# DEBEM Model B502 Metal Air Operated Diaphragm Pump

Flow Rates to 650 LPM (89.8 GPM), Pressure to 70 Meters (99.7 PSI)

# DESCRIPTION

B502 metal 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. Selfpriming 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: Aluminum, AISI 316 SS Intake/delivery Connections: 2" NPT Female Air Connection: 1/2" NPT Female Max. Self-Priming Capacity: 4 meters (13.17 ft) Max. Flow Rate: 650 l/min (89.8 GPM) Max. Head: 70 m (99.7 PSI) Max. Air Supply Pressure: 7 bar (102 PSI) Max. Diameter of Passing Solids: 8 mm (0.315") Net Weight: Al, 49 Kg; AISI 316, 54 Kg Max Temperature: 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)

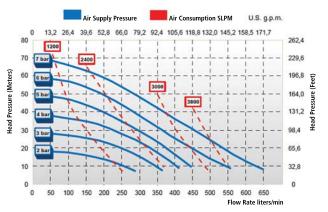
CONDUCT version: Built with pump casings and/or manifolds (PP + carbon fiber, ECTFE/PVDF + carbon fiber), made from conductive plastic and metal materials (aluminium, stainless steel). Il 2/2 GD c IIB T135°C (for zone 1)

## **ORDERING INFORMATION**

#### ABCDEFGH

Example: B502AHTTAT

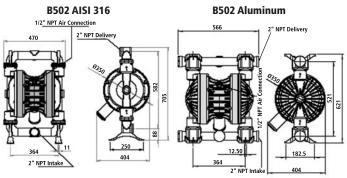
### **FLOW CURVES**



B502 Aluminum

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	B Pump Body	C Air Side Diaphragm	D Fluid Side Diaphragm	balls	F Ball Seats	G O Rings	H Options
B502	AL= Aluminum A= AISI 316	H= Hytrel <sup>®</sup> M= Santoprene <sup>®</sup>	T= PTFE	T= PTFE D= EPDM <u>Pump Body Balls</u> Aluminum T,D,N,A	D= EPDM I= PE-UHMV A= AISI 316 L= Aluminum <u>Pump Body Ball Seats</u> Aluminum L,D,I AISI 316 SS A	D= EPDM V= Viton S= Silicone N= NBR T= PTFE	-= None X= Twin Manifold C= CONDUCT ATEX Rating