



fluidity.

nonstop

IT'S ABOUT KEEPING YOUR PROCESSES RUNNING



Chemical Process

 **AxFLOW**



fluidity. nonstop

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About AxFlow

Part of Axel Johnson AB with sales of over 7 billion euro and 20,000 employees worldwide, the AxFlow Group is one of Europe's largest suppliers of process pumps with offices a presence in 28 European countries, South Africa, Australia and New Zealand.

In the UK AxFlow has over 50 years history operating from 5 locations across the country from which it supplies a large range of process pumps and a comprehensive pump service and repair package.



AxFlow has developed *fluidity.nonstop* a concept through which we provide products and services that encompass all aspects connected with the smooth running of process pumps.

The most comprehensive portfolio of process pumps in the UK

Our chemical process pump range isn't just limited to centrifugal pumps but includes numerous positive displacement pumps making it the largest range in the UK.

WILDEN

Wilden is one of the world's largest manufacturers of air operated double diaphragm pumps. Within Europe, Wilden has a history with AxFlow that goes back more than 40 years, making us the pre-eminent European experts in their products.

WERNERT-PUMPEN

Since 1920 Wernert Pumpen have been at the forefront of pump innovation and developed the first plastic centrifugal pump back in 1927. Since then, Wernert have become world leaders in the manufacture of plastic lined pumps.

Gruppo Aturia

The oldest pump manufacturer in Italy tracing its routes back to 1889, Gruppo Aturia manufactures pumps for the utilities, process and oil/gas sectors and has recently absorbed the entire workforce of Caster Pumps.

LEDERLE Hermetic

Established in 1875 Hermetic have been manufacturing canned motors since 1951 and remain the leading European canned pump manufacturer having supplied over 180,000 units around the world.

ARGAL PUMPS

Argal manufacture one of the most comprehensive portfolios of plastic pumps in the world that includes, mag drive, self priming and mechanically sealed FRP ranges.

BUNGARTZ CENTRIFUGAL PUMPS

Since the 1930s, Bungartz have specialised in the design and manufacturer of problem solving pumps which can self regulate their flow to cope with varying suction conditions and ultra low NPSHa.

realAx | hose pumps

Realax is a major force in the fluid handling industry. Bringing a comprehensive range of Peristaltic pumps to the market for handling an extraordinary range of media and drawing on vast industry and application experience.

Blackmer

Blackmer is the world's leading manufacturer of rotary-vane pumps. Blackmer's unique sliding-vane design is now recognised world-wide for handling industrial process fluids, volatile or organic compounds and viscous liquids.

ALMATEC

First established in 1984, Almatec has become the respected world leader in the field of pneumatic diaphragm pumps due to a combination of consistent innovation and German product quality.

PULSAFEEDER A Unit of IDEX Corporation

Pulsafeeder has been a leader in fluid handling technology since the early 1940's, when they pioneered the hydraulically actuated diaphragm metering pump principle. Following this they have also become experts in magnetically driven gear.

OBL

Established in 1975, OBL has one of the largest metering pump portfolios including plunger, mechanical diaphragm and hydraulic diaphragm types.

MUVEX

Mouvex, has remained an innovator in the manufacture of positive displacement pumps since its foundation. Of particular interest to the chemical process market are their eccentric rotating that are capable of clearing a pipeline of fluid.

Experts in pumps associated with the Chemical Process Industry

AxFlow has been supplying pumps to the Chemical Process Sector for over 50 years so we understand that it's about reducing down time, safe liquid handling and lowering life cycle costs. With the largest range in the UK, we believe that we can always offer the most suitable solution for every application.

Acids and Alkalis

Chemical processes involve countless acidic, alkaline and solvent liquids; in response to this diversity we have the ability to offer products with wetted parts constructed from an extremely wide range of chemically resistant materials. This range of materials includes several grades of stainless steel, hastelloy, Monel, titanium and Alloy 20 and plastics such as polypropylene, PVDF, ETFE, PE and PVC. In addition to this, we have several ranges of pumps including mag drive and canned models that offer extremely high levels of containment.

Abrasives and Solids

Abrasive particles and solids are not unknown in chemical process liquids and as a result we have included several wear resistant pump ranges that can handle them. These include our Wernert lined centrifugal pumps, Relax hose pumps, eccentric disc pumps from Mouvex and AOD pumps. Wherever possible we aim to reduce wear at source by handling the solids in a gentle way.

Tanks and Sumps

The AxFlow range includes a number of vertical pumps that can be fitted in or out of tank, many of which can cope with high temperatures or solids. In addition to this, we also have several pump types that can dry prime and can cope with suction lifts of up to 5 metres allowing them to be sited next to tanks and sumps.

Tanker off Loading

AxFlow offer the largest choice of pumps suitable for tanker off loading, these range from self priming centrifugal pumps, vane pumps through AOD to eccentric disc pumps. Many can run dry, can be automatically controlled, will clear the line and be used as part of vapour recovery systems with our range of process compressors.

Dosing

The definition of dosing varies from industry to industry as different applications require different levels of accuracy, reliability and repeatable flow. Consequently, we offer a range of pumps capable of dosing to different levels of flow and accuracy. These range from AOD and peristaltic pumps to precise gear and diaphragm metering pumps.

Extreme Temperature Liquids

Due to the size of our product range, we have many pumps that can handle liquids at temperatures from - 160 °C to 450°C. This includes magnetic drive and canned pumps that offer additional levels of liquid containment.

Refrigerants and Liquid Gases

Handling refrigerants and liquid gases can involve many technical challenges including high vapour pressures and super critical viscosities. At AxFlow we understand these problems and have a range of pumps from vane to centrifugal pumps that have been specifically designed to handle these liquids.

Viscous Liquids

Due to our expertise in the Food and Beverage Sector we are experts in the challenges posed by viscous liquids. We can analyse viscosities in house and then offer pumps capable of transferring liquids with viscosities of over 1 million cP.



Range Summary

Materials		Seal Type	ATEX	Solids	Self Priming	Max m3/hr	Max Diff Pressure	Max System bar	Max °C	Min °C	Max cP	Page
AODD Pumps												
Original Plastic	Wilden	PP,PVDF	None	☺	☑	22	4.5 bar	8	107	0	20,000	6
Original Metal	Wilden	SS,AL,DI	None	☹	☑	50	8 bar	20	176	0	20,000	6
Advanced Plastic	Wilden	SS,AL,DI	None	☺	☑	35	8 bar	8	107	0	20,000	6
Advanced Metal	Wilden	SS,AL,DI	None	☹	☑	50	8 bar	20	176	0	20,000	6
E series	Alamtec	PE,PTFE	None	☹	☑	18	7 bar	7	120	-10	10,000	7
Chemcor	Alamtec	SS	None	☹	☑	25	7 bar	7	176	-10	10,000	7
Centrifugal Pumps												
ND	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mech	☹		1700	140 m	16	300	-20	300	8
NDM	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mag Drive	☹		200	100 m	25	300	-50	300	8
NE	Wernert	PE,PVDF,PTFE,PP	Mech	☹	☑	1800	140 m	16	90	-5	300	9
NM	Wernert	PE,PVDF,PTFE,PP	Mech	☹	☑	70	70 m	16	80	-5	300	9
SP	Wernert	PE	Mech	☹	☑	4000	47 m	4.7	80	-5	300	9
SDM	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mag Drive	☹		27	20 m	25	200	-50	150	10
PCM	Aturia	PP,PVDF	Mag Drive	☹		100	45 m	10	80	-20	150	10
PCM-SP	Aturia	PP,PVDF	Mag Drive	☹	☑	70	38 m	10	80	-20	150	10
Basis	Argal	PP,PTFE	Mag Drive	☹		4	7 m	6	80	-20	150	11
Prima	Argal	PP,PTFE	Mag Drive	☹		12	12 m	6	80	-20	150	11
Route	Argal	PP,PTFE	Mech, Mag Drive	☹		50	48 m	10	100	-20	150	11
Frontiera	Argal	PP,PTFE	Mag Drive	☹		90	42 m	10	100	-20	150	11
CN-CNF-CNK	Hermetic	SS,CI,HST,DX,CS	Canned	☹		1600	270 m	1200	450	-120	50	12
CAM	Hermetic	SS,CI,HST,DX,CS	Canned	☹		300	1000 m	1200	360	-120	50	12
TCN - TCAM	Hermetic	SS,CI,HST,DX,CS	Canned	☹		1600	270 m	1200	450	-120	50	12
CNP-CNPF	Hermetic	SS,CI,HST,DX,CS	Canned	☹		1000	300 m	1000	425	-120	50	13
SMKM	Aturia	CS,SS,DX,SDX,TI	Mech	☹		1400	400 m	25	450	-20	300	13
KSMKM	Aturia	CS,SS,DX,SDX,TI	Mech	☹		2000	400 m	25	450	-20	300	13
SMKM-M	Aturia	CS,SS,DX,SDX,TI	Mag Drive	☹		1400	400 m	25	450	-20	300	13
Rhino	Argal	PP,PTFE	Mag Drive	☹	☑	17	20 m	10	100	-20	100	14
Hippo	Argal	PP,PVC,PVDF	Mech	☹	☑	45	30 m	10	100	-20	150	14
Saturn Evo	Argal	FRP	Mech		☑	1350	150 m	16	115	-35	150	14
NKPF	Wernert	PP,PVDF	Seal-less	☹	☑	700	120 m	16	115	0	300	15
VKPF - VKKF	Wernert	PP,PVDF	Seal-less	☹	☑	700	120 m	16	115	0	300	15
Saturnsub	Argal	FRP	Seal-less	☹	☑	900	85 m	10	40	0	150	15
Equipro	Argal	PP,PVDF	Seal-less	☹	☑	12	m	10	100	-20	150	15
KGK	Argal	PP,PVDF	Seal-less	☹	☑	200	80 m	10	90	-10	150	15
Turbine												
Elk	Argal	PP,PTFE	Mag Drive	☹	☑	22	3 m	10	100	-20	150	15
PTM	Aturia	PP,PVDF	Mag Drive	☹		15	55 m	6	80	-20	150	15
PTM-SP	Aturia	PP,PVDF	Mag Drive	☹	☑	12	50 m	6	80	-20	150	15
STM	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mag Drive	☹		10	90 m	100	350	-50	150	15
SDTM	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mag Drive	☹		12	170 m	100	350	-50	150	15
Vane Pumps												
NP-SNP-HXL	Blackmer	SS,DI	Mech	☹	☑	250	140 bar	20	260	-20	22,000	20
P Series	Blackmer	SS,CI	Mech	☹	☑	100	12 bar	14	250	-5	22,000	20
SVM	Aturia	SS,CS,DX, SDX,HST,TI,MONEL	Mag Drive	☹	☑	2	13 bar	350	300	-50	200	20
Lobe Pumps												
Universal 2	Waukesha	SS,CS,DX, SDX,HST,TI,MONEL	Mech	☹	☑	100	35 bar	35	148	-40	1 million	19
Peristaltic Pumps												
APY	Realax	SILTY,NR,SO	Seal-less	☹	☑	0.09	2 bar	2	100	-20	10,000	12
ISI	Realax	NRB,EPDM,SI,SOL,NR,HYP	Seal-less	☹	☑	1.5	8 bar	8	120	-20	25,000	13
IP	Realax	NRB,EPDM,SI,SOL,NR,HYP	Seal-less	☹	☑	25	8 bar	8	120	-20	25,000	13
RP	Realax	NRB,EPDM,SI,SOL,NR,HYP	Seal-less	☹	☑	50	15 bar	15	120	-20	25,000	13
Eccentric Disc Pumps												
S Series	Mouvex	SS	Seal-less			12	10 bar	10	80	0	3,000	14
C - SLS Series	Mouvex	SS	Seal-less			8	16 bar	16	80	0	3,000	14
Metering Pumps												
MD/ML	OBL					2	12 bar	12	45	0	100	22
Plunger Pumps	OBL					10	400 bar	400	45	0	100	22
Hydraulic Diaphragms	OBL					3.8	125 bar	125	100	0	100	23
Pulsa	Pulsafeeder	SS,Alloy 20,HST,TI,MONEL,PVC,P'	Seal-less			18	250 bar	250	350	0	5,000	24
PulsaPro 900	Pulsafeeder	SS,Alloy 20,HST,PVC,PTFE	Seal-less			15	1000 bar	1000	370	0	3,000	24
Pulsar	Pulsafeeder	SS,Alloy 20,HST,TI,MONEL,PVC,P'	Seal-less			0.6	250 bar	250	110	0	200	25
Gear pumps												
Eco Chemgear	Pulsafeeder	SS,Alloy 20,Hast	Mech	☹	☑	220	14 bar	14	232	-50	1 million	26
Isochem	Pulsafeeder	SS,Alloy 20,Hast	Mag Drive	☹	☑	220	14 bar	14	232	-50	11,000	25
Eclipse	Pulsafeeder	ETFE,PVDF	Mag Drive	☹	☑	8	11 bar	11	93	-50	11,000	27
Envirogear	Maag	SS,CS,DI	Mag Drive	☹	☑	35	14 bar	14	260	-50	50,000	27
Process Equipment												
Plate Heat Exchangers												29-29
Vapour Recovery Systems												30
Mechanical seals												30
Pump Services												31

