



Black Line Air Operated Diaphragm Pumps

Model 1"

Construction materials: SS Body, PP Center Section

New pump line with a brand new designing that offers reinforced pumping potentials. The updated designing provides even bigger performance provided with economy.



II 2/2 G/D Ex h IIC T4 Gb/Db
I M2 Ex h Mb



Features

- ✓ Optimal performance
- ✓ Economical air consumption, ecological designing
- ✓ High efficiency for pressure/capacity • Oil free operation
- ✓ No freezing
- ✓ New air valve designing, fully controlled air passing
- ✓ Easy disassembling and re-assembling
- ✓ New generation diaphragms with embodied inner-outer piston
- ✓ New generation PTFE diaphragms of embodied type for long-life operation (compound)
- ✓ Advanced quality Full capacity PTFE-A diaphragms for high chemical and mechanical applications
- ✓ Potential to be submersible (on request)
- ✓ Possibility to be used in dirty environments due to their closed designing
- ✓ Easy manifold reverse
- ✓ Automatic suction
- ✓ Twin manifold option (two suction and two delivery)
- ✓ Excellent performance and value for money
- ✓ Ideal for abrasive, viscous, and shear sensitive media

BlackLine Nomenclature

Pump model	Pump Body	Center block	Diaphragms	Ball Seats	Balls	O-ring	Other Options
BlackLine 115	P : PP PC : PP+CF V : PVDF+CF A: ALUMINUM AL-233	P: PP PC : PP+CF	N: NBR Conductive E: EPDM Conductive F: VITON Conductive T: Compound PTFE+EPDM Conductive	N: NBR E: EPDM P: PP V: PVDF A: ALUMINUM S: AISI 316	N: NBR E: EPDM T: PTFE S: SS 316	N: NBR E: EPDM T: PTFE F: VITON	D: Twin Manifold F: Flange PN10/ANSI/JIS

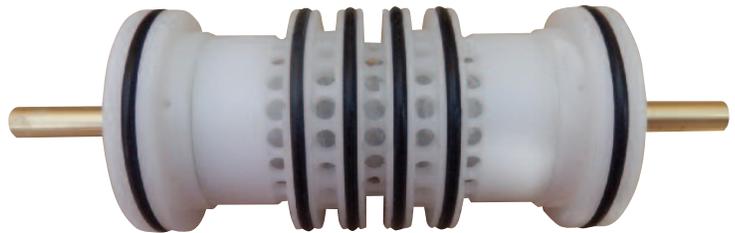


BlackLine Air Operated Diaphragm Pumps

BlackLine oil free air valve

The heart of the BlackLine pump is our innovative, new design air valve. In respect for New Era demands, to create and offer High Quality product, with high interest for the environment and it's protection, the Air Valve of the BlackLine Diaphragm Pumps has been created to offer:

- ✓ Non freezing operation
- ✓ Low need for maintenance
- ✓ Not affected by minor contamination of compressed air
- ✓ Significant energy saving
- ✓ Oil free operation
- ✓ External environment operation
- ✓ No dead centre
- ✓ Long life
- ✓ Reliable



Advanced Melded Diaphragms Features

The heart of the BlackLine pump is our innovative, new design air valve. In respect for New Era demands, to create and offer High Quality product, with high interest for the environment and it's protection, the Air Valve of the BlackLine Diaphragm Pumps has been created to offer:

- ✓ Easy installation and maintenance
- ✓ Excellent service life
- ✓ Inventory cost reduction
- ✓ Improved performance
- ✓ Greater displacement per cycle
- ✓ No center hole, elimination of potential leak paths.
- ✓ There is no need for the main axis to be insured
- ✓ They can be screwed and unscrewed without the use of tools



