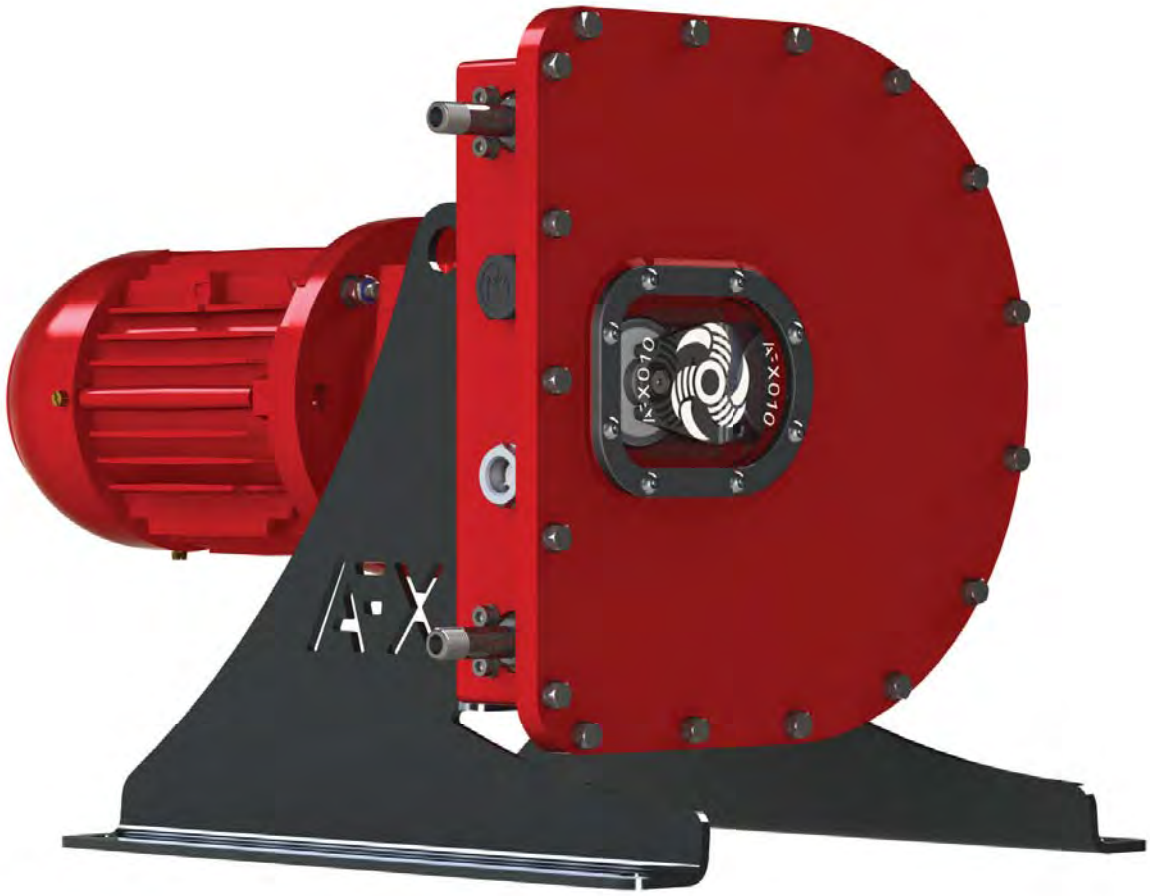
MIXING AND PUMPING TECHNOLOGIES

KEEPING FLUID IN MOTION

PUMP PRODUCT RANGE

AFX PUMPS

AFX PUMPS



The AFX Peristaltic pump range has been designed to be a robust pumping solution for high viscosity, high solids (abrasive), high density slurries and liquids for a wide array of applications and industries including mining, chemical, food and beverage, pulp and paper, petrochemical, pharmaceutical, agricultural, water treatment, and many more.

Building on a proven concept our latest development is the AFX PUMP SERIES which was specially adapted to further improve the product's high performance, durability and low maintenance.

All of AFX's products are designed to deliver exceptional performance, but what really sets this pump apart from its competitors is its cost effectiveness and reliable operation. AFX can demonstrate measurable savings when using the AFX PUMP over that of its competitors, including energy savings and maintenance down time savings of up to 50% compared to traditional peristaltic hose pumps. The pumps are self-priming, fully reversible, highly durable, easy to maintain, can be run dry for extended periods without damage, and offer flow rates from 40 l/hr to 150 000 l/hr.

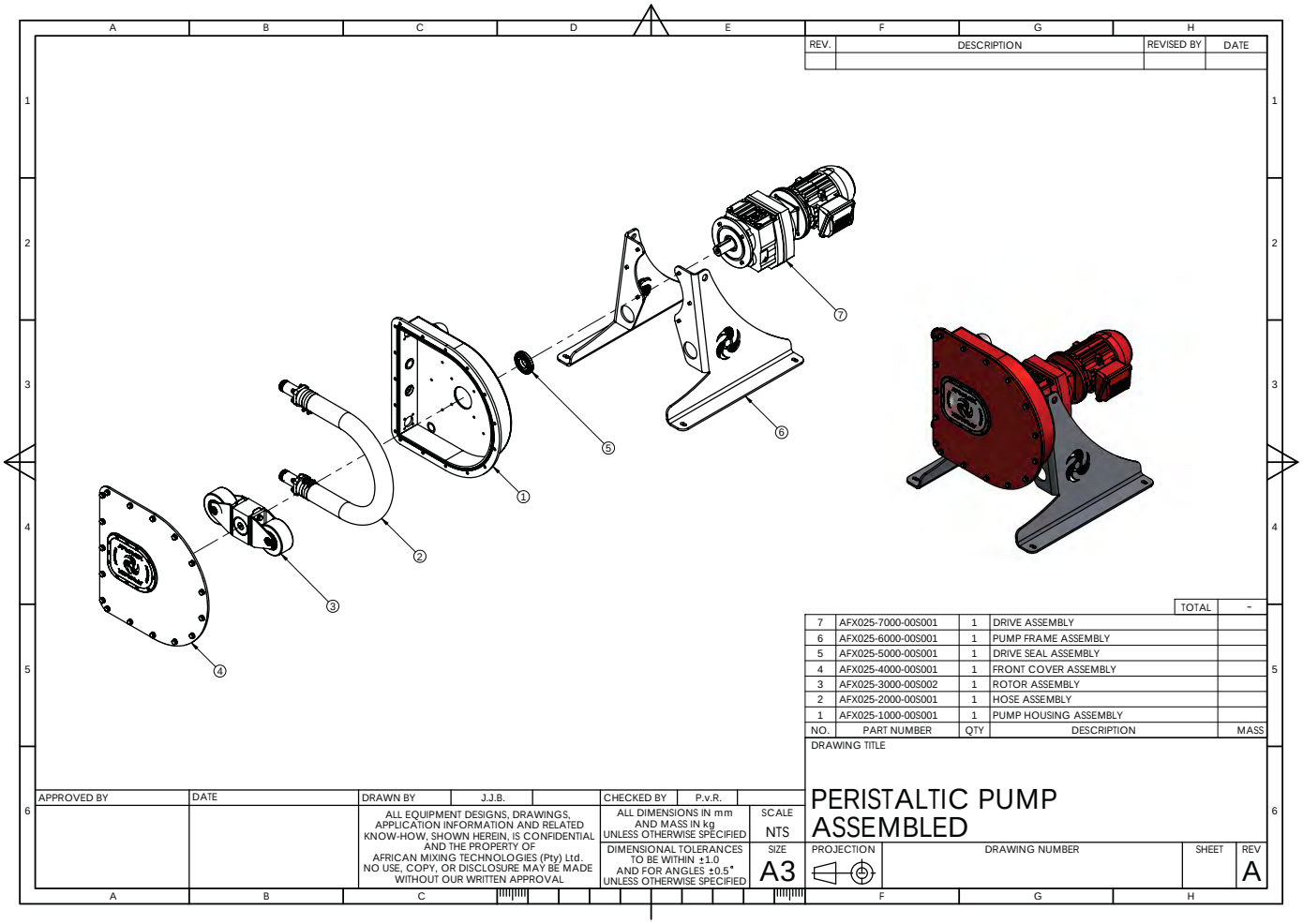
AFX PUMPS

www.afxmixing.com contact@afxmixing.com +1 604 380 4458

AFX PUMPS

AFX PUMPS

EXAMPLE DRAWING:



Operating Principle

The internal workings of each pump comprises of a rotor block with solid rotating rollers. The pumping action results from alternately compressing and relaxing a specially designed high pressure peristaltic hose between the pump housing and the pump compression rollers to create an air tight pocket. The fluid is pushed along the hose towards the discharge by the compression rollers, creating a positive displacement. The reopening hose behind the roller draws more fluid into the pump through the suction.

Due to this method of operation where there is 100% hose closure at all time, the pump is in its own a non-return mechanism. This ensures excellent metering accuracy and reduces the need for additional equipment downstream.

AFX PUMPS

AFX PUMPS

Applications

The AFX PUMP SERIES are commonly used in applications where the product to be pumped has a high solids content and/ or viscosity, such as thickener underflow, slurry transfer and chemical transfer or dosing applications; but are popular solutions for many other applications which include:

Chemical:	Corrosive acids and shear sensitive media
Water and waste treatment:	Sludge pumping
Fishing industry:	Bulk fish transfer and effluent handling
Paint and pigment:	Dispersion mill feed and latex transfer
Pulp and paper:	Dyes, sizing agents, and titanium dioxide dosing
Mining:	Tailing slurries transfer, sludge transfer
Mineral processing:	Carbon and ceramic media transfer
Mineral Recovery:	Filter Press Feed, electro winning Feed
Ceramics:	Clay slip and glaze pumping
Construction:	Cements, coatings, spray concrete and aggregate pumping
Food and beverage:	Yeast cropping, additives and effluent pumping reagents transfer and dosing, sump discharge

AFX PUMPS

AFX PUMPS

Key Benefits

Energy efficiency:	Reductions in friction thanks to specially developed roller technology greatly reduces power consumption and mechanical wear
Built for difficult applications:	AFX pumps can handle high abrasive slurries, corrosive material, high solids applications, gaseous liquids and very dense liquids and slurries with remarkable ease
Sensitive handling:	AFX pumps are Ideal for shear sensitive products
Chemically compatible:	Every AFX pump is supplied with internals to be chemically compatible with your product
Fool proof:	AFX series pumps can run dry indefinitely, without damage
Fully reversible:	Your AFX pump can easily change direction to flush or reverse transfer when necessary
Minimal maintenance:	The heavy duty, high pressure hose is the only wearing item in your AFX pump
Flexible to your needs:	Pump casings and internal components are available in a choice of materials including stainless steel
Suctions power:	The AFX pump is self-priming pump and has a suction lift capability of up to 9 metres
Accuracy:	AFX pumps have a fixed flow per revolution resulting in a highly accurate flow rate for dosage sensitive applications

Pump Selection

Boasting eleven AFX peristaltic pump models with flow rates between 40 l/hr to 150 000 l/hr across the range the AFX PUMP SERIES have become industry favourites in many countries.

We attach the same care and dedication not only to pump and hose design, but also to the selection and application of our pumps. To ensure optimum performance and product life, as well as to minimize operational cost and maintenance downtime, every AFX pump is carefully selected, configured and equipped for a specific application's requirements by an experienced application specialist.

AFX PUMPS

AFX PUMPS

AFX PUMPS

AFX PUMP CAPABILITIES						
Pump	**Temperature**	**Max continuous speed**	**Max discharge pressure**	**Max continuous flow rate**	**Max intermittent flow rate**	**Standard Connections**
AFX010	MAX 80°c	70 rpm	10 Barg	210 l/hr	300 l/hr	1/4" NPT Male
AFX015	MAX 80°c	70 rpm	10 Barg	420 l/hr	600 l/hr	1/2" NPT Male
AFX020	MAX 80°c	90 rpm	10 Barg	1,242 l/hr	1,380 l/hr	3/4" NPT Male
AFX025	MAX 80°c	90 rpm	10 Barg	2,214 l/hr	2,460 l/hr	1" NPT Male
AFX032	MAX 80°c	70 rpm	10 Barg	3,990 l/hr	5,130 l/hr	1 1/2" NPT Male
AFX040	MAX 80°c	60 rpm	10 Barg	6,552 l/hr	8,736 l/hr	1 1/2" NPT Male
AFX050	MAX 80°c	50 rpm	10 Barg	10,380 l/hr	16,608 l/hr	2" NPT Male
AFX065	MAX 80°c	45 rpm	10 Barg	19,170 l/hr	25,560 l/hr	2" NPT Male
AFX080	MAX 80°c	35 rpm	10 Barg	25,893 l/hr	36,990 l/hr	3" NPT Male
AFX100	MAX 80°c	30 rpm	10 Barg	43,200 l/hr	57,600 l/hr	4" NPT Male
AFX150	MAX 80°c	25 rpm	10 Barg	105,000 l/hr	147,000 l/hr	6" NPT Male

*Data published is based upon pumps operating on water under controlled conditions. Actual site operational conditions including pipeline lengths, temperatures and fluid characteristics will affect pump choice and selection

AFX PUMPS

AFX PUMPS

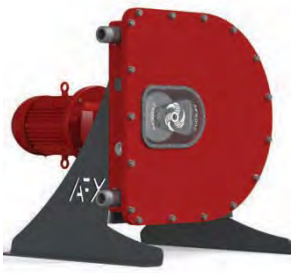
AFX020 DATA SHEET

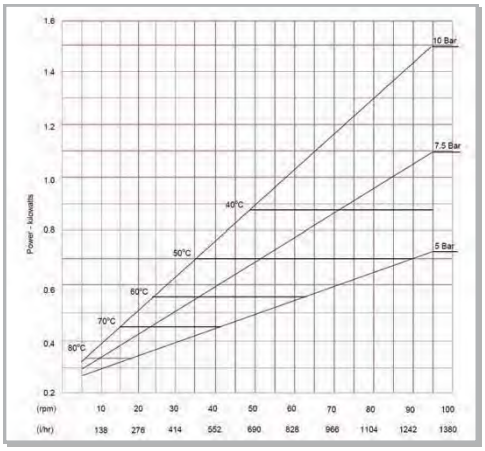
AFX020

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate





Technical Specifications

Maximum intermittent flow rate of:	1,380 litres per hour
Maximum continuous flow rate of:	1,242 litres per hour
Flow per revolution of:	0.23 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	20 mm

AFX PUMPS

AFX PUMPS

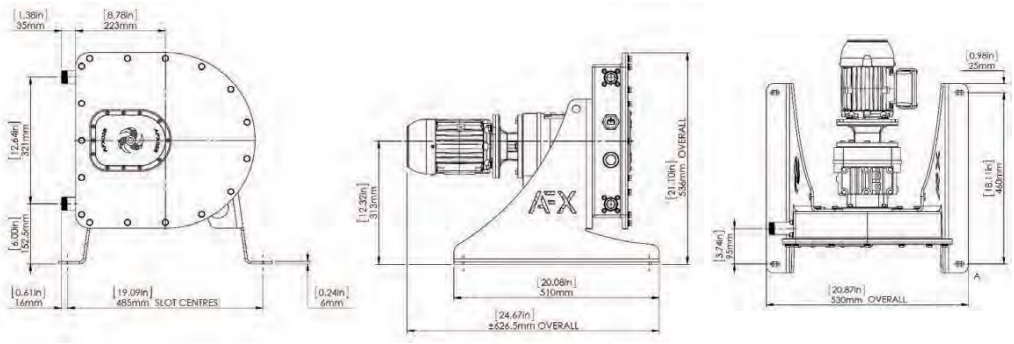
AFX020 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 100rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	DIN, ASA, JIS: mild steel galvanised
Hose Lubricant Required:	2.5 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Aluminium or Acetal
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 74kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration.

