

The Almatec[®] C-Series Air-Operated Double-Diaphragm (AODD) Pump is a cost-effective, reliable and superior-built alternative and features a solid design suitable for a wide array of pumping tasks. The distinctive and proven solid design provides the mass needed for an oscillating pump. The suction and discharge ports are available as separate housing parts. In addition to the standard connection, two further connection footprints are available to match existing installations. The ring tightening structure, good suction head, self-priming and dry run capability as well as the absence of drives, rotating parts and shaft seals are further features.

COST-EFFECTIVE SOLUTIONS

Almatec[®] C-Series A Cost-Effective Plastic AODD Pump with Almatec Quality



C -Series sizes C 10, C 15 and C 25 in conductive version.

- Air-operated double-diaphragm pump available in five sizes: C 10 (3/8"), C 15 (1/2"), C 25 (1"), C 40 (1-1/2"), and C 50 (2")
- Reliable ALMATEC solid-design construction
- Manifolds as separate housing parts
- High level of pump safety due to innovative ring-tightening structure
- Wetted housing materials PE or PTFE, also conductive (ATEX conformity)
- Diaphragms and ball valves made of EPDM and PTFE
- Maintenance and lubrication-free PERSWING P® air control system
- Wear parts compatible with other ALMATEC pumps
- Good suction head, self-priming, and dry-run capability
- No drives, no rotating parts, no shaft seals within fluid
- Stroke counting and diaphragm monitoring available as accessories
- Different connection options available to match to existing installations

FUNCTIONAL PRINCIPLE

The ALMATEC C-Series is based on the functional principle of double diaphragm pumps. The basic configuration consists of two external side housings with a center housing between them. Each of the side housings contains a product chamber which is separated from the center housing by a diaphragm. The two diaphragms are interconnected by a piston rod. Directed by an air control system, they are alternately subjected to compressed air so that they move back and forth. In the first figure, the compressed air has forced the left-hand diaphragm towards the product chamber and displaced the liquid from that chamber through the open valve at the top to the discharge port. Liquid is simultaneously drawn in by the right-hand diaphragm, thus refilling the second product chamber. When the end of the stroke is reached, it reverses automatically and the cycle is



repeated in the opposite direction. In the second figure, liquid is drawn in by the left-hand diaphragm and displaced by the right-hand diaphragm. The liquid is displaced – and thus conveyed – by the compressed air. The diaphragms merely serve as barriers and are not pressurized, this is of critical importance for the service life of the diaphragms.

APPLICATIONS

- Sludges
- Acids
- Alkalis
- Solvents
- Slurries
- Emulsions
- Mixtures of liquids and solids

- Resins
- Powders
- Aqueous solutions
- Paints, inks
- Chemical industry
- Ceramics
- Surface treatment

- Mechanical engineering
- Textile industry
- Water processing
- Waste disposal
- Paper industry
- Electroplating
- Refineries