Please note all technical information is approximate, please consult AxFlow GB before specifying any product.



AODD

Original/Advanced Plastic

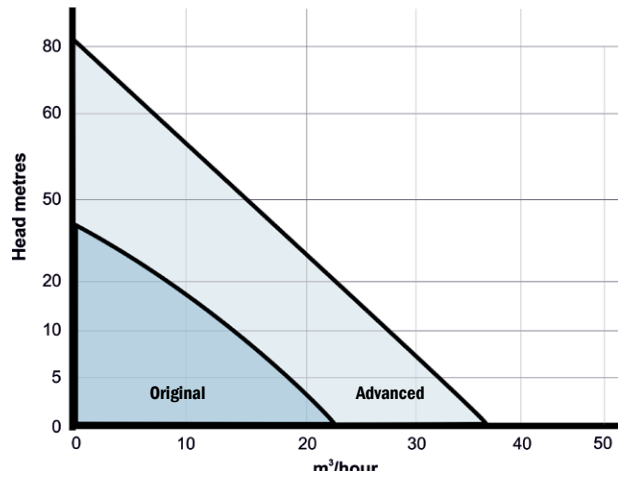
Wilden's Original Series AODD pumps are designed for utilitarian applications that require a robust construction. The Advanced Series AODD pumps are constructed with bolts to give a better diaphragm seal to cope with varying discharge pressures. They both utilise ProFlo Shift which automatically optimizes air consumption and eliminates overcharging of the air chamber.

- PP
- PVDF
- PFA
- Buna
- EPDM
- Viton
- Neoprene
- Santoprene
- Hytrel
- Polyu'thane
- PTFE



- Solids
- Self Priming
- Corrosive Liquids
- Abrasive Liquids

8 bar Viscous 20,000 cP +107 °C -40 °C

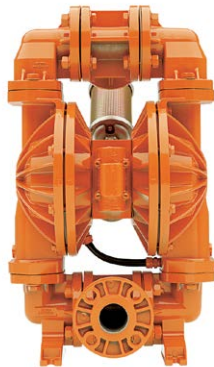


- Reliable and robust.
- Dry priming and dry running.
- Single-point exhaust option.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- Sizes 1/4" to 3".

Original/Advanced Metal

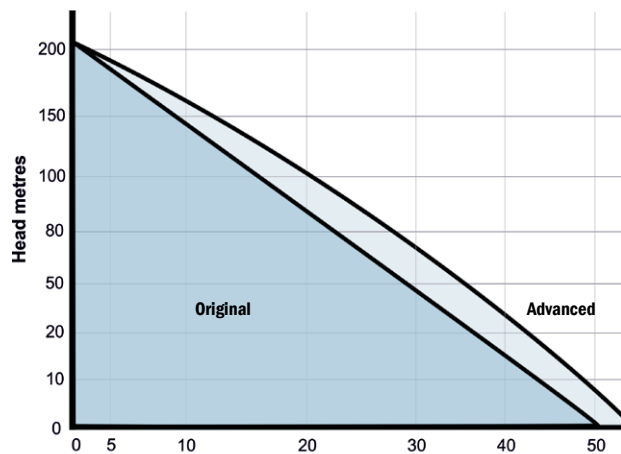
Wilden's Original Series AODD pumps are designed for utilitarian applications that require a robust construction. The Advanced Series AODD pumps are constructed with bolts to give a better diaphragm seal to cope with varying discharge pressures. They both utilise ProFlo which automatically optimizes air consumption and eliminates overcharging of the air chamber.

- St Steel
- Aluminium
- Cast Iron
- Buna
- EPDM
- Viton
- Neoprene
- Santoprene
- Hytrel
- Polyu'thane
- PTFE



- Solids
- Self Priming
- Corrosive Liquids
- Abrasive Liquids

8 bar Viscous 20,000 cP +107 °C -40 °C



- High discharge pressures.
- Reliable and very robust.
- Improved product containment.
- Dry priming and dry running.
- Single-point exhaust option.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- Sizes 1/2" to 4".





AODD

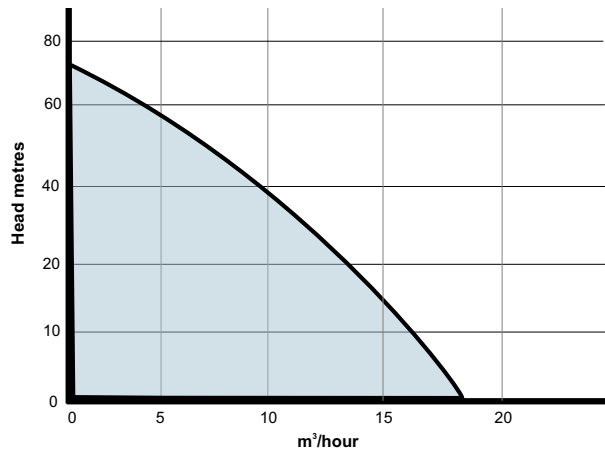
E Series

The E-Series represents the latest generation of plastic air-operated AOD pumps. They are machined from solid blocks of plastic and all housing bolts are tightened against a diaphragm ring allowing for an extremely secure unit. They are ATEX rated and their bodies can be made from PE or PTFE.

- PE
- PTFE
- EPDM
- PTFE
- NBR



- Solids
- Self Priming
- Corrosive Liquids
- Abrasive Liquids



- Reliable and robust.
- Dry priming and dry running.
- High levels of liquid containment.
- Extremely resistant to aggressive chemicals.
- Will deliver variable flow and pressure.
- Sizes 1/2" to 3".
- NPT, DIN or ANSI flange connections.

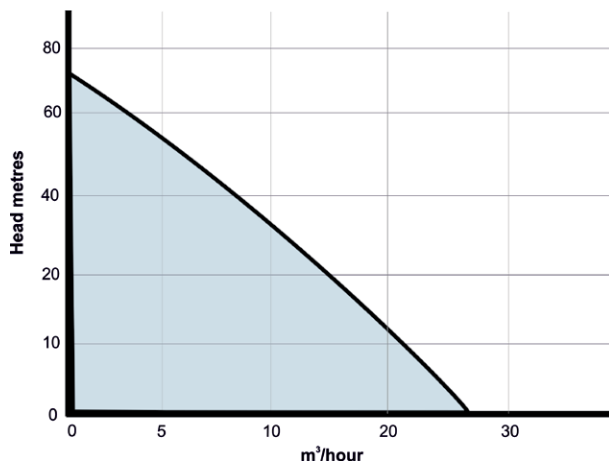
Chemisor

These metal pneumatic diaphragm pumps feature soft contours, smooth flow channels and no dead spaces. CHEMICOR pumps contain a central block made of PA or conductive PE.

- St Steel
- EPDM
- PTFE



- Solids
- Self Priming
- Corrosive Liquids
- Abrasive Liquids



- Reliable and robust.
- Dry priming and dry running.
- Can be dead headed without damage.
- Will deliver variable flow and pressure.
- NPT or BSP connections.
- Sizes 3/4" to 2".

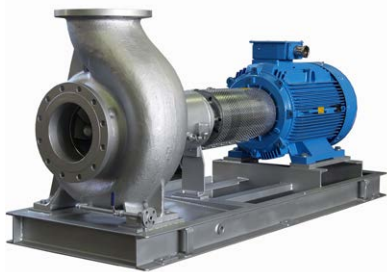


Centrifugal

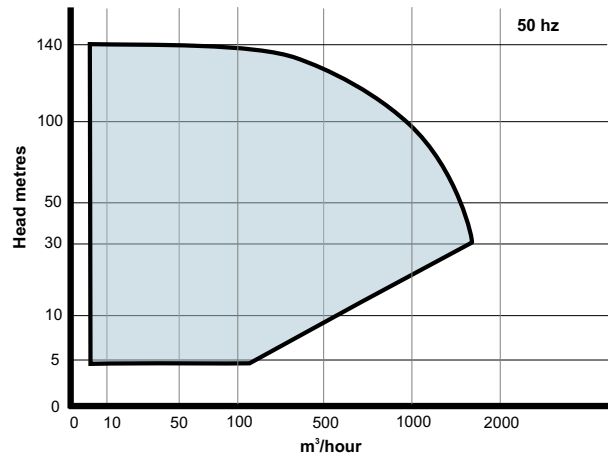
ND

High quality ISO 2858 - ISO 5199 process pumps refined over many years service life to offer an efficient and balanced pump design. They are available in a very wide range of materials. Most components are stocked resulting in short lead times.

- St Steel
- Dup St St
- S Dup St St
- Hastelloy
- Titanium
- Carb St
- Monel



✓ Corrosive Liquids



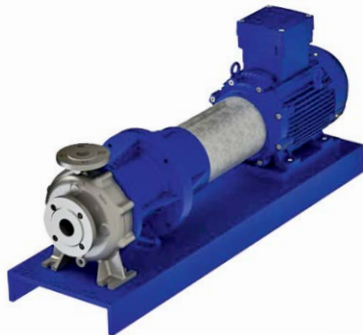
- Dynamically balanced impellers.
- Oil lubricated ball bearings.
- Back pull out design.
- Labyrinth seals on bearing supports
- Heating jackets.
- Single, double, flushed API 682 seals.
- Optional Refrigerated seal chamber.