AFX PUMPS

AFX PUMPS

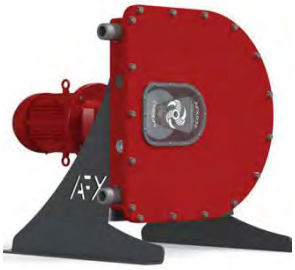
AFX025 DATA SHEET

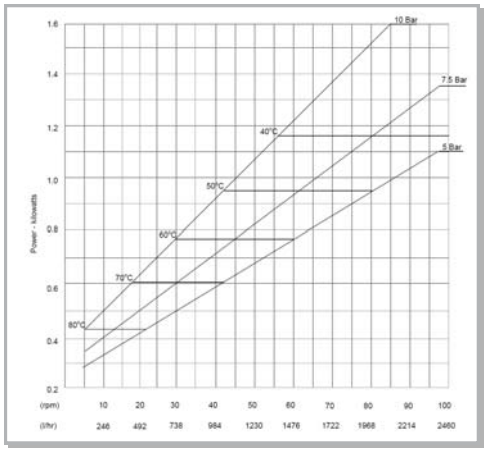
AFX025

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate





Technical Specifications

Maximum intermittent flow rate of:	2,460 litres per hour
Maximum continuous flow rate of:	2,214 litres per hour
Flow per revolution of:	0.41 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	25 mm

AFX PUMPS

AFX PUMPS

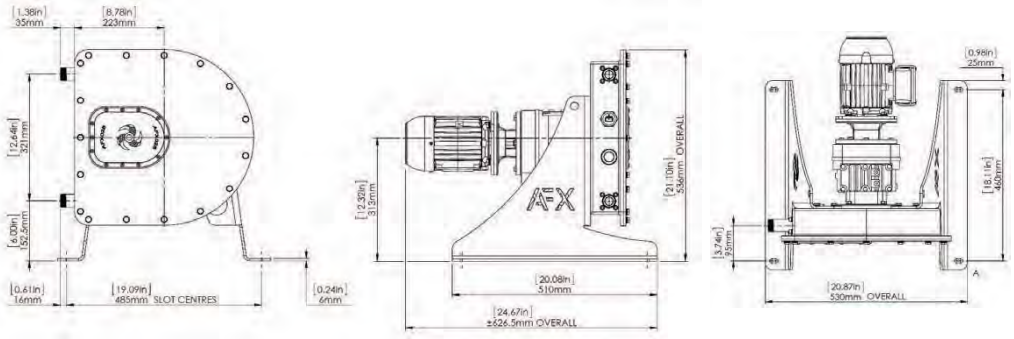
AFX025 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 100rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	DIN, ASA, JIS: mild steel galvanised
Hose Lubricant Required:	2.5 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Aluminium or Acetal
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 75kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration.

AFX PUMPS

AFX PUMPS

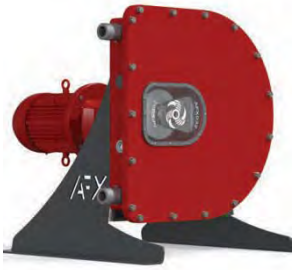
AFX032 DATA SHEET

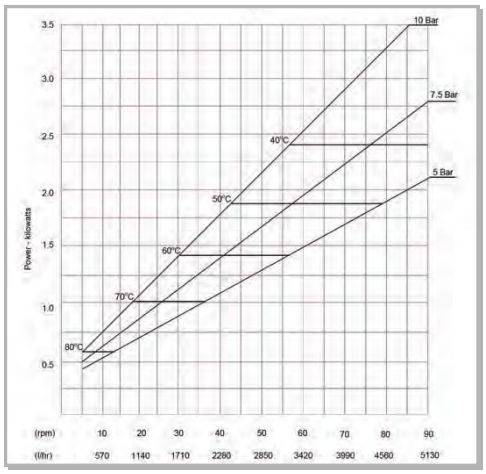
AFX032

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate





Technical Specifications

Maximum intermittent flow rate of:	5,130 litres per hour
Maximum continuous flow rate of:	3,990 litres per hour
Flow per revolution of:	0.95 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	32 mm

AFX PUMPS

AFX PUMPS

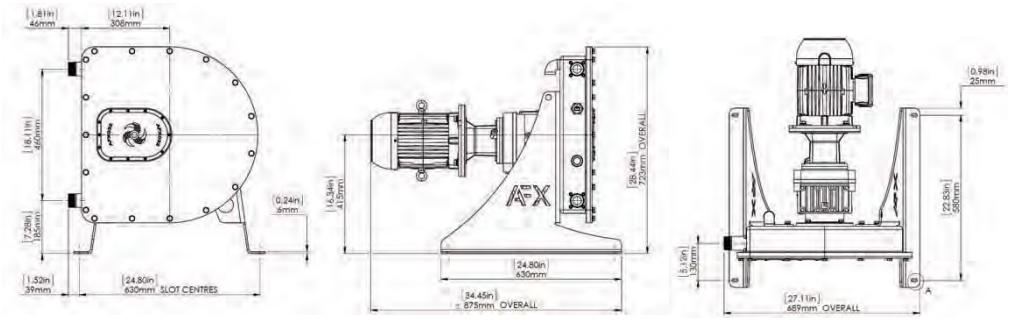
AFX032 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 100rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA: 316 St. Stl., PVC
Hose Lubricant Required:	5 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Aluminium or Acetal
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 154kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration.

Rev.1.1

AFX PUMPS

AFX PUMPS

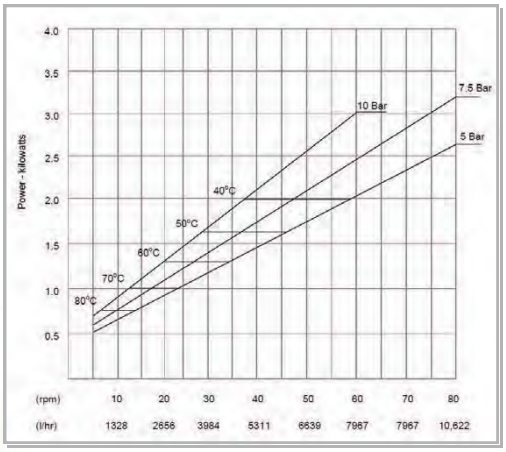
AFX040 DATA SHEET

AFX040

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	8,736 litres per hour
Maximum continuous flow rate of:	6,552 litres per hour
Flow per revolution of:	1.82 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	40 mm

AFX PUMPS

AFX PUMPS

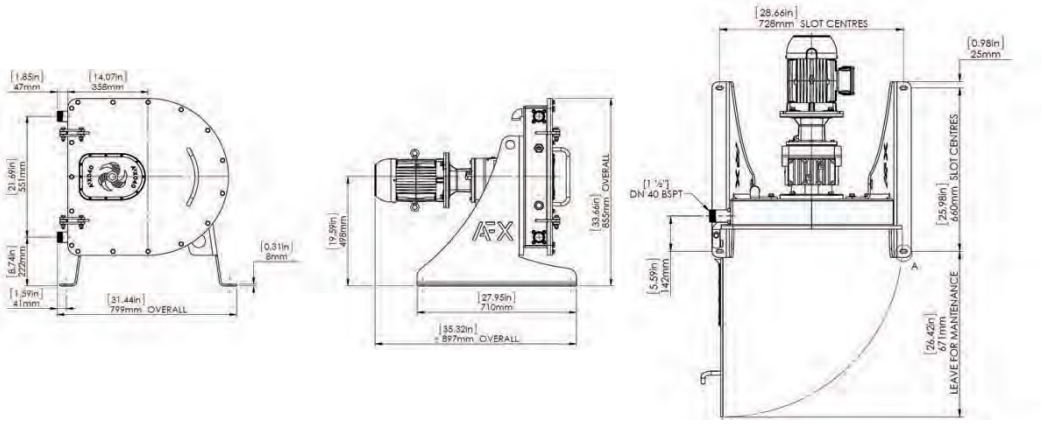
AFX040 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 80rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA: 316 St. Stl., PVC
Hose Lubricant Required:	7.5 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Aluminium or steel
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 234kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration..

AFX PUMPS

AFX PUMPS

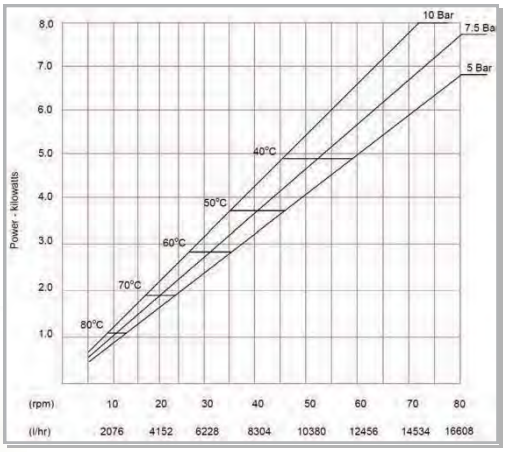
AFX050 DATA SHEET

AFX050

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	16,608 litres per hour
Maximum continuous flow rate of:	10,380 litres per hour
Flow per revolution of:	3.46 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	50 mm

AFX PUMPS

AFX PUMPS

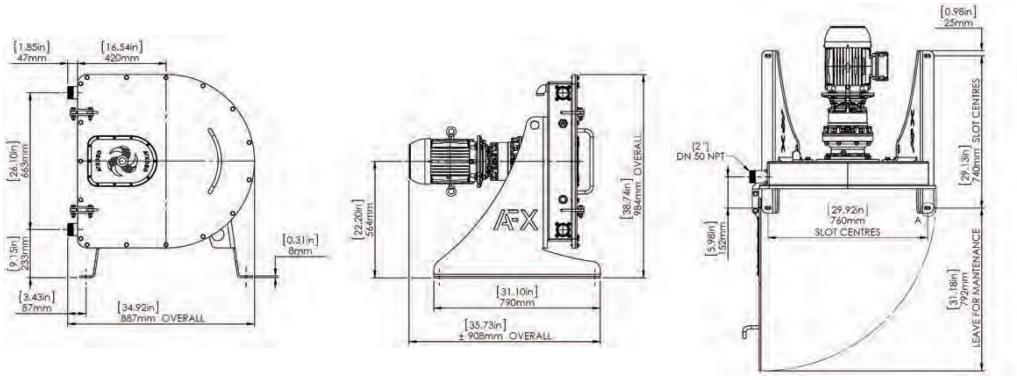
AFX050 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 80rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA: 316 St. Stl., PVC
Hose Lubricant Required:	10 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Aluminium or Acetal
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 276kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration..

AFX PUMPS

AFX PUMPS

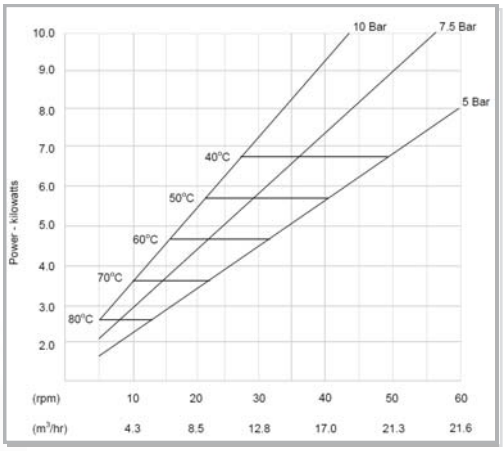
AFX065 DATA SHEET

AFX065

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	25,560 litres per hour
Maximum continuous flow rate of:	19,170 litres per hour
Flow per revolution of:	7.1 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	65 mm

AFX PUMPS

AFX PUMPS

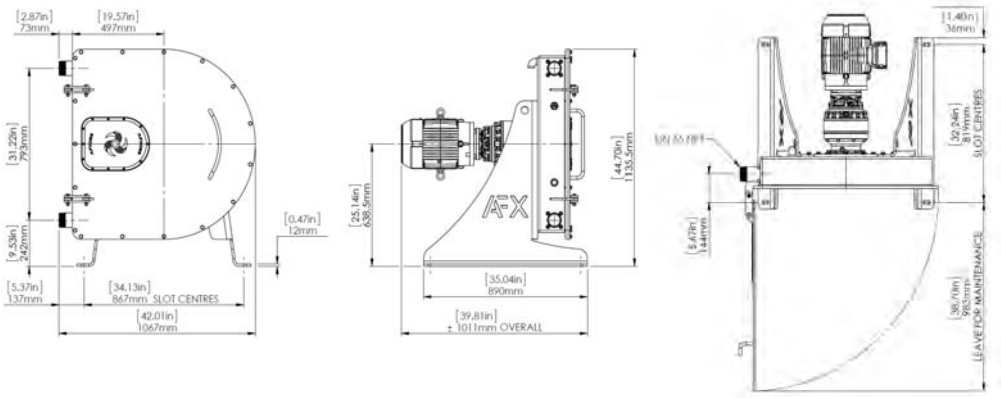
AFX065 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 60rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA: 316 St. Stl., PVC
Hose Lubricant Required:	20 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Acetal or steel
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 488kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration..

AFX PUMPS

AFX PUMPS

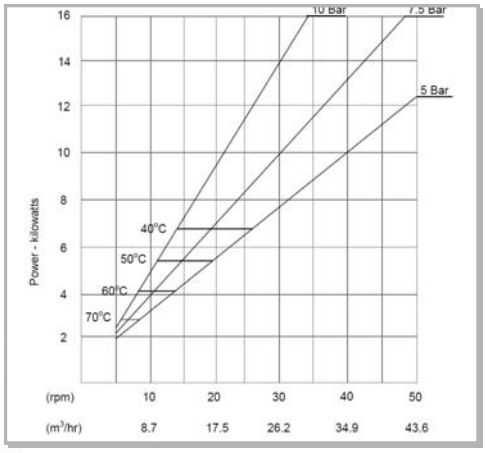
AFX080 DATA SHEET

AFX080

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	43,600 litres per hour
Maximum continuous flow rate of:	30,450 litres per hour
Flow per revolution of:	14.5 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	80 mm

AFX PUMPS

AFX PUMPS

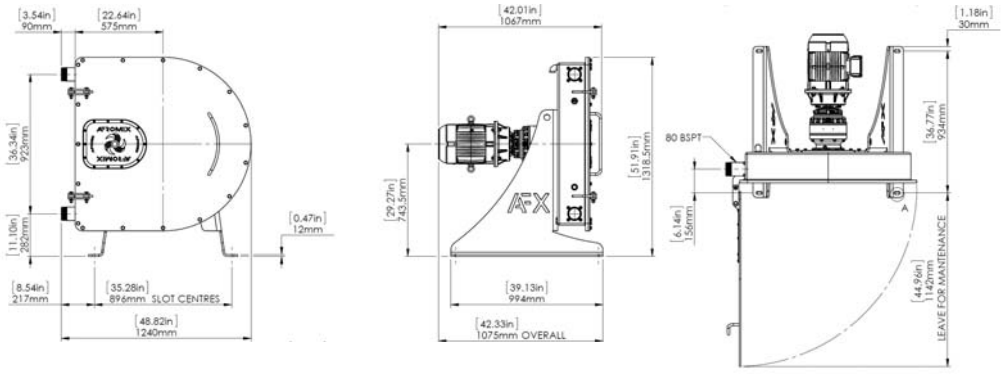
AFX080 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 50rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA: 316 St. Stl., PVC
Hose Lubricant Required:	25 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Acetal or steel
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 670kgs

Actual weight depends upon drive fitted.
Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration..

