



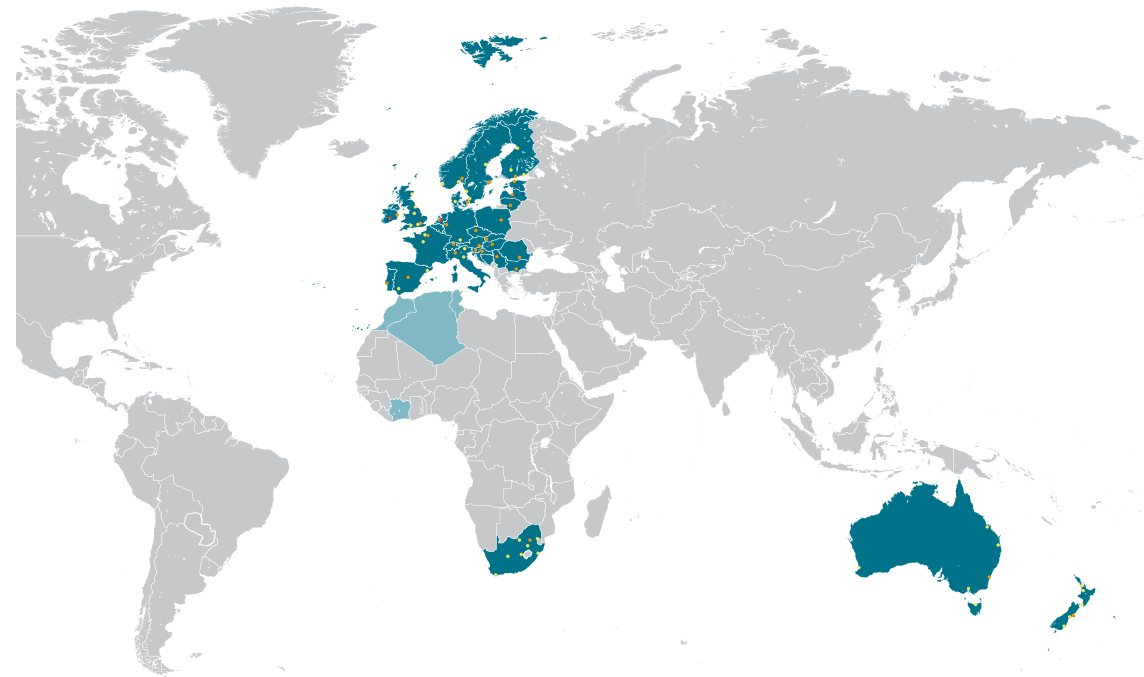
*fluidity.*  
**nonstop**

IT'S ABOUT KEEPING YOUR PROCESSES RUNNING

**Water and waste  
water treatment**

 **AXFLOW**

# AxFlow near you



## About AxFlow in Ireland

Our team of experienced engineers are here to offer the very best technical advice and support. That, together with products from world leading manufacturers, means you can be sure of the highest quality equipment selected to provide the most precise, cost-effective and reliable solution to your fluid handling requirements.

The role that fluid handling systems play in your process is vital, yet often hidden. That's fine with us; we believe in 'fit and forget'. We work hard so that we can fit and you can forget.

## AxFlow Group

The AxFlow Group is one of Europe's largest suppliers of centrifugal, rotary positive displacement and reciprocating pumps. Operating with offices and service locations in 27 European countries and offices in South

Africa, Australia and New Zealand, AxFlow with nearly 1100 employees represent many world leading pump manufacturers. It is not just about selling pumps and spares – AxFlow provide face-to-face technical support and problem solving capabilities unsurpassed within the pumps industry. That in-depth knowledge along with the ability to select the “best pump for the job” irrespective of supplier, allows AxFlow an almost unique perspective on providing the optimum solution. Recent years have seen AxFlow develop a comprehensive pump service and repair organisation as well as the ability to build bespoke pump-systems to solve process problems.

Our ultimate parent company Axel Johnson was formed in 1873 and to this day AxFlow remain part of a family owned business.



## Progressive Cavity Pumps

### Mono EZstrip™ Family

Keeps your process running with minimal down time.

