



BARREL AND CONTAINER PUMPS

NEW!

with even more powerful
barrel pump motor

Innovators
in Flow Technology

FLUX PUMPS: PERFECTION IN PUMPING

Do you want to transfer differing liquids quickly and economically?

Do you want to measure out varying quantities?

Do you want to ensure total safety for the operator or the environment when pumping hazardous products?

Do you want a pump which can cope even with peak loadings?

Barrel and Container Pumps are used in almost every sector of the processing and manufacturing industries.

Initially designed for decanting and transfer operations of differing liquids from barrels and containers, current production time scales are now requiring these pumps to be used on applications with extended run times and frequent stopping and starting.

Whenever liquids are pumped out of a barrel or container, FLUX can supply a unit of unsurpassed quality: all FLUX pumps are available in different materials. You can choose between a pump with a mechanical seal or a sealless version. One of the unique features of both, the Polypropylene and the PVDF mechanical seal version, is the steel cored inner tube providing, through increased lateral stability, a longer service life. Both, mixed centrifugal and axial impellers are available to suit differing head and flow applications. And if you want to combine the pumping and mixing operation FLUX also have the pump you need.

Another feature is the FLUX quick assembly system. This allows for simple and speedy pump strip down.

Of course, FLUX pumps require a powerful and reliable drive motor. A wide range of electric or compressed air motors provides a matched power unit throughout the pump range – even in hazardous locations or when pumping highly flammable liquids. To complete the comprehensive FLUX program, a wide range of top class accessories is available – from protection against emission of noxious vapours through to the volumetric measurement of liquids.



For further information to our pre-configured barrel-pump kits see page 34



NEW! COMPACT! SAFE!

The barrel pump motor FEM 4070 with

- Speed range adjustment
- Overload protection
- Ergonomically designed handle
- Low noise level
- Advanced flow rate and much more ... see page 24



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FLUX BARREL AND CONTAINER PUMPS – WHICH MATERIAL GOES BEST WITH WHICH LIQUID

Stainless steel 1.4571/316 Ti (S) up to 100 °C

Suitable for highly flammable liquids (up to temperatures of class T4) as well as for all neutral and non-flammable, thin liquids like solvents, organic acids, dilute anorganic acids and alkalis.

Certified for use in Zone 0*

Examples of suitable liquids: acetone, alcohol, ammonia, petrol, flammable solvents, nitrocellulose varnishes, perchlorethylene, trichlorethylene, toluene, potassic alkali, soda alkali, phosphoric acid (up to 60%), sulphuric acid (up to 7,5% and more than 96%), fruit juices, milk, salad oil and all liquids listed for aluminium alloy.

Hastelloy C (HC) up to 120 °C

Specially designed for pumping alternatively highly flammable and chemically aggressive liquids.

Certified for use in Zone 0*

Examples of suitable liquids: hydrofluoric acid, aqua regia, oleum, hydrochloric acid (up to 30%), sulphuric acid, various mixed acids and all liquids listed for aluminium alloy and stainless steel.

Aluminium alloy AlMg5 (AL) up to 100 °C

Suitable for neutral, hardly flammable liquids.

Examples of suitable liquids: drilling emulsion, diesel oil, fuel oil, hydraulic oil, non-flammable solvents, liquid soap, liquid wax, water.

Polypropylene (PP) up to 50 °C

Suitable for both, chemically aggressive and neutral liquids, together with hardly flammable liquids such as acids and alkalis.

Examples of suitable liquids: formic acid, ammonia, boric acid, chromic acid (up to 10%), liquid fertilizers, acetic acid, photo developers, hydrofluoric acid (up to 70%), fruit acids, potassic alkali, copper chloride, lactic acid, soda alkali, phosphoric acid, hydrochloric acid, sulphuric acid (up to 80%), distilled water.

Polyvinylidene fluoride (PVDF) up to 100 °C

Suitable for both, chemically aggressive and neutral liquids, together with hardly flammable liquids such as acids and alkalis.

Examples of suitable liquids: hydrobromic acid, chromic acid, chloric acid, hydrofluoric acid, sodium hypochlorite, nitric acid (up to 75%), sulphuric acid and all liquids listed for Polypropylene (except soda alkali).

***Zone 0**



Area in which a hazardous and explosive atmosphere of gases, vapours or fogs exists permanently or for a long period of time. In general such conditions exist inside of barrels or containers only.

The following pump models are tested and certified according to ATEX-Directive 94/9/EC, category 1/2, for transferring highly flammable liquids out of portable barrels or containers in hazardous areas:

F 424 S – EC Type examination certificate
PTB 00 ATEX 4108 X

F 425 S – EC Type examination certificate
PTB 99 ATEX 4001 X

F 426 S – EC Type examination certificate
PTB 00 ATEX 4109 X

F 430 S – EC Type examination certificate
PTB 00 ATEX 4110 X

F 430 HC – EC Type examination certificate
PTB 00 ATEX 4110 X



In selecting a pump model, please always check material of pump and material of seals for compatibility.

Due to the enormous variety and complexity of industrial chemicals, together with the range and variation of FLUX products, we can only list some of all the suitable liquids. But we would be glad to send you a detailed Resistance Chart.

A FLUX barrel pump is always a "Two-Component-Team" consisting of a drive motor and a pump (tube set). Both component parts are universally interchangeable. For further details please see page 10 onwards.

IN GOOD CONTACT WITH THE LIQUIDS: THE SEALLESS FLUX PUMP F424



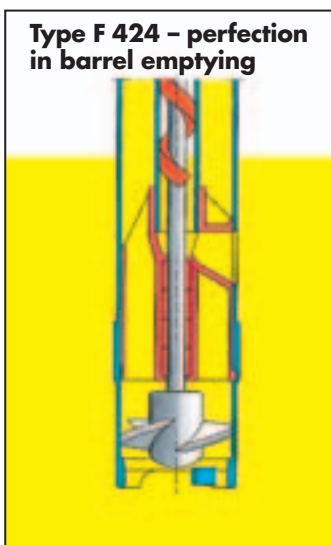
The liquids to be pumped are abrasive, but they do not leave any deposits. Dry running of the pump must not cause any problems. You are looking for a lightweight, general purpose pump in stainless steel, Polypropylene or Polyvinylidene fluoride.

The inner tube supports the pump shaft, which is lubricated by the liquid. The level of the liquid in the inner tube always corresponds to that in the barrel or container.

Special advantages:

- Safe dry running of the pump
- No wearing of seals
- The liquid being pumped is not contaminated by the shaft lubricant
- Inner tube and helix shaped support bearings completely self-draining

Here a FLUX pump in sealless version is your pump.



Flexible coupling between motor and pump

O-ring to seal between inner and outer tube (not in the liquid section)

