

DEBEM

Models B80/B81 Air Operated Diaphragm Pumps

Flow Rates to 100 LPM (26.4 GPM), Pressure to 70 Meters (99.7 PSI)

DESCRIPTION

B80/B81 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).

SPECIFICATIONS

- Pump Body Materials: PP, PVDF, Aluminum, AISI 316
- Intake/delivery connections: 1" NPT Female
- Air Connection: 3/8" NPT Female
- Max. Self-Priming Capacity: 6 meters (19.7 ft)
- Max. Flow Rate: 100 l/min (26.4 GPM)
- Max. Head: 70 m (99.7 PSI)
- Max. Air Supply Pressure: 7 bar (102 PSI)
- Max. Diameter of Passing Solids: 4 mm (0.157")
- Net Weight: PP, 5.0 Kg; PVDF, 6.5 Kg; Alu, 6.5 Kg; AISI316 10.5 Kg
- Max Temperature: PP, 60°C (140°F); PVDF, ALU, AISI 316, 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)

ORDERING INFORMATION

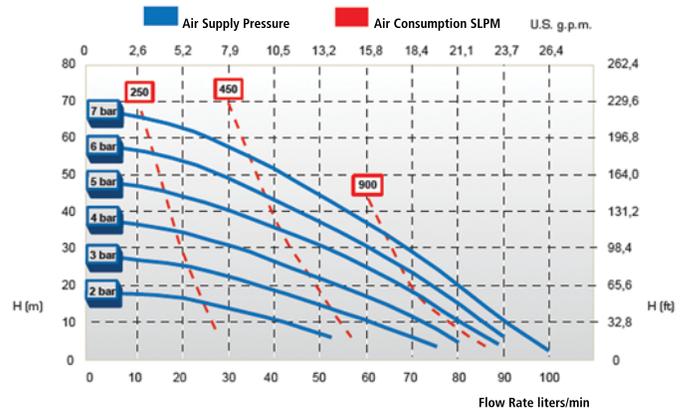
ABCDEFGG

Example: B80AHTTAT



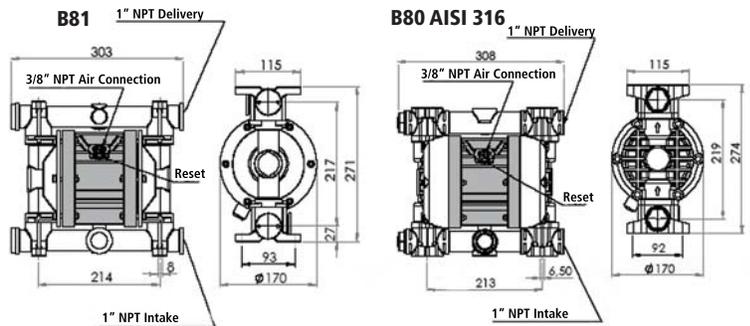
B80 PP

FLOW CURVES



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.

DIMENSIONS (MM)



A Model & Pump Body Material	B Air Side Diaphragm	C Fluid Side Diaphragm	D Balls	E Ball Seats	F O Rings	G Options
B81P= Polypropylene B81FC= PVDF+CF B81AL= Aluminum B80A= AISI 316	*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 T,D,N,A PVDF T,A Aluminum T,D,N,A AISI 316 SS A	P= Polypropylene F= PVDF E= ECTFE I= PE-UHMV A= AISI 316 L= Aluminum Pump Body Polypropylene P, A, I PVDF F, A Aluminum L, I AISI 316 SS A	D= EPDM V= Viton S= Silicone N= NBR T= PTFE	= None X= Twin Manifold C= CONDUCT ATEX Rating