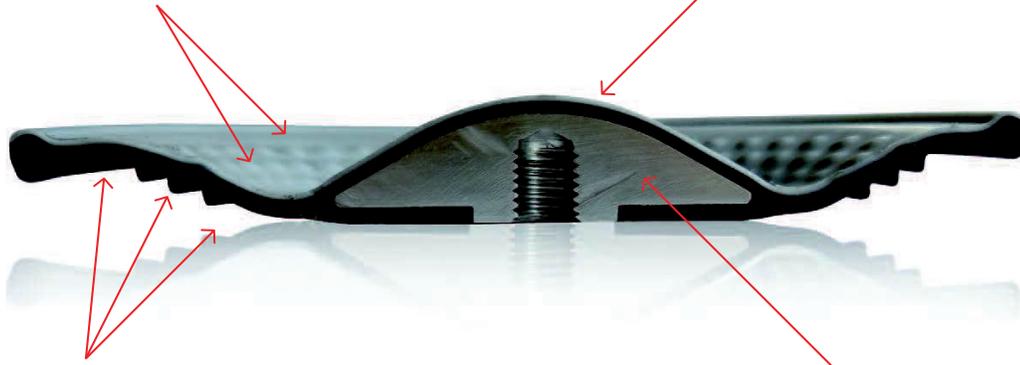


Black Line Air Operated Diaphragm Pumps

Advanced Melded Diaphragm Details

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.

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

Advanced Melded Diaphragm Spec

ATEX Certifications	  STANDARD : II 3/3 G/D Ex h IIB T4 Gc/Dc CONDUCT : II 2/2 G/D Ex h IIC T4 Gb/Db – I M2 Ex h Mb
Construction	SS 316-Body, PP-Center Section
Material Diaphragms	T: Compound PTFE + Backup (EPDM Conductive)
Intake/delivery connections	1" BSP with Type F Male PP Camlock adapters included
Air connection	1/2" with NPT Adapter included
*Max. flow rate	46 Gpm (175 Ltr/m)
*Max. flow pressure	101 Psi (7 Bar)
Operating pressure	Min 29 Psi (2 Bar) - Max 101 Psi (7 bar)
Max. suction head (Dry)	13 Ft (4 Mtr)
Max. size of solids	~9/64 In (3.5 mm)
Max. operating	SS 203°F (95°C)
Temperature	203°F (95°C)
Weight SS 316	31 Lbs (14.0 Kg)

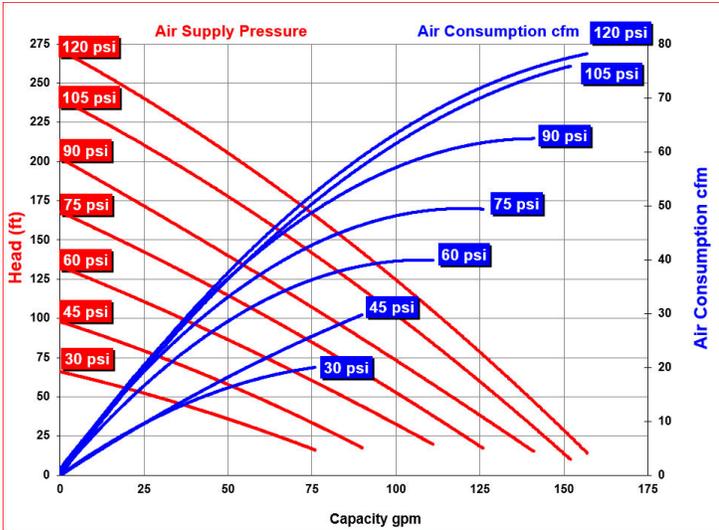
* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 68°F (20°C), and vary according to the construction material.



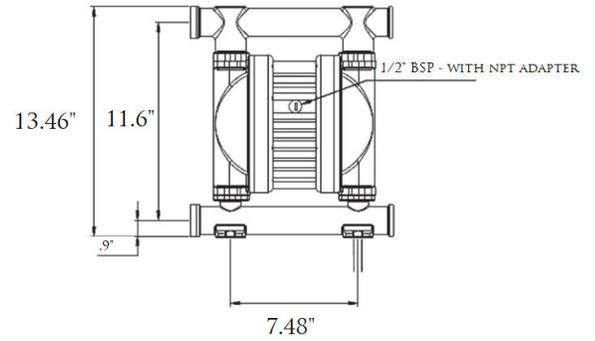
BlackLine Air Operated Diaphragm Pumps

Melded Diaphragm Performance

Performance Curve



Front View



Side View