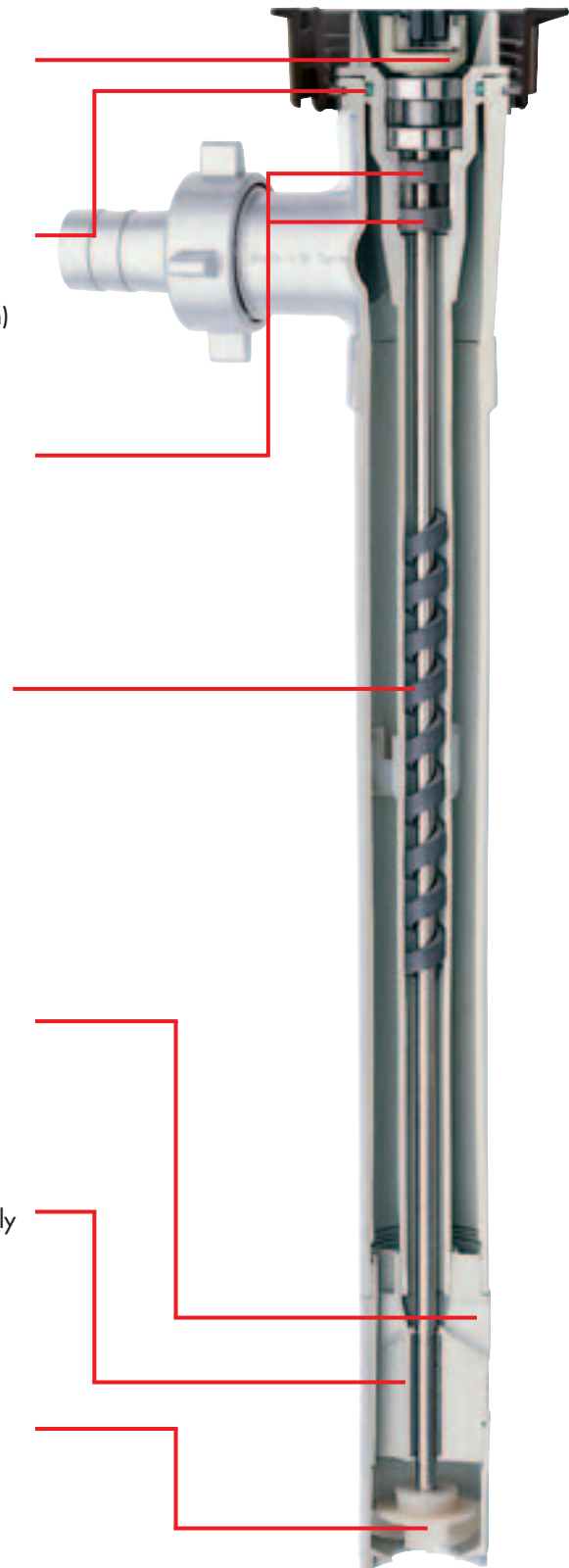
Radial shaft seals to prevent liquid and/or vapours entering the coupling area

Non-metallic helix shaped shaft support bearing

Pressure relief ports

Bottom bearing assembly which centers the shaft within the inner tube

Impellor in ETFE



NOTE All FLUX barrel pumps are stripped for cleaning with a minimum of effort.

A SHAFT IN A SHELL: THE FLUX PUMP F430 WITH MECHANICAL SEAL

Flexible coupling
between motor and pump

Steel cored inner tube in
PP and PVDF provides the
ultimate in stability. This
core prevents elongation
of the plastics at high
temperatures. This results
in an extended service life
of the mechanical seal

Packaging of the
mechanical seal and rotary
shaft seal adjacent to each
other ensures the maximum
integrity of the sealed inner tube

Impellor in ETFE



The pump must be used with many varying liquids, consequently the smallest residual left within the pump is unacceptable. You want to pump adhesive substances like paints or liquids which tend to crystallize or harden.

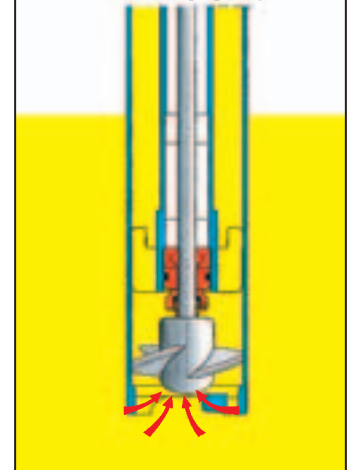
The inner tube houses the shaft. It is sealed at the bottom by a mechanical seal through which the shaft passes. Consequently the shaft does not come into contact with the liquid except for the small section between the impellor and seal.

Special advantages:

- The shaft support bearings are isolated from the liquid
- Steel cored inner tube in PP and PVDF pumps. This prevents elongation of the plastics, even at high temperatures
- Extended service life through well proven seal design

Here a FLUX pump with mechanical seal is the best choice.

Type F 430 – perfection in barrel emptying



NOTE For all other applications both designs – F 424 and F 430 – are equally suitable.

MOST ECONOMICAL DELIVERY: THE FLUX PUMP F425 FOR EMPTYING BARRELS UP TO 99,98%



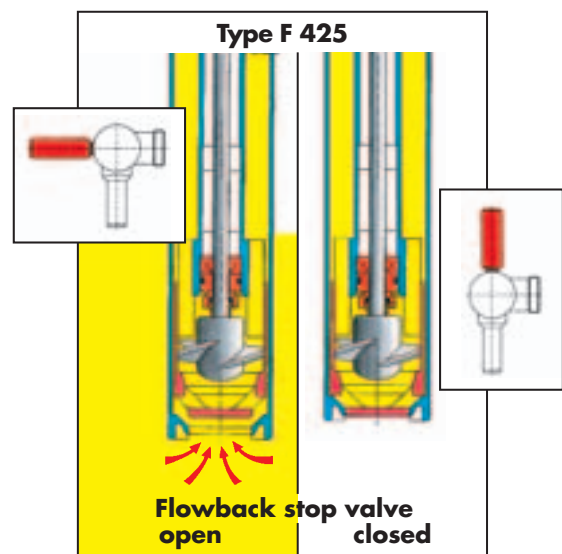
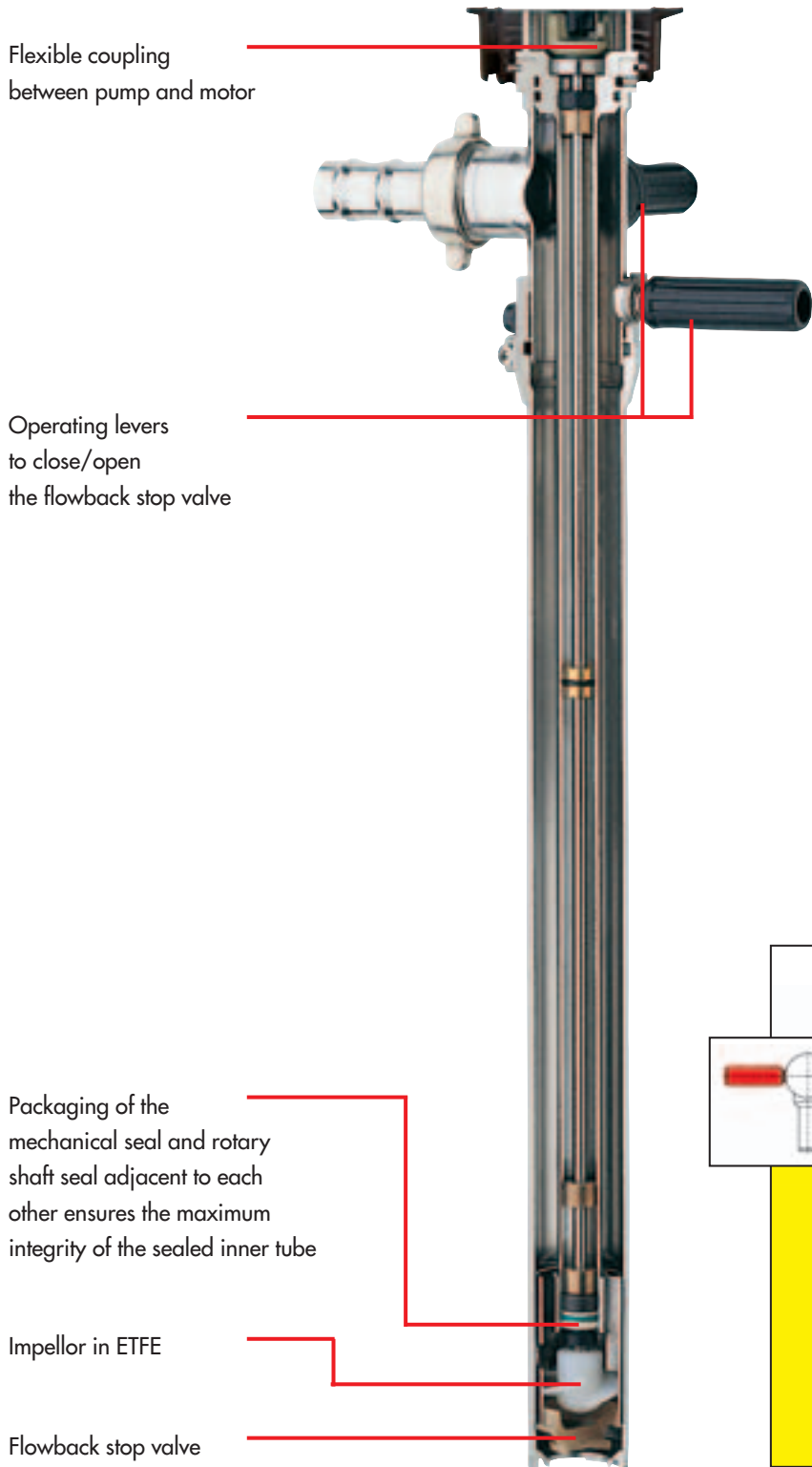
You are not prepared to accept any residual liquid in the barrel in order to avoid problems and costs of disposal or to avoid losing high value liquids.

