

Air Operated Double Diaphragm Pumps



We Make The Difference

Line Introduction

RubyBlack Line Air Operated Double Diaphragms Pumps are available in various designs, from miniature ¼-inch to 3-inch and can handle a wide range of fluids.

They can work with low to highly viscous liquids even if they contain suspended particles.

They are applicable in many industries such as: Chemical, Marine, Food and Beverage, Cosmetic, Paint, Galvanic, Textile, Water and Sludge, Oil and Gas and many more.

Available in both plastic (PP or PVDF) and metal (Aluminum or SS 316) versions these "small giants" may be simple in design but that doesn't stop them from operating across challenging environments.

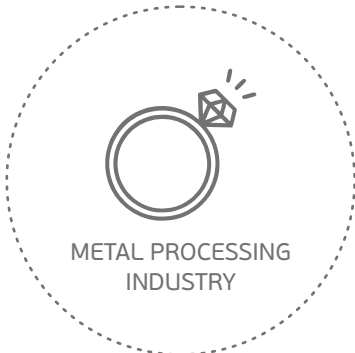
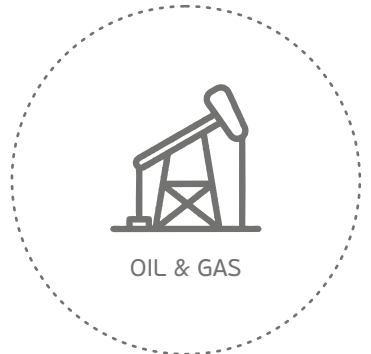
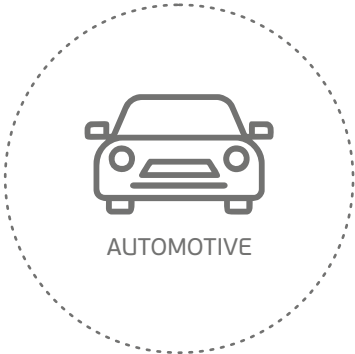
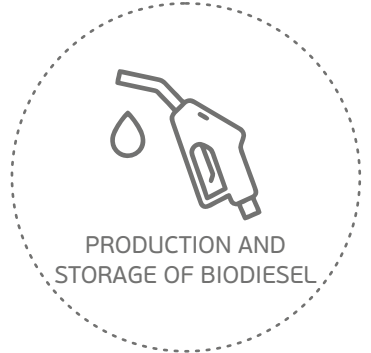
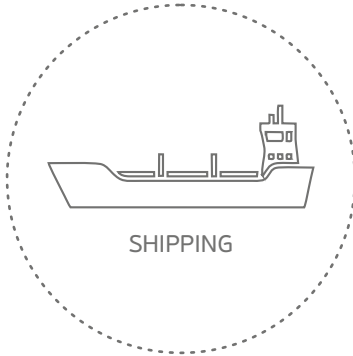
Their wetted parts are available in various materials which makes them compatible with any type of fluid.

Main Advantages

Available in PP, PP+CF, PVDF+CF, ALUMINUM and STAINLESS STEEL 316 versions.

- Certified for use in potentially explosive atmospheres (ATEX certification zone 1-2)
- Advanced diaphragms of new technology
- New generation PTFE compound diaphragms for long life operation
- Advanced quality PTFE-A Full capacity diaphragms for high chemical and mechanical applications
- Dry running without risk of damage
- Self-priming capacity
- No need for air lubrication
- Innovative oil free Air Valve
- Adjustable flow rate and head
- Designed for varying flow, and head conditions
- Able to operate while fully submerged in the pumping liquid (On request)
- Twin suction and discharge of separate fluids
- Automatic suction
- Easy manifold reverse
- Long service life
- Reliable, optimal performance at the lowest possible cost
- Ideal for handling abrasive, viscous and shear sensitive or corrosive fluids
- Operating temperatures:
 - PP/PP+CF → -5°C / + 60°C
 - PVDF + CF → -10°C / +120°C
 - Aluminum → -10°C / +130°C
 - Stainless steel → -10°C / 130°C

Main application sectors



Ruby Diaphragms

Introducing the Advanced Composite Diaphragms of Ruby pumps

Diaphragms play a crucial role in the operation of a diaphragm pump. No matter what the pumping liquid is, from water to aggressive acids, diaphragms must meet the needs of very specific handling characteristics as they relate to product compatibility.

Diaphragms of Ruby pumps are constructed of high-quality materials and their design, enables them to produce reliable and optimal performance. Available in a full range of options, PTFE, PTFE-A, NBR, EPDM, VITON, they meet the specific needs of every pumping application.

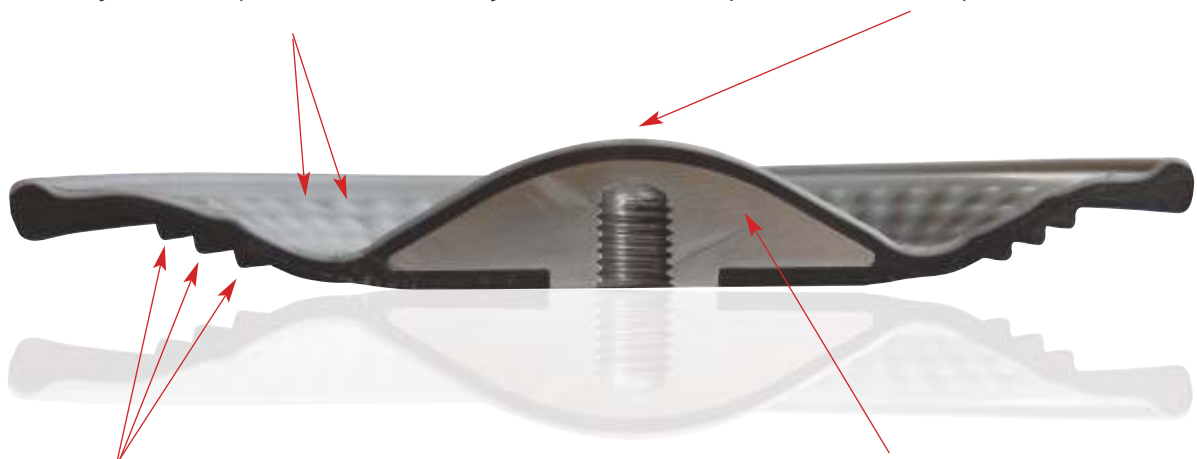


- Excellent, extended service life
- Greater performance
- Higher displacement per cycle
- Easy to install and maintain
- Eliminated leak paths due to absence of central hole
- They can be installed and removed without the use of tools
- Our diaphragms last longer and are considerably stronger than other diaphragms
- They can be used with most chemicals and are ideal for a wide range of pumping tasks
- Longer diaphragm life in more abrasive applications that still require PTFE

Advanced Composite Diaphragms Offer:

The prominences decrease
the stretching of the PTFE during the regression and prevent it from cracking.

Innovative conical shape
ideal for optimal performance and life, low pressure requirements for start-up, ideal suction



Innovative diaphragm support side,
offers flexibility, long life and protects from cavitation

Special internal plate
supports diaphragm in every movement

New Air Valve Design



Designed and made using the most innovative technology, the **Air Valve** is the "heart" of the Ruby pump. It functions without the need for lubricants or oils, hence:

- Eliminates the risk of seizing due to lubrication issues
- Protects the environment
- Saves money spent for lubrication

The innovative Air Valve of Ruby pumps also provides:

- Great saving energy due to fully managed airflow
- Low-maintenance
- Non- Internal freeze
- Non-dead-Centre asymmetric operation
- Long service life
- Low cost of spare parts
- Easy installation
- Reliability
- Does not contain metal parts (excluding shaft)



ATEX Certificate

Both plastic and metallic conductive series of Ruby Air Diaphragm Pumps comply with the demands of EU Directive 2014/34/EU and are certified by Ex II 2G Ex h IIC T4 Gb and II 2D Ex h IIC T135°C Db. They can operate safely in potentially explosive atmospheres where flammable gases, mists or dust particles may be present.

Plastic Conductive and AISI 316 pumps are also certified by ATEX I M2 for use in underground parts of mines.

ATEX Certificate has been issued by the European notified body J. S. Hamilton.

Type Examination Certificate No JSHP 25 ATEX 0025X.