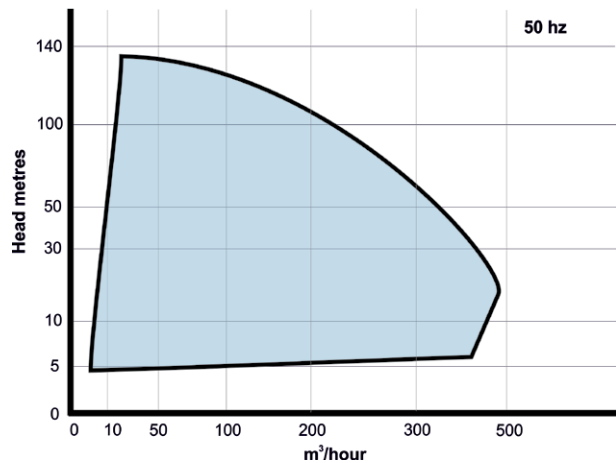
NDM

High quality magnetically driven ISO 2858 pumps. NDM pumps have hydraulically and hydro-statically balance pump chambers and Hastelloy rear housings, Samarium Cobalt magnets and Silicon Carbide bears as standard. They are available as either a long or close coupled construction.

- St Steel
- Hastelloy
- Dup St St



✓ Corrosive Liquids



- No mechanical seals to leak or service.
- Oil lubricated ball bearings.
- Incoloy or Hastelloy constructions available.
- Back pull out design with screw-on impeller.
- Available with self cleaning filters.





Centrifugal

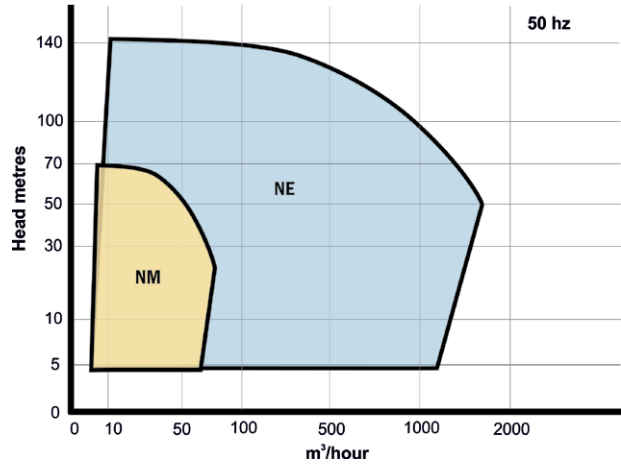
NE - NM

ISO 2858 plastic lined pumps designed to convey aggressive, solid laden and toxic liquids. They are designed around a solid pump casing which results in a particularly robust construction. The mechanically sealed pumps are also able to handle abrasive liquids when manufactured in PE.

- PTFE
- PE
- PP
- PVDF



- Solids
- Corrosive Liquids
- Abrasive Liquids



- Thick-Walled casing and liners.
- Fully metal clad enclosure.
- Sealed for life roller bearings.
- Semi-open or closed impeller.
- PE - PVDF - PP - PTFE.
- Single, double, flushed mechanical seals and mag drive.

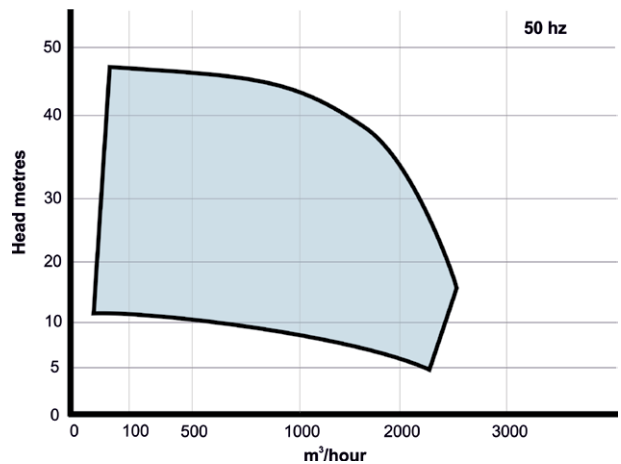
SP

Polyethylene lined pumps designed to convey aggressive, solid laden and toxic liquids for flows up to 2,500 m³/hr. SP pumps are fitted with closed impellers specially designed for high abrasion applications.

- PE



- Solids
- Corrosive Liquids
- Abrasive Liquids



- Thick-walled and interchangeable parts.
- Grease or oil lubricated bearings.
- Single, bellows, or double acting mechanical seals.
- True slurry design impellers.



Centrifugal

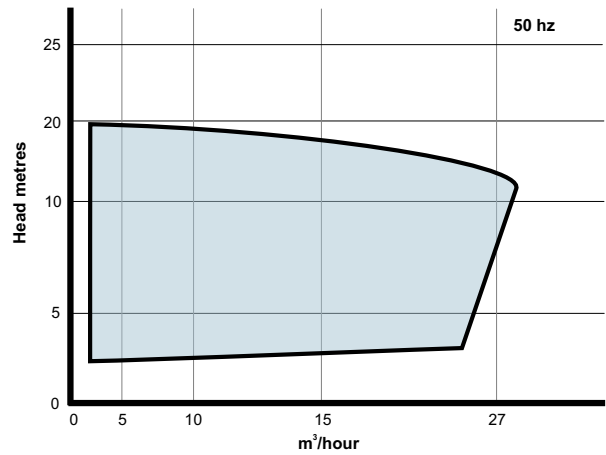
SDM

Compact, sturdy and simple centrifugal transfer pumps made from 316 stainless steel designed to handle a wide range of acids, solvents, alkalis and refrigerants. Fitted with Samarium Cobalt magnets, SDM pumps can be configured to handle liquids up to 200°C.

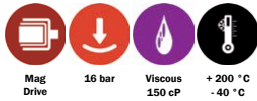
St Steel
PTFE
Carbon
EPDM
Viton
FEP



- Corrosive Liquids
- Refrigerants



- No mechanical seals to leak or service.
- BSP, NPT, PN or ANSI connections.
- Can be mounted vertically.
- Vacuum welded internal magnets available.
- Can be constructed to suit off shore applications.



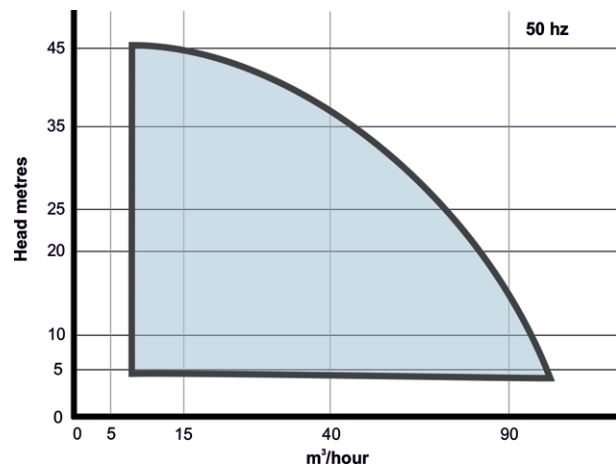
PCM

Robust mag drive pumps machined from solid blocks of plastic. Being magnetically driven, PCM pumps have no drive seals to leak and their solid construction offers an alternative to lined pumps.

PP
PVDF
PTFE
Carbon
EPDM
Viton
FEP



- Self Priming
- Corrosive Liquids



- No mechanical seals to leak or service.
- Chemically resistant.
- PN10 or ANSI 150.
- Can be mounted vertically.
- PP - PVDF.



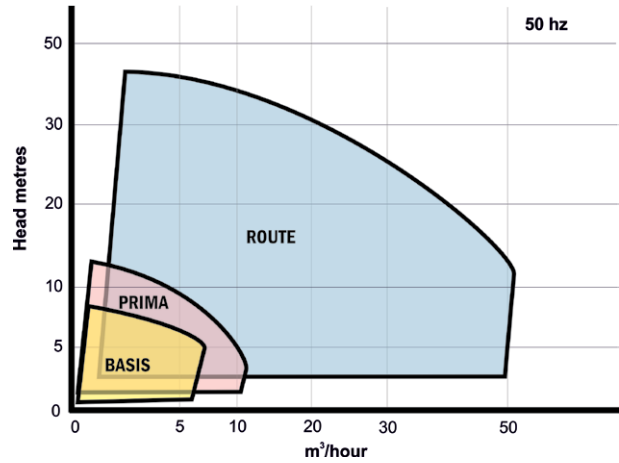


Centrifugal

Basis - Prima - Route

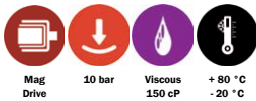
A suite of magnetically driven and mechanically sealed pumps able to handle a wide selection of chemical transfer duties. They are also available with 50/60 hz UL approved motors making them suitable for OEM circulation applications.

- PP
- ETFE
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- Self Priming
- Corrosive Liquids

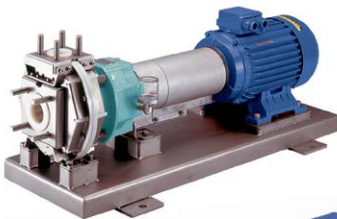
- No mechanical seals to leak or service.
- Chemically resistant.
- Threaded or flanged.
- Can be mounted vertically.
- PP - PVDF.



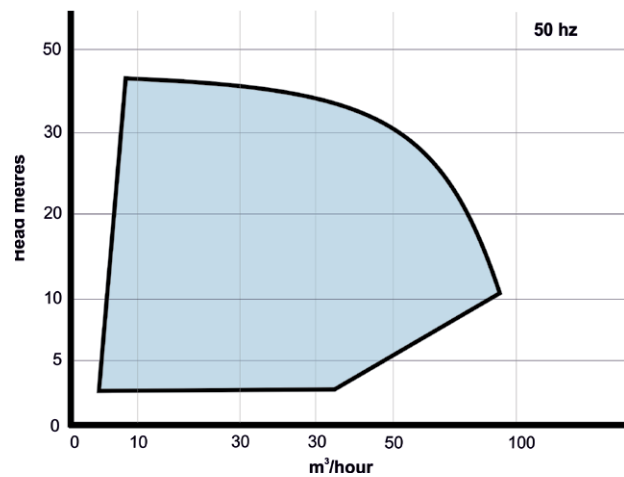
Frontiera

A suite of magnetically driven and mechanically sealed pumps. All components in contact with the pumped liquids are realised in PP or E-CTFE and the pump is covered with a solid armour made of AISI 316 for making the pump more robust and chemically more resistant.

- PP
- ETFE
- EPDM
- Viton
- FEP



- Self Priming
- Corrosive Liquids



- No mechanical seals to leak or service.
- Chemically resistant.
- Threaded or flanged.
- Can be mounted vertically.
- PP - PVDF.