Before the motor is switched off, the flowback stop valve at the pump inlet must be closed by operating the lever. This prevents the liquid flowing back into the empty barrel.

Special advantages:

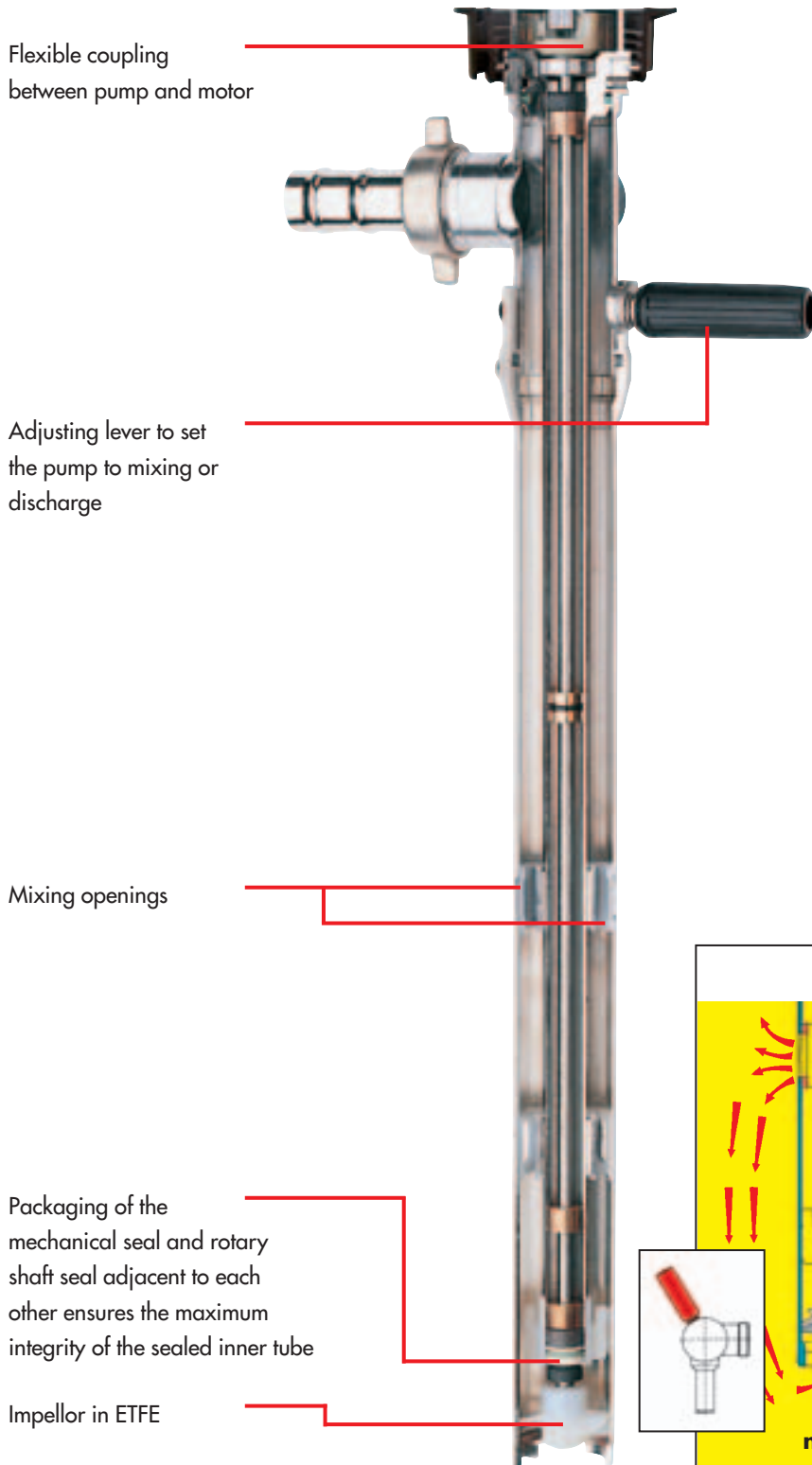
- Especially easy operating of the pump
- Optimum use of the liquids
- Remains of less than 0,05 l

Here the FLUX F 425 for emptying barrels up to 99,98% is your pump.



NOTE All FLUX barrel pumps are stripped for cleaning with a minimum of effort.

AN EXCELLENT MIXTURE: THE FLUX MIXING PUMP F426



Flexible coupling
between pump and motor

Adjusting lever to set
the pump to mixing or
discharge

Mixing openings

Packaging of the
mechanical seal and rotary
shaft seal adjacent to each
other ensures the maximum
integrity of the sealed inner tube

Impellor in ETFE

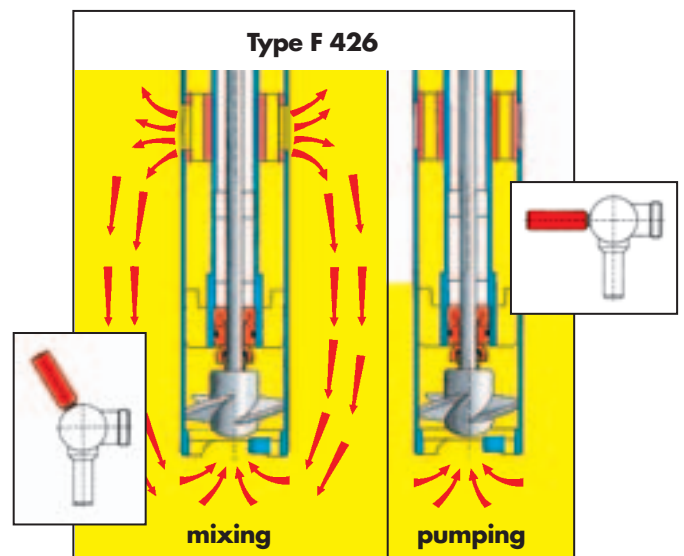
You want to mix and pump
liquids within a closed barrel or
an open container.

By turning the adjusting lever, the
pump can either mix or pump.
Liquids can also be mixed even
when being transferred to
another container.

Special advantages:

- No changes in the outer diameter of the pump tube in stainless steel as the pump works without any additional components
- Light and handy design
- Pump/barrel connection glands are also in vapour-proof version available

Here the FLUX mixing pump is
the right pump for you.



NOTE All FLUX barrel pumps
are stripped for cleaning
with a minimum of effort.

