

Brand Portfolio

SAFETY. QUALITY. RELIABILITY.



ALMATEC®

Where Innovation Flows

SAFETY. QUALITY.
RELIABILITY.

ALMATEC®

Offering one of the most comprehensive production programs of AODD pumps in the world, Almatec® can be found across the globe in the most difficult and critical pumping applications. The main markets where Almatec pumps are increasingly used are chemical process, semiconductor, solar, battery, ceramic, hygienic, paint & coatings, paper and water treatment.



CHEMICAL



SEMICONDUCTOR



SOLAR



BATTERY



CERAMIC



HYGIENIC



PAINT & COATINGS



PULP & PAPER

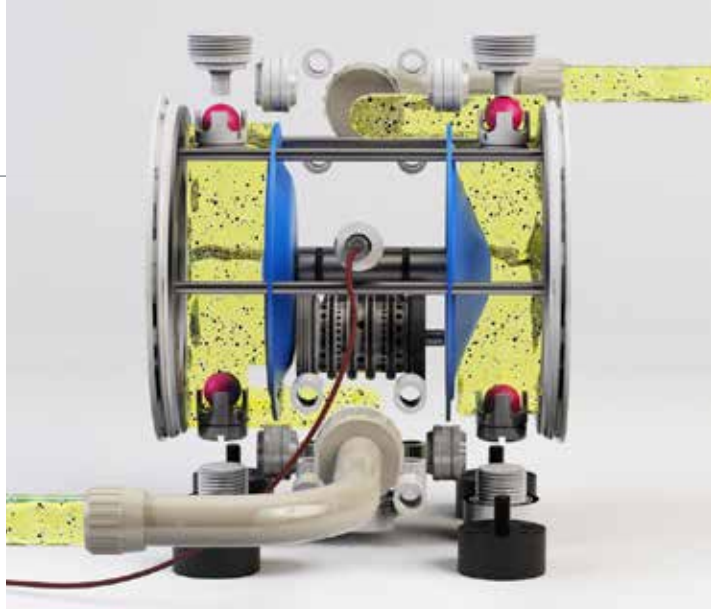


WATER/WASTEWATER

The Almatec® Advantage

Functional Principle

Based on the functional principle of double-diaphragm pumps, the basic configuration of Almatec pumps consists of two external side housings with a center housing between them. Each of the side housings contains a product chamber that 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 figure to the right, 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. The 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.



AHD Series

The working principle of the Almatec high-pressure AHD Series is the same, but these pumps have a pressure booster centered between the diaphragms that more than doubles the air pressure in the two product chambers. The FUTUR Series also uses the same operational principle, featuring two pairs of air and liquid chambers separated by diaphragms that are moved by air. However, these pumps are "internal-flow" pumps, which means they have a reversed pattern of fluid in the center and air on the sides. The straight-through flow pattern allows the presence of just one wetted housing part.

Features & Benefits

Almatec AODD pumps meet or exceed industry quality requirements and incorporate the standard-setting features and benefits our customers have come to demand: a solid design, the energy-efficient PERSWING P® Air Control System, cutting-edge diaphragms and best-in-class materials of construction.

- Solid-body construction with a high safety level due to a ring-tightening structure
- Material selection options with corrosive and abrasion resistance for pump housings and internals
- Conductive models for explosion-proof areas and flammable liquids (ATEX conformity)
- Maintenance and lubrication-free PERSWING P® Air Control System
- Diaphragms with integrated metal core, no diaphragm discs
- Proof against dry running and overloading, no heat generation, submersible
- Self-priming, insensitive to solids, gentle displacement, portable design
- Simple and easy to start-up, repair and maintain
- Can be infinitely controlled via the air volume
- Unattended operation with long service life
- Pulsation dampers available for a virtually uniform flow
- Multiple optional accessories to meet application requirements
- No drives, no rotating parts, no shaft seals within the fluid

Plastic & Metal Materials

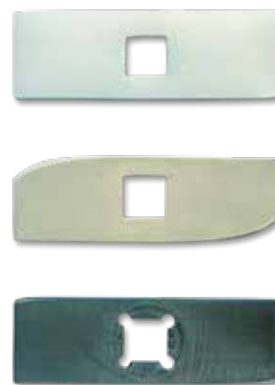
Solid-Body Design for Strength and Smooth Operation