Centrifugal

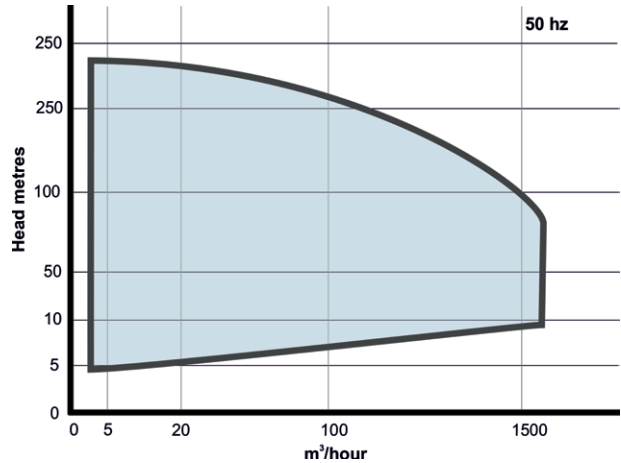
CN-CNF-CNK

Canned pumps to ISO 2858 for liquids that require high containment. Primary containment is provided by the stator can with secondary containment provided by the stator housing and terminal box. Having only one hydro-dynamically balanced rotor, experience has shown that operation periods well in excess of 5 years without maintenance are considered normal.

- Cast Iron
- Steel
- St Steel
- Hastelloy
- Duplex



- Corrosive Liquids
- Refrigerants



- Double containment of liquid.
- No mechanical seals to leak or service.
- 180 month mean time before failure.
- Reduced footprint and easy installation.
- ATEX certified up to T6.
- CNF Axillary Impeller for high vapour pressures.
- CNK (cooled motor) design.
- System pressures up to 1200 bar



CAM - CAM Tandem

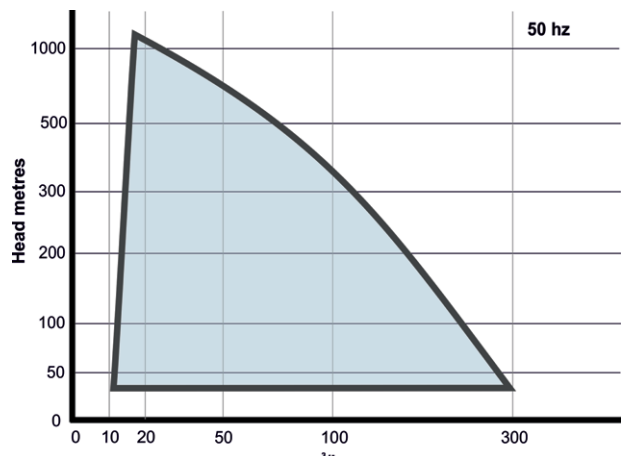
The CAM range of canned pumps utilise are multi-stage, canned pumps that provide a high containment solution to low flow high head applications.

High pressures can be achieved with Tandem units in which the stages are arranged on both sides of the motor.

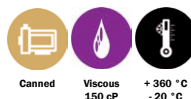
- Cast Iron
- Steel
- St Steel
- Hastelloy
- Duplex



- Corrosive Liquids
- Refrigerants



- Double containment of liquid.
- No mechanical seals to leak or service.
- 180 month mean time before failure.
- Reduced footprint.
- Easy installation.
- ATEX certified up to T6.



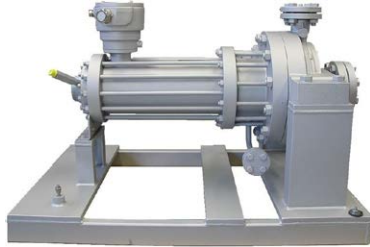


Centrifugal

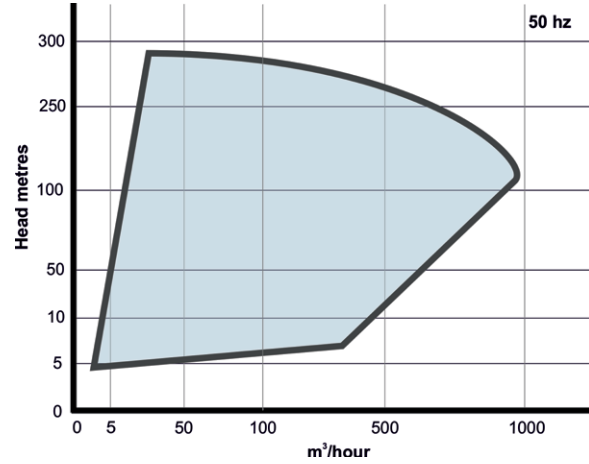
CNP-CNPF-CNPF

The CNP range of canned pumps utilise API610 hydraulics, combined with canned pump technology to provide a fully compliant API685 seal-less pump. As they provide high levels of containment and an integral pump/motor construction, they offer a trouble free API solution without the complex seal systems.

- Steel
- St Steel
- Hastelloy
- Duplex



- Corrosive Liquids
- Refrigerants



- Double containment of liquid.
- Extremely long service life.
- Reduced footprint.
- Simplified installation.
- ATEX certified up to T6.
- Reduced instrumentation.



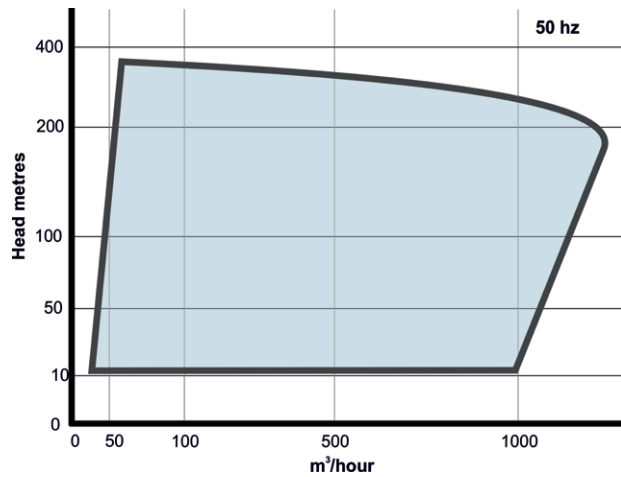
SMKM-KSMKM

A range of API 610 and API 685 process pumps. SMKM are the single stage OH2 version while KSMKM pumps are BB2 and can be constructed as two stage units. Both are available magnetically coupled.

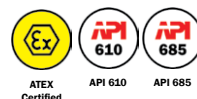
- Carb Steel
- St Steel
- Hastelloy
- Duplex
- S Duplex
- Titanium



- Corrosive Liquids
- Refrigerants



- Statically and dynamically balanced impellers.
- Compartmentalized approach to axial thrust.
- Double angular contact ball bearings.
- Single, double and balanced seals.





Centrifugal

Argal Self Priming Pumps

ELK mag drive pumps with a reversible flow and a priming capability of up to 6m. PP and ETFE

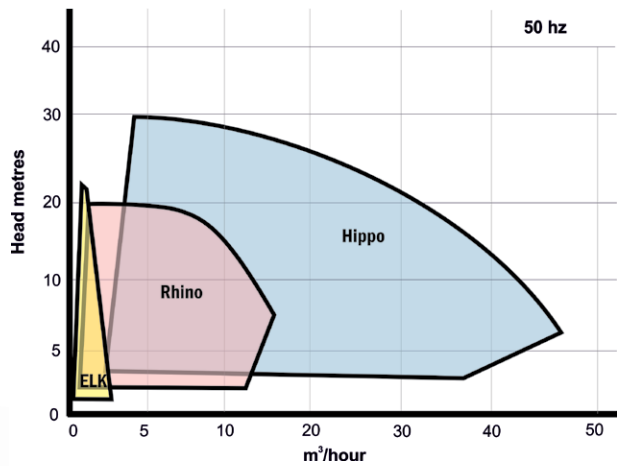
Rhino mag drive pumps with a priming capability of up to 6m. PP and ETFE

Hippo mechanical sealed pumps able to handle liquids with suspended solids and prime up to a height of 5m.

- PP
- PVDF
- ETFE
- PVC



- Corrosive Liquids
- Self Priming



- Thick-Walled casing parts.
- A range of sealing types.
- PP - PVDF - PVC - ETFE.
- Reversible flows.

Saturn Evo

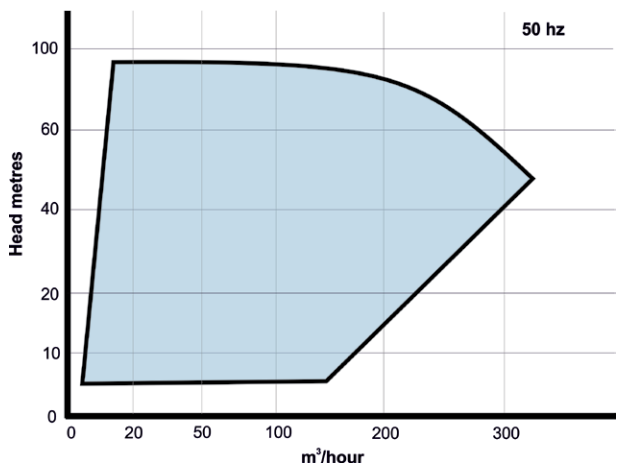
An extremely comprehensive suite of fibreglass pumps that offer a cost effective solution to applications that require both chemical resistance and resilience to abrasion.

Saturn Evo pumps offer low NPSHr and the ability to fit a range of single and double seals.

FRP



- Solids
- Corrosive Liquids
- Abrasive Liquids



- Single piece pump casing.
- Bearings positioned to prolong their life.
- Close and long coupled units available.
- Can be fitted with easy to clean inlet filters.
- Impeller adjustment possible by relocating the shaft.



Centrifugal

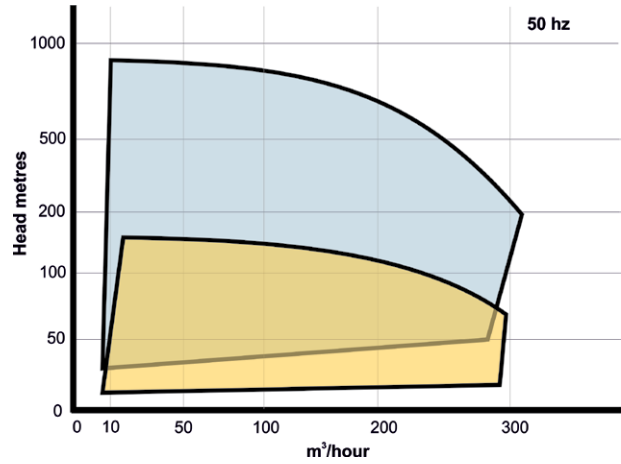
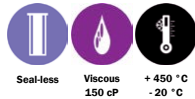
NKPF-NKKF-VKPE-VKKF

VKPE/VKKF pumps are heavy duty vertical plastic lined sump pumps designed to convey aggressive, solid laden liquids. They have no seals to leak or maintain and no bearings in the liquid.

NKPE/NKKF are seal-less side tank mounted plastic lined pumps with outer metallic construction suitable for liquids with a high suspended solids content.

- PE
- PVDF
- PP
- PTFE

- Solids
- Corrosive Liquids
- Abrasive Liquids



- Thick-Walled metallic casing parts.
- Bearings positioned above mounting plate
- Sealed for life roller bearings.
- PE - PVDF - PP - PTFE.
- Can run dry for short periods.
- True cantilever design with no bearings in the liquid.

