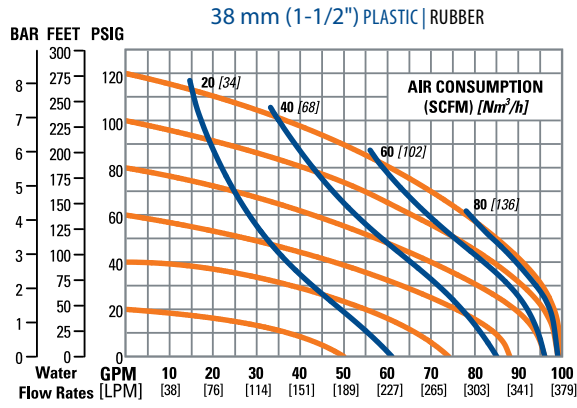
PERFORMANCE

MAX. SUCTION LIFT

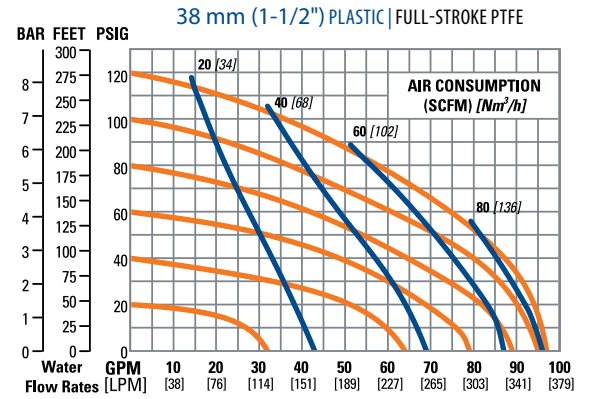
MAX. DISCHARGE PRESSURE	MAX. SOLIDS PASSAGE	RUBBER/TPE		PTFE		MAX. FLOW		
		DRY	WET	DRY	WET	RUBBER/TPE	PTFE	
8.6 bar (125 psig)	4.8 mm (3/16")	6.2 m (20.4')	8.3 m (27.2')	6.1 m (19.9')	8.3 m (27.2')	379 lpm (100 gpm)	368 lpm (98 gpm)	PRO-FLO SHIFT
8.6 bar (125 psig)	6.4 mm (1/4")	6.6 m (21.8')	8.3 m (27.2')	6.1 m (19.9')	8.3 m (27.2')	643 lpm (170 gpm)	597 lpm (158 gpm)	
8.6 bar (125 psig)	4.8 mm (3/16")	5.7 m (18.7')	9.2 m (30.1')	2.1 m (6.8')	9.2 m (30.1')	363 lpm (96 gpm)	276 lpm (73 gpm)	PRO-FLOX
8.6 bar (125 psig)	6.4 mm (1/4")	7.8 m (25.5')	8.6 m (28.4')	3.8 m (12.5')	9.2 m (30.1')	644 lpm (170 gpm)	503 lpm (133 gpm)	
8.6 bar (125 psig)	0.4 mm (1/64")	3.1 m (10.0')	9.5 m (31.0')	2.4 m (8.0')	8.8 m (29.0')	18.1 lpm (4.8 gpm)	18.1 lpm (4.8 gpm)	PRO-FLO
8.6 bar (125 psig)	1.6 mm (1/16")	6.1 m (20.0')	9.8 m (32.0')	5.2 m (17.0')	9.8 m (32.0')	56.8 lpm (15.0 gpm)	53.4 lpm (14.1 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	5.5 m (18.0')	8.8 m (29.0')	3.4 m (11.0')	8.8 m (29.0')	140 lpm (37 gpm)	132 lpm (35 gpm)	
8.6 bar (125 psig)	4.8 mm (3/16")	4.9 m (16.0')	7.9 m (26.0')	3.1 m (10.0')	7.5 m (24.5')	354 lpm (94 gpm)	261 lpm (69 gpm)	
8.6 bar (125 psig)	6.4 mm (1/4")	7.0 m (23.0')	9.5 m (31.0')	4.3 m (14.0')	9.5 m (31.0')	591 lpm (156 gpm)	481 lpm (127 gpm)	
8.6 bar (125 psig)	0.4 mm (1/64")	4.1 m (13.6')	9.3 m (30.6')	3.9 m (13.0')	9.3 m (30.6')	12.1 lpm (3.2 gpm)	11.7 lpm (3.1 gpm)	ACCU-FLO
8.6 bar (125 psig)	0.4 mm (1/64")	2.9 m (9.6')	9.3 m (30.6')	4.3 m (14.2')	9.3 m (30.6')	11.7 lpm (3.1 gpm)	11.7 lpm (3.1 gpm)	
8.6 bar (125 psig)	1.6 mm (1/16")	6.1 m (20')	8.9 m (29')	5.2 m (17')	8.9 m (29')	39.0 lpm (10.3 gpm)	39.0 lpm (10.3 gpm)	
8.6 bar (125 psig)	1.6 mm (1/16")	4.5 m (15')	9.3 m (31')	3.5 m (11')	9.3 m (31')	33.4 lpm (9.1 gpm)	29.1 lpm (7.7 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	6.2 m (20.4')	9.0 m (29.5')	5.2 m (17')	9.0 m (29.5')	136 lpm (36 gpm)	110 lpm (29 gpm)	
8.6 bar (125 psig)	3.2 mm (1/8")	4.5 m (14.7')	9.3 m (30.6')	3.5 m (11.3')	9.3 m (30.6')	95 lpm (25 gpm)	61 lpm (16 gpm)	

