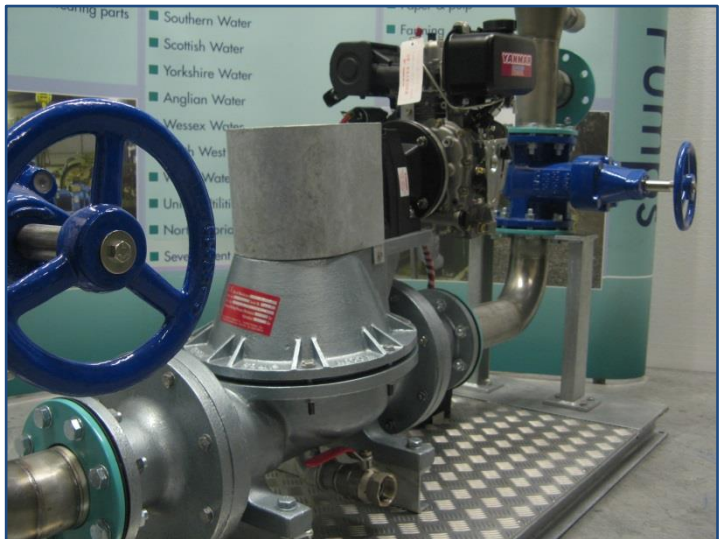


# FAFEB Chemical and Equipment Company





# ENERGY

Chemical and Equipment Company

Energy Chemical & Equipment Company

Energy Manor, Crew Lane,

Southwell. NG25 0TX

Telephone: 01636 816600

Email: [sales@energypumps.co.uk](mailto:sales@energypumps.co.uk)

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## About Us

---

*The Energy Manufacturing facility in Southwell,  
Nottinghamshire.*



Energy is a family-owned business established in 1979. We have developed a good relationship with our customers and their ultimate satisfaction with our products and service is the key to the company's success. As one of the few remaining UK based manufacturers of industrial pumps, we shall continue to persevere with traditional engineering skills and provide an on-going outlet for quality British products.

*Energy 460mm Hydraulic Ram Pump with Camel Ball Valves  
ready for shipping to Singapore.*



Energy Pumps design and manufacture an extensive range of Ram and Diaphragm pumps primarily for the Waste Water Treatment industries and developed through more than 40 years of experience within the industry. We have gained, over the years, an enviable reputation for building equipment that is reliable, energy efficient, low maintenance and proving durable over many years. We foster innovation and

new ideas to improve the value and performance of our products while being mindful of the impact on environment and society.

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*Energy Mastiff Diaphragm Pumps Duty/Standby.*

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Energy Pumps attention to detail has always been central to the manufacture and supply of our equipment. We machine all the various castings and parts that make up the pumps in house, and the pumps are then assembled by a small team of dedicated and skilled staff. In addition to this we work closely with our clients to ensure that the position of the pump and layout of the pipework is designed to provide the most efficient pumping conditions to get the best performance from the pump.

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*Energy 270mm Mechanical Ram Pumps with Mallard Bullfrog Valves.*

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Energy Pumps has developed a reputation over the years for supplying some of the most cost effective, efficient, and reliable pumping equipment throughout the country. Our pumping solutions apply to various industries including water and waste water, pottery, food waste, chemical and other industries. We have established Framework and supply agreements with Scottish, Thames, Wessex, Northumbrian, and Yorkshire Water for the supply of Ram and Diaphragm pumps and are working to secure agreements with other major Utility companies.

## Major Diaphragm Pump Specifications

### General

Pump Type: ..... Major  
Gearbox Type: ..... R47  
Valve Type: ..... Mallard Bullfrog  
Inlet Size: ..... 80/100mm  
Outlet Size: ..... 80/100mm  
Total Pump Weight: ..... 96-112kg  
Gearmotor Weight: ..... 19-35 kg  
Noise: ..... 65 dB

### Construction

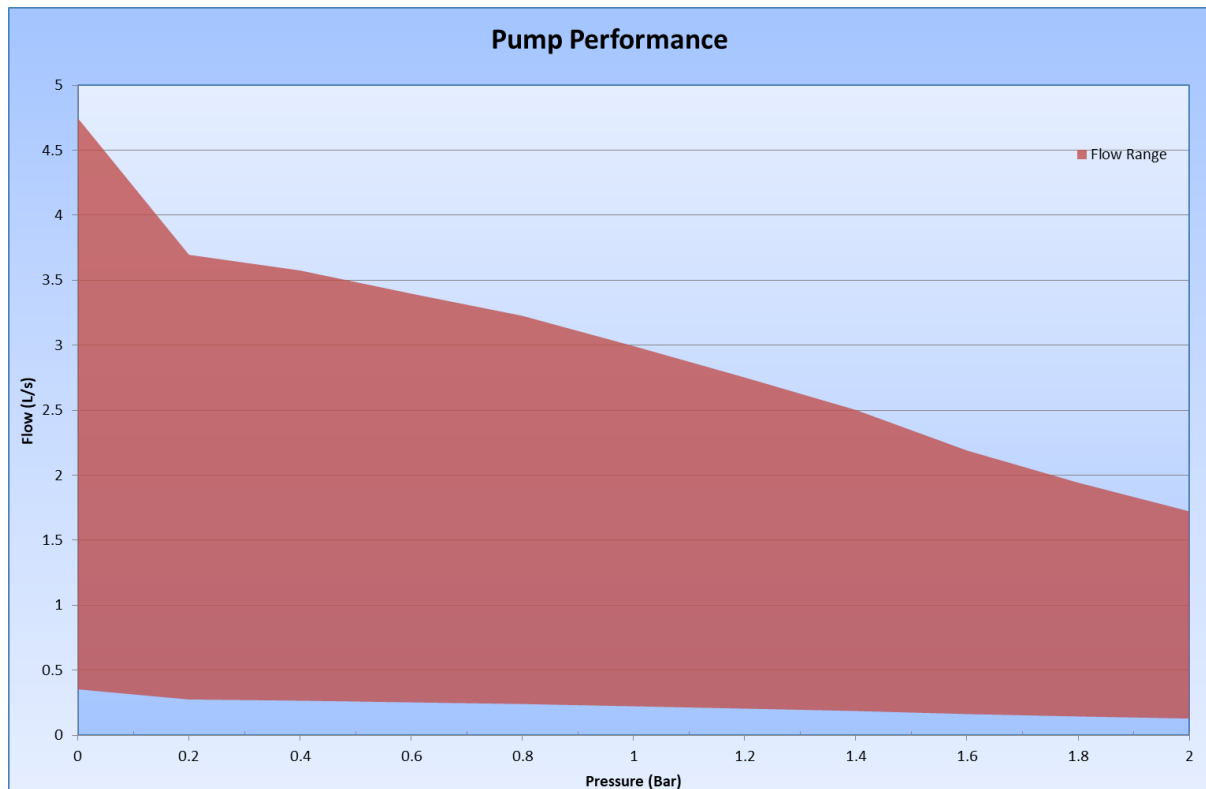
Feet: ..... Galvanised Steel  
Pump: ..... Aluminium  
Diaphragm: ..... Neoprene  
Valves: ..... Neoprene