EZstrip has revolutionised the way in which progressing cavity pumps and associated products are maintained. The main feature of the EZstrip is the ability to 'Maintain-In-Place' (MIP), making a day-long maintenance operation of a PC pump into a 30 minute job.



BY SIMPLY REMOVING A FEW SCREWS, THE SUCTION CHAMBER IS EASILY DISMANTLED, GIVING YOU ACCESS TO TAKE OUT ANY RAG BUILD-UP, A PROCESS THAT TAKES LESS THAN 2½ MINUTES.

	Performance	Build options
EZstrip Transfer Pumps	<ul style="list-style-type: none"> <li>Flows of 1 – 220 m<sup>3</sup>/h</li> <li>Up to 12 bar in all sizes</li> <li>24 bar available on some sizes</li> </ul>	<ul style="list-style-type: none"> <li>Cast Iron or SS</li> <li>Range of elastomers</li> <li>Alloy Steel / SS rotating parts</li> </ul>
EZstrip Cake Pumps	<ul style="list-style-type: none"> <li>Flows of 0.5 – 49 m<sup>3</sup>/h</li> <li>Up to 24 bar discharge pressure</li> <li>Sludge Cake up to 30% DS</li> <li>Can be used for lime blending /BLI</li> </ul>	<ul style="list-style-type: none"> <li>Cast Iron casing</li> <li>Range of Elastomers</li> <li>Alloy Steel or SS rotating parts</li> <li>Auger &amp; inlet hopper variations</li> </ul>
EZstrip Munchers	<ul style="list-style-type: none"> <li>Up to 440 m<sup>3</sup>/h (untreated WW)</li> <li>Up to 330 m<sup>3</sup>/h on 4%DS</li> <li>Reduces solids to 5.5 mm or 8 mm</li> </ul>	<ul style="list-style-type: none"> <li>Inclined Cutter stacks</li> <li>Trash trap</li> <li>IP55 or IP68</li> <li>ATEX Zone 1</li> </ul>

## Mono EZstrip makes pump maintenance fast and easy



County Council engineers were spending hours repairing their press feed pumps which were constantly blocking. They realised Mono's EZstrip technology was the perfect solution.

With its maintain-in-place technology, the pumps could be de-ragged without disconnecting any pipework. The split suction chamber gave the fitters quick, immediate access to the blocked pump internals. De-ragging the pumps or changing out the worn rotor/stator became an easy job. Mono EZstrip pumps replaced both the old pumps, alleviating the pressure on the fitters to keep the plant running.

Commenting on their success, the Senior Engineer: "I welcome this new innovation in PC pump technology and have seen a major benefit in replacing other PC pumps on various sites with the Mono EZstrip pump because of the ease of maintenance and savings on costly down time".

Duty details:		AxFlow Solution:
Liquid	Dissolved Sludge	Model: EZstrip Z15AC with <ul style="list-style-type: none"> <li>2.2 kW inverter rated geared motor reduced to 356 rpm at 50 Hz</li> <li>Cast iron casing, Hard Chrome plated Alloy steel rotor, nitrile stator and single mechanical seal</li> <li>Port size is 65 mm PN16 Flanges</li> </ul>
Dry Solids	2% DS	
Capacity	4 – 10 m <sup>3</sup> /h	
Pressure	1 - 2 bar	



## Munchers & Screens

### Mono Pump Station / Inlet Works Protection

- Equipment to handle macerating, screening or a combination of both
- Munchers save hours in maintenance by preventing pumps from blocking
- Discreens are dynamic, self-cleaning and don't need regular maintenance/cleaning
- Discam units efficiently handle high flows, combining two proven technologies
- Local support with short lead times on equipment and spares