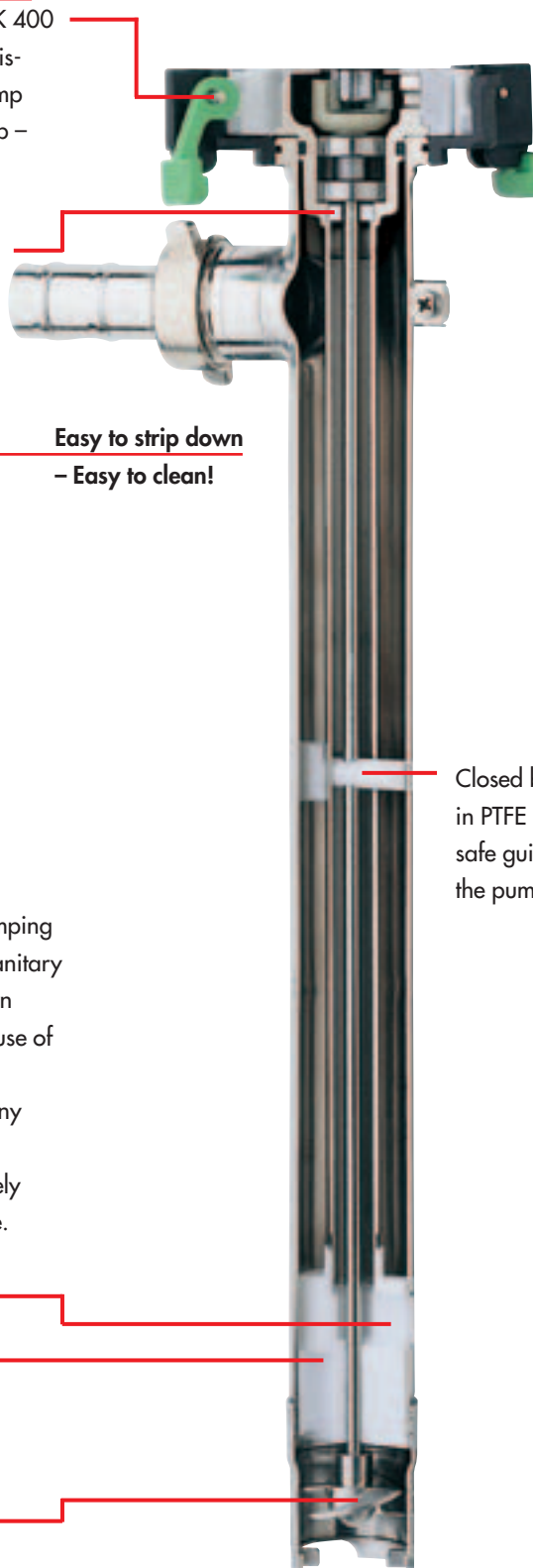
PURE CULTURE IN PUMPING: THE FLUX SANITARY PUMP F427



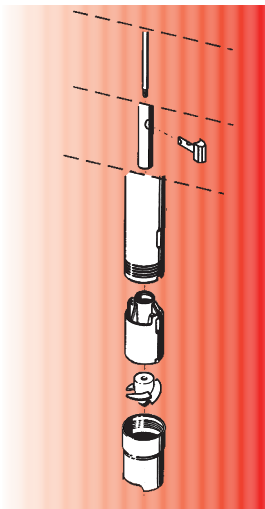
For use with all FLUX models:

Quick Action Coupling SSK 400 allows a quick assembly/dis-assembly of motor and pump (not included with the pump – see page 19)

Shaft seal to prevent liquids and/or vapours entering the coupling area



**Easy to strip down
– Easy to clean!**



Closed bearing in PTFE assures safe guiding of the pump

FLUX facilitates aseptic pumping of delicate products. The sanitary pump can be stripped down within a few seconds because of its ingenious design. The F 427 does not have any inaccessible voids. This allows you to completely clean the pump at any time.

Pressure relief ports

Bottom bearing assembly which centers the shaft within the inner tube

Impellor in ETFE or in stainless steel

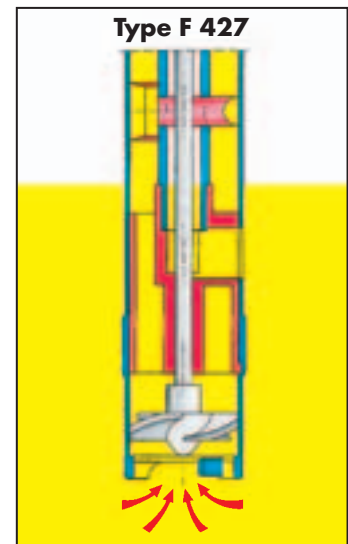
You want a safe pumping of food, cosmetic or pharmaceutical products. The operating conditions require an easy and quick cleaning or sterilization of the pump at regular intervals to avoid any contamination of the product, e.g. when pumping varying liquids or different colours as well as quick-drying or film forming liquids.

The efficient FLUX sanitary pump has been especially designed for aseptic applications.

Special advantages:

- All wetted parts are made in stainless steel, PTFE or ETFE
- The pump can be quickly stripped down for cleaning or sterilization
- Negligible wear by friction on seals and bearings

Here a FLUX sanitary pump is your pump.



NOTE All FLUX barrel pumps are stripped for cleaning with a minimum of effort.

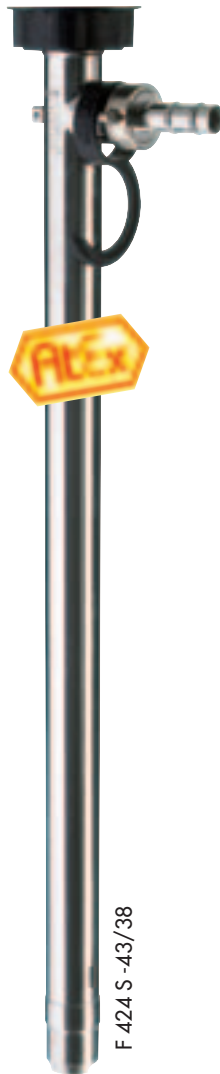
FLUX BARREL PUMPS IN STAINLESS STEEL

FLUX barrel pumps in stainless steel 316 Ti – except sanitary pump F 427 S – are approved according to ATEX-Directive 94/9/EC for use in Zone 0, temperature class T4, for transferring highly flammable liquids out of portable barrels or containers.

With the help of the performance charts you can compare the delivery rates achieved by each pump model powered by the various FLUX motors. Detailed motor data are shown on pages 21 to 29.

When using the pump with a discharge hose (of approx. 2 m) and a quick action tap, the delivery rate will be approx. 70 l/min. Depending on the motor type a 200 l barrel can be emptied within 3–4 minutes. The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.

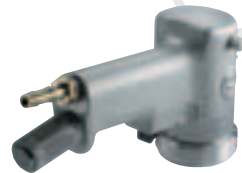
Special version for horizontal use on request.



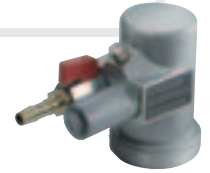
FBM 4000 Ex



F 460 Ex
F 460 Ex EL
F 460-1 Ex



F 416 Ex



F 416-2 Ex



F 458
F 458 EL
F 458-1



F 414



F 457
F 457 EL



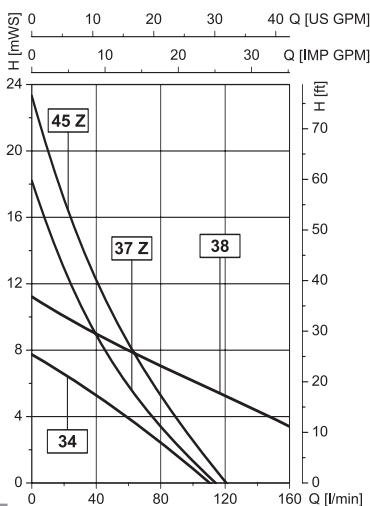
FEM 4070

↖ This pump version will achieve a higher delivery rate!