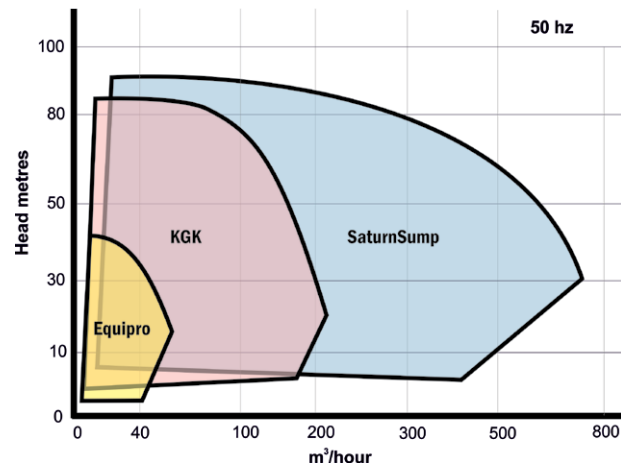
Argal Vertical Pumps

Equipro are seal-less circulation pumps designed for use in the surface treatment industry. **KGK** pumps are robust plastic sump pumps with shafts up to 4m long.

SaturnSump pumps are fibreglass sump pumps designed to handle waste and contaminated water with column lengths of up to 5m.

- PP
- PVDF
- FRP

- Solids
- Corrosive Liquids



- Thick-Walled casing parts.
- Bearings positioned above mounting plate.
- Semi open impellers.
- Sealed for life roller bearings.
- PVDF - PP.
- Can run dry for short periods.
- True cantilever design with no bearings in the liquid.





Turbine

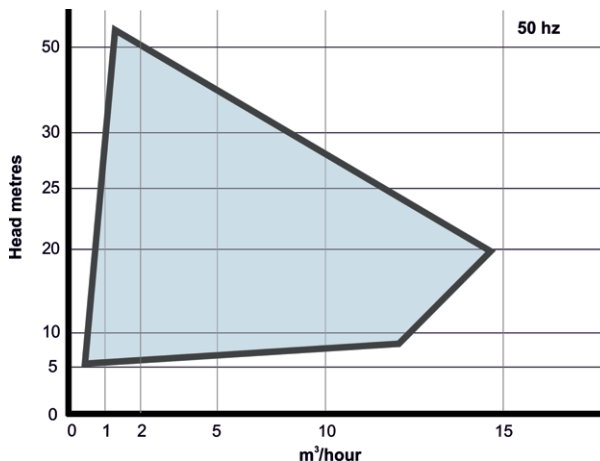
PTM & PTM-SP

Magnetically driven regenerative turbine pumps for low flow - high head duties. PTM pumps offer an extremely cost effective alternative to multi-stage pumps and are available with self priming chambers. Being magnetically driven the liquid is contained within a seal-less chamber that cannot leak.

- PP
- PVDF
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- Self Priming
- Corrosive Liquids



- No mechanical seals to leak or service.
- Chemically resistant.
- Threaded or flanged.
- Can be mounted vertically.
- Will pump 20% entrained gases.
- PP - PVDF.

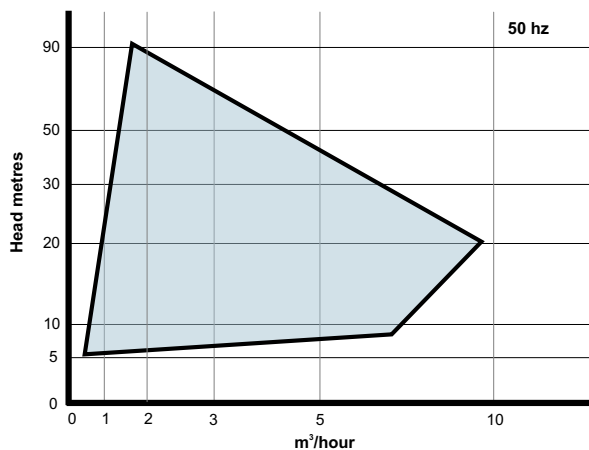
STM

High specification regenerative turbine pumps for high heads/ low flow applications. Because STM pumps are machined from solid metal, they offer an extremely wide range of design options and construction materials.

- St Steel
- Hastelloy
- Dup St St
- Titanium
- PTFE
- Carbon
- EPDM
- Viton
- FEP



- Corrosive Liquids
- Refrigerants



- No mechanical seals to leak or service.
- High system pressure capability up to 200 bar.
- Will pump up to 20% entrained gasses.
- Can be vertically mounted.
- Polished internal surfaces available.
- Threaded, Tri-Clamp, PN or ANSI flanges.



Eccentric Disc

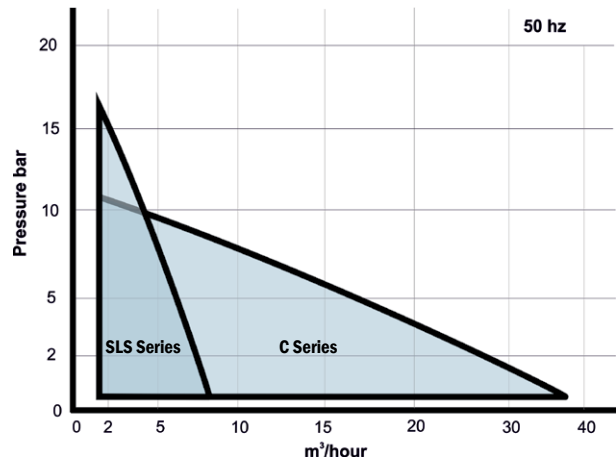
C & SLS Series

The unique eccentric disc concept provides gentle handling and high-volume efficiency. The C and SLS Series pumps are particularly suited to tanker off loading and can completely clear the line of product.

- St Steel
- Ductile iron
- Viton
- FEP



- Solids
- Self Priming
- Corrosive Liquids



- Seal-less
- Self priming.
- High product recovery.
- Pumped product constantly renewed.
- Output not affected by viscosity variation
- Low linear speed.



16 bar



Viscous
3000 cP



+ 80 °C
-10 °C



ATEX
Certified

Your production process is marked by critical control points where different fluids are pumped, mixed, injected and filtered. Too often the role these points play in process performance is underestimated.

To get the very best from your process, all the individual parts should work in harmony. You may only need to consider performance, dimensions and material specifications of the pump; alternatively you might also need to evaluate the pumping technology, safety issues or compatibility with upstream and downstream systems as well as overall process control matters.

It's so much easier when you can interact with a fluid handling specialist.



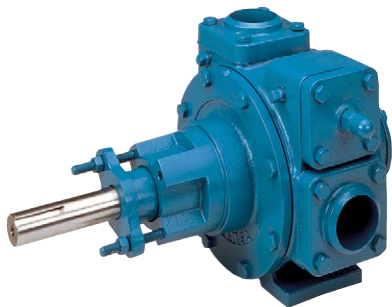
Vane

NP - SNP - HXL Series

Blackmer NP pumps are specifically designed to offer maximum versatility for handling a wide variety of liquids. The NP pump is ideal for applications that have varying fluid viscosities and temperatures. NP pumps can be fitted with double mechanical seals. SNP denotes stainless steel and HXL high flows.

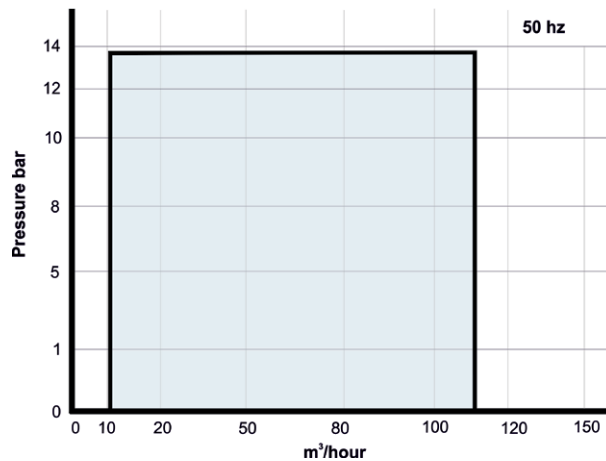
- Cast Iron
- St Steel
- Duravane
- EC Laminate
- Bronze
- Viton
- PTFE

- Self Priming
- Corrosive Liquids
- Refrigerants
- Low shear



- Mechanical Seal
- 20 bar
- Viscous 22,000 cP
- +260 °C -30 °C

- ATEX Certified
- FDA Compliant



Viton

- Jacketed pump heads available.
- Excellent self-priming and dry run capabilities.
- Symmetrical bearing support assures even loading and wear for long life.
- Adjustable relief valve protects pump against excessive pressures.
- Vanes can be replaced without removing the pump from the piping system.

P Series

The MouveX P Series vane pump cover a large range of industrial applications, from thin fluids to very viscous products, whether they are non-lubricating, abrasive or corrosive.

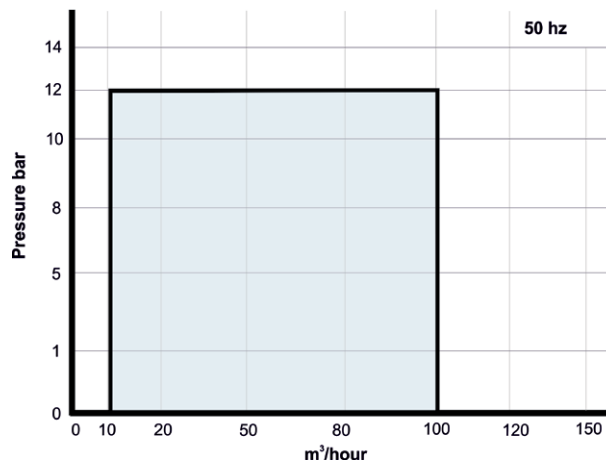
- St Steel
- Cast Iron
- Viton
- Nitrile

- Low Shear
- Self Priming



- Mechanical Seal
- 14 bar
- Viscous 22,000 cP
- +250 °C -20 °C

- ATEX Certified



- CIP and SIP compatible.
- Performance remains constant over time.
- Dry-run capability.
- Can be supplied with built-in heating or cooling jackets.



Vane

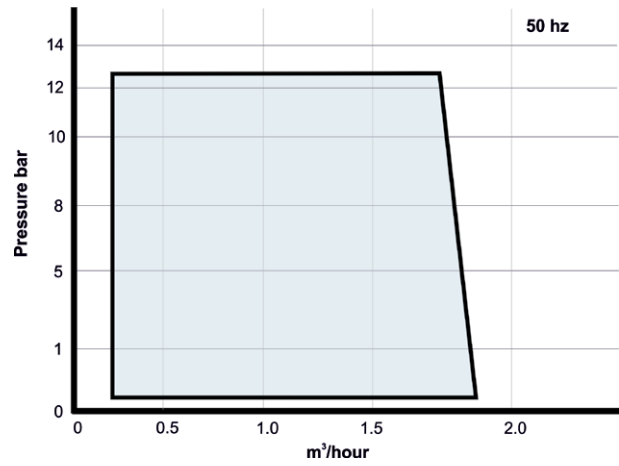
SVM-SVP

Robust, high specification mag drive rotary vane pumps designed with a flow path which produces no pulsation. SVM pumps can be configured to a range of different applications and will pump fluids up to 300 °C.

- St Steel
- Hastelloy
- Dup St St
- Titanium
- PP
- PVDF
- EPDM
- Viton
- FEP



- Self Priming
- Corrosive Liquids
- Refrigerants
- Low shear



- High heads - low flows.
- Viscous or thin liquids.
- Available with metallized graphite.
- Dry running capability.
- Threaded, PN, Tri-Clamp or ANSI flanges.
- SS plus options of Duplex and Hastelloy.