AFX PUMPS

AFX PUMPS

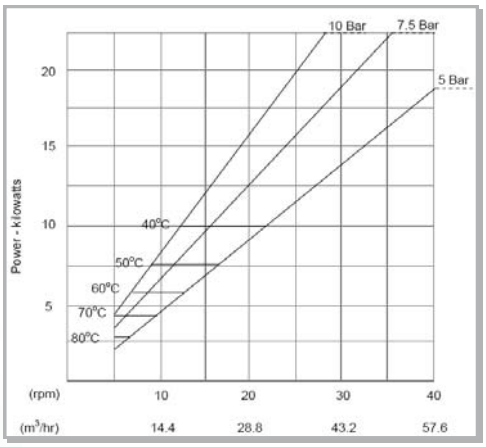
AFX100 DATA SHEET

AFX100

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	57,600 litres per hour
Maximum continuous flow rate of:	43,200 litres per hour
Flow per revolution of:	24 litres
Pressure capability of:	10 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	100 mm

AFX PUMPS

AFX PUMPS

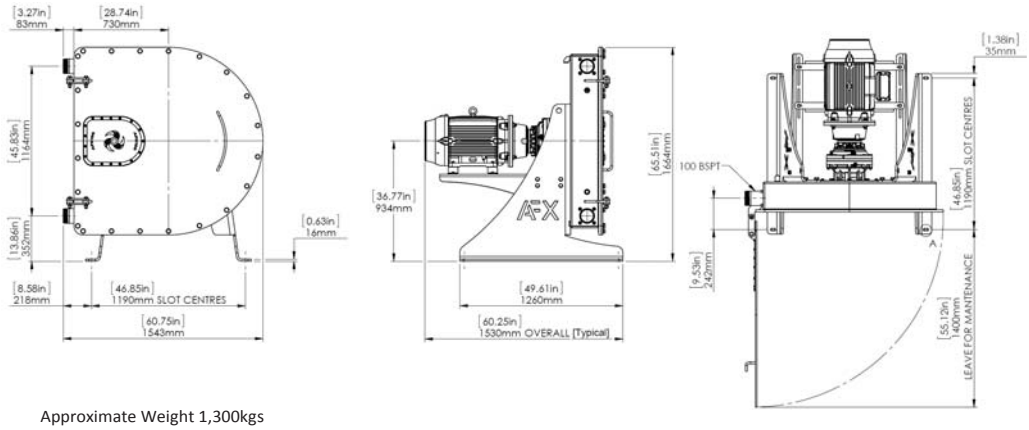
AFX100 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 40rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA, Groove End: 316 St. Stl., PVC
Hose Lubricant Required:	40 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Aluminium or carbon steel
Compression rollers:	Acetal or steel
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 1,300kgs

Actual weight depends upon drive fitted. Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration.

AFX PUMPS

AFX PUMPS

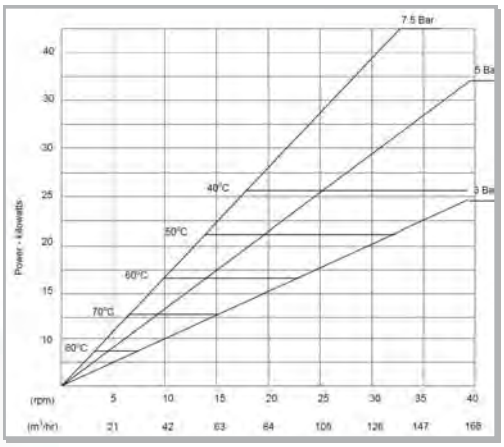
AFX150 DATA SHEET

AFX150

Product Data Sheet

Features

- Pumps abrasive slurries, corrosive material, solids and gaseous liquids with ease
- Ideal for high viscosity or shear sensitive products
- Pumps can run-dry indefinitely without damage
- No check valves or seal water flush systems
- Fully reversible – pumps in either direction
- Minimal maintenance – the hose is the only wearing part
- Pump casings available in a choice of materials including stainless steel
- Suction lift capability up to 9.5 metres and self-priming
- Highly accurate



Technical Specifications

Maximum intermittent flow rate of:	147,000 litres per hour
Maximum continuous flow rate of:	105,000 litres per hour
Flow per revolution of:	70 litres
Pressure capability of:	7.5 Bar
Maximum temperature:	80 Degrees Celsius
Inner hose diameter of:	150 mm

AFX PUMPS

AFX PUMPS

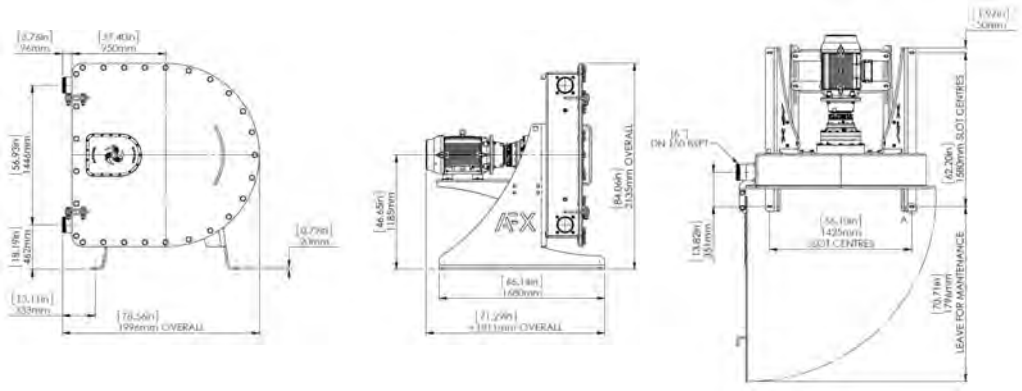
AFX150 DATA SHEET

Technical Specifications

Operating Speeds:	0 to 35rpm
Product Temperature Range:	-10 °C to +80 °C
Suction Lift:	9.5 metres lift
Hose Materials:	Natural Rubber, Nitrile (Buna), EPDM and CSM
Connections available:	BSP, NPT, DIN, ASA, Groove End: 316 St. Stl., PVC
Hose Lubricant Required:	110 litres
Sound level at 1m:	< 70 dB(A) (pumping water at maximum continuous flow)
Optional Hose Failure Sensor:	Capacitive DC sensor

Materials of Construction

Pump housing:	Carbon steel or stainless steel
Rotor:	Carbon steel
Compression rollers:	Aluminium or steel
Front cover:	Carbon steel or stainless steel
Support Frame:	Carbon steel or stainless steel
Seals:	Neoprene or Nitrile



Approximate Weight 2,560kgs

Actual weight depends upon drive fitted. Contact factory for details.

The information contained in this document is believed to be correct but neither AFX Holdings nor its subsidiary companies or distributors or representatives accept any liability for any errors or omissions and reserves the right to alter any specifications without notice. All values given in this document are values under controlled test conditions Actual site flow rates achieved may differ due to changes in temperature, product viscosity, suction and discharge pressures and/or system configuration.

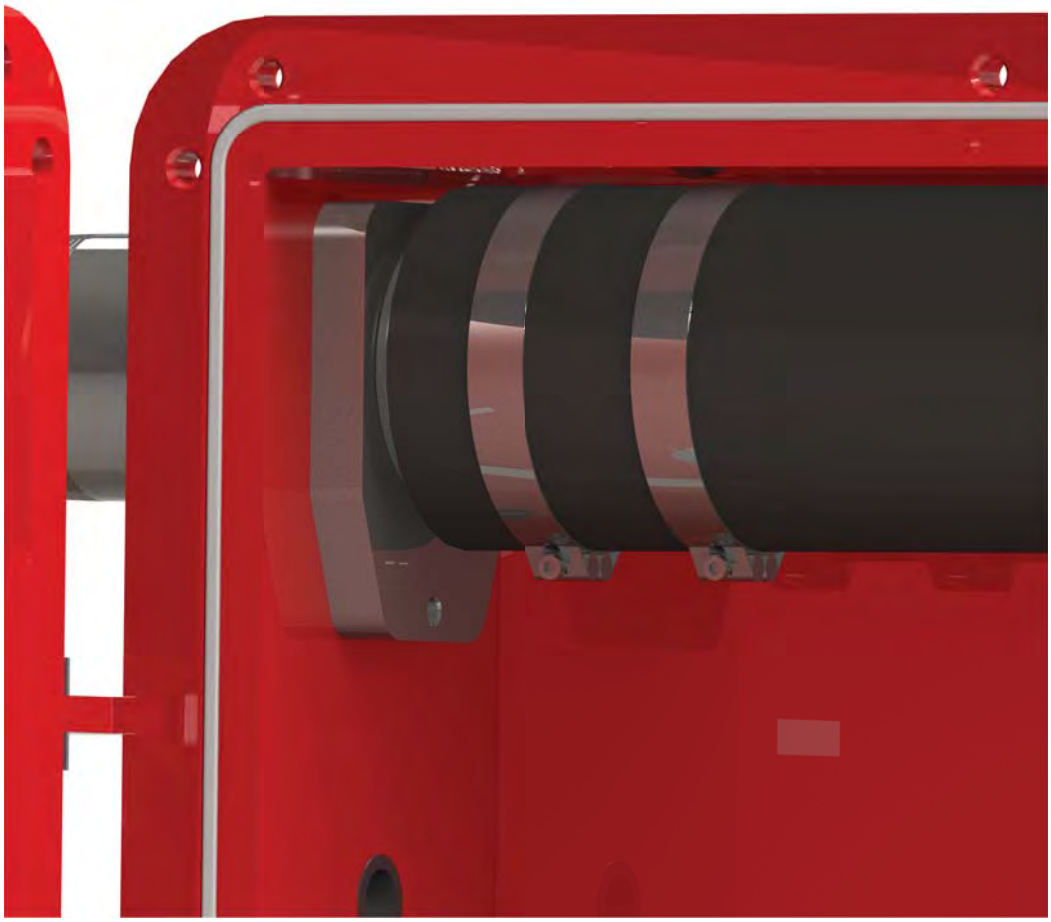
Rev.1.0

AFX PUMPS

AFX HOSES

At the heart of every AFX peristaltic pump lies a heavy duty peristaltic hose specially developed to work hand in hand with the pump roller technology installed in the AFX PUMP SERIES. We stock a comprehensive range of hose materials for each pump to be compatible with the unique chemical and abrasive characteristics of every application.

A carefully designed and manufactured hose element is the single most vital component for the performance durability, and efficiency of any peristaltic pump.



AFX PUMPS

AFX HOSES

To ensure a good pump you must have a good hose, and this is where AFX excels. Each hose we supply is built under stringent quality control measures, using high quality, compounded rubbers, reinforced with four individual layers of braided nylon carefully set at optimum angles.

Once cured, the outer diameter of each hose is precision machined to exacting tolerances ensuring a perfectly sized hose. An accurately sized hose ensures perfect compression, which eliminates internal slip (which reduces pump efficiency and allows for the abrasive slurries to prematurely destroy the hose.)

Designed and Manufactured to Perfection

Utilising design tools such as Finite Element Analysis (FEA), backed up by physical tests and theoretical calculations, our hoses are designed to perfection – right down to the position of the reinforcing layers, the braid angles, cord thickness, and the thickness of the surrounding rubber.

The roller geometry and the profile of the pump housing are all designed and engineered to optimise the performance of the pump hose.

To ensure a good repeatable and consistent hose life, you must have a hose built and machined to exacting tolerances. To us the ISO standards are not good enough. All our hoses exceed the requirements set out in ISO 1307 and DIN7715.

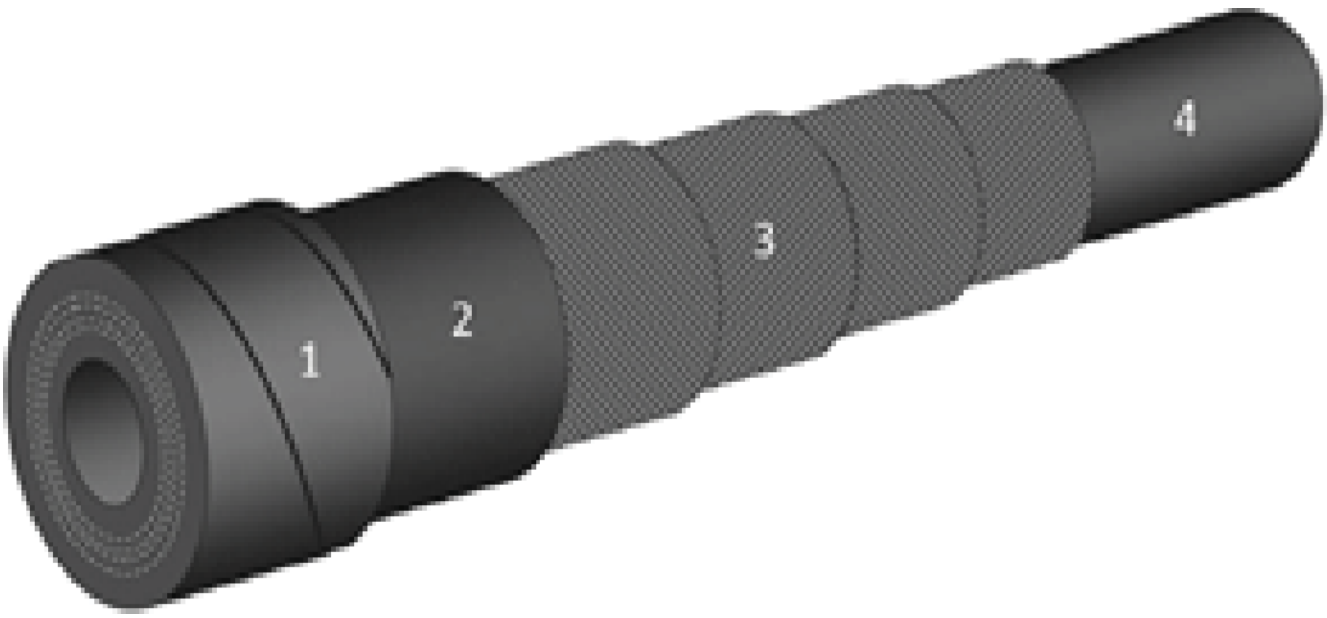
AFX PUMPS

AFX HOSES

Hoses for Use in Other Manufacturers' Pumps

So confident are we of the quality of our hose, we will supply hoses, produced to original tolerances, for a number of the major peristaltic pump manufacturers pumps. We have successfully reduced operational costs for a large number of customers by using our hose in their existing peristaltic hose pumps.