Ruby Pumps composition codes:

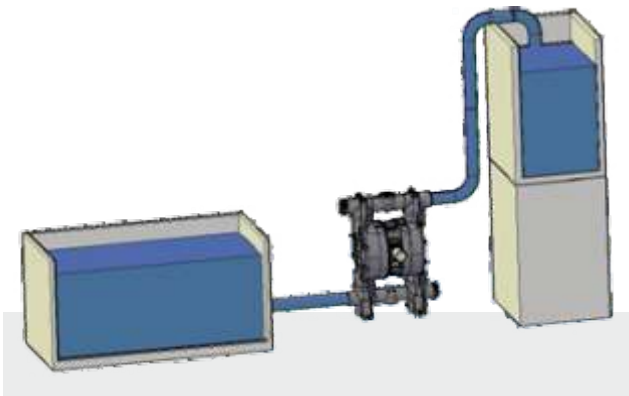
example: model Ruby 126P-P-TPT-F

Pump Model Ruby 126, PP Pump Body, PP Center Section, PTFE Diaphragms, PP Ball Seats, PTFE Ball Valve, VITON O-ring

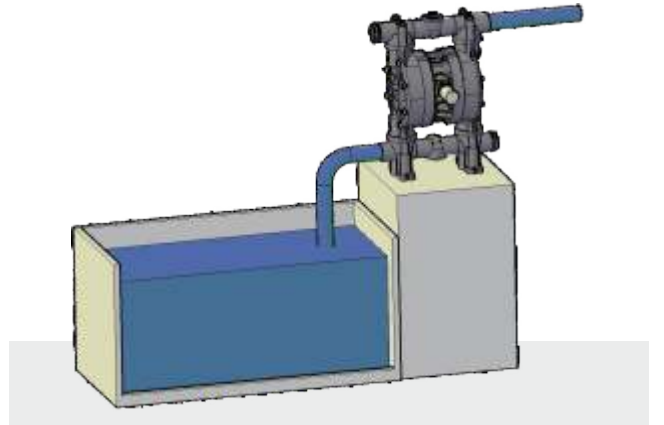
R 126	P	P	T	P	T	F	-
Pump Model	Pump Body	Center Section	Diaphragms	Ball Seats	Ball Valve	O-ring	Other Options
MINI 005	P : PP	P : PP	N : NBR Conductive	V: PVDF	T: PTFE	T: PTFE	F: Flange PN10/ANSI 150
Ruby 008	V : PVDF+CF	A : Aluminum	E : EPDM Conductive	S: AISI 316	S: AISI 316	F: VITON	D: Twin Manifold
Ruby 010	A : Aluminum	PC: PP+CF	F : VITON	A: Aluminum	N: NBR	E: EPDM	
Ruby 112	S : Stainless Steel 316		T : PTFE+back up (EPDM Conductive)	P: PP	E: EPDM	N: NBR	
Ruby 115	PC: PP+CF		Z : PTFE A+back up (EPDM Conductive)	N: NBR			
Ruby 120			NT: PTFE+Back up (NBR)	E: EPDM			
Ruby 025				O: POM-C			
Ruby 125							
Ruby 126							
Ruby 140							
Ruby 141							
Ruby 150							
Ruby 151							
Ruby 180							
Ruby 181							

Installations

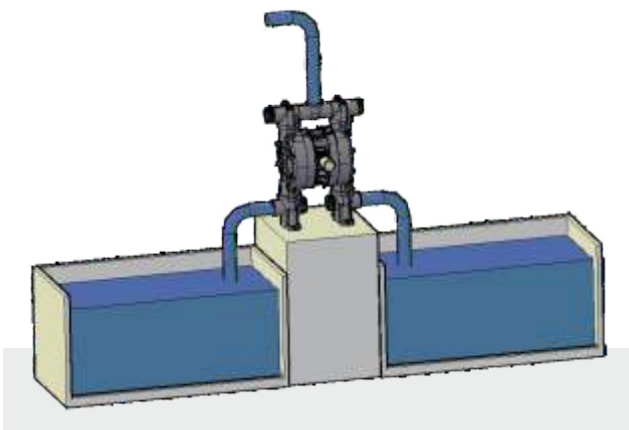
Under Head (Positive suction)



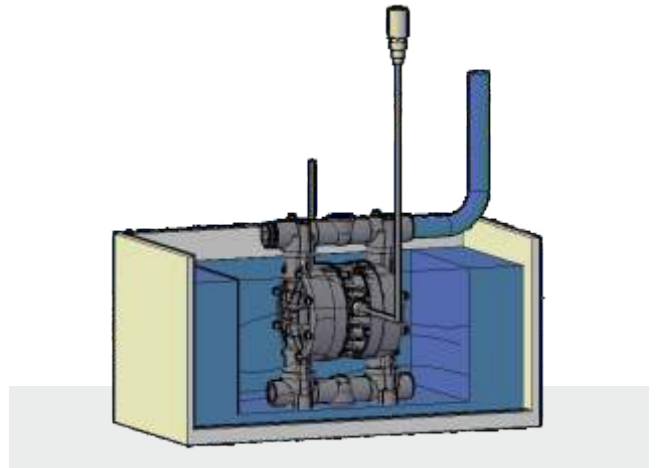
Self Priming



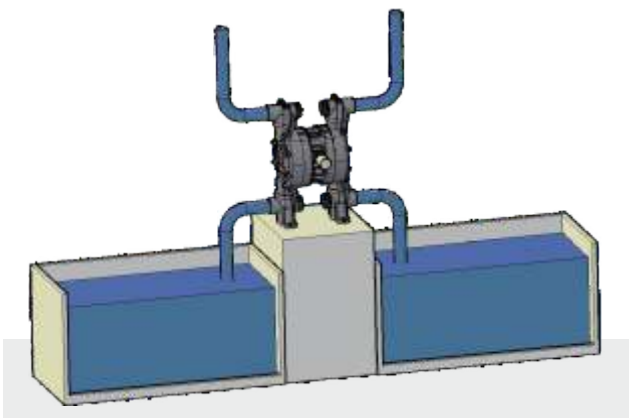
Split Suction



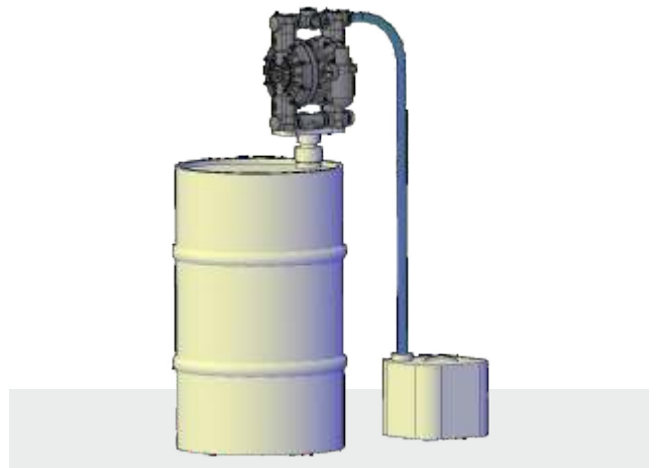
Immersed Transfer



Split Suction and Discharge



Drum Transfer



Minipump 005

Construction materials: **PP, PP+CF, PVDF+CF**

Ruby 008



Zone 2 - Zone 22
Zone 1 - Zone 21
Zone M2

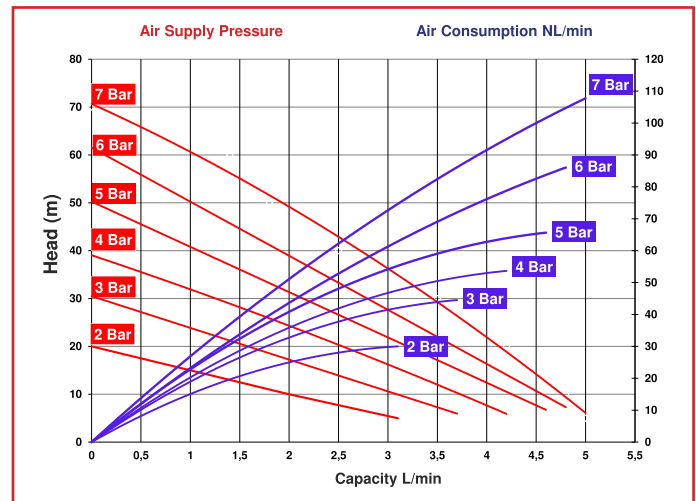
II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
I M2 Ex h I Mb