### Performance

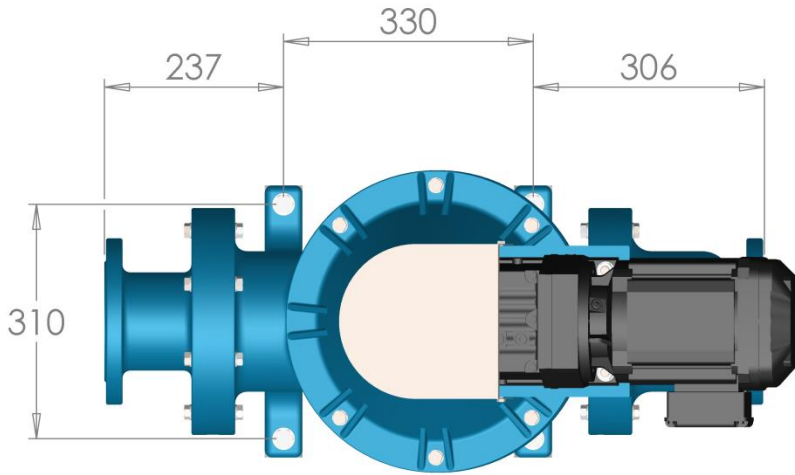
Speed: ..... 12-90 RPM  
Maximum Flow Rate: ..... 0.6-4.7l/s  
Maximum Pressure: ..... 2 Bar

### Motor Specifications

Power: ..... 0.25-1.5 kW  
Frequency: ..... 50 Hz  
Cyclic Duration factor: ..... S1  
Voltage: ..... 230/400v Delta/Star  
Current: ..... 1.18/0.68-5.9/3.4A  
Thermal Class: ..... 155/F  
Efficiency Class: ..... IE3  
Thermistors fitted: ..... Optional  
Heater fitted: ..... Optional



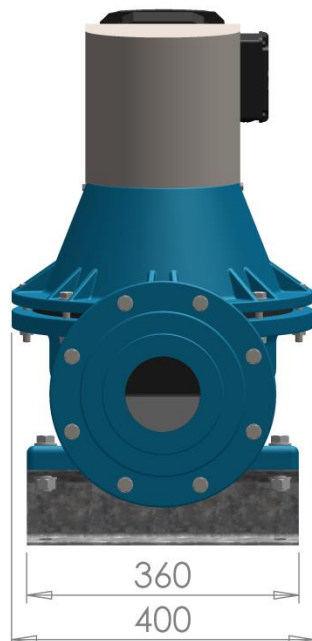
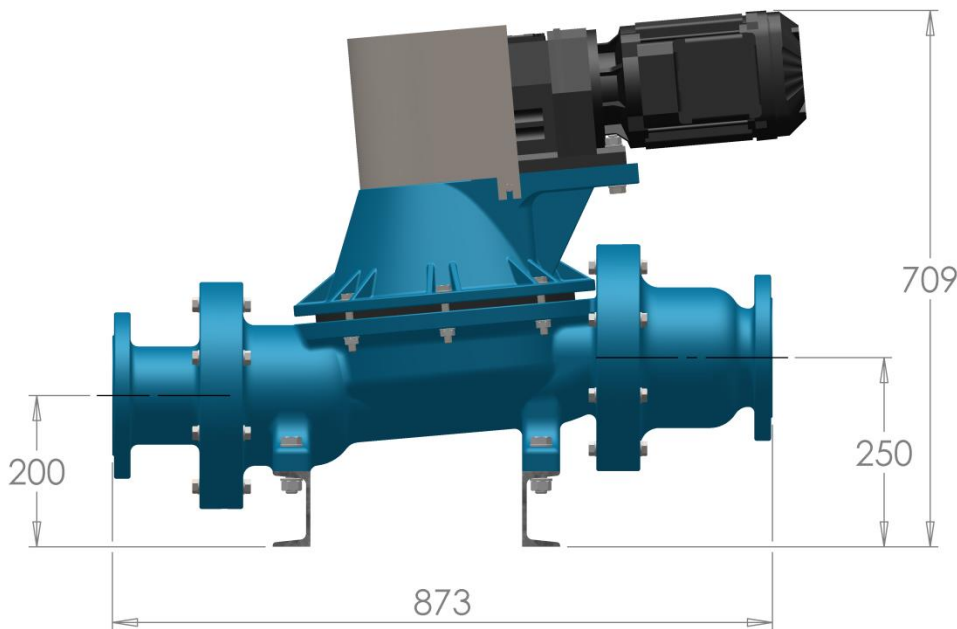
# Major Mallard GA



All dimensions are approximate and are for guidance only. Please contact Energy if you need specific dimensions.