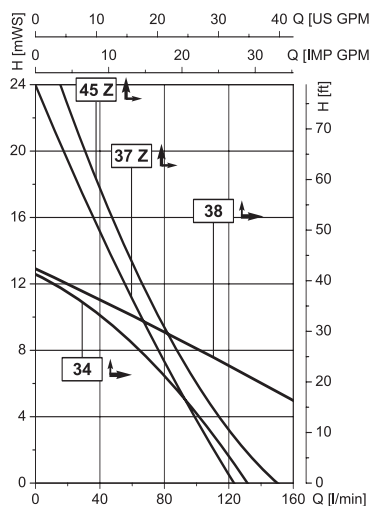
↖ This pump version will achieve a higher delivery head!

Max. viscosity per pump and motor, please see pages 28 and 29.

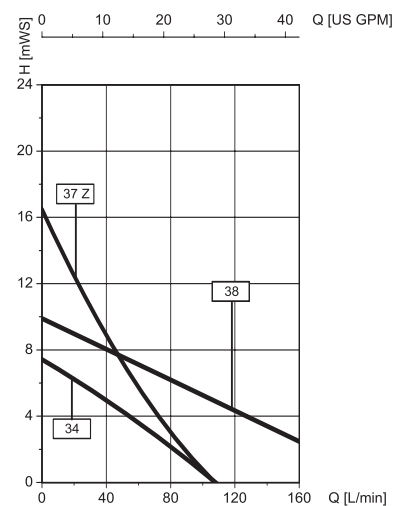
Motor FBM 4000 Ex



Motor F 416 Ex, F 416-1 Ex or F 416-2 Ex



Motor FEM 4070



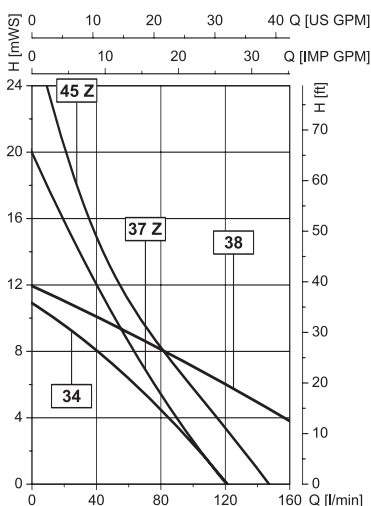
Barrel Pump (tube set) in Stainless Steel, thread on outlet G 1 1/4 A (BSP 1 1/4" male), motors on page 21

Type/Curve	F 424 S-43/38	F 424 S-43/37 Z	F 424 S-50/45 Z	
Version				
Seal type	sealless within the liquid section			
Material	shaft in stainless steel 316 Ti, impellor in ETFE, o-ring in FKM			
Max. temperature	100 °C			
Outer-Ø	41 mm (foot piece 43 mm)	41 mm (foot piece 43 mm)	50 mm	
Part No./Weight				
Immersion length 700 mm	424 20 007/2,2 kg	424 20 107/2,2 kg	424 20 207/3,0 kg	
Immersion length 1000 mm	424 20 010/2,9 kg	424 20 110/2,9 kg	424 20 210/4,0 kg	
Immersion length 1200 mm	424 20 012/3,3 kg	424 20 112/3,3 kg	424 20 212/4,8 kg	
Type/Curve	F 425 S-41/34*	F 426 S-41/38	F 427 S3-43/38	
Version	99,98 % barrel emptying	Mixing pump	Sanitary pump	
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM		sealless within the liquid selection	
Material	shaft in stainless steel 316 Ti, seal in FKM, impellor in ETFE		shaft in stainless steel 316 Ti, impellor in ETFE, o-ring in FKM	
Max. temperature	100 °C		100 °C	
Outer-Ø	41 mm	41 mm	41 mm (foot piece 43 mm)	
Part No./Weight				
Immersion length 700 mm	425 20 008/3,0 kg	-	427 20 307/2,2 kg	
Immersion length 1000 mm	425 20 011/3,8 kg	426 20 010/3,8 kg	427 20 310/2,9 kg	
Immersion length 1200 mm	425 20 013/4,4 kg	426 20 012/4,4 kg	427 20 312/3,3 kg	
Type/Curve	F 430 S-41/38	F 430 S-41/37 Z	F 430 S-50/45 Z	F 430 S-50/38
Version				
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM			
Material	shaft in stainless steel 316 Ti, seal in FKM, impellor in ETFE			
Max. temperature	100 °C			
Outer-Ø	41 mm	41 mm	50 mm	50 mm
Part No./Weight				
Immersion length 700 mm	430 20 107/2,4 kg	430 20 407/2,4 kg	430 20 207/3,4 kg	430 20 307/3,4 kg
Immersion length 1000 mm	430 20 110/3,0 kg	430 20 410/3,0 kg	430 20 210/4,5 kg	430 20 310/4,5 kg
Immersion length 1200 mm	430 20 112/3,6 kg	430 20 412/3,6 kg	430 20 212/5,2 kg	430 20 312/5,2 kg
Accessories	Hose connection complete with nut G 1 1/4 DN 19 Part No. 959 04 061		DN 25 Part No. 959 04 041	

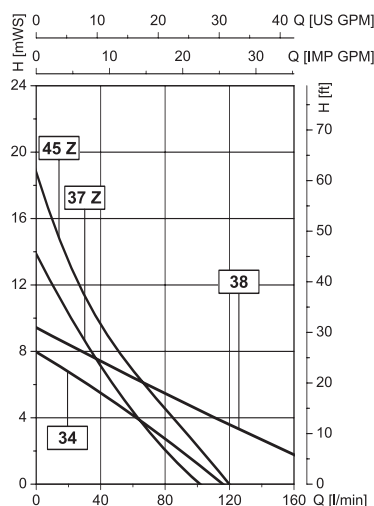
Pump models in immersion length of 200 – 3000 mm (in steps of 100 mm) on request.

* Model for higher delivery head on request.

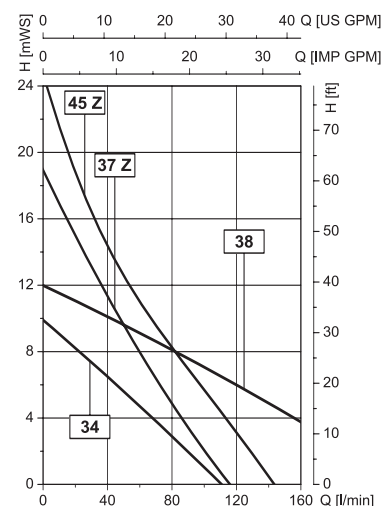
Motor F 457 or F 457 EL



Motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL



Motor F 458-1 or F 460-1 Ex



Values ± 10% with water (20 °C) and a voltage of 230 Volt.

FLUX BARREL PUMPS IN ALUMINIUM ALLOY AND HASTELLOY C

FLUX barrel pumps in aluminium alloy AlMg5 are suitable for transferring neutral, hardly flammable liquids.

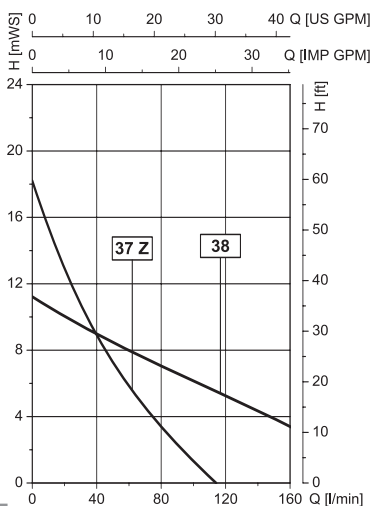
FLUX barrel pumps in Hastelloy C are approved according to ATEX-Directive 94/9/EC for use in Zone 0, temperature class T4, for transferring highly flammable liquids out of portable barrels or containers. In addition, Hastelloy C is chemically resistant to most of acids and alkalis, allowing the most universal use of this pump type.

With the help of the performance charts you can compare the delivery rates achieved by each pump model powered by the various FLUX motors. Detailed motor data are shown on pages 21 to 29.