An important construction element in Almatec AODD pumps is the solid-body design of the plastic models. Only a solid-plastic body can support the necessary weight for an oscillating pump. The individual components can be designed so that the required wall thicknesses are arranged where they are needed. The mechanical machining of a solid-plastic block is economical thanks to modern CNC technology, enabling tight tolerances. The high static mass leads to smooth operation and eliminates the need for unnecessary external metal parts that would otherwise be used for reinforcement.



Polyethylene (PE / UHMW-PE)

As an air-operated double-diaphragm pump housing, polyethylene (PE) – especially in the ultra-high molecular weight grade (UHMW-PE) – is very tough, exceptionally resistant to wear, has low water-absorption capacity and displays good general resistance to chemicals. Only strong oxidants such as nitric acid, oleum and halogens can damage PE. PE competes with polypropylene (PP), which is frequently used in the manufacture of pumps. Thermally and chemically speaking, there are virtually no differences between the two materials. However, the similarity ends where the mechanical properties are concerned. Trials based on the sand-slurry method have shown that the abrasion resistance of UHMW-PE (material sample on top) is seven times higher than that of PP (middle) and even 1.6 times higher than that of construction steel (bottom). It is also more wear-resistant than, for example, cast iron or aluminum. This high resistance to abrasion plays a vital role in many applications (e.g., slurry delivery in wafer manufacturing in the photovoltaic industry, pickling baths in the electroplating industry, printing inks, lime slurry for wet desulfurization, ceramic mass and glazes in the ceramic industry). For explosion-proof areas (ATEX conformity) and for flammable liquids, conductive UHMW-PE housing material is available.



- Almatec pumps with PE housing: E-Series, FUTUR Series, AHD/AHS Series, CXM Series
- Almatec pumps with UHMW-PE housing: FUTUR Series, AHD/AHS Series

Polytetrafluoroethylene (PTFE)

PTFE is also used for our AODD pump housings. PTFE has a smooth surface, very low friction coefficient, is physiologically safe, can be used over a wide range of temperatures and displays virtually universal resistance to chemicals. However, pure PTFE has very little resistance to abrasion and tends to cold flow. For explosion-proof areas (ATEX conformity) and for flammable liquids, PTFE conductive as housing material is available.

- Almatec pumps with PTFE housing: E-Series, FUTUR Series

Stainless Steel

Stainless steel 1.4408/SS316 (G-X 6 CrNiMo 18 10) is a cast steel that is resistant to corrosion and acids, and is frequently used for fittings and pump casings because of its good general chemical stability. In a precision lost-wax casting operation, stainless steel is used for wetted housing parts. The lost-wax process is a complex casting process yielding a smooth and dense surface with increased resistance to corrosion.

Another stainless steel pump housing material is 1.4435/SS316L (Basel Standard II, ferrite content < 1%). It has a surface roughness of $\leq 0.4 \mu\text{m}$. 1.4404/SS316L will be used for the wetted housing material of FUTUR S Series pumps.

- Almatec pumps with 1.4408 housing: CHEMICOR Series
- Almatec pumps with 1.4435 housing: BIOCOR Series
- Almatec pumps with 1.4404 housing: FUTUR S Series

Diaphragms

Diaphragms with Integrated Metal Core

The diaphragms in an air-operated double-diaphragm pump mechanically and chemically separate the liquid section and the air section. Diaphragms used in Almatec pumps are precisely matched to the design features of the pumps. An important point is the bidirectional diaphragm clamping. This results in the interaction between diaphragm geometry and the housing clamping area being able to deliver optimum sealing and performance.

The surface of an Almatec diaphragm is smooth and not interrupted by any seals. Due to their integrated metal core, they do not require diaphragm discs that can frequently result in leaks and attract dirt. Produced in priming position, these diaphragms simplify assembly and almost completely eliminate the dead space on the air side since the inner side of the diaphragms rests against the central housing in the limit position, thus optimizing efficiency and reducing air consumption.