Approximate weight: 106.24Kg

Flow →



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Drawing Date  
04 February 2025

## Mastiff HD Diaphragm Pump Specifications

### General

Pump Type: ..... Mastiff HD  
Gearbox Type: ..... R77  
Valve Type: ..... Mallard Bullfrog  
Inlet Size: ..... 80-100mm  
Outlet Size: ..... 80-100mm  
Total Pump Weight: ..... 198-225 kg  
Gearmotor Weight: ..... 46-73 kg  
Noise: ..... 65 dB

### Construction

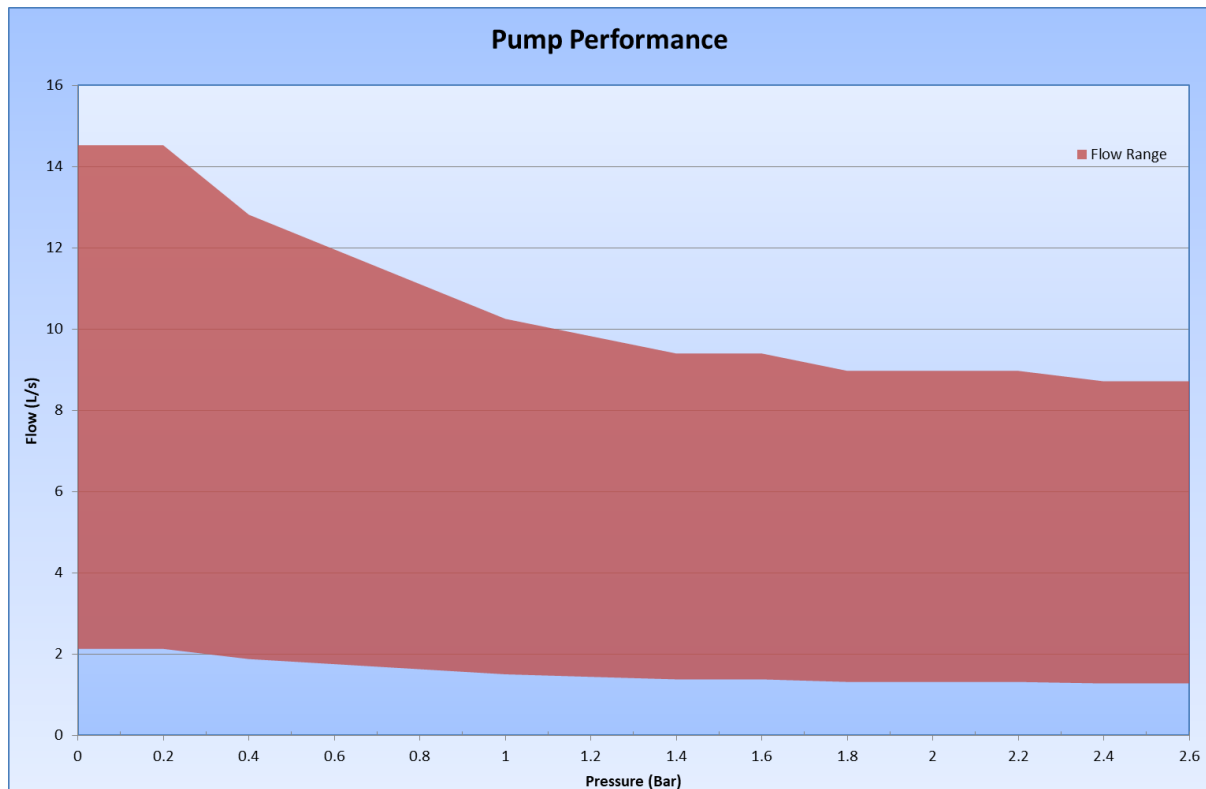
Feet: ..... Galvanised Steel  
Pump: ..... Aluminium  
Diaphragm: ..... Neoprene  
Valves: ..... Neoprene

### Performance

Speed: ..... 12-82 RPM  
Maximum Flow Rate: ..... 2.1-14.5 l/s  
Maximum Pressure: ..... 2.5 Bar

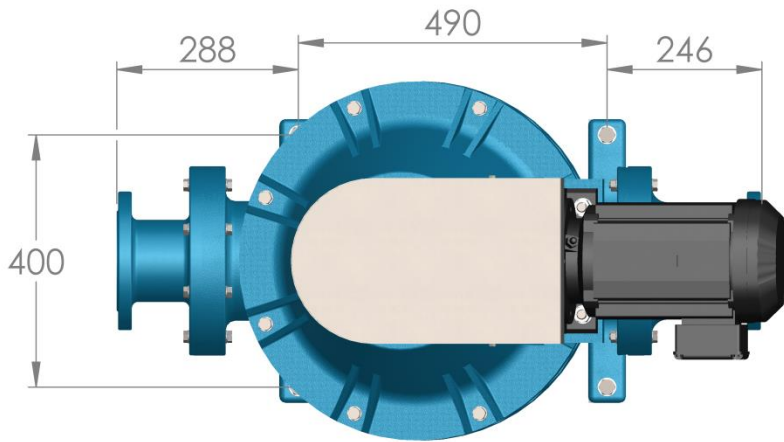
### Motor Specifications

Power: ..... 0.75-4 kW  
Frequency: ..... 50 Hz  
Cyclic Duration factor: ..... S1  
Voltage: ..230/400V<4kW 400/690VDelta/Star  
Current: ..... 3.05/1.75-7.9/4.6A  
Thermal Class: ..... 155/F  
Efficiency Class: ..... IE3  
Thermistors fitted: ..... Optional  
Heater fitted: ..... Optional



