CHARLES AUSTEN PUMPS LTD



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INTRODUCTION

For almost 70 years, Charles Austen Pumps has worked hard to earn the trust and respect of pump buyers within various industries across the world

Our founder, Charles Austen, is widely believed to have invented the first ever diaphragm pump using the leather from left-over army boots following the first world war.

Charles later went on to found the company which in the 1940s, became the first manufacturer to put pumps in the laboratory, where the equiment was used to create vaccines for diseases such as Diptheria, Smallpox and Polio.

Since then Charles Austen Pumps has been involved in a number of huge advancements in recent human history, from the conception of Dolly the Sheep (the first ever cloned mammal) to our own world-changing innovation in the form of patented rotary diaphragm technology.

Even to this day Charles Austen is revolutionizing pumping principals in a wide span of different markets. We champion in vending technology, environmental equipment and life-changing medical apparatus.

TECHNOLOGIES



The patented rotary diaphragm technology has a revolutionary pumping principle. The flow of liquid is initiated by an eccentrically mounted bearing on a drive shaft which revolves within a flexible diaphragm. As the shaft rotates, the bearing flexes the diaphragm, squeezing liquid through the pump.



The major advantage of the diaphragm pump is that the pumping chamber is totally sealed and, therefore, does not require a sliding seal between moving parts. Vacuum and pressure are produced by the flexing of the diaphragm back and forth in the chamber. The pumps can handle corrosive gases and vapours when the correct materials are specified and are completely oil-free which makes them ideal for use in applications where contamination cannot be tolerated.



The simple yet efficient pumping principle uses a magnetically operated diaphragm. This action flexes a diaphragm at one, or both ends of the connecting rod within a totally sealed pumping chamber. This eliminates sliding parts keeping wear, tear and power consumption to a minimum



Rocking piston pumps combine the higher performance of a piston pump with the simplicity of a diaphragm pump in a small economic unit. The piston is fixed rigidly to the top of the connecting rod. The pumps are capable of operating continuously with a minimum of maintenance and offer high performance, particularly pressure, within a compact package.



R&D

The Process begins in our state of the art Research and Development department. Using an array of high-tech equipment alongside the old fashioned proven methods we can accurately gauge the performance and reliability of our pumps, ensuring we are staying at the top of our game.



TOOLMAKING

With 10 members of staff dedicated solely to toolmaking, Charles Austen is proud to boast an impressive 'Tool Room' complete with a labyrinth of imposing machinery. This allows us to efficiently and precisely create the tooling we require to continue revolutionizing the pump industry.



MOULDING

Charles Austen employs modern CNC moulding machines to mould components all in-house. As a company we have invested heavily in our moulding capability to ensure high fidelity components.



ASSEMBLY

With 20,000 square foot of manufacturing lines Charles Austen Pumps efficiently constructs our pumps primarily by hand. Pumps are then tested to secure that each of them leave the factory as reliable as we designed them to be, following the ISO 9001 quality standard.



WAREHOUSING

With 5 dedicated buildings on site for warehousing Charles Austen Pumps have the capacity to hold huge orders in waiting. We utilise double shifts to ensure that stock items are despatched within 24 hours.



OEM PUMPS- GAS & AIR



Charles Austen Pumps can offer different material variations for either the pump head or diaphragm meaning that the pump you have chosen can be tailored to your individual application needs. If you have any questions about the best material to use for your application then contact info@charlesausten.com



Almost all of the Charles Austen Pump range come with different voltage options. Look out for the lightning symbol on each pump description to see what voltages are available.