The Anatomy of Our Hose



1. Unground outer cover
2. Precision ground finished hose
3. Layers of reinforcement braid
4. Inner hose liner

AFX PUMPS

AFX HOSES

Available Hose Liner Materials

NATURAL RUBBER (NR)

A general purpose material with excellent mechanical and abrasion resistant properties.
Suitable for all water-based applications and mild acids, alkalis or oxidising agents.
Max. fluid temperature: 80 °C
Min. temperature: -20 °C

NITRILE (NBR)

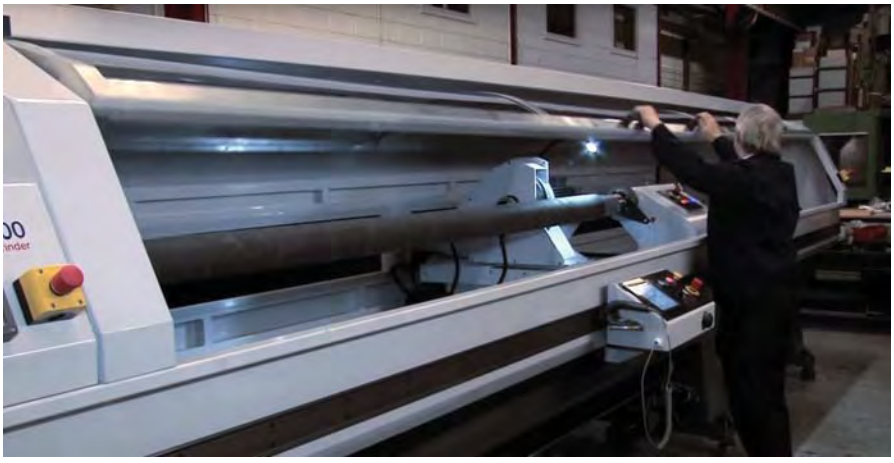
Acrylonitrile butadiene rubber.
A durable material resistant to oils, greases, alkalis and detergents.
Compliant to European BfR standards, this liner can also be used in a wide range of applications in the food industry.
Max. fluid temperature: 80 °C
Min. temperature: -10 °C

EPDM

Ethylene propylene diene rubber.
Excellent chemical resistance, especially to ketones, esters, alcohols and concentrated acids.
Max. fluid temperature: 90 °C
Min. temperature: -10 °C

CSM (HYPALON®)

Chlorosuphonyl polyethylene rubber.
Excellent chemical resistance to high concentration acids, ozones, and other oxidising materials.
Max. fluid temperature: 80 °C
Min. temperature: -10 °C



AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
ACETAL	C6H14O2	C	C	C	C	C	C	C	?	A	C	?
ACETIC ACID (ICE)	CH3COOH	C	C	B	B	C	A	A	?	A	B	A
ACETIC ACID 10%	CH3COOH	A	C	A	A	C	A	?	A	A	A	A
ACETIC ACID 20%.	CH3COOH	B	C	A	A	C	A	A	A	A	A	A
ACETIC ACID 30%	CH3COOH	B	C	A	A	C	A	A	A	A	C	A
ACETIC ACID 50%	CH3COOH	B	C	A	A	C	A	A	A	A	C	A
ACETIC ACID 99%	CH3COOH	C	C	A	B	C	A	A	A	A	C	A
ACETIC ACID ANHYDRIDE	C4H6O3	C	C	B	C	C	A	?	C	A	C	B
ACETONE	C3H6O	A	C	A	C	A	A	A	C	A	A	C
ACETONITRILE	C2H3N	C	C	C	C	C	A	A	?	A	A	A
ACETOPHENONE	C8H8O	C	C	C	C	C	C	C	?	A	C	?
ACETYLENE	C2H2	C	B	C	B	A	A	A	A	A	?	A
ACRYL ARYL SULPHONATE SLURRY		A	C	A	B	?	?	?	?	?	?	?
ACRYLATE (MONOMER)		C	C	C	C	?	?	?	?	?	?	?
ACRYLATE (POLYMER)		?	?	A	?	?	?	?	?	?	?	?
ACRYLIC ACID (323 K)	C3H4O2	C	C	C	C	?	?	?	?	?	?	?
ACRYLIC MONOMER		C	C	C	C	?	?	?	?	?	?	?
ACRYLONITRILE	C3H3N	C	C	C	C	A	A	A	?	A	A	?
AIR	78% N2 + 21% O2	A	A	A	A	A	A	A	A	A	A	A
ALCOHOL (ETHYL)	C2H5OH	A	A	A	A	A	?	?	?	?	B	A
ALKYLARYL BENZENE SULPHONATE		C	A	A	C	?	?	?	?	?	?	?
ALLYL ALCOHOL	C3H5OH	A	B	A	B	?	A	A	C	A	A	A
ALLYL CHLORIDE	C3H5Cl	C	C	C	C	?	A	C	?	A	A	A
ALUM	AlK(SO4)2.12H2O	A	A	A	A	C	C	?	A	A	A	A
ALUMINIUM CHLORIDE	AlCl3	A	A	A	A	C	C	C	A	A	A	A
ALUMINIUM FLUORIDE	AlF3	A	A	A	A	C	C	?	A	A	A	A
ALUMINIUM HYDROXIDE	Al(OH)3	A	A	A	A	C	C	?	A	A	A	A
ALUMINIUM SILICATE	Al2SiO5	A	A	A	A	?	?	?	?	?	?	?
ALUMINIUM SULPHATE	Al2(SO4)3	A	A	A	A	?	?	?	A	A	A	A
AMMONIA (AQUEOUS)	NH3 in H2O	A	A	A	A	?	A	A	?	A	?	?
AMMONIA (GAS)	NH3 (g)	A	A	A	A	?	A	?	A	A	A	A
AMMONIA ANHYDRIC		A	B	A	A	A	A	A	A	A	A	A
AMMONIUM BICARBONATE	NH4HCO3	A	A	A	A	?	?	A	?	A	?	?
AMMONIUM BISULPHATE 50%	NH4HSO4	A	C	A	A	?	?	?	?	A	?	?
AMMONIUM BROMIDE	NH4Br	B	C	A	A	?	?	?	?	A	?	?
AMMONIUM CARBONATE	(NH4)2CO3	A	A	A	A	C	C	A	A	A	A	A
AMMONIUM CHLORIDE	NH4Cl	A	A	A	A	C	C	C	A	A	A	A
AMMONIUM FORMATE	NH4CO2	A	A	A	A	?	?	?	?	?	?	?
AMMONIUM HYDROXIDE	NH4OH	A	A	A	A	?	?	?	?	A	A	A
AMMONIUM METAPHOSPHATE	NH4PO3	A	A	A	A	?	A	?	?	A	A	A

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
AMMONIUM NITRATE	NH4NO3	A	A	A	A	A	A	A	B	A	A	A
AMMONIUM NITRITE	NH4NO2	A	A	A	A	?	?	?	?	A	A	A
AMMONIUM PERSULPHATE	(NH4)2S2O8	B	B	A	A	C	C	B	A	A	A	?
AMMONIUM PHOSPHATE	(NH4)2HPO4	A	A	A	A	C	C	C	A	A	A	?
AMMONIUM PROPIONATE	NH4C3H5O2	A	C	A	B	?	?	?	?	?	?	?
AMMONIUM SULPHATE	(NH4)2SO4	A	A	A	A	C	C	C	A	A	A	A
AMMONIUM THIOCYANATE	NH4SCN	A	A	A	A	?	?	B	?	A	?	?
AMYL ACETATE	C7H14O2	B	B	B	C	?	A	A	C	?	A	A
AMYL ALCOHOL	C5H11OH	B	B	B	B	A	A	A	?	A	A	A
AMYL AMINE	C5H11NH2	C	C	C	C	?	?	?	?	A	?	?
AMYL BORATE	C5H11BO3	B	C	B	C	?	?	?	?	A	?	?
AMYL BROMIDE	C5H11Br	B	C	B	C	?	?	?	?	A	?	?
AMYL CHLORIDE	C5H11Cl	C	C	C	C	?	A	C	C	A	C	A
AMYL CHLORONAPHTHALENE	C15H17Cl	C	C	C	C	?	?	?	?	A	?	?
AMYL ETHER	C10H22O	C	C	C	C	?	?	?	?	A	?	?
AMYL IODIDE	C5H11I	C	C	C	C	?	?	?	?	A	?	?
AMYL NAPHTALENE	C15H18	C	C	C	C	?	?	?	?	A	?	?
AMYL PHENOL	C10H17O	C	C	C	C	?	A	A	?	A	?	?
AMYLENE	C5H10	C	C	C	C	?	?	?	C	A	?	?
ANILINE	C6H5NH2	C	C	C	C	?	A	A	C	A	B	A
ANILINE PAINT		B	C	C	C	?	A	?	C	A	A	?
ANIMAL FAT		C	B	C	B	?	A	A	?	A	?	A
ANIMAL GLUE		A	A	A	A	?	?	?	?	A	?	?
ANTHRAQUINONE (55 °C)	C14H8O2	A	B	A	C	?	?	?	?	?	?	?
ANTI-FREEZE	C2H6O2	A	A	A	A	A	A	A	?	A	?	?
ANTIMONY CHLORIDE 50%	SbCl3	B	C	A	A	C	C	?	A	A	A	?
AQUA REGIA	conc. HNO3 + HCl (1	C	C	B	B	C	C	C	B	A	B	C
ARSENIC ACID	H3AsO4	C	C	B	A	C	C	A	A	A	A	?
ARSENIC TRIOXIDE	As2O3	A	A	A	A	?	?	?	?	?	?	?
ASCORBIC ACID	C6H8O6	A	A	A	A	?	A	A	?	A	?	?
ASPHALT		C	B	C	C	A	A	A	?	A	A	A
ASTOR OIL 1-2-3		C	C	C	C	A	A	A	?	A	?	?
AVIATION GASOLINE		C	B	C	C	A	A	A	?	A	?	?
BARIUM CARBONATE	BaCO3	A	A	A	A	A	A	C	A	A	A	A
BARIUM CHLORIDE	BaCl2	A	A	A	A	C	C	C	A	A	A	?
BARIUM FERRITE	BaO.6Fe2O3	A	A	A	A	?	?	?	?	?	?	?
BARIUM HYDROXIDE	Ba(OH)2.8H2O	A	A	A	A	A	?	C	A	A	A	A
BARIUM SULPHATE	BaSO4	A	A	A	A	C	C	A	A	A	A	A
BARIUM SULPHIDE	BaS	A	A	A	A	C	C	C	A	A	A	A
BEER		A	A	A	A	?	A	A	A	A	A	A

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
BEET ROOT SYRUP		A	A	A	A	?	A	A	?	A	A	A
BENZALDEHYDE	C7H6O	C	C	B	C	C	C	A	C	?	A	B
BENZENE (BENZOL)	C6H6	C	C	C	C	C	C	A	C	A	B	B
BENZENESULPHONIC ACID	C6H6SO3H	C	C	C	C	?	A	B	?	A	C	A
BENZOYL CHLORIDE	C7H5OCl	C	C	C	C	C	C	C	?	A	B	A
BENZYL ALCOHOL	C7H8O	C	C	C	C	A	A	A	?	A	A	A
BENZYL BENZOATE	C14H12O2	C	C	C	C	A	A	A	?	A	?	?
BICALCIUM PHOSPHATE	CaHPO4	A	?	A	A	?	?	?	?	?	?	?
BIRD LIME (GLUE)		A	A	A	A	A	A	A	?	A	?	?
BISMUTH CARBONATE	(BiO)2CO3	A	A	A	A	A	A	?	A	A	A	?
BLACK SULPHATE LIQUOR		A	A	A	A	?	A	B	?	A	?	?
BLAST FURNACE GAS		C	A	C	C	?	?	?	?	A	?	?
BOR(AC)IC ACID	H3BO3	A	A	A	A	?	?	A	?	A	A	A
BORAX	Na2B4O7.10H2O	A	A	A	A	A	A	A	A	A	A	A
BROMINE	Br2	C	C	C	B	C	C	A	C	?	C	?
BUTADIENE	C4H6	C	B	C	C	A	A	A	?	A	C	A
BUTANE	C4H10	C	C	C	C	A	A	A	?	A	C	A
BUTANE FLUID	C4H10	C	B	C	C	?	?	?	?	A	?	?
BUTTER		C	A	C	C	?	A	A	?	A	?	?
BUTTER ACID	C4H8O2	B	B	C	C	?	?	?	?	A	?	?
BUTYL ACETATE	C6H12O2	C	C	B	C	A	A	A	C	A	B	A
BUTYL ALCOHOL	C4H9OH	B	B	A	C	A	A	A	A	A	A	A
BUTYL ALDEHYDE	C4H8O	C	C	C	C	?	?	?	?	A	?	?
BUTYL CELLOSOLVE (=2-butoxyethanol)	C6H13O2	C	C	C	A	A	A	?	?	A	?	A
BUTYL CELLOSOLVE ADIPATE	C6H14O2	C	C	C	C	?	?	?	?	A	?	?
BUTYL ETHER	C8H18O	C	C	C	C	A	A	A	?	A	C	A
BUTYL GLYCOL	C6H14O2	A	A	A	A	?	?	?	A	A	?	?
BUTYL IODIDE	C4H9I	C	C	C	C	?	?	?	?	A	?	?
BUTYL STEARATE	C22H44O2	C	B	C	C	?	A	A	?	A	?	A
BUTYRONITRILE	C4H7N	C	C	C	C	?	?	?	?	A	?	?
CALCIUM ACETATE	Ca(C2H5O2)2	A	A	A	A	?	A	?	?	A	A	?
CALCIUM BISULPHATE	Ca(HSO4)2	A	A	A	A	?	A	?	?	?	A	?
CALCIUM BISULPHITE	Ca(HSO3)2	A	A	A	A	?	?	C	?	A	A	A
CALCIUM BROMIDE	CaBr2	?	?	A	?	?	?	?	?	?	?	?
CALCIUM CARBONATE	CaCO3	A	A	A	A	C	C	B	A	A	A	A
CALCIUM CHLORATE	Ca(ClO3)2.H2O	A	B	A	A	C	C	?	A	A	A	?
CALCIUM CHLORIDE	CaCl2	A	A	A	A	?	?	A	A	A	A	?
CALCIUM FLUORIDE	CaF2	A	A	A	A	?	?	?	?	?	?	?
CALCIUM HYDROXIDE	Ca(OH)2	A	A	A	A	C	C	?	A	A	A	?
CALCIUM HYPOCHLORITE	Ca(ClO)2	C	C	A	A	?	?	?	?	?	?	?