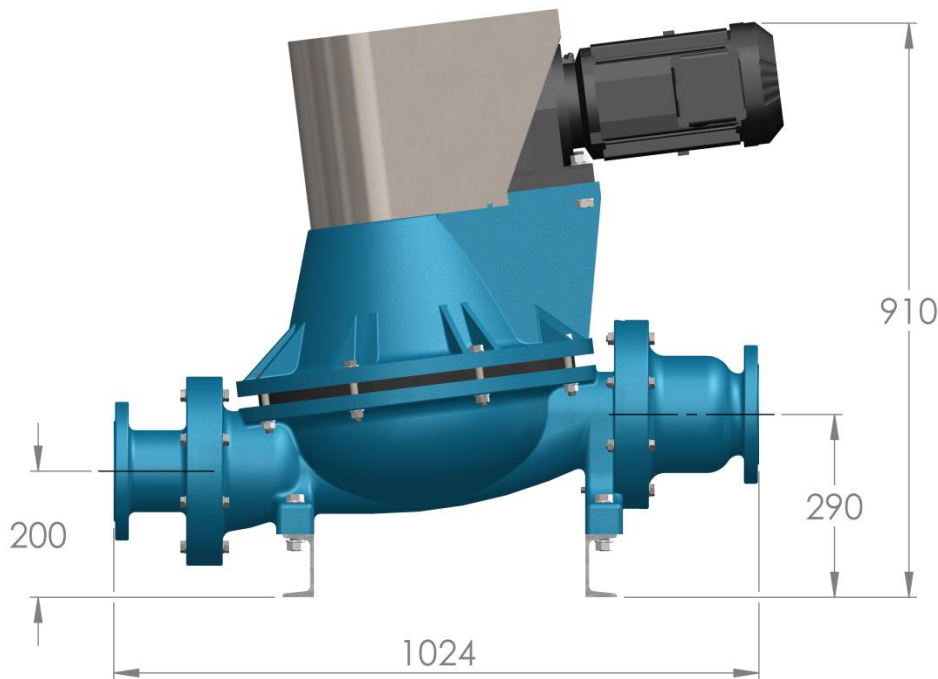


# Mastiff HD Mallard GA



All dimensions are approximate and are for guidance only. Please contact Energy if you need specific dimensions. Approximate weight: 209.72Kg

Flow →



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## Mallard Ram Pump Specifications

### General

Pump Type: ..... 270mm Mallard Ram  
Gearbox Type: ..... R87  
Valve Type: ..... Mallard Bullfrog  
Inlet Size: ..... 80/100mm  
Outlet Size: ..... 80/100mm  
Total Pump Weight: ..... 500 kg  
Gearmotor Weight: ..... 79-110kg  
Noise: ..... 68 dB

### Construction

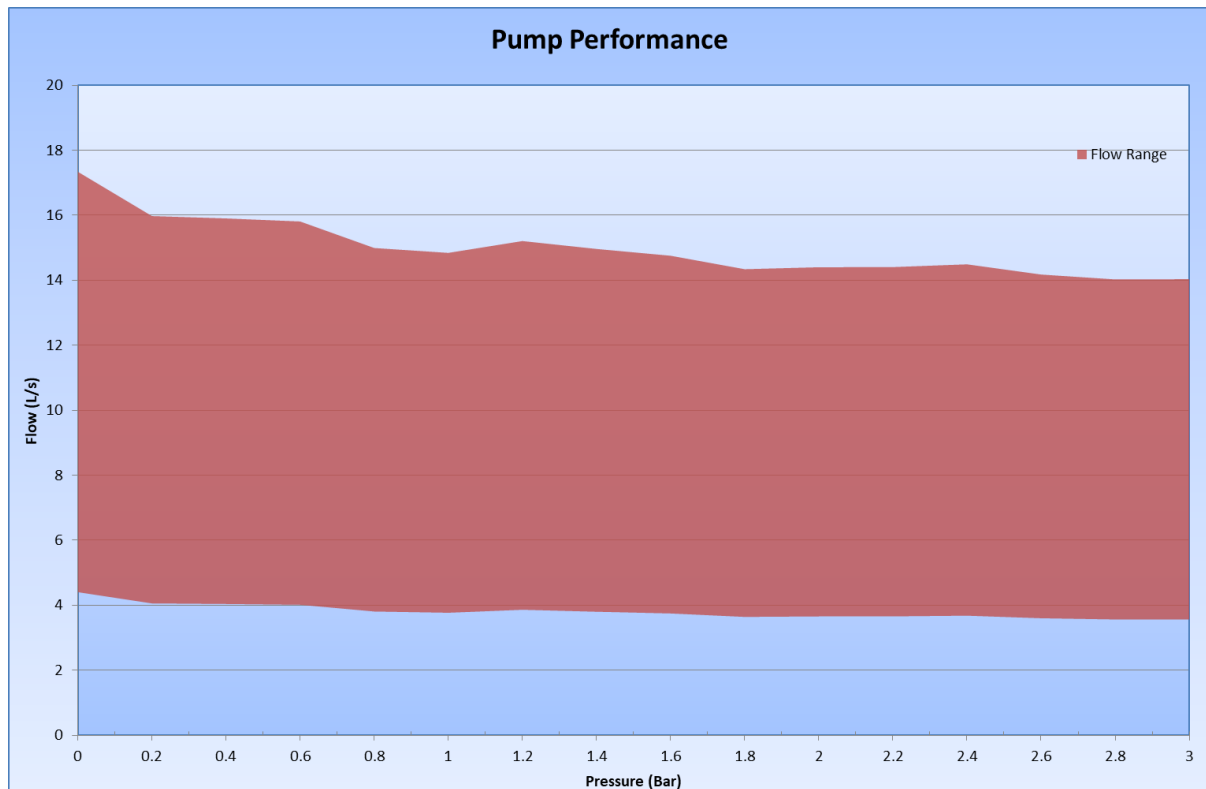
Frame: ..... Galvanised Steel  
Pump: ..... Aluminium  
Ram: ..... Hard Chrome Plated Steel  
Valves: ..... Neoprene

### Performance

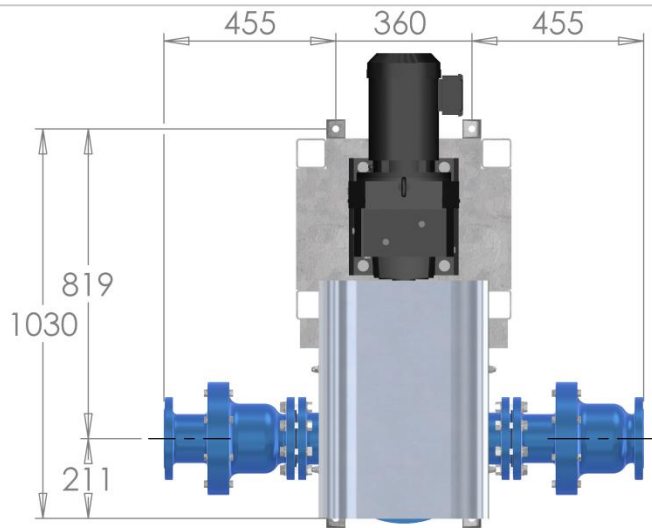
Speed: ..... 16-40 RPM  
Maximum Flow Rate: ..... 2.3-7.6 l/s  
Maximum Pressure: ..... 3Bar