Technical data

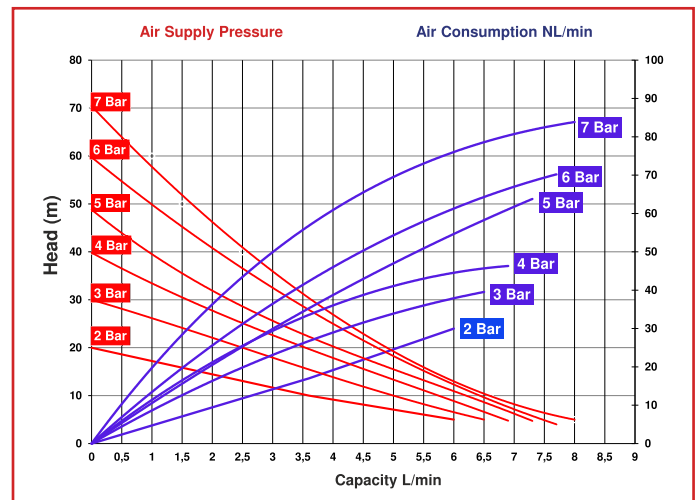
	Minipump 005	Ruby 008
Suction / Discharge connections	1/4" BSP F	1/4" BSP F
Air connection	1/8" BSP F	1/8" BSP F
*Max. flow rate	5 L/min	8 L/min
*Max. self-priming capacity - dry running	3 m	3 m
*Max. negative suction head - with pump primed	9.5 m	9.5 m
Max. head	70 m	70 m
Max. operating pressure	Min. 2 bar - Max. 7 bar	Min. 2 bar - Max. 7 bar
Max. size of solids	0.5 mm	0.5 mm
Max. operating Temperature	PP: 60°C	PP: 60°C , PVDF: 95°C
Noise Level	60 dB	60 dB
Displacement per stroke	3.2 cc	3.2 cc
Maximum Viscosity	800 cPs	800 cPs
Weight	PP: 0.7 Kg	PP: 0.7 Kg , PVDF: 1.3 Kg



Performances Minipump 005



Performances Ruby 008



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 010

Construction materials: **PP, PP+CF, PVDF+CF, AISI 316**



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

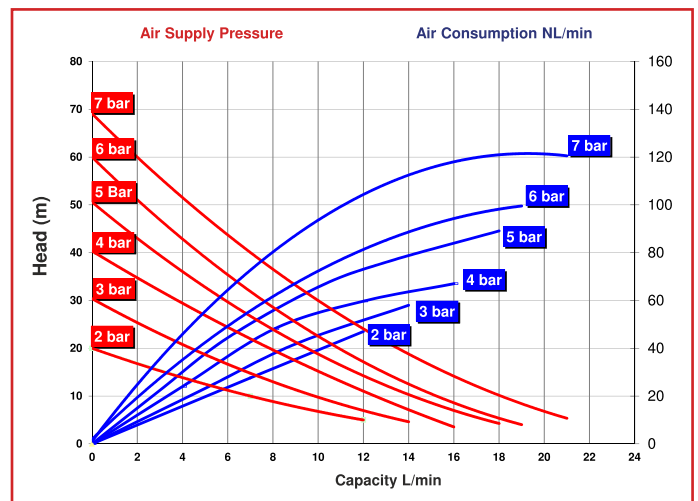
Technical data

Suction / Discharge connections	3/8" BSP F
Air connection	3/8" BSP F
*Max. flow rate	21 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	70 m
Max. operating pressure	Min. 2 bar - Max. 7 bar
Max. size of solids	0.5 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C , AISI 316: 95°C
Noise Level	65 dB
Displacement per stroke	23 cc
Maximum Viscosity	12.000 cPs
Weight	PP: 1.2 Kg , PVDF: 1.9 Kg , AISI 316: 3.0 Kg

Ruby 010



Performances Ruby 010



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 112

Construction materials: PP, PP+CF, PVDF+CF, AISI 316, ALUMINUM



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

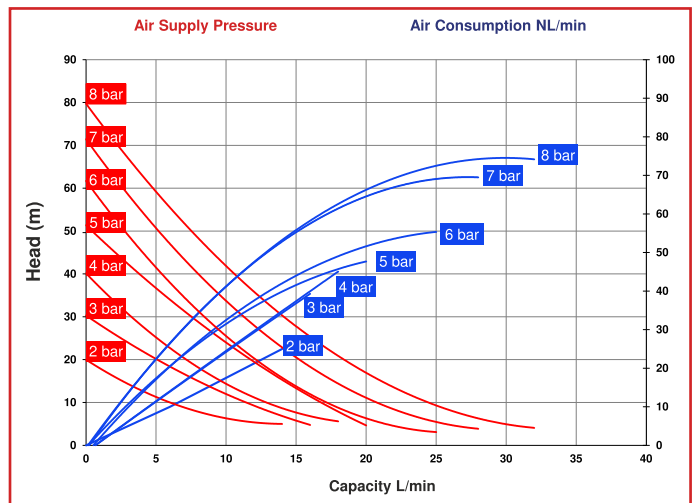
Technical data

Suction / Discharge connections	1/2" BSP F
Air connection	3/8" BSP F
*Max. flow rate	32 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3.0 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C , AISI 316: 95°C , ALUMINUM: 95°C
Noise Level	65 dB
Displacement per stroke	60 cc
Maximum Viscosity	15.000 cPs
Weight	PP: 2.1 Kg , PVDF: 3.0 Kg , AISI 316: 4.7 Kg , ALUMINUM: 2.2 Kg

Ruby 112



Performances Ruby 112



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.



Ruby 115

Construction materials: PP, PP+CF, PVDF+CF, AISI 316, ALUMINUM



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

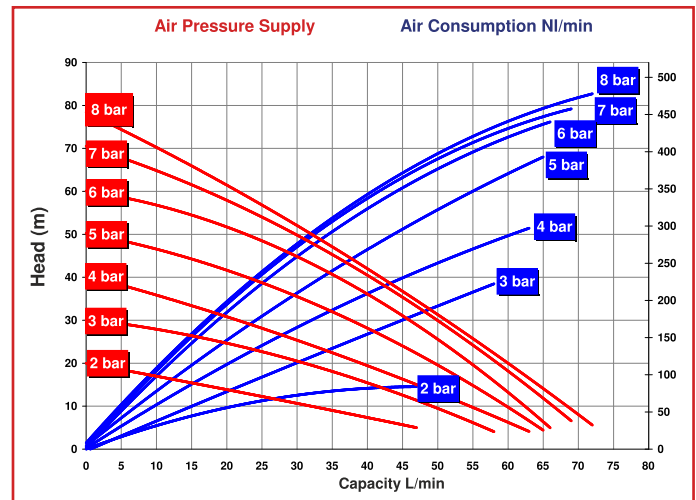
Technical data

Suction / Discharge connections	1/2" BSP F
Air connection	1/2" BSP F
*Max. flow rate	72 L/min
*Max. self-priming capacity - dry running	3 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C , AISI 316: 95°C , ALUMINUM: 95°C
Noise Level	72 dB
Displacement per stroke	95 cc
Maximum Viscosity	20.000 cPs
Weight	PP: 4.0 Kg , PVDF: 5.5 Kg , AISI 316: 9.0 Kg , ALUMINUM: 6.0 Kg