PLASTIC PERFORMANCE CURVES

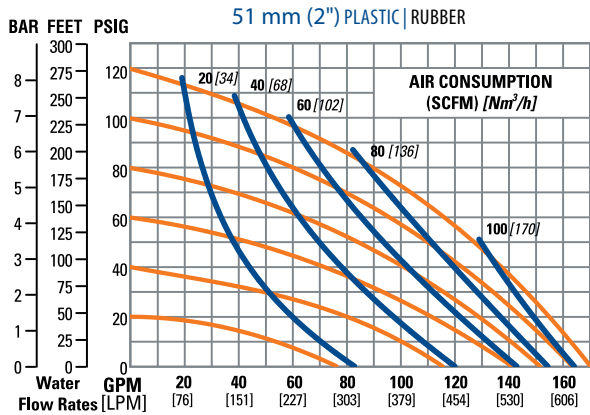
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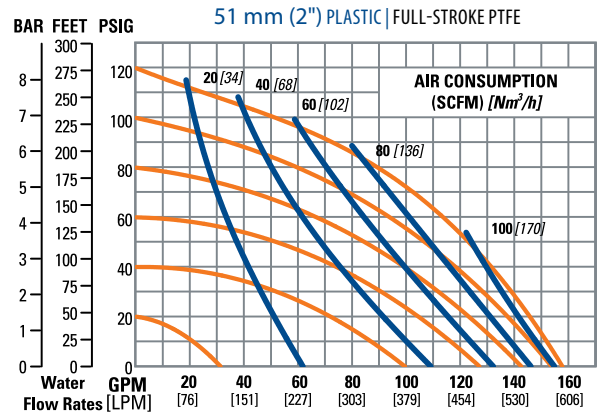
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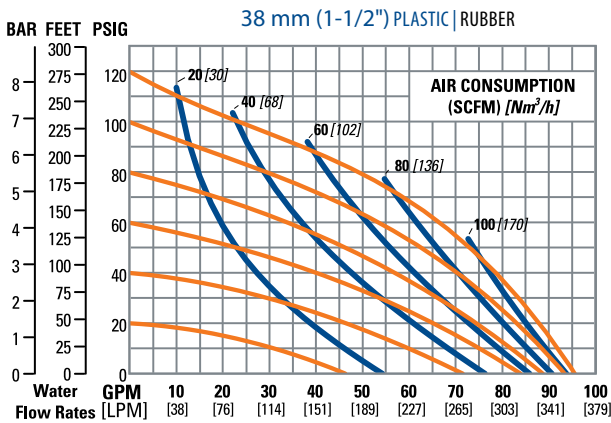
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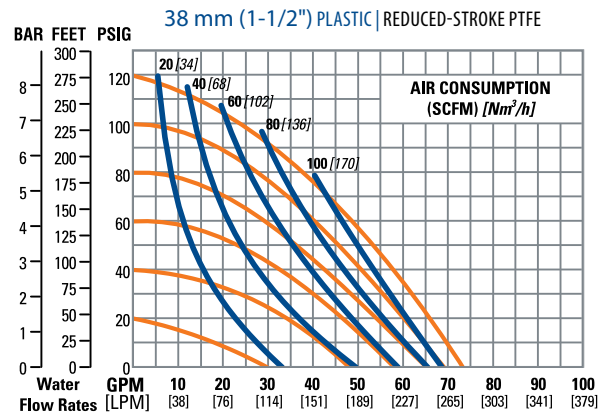
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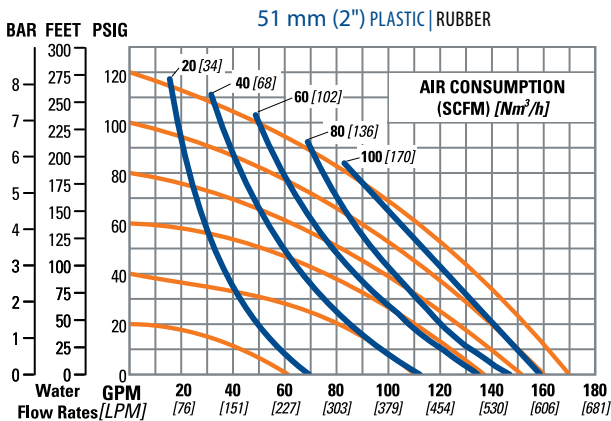
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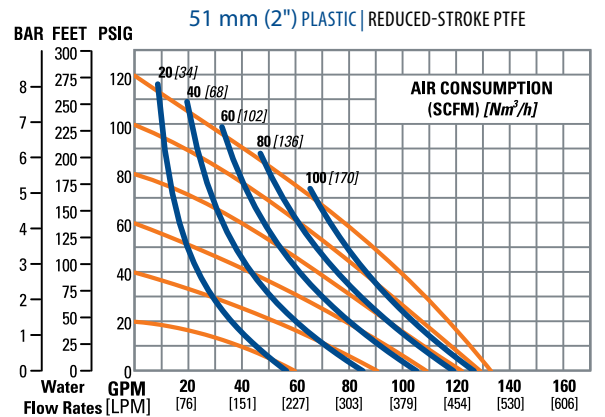
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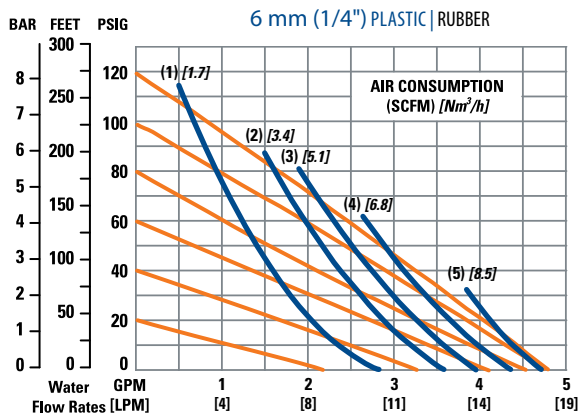