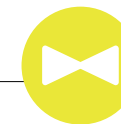
	Performance
Mono Munchers	<ul style="list-style-type: none"> <li>• Low speed, High Torque macerating</li> <li>• Installed in channels, sumps or pipelines</li> <li>• Handles flows of 1 180 m<sup>3</sup>/h</li> <li>• Solids reduced to 5.5 mm or 8 mm</li> </ul>
Mono Discreens	<ul style="list-style-type: none"> <li>• Intermeshing rotating discs pass solids to one side</li> <li>• 3 - 10 shafts, 200 - 1 750 mm high</li> <li>• Discs spaced at 2.5, 5, 9, 13, or 18 mm</li> <li>• Flows up to 13 400 m<sup>3</sup>/h</li> </ul>
Mono Discams	<ul style="list-style-type: none"> <li>• Flow rates up to 16 000 m<sup>3</sup>/h</li> <li>• All solids reduced to 5.5 mm or 9 mm</li> <li>• 1 m, 1.5 m or 2 m heights</li> </ul>

#### Genuine Mono Parts & Mono Universal Parts Family

- We supply wearing parts for almost all main PC pumps - Seepex, Netzsch, Allweiler, PCM
- All Parts are high quality, manufactured by Mono
- **Large range of stock held between the AxFlow and Mono UK stores means short lead times**
- We have the capability to keep your process going with minimal down times

#### Mono EZparts

- Available for all Mono EZstrip pumps
- Preassembled in relevant sections
- Ready to install for faster turn-around times



## Process Equipment

### Auma Actuators

Auma actuators are one of the industry's leading manufacturer in Electric quarter and Multi Turn valve automation solutions, available for duties from simple ¼ turn On/Off to Fully Modulating Multi turn actuators with various control options - Profibus, Modbus, analogue Position control and more.

With options such as Ex Rating, IP68 environmental protection, Non-intrusive / Bluetooth setup and UPS supply.



- Quarter Turn (SQ) and Multi Turn (SA)
- Available in 110v/220v 1phase or 380/400 v 3phase
- IP67 - IP68
- Supplied as standard with "Matic" control unit, for selectable Local / Remote control, with Reversing Contactors, Push Button Control
- Indicator lamps for Fully Open / Fully Closed, Running and Fault Display
- Adjustable Torque and Limit switches
- Manual Override via De-Clutchable Handwheel
- Paint Specification - C5M Marine Grade
- ISO Standard Valve Mounting Pad
- Visual Position Indication
- Available up to 1500 Starts per hour



### Airpower Pneumatic Actuators

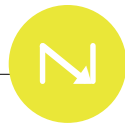
The air power actuator uses the same dimensions for double and single acting actuators with a 90° or 180° pivoting angle. This means that a double acting actuator can easily be converted to a spring return actuator by adding springs and vice versa. The aluminium housing is hard anodised and powder coated. The caps are manufactured die cast aluminium and is likewise powder coated allowing for deployment possibilities in almost all situations especially critical environments meaning that the Air Power Pneumatic actuator will suit all your needs for 90° - 180° valve actuation.



- **Housing: Aluminium alloy, hard anodised, outside PE Coated**
- **Interface: Namur VDI/VDE 3845**
- **Ambient Temperature: -35° - +80° C**
- **Torque range: 2 Nm to 13,022 Nm**
- **Control Pressure: 2 - 10 Bar**
- **Control Media: Filtered air minimum acc to DIN/ISO 8573-1 Class 4**







## Process Equipment

### Noah Actuators

The Noah Series of Electric ¼ Actuators are particularly suitable for Ball, Butterfly and Plug Valves. Options are available to suit most application environments and industry types. Its compact and simple design will assure reliability and quality for customers even in hazardous locations. The Noah Series of Electric Actuators give the best automation solutions, long life, low maintenance and reliable service.

- Torque ratings from 30Nm up to 3,500Nm.
- Open/Close operation or Modulating by 4-20mA control signal.
- IP67 as standard.
- Operating voltage of 24VDC, 110VAC, 220VAC or 380VAC.
- Epoxy Coated Aluminium Body



### Gate Valves

The ISV range of Gate Valves are designed and manufactured in accordance with BS5163. Primarily for Water, Waste Water, Neutral Liquids, and Industrial Applications. All valves are Shell Tested to 24bar prior to leaving works, have a WRAS approved two-part Epoxy Blue Coating inside and out, Stainless Steel Shaft and Replaceable EPDM Seals.