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
CALCIUM HYPOCHLORITE 30%	Ca(ClO)2	B	B	A	A	?	?	C	?	A	A	A
CALCIUM NITRATE	Ca(NO3)2	A	A	A	A	C	C	?	A	A	A	?
CALCIUM STEARATE	Ca(C18H35O2)2	B	B	C	C	?	?	?	?	?	?	?
CALCIUM SULPHATE	CaSO4	A	A	A	A	C	C	B	A	A	A	A
CALCIUM SULPHIDE	CaS	A	A	A	A	A	A	?	?	A	A	A
CALCIUM TETRAFLUORIDE	Ca2F4	C	C	B	A	?	A	?	A	A	A	?
CALIC LIQUOR		A	A	A	A	?	?	?	?	A	?	?
CANE SUGAR LIQUOR		A	A	A	A	A	A	A	?	A	A	A
CARBIDE LIME / CARBIDE SLUDGE		A	A	A	A	?	?	?	?	?	?	?
CARBITOL	C6H14O3	C	C	C	C	?	A	A	?	A	?	?
CARBOLIC ACID (= phenol)	C6H5OH	C	C	C	C	?	A	A	?	A	B	A
CARBON DIOXIDE (DRY)	CO2	A	A	A	A	A	A	A	A	A	A	A
CARBON DIOXIDE (MOIST)	CO2	A	A	A	A	A	A	A	A	A	A	A
CARBON DISULPHIDE	CS2	C	A	C	C	A	A	A	C	A	C	A
CARBON MONOXIDE (338 K)	CO	A	B	A	A	A	A	A	?	A	A	A
CARBON TETRACHLORIDE	CCl4	C	C	C	C	?	?	?	C	A	?	?
CARBONIC ACID	H2CO3 (CO2 in H2O	A	A	A	A	?	C	A	C	A	A	A
CARBOXYMETHYL CELLULOSE 12%		A	A	A	A	?	?	?	?	?	?	?
CASTOR OIL		C	B	C	C	?	A	A	A	A	A	A
CAUSTIC SODA (max. 50%)	NaOH	B	B	A	A	?	B	?	A	?	A	A
CELLOSOLVE	C4H10O2	C	C	C	C	?	A	A	?	A	A	A
CELLOSOLVE ACETATE	C6H12O3	C	C	C	C	A	A	?	?	A	?	?
CELLULOSE ACETATE		?	B	C	C	?	A	A	?	A	?	?
CHINA WOOD OIL (TUNG OIL)		C	C	C	C	A	A	A	?	A	?	?
CHLORIC ACID	HClO3	C	C	A	A	C	C	C	A	?	?	?
CHLORIC ACID SULPHUROUS		C	C	B	A	?	?	?	C	A	?	?
CHLORINATED SOLVENTS		C	C	C	C	?	?	?	?	?	?	?
CHLORINE (DRY)	Cl2	C	C	B	C	C	C	C	A	A	C	A
CHLORINE (MOIST)	Cl2	C	C	A	A	?	A	A	?	A	C	A
CHLORINE AQUEOUS SOLUTION 3%	Cl2 in H2O	C	C	A	A	?	A	B	?	A	A	A
CHLORINE LYE		C	C	A	A	?	?	?	?	A	?	?
CHLORO NITROETHANE	C2H4NO2Cl	C	C	C	C	?	?	?	?	A	?	?
CHLOROACETONE	C3H5OCl	C	B	B	C	?	?	?	?	A	?	?
CHLOROACETONITRILE	C2H2NCl	C	C	C	C	?	?	?	?	A	?	?
CHLOROBENZENE	C6H5Cl	C	C	C	C	A	A	A	C	A	?	?
CHLOROBROMOMETHANE	CH2ClBr	C	C	C	C	?	A	?	C	A	?	?
CHLOROETHYL ACETATE	C4H7O2Cl	C	C	C	C	?	?	?	?	A	?	?
CHLOROFORM	CHCl3	C	C	C	C	A	A	C	C	A	B	A
CHLOROMETHYL	CH3Cl	C	C	C	C	?	?	?	?	A	?	?
CHLORONAPHTALENE	C10H7Cl	C	C	C	C	A	A	?	C	A	?	?

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
CHLOROSULPHONIC ACID	HSO3Cl	C	C	?	C	?	?	?	?	A	?	?
CHLOROTOLUENE	C7H7Cl	C	C	C	C	A	A	A	?	A	?	?
CHROMIC ACID 10%	CrO3.H2O	C	C	?	A	C	C	A	A	A	C	A
CHROMIC ACID 25%	CrO3.H2O	C	C	?	A	C	C	C	A	A	C	A
CHROMIC ACID 50%	CrO3.H2O	C	C	?	A	C	C	C	B	A	C	A
CHROMIUM HYDROXIDE	Cr(OH)3	C	C	A	A	?	?	?	?	?	?	?
CHROMIUM SULPHATE	Cr2(SO4)3	C	C	A	?	?	?	?	?	?	?	?
CITRIC ACID	C6H8O7	A	B	A	A	?	?	A	A	A	A	?
CITRUS PULP		A	B	A	A	?	?	?	?	?	?	?
COCONUT OIL		C	B	C	C	A	A	A	A	A	A	A
COD LIVER OIL		C	B	C	C	?	A	A	?	A	?	?
COKES OVEN GAS		C	B	C	C	A	?	?	?	A	?	A
COMPRESSOR OIL		C	A	C	B	?	?	?	?	A	?	?
COPPER ARSENATE	Cu3(AsO4)2	B	B	A	A	A	A	?	?	A	?	?
COPPER CYANIDE	Cu(CN)2	B	A	A	A	?	?	C	A	?	A	A
COPPER NITRATE	Cu(NO3)2.3H2O	A	B	A	A	?	?	C	A	A	A	?
COPPER OXYCHLORIDE	CuCl2.Cu(OH)2	B	B	A	A	?	?	?	?	?	?	?
COPPER SULPHATE	CuSO4.5H2O	A	B	A	A	?	?	C	A	A	A	?
COPPER(I) CHLORIDE	CuCl	A	A	A	A	C	C	C	A	A	A	A
COPPER(II) CHLORIDE	CuCl2	A	A	A	A	C	C	C	A	A	A	A
COTTONSEED OIL		C	B	C	C	?	A	A	A	A	A	A
CREOSOTE COAL TAR		C	C	C	C	?	A	A	?	A	C	?
CREOSOTE OIL		C	C	C	C	C	C	?	C	A	B	?
CREOSOTE WOOD		C	C	C	C	A	A	?	?	A	C	?
CRESOL 90%, XYLOL 5%, DDT 5%		C	C	C	C	A	A	A	C	?	C	A
CRESOL 95%, XYLOL 5%		C	C	C	C	A	A	A	C	?	C	A
CRESYLIC ACID (= cresol)	CH3C6H4OH	C	C	C	C	?	A	A	?	A	C	A
CRUDE OIL		C	B	C	B	A	A	A	A	A	A	A
CRYOLITE 10%	Na3AlF6	B	B	B	A	?	A	?	?	A	?	?
CYANIDE	...CN	A	A	A	A	?	?	?	?	?	A	?
CYCLOHEXANE	C6H12	C	B	C	C	A	A	A	?	A	C	A
CYCLOHEXANOL	C6H12O	C	C	C	C	C	C	B	C	A	A	A
CYCLOHEXANONE	C6H10O	C	C	C	C	?	A	A	C	A	B	?
CYCLOPENTANE	C5H10	C	C	C	C	?	A	A	?	A	?	?
DDT2 KEROSEN		C	B	C	C	?	A	A	A	A	?	?
DECAHYDRONAPHTENE (= decaline)	C10H18	C	C	C	C	?	?	?	?	A	?	?
DECALIN	C10H18	C	C	C	C	?	?	?	?	A	C	?
DECANE	C10H18	C	C	C	C	?	?	?	?	A	A	A
DIACETONE ALCOHOL	C6H12O2	C	C	C	C	A	A	A	?	A	?	?
DIAMYL NAPHTENE	C20H29	C	C	C	C	?	?	?	?	A	?	?

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
DIAMYL PHTALATE	C18H26O4	C	C	C	C	?	?	?	?	A	?	?
DIBENZYL ETHER	C14H14O	C	C	C	C	A	A	A	?	A	?	?
DIBUTYL AMINE	C8H19N	C	C	C	C	?	?	?	?	A	?	?
DIBUTYL ETHER	C8H18O	C	C	C	C	A	A	A	?	A	?	?
DIBUTYL PHTALATE	C16H22O4	C	C	C	C	A	A	A	?	A	?	?
DIBUTYL SEBACATE	C18H34O4	C	C	C	C	?	?	?	?	A	?	?
DICHLORINE ACID		C	C	C	C	?	?	?	?	A	?	?
DICHLOROBENZENE	C6H4Cl2	C	C	C	C	?	A	?	?	A	?	?
DICHLOROBUTENE	C4H6Cl2	C	C	C	C	?	?	?	?	A	?	?
DICHLORODIFLUOROMETHANE	CCl2F2	C	C	C	C	?	A	?	?	A	A	?
DICHLOROMETHANE	CH2Cl2	C	C	C	C	?	?	?	?	?	?	?
DICHLOROPHENOXY ACETIC ACID	C8H6Cl2O3	C	C	C	C	?	?	?	?	?	?	?
DICHLOROPROPENE	C3H5Cl2	C	C	C	C	?	?	?	C	A	?	?
DICHLOROTETRAFLUOROETHANE	C2Cl2F4	C	C	C	C	?	A	A	?	A	A	?
DICYCLOHEXYLAMINE	(C6H11)2NH	C	C	C	C	?	?	?	?	A	?	?
DI-DOWTHERM (A+E)		C	C	C	C	A	A	A	?	A	?	?
DIESEL OIL		C	C	C	C	A	A	A	?	A	B	A
DIETHYL AMINE	(C2H5)2NH	C	C	C	C	?	A	?	?	A	?	?
DIETHYL CARBONATE	(C2H5)2CO3	C	C	C	C	?	?	?	?	A	?	?
DIETHYL ETHER	C4H10O	C	C	C	C	A	A	A	?	A	?	?
DIETHYL FATTY ACID		?	C	C	C	?	?	?	?	A	?	?
DIETHYL GLYCOL	C6H14O2	A	A	A	A	A	A	A	A	A	A	?
DIETHYL KETONE	C5H10O3	B	C	B	C	?	?	?	?	A	?	?
DIETHYL OXALATE	C6H10O4	C	C	C	C	?	?	?	?	A	?	?
DIETHYL PHTALATE	C12H14O4	C	C	C	C	?	A	?	?	A	?	?
DIETHYL SEBACATE	C14H26O4	C	C	C	C	?	A	?	?	A	?	?
DIISOBUTENE		C	?	C	C	?	A	?	?	A	?	?
DIISOBUTYL KETONE	C9H18O	C	C	C	C	?	A	?	?	A	?	?
DIISOPROPYL ETHER	C6H14O2	C	C	C	C	?	?	?	?	A	?	?
DIISOPROPYL KETONE	C7H14O	C	C	C	C	?	A	?	?	A	?	?
DIMETHYL AMINE	(CH3)2NH	C	C	C	C	?	?	?	?	?	?	?
DIMETHYL ANILINE	C8H11N	C	C	C	C	?	?	?	?	A	?	?
DIMETHYL ETHER	C2H6O	C	C	C	C	A	A	A	?	A	?	?
DIMETHYL FORMAMIDE	C3H7NO	A	B	A	C	A	A	?	?	A	?	?
DIMETHYL PHOSPHITE	C2H7PO3	B	C	B	C	?	?	?	?	A	?	?
DIMETHYL PHTALATE	C10H10O4	C	C	C	C	?	?	?	?	A	?	?
DIMETHYL SULPHIDE	(CH3)2S	C	C	C	C	?	?	?	?	A	?	?
DIOCTYL ADIPATE	C20H38O4	C	C	C	C	?	?	?	?	A	?	?
DIOCTYL PHTALATE (DOP)	C24H38O4	C	C	C	C	?	?	?	C	A	?	?
DIOCTYL SEBACATE	C26H40O4	C	C	C	C	?	?	?	?	A	?	?

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
DIOXANE	C4H8O2	C	C	C	C	A	A	A	?	A	?	?
DIVINYL BENZENE	C10H10	C	C	C	C	?	?	?	?	A	?	?
DODECYL BENZENE	C18H30	C	C	C	C	?	A	A	?	A	C	C
DODECYL TOLUENE SULFONATE	C19H32O3S	C	C	C	C	?	?	?	?	A	?	?
EPICHLOROHYDRINE	C3H5ClO	C	C	C	C	A	A	C	?	A	A	C
ETHANOLAMINE	C2H7NO	C	C	C	C	A	A	A	?	A	C	B
ETHER	C4H10O	C	C	C	C	C	C	A	A	A	?	?
ETHYL ACETATE	C4H8O2	B	C	B	C	C	C	A	C	A	A	A
ETHYL ALCOHOL	C2H5OH	A	A	A	B	A	A	A	A	A	B	A
ETHYL AMINE	C2H7N	?	C	C	C	?	A	A	?	A	C	C
ETHYL BENZENE	C8H10	C	C	C	C	A	A	A	?	A	C	A
ETHYL BENZOATE	C9H10O2	C	C	C	C	?	A	A	?	A	A	?
ETHYL BROMIDE	C2H5Br	C	C	C	C	?	A	C	?	A	?	?
ETHYL BUTYRATE	C6H12O2	C	C	C	C	?	A	A	?	A	A	?
ETHYL CELLULOSE		A	B	A	B	A	A	A	?	A	B	?
ETHYL CHLORIDE	C2H5Cl	C	C	C	C	A	A	C	C	A	A	A
ETHYL CHLOROFORMATE	C3H5ClO2	C	C	C	C	?	?	?	?	?	?	?
ETHYL CYANOACETATE	C5H7NO2	?	C	?	C	?	?	?	?	A	?	?
ETHYL DICHLORIDE	C2H4Cl2	C	C	C	C	?	?	?	?	A	?	?
ETHYL ETHER	C4H10O	C	C	C	C	?	A	?	C	A	B	A
ETHYL FORMATE	C3H6O2	C	C	B	C	?	A	A	?	A	?	?
ETHYL HEXANOL	C8H17OH	C	C	C	C	?	?	?	?	A	?	?
ETHYL IODIDE	C2H5I	C	C	C	C	?	?	?	?	A	?	?
ETHYL ISOBUTYLETHER	C6H14O	C	C	C	C	?	?	?	?	A	?	?
ETHYL ISOBUTYRATE	C6H12O2	C	C	C	C	?	?	?	?	A	?	?
ETHYL MERCAPTAN	C2H5SH	C	C	C	C	?	?	?	?	A	?	?
ETHYL OXALATE	C4H6O4	?	C	C	C	?	?	?	?	A	?	?
ETHYL PENTACHLOROBENZENE	C8H5Cl5	C	C	C	C	?	?	?	?	A	?	?
ETHYL PROPIONATE	C5H10O2	C	C	C	C	?	?	?	?	A	?	?
ETHYL PROPYLETHER	C5H12O	C	C	C	C	?	?	?	?	A	?	?
ETHYL SILICATE	(C2H5)4SiO4	A	A	A	A	A	A	A	?	A	?	?
ETHYLAMYL KETONE	C8H16O	C	C	C	C	?	?	?	?	A	?	?
ETHYLENE DIAMINE	C2H4(NH2)2	C	C	C	C	?	?	?	?	A	?	?
ETHYLENE GLYCOL	C2H6O2	A	A	A	A	A	A	A	A	A	A	?
ETHYLENE OXYDE	C2H4O	C	C	C	C	?	A	A	C	A	?	A
ETHYLHEXYL DIPHENYL PHOSPHATE	C20H27PO4	C	C	C	C	?	?	?	?	A	?	?
ETHYLMETHYL KETONE	C4H8O	B	C	B	C	?	?	?	?	A	?	?
FAECES		A	A	A	A	?	A	?	A	A	A	A
FERRIC OXIDE	Fe2O3	A	A	A	A	?	?	?	?	?	?	?
FERRIFEROUS CHLORIDE (338 K)		A	A	A	A	?	A	?	A	A	?	?