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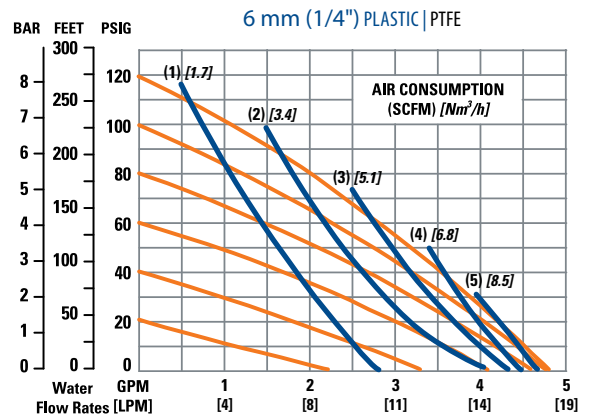


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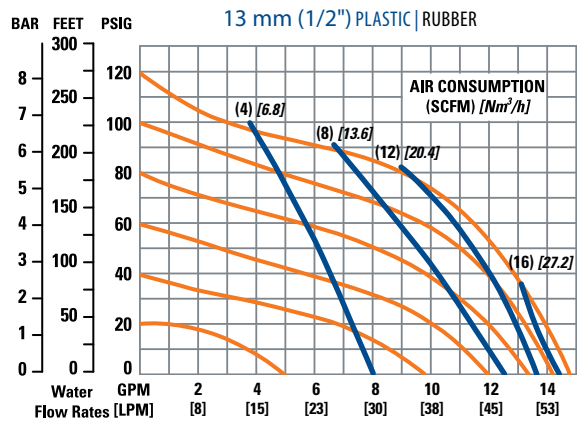
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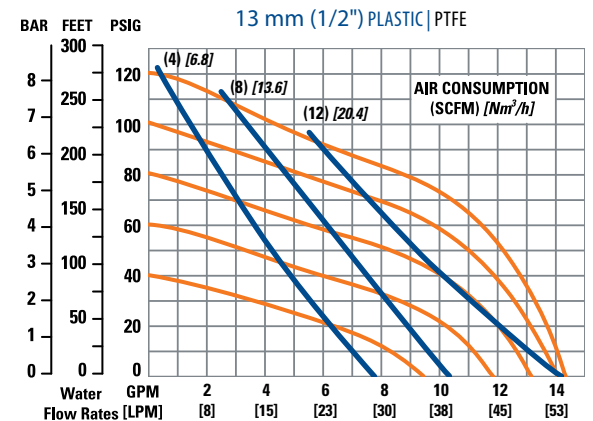
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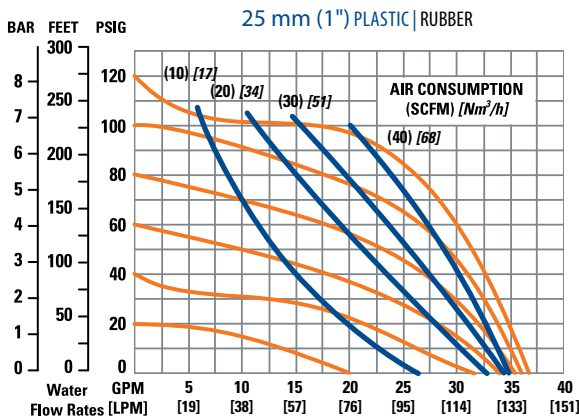