Rotary Piston

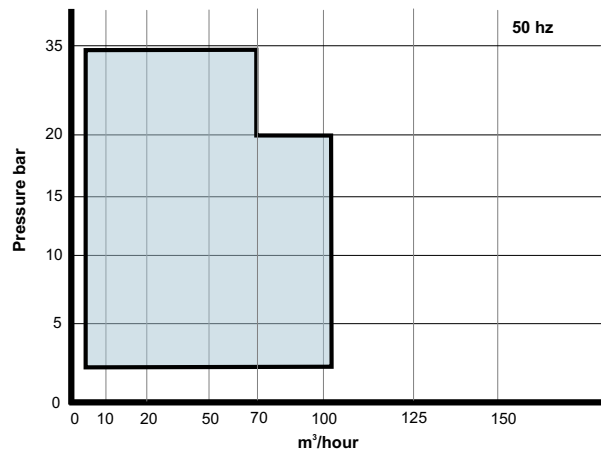
Universal

Built around Waukesha arc shaped rotor wings resulting in a long sealing path, the Universal 2 Series offers the same low pump slippage, easy maintenance, long service life and the ability to pump liquids with both high and low viscosity as the Universal 1 but at higher flows and pressures.

- St Steel
- EPDM
- Viton
- Silicone
- PTFE
- FEP
- Buna



- Solids
- Low Shear
- Self Priming
- Corrosive Liquids
- Abrasive Liquids



- Bi-directional flow.
- Gentle pumping action.
- Free draining pump housing.
- Dry running with flushed seal.
- Can pump large solids.
- Can pump a wide range of viscosities.





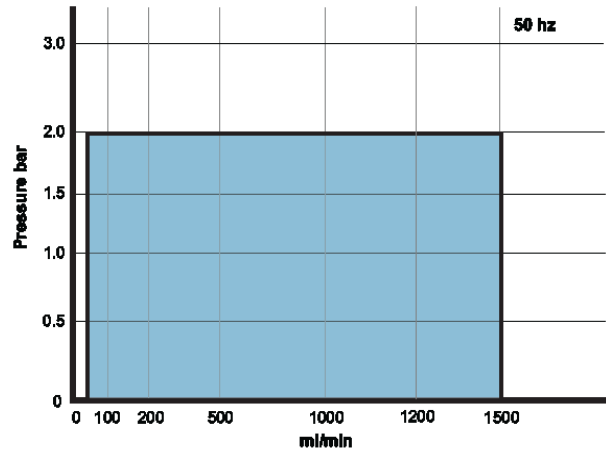
Peristaltic

APY

APY tube pumps are ideal for lower pressures and low flow applications providing accurate dosing of small quantities of up to 90 l/h and up to 2 bar pressure. The three roller design cuts vibration and tube replacement is quick and easy.

- Silicone
- Norprene
- Tygon
- Solva

- Solids
- Low Shear
- Self Priming
- Corrosive Liquids



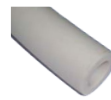
- Suction lift to 6 metres.
- Electronic equipment for batch applications.
- Plastic baseplate with leakage container.
- Reversible rotation.
- High dosing accuracy.
- Corrosion resistant.
- Sanitary tubes to FDA.



Tubes and Hoses



SILICONE widely used for food and laboratory applications chemically resistant with high temperature capabilities.



NORPRENE is an excellent all round tubing with very good chemical resistance, and low absorption rates.



SOLVA food grade PVC tubing compatible with oils, fatty products, some hydrocarbons and good for viscous products.



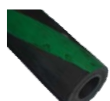
NORPRENE A60G offers an extremely long life time, good chemical compatibility and 120°C maximum temperature.



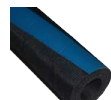
NR abrasion resistant and mechanical strength. Generally resistant to diluted acids, alcohols and alkaline products.



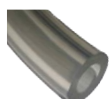
NORPRENE A60F is the food grade version of A60G resistant to CIP.



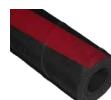
HYPALON has excellent resistance, to oxidizing products such as nitric, chornic, and hydrochloric acid as well as oxygen generating liquids such as hydrogen peroxide.



EPDM has good chemical resistance, specially used for concentrated acids, ketones and alcohols.



TYGON is plasticizer free with low absorption/adsorption properties, this minimizes the risk of fluid alteration making it particularly suitable for pharmaceutical and medical applications.



NBR shows excellence compression and abrasion resistance although it's temperature and chemical resistance capabilities are limited.



NBR-A is the FDA approved NBR material.



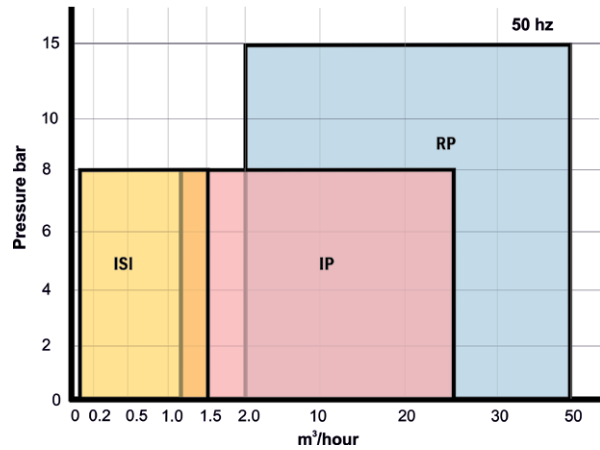
Peristaltic

ISI - IP - RP

A suite of industrial hose pumps that utilise shoes or rollers to compress the hose rather than rollers giving a more even and longer sealing area. They are fitted with inverter driven motors and have sturdy reinforced hoses.

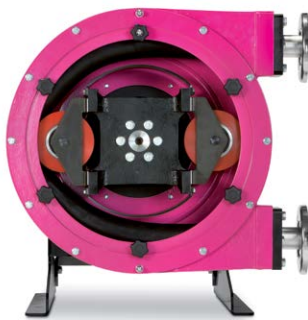
- EPDM
- Silicone
- Norprene
- NR
- NBR
- HYPALON

- Solids
- Low Shear
- Self Priming
- Corrosive Liquids



- Suction lift to 9 metres.
- Reversible rotation.
- Hose leakage detector available.
- Can be accompanied with pulsation dampeners.
- Electronic equipment for batch.
- FDA materials available.
- Available with Tri-clamp, DIN 11851, SMS, NPT, PP, PVDF connections.

Shoes or Rollers



Rollers

Mounted on bearings rollers compress the surface of the hose during rotation. This design generates less friction and can support pressures up to 8 bar.



Shoes

Fixed shoes are an option for RP models which move across the surface of the hose during compression. Shoes spread the pressure over a greater area and make a firmer seal than rollers. Typically they are preferred for higher operating pressures (up to 15 bar) and more viscous liquids.



Metering

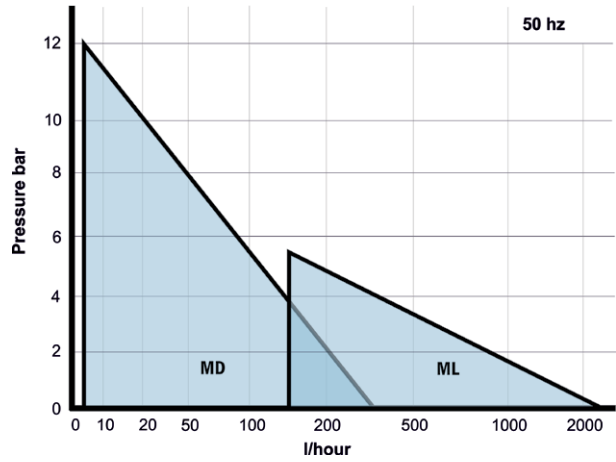
OBL Mechanical Diaphragm

Mechanically actuated diaphragms which offer a chemically resistant, seal-less option for low pressure applications. The OBL's unique (patented) mechanical diaphragm design ensures linearity between flow rate and percentage of stroke. The flow rate is virtually unaffected by the working pressure variations.

St Steel
PP
PVC
PVDF
PTFE
Viton



- Self Priming
- Corrosive Liquids



- Simple and robust spring return plunger pump.
- Low maintenance costs due to small number of components.
- Suited to aggressive fluids.
- Single and multiple head arrangements possible.
- Spring or positive return.
- Available with a stroke length actuator.

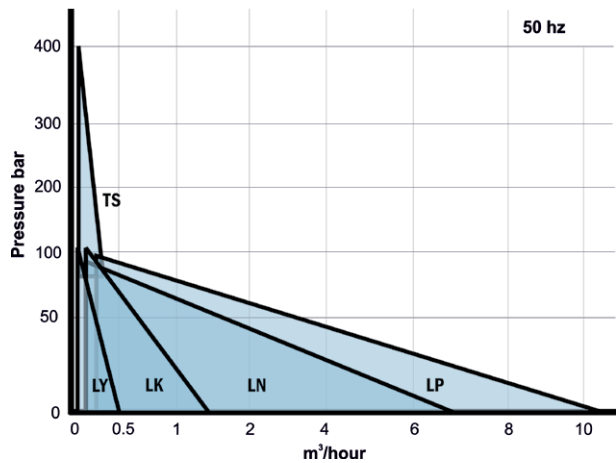
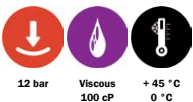
OBL Plunger

A comprehensive range of plunger metering pumps with ceramic plungers that comply with API 675 for high pressure applications. They can be used singularly or in multiple head units and feature a simple linear adjustment dial.

St Steel
PVC
PVDF
Viton



- Self Priming
- Corrosive Liquids



- Simple and robust plunger metering pump.
- Low maintenance costs due to small number of components.
- Available with a stroke length actuator.
- Single and multiple head arrangements possible.



Metering

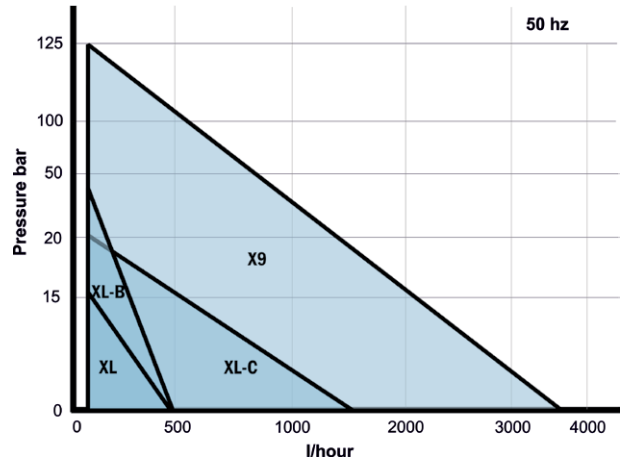
OBL Hydraulic Diaphragm

Hydraulically actuated diaphragm pumps which offer the product containment of mechanical diaphragm units and the high pressure capabilities of plunger type pumps. They feature built-in relief valves, air purge valves and mechanically actuated replenishing diaphragms that guarantee a constant hydraulic balance.

St Steel
PVC
PVDF
PTFE
Viton



- Self Priming
- Corrosive Liquids



- Longer diaphragm life.
- Suited to aggressive fluids.
- Single and multiple head arrangements possible.
- Available with a range of actuators.
- Comply with API 675.
- Available with a double diaphragm construction.