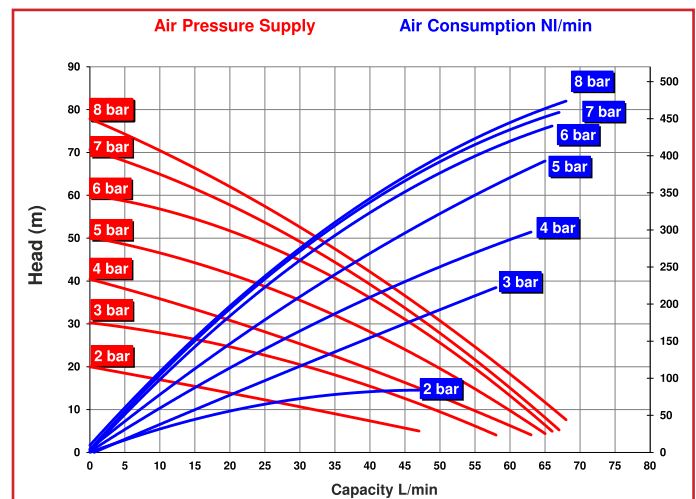
Ruby 115



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 120

Construction materials: PP, PP+CF, PVDF+CF, AISI 316, ALUMINUM



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

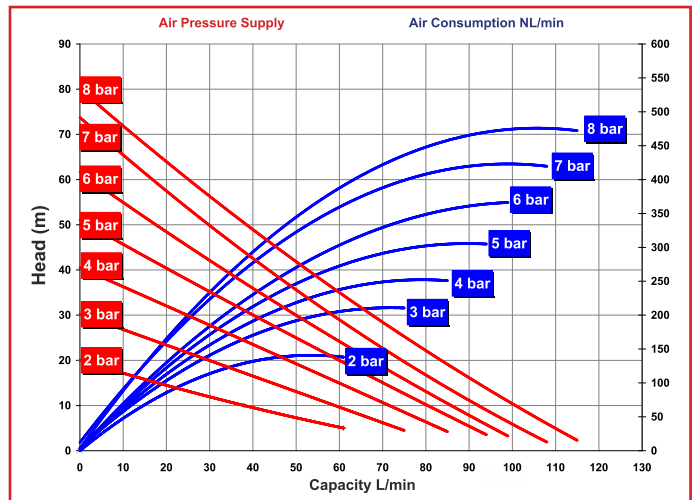
Technical data

Suction / Discharge connections	3/4" BSP F
Air connection	1/2" BSP F
*Max. flow rate	115 L/min
*Max. self-priming capacity - dry running	3 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C , AISI 316: 95°C , ALUMINUM: 95°C
Noise Level	75 dB
Displacement per stroke	95 cc
Maximum Viscosity	25.000 cPs
Weight	PP: 4.0 Kg , PVDF: 5.5 Kg , AISI 316: 9.0 Kg , ALUMINUM: 6.0 Kg

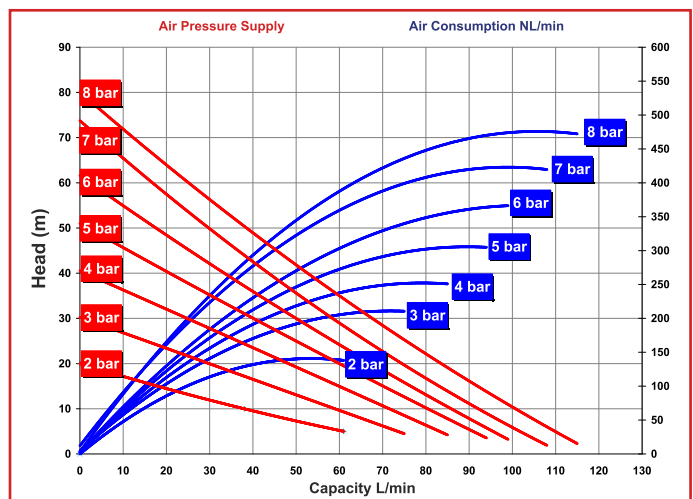
Ruby 120



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.

Ruby 025

Construction materials: **PP, PP+CF**



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

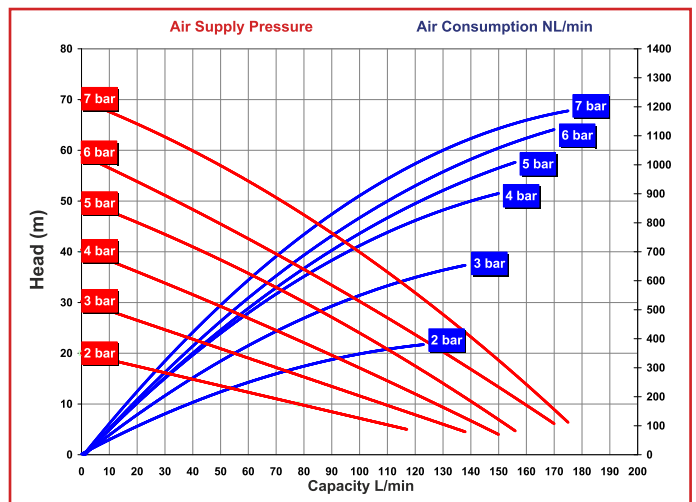
Technical data

Suction / Discharge connections	1" BSP F
Air connection	1/2" BSP F
*Max. flow rate	175 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 7 bar
Max. size of solids	3.5 mm
Max. operating Temperature	PP: 60°C
Noise Level	75 dB
Displacement per stroke	350 cc
Maximum Viscosity	35.000 cPs
Weight	PP: 6.0 Kg

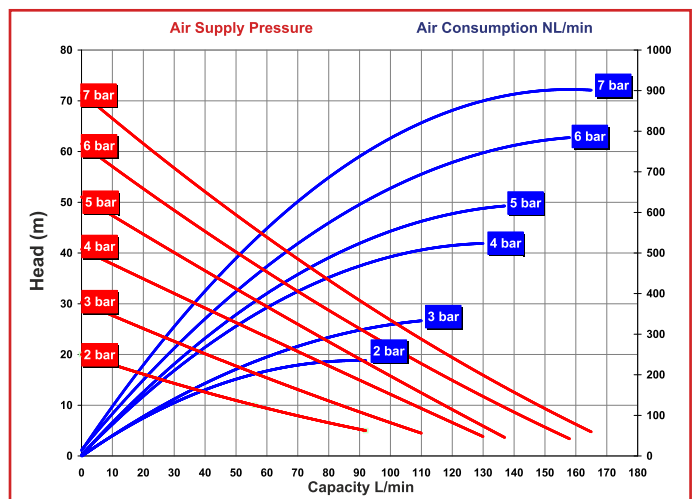
Ruby 025



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 125

Construction materials: PP, PP+CF, PVDF+CF, AISI 316, ALUMINUM

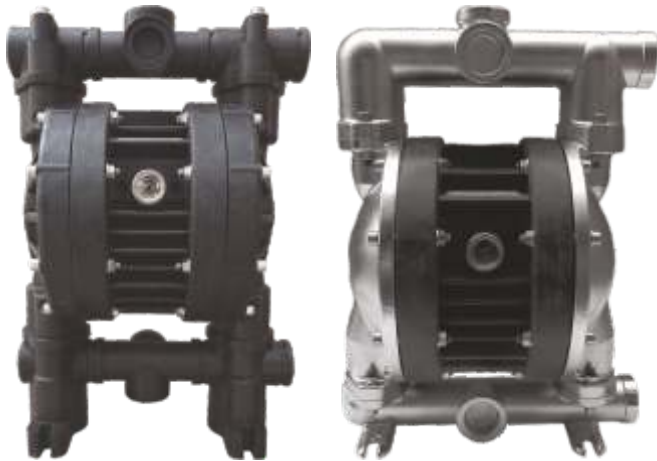


Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

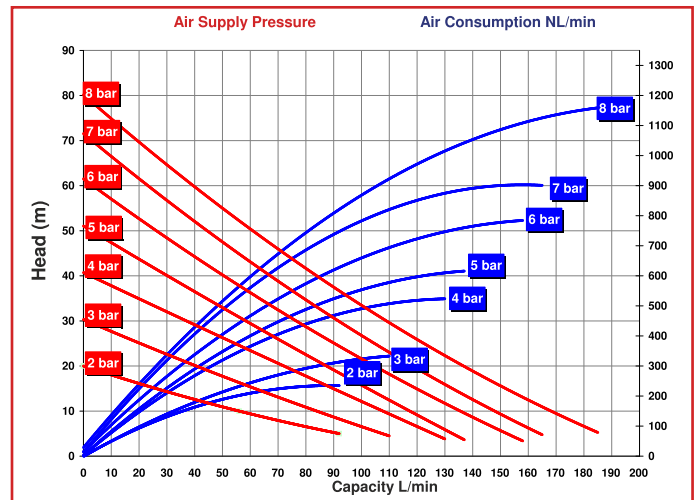
Technical data

Suction / Discharge connections	1" BSP F
Air connection	1/2" BSP F
*Max. flow rate	185 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3.5 mm
Max. operating Temperature	PP: 60°C , PVDF - AISI 316 - ALUMINUM: 95°C , w/metallic center block: 130°C
Noise Level	75 dB
Displacement per stroke	350 cc
Maximum Viscosity	35.000 cPs
Weight	PP: 6.0 Kg , PVDF: 7.0 Kg , AISI 316: 14.0 Kg , ALUMINUM: 8.0 Kg

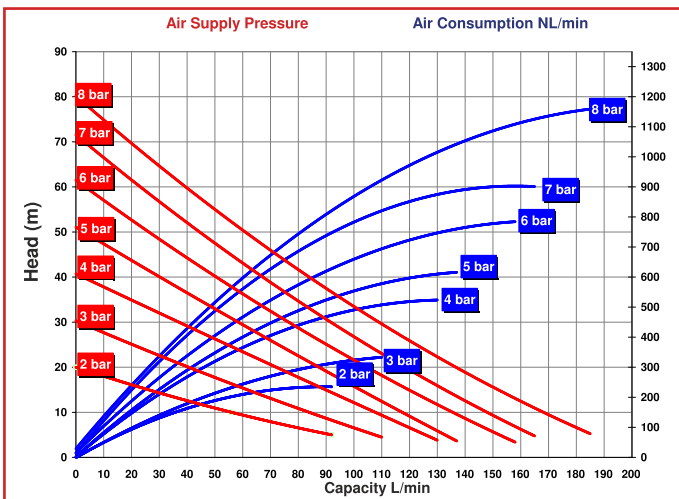
Ruby 125



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.