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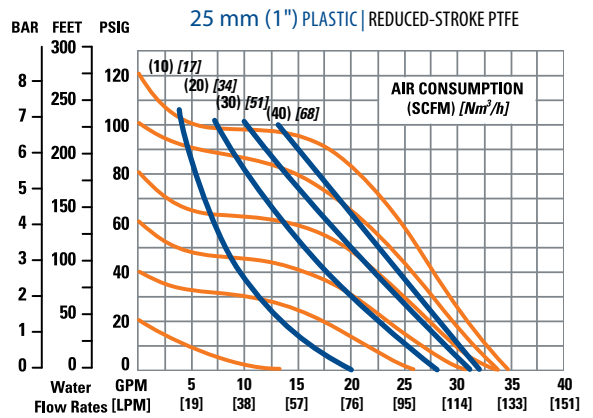
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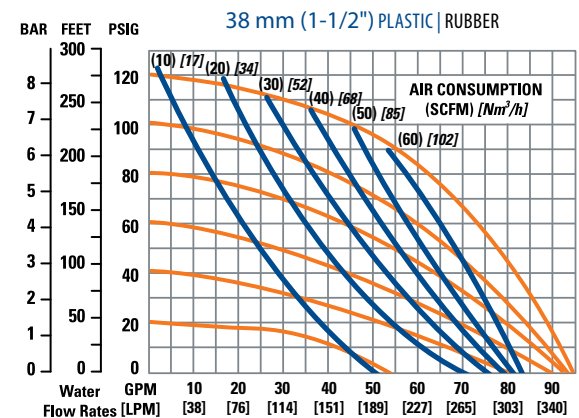
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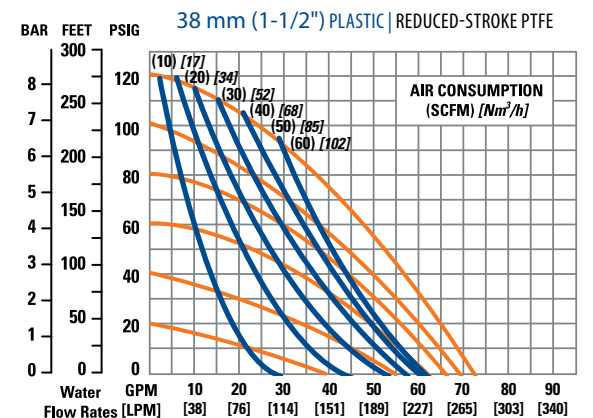
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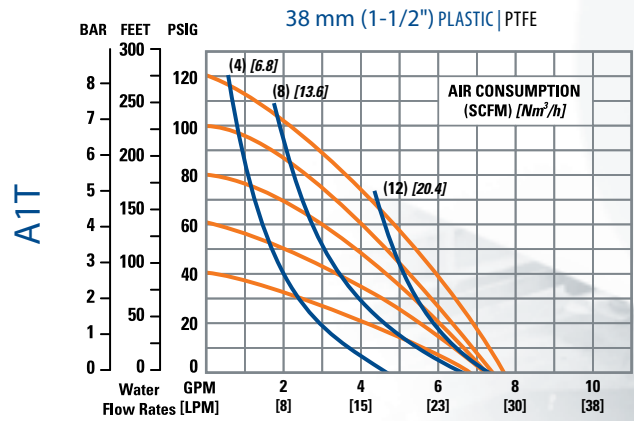