Since the medium is displaced and delivered by compressed air, the diaphragms merely serve as barriers and are not pressurized. This is a fact of decisive importance for the service life of the diaphragms. Almatec diaphragms have always been designed from the "PTFE" point of view. This results in a diaphragm that has a large diameter and short stroke with low flexural load, ensuring uniform delivery regardless of the material used for the diaphragm's construction.

Almatec diaphragms are available in the following materials:

- EPDM – medium strong acids and caustics, slurries, glues, paints
- PTFE/EPDM compound – strong acids and caustics, slurries, paints
- PTFE modified/EPDM compound – liquids with increased diffusion tendency (e.g., benzene, solvents)
- NBR – oils and oily liquids, slurries

For FUTUR Series pumps, specially developed diaphragms made of massive PTFE are used.

The specification of temperature limits of the different diaphragm materials is not applicable, since the maximum permissible temperature of the pumped liquid always depends on the lower temperature limits of the used housing material.

Summary Of Chemical Resistance

| | WATER | MINERAL OILS | VEG. ANIMAL FATS | HYDROCARBONS | | | | ALCOHOLS | KETONES | ESTERS | ACIDS, DILUTED | ACIDS, CONCENTRATED | ALKALIS, DILUTED | ALKALIS, CONCENTRATED | SALTS |
|------------------------|-------|--------------|------------------|--------------|----------|-------------|-------------|----------|---------|--------|----------------|---------------------|------------------|-----------------------|-------|
| | | | | ALIPHATIC | AROMATIC | HALOGENATED | CHLORINATED | | | | | | | | |
| Stainless Steel | + | + | + | + | + | + | + | + | + | + | 0 | 0 | 0 | 0 | 0 |
| PE | + | + | + | + | 0 | – | 0 | + | + | + | + | 0 | + | + | + |
| PTFE | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| EPDM | + | – | – | – | – | – | – | 0 | + | + | + | + | + | + | + |

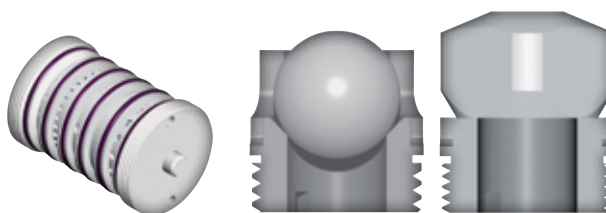
+ = Resistant, 0 = Fairly Resistant, – = Not Resistant; All entries are merely intended for guidance.



The Almatec® Advantage | Air Control System & Valves

The metal-free, pneumatic-pilot-operated PERSWING P® Air Control System ensures accurate reversal of the main piston and is characterized by low noise levels. Only two moving parts ensure that there is absolutely no dead center. It does not require maintenance, operates without any lubrication whatsoever, and is made of no more than four different parts. The complete cartridge can be replaced easily. The patented PERSWING P is a precision control system and therefore requires clean, oil-free compressed air to ensure its optimal function.

Ball valves are robust and insensitive to media containing solids since they only form a linear seal with the valve seat. They are available in EPDM, PTFE, NBR and stainless steel. The use of stainless steel ball valves is recommended for high-viscosity media. PTFE pumps can be equipped with cylinder valves also. The surface sealing shows very good dry-priming values. They close gently and uniformly, which is required for accurate delivery. The interior design of the housings is identical, regardless of the type of valve used. This makes it easier to change to a different valve type at a later date.



Pulsation Damper, ET Series

Due to their design, pumps with oscillating action produce a pulsating flow. Although the double-acting design of the E-Series and the direct pneumatic drive have already greatly reduced pulsation, a pulsation damper must be installed on the delivery side in order to obtain a virtually uniform flow.

The Almatec ET Series Pulsation Damper represents the latest generation of active pulsation dampers. It is simply screwed onto the pump. Additional connecting elements are not required. Alternatively, the dampers are available in a flange version, too (ET-F Series). Pulsation dampers of appropriate size are available for every pump. The wetted material is PE or PTFE (both also conductive). The damper heads are made of polyamide or PE (conductive). As with the pumps, the recessed housing bolts are tightened against a ring. The exterior is completely free of metal.