Ruby 126

Construction materials: **PP, PP+CF, PVDF+CF**



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

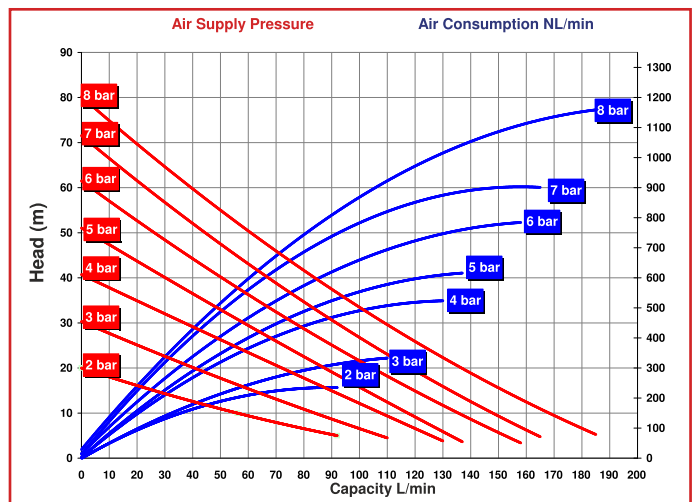
Technical data

Suction / Discharge connections	1" Flange DN 25 / ANSI 25
Air connection	1/2" BSP F
*Max. flow rate	185 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3.5 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C
Noise Level	75 dB
Displacement per stroke	350 cc
Maximum Viscosity	35.000 cPs
Weight	PP: 7.0 Kg , PVDF: 8.0 Kg

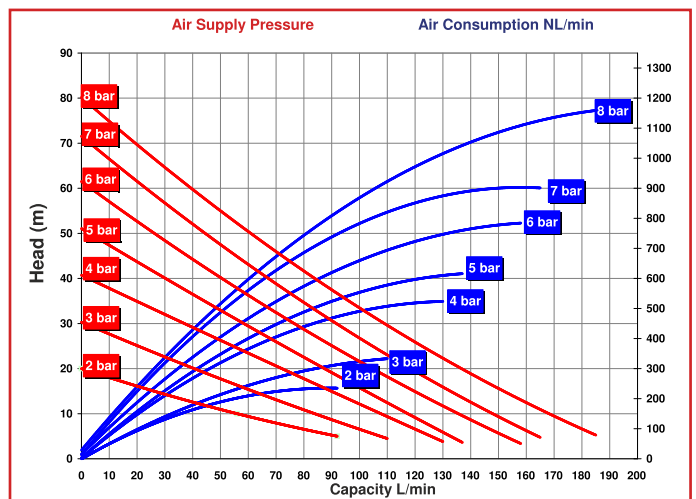
Ruby 126



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 140

Construction materials: PP, PP+CF, PVDF+CF, AISI 316, ALUMINUM

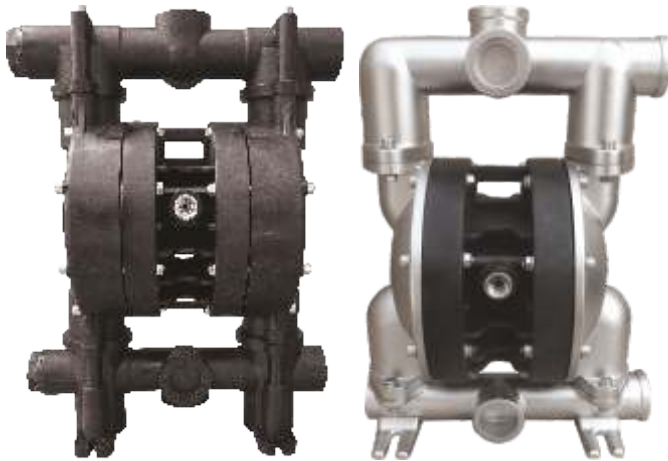


Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

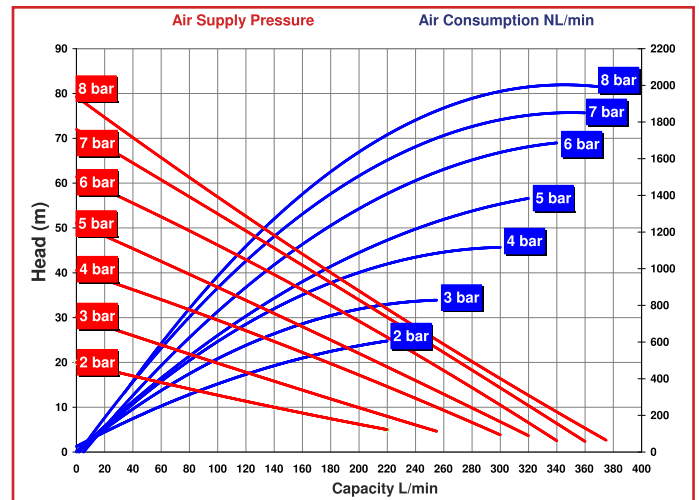
Technical data

Suction / Discharge connections	1 1/2" BSP F
Air connection	1/2" BSP F
*Max. flow rate	380 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	5 mm
Max. operating Temperature	PP: 60°C , PVDF - AISI 316 - ALUMINUM: 95°C , w/metallic center block: 130°C
Noise Level	78 dB
Displacement per stroke	700 cc
Maximum Viscosity	50.000 cPs
Weight	PP: 14.0 Kg , PVDF: 22.0 Kg , AISI 316: 26.0 Kg , ALUMINUM: 14.0 Kg

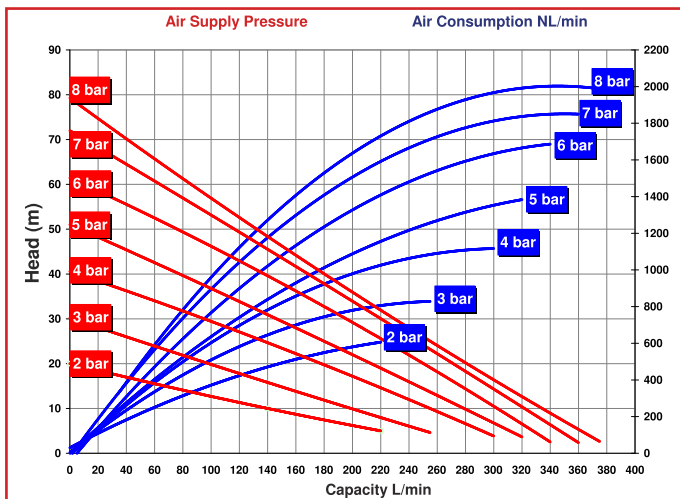
Ruby 140



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.