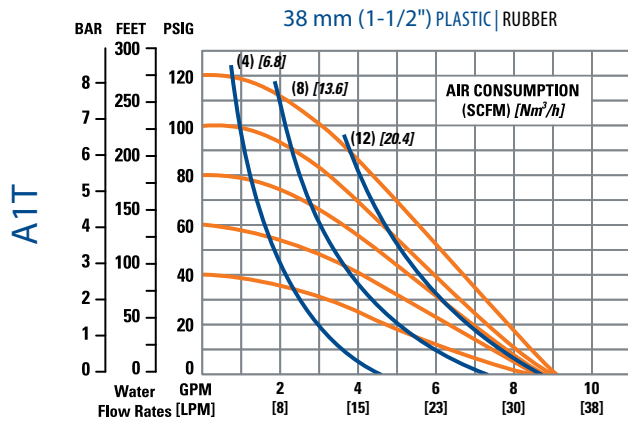
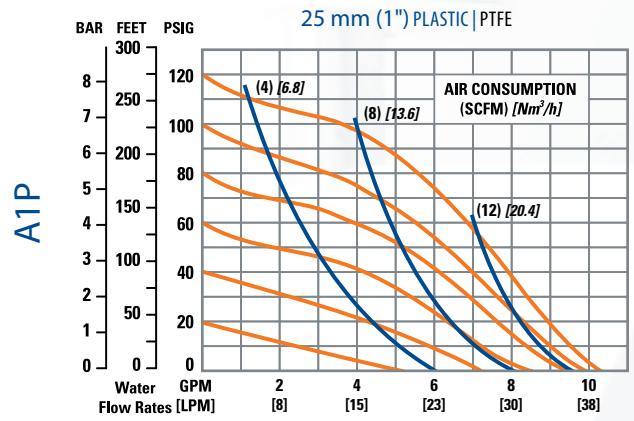
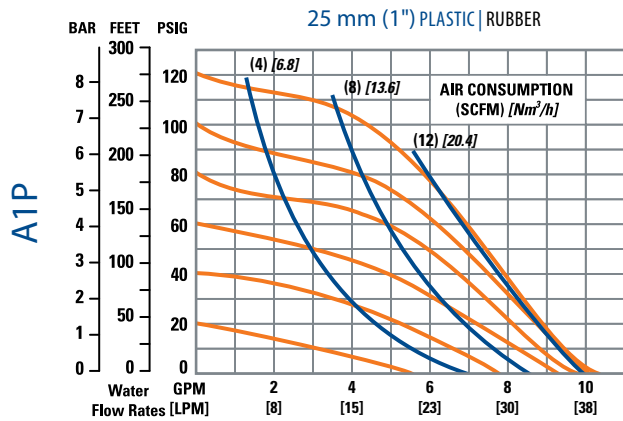
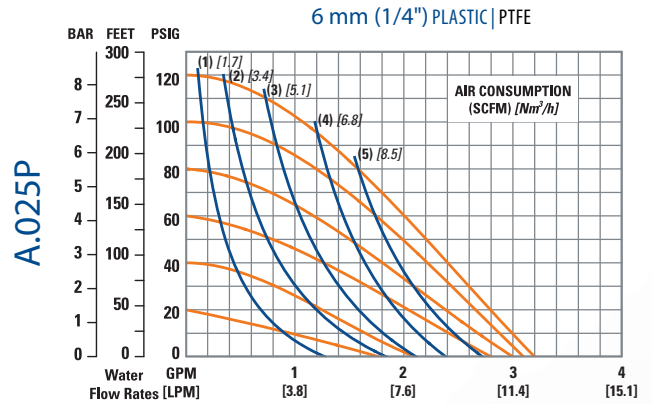
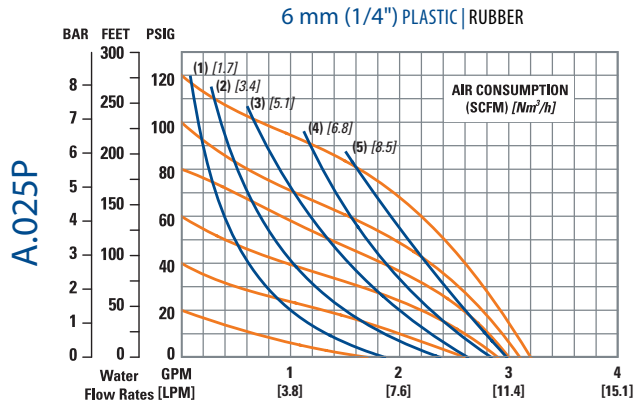
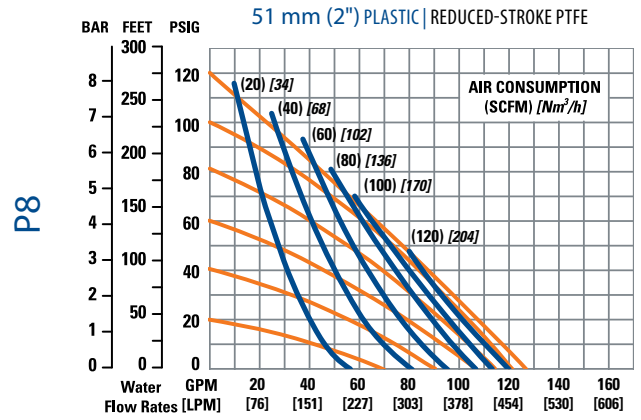
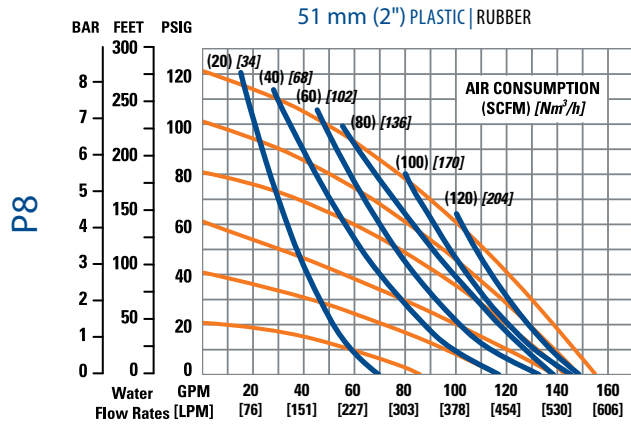
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P4