12 bar



Viscous
100 cP



+100 °C
0 °C



ATEX
Certified

Using the right pumps for your process? Or just the ones you've always used?

Pumps matter to the performance of your processes and choosing the right ones is critical - to productivity, profitability, reliability and to safety.

On the face of it, making the right choice should be easy - the necessary dimensions, output, material and safety standards are all given. What is harder to determine is the optimal choice of fluid handling technology.



Metering

Pulsa

Pulsa Series are high specification metering pumps available with three different diaphragms designs:

Flat with dish plates to prevent over deflection,

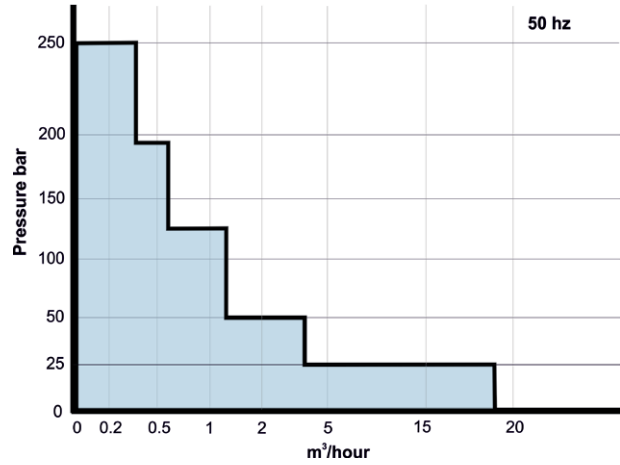
Hydratube for high viscosity liquids and

Hydracone for self priming applications.

St Steel
Alloy C
Monel
PVC
PTFE
Viton
PTFE
CSM
PFA



- Self Priming
- Corrosive Liquids



- Three component hydraulic valves.
- Hydraulically balanced diaphragms - no wear point.
- 1 yr warranty on wear parts, 5 on gear train
- Manual adjustment mechanism to $\pm 1\%$ accuracy.
- A wide range of control signal options.



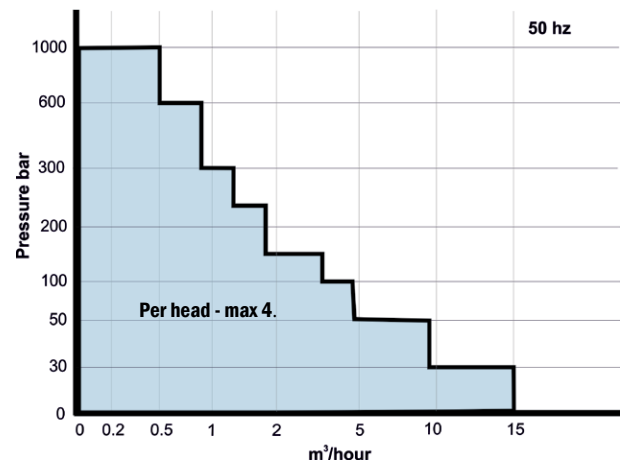
PulsaPro 900

The PulsaPro 900 is a more rugged and large scale range for high flows and pressures. One of the most innovative features of the PulsaPro 900 is the unique gearbox design which allows for up to four heads.

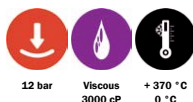
St Steel
Alloy 20
Hastelloy
PTFE
PTFE



- Self Priming
- Corrosive Liquids



- Vertical or horizontally mounted motors.
- Hydraulically balanced diaphragms - no wear point.
- 1 yr warranty on wear parts, 5 on gear train
- Manual adjustment mechanism to $\pm 0.5\%$ accuracy.
- A wide range of control signal options.
- Dual scale % and flow units.
- API 675.





Metering

Pulsar

Pulsar Pumps are high specification metering pumps available with three different designs:

Pulsar for flows up to 450 l/min and 250 bar.

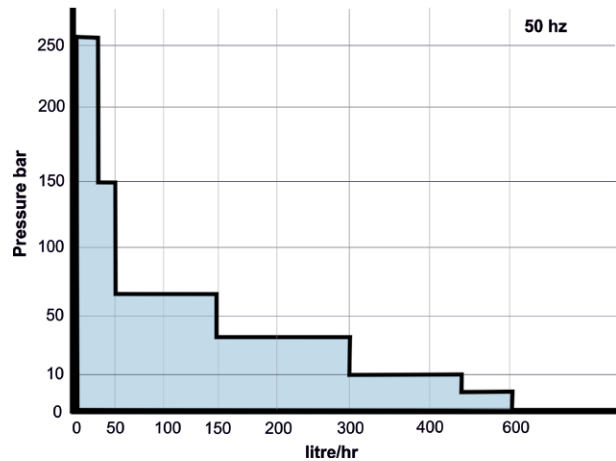
Hypopump for Sodium Hypchloride 420 l/min and 10.4 bar.

Shadow for flows up to 640 l/min and 21 bar.

- St Steel
- Alloy 20
- Hastelloy
- Titanium
- Monel
- PVC
- PTFE



- Self Priming
- Corrosive Liquids



- Balanced diaphragm to give prolonged life.
- 4 bolt tie bar provides rigidity to the 3 component check valves and eases their quick removal.
- Diagnostics give hydraulic operation, system over-pressure, diaphragm integrity and hydraulic oil fill level.
- 1 yr warranty on wear parts, 5 on gear train.



**Mean Time Between Failure? Life Cycle Cost? Capital cost?
Are you asking the right questions?**

It's not just about acceptable expected life of equipment, seals, filters and other components, it's about looking at those factors in the context of your process. How easy is it to schedule maintenance within your plant? What are the cost-implications of down-time and bottlenecks? How quickly and readily can you get replacement parts and consumables? How frequently, and how rapidly do you need to change lines? How valuable is residual product in your lines and how easily can you extract it?

Looking at the process as a whole, and the role of your pumps and mixers within that process, enables you to look at the real cost of ownership.

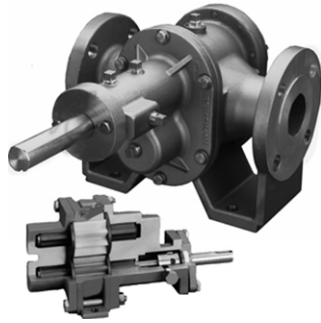


Metering

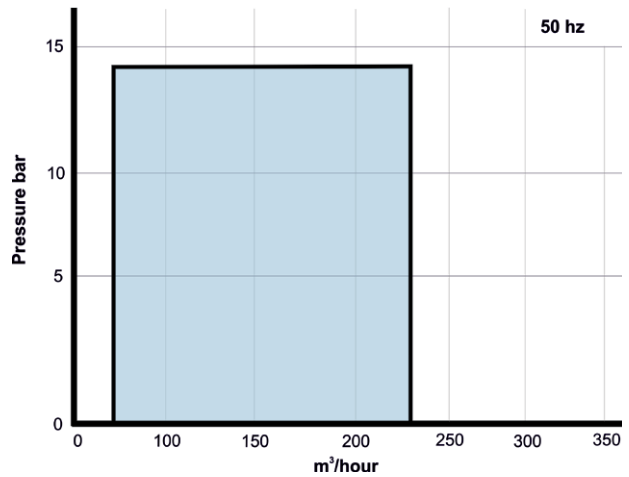
Eco Chemgear

External gear pumps, available in various materials and designed for the handling of low and high viscosity liquids – even in continuous or cyclic operations. They are self priming and bi-directional and can be fitted with internal or external mechanical seals or packing.

- St Steel
- Alloy 20
- Hastelloy
- PEEK
- PTFE



- Corrosive Liquids
- Low shear



- Bi-directional.
- Lubricated by process fluid.
- Self priming.
- Can handle non lubricating fluids.
- Accuracy of +/- 5%.



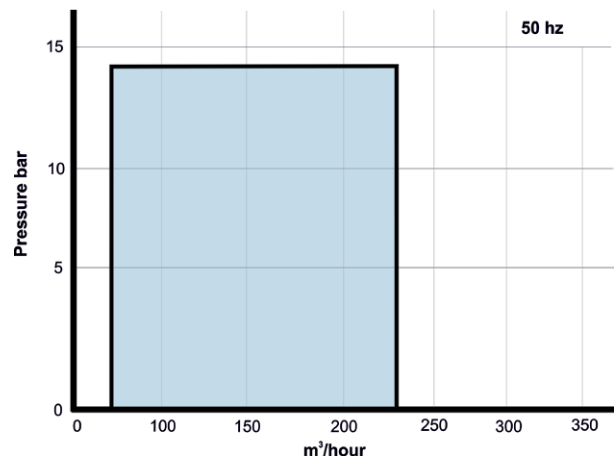
Isochem

Magnetically driven external gear pumps available in various materials and designed for the handling of low and high viscosity liquids – even in continuous or cyclic operations. They are self priming and bi-directional and offer additional product containment and a leak free seal-less design.

- St Steel
- Alloy 20
- Hastelloy
- PEEK
- PTFE



- Self Priming
- Corrosive Liquids



- Additional product containment.
- Seal-less leak free construction.
- Bi-directional.
- Lubricated by process fluid.
- Self priming.
- Can handle non lubricating fluids.
- Accuracy of +/- 5%.





Metering

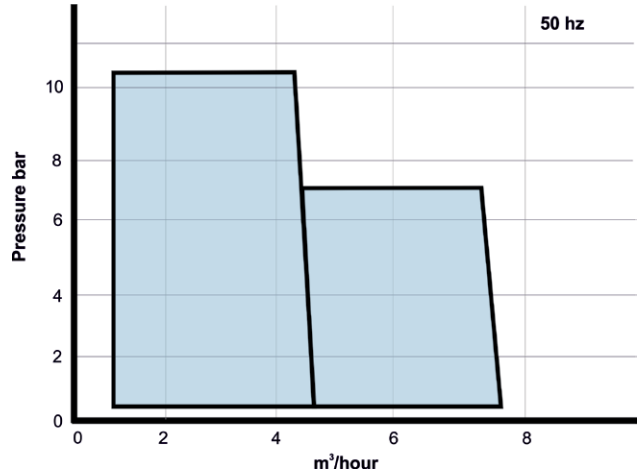
Eclipse

Magnetically driven external gear pumps available in various techno-polymer materials and designed for the handling of low and high viscosity liquids. Based on a simple 16 component design they offer additional product containment and a leak free seal-less construction.

- ETFE
- PVDF
- EPDM
- Viton



- Self Priming
- Corrosive Liquids



- Additional product containment.
- Seal-less leak free construction.
- Bi-directional.
- Lubricated by process fluid.
- Easy to maintain.
- Universal flanges with PTFE insert.



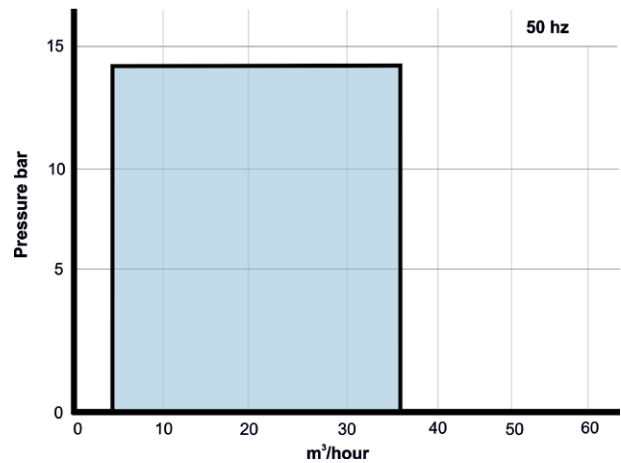
Envirogear

Magnetically driven internal gear pumps featuring a revolutionary support system that effectively eliminates leaks and mechanical wear. This makes them a solution for environmentally conscious fluid handling of both thin and viscous products.