Ruby 141

Construction materials: **PP, PP+CF, PVDF+CF**



Zone 2 - Zone 22
Zone 1 - Zone 21
Zone M2

II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
I M2 Ex h I Mb

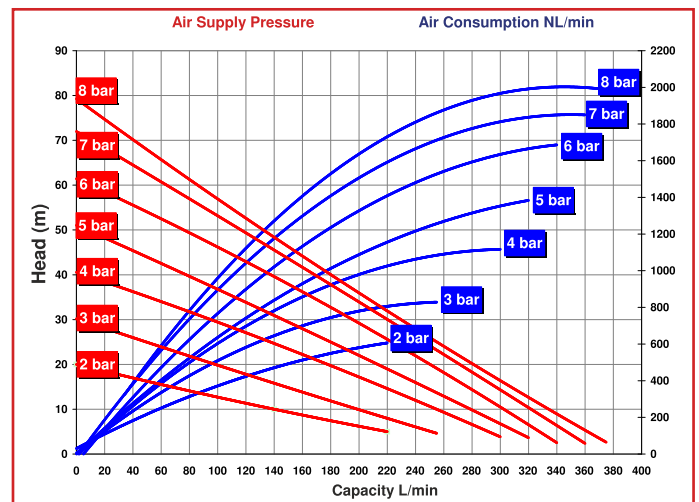
Technical data

Suction / Discharge connections	1 1/2" Flange DN 40 / ANSI 40
Air connection	1/2" BSP F
*Max. flow rate	380 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	5 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C
Noise Level	78 dB
Displacement per stroke	700 cc
Maximum Viscosity	50.000 cPs
Weight	PP: 14.0 Kg , PVDF: 22.0 Kg

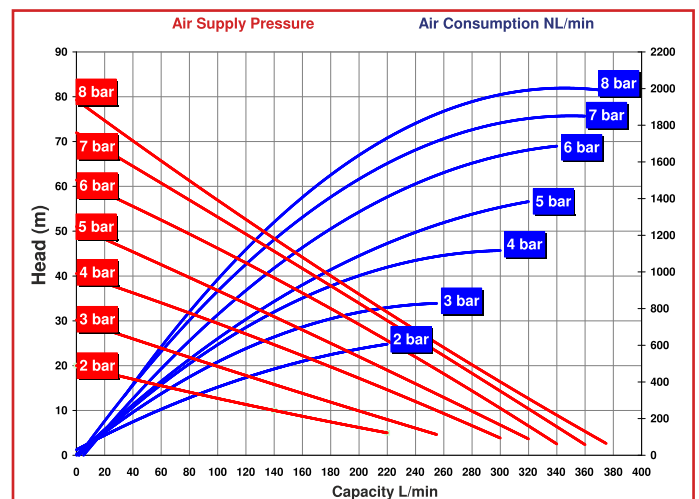
Ruby 141



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according to the construction material.

Ruby 150

Construction materials: **AISI 316, ALUMINUM**



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

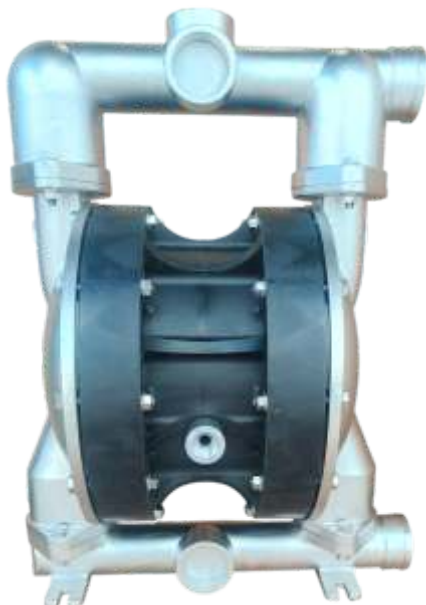
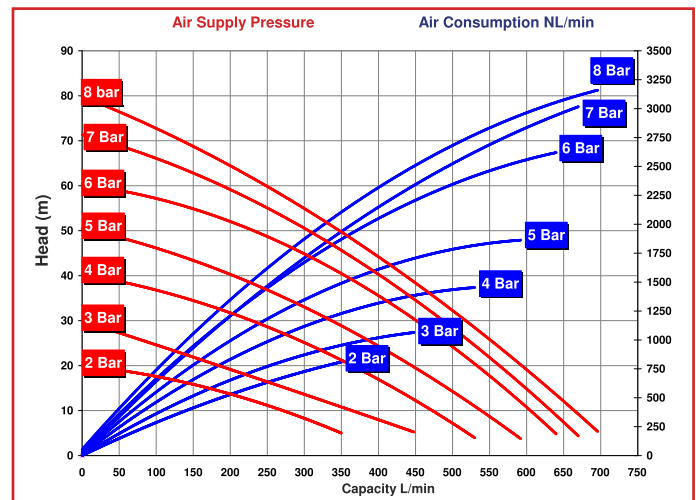
Technical data

Suction / Discharge connections	2" BSP F
Air connection	3/4" BSP F
*Max. flow rate	696 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	8 mm
Max. operating Temperature	AISI 316 - ALUMINUM: 95°C , w/metallic center block: 130°C
Noise Level	78 dB
Displacement per stroke	2.000 cc
Maximum Viscosity	50.000 cPs
Weight	AISI 316: 64.0 Kg , ALUMINUM: 35.0 Kg

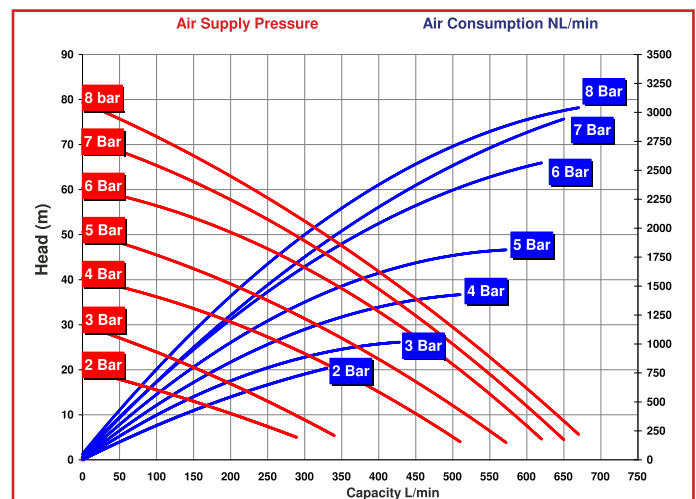
Ruby 150



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 151

Construction materials: **PP, PP+CF, PVDF+CF**



Zone 2 - Zone 22
Zone 1 - Zone 21
Zone M2

II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
I M2 Ex h I Mb

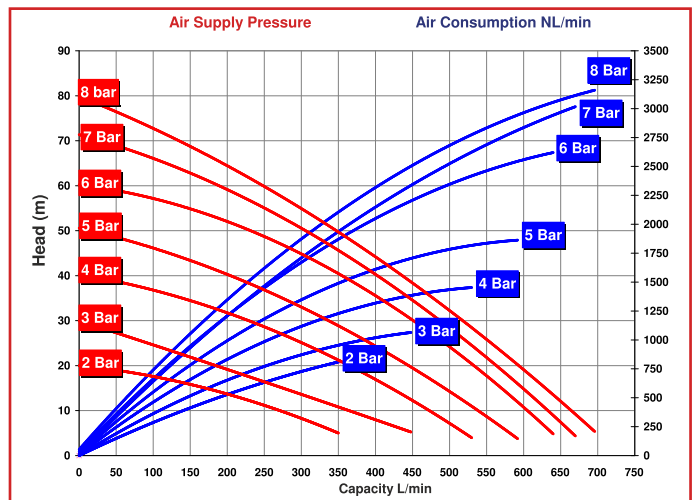
Technical data

Suction / Discharge connections	2" BSP F
Air connection	3/4" BSP F
*Max. flow rate	696 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	8 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C
Noise Level	78 dB
Displacement per stroke	2.000 cc
Maximum Viscosity	50.000 cPs
Weight	PP: 40.0 Kg , PVDF: 48.0 Kg

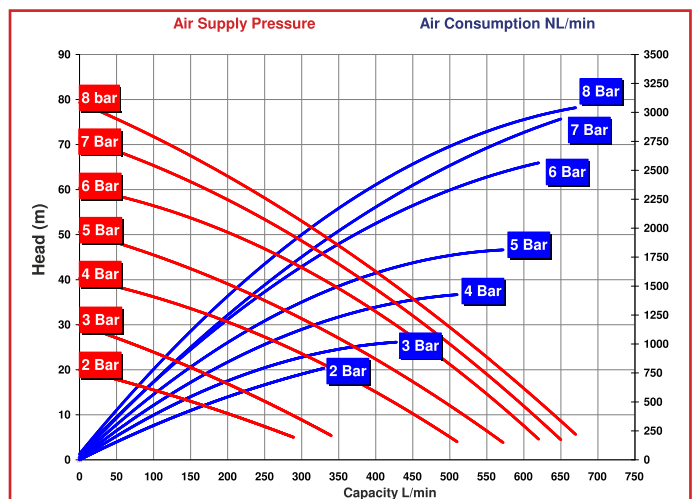
Ruby 151



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 180

Construction materials: **AISI 316, ALUMINUM**



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
 Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
 Zone M2 I M2 Ex h I Mb