### Motor Specifications

Power: ..... 2.2-5.5kW  
Frequency: ..... 50 Hz  
Cyclic Duration factor: ..... S1  
Voltage: .230/400V<4kW 600/690V Delta/Star  
Current: ..... 8.3/4.75A-10.5/6.1A  
Thermal Class: ..... 155/F  
Efficiency Class: ..... IE3  
Thermistors fitted: ..... Optional  
Heater fitted: ..... Optional

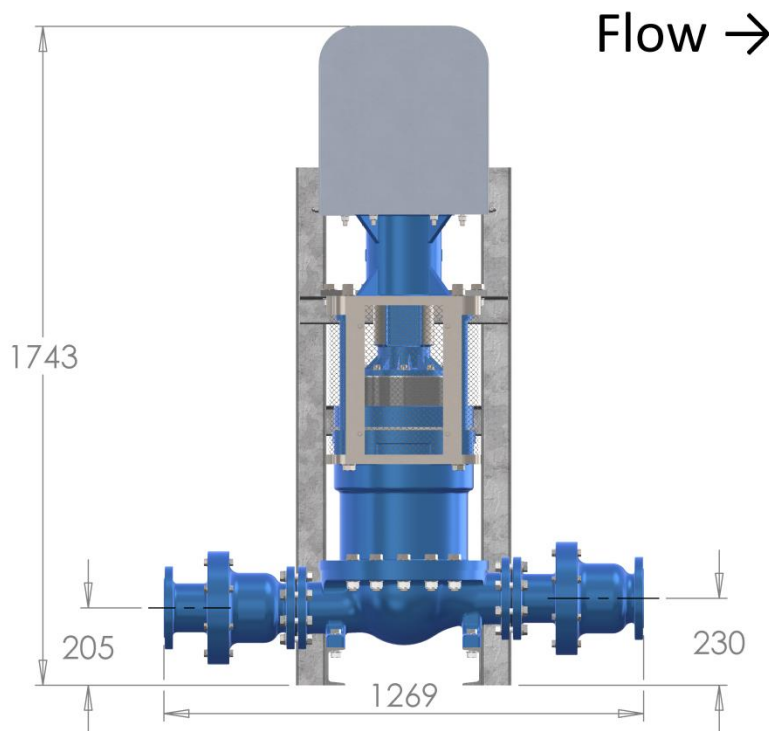


# Mallard Mechanical Ram GA



All dimensions are approximate and are for guidance only. Please contact Energy if you need specific dimensions.

Approximate weight: 595.17Kg



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## Mallet Ram Pump Specifications

### General

Pump Type: ..... 240-480mm Mallet Ram  
Power Unit: ..... Hydraulic Power Pack  
Valve Type: ..... Camel Ball  
Inlet Size: ..... 100/150mm  
Outlet Size: ..... 100/150mm  
Total Pump Weight: ..... 500-1600 kg  
Noise: ..... 78 dB

### Construction

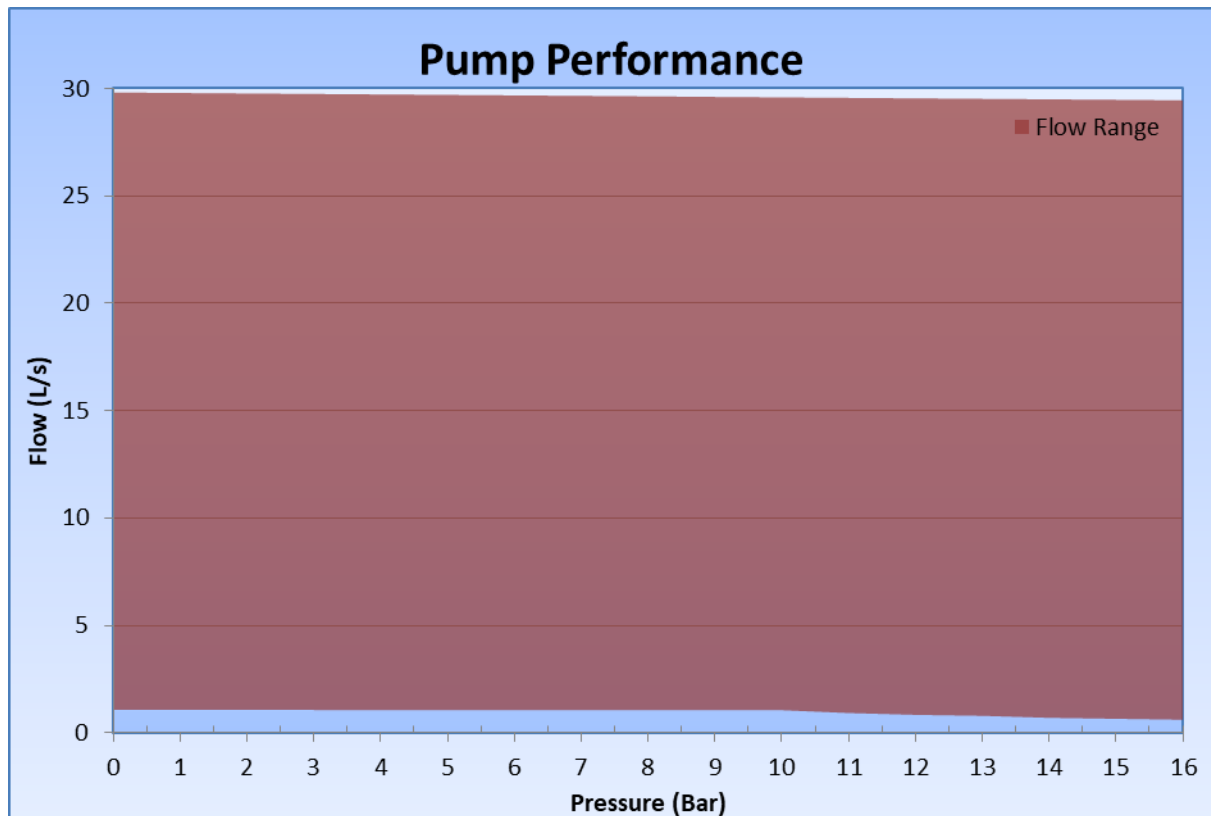
Pump: ..... SG Iron  
Ram: ..... Hard Chrome Plated Steel/  
Metallised Ceramic  
Valves: ..... SG Iron  
Polypropylene, Resin/Fibre Composite