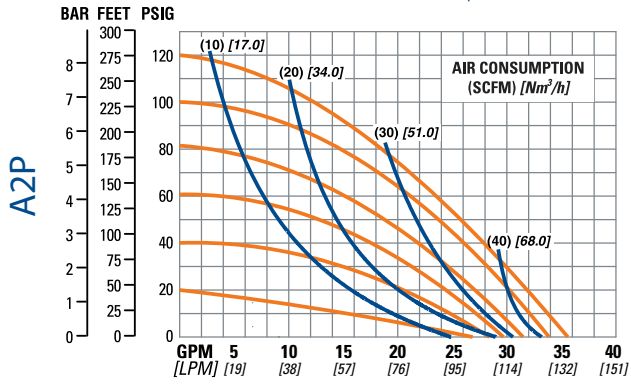


PLASTIC PERFORMANCE CURVES

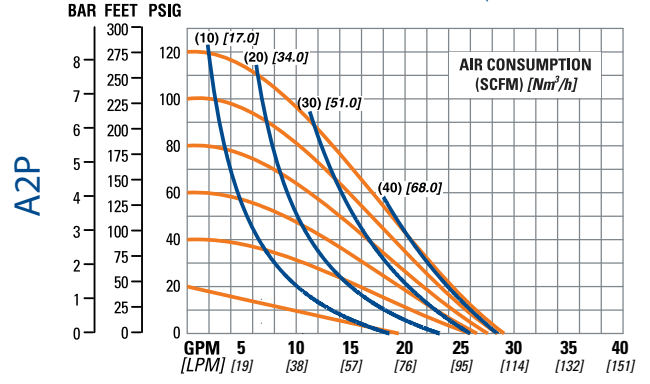


PLASTIC PERFORMANCE CURVES

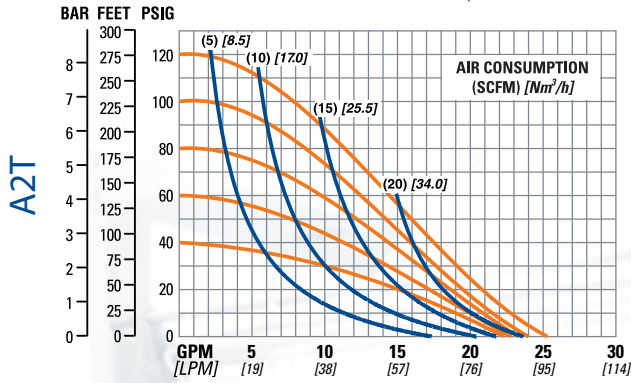
25 mm (1") PLASTIC | RUBBER



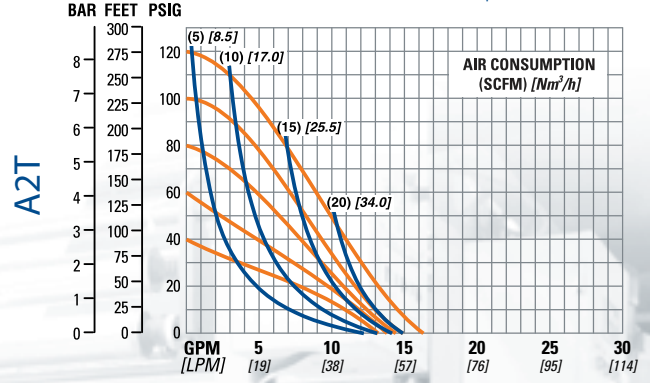
25 mm (1") PLASTIC | PTFE



25 mm (1") PLASTIC | RUBBER



25 mm (1") PLASTIC | PTFE



Things to Think About

When Selecting an Air-Operated Double-Diaphragm (AODD) Pump

Application

- What application will the pump be used in?
- What are you pumping?
- Do you need lube-free operation?
- Does the pump need to be submersible?
- What cleaning fluids would be used to clean the pump?
- What are your performance parameters (flow rates, air consumption, viscosities, suction lift)?
- Do you need a pulsation dampener?

Air Distribution System (ADS)

- What ADS best suits your application needs?
- How reliable is the ADS?
- How efficient is the ADS?
- Do you need On/Off reliability?
- Is the pump ADS ATE-approved?
- Does the ADS have anti-freezing technology?
- Does the ADS have integrated variable performance controls?

Installation

- Before installation please read the caution section of the pump manual.
- What are your piping considerations (valves, elbows, pipe friction losses, etc.)?
- Do you have sufficient air pressure and air volume for the pump?
- What is the MTBR (Mean Time Between Repair) of the AODD pump?
- What are your installation parameters (self-priming, positive suction head, high vacuum, heat generation, dry-run capable, submersible, large solids passage, variable flow and pressure, shear sensitive)?