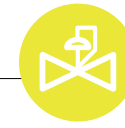
- Ductile Iron Body
- Available in Sizes from 50mm to 2000mm
- ISO Pad and Keyed Shaft for Direct Actuation
- Flanges to Suit PN6/10/16
- Clockwise or Anti-Clockwise closing
- Gearbox, Handwheel or Cap Top Operation



### Swing Check Valves

The ISV range of Swing Check Valves with Resilient Seats features a unique Body and Disc Design, to allow 100% Flow Area. Designed to reduce the effects of Water Hammer whilst offering a Fast-Acting Closure and eliminating the need for External Levers and Weights. Designed primarily for Water and Waste Water applications. All valves are Shell Tested to 24bar prior to leaving works, have a two-part Epoxy Blue Coating.

- Ductile iron body and bonnet
- Available in Sizes from 50mm to 600mm
- Flange drillings: PN10, PN16, ANSI
- External backflush device
- Fully moulded disk assembly
- Nylon reinforced hinge
- Temperature rating - (EPDM) 10°C - 120°C



## Process Equipment

### ISV Butterfly Valves

The ISV Butterfly Valve is a cast iron epoxy coated valve manufactured in accordance to ISO 5211 and is commonly used for flow isolation and regulation for industrial and commercial applications. Butterfly valves provide low pressure loss and leak free operation and are available with manual, electric or pneumatic actuation depending customer requirements.



- **Body: Ductile Iron 0.7040 Epoxy Coated**
- **Seat: EPDM -25°C to +125°C**
- **Sizes: 50mm – 300mm**
- **Disc: Ductile Iron epoxy coated or Stainless Steel 1.4308 CF8M**
- **Dimensions: According to EN558 Series 20, ISO5752 Series 20**
- **Flanges: Wafer or fully lugged pattern to suit flanges PN6/10/16**



- CF8M stainless steel (AISI-316) Body & Ball
- Available in Two Pieces or Three Pieces
- Full Bore
- ISO Pad for Actuation or Lever Operated
- PTFE Ball Seats
- Available in Sizes from 8mm to 100mm
- Maximum Working Pressure of 63bar
- Working temperature range of -20° to 80°C

### MT BSP Threaded Ball Valves

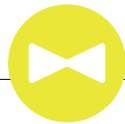
The MT range of BSP Threaded Ball Valves are suitable for use in installations in hot and cold water, low pressure steam, chemical installations, solvents, fluids of all kinds and air. Chemical industries, petrochemical industries, food industries for external and auxiliary processes.

- Ductile Iron Body
- Epoxy paint coating
- Available in Sizes from 40mm to 350mm
- Maximum Working Pressure of 16bar
- Working temperature range of -10° to 80°C
- EPDM Seat & AISI-304 stainless steel disc



### MT Double Disc Check Valves

The MT range of Double Disc Check Valves are suitable for installation/use with cold and hot water, waste water, alimentary industry, steam, alkaline liquid and weak acids.



## Process Equipment

### MT Ball Check Valve

The MT range of Ball Check Valves are suitable for a wide range of applications such as in facilities with hot and cold water, sewage, septic tanks, oils, and neutral chemicals.

These valves completely close the passage of fluid circulating in one direction and leaving free the other.

- Ductile Iron Body
- Epoxy paint coating
- Available in Sizes from 400mm to 350mm
- Maximum Working Pressure of 16bar
- Suitable for installation in the horizontal position
- Working temperature range of 0° to 80° C
- Metal ball with NBR elastomer coating



### MT Flanged Ball Valves

The MT range of Flanged Stainless Steel Ball Valves are suitable for use in installations in hot and cold water, low pressure steam, chemical installations, solvents, fluids of all kinds and air. Chemical industries, petrochemical industries, food industries for external and auxiliary processes.



- CF8M stainless steel (AISI-316) Body & Ball
- Full Bore
- ISO Pad for Actuation or Lever Operated
- Reinforced PTFE Ball Seats
- Available in Sizes from 15mm to 150mm
- Maximum Working Pressure of 16bar
- Working temperature range of -20° to 80° C



## Process Equipment

### Penstock Valves

Orbinox penstocks are suitable for different types of applications with a highly versatile flow control for water and wastewater treatment plants, irrigation, reservoirs, hydraulic works and hydro-electric power plants. Orbinox penstocks are available as wall mounted 4 side sealing, channel mounted 3 side sealing and weir penstocks. Orbinox can also offer a range of aluminium stop logs specific to site requirements.