DA1 SE



Features

- Max Flow: 2.0 I/min
- Max Vacuum: 400 mbar
- Max Pressure: 1.0 bar
- Size: 99 x 61 x 85mm
- Connector Size: 4.8mm

Performance Standard Option Diaphragm: EPDM





- 110V 50/60 Hz
- 230V 50Hz

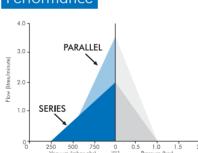
DA1 DE



Features

- Max Flow: 3.5 I/min
- Max Vacuum: 250 mbar
- Max Pressure: 1.0 bar
- Size: 125 x 61 x 85mm
- Connector Size: 4.8mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



- 110V 50/60 Hz
- 230V 50Hz

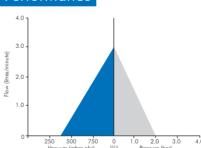
D₃ DC



Features

- Max Flow: 3.0 I/min
- Max Vacuum: 350 mbar
- Max Pressure: 2.0 bar
- Size: 74 x 29 x 52mm
- Connector Size: 4mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



- POLYPROPYLENE
- - 12V BLDC

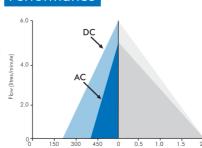
D5 SE / D6 SE



Features

- Max Flow: 6.0 I/min
- Max Vacuum: 190 mbar
- Max Pressure: 2.0 bar
- Size: 94 x 80 x 46mm
- Connector Size: 6mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYION



- POLYPROPYLENE



- 12V 110V
- 24V 230V
- BLDC







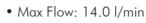


D7 SE

D7 DE



Features



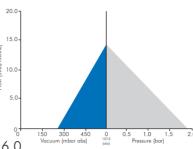


• Max Pressure: 1.8 bar

• Size: 128 x 94 x 128mm

• Connector Size: 8.0, 6.4, 6.0

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON

POLYPROPYLENE

STAINLESS STEEL



• 110V • 60 Hz

• 230V • 50Hz

Features

• Max Flow: 80 I/min

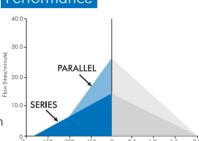
• Max Vacuum: 240 mbar

• Max Pressure: 1.8 bar

• Size: 164 x 94 x 128 mm

• Connector Size: 8.0, 6.4, 6.0

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



POLYPROPYLENE

• STAINLESS STEEL



• 110V • 60 Hz

• 230V • 50Hz

D16



Features

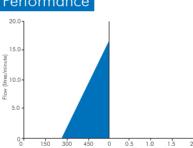
• Max Flow: 16.0 I/min

• Max Vacuum: 250 mbar

• Size: 100 x 43 x 71mm

• Connector Size: 10mm

Performance



Standard Option

Diaphragm: SARLINK

Head: NYLON



• 110V • 12V

• 230V • BLDC

D34



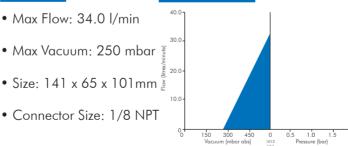
Features

• Max Flow: 34.0 I/min

• Max Vacuum: 250 mbar

• Size: 141 x 65 x 101mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



D16 DUPLEX



Features

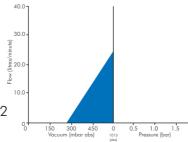
• Max Flow: 24.0 I/min

• Max Vacuum: 250 mbar

• Size: 99 x 114 x 43mm

• Connector Size: 10mm x2

Performance



Standard Option

Diaphragm: SARLINK

Head: NYLON



12V • BLDC





CAPEX L2





CAPEX V2 DUPLEX

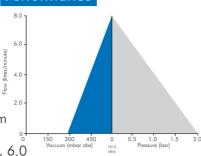




Features

- Max Flow: 8.0 l/min
- Max Vacuum: 280 mbar
- Max Pressure: 2.0 bar
- Size: 232 x 178 x 155mm
- Connector Size: 8.0, 6.4, 6.0

<u>Performance</u>



Standard Option

Diaphragm: EPDM Head: NYION



- STAINLESS STEEL
- PP/ PTFF

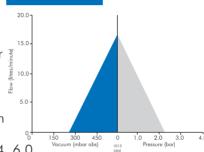


- 110V
- 230V

Features

- Max Flow: 17.0 I/min.
- Max Vacuum: 240 mbar
- Max Pressure: 2.2 bar
- Size: 140 x 67 x 127mm
- Connector Size: 8.0, 6.4, 6.0