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
FERRO HYDROXIDE	Fe(OH)3	C	C	A	A	?	?	?	?	?	?	?
FERROUS SULPHATE	FeSO4.7H2O	A	A	A	A	?	A	?	A	A	A	?
FLEXOL 300 (dioctyl phtalate - DOP)	C24H38O4	C	C	C	C	?	?	?	?	A	?	?
FLUOBORIC		A	B	A	A	?	A	?	?	A	A	?
FLUOBORIC ACID 65%	HBF4	C	C	C	A	?	A	?	A	A	?	?
FLUORIC ACID	HF	C	C	B	A	C	C	C	A	A	A	A
FLUOROBENZENE	C6H5F	C	C	C	C	?	?	?	?	A	?	?
FLUOROSILICIC ACID	H2SiF6	?	C	?	A	?	?	A	?	A	?	?
FLUOROSILICIC ACID 50%	H2SiF6	?	C	?	A	?	?	A	A	A	?	?
FORMALDEHYDE 37%	CH2O	A	B	A	B	?	A	A	A	A	A	A
FORMALDEHYDE 40% (343 K)	CH2O	C	C	A	C	?	A	A	?	A	A	A
FORMAMIDE (FORMYLAMINE)	CH3NO	A	B	A	A	?	A	A	?	A	?	?
FORMIC ACID	HCOOH	C	C	B	C	A	B	C	A	A	A	A
FREON 11	CCl3F	C	C	C	C	A	A	A	A	A	A	A
FREON 112	C2Cl4F2	C	C	C	C	A	A	A	?	A	A	?
FREON 113	C2Cl3F3	C	C	C	C	?	A	?	?	A	A	?
FREON 114	C2Cl2F4	C	C	C	C	?	A	A	?	A	A	A
FREON 115	C2ClF5	C	C	C	C	A	A	A	?	A	A	?
FREON 12 (LIQUID)	CCl2F2	C	C	C	C	A	A	A	A	A	A	A
FREON 13	CClF3	C	C	C	C	A	A	A	?	A	A	?
FREON 14	CF4	C	C	C	C	A	A	?	?	A	A	?
FREON 21	CHCl2F	C	C	C	C	A	A	A	B	A	B	A
FREON 22	CHClF2	C	C	C	C	A	A	A	?	A	?	A
FREON 31	CH2ClF	C	C	C	C	A	A	A	?	A	A	?
FREON C 316	C4Cl2F6	C	C	C	C	A	A	A	?	A	A	?
FREON C 318	C4F8	C	C	C	C	A	A	A	?	A	A	?
FUEL OIL		C	B	C	C	A	A	A	A	A	A	A
FURAN	C4H4O	C	C	C	C	A	A	A	?	A	A	C
FURFURAL	C4H3OCHO	C	C	C	C	?	A	A	A	A	A	A
GALLNUTOIL		B	C	B	A	A	A	A	A	A	?	?
GARLIC		A	A	?	?	A	A	A	A	A	A	A
GASOLINE OCTANE 100		C	C	C	C	A	A	A	?	A	B	A
GASOLINE OCTANE 65		C	C	C	C	A	A	A	?	A	B	A
GELATIN (GLUE)		A	A	A	A	?	A	A	A	A	A	A
GLUCOSE	C6H12O6	A	A	A	A	A	A	A	?	A	A	A
GLUE		B	A	A	A	A	A	A	?	A	A	?
GLYCERINE	C3H8O3	A	A	A	A	A	A	A	A	A	A	A
GLYCEROL	C3H8O3	A	A	A	A	A	A	A	A	A	A	A
GLYCOL	C2H6O2	A	A	A	A	?	?	?	?	A	A	?
GRAINSEED OIL		C	B	C	C	A	A	A	?	A	A	?

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
GREEN SULPHATE LIQUOR		A	B	A	A	?	A	A	?	A	A	?
HEPTANE	C7H16	C	C	C	C	A	A	A	A	A	A	A
HEXALDEHYDE	C6H14O	C	C	C	C	A	A	A	?	A	?	?
HEXANE	C6H14	C	C	C	C	A	A	A	A	A	C	A
HEXENE	C6H12	C	B	C	C	A	?	?	?	A	?	?
HEXYL ALCOHOL	C6H13OH	B	B	C	C	A	A	A	A	A	A	A
HOG FAT		C	B	C	B	?	A	?	A	A	A	?
HYDRAULIC OIL ESTER BASE		B	C	C	C	A	A	A	?	A	A	?
HYDRAULIC OIL MINERAL BASE		C	B	C	C	A	A	A	?	A	A	?
HYDRAULIC OIL PYDRAUL BASE		C	C	C	C	A	A	A	?	A	A	?
HYDRAULIC OIL SKYDROL BASE		C	C	C	C	A	A	A	?	A	A	?
HYDROBROMIC ACID	HBr	B	B	A	A	?	?	A	?	A	A	A
HYDROBROMIC ACID 40%	HBr	C	C	B	A	C	C	C	A	A	A	A
HYDROCHLORIC ACID (338 K)	HCl	C	C	A	A	?	?	?	?	A	A	?
HYDROCHLORIC ACID 15%	HCl	A	A	A	A	C	C	B	A	A	A	A
HYDROCHLORIC ACID 30%	HCl	B	C	A	A	C	C	C	?	A	A	A
HYDROCHLORIC ACID 33% (323 K)	HCl	C	C	B	A	?	?	?	?	?	?	?
HYDROCHLORIC ACID CONC. 38%	HCl	C	C	A	A	C	C	C	A	A	A	A
HYDROCYANIC ACID	HCN	B	C	A	A	?	A	?	?	A	A	A
HYDROFLUORIC ACID	HF	C	C	B	A	C	C	C	A	A	A	A
HYDROFLUOSILICIC ACID	H2SiF6	A	B	A	C	?	C	?	B	A	A	?
HYDROGEN FLUORIDE (COLD)	HF	C	C	B	A	?	C	?	?	A	C	A
HYDROGEN FLUORIDE (HOT)	HF	C	C	C	C	C	C	?	?	A	C	?
HYDROGEN GAS (338 K)	H2	A	A	A	A	A	A	?	A	A	A	A
HYDROGEN GAS (COLD)	H2	A	A	A	A	A	A	?	A	A	A	A
HYDROGEN PEROXIDE 10%	H2O2	C	C	A	A	?	A	A	A	A	A	A
HYDROGEN PEROXIDE 30%	H2O2	C	C	C	A	?	A	A	C	A	A	A
HYDROGEN PEROXIDE 88%	H2O2	C	C	C	A	A	A	A	A	A	A	?
HYDROGEN SULPHIDE	H2S	A	B	A	A	C	C	?	A	A	A	A
HYDROGEN SULPHIDE (DRY, COLD)	H2S	A	C	A	A	?	A	?	?	A	A	?
HYDROGEN SULPHIDE (DRY, WARM)	H2S	A	C	A	A	?	A	?	?	A	A	?
HYDROGEN SULPHIDE (MOIST, COLD)	H2S	A	C	A	A	?	A	?	?	A	A	?
HYDROGEN SULPHIDE (MOIST, WARM)	H2S	A	C	A	A	?	A	?	?	A	A	?
HYDROGEN SUPEROXIDE 35%	HO2	?	?	A	A	?	?	?	?	?	?	?
INK OIL		C	B	C	A	A	A	B	?	A	?	?
IODINE	I2	C	C	B	A	C	C	A	?	A	A	A
IRON and ZINC PHOSPHATE SOLUTION	FePO4 & Zn3(PO4)2	A	A	A	A	?	?	?	?	?	?	?
IRON CHLORIDE	FeCl3	A	A	A	A	C	C	?	A	A	A	?
IRON CHLORIDE SULPHATE	FeClSO4	B	?	A	A	?	?	?	?	?	?	?
IRON HYDROXIDE	Fe(OH)3	C	C	A	A	?	?	?	?	?	?	?

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses NR	Nitrile	EPDM	Hypalon	Pump Components Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
IRON NITRATE (338 K)	Fe(NO3)3	A	A	A	A	?	A	?	?	A	A	?
IRON SULPHATE	FeSO4.7H2O	A	A	A	A	?	A	?	A	A	A	?
IRON(II) ACETATE SOLUTION	Fe(C2H3O2)2	A	A	A	A	?	?	?	?	?	?	?
ISOAMYLACETATE	C7H14O2	C	C	C	C	?	A	A	?	A	?	?
ISOAMYLALCOHOL	C5H12O	C	C	C	C	?	?	?	?	A	?	?
ISOAMYLFORMATE	C5H12O	C	C	C	C	?	?	?	?	A	?	?
ISOBUTENE	C4H8	C	C	C	C	C	A	?	?	A	A	?
ISOBUTYL ACETATE	C6H12O2	C	C	C	C	C	A	A	?	A	?	?
ISOBUTYL ALCOHOL	C4H10O	B	C	B	C	A	?	A	?	A	A	A
ISOBUTYL FORMATE	C5H10O2	C	C	C	C	?	?	?	?	A	?	?
ISOBUTYLALDEHYDE	C4H8O	C	C	C	C	?	?	?	?	A	?	?
ISOCYANATE	...NCO	C	C	C	C	?	?	?	?	?	?	?
ISODECANE	C10H22	C	C	C	C	?	?	?	?	A	?	?
ISODODECANE	C12H26	C	C	C	C	?	?	?	?	A	?	?
ISOOCTANE	C8H18	C	B	C	C	A	A	?	?	A	A	?
ISOPROPYL ACETATE	C5H10O2	B	C	B	B	?	A	A	?	A	A	?
ISOPROPYL ALCOHOL	C3H8O	A	B	A	C	A	A	?	A	A	A	A
ISOPROPYL CHLORIDE	C3H7Cl	C	C	C	A	C	A	C	?	A	C	?
ISOPROPYL ETHER	C6H14O	C	C	C	C	A	A	A	?	A	C	A
JET FUELS (JP1 TILL JP5)		C	B	C	C	C	A	A	A	A	A	A
KEROSENE		C	B	C	C	A	A	A	A	A	A	A
LACQUER SOLVENTS		C	?	C	C	?	A	C	?	A	B	C
LACQUERS		C	?	C	C	?	A	C	?	A	?	?
LACTIC ACID	C4H10O4	B	?	B	A	?	?	A	A	A	A	?
LACTOL	C13H12O2	C	B	C	C	A	A	A	?	A	?	?
LARD		C	B	C	B	?	A	A	A	A	B	A
LAURYL ETHER SULPHATE	[C12H25(OCH2CH2)	B	C	A	B	?	?	?	?	?	?	?
LEAD ACETATE	Pb(C2H3O2)2.3H2O	A	A	A	A	?	A	C	A	A	A	?
LEAD ARSENATE	PbHAsO4	A	B	A	A	A	A	?	?	A	A	?
LEAD NITRATE	Pb(NO3)2	A	A	A	A	C	C	C	A	A	A	A
LEAD SULPHAMATE	Pb[(NH)2SO3]2	A	A	A	A	?	?	?	?	A	A	?
LIME SULPHUR		A	A	A	A	?	A	C	?	A	A	?
LIME WATER	CaH2O2	A	A	A	A	A	A	A	A	A	?	?
LINSEED OIL		C	C	C	B	?	A	A	A	A	A	A
LIQUID MANURE		A	A	A	A	A	A	A	?	A	A	?
LITHIUM HYDROXIDE	LiOH	A	A	A	A	?	A	?	?	A	A	A
LUBRICATING OIL		C	B	C	B	A	A	A	?	A	?	A
LYE (CAUSTIC)		A	A	A	A	?	A	?	A	A	A	A
MAGNESIUM CARBONATE	MgCO3	A	A	A	A	A	A	A	A	A	A	?
MAGNESIUM CHLORIDE	MgCl2	A	A	A	A	C	C	?	A	A	A	?

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
MAGNESIUM HYDROXIDE	Mg(OH)2	A	A	A	A	A	A	?	A	A	A	A
MAGNESIUM NITRATE	Mg(NO3)2.6H2O	A	A	A	A	?	A	?	A	A	A	?
MAGNESIUM SULPHATE	MgSO4	A	A	A	A	?	A	?	A	A	A	?
MAGNESIUM SULPHIDE	MgS	?	?	A	A	?	?	?	?	?	?	?
MAGNESIUM SULPHITE	MgSO3	?	?	A	A	?	?	?	?	?	?	?
MANGANESE SULPHATE	MnSO4.H2O	A	A	A	A	?	?	?	A	A	?	?
MARGARINE OIL		C	A	C	C	?	?	?	?	?	?	?
MERCURY	Hg	A	A	A	A	A	A	C	A	A	A	A
MERCURY CYANIDE	Hg(CN)2	A	B	A	A	?	A	C	?	A	A	A
MERCURY(I) CHLORIDE	Hg2Cl2	A	B	A	A	C	C	C	A	A	A	?
MERCURY(II) CHLORIDE	HgCl2	A	B	A	A	C	C	C	A	A	A	?
METHANOL (methyl alcohol)	CH3OH	A	A	A	A	A	A	A	A	A	A	A
METHYL ACETATE	C3H6O2	B	C	B	C	A	A	A	C	A	B	A
METHYL ACETOACETATE	C5H8O3	C	C	C	C	?	A	?	?	A	?	?
METHYL ACETONE	C4H8O	B	C	B	C	?	A	A	C	A	?	C
METHYL AMINE	CH3NH2	C	C	C	C	A	A	A	?	A	C	B
METHYL AMYLACETATE	C8H17O2	C	C	C	C	?	A	A	?	A	?	?
METHYL ANILINE	C7H10N	C	C	C	C	?	?	?	?	A	?	?
METHYL BROMIDE	CH3Br	C	C	C	C	A	A	?	?	A	C	A
METHYL BUTYL KETONE	C6H12O	B	B	B	C	A	A	?	A	?	C	C
METHYL BUTYRATE	C5H10O2	C	C	C	C	?	?	?	?	A	?	?
METHYL ETHYL KETONE (MEK)	C4H8O	C	C	C	C	A	A	A	C	A	C	C
METHYL ISOPROPYL KETONE	C4H10O	C	C	C	C	A	A	?	?	A	B	A
METHYL METHACRYLATE	C5H8O2	C	C	C	C	?	A	A	?	A	?	A
METHYL OLEATE	C19H40O2	C	C	C	C	?	?	?	?	A	?	?
METHYL PROPIONATE	C4H8O2	C	C	C	C	?	?	?	?	A	?	?
METHYL SALICYLATE	C8H8O3	C	C	C	C	A	?	A	?	A	?	?
METHYLAMYLCARBINOL	C7H16O	C	C	C	C	A	A	A	?	A	?	?
METHYLCELLOSOLVE (=2-methoxyethanol)	C3H8O2	C	C	C	C	?	A	A	A	A	A	A
METHYLCHLORIDE	CH3Cl	C	C	C	C	?	A	C	C	A	B	A
METHYLENE CHLORIDE	CH2Cl2	C	C	C	C	?	A	C	C	A	C	B
METHYLFORMATE	C2H4O2	C	C	C	C	A	?	?	?	A	?	?
METHYLIODIDE	CH3I	C	C	C	C	?	A	C	?	A	?	?
METHYLISOBUTYL KETONE	C6H12O	B	B	C	C	A	A	?	A	A	A	B
METHYLISOBUTYLCARBINOL	C6H14O	C	C	C	C	?	?	?	?	A	?	?
METHYLISOBUTYRATE	C5H10O2	C	C	C	C	?	?	?	?	A	?	?
MILK		B	A	B	A	?	A	A	?	A	A	A
MINERAL OIL		C	A	C	A	A	A	A	A	A	A	A
MOLASSES		A	A	A	A	A	A	A	A	A	A	A
MONOBROMOBENZENE	C6H5Br	C	C	C	C	?	?	?	?	A	?	?