- Cast Iron, Stainless Steel Bodies available
- Available from 50mm to 1200mm as standard (other sizes available upon request)
- PN10, PN16 ANSI 150 Flanges available
- Options for UNI or Bi-Directional
- Gate Materials options of AISI 304 & AISI 316 Stainless Steel
- Rising and Non-Rising Stem
- Operation options for Gearbox, lever, handwheel, Pneumatic and Electric actuation.
- Seat material options for EPDM or metal.

- Sealing: Uni or bi directional
- Sizes: 200x200 to 4000x4000mm (other sizes are available on request)
- Frame & Slide: AISI 304L / AISI 316L
- Guides: Polyethylene (HMWPE)
- Seal: EPDM / Nitrile
- Stem: Rising / Non-rising
- Operation: Manual, electric, Pneumatic



### Orbinox Knife Gates

The Orbinox EX & EB model Knife Gate Valves are UNI or Bi-Directional valves designed for general industrial service applications. The design of the body and seat assures non-clogging shut off on suspended solids in industries.



## Specialist Pumps

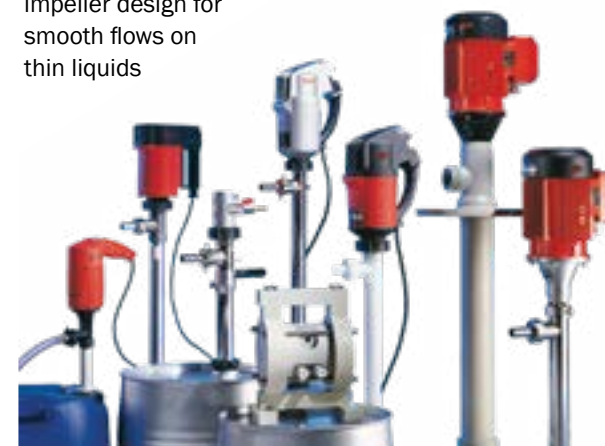
**Specialised Pumps - AxFlow provide a wide range of pumps products from world leading manufacturers. Each pump is carefully selected to give the best solution - first time.**

## Flux

*Barrel, container, vertical immersion pumps.*

Manually portable pumps for IBC, drum & barrel emptying applications. Modular & adaptable with various tube lengths, materials & drive types. Available as an axial flow impeller design for smooth flows on thin liquids

or in a positive displacement type for thicker liquids. Options include flow meters or batching systems, hoses and more.



- Flow rate: up to 14.4 m<sup>3</sup>/h on centrifugal models
- Pressure: up to 8 bar on PD models
- Low shearing for sensitive liquids
- Self-priming and can empty containers.