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



- POLYPROPYLENE
- PTFF



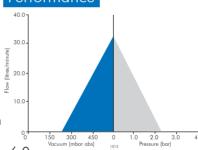
- 12V BLDC

Standard Option Diaphragm: EPDM

Features

- Max Flow: 32.0 I/min.
- Max Vacuum: 240 mbar
- Max Pressure: 2.2 bar
- Size: 140 x 67 x 127mm
- Connector Size: 8.0, 6.4, 6.0

Performance



Head: NYLON



- POLYPROPYLENE
- PTFF



- 12V BLDC
- 24V

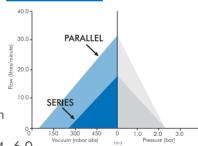
CAPEX V2 DE



Features

- Max Flow: 32.0 I/min
- Max Vacuum: 80 mbar
- Max Pressure: 2.2 bar
- Size: 181 x 97 x 123mm
- Connector Size: 8.0, 6.4, 6.0

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



- POLYPROPYLENE
- PTFE



WHY CHOOSE DUPLEX PUMPS?

- Quieter when in use.
- Bigger range of motor options.
- Lower current draw making the pump more efficient.
- Pump size decrease due to only needing one motor.
- Offers similar performances as a double ended pump.



PROCESS PUMPS- GAS & AIR

(Ex) EX7

Features

Max Flow: 7.0 I/min

• Max Vacuum: 430 mbar 🖁

• Max Pressure: 1.2 bar

• Size: 239 x 116 x 190mm

• Connector Size: 8.0, 6.4, 6.0

Performance

Standard Option

Diaphragm: EPDM





230V • 60Hz

EX30



Features

• Max Flow: 17.0 l/min

• Max Vacuum: 270 mbar

• Max Pressure: 2.0 bar

• Size: 251 x 116 x 194mm

• Connector Size: 8.0, 6.4, 6.0



Standard Option

Diaphragm: EPDM

Head: ALUMINIUM



• STAINLESS STEEL

PTFE

Standard Option Diaphragm: ALUMINIUM



• 110V • 50Hz

• 230V • 60Hz

B85 SE/ B100 SE



Features

• Max Flow: 18.0 I/min

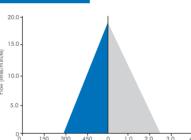
• Max Vacuum: 280 mbar

• Max Pressure: 2.5 bar

• Size: 208 x 130 x 175mm

• Connector Size: 8.0, 6.4, 6.0

Performance



Head: EPDM

• STAINLESS STEEL

PTFE

• 110V • 50/60Hz

• 230V • 50Hz

B85 DE/ B100 DE



Features

• Max Flow: 33.0 I/min

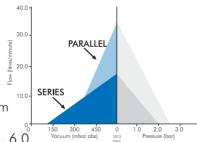
• Max Vacuum: 80 mbar

• Max Pressure: 2.0 bar

• Size: 208 x 130 x 175mm

• Connector Size: 8.0, 6.4, 6.0

Performance



Standard Option

Diaphragm: ALUMINIUM

Head: EPDM



STAINLESS STEEL

PTFE



• 110V • 50Hz

WHY CHOOSE BRUSHLESS MOTORS?

- Longer lasting motor than standard options.
- More economical/ efficient on power.
- Integrated lock rotor.
- Better electromagnetic capability (EMC).
- Integrated Tachometer feedback.



LINEAR DIAPHRAGM PUMPS - GAS & AIR

LD 10



Features

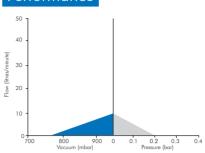
• Max Flow: 10.0 l/min

• Max Vacuum: 880 mbar

• Max Pressure: 0.2 bar

• Size: 97 x 77 x 59mm

Performance



Standard Option

Diaphragm: EPDM



LD 15



Features

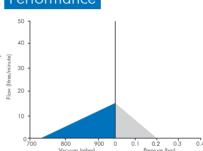
• Max Flow: 15.0 I/min

• Max Vacuum: 760 mbar

• Max Pressure: 0.2 bar

• Size: 109 x 84 x 68mm

Performance



Standard Option

Diaphragm: EPDM



LD 30



Features

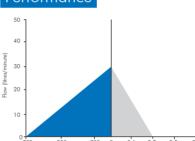
• Max Flow: 30.0 l/min

• Max Vacuum: 700 mbar

• Max Pressure: 0.2 bar

• Size: 131 x 110 x 80mm

Performance



Standard Option

Diaphragm: EPDM



LD DM5 (S)