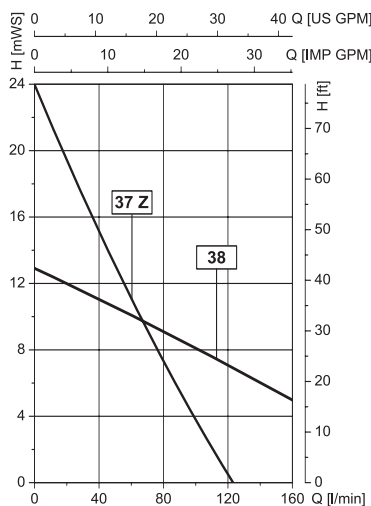
When using the pump with a discharge hose (of approx. 2 m) and a quick action tap, the delivery rate will be approx. 70 l/min. Depending on the motor type a 200 l barrel can be emptied within 3–4 minutes. The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.



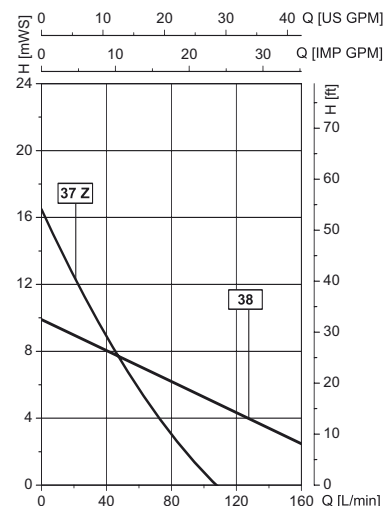
Motor FBM 4000 Ex



Motor F 416 Ex, F 416-1 Ex or F 416-2 Ex



Motor FEM 4070



Barrel Pump (tube set) in Aluminium Alloy, thread on outlet G 1 1/4 A (BSP 1 1/4" male), motors on page 21

Type/Curve	F 430 AL-41/38	F 430 AL-41/37 Z	F 430 AL-50/38
Version			
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in NBR		
Material	shaft in stainless steel 316 Ti, seal in NBR, impellor in ETFE		
Max. temperature	100 °C (for short periods)		
Outer-Ø	41 mm	41 mm	50 mm
Part No./Weight			
Immersion length 700 mm	430 10 107/1,2 kg	430 10 407/1,2 kg	430 10 307/1,5 kg
Immersion length 1000 mm	430 10 110/1,5 kg	430 10 410/1,5 kg	430 10 310/1,8 kg
Immersion length 1200 mm	430 10 112/1,7 kg	430 10 412/1,7 kg	430 10 312/2,1 kg

Accessories Hose connection complete with nut G 1 1/4 DN 19 Part No. 959 04 050 DN 25 Part No. 959 04 039

Pump models in immersion length of 200 – 2000 mm (in steps of 100 mm) on request.

Barrel pump (tube set) in Hastelloy C, thread on outlet G 1 1/4 A, (BSP 1 1/4" male), without motor

Type/Curve	F 430 HC-40/38
Version	
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FFKM
Material	shaft in Hastelloy C, seal in FFKM, impellor in ETFE
Max. temperature	120 °C
Outer-Ø	40 mm
Part No./Weight	
Immersion length 700 mm	430 30 107/2,3 kg
Immersion length 1000 mm	430 30 110/3,0 kg
Immersion length 1200 mm	430 30 112/3,5 kg

Accessories Hose connection complete with nut G 1 1/4 DN 25 Part No. 959 04 043

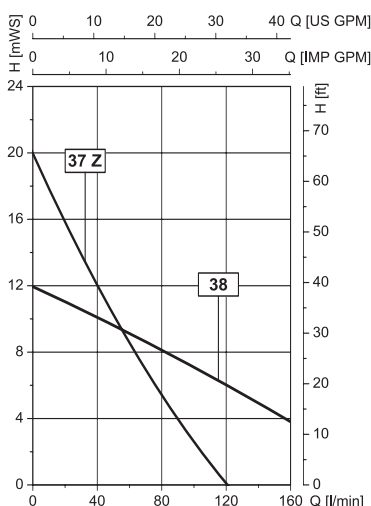
Other immersion lengths on request.

This pump version will achieve a higher delivery rate!

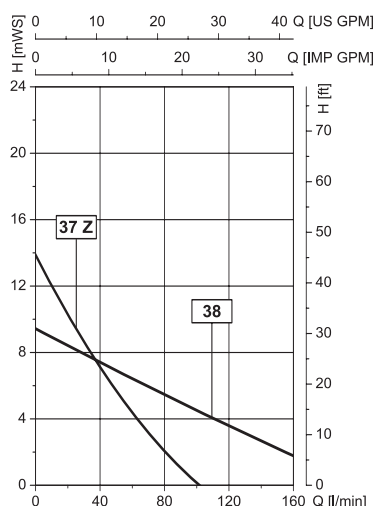
This pump version will achieve a higher delivery head!

Max. viscosity per pump and motor, please see pages 28 and 29.

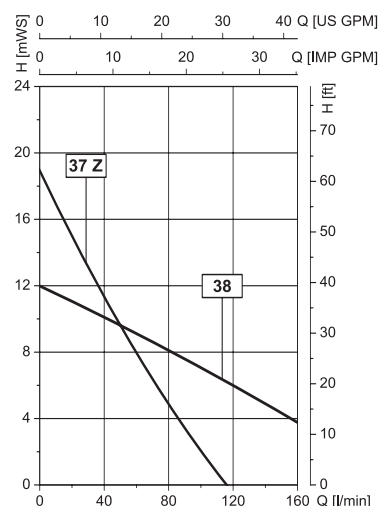
Motor F 457 or F 457 EL



Motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL



Motor F 458-1 or F 460-1 Ex



Values ± 10% with water (20 °C) and a voltage of 230 Volt.

FLUX BARREL PUMPS IN POLYPROPYLENE

FLUX barrel pumps in Polypropylene are used for both chemically aggressive and hardly flammable liquids such as acids and alkalis, together with most thin and neutral liquids.

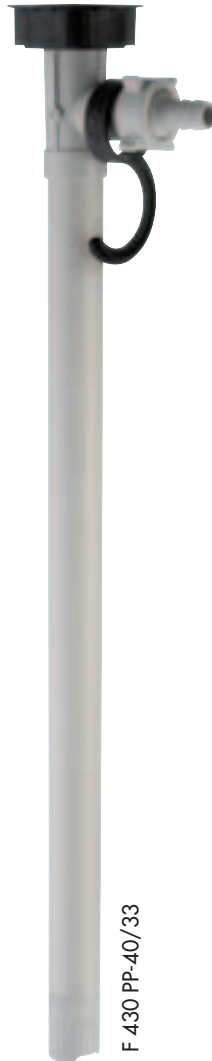
With the help of the performance charts you can compare the delivery rates achieved by each pump model powered by the various FLUX motors. Detailed motor data are shown on pages 21 to 29.

When using the pump with a discharge hose (of approx. 2 m) and a quick action tap, the delivery rate will be approx. 70 l/min.

Depending on the motor type a 200 l barrel can be emptied within 3–4 minutes.

The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.

Special version for horizontal use on request.



New



FEM 4070



F 457
F 457 EL



F 458
F 458 EL
F 458-1



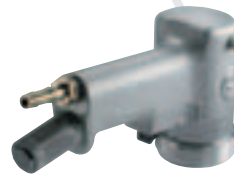
F 414



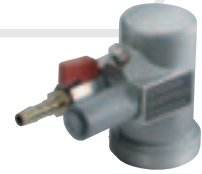
FBM 4000 Ex



F 460 Ex
F 460 Ex EL
F 460-1 Ex



F 416 Ex



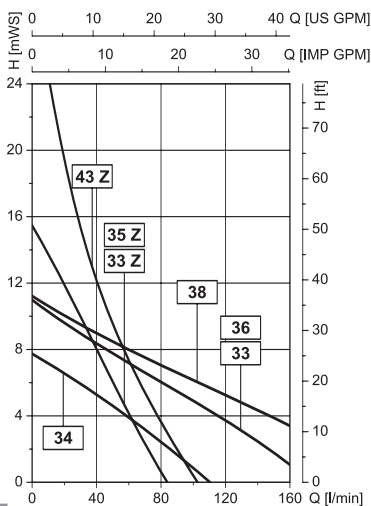
F 416-2 Ex

↖ This pump version will achieve a higher delivery rate!