- Ease of maintenance: is the pump easy to clean, assemble/disassemble?

Wetted Materials

- What media will you be pumping?
- What is the chemical compatibility of the elastomer?
- What are the temperature limits of the wetted material and elastomer?
- How abrasive is the media being pumped?
- Do diaphragm configurations affect flow?

Distributors

- Is your distributor local?
- Can the distributor fully support your fluid transfer needs?
- Are they a full-stocking, full-service distributor?
- How good is delivery? Is it less than 3 weeks?
- Is the distributor formally educated in specifying and maintaining your system?
- How are the services and repair capabilities of the distributor?
- Does the distributor do local training for your staff?
- How responsive is the distributor to your needs?

Resources

- wildenpump.com
- Locating your Authorized Wilden Distributor: wildendistributor.com
- Engineering, Operations and Maintenance Manuals: wildenpump.com > Support > Manuals (EOMs)
- Cavitation and Friction Guide & Safety Supplement: wildenpump.com > Support > Literature
- Electronic Chemical Resistance Guide: wildenpump.com > Support > Chemical Guide
- Troubleshooting: wildenpump.com in the Support section (Troubleshooting)

WILDEN TECHNICAL SUPPORT: Hours of operation: 8:00 am – 5:00 pm (PST)
Ph. +1 (909) 422-1730 • E-mail: techsupport@wildenpump.com

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