

DEBEM

Model B503 Plastic Air Operated Diaphragm Pump

Flow Rates to 900 LPM (238 GPM), Pressure to 70 Meters (99.7 PSI)

DESCRIPTION

B503 plastic diaphragm pumps are characterized by exceptional performance, power and strength, making them ideal for pumping liquids with very high apparent viscosity up to 50000 cps (at 20°C), even if containing suspended solids.

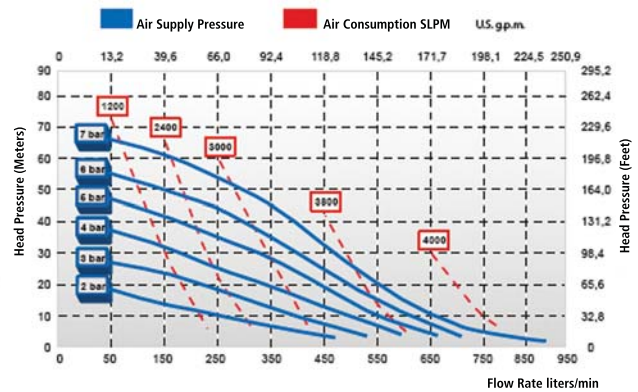
The stall-prevention pneumatic system assures a safe running pump and it does not require lubricated air. Self-priming dry capacity even with considerable suction head, fine tuning of speed without pressure loss and the possibility of dry operation without suffering damage mean that these pumps offer unrivalled versatility.

In addition, the huge choice of construction materials allows selection of optimum chemical compatibility with the fluid and/or environment without neglecting the temperature range.

They are specifically designed for demanding applications with high humidity or in potentially explosive atmospheres (ATEX certification).



FLOW CURVES B503 Polypropylene



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.

SPECIFICATIONS

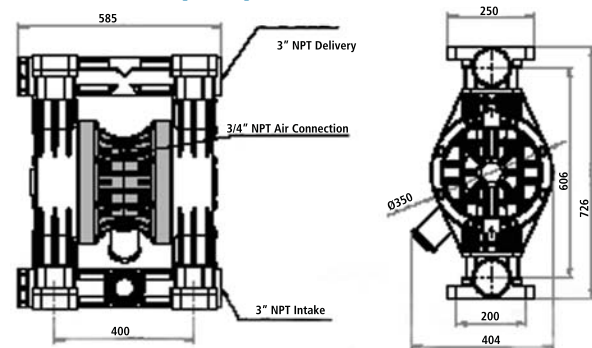
- Pump Body Materials: PP, PVDF
- Intake/delivery Connections: 3" NPT Female
- Air Connection: 3/4" NPT Female
- Max. Self-Priming Capacity: 5 meters (16.4 ft)
- Max. Flow Rate: 900 l/min (238 GPM)
- Max. Head: 70 m (99.7 PSI)
- Max. Air Supply Pressure: 7 bar (102 PSI)
- Max. Diameter of Passing Solids: 10 mm (0.394")
- Net Weight: PP, 50 Kg; PVDF, 67 Kg
- Max Temperature: PP, 60°C (140°F); PVDF, 95°C (203°F)

ATEX Ratings:

STANDARD version: Made from non-conductive plastic and/or with non-conductive center casing or from metal with non-conductive center casing.

ATEX Classification Ⓜ II 3/3 GD c IIB T135°C (for zone 2)
 CONDUCT version: Built with pump casings and/or manifolds (PP + carbon fiber, ECTFE/PVDF + carbon fiber), made from conductive plastic and metal materials (aluminium, stainless steel). Ⓜ II 2/2 GD c IIB T135°C (for zone 1)

DIMENSIONS (MM)



ORDERING INFORMATION

ABCDEFGH

Example: B503FCMTTFV

A Model	B Pump Body	C Air Side Diaphragm	D Fluid Side Diaphragm	E Balls	F Ball Seats	G O Rings	H Options
B503	P= Polypropylene FC= PVDF+CF	*H= Hytrel® M= Santoprene® *Hytrel not available with PVDF pump body	T= PTFE	N= NBR A= AISI 316 T= PTFE D= EPDM Pump Body Polypropylene PVDF Balls T,D,N T	P= Polypropylene F= PVDF I= PE-UHMV Pump Body Polypropylene PVDF Ball Seats P, I F	D= EPDM V= Viton	= None X= Twin Manifold C= CONDUCT ATEX Rating