Features

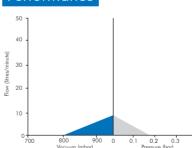
• Max Flow: 8.0 I/min

• Max Vacuum: 800 mbar

• Max Pressure: 0.17 bar

• Size: 106 x 89 x 80mm

Performance



Standard Option

Diaphragm: EPDM



LD DB5 (S)



Features

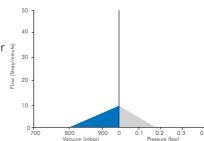
• Max Flow: 9.0 I/min

• Max Vacuum: 800 mbar

• Max Pressure: 0.17 bar

• Size: 106 x 89 x 81 mm

Performance



Standard Option

Diaphragm: EPDM









LD DM10 (S)



Features

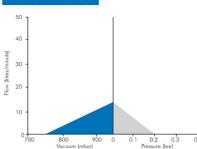
• Max Flow: 14.0 I/min

• Max Vacuum: 750 mbar

• Max Pressure: 0.2 bar

• Size: 106 x 89 x 81 mm

Performance



Standard Option

Diaphragm: EPDM

- PLASTIC CASING
- STEEL CASING



LD DBM30B



Features

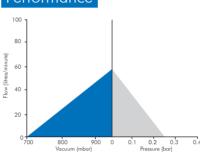
Max Flow: 58 0 1/min

• Max Vacuum: 700 mbar

• Max Pressure: 0.25 bar

• Size: 132 x 118 x 90mm

Performance



Standard Option

Diaphragm: EPDM



LD DBM40B



Features

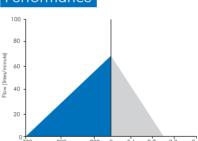
• Max Flow: 68.0 I/min

• Max Vacuum: 700 mbar

• Max Pressure: 0.25 bar

• Size: 133 x 118 x 90mm

Performance



Standard Option

Diaphragm: EPDM



• 230V

LD 50DE



Features

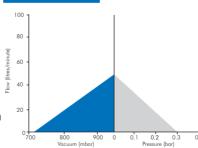
• Max Flow: 50.0 l/min

• Max Vacuum: 720 mbar

• Max Pressure: 0.3 bar

• Size: 133 x 118 x 90mm

Performance



Standard Option

Diaphragm: EPDM



LD 60DE



Features

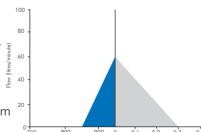
• Max Flow: 60.0 I/min

• Max Vacuum: 850 mbar 🖁

• Max Pressure: 0.3 bar

• Size: 140 x 118 x 100mm

Performance



Standard Option

Diaphragm: EPDM





ROCKING PISTON PUMPS- GAS & AIR

RP12



Features

Max Flow: 12.0 I/min

• Max Vacuum: 200 mbar

Max Pressure: 6.0 bar

• Size: 140 x 67 x 146mm

• Connector Size: 8.0, 6.4, 6.0mm

Performance

Standard Option

Seal: PTFE, ANODISED **ALUMINUM**



- 110V 12V
- 230V 24V
 - BLDC

RP40V/P



Features

Max Flow: 42.0 l/min

• Max Pressure: 7 bar

• Max Vacuum: 100 mbar

• Size: 198 x 134 x 240mm

• Connector Size: 1/4" BSP



Performance

SERIES

60.0

PARALLEL

Standard Option

Seal: PTFE, ANODISED **ALUMINUM**



- 110V 50/60Hz
- 230V 50/60Hz

RP120 V/P



Features

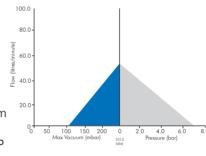
Max Flow: 100.0 I/min

• Max Vacuum: 27 mbar

• Max Pressure: 7 bar

• Size: 198 x 134 x 146mm

Connector Size: 1/4" BSP



Standard Option

Seal: PTFE, ANODISED **ALUMINUM**



- 110V 50/60Hz
- 230V 50/60Hz

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See the product range, latest news, applications and recieve expert advice when specifying your pump.