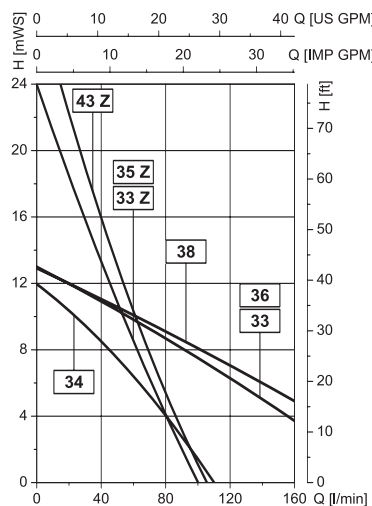
↖ This pump version will achieve a higher delivery head!

Max. viscosity per pump and motor, please see pages 28 and 29.

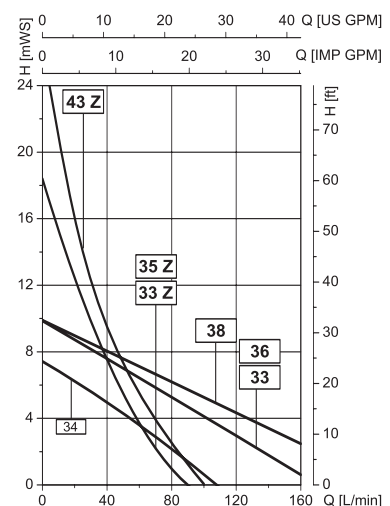
Motor FBM 4000 Ex



Motor F 416 Ex, F 416-1 Ex or F 416-2 Ex



Motor FEM 4070

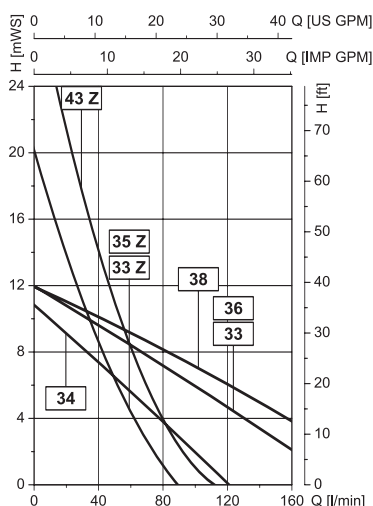


Barrel Pump (tube set) in Polypropylene, thread on outlet G 1¼ A (BSP 1¼" male), motors on page 21

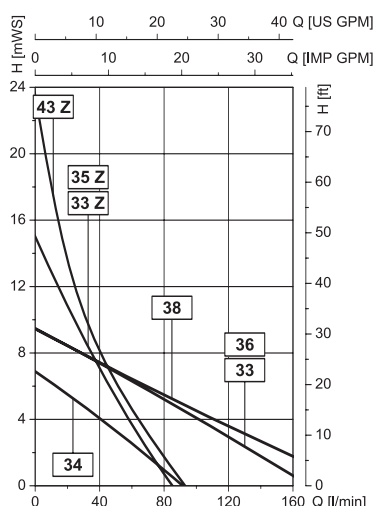
Type/Curve	F 424 PP-41/36	F 424 PP-41/35 Z	F 424 PP-50/38	F 424 PP-50/43 Z
Version				
Seal type	sealless within the liquid section			
Material	shaft in Hastelloy C, impellor in ETFE, o-ring in FKM			
Max. temperature	50 °C			
Outer-Ø	40 mm (foot piece 41 mm)	40 mm (foot piece 41 mm)	50 mm	50 mm
Part No./Weight				
Immersion length 700 mm	424 40 007/0,8 kg	424 40 107/0,8 kg	424 40 207/0,9 kg	424 40 307/0,9 kg
Immersion length 1000 mm	424 40 010/1,0 kg	424 40 110/1,0 kg	424 40 210/1,3 kg	424 40 310/1,3 kg
Immersion length 1200 mm	424 40 012/1,2 kg	424 40 112/1,2 kg	424 40 212/1,6 kg	424 40 312/1,6 kg
Type/Curve	F 425 PP-50/34	F 426 PP-50/33		
Version	99,98 % barrel emptying	mixing pump		
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM			
Material	shaft in Hastelloy C, seal in FKM, impellor in ETFE			
Max. temperature	50 °C			
Outer-Ø	50 mm	50 mm		
Part No./Weight				
Immersion length 700 mm	425 40 048/1,6 kg	-		
Immersion length 1000 mm	425 40 051/2,0 kg	426 40 001/1,8 kg		
Immersion length 1200 mm	425 40 053/2,3 kg	426 40 002/2,1 kg		
Type/Curve	F 430 PP-40/33	F 430 PP-40/33 Z	F 430 PP-50/43 Z	F 430 PP-50/38
Version				
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM			
Material	shaft in Hastelloy C, seal in FKM, impellor in ETFE			
Max. temperature	50 °C			
Outer-Ø	40 mm	40 mm	50 mm	50 mm
Part No./Weight				
Immersion length 700 mm	430 40 107/1,1 kg	430 40 407/1,1 kg	430 40 207/1,1 kg	430 40 307/1,1 kg
Immersion length 1000 mm	430 40 110/1,4 kg	430 40 410/1,4 kg	430 40 210/1,5 kg	430 40 310/1,5 kg
Immersion length 1200 mm	430 40 112/1,6 kg	430 40 412/1,6 kg	430 40 212/1,7 kg	430 40 312/1,7 kg
Accessories	Hose connection complete with nut G 1¼		DN 19 Part No. 959 04 053	DN 25 Part No. 959 04 052

Pump models in immersion length of 200 – 3000 mm (in steps of 100 mm) on request.

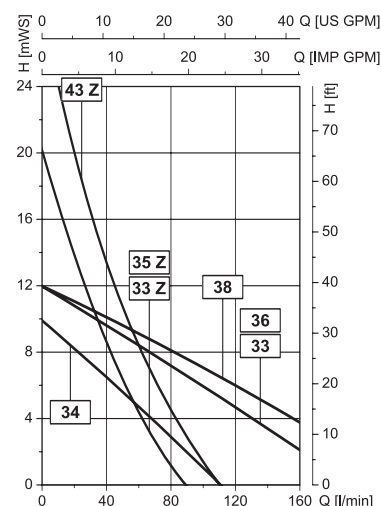
Motor F 457 or F 457 EL



Motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL



Motor F 458-1 or F 460-1 Ex



Values ± 10% with water (20 °C) and a voltage of 230 Volt.

FLUX BARREL PUMPS IN POLYVINYLIDENE FLUORIDE

FLUX barrel pumps in Polyvinylidene fluoride are used for both chemically aggressive and hardly flammable liquids such as acids and alkalis, together with most thin and neutral liquids.

With the help of the performance charts you can compare the delivery rates achieved by each pump model powered by the various FLUX motors.

Detailed motor data are shown on pages 21 to 29.

When using the pump with a discharge hose (of approx. 2 m) and a quick action tap, the delivery rate will be approx. 70 l/min.

Depending on the motor type a 200 l barrel can be emptied within 3–4 minutes.

The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.