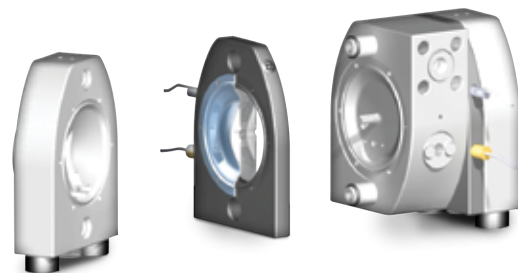
The dampers are self-regulating. They have their own air connection that must be supplied via the pump connection so that the pump and damper always operate with the same air pressure. The pulsation can already be damped effectively with a minimum back pressure of only approximately 1 bar. As in the Almatec pumps, the diaphragm merely serves as a barrier between product and air chamber, and is therefore always without load. If the pressure on the product side drops due to changes in the operating conditions, the pressure on the other side of the diaphragm will decline accordingly. If the pressure on the product side rises, the pressure on the other side will also increase. This automatic adjustment optimizes the diaphragm setting and ensures a consistently good damping effect.



The Almatec® Advantage | Optional Equipment

Barrier Chamber System (code BS)

The Almatec Barrier Chamber System for sizes E 10 to E 50 meets high safety requirements. The individual diaphragm is replaced by two diaphragms arranged in tandem with a barrier chamber of conductive PE between them and filled with non-conductive liquid. The barrier chambers must always be filled entirely to transmit the air pressure to the medium. Therefore, it is monitored by level sensors. If the diaphragm on the product side breaks, medium merely enters the barrier chamber and the non-conductive liquid flows into the medium. The change in conductivity of the barrier liquid is detected by sensors and signaled to a controller which triggers an alarm or disconnects the pump.



Diaphragm Monitoring (code D)

A capacitive sensor installed in the pump muffler detects all liquids and in case of a diaphragm rupture it outputs a corresponding signal to a controller which then triggers an alarm or disconnects the pump via a connected solenoid valve.

External Control (code Z)

Such a pump has neither an air-control system nor a muffler, but can be controlled externally via a solenoid valve. The center housing has two separate air connections to ventilate and exhaust both working chambers. The solenoid valve is not part of the delivery.

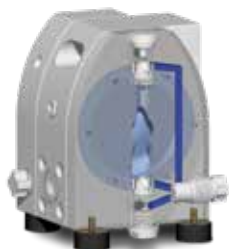


Pneumatic Expansion Compensation (code EC)

Temperature changes can cause thermal expansion to occur in AODD pump units engineered with plastic housings and metallic connecting elements. Operating in wide temperature ranges – including many PTFE-pump standard applications – can lower the tension of the connecting elements. Therefore, Almatec has introduced an “Expansion Compensation” option for its line of E-Series AODD pumps (code EC for E-Series pump sizes 15/25/40/50).

Special Diaphragms (code L and P)

For use on pumps in the device group IIC (European ATEX regulation) without flanking measures diaphragms made of conductive PTFE/EPDM compound are available (code L). For liquids with increased diffusion tendency (e.g., benzene, solvents) as well as for applications with priming out of a vacuum, PTFE/EPDM compound diaphragms made of modified PTFE are obtainable (code P).



Draining System (code R)

E-Series pump sizes E 15 to E 50 are available with the special Almatec draining system. This unit consists of a bypass system in the side housings that can be easily activated either via hand-operated valves or pneumatically. The pump and piping can then be drained without having to be dismantled. The amount of cleaning agent and solvent required when changing products is reduced considerably, greatly reducing environmental pollution.

FKM Housing Gaskets (code V)

Pumps with PTFE diaphragms can be equipped with housing gaskets made of FKM (FDA-compliant) instead of FEP/FKM. These reasonably priced FKM gaskets cover the major part of applications requiring PTFE diaphragms.

Flange Connection (code F)

According to industry-safety standards, the pump sizes E 15 to E 80 can be equipped with thread bushings and flange O-rings for flange connections to DIN or ANSI/PN 10.