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

Duty fluid	Molecular formula	Pump Hoses				Pump Components						
		NR	Nitrile	EPDM	Hypalon	Mild steel	SS316	Aluminium	PVC	PTFE	Polypropylene	PVDF
MONOCHLOROANILINE	C6H4NH2Cl	C	C	C	C	?	?	?	?	A	?	?
MONOCHLOROBENZENE	C6H5Cl	C	C	C	C	A	A	?	C	A	?	?
MONOCHLORODIFLUOROMETHANE	CHClF2	C	C	C	C	?	A	?	?	A	A	?
MONOCHLOROTRIFLUOROMETHANE	CClF3	C	C	C	C	?	?	?	?	A	?	?
MONOETHANOLAMINE	C2H4NH2OH	C	C	C	C	A	A	A	?	A	A	B
MONOSODIUM GLUTAMATE	Na[C5H8NO4]	C	A	A	B	?	?	?	?	?	?	?
MOTOR OIL		C	B	C	B	A	A	A	?	A	?	?
MURIATIC ACID (= hydrochloric acid)	HCl	B	C	A	A	?	?	?	?	A	?	?
NAPHTA		C	?	C	C	A	A	A	A	A	A	?
NAPHTALENE	C10H8	C	C	C	C	A	A	A	C	A	C	A
NAPHTHENE	C10H8	C	C	C	C	A	A	A	?	A	?	?
NATURAL GAS	CH4	B	A	B	B	A	A	A	?	A	A	?
NATURAL GAS (DRY)	CH4	B	A	B	A	A	A	?	A	A	A	?
NATURAL GAS (WET)	CH4	B	A	B	A	A	A	?	A	A	A	?
NICKEL CHLORIDE	NiCl2	A	A	A	A	C	C	C	A	A	A	?
NICKEL HYDROXIDE	Ni(OH)2	B	?	A	A	?	?	?	?	?	?	?
NICKEL NITRATE	Ni(NO3)2	A	A	A	A	C	C	C	A	A	A	?
NICKEL SULPHATE	NiSO4	A	A	A	A	?	A	C	A	A	A	?
NICOTINE BENTONITE		C	B	C	C	?	?	?	?	A	?	?
NICOTINE SULPHATE	C10H14N2O.5H2SO4	A	A	A	A	?	?	?	?	A	?	?
NITRIC ACID (FUMING)	HNO3	C	C	C	C	C	C	A	?	?	C	?
NITRIC ACID 10%	HNO3	C	C	A	A	?	A	A	A	A	A	A
NITRIC ACID 2%	HNO3	C	C	A	A	?	A	C	A	A	A	A
NITRIC ACID 25%	HNO3	C	C	B	A	?	?	C	A	A	A	A
NITRIC ACID 40%	HNO3	C	C	B	B	?	A	C	A	A	A	A
NITRIC ACID 50%	HNO3	C	C	C	C	?	A	C	B	A	C	A
NITRIC ACID 60%	HNO3	C	C	C	C	?	A	C	B	A	C	A
NITRIC ACID 70%	HNO3	C	C	C	C	?	A	C	B	A	C	C
NITRO-BENZENE	C6H5NO2	C	C	C	C	A	A	A	?	A	A	A
NITROETHANE	C2H5NO2	C	C	C	C	?	A	A	?	A	B	A
NITROGLYCERINE	C3H5N3O9	C	C	C	C	?	?	?	?	A	?	?
NITROMETHANE	CH3NO2	C	C	C	C	A	A	A	?	A	B	A
NITRO-OCTANE	C8H17NO2	C	C	C	C	?	?	?	?	A	?	?
NITROPROPANE	C3H7NO2	C	C	C	C	?	A	?	?	A	?	?
NITROSYL CHLORIDE	ClNO	C	C	C	C	?	A	?	?	A	?	?
NITROUS ACID	HNO2	C	C	A	A	?	A	?	?	A	A	?
OCTANE	C8H18	C	B	C	C	A	?	?	?	A	C	A
OCTYL ALCOHOL	C8H18O	C	B	C	C	A	A	A	?	?	?	?
OCTYL ALDEHYDE	C8H16O	C	C	C	C	?	?	?	?	A	?	?
OLEIC ACID	C18H34O2	C	C	C	C	?	?	?	B	A	?	?

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
OLEINIC ACID	C18H34O2	C	C	C	C	?	A	A	?	A	?	?
OLEUM (fuming sulfuric acid)	H2SO4 + SO3	C	C	B	B	?	?	?	C	A	A	?
OLIVE OIL		C	B	C	C	?	A	A	A	A	A	A
OXALIC ACID	C2H2O4	A	B	A	A	?	C	A	A	A	A	A
OXYGEN	O2	B	B	A	A	A	A	A	A	A	A	A
OZONE	O3	C	C	A	A	A	A	?	B	A	C	A
PALM OIL		C	B	C	C	A	A	?	?	A	?	?
PALMITIC ACID	C16H32O2	C	B	C	C	A	A	A	?	A	A	A
PARAFFIN OIL 50%	C12H26 - C18H38	C	C	C	C	A	A	A	A	A	A	A
PARAFORMALDEHYDE	HO(CH2O)nH	C	B	C	C	?	A	?	?	A	?	?
p-CYMENE	C10H14	C	C	C	C	?	?	?	?	A	?	?
PENTACHLOROPHENOL	C6Cl5OH	C	C	C	C	A	?	?	?	A	?	?
PENTANE	C5H12	C	B	C	C	?	?	?	?	A	?	?
PERACETIC ACID 15% (peroxyacetic acid)	CH3COO2H	C	C	A	A	?	?	?	?	A	A	?
PERCHLORIC ACID	HClO4	C	C	C	B	?	A	?	B	A	?	?
PERCHLORO ETHENE	C2Cl4	C	C	C	C	A	A	?	?	A	?	?
PETROLEUM (to 363 K)		C	C	C	C	A	A	A	?	A	C	A
PHENOL	C6H5OH	C	C	C	C	?	?	A	A	?	A	A
PHENYL ETHYL ETHER	C8H10O	C	C	C	C	?	?	?	?	A	?	?
PHOSPHOR TRIBUTYRATE	(C4H9)3PO4	?	C	C	C	?	?	?	?	A	?	?
PHOSPHORIC ACID 50%	H3PO4	A	B	A	A	?	A	C	A	A	?	A
PHOSPHORIC ACID 7% (50 °C)	H3PO4	A	A	A	A	?	?	?	?	?	?	?
PHOSPHORIC ACID 7% (70 °C)	H3PO4	B	B	A	A	?	?	?	?	?	?	?
PHOSPHORIC ACID 75%	H3PO4	A	B	A	A	?	?	C	A	A	A	A
PHOSPHORIC ACID 8% (80 °C)	H3PO4	C	C	A	A	?	?	?	?	?	?	?
PHOSPHORIC ACID 85%	H3PO4	A	B	A	A	?	?	C	A	A	A	A
PHOSPHOROUS OXYCHLORIDE	POCl3	C	C	C	C	?	?	?	?	?	?	?
PICKLE SOL. (20% NITR. ACID, 4% HF)	HNO3 + HF	C	C	B	A	?	?	?	?	A	?	?
PICRIC ACID	C6H3N3O7	B	C	A	A	?	A	A	A	?	A	C
PINE OIL		C	B	C	C	?	A	A	?	A	?	?
PINE TREE OIL		C	B	C	C	?	?	?	?	A	?	?
POLYACRYLIC ACID	C3H4O2	C	C	C	C	?	?	?	?	?	?	?
POLYALKYLENE GLYCOL		C	B	C	B	?	?	?	?	A	?	?
POLYALUMINIUM CHLORIDE	[Al2(OH)xCl6-x]n	B	A	B	?	?	?	?	?	?	?	?
POLYVINYL ACETATE	C4H6O2	A	?	A	?	?	?	?	?	?	?	?
POLYVINYL ALCOHOL (CONCENTRATED)	C2H4O	C	C	C	?	?	?	?	?	?	?	?
POLYVINYL ALCOHOL (SOLUTION)	C2H4O	A	C	A	?	?	?	?	?	?	?	?
POTASSIUM BICHROMATE	K2Cr2O7	B	B	A	A	?	?	?	?	?	?	?
POTASSIUM BORATE	KB2O3	A	A	A	A	?	A	?	?	A	A	A
POTASSIUM BROMIDE	KBr	A	A	A	A	C	C	A	A	A	A	A

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
POTASSIUM CARBONATE	K2CO3	A	A	A	A	?	A	C	A	A	A	A
POTASSIUM CHLORATE	KClO3	B	B	A	A	?	A	C	A	A	A	?
POTASSIUM CHLORIDE	NaCl	A	A	A	A	?	A	C	A	A	A	?
POTASSIUM CYANIDE	KCN	A	A	A	A	A	A	B	A	A	A	?
POTASSIUM DICHROMATE	K2Cr2O7	B	B	A	A	A	A	A	A	A	A	?
POTASSIUM HYDROXIDE	KOH	A	B	A	A	?	A	C	?	?	?	?
POTASSIUM NITRATE	KNO3	A	A	A	A	?	A	?	A	A	A	?
POTASSIUM PERMANGANATE	KMnO4	B	B	A	A	?	A	?	A	?	A	?
POTASSIUM SULPHATE	K2SO4	A	A	A	A	?	?	A	A	A	A	A
POTASSIUM SULPHITE	K2SO3	A	A	A	A	?	A	A	A	A	?	?
PRODUCER GAS (WOOD GAS)		B	A	B	A	A	A	A	A	A	A	?
PROPANE GAS	C3H8	C	A	C	B	A	A	A	?	A	C	A
PROPANE LIQUID	C3H8	C	A	C	B	A	A	A	A	A	A	A
PROPENE BROMIDE	C3H5Br	C	C	C	C	?	?	?	B	A	?	?
PROPIONIC ACID	C3H6O2	C	C	C	C	?	A	A	?	A	A	?
PROPIONITRILE	C3H5N	C	C	C	C	A	A	?	?	A	A	?
PROPYL ACETATE	C5H10O2	B	C	B	C	?	A	A	?	A	B	A
PROPYL ALCOHOL	C3H7OH	A	C	A	C	?	A	A	?	A	A	A
PROPYL DICHLORIDE	C3H6Cl2	C	C	C	C	?	?	?	?	A	?	?
PROPYL FORMATE	C4H8O2	C	C	C	C	?	?	?	?	A	?	?
PROPYL PROPIONATE	C6H12O2	C	C	C	C	?	?	?	?	A	?	?
PROPYLBENZENE	C9H12	C	C	C	C	?	?	?	?	A	?	?
PROPYLENE CARBONATE	C4H6O3	A	C	A	C	?	?	?	?	A	?	?
PROPYLENE CHLORIDE	C3H7Cl	C	C	C	C	?	?	?	?	A	?	?
PROPYLENE CHLOROHYDRINE	C3H7ClO	C	C	C	C	?	?	?	?	A	?	?
PROPYLENE DIAMINE	C3H6(NH2)2	C	C	C	C	?	?	?	?	A	?	?
PROPYLENE DICHLORIDE	C3H6Cl2	C	C	C	C	A	A	A	?	A	?	?
PROPYLENE GLYCOL	C3H6(OH)2	A	A	A	A	A	A	A	A	A	A	?
PROPYLENE OXIDE	C3H6O	C	C	?	C	?	?	?	?	A	?	?
PROPYLENE TRICHLORIDE	C3H6Cl3	C	C	C	C	?	?	?	?	A	?	?
PRUSSIC ACID 20%	HCN	A	B	A	A	?	?	?	?	?	?	?
PRUSSIC ACID 98% CONCENTRATED	HCN	B	B	A	A	?	?	?	?	?	?	?
PYRANOL 1467/76		C	C	C	C	?	?	?	?	A	?	?
PYRIDINE	C5H5N	C	C	C	C	?	A	A	A	A	?	B
QUICKSILVER NITRATE	Hg(NO3)2	A	A	A	A	A	A	?	?	A	?	?
RAPESEED OIL		C	B	C	C	?	A	?	?	A	?	?
RESIN (ROSIN)		C	B	C	C	?	A	A	B	?	A	?
ROTENONE IN WATER	C23H22O6 in H2O	A	A	A	A	?	A	?	?	A	?	?
SEA WATER		A	A	A	A	?	A	A	?	A	A	A
SEWAGE WATER (no hydrocarbons)		A	A	A	A	A	A	A	?	A	A	A