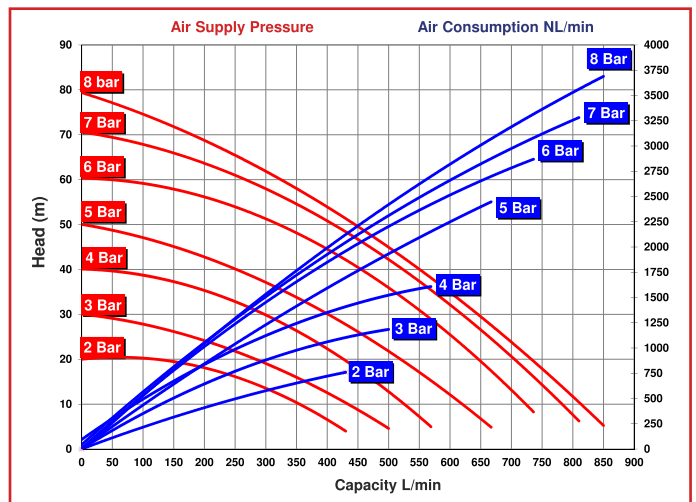
Technical data

Suction / Discharge connections	3" BSP F
Air connection	3/4" BSP F
*Max. flow rate	850 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	8 mm
Max. operating Temperature	AISI 316 - ALUMINUM: 95°C , w/metallic center block: 130°C
Noise Level	80 dB
Displacement per stroke	2.000 cc
Maximum Viscosity	60.000 cPs
Weight	AISI 316: 88.0 Kg , ALUMINUM: 50.0 Kg

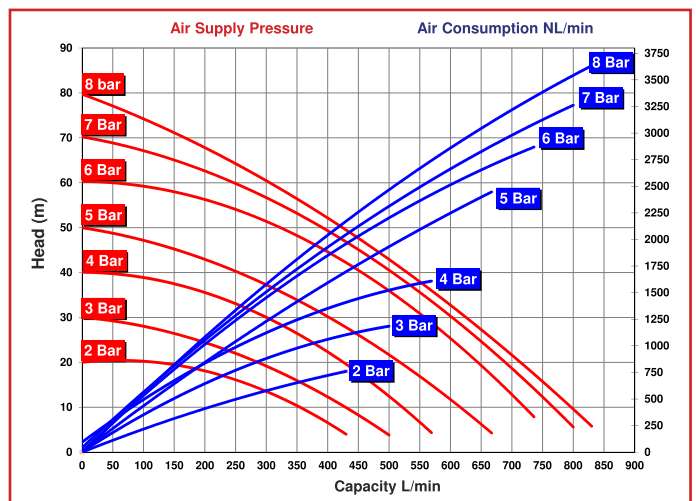
Ruby 180



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Ruby 181

Construction materials: **PP, PP+CF, PVDF+CF**



Zone 2 - Zone 22
Zone 1 - Zone 21
Zone M2

II 3G Ex h IIB T4 Gc - II 3D Ex h IIIB T135°C Dc
II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db
I M2 Ex h I Mb

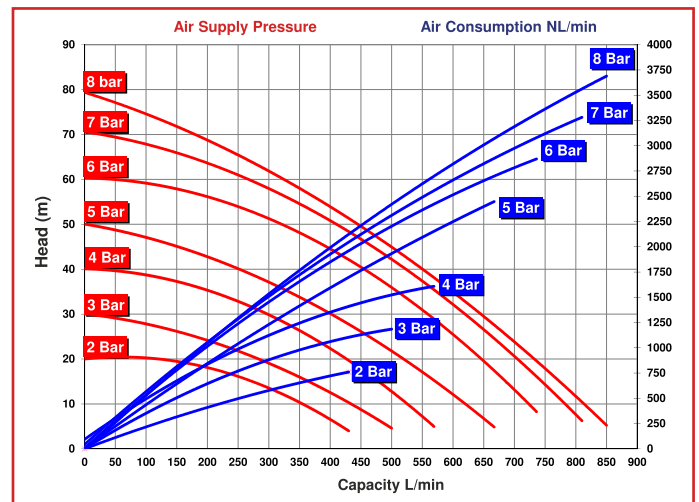
Technical data

Suction / Discharge connections	3" BSP F
Air connection	3/4" BSP F
*Max. flow rate	850 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	10 mm
Max. operating Temperature	PP: 60°C , PVDF: 95°C
Noise Level	80 dB
Displacement per stroke	2.000 cc
Maximum Viscosity	60.000 cPs
Weight	PP: 50.0 Kg , PVDF: 67.0 Kg

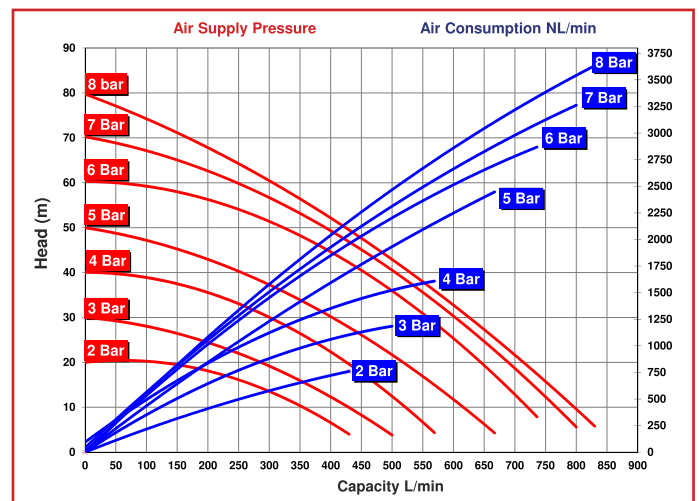
Ruby 181



Performances Rubber Fitted



Performances PTFE+A Fitted



* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

Line Introduction

ADPD Pulsation Dampeners

Diaphragm pumps often produce pulsating fluid flows, which lead to unstable pressure levels. To counteract these fluctuations during the discharge phase, pneumatic pulsation dampeners serve as the most effective solution. By significantly lowering fluid surges and water hammer effects, these devices also minimize vibrations within the pump itself.

Built with advanced technology, ADPD pulsation dampeners can suppress up to 90% of the flow's pulsation. Because they feature an automatic self-adjusting mechanism, they require no manual pre-loading or calibration, seamlessly adapting to the real-time fluid behavior inside the delivery pipelines.

Main Advantages

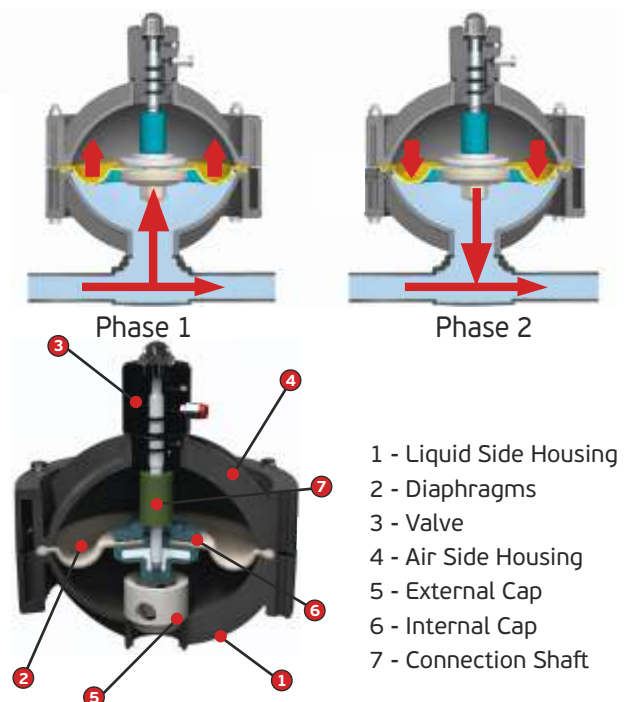
Available in PP, PP+CF, PVDF+CF, PPS-V, ALUMINUM and STAINLESS STEEL 316 versions.

- **Smooth Flow:** Convert the pump's pulsating discharge into a steady, continuous stream.
- **System Protection:** Absorb water hammer effects, protecting pipes, joints and instruments from damage.
- **Less Vibration & Noise:** Stabilize the pipeline network and drastically reduce operational noise.
- **Extended Equipment Life:** Minimize wear and tear on pump parts (diaphragms, valves), lowering maintenance costs.
- **Accurate Metering:** Ensure precise and stable readings on flow meters and pressure sensors.
- **Self-Regulation:** Automatically adapt to pressure changes without manual calibration.
- **Heavy-Duty:** Engineered specifically for highly demanding applications.
- **ATEX Certified:** Safe for use in potentially explosive environments.
- **Eco-Friendly Air:** Runs on non-lubricated compressed air (2 – 8 BAR).
- **Easy Maintenance:** Quick, user-friendly parts replacement.
- **High Value:** Delivers excellent performance and cost-efficiency.