EC1935/2004 Certification (code H)

Since certifications are an important aspect in the hygienic market, an EC1935/2004 conformity declaration can be issued for Almatec pumps with PTFE internals for the applicability of the pump material for food contact.



Stroke Counting (code C)

Almatec air-operated double-diaphragm pumps can be used continuously or intermittently for hours, minutes or for a specifically defined number of strokes. A sensor can be installed in the pump's center housing to accurately count the strokes. This is available in a pneumatic version as well.

USP Class VI Certification (code USP)

After receiving an increasing number of requests to state “USP Class VI” conformity for the wetted pump materials, Almatec has introduced the “Option Code USP” for defined material types. Whenever ordering such a pump, the customer can be sure to receive a clearly marked pump with an appropriate certificate. Please contact us for more information about the pump-material codes.

Transport Carts

Many industrial applications need not only stationary air-operated double-diaphragm pumps but also mobile pumping units (e.g., for use as an emergency pump, as a short-dated replacement pump or for decanting between two containers). For these purposes, a transport cart is available.

The Almatec® Pump Portfolio

E-Series

State-of-the-Art Plastic Range with High-Quality Standards

Features & Benefits:

- Almatec pump flagship model with high distribution in multiple markets
- Well-known pump, meeting customer's expectations for safety, quality and reliability
- Ball or cylinder valves
- Metal-free exterior
- Numerous optional accessories for special applications
- Screw-on and flanged pulsation damper available

Materials:

- Housing: PE, PTFE, PE (conductive) (ATEX), PTFE Conductive (ATEX)
- Diaphragms: EPDM, PTFE/EPDM, PTFE modified/EPDM, NBR, ATEX variations
- Ball Valves: EPDM, PTFE, NBR, Stainless Steel
- Cylinder Valves: PTFE



Technical Data:

| Pump Size | E 08 | E 10 | E 15 | E 25 | E 40 | E 50 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Nominal port size (NPT) | ¼ " | ⅜ " | ½ " | 1 " | 1 ½ " | 2 " |
| Suction lift, dry - mWC (ftWC) | | | | | | |
| Cylinder Valves | 1 (3.3) | 2 (6.6) | 3 (9.8) | 4 (13.1) | 5 (16.4) | 5 (16.4) |
| Ball Valves | 0.5 (1.6) | 1 (3.3) | 2 (6.6) | 3 (9.8) | 4 (13.1) | 4 (13.1) |
| Maximum operating temperature - °C (°F): | | | | | | |
| PE | – | – | 70 (158) | 70 (158) | 70 (158) | 70 (158) |
| PTFE | 100 (212) | 100 (212) | 120 (248) | 120 (248) | 120 (248) | 120 (248) |
| Max. capacities | | | | | | |
| m³/h | 0.9 | 1.4 | 3.4 | 8 | 20 | 36 |
| l/min | 15 | 23 | 55 | 130 | 330 | 600 |
| gpm | 4 | 6 | 15 | 35 | 88 | 160 |

Certifications:

- (Depending on material choice)





AHD/AHS Series

High-Pressure Pumps

Features & Benefits:

- Designed for safe operation in high-pressure applications such as filter-press feeding
- Discharge pressure up to 15 bar (218 psig)
- AHD pumps with internal pressure booster, AHS pumps for usage with increased driving air pressure
- Automatic pressure/volume adjustment for filter-press feeding

Materials:

- Wetted Housing: UHMW-PE
- Non-Wetted Center Block: PA
- Diaphragms: EPDM, PTFE/EPDM, NBR
- Ball Valves: EPDM, PTFE, NBR