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
SHELL DD		C	B	C	A	?	?	?	?	A	?	?
SILICON CARBIDE (SLURRY)	SiC	A	A	A	A	?	?	?	?	?	?	?
SILICON FLUORIDE	SiF4	A	C	A	A	?	?	?	?	A	?	?
SILICON TETRACHLORIDE	SiCl4	?	?	?	?	?	?	?	?	?	?	?
SILICONE OIL		A	A	A	A	A	A	A	A	A	A	A
SILVER CYANIDE (74 g/l)	AgCN	A	B	A	A	?	?	C	A	A	A	A
SILVER NITRATE	AgNO3	A	A	A	A	C	C	C	A	A	A	?
SOAP OIL		C	B	C	A	?	A	?	?	A	A	?
SOAP SOLUTIONS		A	B	A	A	?	A	B	?	A	A	A
SODA	Na2CO3	A	A	A	A	A	A	?	?	A	A	?
SODA LYE 1.25%	NaOH	B	B	A	A	?	A	A	A	A	A	A
SODA LYE 2.5%	NaOH	B	B	A	A	?	A	A	A	A	A	A
SODA LYE 50% (338 K)	NaOH	C	C	B	B	?	A	?	A	A	A	?
SODIUM ACETATE	NaC2H3O2	A	A	A	A	A	A	A	A	A	A	A
SODIUM ALUMINATE 3%	NaAlO2	A	B	A	A	?	?	?	?	A	?	?
SODIUM ALUMINIUM SILICATE	Al12Na12Si12O48.27	A	A	A	A	?	?	?	?	?	?	?
SODIUM BICARBONATE	NaHCO3	A	A	A	A	?	?	A	?	A	A	A
SODIUM BISULPHATE	NaHSO4	A	A	A	A	?	?	?	?	A	A	A
SODIUM BROMIDE	NaBr	A	C	A	A	C	C	B	A	A	A	A
SODIUM CARBONATE	Na2CO3	A	A	A	A	A	?	C	A	A	A	A
SODIUM CHLORATE	NaClO3	C	C	A	A	C	C	?	A	A	A	?
SODIUM CHLORIDE	NaCl	A	A	A	A	C	C	A	A	A	A	?
SODIUM CHLORIDE 25%	NaCl	A	A	A	A	?	?	A	?	?	?	?
SODIUM CYANIDE	NaCN	A	A	A	A	A	A	C	A	A	A	?
SODIUM DICHROMATE	Na2Cr2O7.2H2O	B	B	A	A	A	?	?	A	A	A	A
SODIUM FLUOALUMINATE	Na3AlF6	A	A	A	A	?	?	?	A	A	?	?
SODIUM FLUORIDE	NaF	A	A	A	A	C	C	?	A	A	A	?
SODIUM HYDROSULPHIDE	NaHS	A	A	A	A	?	?	?	?	?	?	?
SODIUM HYDROXIDE <5% (90 °C)	NaOH	B	B	A	A	?	?	?	?	?	?	?
SODIUM HYDROXIDE 50% MAX.	NaOH	B	B	A	A	?	A	C	A	A	A	A
SODIUM HYPOCHLORITE	NaClO	C	C	A	A	?	?	?	?	A	?	?
SODIUM HYPOCHLORITE 20%	NaClO	C	C	A	A	C	C	C	A	?	B	A
SODIUM IODIDE	NaI	B	C	A	A	?	?	?	?	?	?	?
SODIUM METABISULPHATE <2%	Na2S2O7	C	C	B	C	?	?	?	?	?	?	?
SODIUM METABISULPHATE >2%	Na2S2O7	C	C	C	C	C	C	C	C	C	C	C
SODIUM METABISULPHITE <2%	Na2S2O5	C	C	B	C	?	?	?	?	?	?	?
SODIUM METABISULPHITE >2%	Na2S2O5	C	C	C	C	C	C	C	C	C	C	C
SODIUM METABORATE 18% (333 K)	NaBO2.2H2O	A	A	A	A	?	?	?	?	?	?	?
SODIUM METAPHOSPHATE	NaPO3	A	A	A	A	?	A	C	?	A	C	?
SODIUM NITRATE	NaNO3	A	A	A	A	A	?	?	A	A	A	A

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
SODIUM NITRITE	NaNO2	A	A	A	A	?	?	A	A	A	A	?
SODIUM OLEATE	Na(C18H32O2)	C	C	C	C	?	?	?	?	?	?	?
SODIUM PERBORATE	NaBO3	B	C	A	A	C	C	C	?	A	A	?
SODIUM PEROXIDE	Na2O2	C	C	A	A	A	A	?	A	A	A	?
SODIUM PHOSPHATE	Na3PO4	A	A	A	A	?	A	C	?	A	A	A
SODIUM PHOSPHATE (DI-BASIC)	Na2HPO4.12H2O	A	A	A	A	A	A	?	A	A	A	?
SODIUM PHOSPHATE (MONO-BASIC)	NaH2PO4	A	A	A	A	A	A	?	?	A	A	?
SODIUM PHOSPHATE (TRI-BASIC)	Na3PO4	A	A	A	A	A	A	?	?	A	A	?
SODIUM SALT	Na	A	A	A	A	A	A	?	?	A	A	?
SODIUM SILICATE	Na2SiO3 (Na2O.SiO2)	A	A	A	A	?	A	A	A	A	A	A
SODIUM SILICOALUMINATE		A	A	A	A	?	?	?	?	?	?	?
SODIUM SULPHATE	Na2SO4	A	A	A	A	?	A	?	A	A	A	?
SODIUM SULPHIDE	Na2S.9H2O	A	A	A	A	A	A	?	A	A	A	A
SODIUM SULPHITE	Na2SO3	A	A	A	A	?	A	?	A	A	A	A
SODIUM THIOSULPHATE	Na2S2O3.5H2O	A	A	A	A	?	A	A	A	A	A	?
SOYA OIL		C	A	C	B	?	A	?	A	A	A	?
SPENT SULPHITE LIQUOR		?	?	A	A	?	?	?	?	?	?	?
SPIRIT (85% ETHYL ALCOHOL)	C2H5OH	A	A	A	A	A	A	A	?	A	A	?
STANNIC CHLORIDE	SnCl4	A	B	B	A	?	?	C	?	A	A	A
STEARIC ACID	C18H36O2	C	B	C	C	?	A	B	A	A	A	A
STRONTIUM FERRITE	IS A SOLID	A	?	?	?	?	?	?	?	?	?	?
STYRENE	C8H8	C	C	C	C	A	A	A	?	A	C	A
SUCCINIC ACID / AMBER ACID	HOOC(CH2)COOH	A	?	A	?	?	?	?	?	?	?	?
SULPHAMINIC ACID 2%	H3NSO3	A	B	A	A	?	?	?	?	?	?	?
SULPHONIC ACID	H2SO2	C	C	C	B	?	?	?	?	?	?	?
SULPHUR (363 K)	S8	C	C	C	C	?	?	A	?	A	A	?
SULPHUR CHLORIDE	S2Cl2	B	C	A	A	?	A	A	?	A	B	A
SULPHUR DIOXIDE 1.5%	SO2	?	?	C	?	?	?	?	?	?	?	?
SULPHUR DIOXIDE 5% IN WATER	SO2 in H2O	A	B	A	A	?	?	?	?	?	?	?
SULPHUR DIOXIDE GAS	SO2	C	C	A	A	?	?	A	?	?	?	?
SULPHUR SMOKE		A	B	A	A	?	?	?	C	A	?	?
SULPHUR TRIOXIDE	SO3	C	C	B	A	?	?	?	?	A	?	?
SULPHURIC ACID (338 K)	H2SO4	?	?	?	A	?	?	?	?	A	?	?
SULPHURIC ACID 10% (348 K)	H2SO4	?	?	A	A	?	?	?	?	?	?	?
SULPHURIC ACID 10% (COLD)	H2SO4	A	A	A	A	?	A	C	?	A	A	A
SULPHURIC ACID 20%	H2SO4	A	B	A	A	?	A	C	?	A	A	A
SULPHURIC ACID 30%	H2SO4	A	B	A	A	?	A	C	?	A	A	A
SULPHURIC ACID 5% (358 K)	H2SO4	?	?	?	A	?	?	?	?	?	?	?
SULPHURIC ACID 50%	H2SO4	B	B	A	A	C	C	C	A	A	A	A
SULPHURIC ACID 75% (COLD)	H2SO4	C	C	A	A	C	C	C	A	A	A	A

AFX PUMPS

AFX HOSES

Chemical Compatibility Chart

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
SULPHURIC ACID 95% (COLD)	H2SO4	C	C	B	A	A	A	C	B	A	C	A
SULPHURIC ACID 97%	H2SO4	C	C	C	A	?	?	C	?	?	C	?
SULPHURIC ACID 98%	H2SO4	C	C	C	B	?	?	C	?	?	C	?
SULPHUROUS ACID 10%	H2SO3	A	B	A	A	?	?	A	?	?	?	?
SULPHUROUS ACID 75%	H2SO3	B	C	A	A	?	?	A	?	?	?	?
SUNFLOWER OIL		C	A	C	C	?	?	?	?	?	?	?
TALC	Mg3Si4O11.H2O	A	A	A	A	?	?	?	?	?	?	?
TALLOW (BEEF)		C	B	C	B	?	A	A	?	A	A	?
TANNIC ACID	C76H52O46	A	A	A	A	?	A	A	A	A	A	A
TAR		C	C	C	C	A	A	A	?	A	A	A
TARTARIC ACID	C4H6O6	A	B	A	A	?	A	?	A	A	A	A
TETRABROMOETHANE	C2H2Br4	C	C	C	C	?	?	C	?	A	C	?
TETRABUTYLTITANATE	(C4H9)4TiO4	C	C	C	C	?	?	?	?	A	?	?
TETRACHLOROCARBON	CCl4	C	C	C	C	?	?	?	C	A	?	?
TETRACHLORODIFLUOROETHANE	C2F2Cl4	C	C	C	C	?	?	?	?	A	?	?
TETRACHLOROETHANE	C2H2Cl4	C	C	C	C	?	B	C	?	A	C	A
TETRACHLORONAFTALENE	C10H4Cl4	C	C	C	C	?	?	?	?	A	?	?
TETRAFLUOROCARBON	CF4	C	C	C	C	?	?	?	?	?	?	?
TETRAHYDROFURAN (THF)	C4H8O	C	C	C	C	?	A	?	C	A	B	A
THORIUM SLURRY		A	B	A	A	?	?	?	?	?	?	?
TITANIUM DIOXIDE (30%)	TiO2	A	B	A	A	?	?	?	?	?	?	?
TITANIUM SULPHATE (1%)	Ti(SO4)2	A	B	A	A	?	?	?	?	?	?	?
TOLUENE	C7H8	C	C	C	C	A	A	A	C	A	C	A
TRIBUTOXYPHOSPHATE	(C4H8OH)3PO4	C	C	C	C	?	?	?	?	?	?	?
TRIBUTYLPHOSPHATE	(C4H9)3PO4	C	C	C	C	A	A	A	?	A	A	A
TRICHLOROBENZENE	C6H3Cl3	C	C	C	C	?	A	C	?	A	?	?
TRICHLOROETHYLENE	C2HCl3	C	C	C	C	?	A	?	B	A	?	?
TRICHLOROFLUOROMETHANE	CFCl3	C	C	C	C	?	A	?	?	A	A	?
TRICHLOROTRIFLUOROETHANE	C2Cl3F3	C	C	C	C	?	A	?	?	A	A	?
TRICRESYL PHOSPHATE	(C7H7)3PO4	C	C	C	C	A	?	?	?	A	?	?
TRIETHANOLAMINE	(C2H5OH)3N	C	C	C	C	?	A	A	C	?	C	C
TRIPHENYL PHOSPHATE	(C6H5)3PO4	A	A	A	A	?	?	?	?	A	?	?
TRISODIUM PHOSPHATE (TSP)	Na3PO4	A	A	A	A	?	A	?	A	A	A	?
TUNG OIL (China wood oil)		C	C	C	C	A	A	A	?	A	A	?
TURPENTINE (mainly pinene)	C10H16	C	C	C	C	A	A	A	?	A	B	?
URANIUM	U	A	A	A	A	?	?	?	?	A	?	?
UREA	CH4N2O	A	B	A	A	?	A	A	A	A	A	A
URINE		A	B	A	A	?	A	A	?	A	A	A
VEGETABLE OIL		C	B	C	B	A	A	A	A	A	A	?
VINEGAR	C3H5COOH	B	C	A	A	?	A	B	A	A	A	A

A: no effect
Should be acceptable for use in a pump

B: some effect
Use if no alternative is available or if short service is acceptabl

C: severe effect
Do not use

?: no data available

		Pump Hoses				Pump Components						
Duty fluid	**Molecular formula**	**NR**	**Nitrile**	**EPDM**	**Hypalon**	**Mild steel**	**SS316**	**Aluminium**	**PVC**	**PTFE**	**Polypropylene**	**PVDF**
VINEGAR ANHYDRIDE 50%	C4H6O3	C	C	B	B	?	A	A	C	A	A	?
VINYLCHLORIDE	C2H3Cl	C	C	C	C	?	A	C	?	A	C	A
WATER	H2O	A	A	A	A	A	A	A	A	A	C	?
WATER, CONDENSATION	H2O	A	A	A	A	A	A	A	A	A	A	?
WATER, DISTILLED	H2O	A	A	A	A	A	A	A	A	A	A	A
WATER, DRINK	H2O	A	A	A	A	A	A	A	A	A	A	?
WATER, MIN. WITH OXYD.SALTS		B	C	A	A	?	?	?	?	?	?	?
WATER, MIN. WITHOUT OXYD.SALTS		A	A	A	A	?	?	?	?	?	?	?
WHISKY AND WINE		A	A	A	A	?	A	A	A	A	A	A
WHITE OIL 10%		C	A	C	C	?	A	?	?	A	?	?
WHITE SPIRIT		C	B	C	C	?	?	?	?	A	?	?
WOOD OIL		C	C	C	C	?	?	?	?	A	?	?
WOOLFAT		C	C	C	?	?	?	?	?	?	?	?
XYLENE	C8H10	C	C	C	C	A	A	A	C	A	C	A
ZEOLITE		B	B	A	A	?	A	?	?	A	?	?
ZINC AMMONIUM CHLORIDE	ZnNH4Cl3	A	C	A	A	?	?	?	?	?	?	?
ZINC BORATE	ZnBO3	A	A	A	A	?	?	?	?	?	?	?
ZINC CHLORIDE	ZnCl2	A	A	A	A	?	C	?	A	A	A	?
ZINC HYDROXIDE	Zn(OH)2	A	B	A	A	?	?	?	?	?	?	?
ZINC OXIDE (300 K)	ZnO	A	A	A	A	?	?	?	?	?	?	?
ZINC SULPHATE	ZnSO4	A	A	A	A	?	?	?	A	A	A	?

ACCESSORIES - AFX PUMPS

DAMPENERS

Peristaltic pumps are by nature inherently pulsing in operation. Excessive pressure spikes and pulsations within the pump system can be extremely damaging to the pump hose and the process system.

Appropriate pump selection will ensure pulsations are kept to an acceptable level. In certain circumstances where other constraints exist, it is possible to fit appropriate pulsation dampening equipment.

Correctly sized pulsation dampeners and inlet stabilisers can eliminate up to 90% of pressure spikes to protect the pump, pipeline and instrumentation. Other benefits include: reduced vibration, protection against hammer, lower noise levels, increased pump efficiency and prolonged hose life. Specific details and recommendations are dependent upon each application.

AFX PUMPS

ACCESSORIES - AFX PUMPS

HOSE FAILURE DETECTION

The primary reason for hose failure is from cyclic fatigue (number of hose compressions). Pump hose failure is inevitable, but exactly when hose failure will occur is dependent upon many factors and may not always be at a convenient time when a technician is watching the pump.

Installing a Hose Failure Detector is a simple solution. When a pump hose fails, pumped product is contained within the pump housing mixing with the hose lubricant and raising the liquid level within the pump housing. The Hose Failure Detector will sense this rise in liquid level, when connected to a contact relay your system can be set up to switch off the pump or even alert a control room.

.

AFX MIXING AND PUMPING TECHNOLOGIES

KEEPING FLUID IN MOTION

www.afxmixing.com contact@afxmixing.com ++1 604 380 4458

13782, 232a Street, Maple Ridge, BC V4R 0C2