## Metering Pumps

### Blue-White

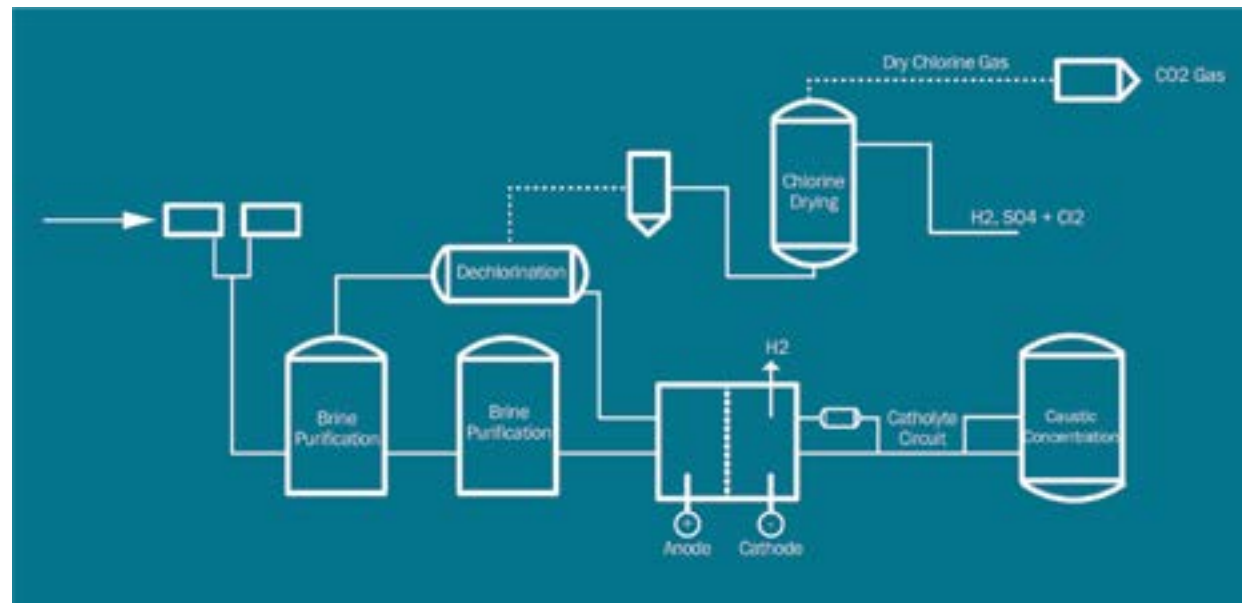
Blue-White Industries is a leading manufacturer of chemical metering pumps (diaphragm, peristaltic), flowmeters (variable-area, paddlewheel, ultrasonic), and water treatment accessories.

#### Blue-White Flex-Pro

The compact Blue-White ProSeries hose dosing pumps can be widely used in general Chemical Dosing applications as well a wide range of applications in the water and waste water treatment sector. The pumps are ideal for accurate dosing and injection of aggressive and viscous chemical with a low dosing capacity. The design of the Flex-Pro ensures that the pump is self-priming and the medium only comes into contact with the hose.



- PVDF Hose Connection
- Patented Tube Fail Detection (TFD)
- Flows up to 600 l / h
- Pressures to 8.6 bar
- SCADA & Pulse inputs 4-20mA, 0-10Vdc, 0-30 VDC
- Digital touch pad with backlit LCD display
- Advanced serial and Ethernet communication



A chlorine production line



## Centrifugal Pumps

### Johnson pumps

- Flows up to 850 m<sup>3</sup>/h
- Pressures to 10 bar
- Adjustable axial impeller position
- Shaft seal: mechanical bellows to EN12756
- Easy and low cost maintenance



#### CombiBloc from Johnson Pump

These closed coupled centrifugal pumps are designed for optimal suction capabilities with minimal flow distortion. The hydraulic balancing of the closed impeller gives extended bearing life & high efficiencies.

Suitable for clean & aggressive liquids, it includes a casing drain for rapid emptying.

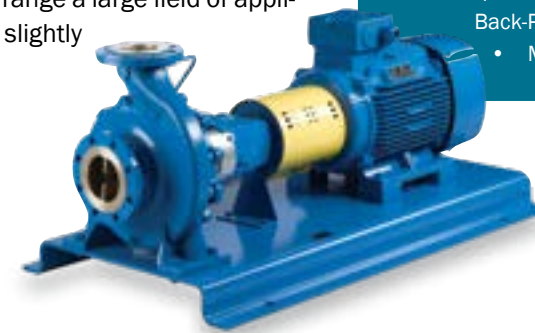
Johnson Pump®



#### CombiNorm from Johnson Pump

Johnson Pump's family of long-coupled horizontal centrifugal pumps maximise interchangeability of parts. The great variety in materials, flexible choice in bearings & shaft seals give this range a large field of application. Suitable for clean & slightly contaminated liquids.

- Flows up to 1500 m<sup>3</sup>/h
- Pressures up to 10-16 bar
- Suitable for temperatures up to 200 °C
- Simple maintenance with standard components and Back-Pull-Out principle
  - Magnetic Drive versions available



- Flows up to 300 m<sup>3</sup>/h
- Pressures up to 8 bar
- Self-priming up to 7 m
- Oil bath for mechanical seal prevents dry running
- No need for non-return valve on inlet

#### FreFlow from Johnson Pump

Self-Priming centrifugal pumps with a high performance & easy operation. The robust design ensures a durability to the pump lifespan. Suitable for low viscosity liquids (150 cPs) & liquids with entrained gasses. Close or long coupled, the pumps will handle contaminated, aggressive or corrosive liquids.