Technical Data:

| Pump Size | AHD 15 | AHD 25 | AHD 40 | AHS 15 | AHS 25 |
|--|-----------|------------|------------|-----------|-----------|
| Flange connections (DIN/PN 16 or ANSI B 16.5 300 lbs) | 15 (½ ") | 25 (1") | 40 (1 ½ ") | 15 (½ ") | 25 (1") |
| Suction lift, dry - mWC (ftWC) | | | | | |
| EPDM/NBR ball valves | 2 (6.6) | 3.5 (11.5) | 3.5 (11.5) | 2 (6.6) | 2.5 (8.2) |
| PTFE ball valves | 1.5 (4.9) | 2 (6.6) | 2 (6.6) | 1.5 (4.9) | 1.5 (4.9) |
| Maximum operating temperature - °C (°F): | 70 (158) | 70 (158) | 70 (158) | 70 (158) | 70 (158) |
| Max. capacities | | | | | |
| m³/h | 4 | 10 | 20 | 4 | 8 |
| l/min | 67 | 165 | 330 | 67 | 130 |
| gpm | 17 | 44 | 88 | 17 | 35 |

The Almatec® Pump Portfolio

FUTUR Series

The Choice for the Semiconductor Industry

Features & Benefits:

- Specialty pumps for supplying and circulating chemicals in the semiconductor industry
- Straight-through flow-pattern technology, only one wetted housing part
- Five material versions (T, H, E, S/ SH and F) for different applications
- Plastic models completely metal-free
- Cleaned, assembled and tested in a cleanroom line
- Appropriate screw-on pulsation damper for every pump size and material available
- PERSWING P® air control system requires no lubrication or maintenance
- ATEX Certified





Materials:

- Wetted Center Housing: PTFE, UHMW-PE, UHMW-PE (conductive), Stainless Steel (SS316L)
- Non-Wetted Side Housings: PTFE, UHMW-PE, UHMW-PE (conductive), Stainless Steel (SS316)
- Diaphragms: PTFE
- Cylinder Valves: PTFE, UHMW-PE

Technical Data:

| Pump Size | FUT 10 | FUT 20 | FUT 50 | FUT 100 |
|--|-----------|-----------|------------|-----------|
| Nominal port size (NPT) | 3/8 " | 1/2 " | 1 " | 1 1/4 " |
| Suction lift, dry - mWC (ftWC) Cylinder Valves | 1 (3.3) | 2.5 (8.2) | 3.5 (11.5) | 4 (13.1) |
| Maximum operating temperature - °C (°F): (Depends on the housing material and pressure) | 200 (392) | 200 (392) | 130 (266) | 130 (266) |
| Max. capacities | | | | |
| m³/h | 0.6 | 1.2 | 3 | 6 |
| l/min | 10 | 20 | 50 | 100 |
| gpm | 2.6 | 5.3 | 13 | 26 |

Certifications:

- (Depending on material choice)  

CXM Series

For Low- to Middle-Duty Applications

Features & Benefits:

- General-purpose pumps designed for low- to medium-duty applications and to operate as drum pumps
- Modular design, four sizes with NPT connections and three sizes with BSP connections
- Ball or cylinder valves

Materials:

- Housing: PE (conductive) (ATEX)
- Diaphragms: EPDM, PTFE/EPDM, NBR
- Ball Valves: EPDM, PTFE, NBR, Stainless Steel
- Cylinder Valves: PE



Technical Data:

| Pump Size | CXM 10 | CXM 20 | CXM 25 | CXM 50 | CXM 55 | CXM 130 | CXM 135 |
|--|-----------|-----------|-----------|------------|------------|-------------|-------------|
| Nominal port size | NPT 3/8 " | NPT 1/2 " | BSP 1/2 " | NPT 3/4 " | BSP 1 " | NPT 1 1/4 " | BSP 1 1/2 " |
| Suction lift, dry - mWC (ftWC) | | | | | | | |
| Cylinder Valves | 0.7 (2.3) | 2 (6.6) | 2 (6.6) | 4.5 (14.8) | 4.5 (14.8) | 4.5 (14.8) | 4.5 (14.8) |
| EPDM Ball Valves | 0.5 (1.6) | 1 (3.3) | 1 (3.3) | 3 (9.9) | 3 (9.9) | 3 (9.9) | 3 (9.9) |
| PTFE Ball Valves | 0.5 (1.6) | 1 (3.3) | 1 (3.3) | 2 (6.6) | 2 (6.6) | 3 (9.9) | 3 (9.9) |
| Stainless Steel Ball Valves | 0.5 (1.6) | 1 (3.3) | 1 (3.3) | 2 (6.6) | 2 (6.6) | 3 (9.9) | 3 (9.9) |
| Maximum operating temperature - °C (°F): | 70 (158) | 70 (158) | 70 (158) | 70 (158) | 70 (158) | 70 (158) | 70 (158) |
| Max. capacities | | | | | | | |
| m³/h | 0.7 | 1.6 | 1.6 | 3.3 | 3.3 | 7.5 | 7.8 |
| l/min | 10 | 25 | 25 | 55 | 55 | 125 | 130 |
| gpm | 3 | 7 | 7 | 15 | 15 | 33 | 34 |