### Performance

Speed: ..... 6-30 SPM  
Maximum Flow Rate: ..... 1.1-30 l/s  
Maximum Pressure: ..... 16 Bar

### Power Pack Specifications

Power: ..... 3-132 kW  
Frequency: ..... 50 Hz  
Motor Cyclic Duration factor: ..... S1  
Voltage: ..... 230/400v 400/690v Delta/Star  
Current: ..... 10.8/6.2A-230/133A  
Motor Thermal Class: ..... 155/F  
Motor Efficiency Class: ..... IE3  
Off-line Cooler: ..... 0.55-3 kW  
Proportional Valves: ..... Yes



# Mallet Hydraulic Ram GA

Pump Type\Dimension	A	B	C	D	E	F	G*	H	I
240/270 Dn100	380	360	536	1433	205	230	1760	420	450
240/270 Dn150	380	360	695	1750	205	230	1760	420	450
360/380 Dn150	500	380	688	1756	180	230	2000	380	590
460/480 Dn150	600	500	685	1870	200	250	2100	500	720

All dimensions are approximate and are for guidance only.

\* Varies with stroke length

Please contact Energy if you need specific dimensions.

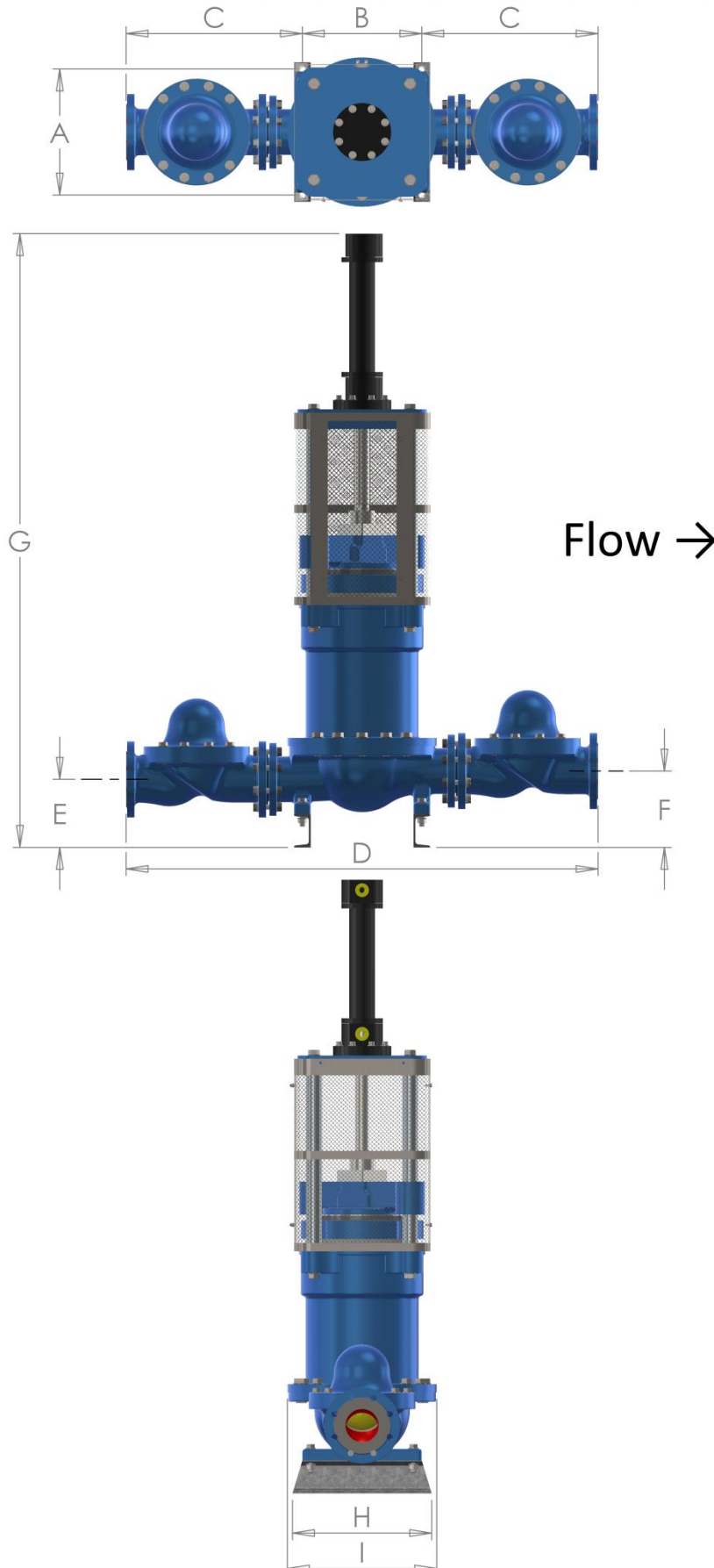
Approximate weight:

240/270 Dn100: 500kg

240/270 Dn150: 600kg

360/380 Dn150: 1200kg

460/480 Dn150: 1600kg

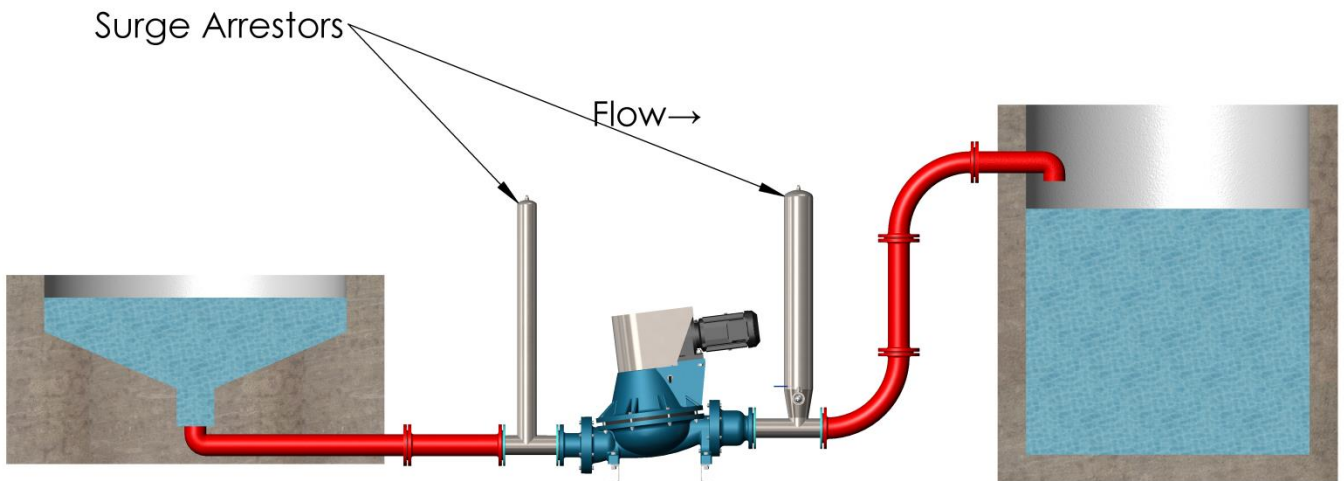


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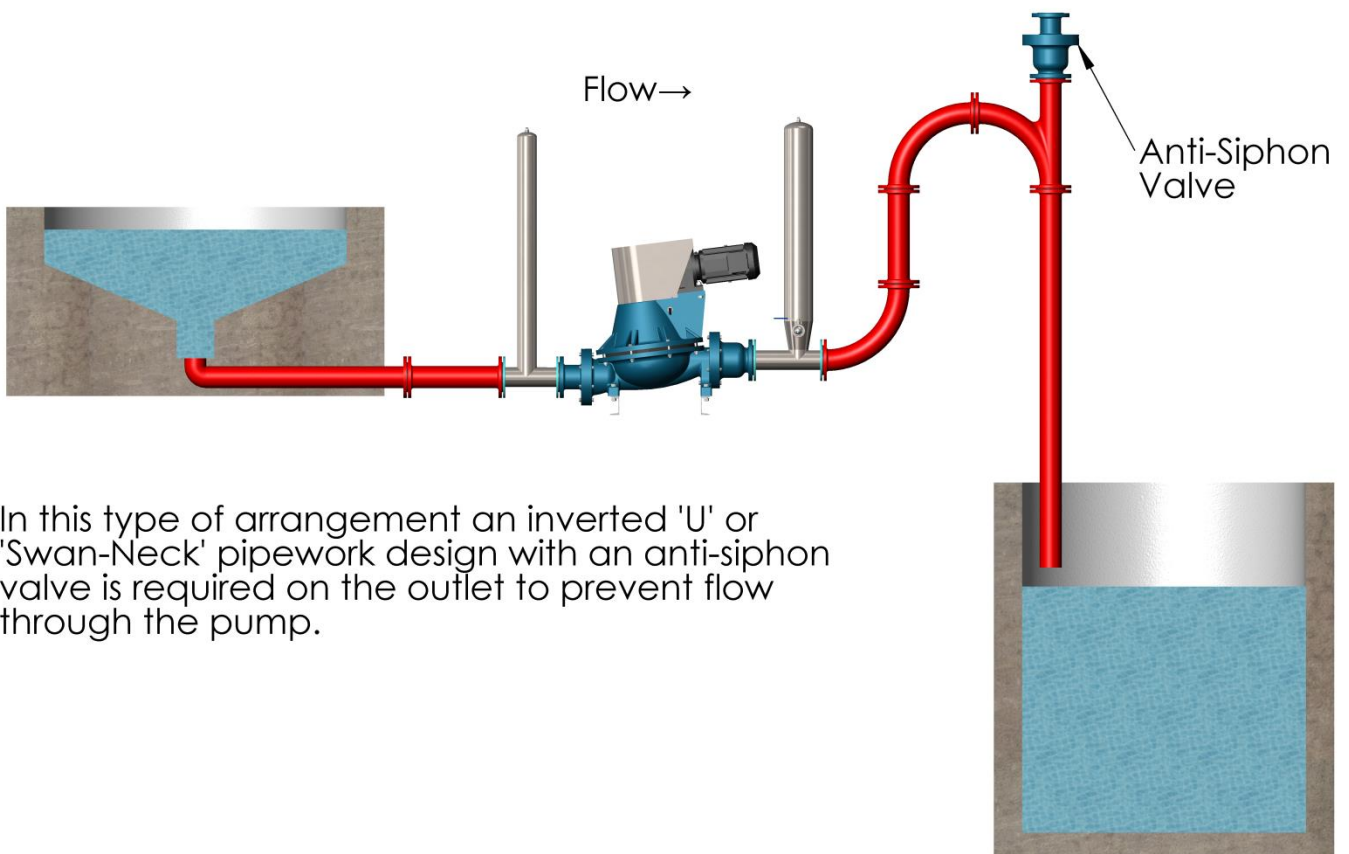
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# Pipework Arrangement Guide