### Metering Pumps

#### OBL MB / MC Range

The OBL range of Metering Pumps offers a chemically resistant seal-less option for low pressure applications. OBL offer a unique mechanical diaphragm design which ensures linearity between flow rate and percentage of stroke.

- Simple and robust spring return plunger pump.
- Low maintenance costs due to small number of components.
- Suited to aggressive fluids.
- Single and multiple arrangement.
- Spring or positive return.
- Available with a range of actuators.



### Centrifugal Pumps



#### Argal Route

The Argal range of Route pumps are available as magnetic driven and mechanical seal versions. They are suitable for pumping a diverse range of chemical with impurities and suspended solids. The pumps can be offered with a fitted stainless steel casing harness to improve their physical robustness.



- Mag drive or mech sealed.
- Dry running option available for mag drive models.
- PP or ETFE
- Single and double seals.
- Optional stainless steel casing reinforcement.



### Hose pumps

## Realax peristaltic hose pumps

*The widest model range in the market.*

Hose pumps, also called peristaltic pumps, are excellent for moving a wide variety of fluids efficiently and with great dosing accuracy. They work just as happily with viscous and abrasive media as they do with shear-sensitive fluids.

#### The operating principle

The hose, which can be made from any of a variety of materials, is housed in the pump body. The pump rotor exerts pressure as it rotates on a set of rollers or shoes which, in turn, compress the hose. This forms a vacuum behind the roller or shoe drawing fluid into the



realax | hose pumps

hose while the next roller or shoe gently pushes the fluid forward through the hose. Pump wear is concentrated on the hose component which is quick and inexpensive to replace in situ.

**Flow rate: from 0 to 72 m<sup>3</sup>/h**  
**Suction lift: up to 9 m**  
**Pressure: up to 15 bar**



Rollers

#### Shoes or rollers?

**Rollers** mounted on bearings compress the surface of the hose during rotation. This design generates less friction and mechanical stress on the hose and it can support pressures of up to 8 bar.

**Fixed shoes** move across the surface of the hose during compression. Typically this technology is preferred for higher operating pressures (up to 15 bar).



Shoes



PERISTALTIC DOSING PUMP  
SERIES APY

INDUSTRIAL HOSE PUMP  
SERIES ISI

INDUSTRIAL HOSE PUMP  
SERIES IP

INDUSTRIAL HOSE PUMP  
SERIES RP HIGH PRESSURE





# You get more than just pump repair

Its not just about selling pumps, at AxFlow we are committed to providing ongoing support to make sure our customers always think of AxFlow as their premier business partner for the supply of pumping equipment.



## Technical Advice

Whether it's a 'pump-in-a-box' or the design and manufacture of a complex custom built system, AxFlow specialist engineers provide a complete product and service package. Our team of experienced engineers offer the very best technical advice and support.



## Working Together

We have experienced Engineers located throughout Ireland ready to meet you and discuss your pumping needs. Be it troubleshooting or application expertise we are happy to help. If you are in doubt regarding a pump application we are often able to offer a trial pump to prove the solution.



## Training

Most companies would agree that product and maintenance training can bring many benefits, including improving production. Recognising this need, AxFlow has created a range of in-house and on-site training courses with flexibility to suit individual companies' requirements.



+ products +



= *fluidity*.nonstop



*fluidity.nonstop*<sup>®</sup> is about keeping your processes running. And it's our promise and our commitment to a level of service and a quality of product, performance and expertise that has never been bettered.

By its nature, *fluidity.nonstop* is never static, that promise is ever-evolving and improving. As needs and demands change, we work to meet those new challenges and try to surpass them. We are Europe's leading source of pumps and pump expertise for the process industry and we intend to maintain that position by working fluidly and ceaselessly to be the best.

For more information, please visit [www.axflow.ie](http://www.axflow.ie)

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