WWW.DIRECTINDUSTRY.COM





OEM PUMPS- LIQUID

DL04



Features

• Max Flow: 0.4 I/min

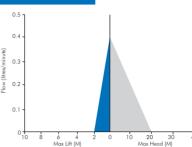
• Max Lift: 2m

• Max head: 20m

• Size: 73 x 30 x 52mm

• Connector Size: 4mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



POLYPROPYLENE



BLDC

DL₂



ML₂

Features

• Max Flow: 1.6 I/min

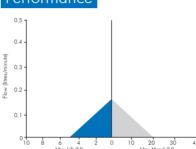
• Max Lift: 5m

• Max Head: 20m

• Size: 100 x 42 x 100mm

• Connector Size: 4mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



• POLYPROPYLENE

• PTFE



• 110V • 12V

Features



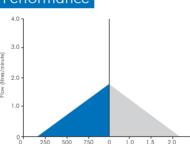
• Max Vacuum: 220 mbar 3

• Max Pressure: 2.2 bar

• Size: 105 x 40 x 40mm

• Connector Size: 6mm OD

Performance



Standard Option

Diaphragm: BUNA

Head: ABS



C50



Features

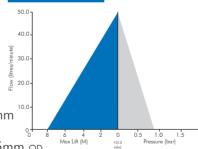
• Max Flow: 50.0 I/min

• Max Head: 8m

• Max Pressure: 0.8 bar

• Size: 167 x 100 x 114mm

Performance



Standard Option

Impeller: NORYL

Shaft: NITRILE



• Connector Size: Inlet 25mm on Outlet 19mm on

WE ALSO STOCK HYDROPONICPI

See the product range, latest news, applications and receive expert advice when specifying your pump



ROTARY DIAPHRAGM PUMPS - LIQUID



The patented rotary diaphragm technology has a revolutionary pumping principle. The flow of liquid is initiated by an eccentrically mounted bearing on a drive shaft which revolves within a flexible diaphragm. As the shaft rotates, the bearing flexes the diaphragm, squeezing liquid through the pump.

Applications include: Vending Machine, Chemical/reagent dosing, IVD analysers, Wash and waste pumps, Water circulation, Sample aspiration/sample scavenge

- No tubing to replace at frequent intervals, Rotary Diaphragm technology is service and maintenance free.
- Excellent vacuum performance on gas and liquid mixtures.
- Installation is very easy, able to mount in any orientation.
- Valveless design tolerates clots and debris.

RD STEPPER



Features

- Max Flow: 0.85 I/min
- Max Lift: 7.0 m
- Max Head: 20.0m
- Size: 87 x 54 x 66mm
- Connector Size: 8mm OD

Performance



10 1: Max Head (M)

Standard Option

Diaphragm: SANTOPRENE Head: POLYPROPYLENE





RD01



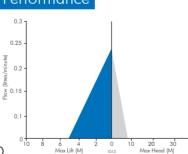
RD1 DOSING



Features

- Max Flow: 0.24 I/min
- Max Lift: 8.0 m
- Max Head: 8.0m
- Size: 87 x 54 x 66mm
- Connector Size: 8mm OD

Performance



Standard Option

Diaphragm: SARLINK Head: POLYPROPYLENE

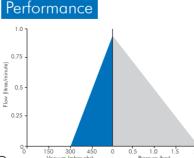






Features

- Max Flow: 0.85 I/min
- Max Vacuum: 300 mbar
- Max Pressure: 2.0 bar
- Size: 45 x 125 x 61mm
- Connector Size: 8mm OD