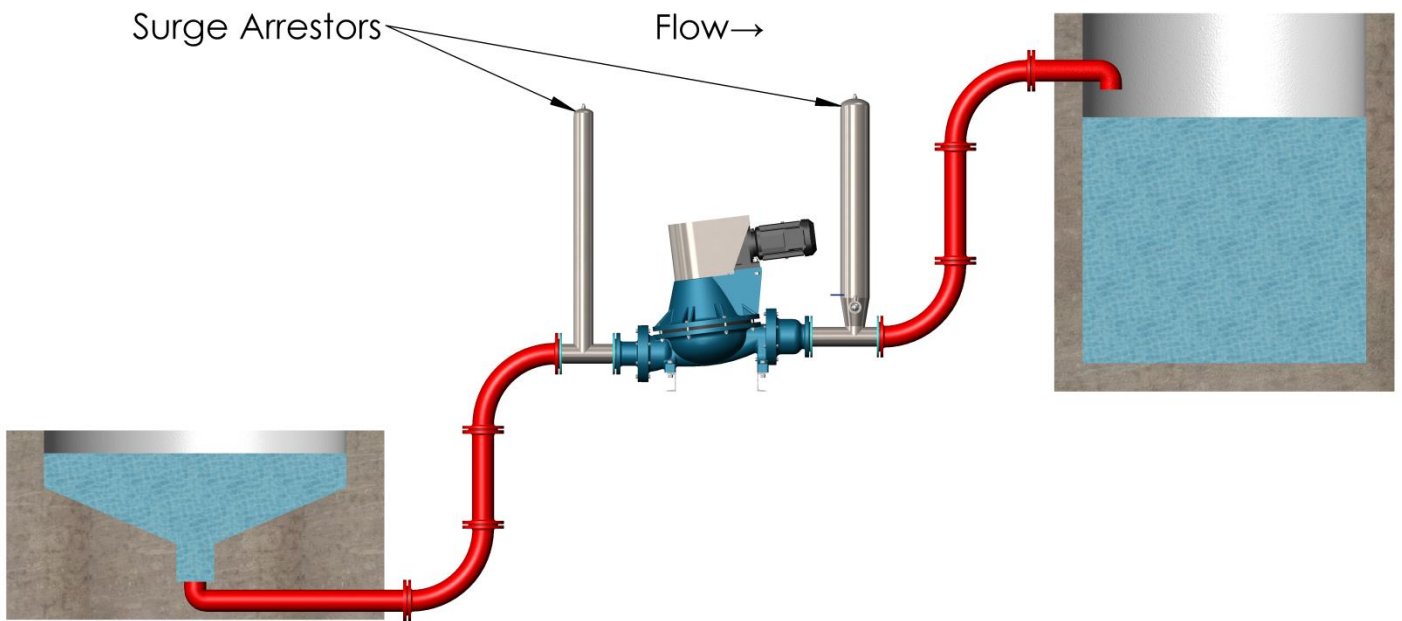
Flooded Suction - Positive Head



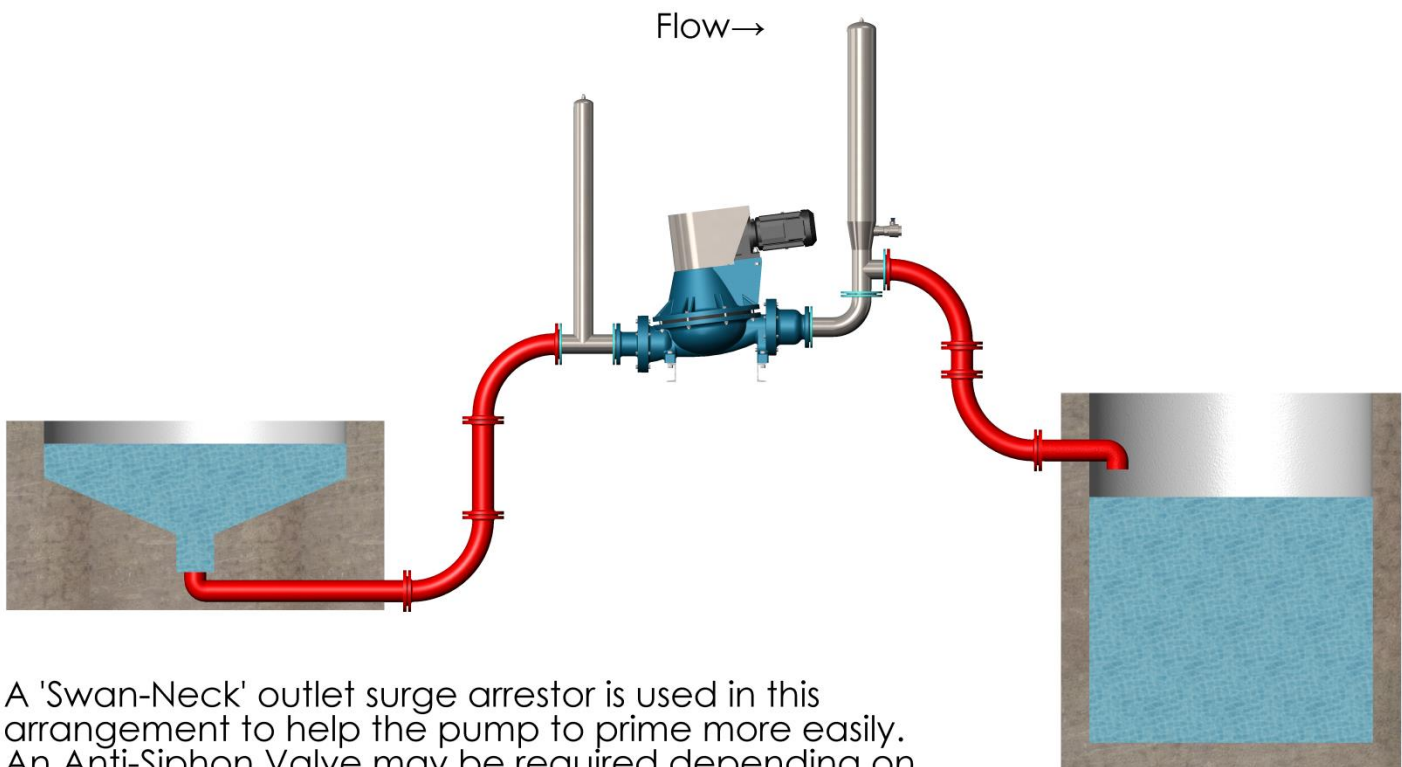
In this type of arrangement an inverted 'U' or 'Swan-Neck' pipework design with an anti-siphon valve is required on the outlet to prevent flow through the pump.

Flooded Suction - Negative Head

# Pipework Arrangement Guide



Suction Lift - Positive Head



A 'Swan-Neck' outlet surge arrester is used in this arrangement to help the pump to prime more easily. An Anti-Siphon Valve may be required depending on outlet conditions.

Suction Lift - Negative Head



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## **SUSTAINABILITY**

We are committed to integrate sustainability into our supply chain management and grow responsibly in a way that helps care for our people and our planet.

## **PRODUCT**

We aim to work with suppliers who adhere to responsible environmental practices and promote sustainable sourcing of raw materials. We embrace product design that promotes durability, reparability, and longevity.

## **ENVIRONMENT**

We implement strategies to reduce energy consumption, minimise waste generation and promote sustainable sourcing. We adopt recycling programs, reduce packaging waste, and encourage the reuse of materials.

## **COMMUNITY**

We make meaningful contributions to charity and communities close to us.

## **GET IN TOUCH**

We firmly believe that we offer some of the most cost effective and reliable equipment available. We are always delighted to discuss any pumping application or other requirements which you may have.

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