- St Steel
- Carb Steel
- Ductile Iron
- SiC
- Carbon
- Viton
- FEP



- Self Priming
- Corrosive Liquids



- Patented between-the-bearing support system. High reliability and durability
- Bi-directional.
- Lowest overall cost of ownership
- Single-fluid-chamber seal-less design.





Heat Exchangers

Gasketed Plate Heat Exchangers

Having invented the plate heat exchanger, APV gasketed heat exchangers remain amongst the best designed and constructed heat exchangers in the world. They are available with port sizes from 3/4" to 20" and plate areas from 0.018 to 3.8 m².

- Improved hanging system that eliminates plate flexing thereby prolonging product life.
- A unique clamping system designed into the plate profile.
- Adhesive free gasket retention system.



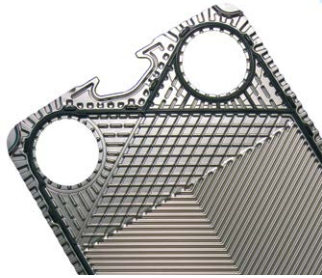
EnergySaver

For processing low-viscosity media. Designed for high thermal efficiency with a very close temperature approach.

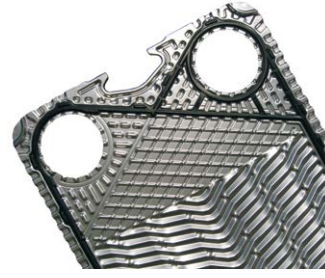
EasyFlow

For media containing fibres or pulp, requiring highest possible recovery without blocking.

St Steel
Titanium
NBR
EPDM
Viton



St Steel
Titanium
NBR
EPDM
Viton



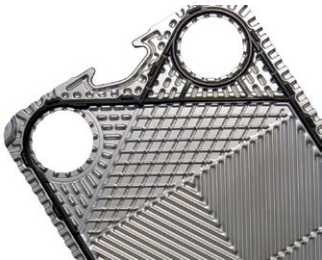
DuraFlow

For medium or high viscosity media. Designed for continuous process and long run time.

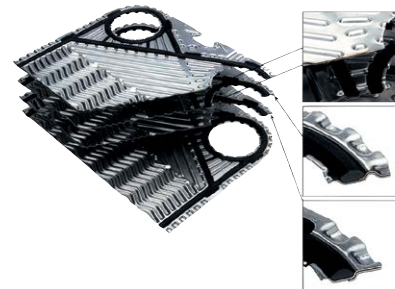
DuoSafety

The DuoSafety system is an adhesive free early warning system, designed to detect leakages at an early stage and enable the end user to take precautions against intermixing of the fluids.

St Steel
Titanium
NBR
EPDM
Viton



St Steel
Titanium
NBR
EPDM
Viton



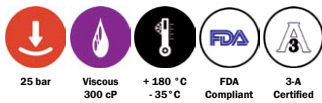


ParaBrazed

A comprehensive range of compact brazed plate heat exchangers without gaskets. ParaBrazed units are especially suited for water heater, district heating units, gas boilers, and solar heating.

St Steel

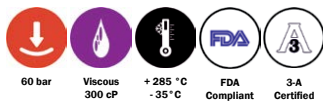
- No gaskets..
- Higher pressure rating.
- Higher temperatures.
- Higher viscosities.
- Stocked for short lead times.



Tube in Tube Exchangers

APV ParaTube heat exchangers can be supplied with either straight tubes or corrugated tubes.

They are available in the four configurations and can be manufactured as a fully-welded design, with removable end caps or with built-in thermal expansion protection of O-rings or packing between the shell and tube bundle.



The **Corrugated Double Tube (CDT)** consists of a single corrugated tube positioned in a larger diameter outer tube. This design is particularly well suited for products with very high pulp or fibre content, or products which contain a substantial quantity of particulates which must be processed with a minimum loss of identity.

The **Corrugated Triple Tube (CTT)** consists of an inner tube positioned within a middle tube which is located in the outer tube. The result is an annular space where heat transfer effectively occurs from both sides. The triple tube is generally applied to high viscosity or Newtonian fluids.

The **Corrugated Quadruple Tube (CQT)** offers significant flexibility in the annulus gap to optimize heat transfer and pressure drop. This feature is critical to heat transfer of laminar and/or non-Newtonian fluids, particularly to product-to-product regeneration.

The **Corrugated Multi Tube (CMT)** consists of small diameter corrugated tubes aligned within a larger diameter outer shell. This maximizes heat transfer in a given volumetric space. The CMT is ideal for heating or cooling duties of lower viscosity products or those containing whole juice cells or pulp.



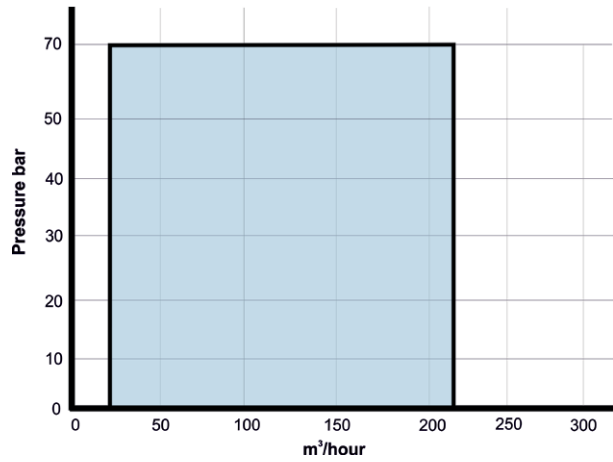
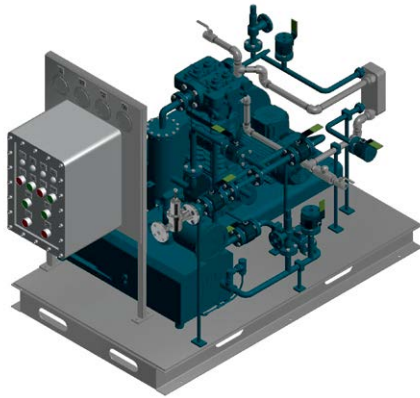
Compressors

Blackmer Vapour Recovery Systems

A comprehensive and range of vapour recovery systems offering a compression ratio of up to 9 and ideal for LPG/propane, butadiene, natural gas, sulphur dioxide, and refrigerants.

They can include integrated heat exchangers, control panels and additional vacuum pumps.

- St Steel
- Duct Iron
- NBR
- Viton
- PTFE
- Neoprene



- Oil free design.
- High efficiency valves move more volume
- Heavy-duty, precision-ground crankshaft.
- Pressure assisted piston rings for positive.
- Pressure lubricated bearings.
- Self-adjusting piston rod seals.
- Pressure and temperature indicators.



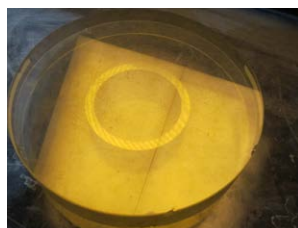
Mechanical Seals



AxFlow are experts in mechanical seals and boast comprehensive seal refurbishment facilities.

Our “as-new” refurbishment process restores customers’ seals to their original functionality, saving them the cost of replacement hardware.

- Comprehensive seal coverage from standard to customised seals, including mixer and bellows seals.
- Improved seal reliability through root cause analysis for critical seal failures based on in-depth understanding of your processes.
- All wearing parts replaced.
- All faces lapped to within 2 light bands 0.0001 microns.
- All cartridge & agitator seals pressure tested to manufacturers specifications.



AxFlow can offer new seals on extremely short lead times and can recommend alternative options to improve the reliability of your process.



Installation

We can install and commission your pumps to ensure they work properly from the word “go” and identify any issues with your system that may adversely affect the pump.



Monitoring

We can monitor your pumps to check they’re working OK. By performing regular checks we can foresee problems and carry out planned maintenance work, therefore preventing pump failures and process stoppages.



Repair

We can undertake numerous types of work on-site or at one of our Service Centres. This work can range from simple maintenance, to completely rebuilding your pump by recreating key components.



PD Pump Repair

AxFlow are the acknowledged European leaders in the supply of positive displacement pumps.

This means that we truly understand positive displacement pumps and the special challenges that their repair can pose. We also hold large stocks of components in our European Distribution Centre that reduce our repair times.



Hygienic Pump Repair

As a result of our strength in positive displacement pumps and knowledge of the Food & Beverage Industry, we have become market leaders in the supply of hygienic pumps to a range of different industries across the UK.

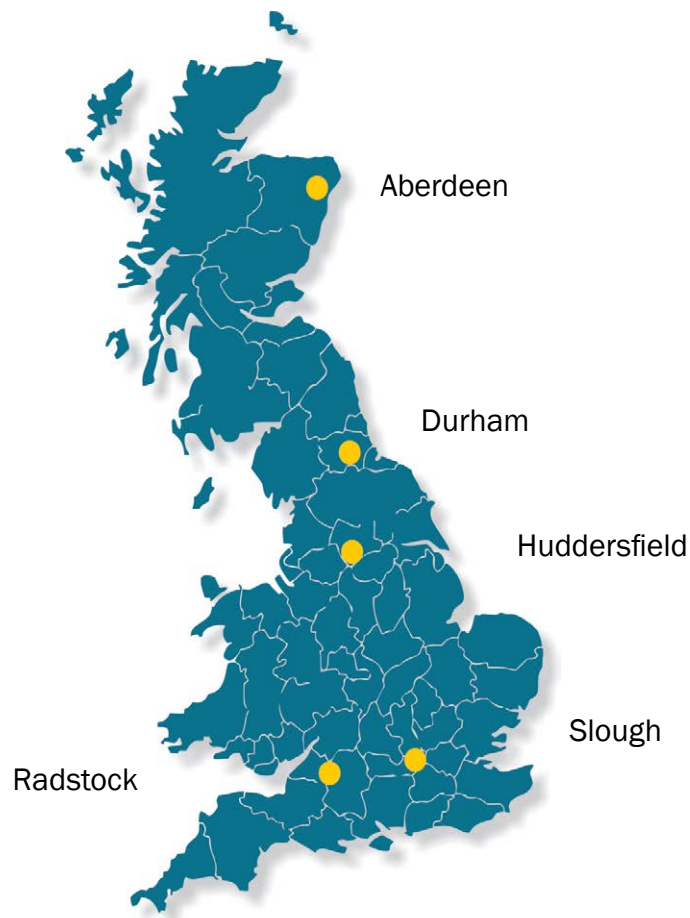
To support this we have created clean assembly areas within our repair facilities and developed specific hygienic pump repair procedures.



Large Pump Repair

We have the ability to handle up to 40 tonnes, and test motors up to 30 kW which make us able to work with the very largest of pumps.





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