How it works

A pulsation dampener acts as a shock absorber for piping networks, converting a pump's choppy, pulsating discharge into a steady, smooth flow through a simple two-phase process.

- **Phase 1:** Pressure Peak (Pump Discharge) As the pump forces fluid into the pipe, a high-pressure spike occurs. The excess fluid pushes into the dampener, forcing the diaphragm upward and compressing the air cushion, which absorbs the shock energy.
- **Phase 2:** Pressure Drop (Pump Rest) When the pump pauses to stroke or refill, line pressure drops. The compressed air cushion instantly expands, pushing the diaphragm back down and forcing the stored fluid back into the pipeline.



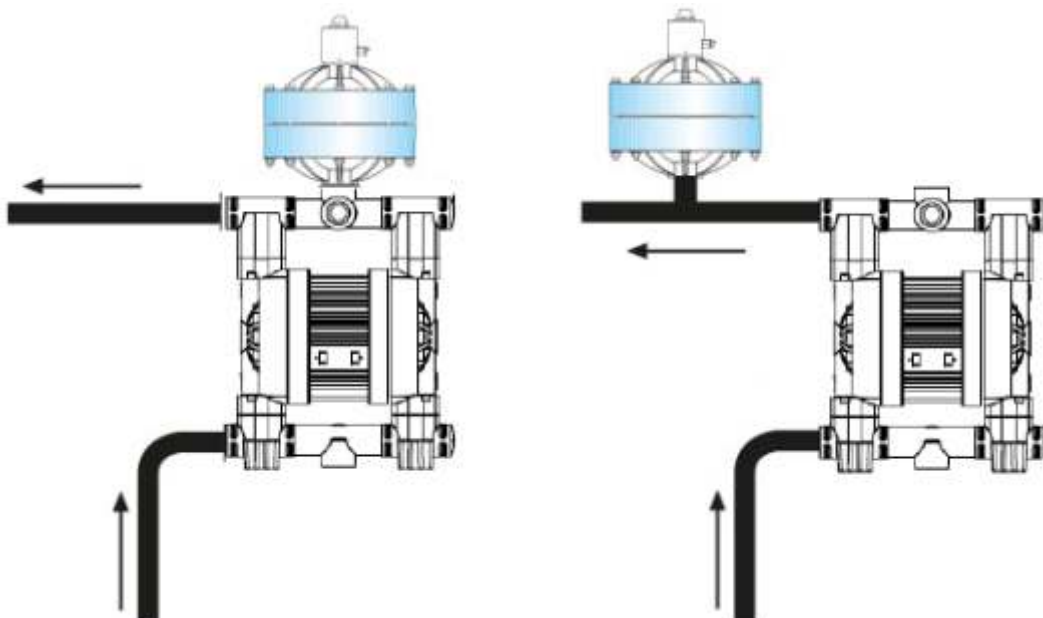
Models

ADPD Models	Material	Air Connection	Liquid Connection	Pump Model	Weight
100 Non Metallic	PP - PP+CF PVDF - PPS-V	Ø 6mm	G 3/4" f	Mini 005 - Ruby 008/010/112	PP - PP+CF: 0.5 Kg - PVDF: 0.6 Kg - PPS-V: 0.6 Kg
100 Metallic	AISI 316	Ø 6mm	G 1/2" f	Ruby 010/112	AISI 316: 1.3 Kg
200 Non Metallic	PP - PP+CF PVDF - PPS-V	Ø 6mm	G 1" f	Ruby 115/120	PP - PP+CF: 1.5 Kg - PVDF: 1.7 Kg - PPS-V: 1.7 Kg
200 Metallic	AISI 316	Ø 6mm	G 1" f	Ruby 115/120	AISI 316: 2.5 Kg
300 Non Metallic	PP - PP+CF PVDF - PPS-V	Ø 6mm	G 1 1/2" f	Ruby 025/125/126/140/141	PP - PP+CF: 3.8 Kg - PVDF: 4.5 Kg - PPS-V: 4.5 Kg
300 Metallic	AISI 316	Ø 6mm	G 1 1/2" f	Ruby 140	AISI 316: 7.5 Kg
400 Non Metallic	PP - PVDF	Ø 8mm	G 2" f	Ruby 151	PP - PP+CF: 23 Kg - PVDF: 29 Kg
400 Metallic	AISI 316 - ALUMINUM	Ø 8mm	G 2" f	Ruby 150	AISI 316: 7.5 Kg - ALUMINUM: 26 Kg
500 Non Metallic	PP - PVDF	Ø 8mm	G 3" f	Ruby 181	PP - PP+CF: 23 Kg - PVDF: 29 Kg
500 Metallic	ALUMINUM	Ø 8mm	G 3" f	Ruby 180	ALUMINUM: 29 Kg



Installation

ADPD pulsation dampeners should be installed on the discharge side of the pump or wherever pressure surges occur.



Line Introduction

Pump Protecting Basket Strainers are manufactured from high-quality, corrosion-resistant materials, ensuring long service life and minimal maintenance requirements, even under the most demanding operating conditions.

These strainers are ideal for a wide range of industrial applications, including the chemical industry, water treatment, aquaculture, electroplating, leather and textile manufacturing, paper and printing industries and many other sectors where operational efficiency and equipment protection are essential.

Main Advantages

- Designed and manufactured in Greece
- No metal parts
- Easy basket inspection and removal
- Constructed from PP and PVDF
- Operating pressure: 1 bar
- Available sizes: 1 1/2" F , 2" F , 2 1/2" F , 3" F

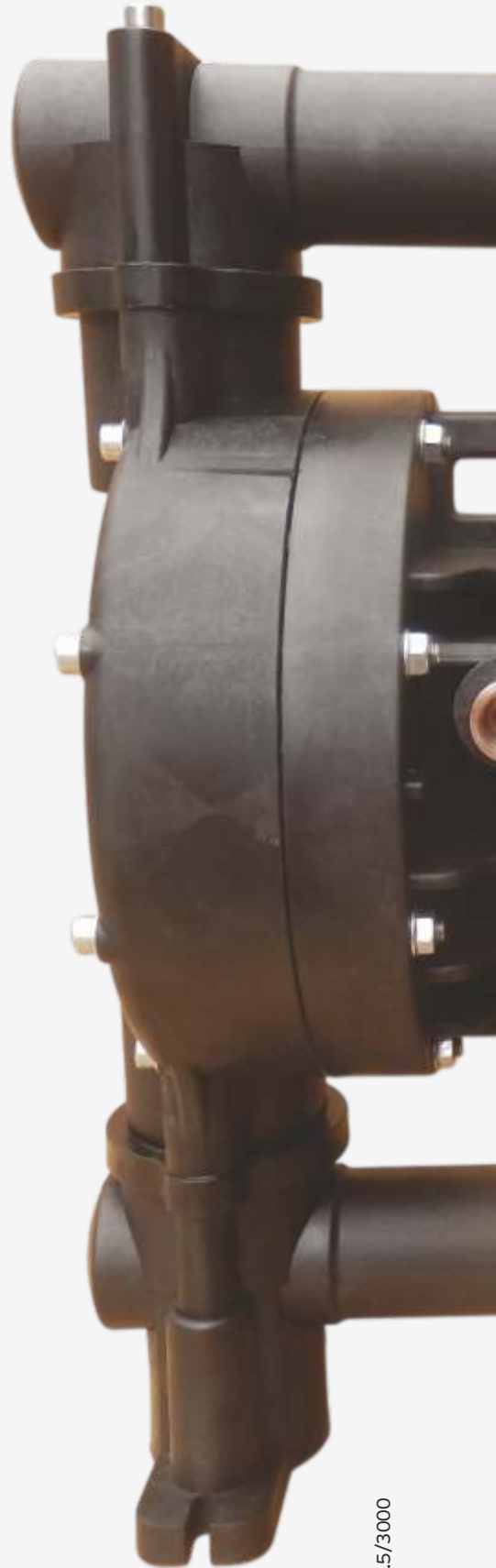




We Make The Difference

Headquarters / Factory:

AlphaDynamic Pumps SA
59 Km Nat. Road Athens - Lamia
Industrial Park of Inofita Viotia
32011 - Inofita Viotia - Greece
VAT No. EL 999695309
Commercial Registry: 045001607000
Tel.: +30 215 215 9520
e-mail: sales@alphadynamic.eu



www.alphadynamic.eu

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