Certifications:

- (Depending on material choice)   

The Almatec® Pump Portfolio

CHEMICOR Series

Standard Range Stainless Steel

Features & Benefits:

- Product housings made of 1.4408 (SS316) with soft contours, smooth flow channels and no dead spaces
- Freely turnable suction and discharge ports
- High-flow, high-solid passage
- Optional draining system with ball lifters to drain the pump without having to be dismantled
- Inline pulsation damper available
- Additional options available to meet application requirements

Materials:

- Wetted Side Housings: Stainless Steel (SS316)
- Non-Wetted Center Block: PA, PE (conductive) (ATEX)
- Diaphragms: EPDM, PTFE/EPDM, PTFE modified/EPDM, NBR, ATEX variations
- Ball Valves: EPDM, PTFE, NBR

Technical Data:

| Pump Size | AD 20 | AD 32 | AD 50 |
|--|-----------------------|-----------------------|-----------------------|
| Nominal port size (BSP) | ¾ " | 1 ¼ " | 2 " |
| Suction lift, dry - mWC (ftWC) | | | |
| EPDM Ball Valves | 2 (6.6) | 2 (6.6) | 3 (9.8) |
| PTFE Ball Valves | 1 (3.3) | 1.5 (4.9) | 2 (6.6) |
| Maximum operating temperature - °C (°F): (with center block of PE (conductive)) | 130 (266) 80 (176) | 130 (266) 80 (176) | 130 (266) 80 (176) |
| Max. capacities | | | |
| m³/h | 4.5 | 9 | 24 |
| l/min | 75 | 150 | 400 |
| gpm | 20 | 40 | 106 |

Certifications:

- (Depending on material choice)



Conductive Versions for Explosion-Proof Areas (ATEX Conformity)

The housings and internals of the conductive versions are made of PE or PTFE filled with conductive pigment that always remains below the limits set by the FDA. The pumps are to be grounded via a connection on the center housing, thus eliminating the risk of electrostatic charges. Conductive CHEMICOR Series pumps conform to ATEX requirements. They can consequently be used without difficulty in gas and dust atmospheres and for flammable liquids.





BIOCOR Series

Aseptic Pump for Sterile Applications

Features & Benefits:

- Specifically designed for critical sterile applications within the pharmaceutical, biotech and food industries
- EHEDG certified, CIP and SIP capability
- Ball-lifting magnets for pump draining
- Suction and discharge ports suitable for different sanitary standards

Materials:

- Wetted Side Housing: Stainless Steel (SS316L) (Basel Standard II) to $\leq 0.4 \mu\text{m}$ (15.75 μm)
- Non-Wetted Center Block: PE (conductive) (ATEX)
- Diaphragms: EPDM (FDA), PTFE/EPDM (FDA)
- Ball Valves: EPDM (FDA), PTFE (FDA)

Technical Data:

| Pump Size | B 20 | B 32 | B 40 |
|---|----------|-----------|----------|
| Nominal port size (Depends on the chosen suction and discharge connection) | DN 20 | DN 32 | DN 40 |
| Suction lift, dry - mWC (ftWC) | 2 (6.6) | 2.5 (8.2) | 3 (9.8) |
| Maximum operating temperature - °C (°F): | 80 (176) | 80 (176) | 80 (176) |
| Max. capacities | | | |
| m ³ /h | 3.5 | 7.5 | 17 |
| l/min | 58 | 125 | 283 |
| gpm | 15 | 33 | 75 |