Standard Option

Diaphragm: SANTROPENE Head: POLYPROPYLENE



- 12V •BLDC













RD₁



Features

• Max Flow: 0.85 I/min

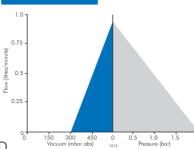
• Max Vacuum: 300 mbar

• Max Pressure: 2.0 bar

• Size: 45 x 125 x 61mm

Connector Size: 8mm OD

Performance



Standard Option

Diaphragm: SANTROPENE Head: POLYPROPYLENE



• 12V •BLDC



RD2



Features

• Max Flow: 1.7 I/min

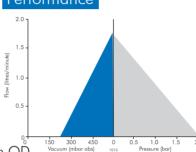
• Max Vacuum: 200 mbar

• Max Pressure: 2.0 bar

• Size: 97 x 77 x 59mm

Connector Size: 15/8mm OD

Performance



Standard Option

Diaphragm: SANTROPENE

Head: NORYL



• 12V •BLDC



RD3



Features

• Max Flow: 3.0 I/min

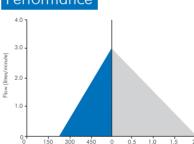
• Max Vacuum: 200 mbar 3

• Max Pressure: 2.0 bar

• Size: 97 x 77 x 59mm

Connector Size: 15/8mm OD

Performance



Standard Option

Diaphragm: SANTROPENE

Head: NORYL



• 12V •BLDC

24V

RD5



Features

• Max Flow: 5.0 I/min

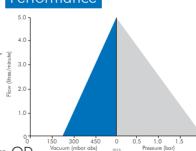
• Max Vacuum: 200 mbar

• Max Pressure: 2.0 bar

• Size: 97 x 77 x 59mm

• Connector Size: 15/8mm OD

Performance



Standard Option

Diaphragm: SANTROPENE

Head: NORYL



• 12V • BLDC



AQUATICS

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See the product range, latest news, applications and receive expert advice when specifying your pump.

PORTABLE & CASED - GAS & AIR



The Cased Pump Series provides a clean oil free vacuum or pressure source. At its heart is a diaphragm pump which has been tried and tested over decades thoughout the world. Rated for continuous operation, the Dymax range is whisper guiet and ruggedly reliable.

The diaphragm pump is housed within a clean, tough and compact polycarbonate case.

DYMAX 5



Features

- Max Flow: 5.0 I/min
- Max Vacuum: 500 mbar
- Max Pressure: 0.8 bar
- Size: 210 x 151 x 125mm
- Connector Size:4mm

Performance Standard Option

Diaphragm: EPDM Head: NYLON





DYMAX 5 VAC TWZR Features



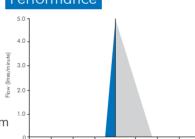
DYMAX 14





- Max Flow: 5.0 I/min
- Max Vacuum: 500 mbar
- Max Pressure: 0.8 bar
- Size: 210 x 151 x 125mm
- Connector Size: 4mm

Performance



Diaphragm: EPDM

Standard Option

Head: NYLON



Features

- Max Flow: 14.0 I/min
- Max Vacuum: 240 mbar
- Max Pressure: 2.0 bar
- Size: 210 x 151 x 125mm
- Connector Size:4mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



• 230V

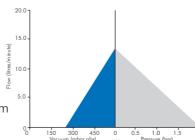
CAPEX 8C



Features

- Max Flow: 8.0 I/min
- Max Vacuum: 240 mbar
- Max Pressure: 2.0 bar
- Size: 210 x 151 x 125mm
- Connector Size:4mm

Performance



Standard Option

Diaphragm: EPDM

Head: NYLON



- 110V
- 230V







Charles Austen Pumps continuously delivers products that are at the forefront of technical development. Driven by a desire to provide innovative pumps to a number of markets, Charles Austen pumps are designed with the consumer in mind, to ensure consistent benefits are delivered in a range of applications.

CONTACT US

- <u>+44 (0)1932 355 277</u>

ADDRESS ROYSTON ROAD BYFLEET, SURREY, KT14 7NY