Certifications:

- (Depending on material choice)



The Almatec® Pump Portfolio | Overview

| Pump Series | E-SERIES | AHD/AHS | FUTUR | CXM | CHEMICOR | BIOCOR |
|--|--|-------------------------------|---|---------------------------------|---|---------------------------------|
| Number of Available Pump Sizes | 6 | 3 | 4 | 7 | 3 | 3 |
| Nominal Port-Size Range | ¼ " - 2 " | ½ " - 1 ½ " | ⅜ " - 1 ¼ " | ⅜ " - 1 ½ " | ¾ " - 2 " | DN20 - DN40 |
| Maximum Capacities Range m³/h l/min gpm | 0.9 - 36 15 - 600 4 - 160 | 4 - 20 67 - 330 17 - 88 | 0.6 - 6 10 - 100 2.6 - 26 | 0.7 - 7.8 10 - 130 3 - 34 | 4.5 - 24 75 - 400 20 - 106 | 3.5 - 17 58 - 283 15 - 75 |
| Maximum Suction-Lift Range, Dry mWC ftWC | 1 - 5 3.3 - 16.4 | 2 - 3.5 6.6 - 11.5 | 1 - 4 3.3 - 13.1 | 0.7 - 4.5 2.3 - 14.8 | 2 - 3 6.6 - 9.8 | 2 - 3 6.6 - 9.8 |
| Material of Wetted Housings with Max. Operating Temp. - °C (°F) | PE 70° (158°) PE (conductive) 70° (158°) PTFE 100°-120° (212°-248°) PTFE Conductive 100°-120° (212°-248°) | PE 70° (158°) | PE 70° (158°) PTFE 130°-200° (266-392°) 1.4404 (SS316L) 80°-130° (176°-266°) | PE (conductive) 70° (158°) | 1.4408 (SS316) 80°-130° (176°-266°) | 1.4435 (SS316L) 80° (176°) |
| Available Options* | E-SERIES | AHD/AHS | FUTUR | CXM | CHEMICOR | BIOCOR |
| Barrier Chamber System | • | | | | • | |
| Stroke Counting, Capacitive | • | • | | | • | • |
| Stroke Counting, Pneumatical | • | • | • | | • | • |
| Diaphragm Monitoring | • | • | • | | • | • |
| Draining System | • | | | | • | |
| Special Diaphragms | • | | | • | • | |
| Pulsation Damper, Screwed | • | | • | | | |
| Pulsation Damper, Flanged | • | | | | | |
| Pulsations Damper, Inline | • | | | • | • | • |
| Sanitary Ports | | | | | • | • |
| Flange Connection | • | • | | | | |
| External Air Booster | | • | | | | |
| EC1935/2004 Certificate | • | | | • | • | • |
| USP Certificate | • | | | | • | • |
| EHEDG Certificate | | | | | | • |

* Not always available for all pump sizes and material combinations. More details available upon request.

Specific product brochures and additional information for each pump series can be found at psgdover.com/almatec or almatec.de.

SAFETY. QUALITY. RELIABILITY.

Milestones in Almatec's History

1984

Almatec is founded

1992

The expanding company moves into a new, spacious facility located in Kamp-Lintfort, Germany, with 2,200 m² of production and office space

2004

Almatec is acquired by the United States-based Dover Corporation

2006

Almatec assumes distribution in Germany of Wilden® AODD pumps; this new area of focus (pump materials, pump sizes and applications) was an ideal fit for the Almatec pump program

2008

Almatec becomes a pump brand within PSG®, a Dover company, and expands its production area by 1,000 m² thanks to a new production hall

2018

The company relocates to Duisburg, Germany; new headquarters provides roughly 70% more space, including a much larger manufacturing facility and an ISO Class 7 cleanroom

TODAY

Almatec has one of the largest product portfolios in the AODD-pump world, offering sophisticated and economical solutions that cover a wide range of applications



ALMATEC®

PSG Germany GmbH
Hochstraße 150-152
47228 Duisburg, Germany
P: +49 (2065) 89205-0
psg-germany@psgdover.com
psgdover.com/almatec



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