New



FEM 4070



F 457
F 457 EL



F 458
F 458 EL
F 458-1



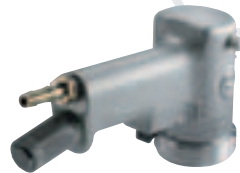
F 414



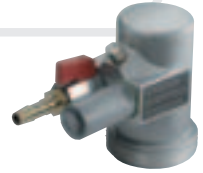
FBM 4000 Ex



F 460 Ex
F 460 Ex EL
F 460-1 Ex



F 416 Ex



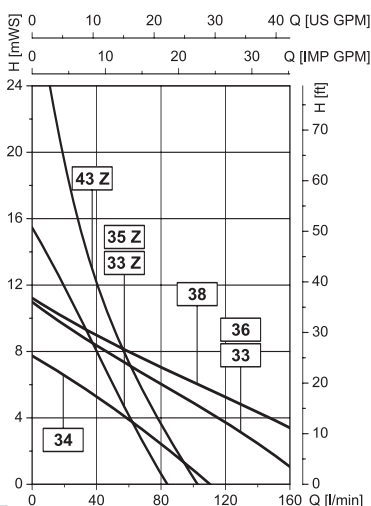
F 416-2 Ex

↖ This pump version will achieve a higher delivery rate!

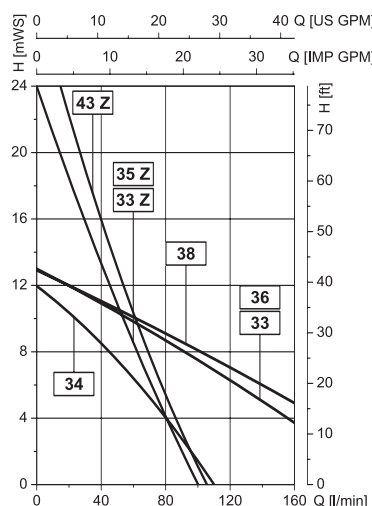
↖ This pump version will achieve a higher delivery head!

Max. viscosity per pump and motor, please see pages 28 and 29.

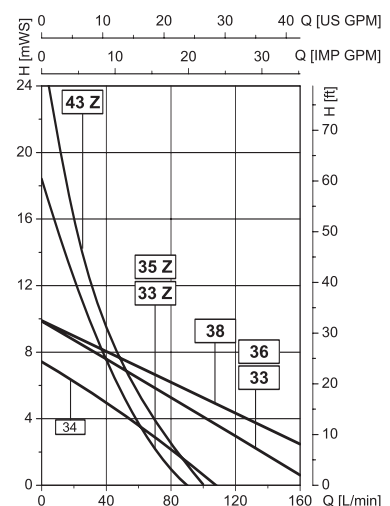
Motor FBM 4000 Ex



Motor F 416 Ex, F 416-1 Ex or F 416-2 Ex



Motor FEM 4070



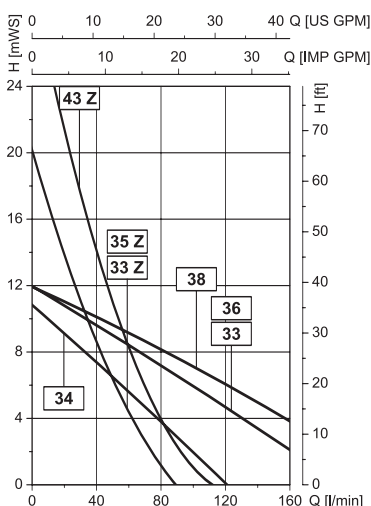
Barrel Pump (tube set) in Polyvinylidene fluoride, thread on outlet, G 1¼ A (BSP 1¼" male), motors on page 21

Type/Curve	F 424 PVDF-41/36	F 424 PVDF-41/35 Z	F 424 PVDF-50/38
Version			
Seal type	sealless within the liquid section		
Material	shaft in Hastelloy C, impellor in ETFE, o-ring in FKM		
Max. temperature	80 °C		
Outer-Ø	40 mm (foot piece 41 mm)	40 mm (foot piece 41 mm)	50 mm
Part No./Weight			
Immersion length 700 mm	424 60 007/1,1 kg	424 60 107/1,1 kg	424 60 207/1,4 kg
Immersion length 1000 mm	424 60 010/1,4 kg	424 60 110/1,4 kg	424 60 210/1,9 kg
Immersion length 1200 mm	424 60 012/1,6 kg	424 60 112/1,6 kg	424 60 212/2,2 kg

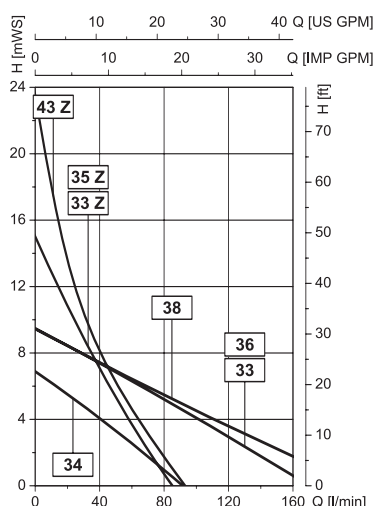
Type/Curve	F 430 PVDF-40/33	F 430 PVDF-40/33 Z	F 430 PVDF-50/43 Z	F 430 PVDF-50/38
Version				
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM			
Material	shaft in Hastelloy C, seal in FKM, impellor in ETFE			
Max. temperature	80 °C			
Outer-Ø	40 mm	40 mm	50 mm	50 mm
Part No./Weight				
Immersion length 700 mm	430 60 107/1,4 kg	430 60 407/1,4 kg	430 60 207/1,7 kg	430 60 307/1,7 kg
Immersion length 1000 mm	430 60 110/1,7 kg	430 60 410/1,7 kg	430 60 210/2,1 kg	430 60 310/2,1 kg
Immersion length 1200 mm	430 60 112/2,0 kg	430 60 412/2,0 kg	430 60 212/2,5 kg	430 60 312/2,5 kg
Accessories	Hose connection with nut G 1¼		DN 19 Part No. 959 04 101	DN 25 Part No. 959 04 102

Pump models in immersion length of 200 – 3000 mm (in steps of 100 mm) on request.

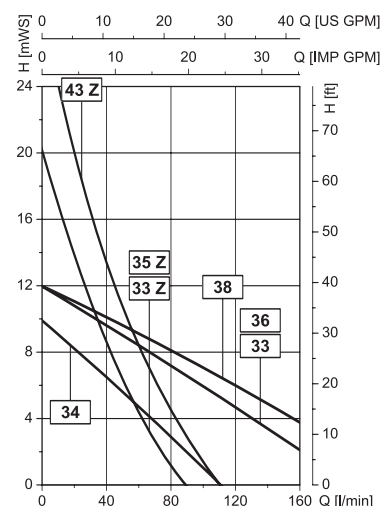
Motor F 457 or F 457 EL



Motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL



Motor F 458-1 or F 460-1 Ex



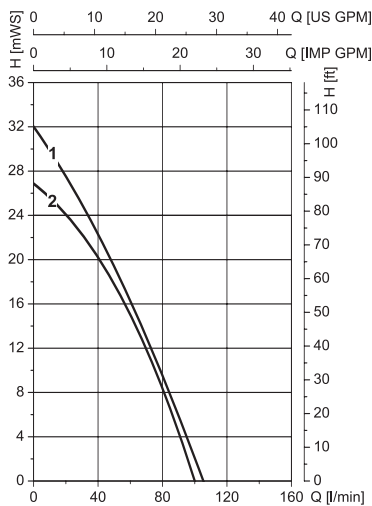
Values ± 10% with water (20 °C) and a voltage of 230 Volt.

FLUX CONTAINER PUMP IN POLYPROPYLENE IN DETAIL

The powerful, extremely lightweight and easy-to-handle solution for transferring corrosive acids and alkalis and almost every thin and hardly flammable liquid out of larger containers: FLUX container pump type F 430 PP-100/50 in Polypropylene. Especially designed for emptying 1000-l-Containers, this pump provides the high safety and ease of handling you do appreciate on FLUX barrel pumps.

The use of this pump allows to dispense with floor drains to minimize leakage risks and to eliminate residual liquid within suction pipes and subsequent handling cost. A compression gland or a vapour-proof gland always secures the pump in a vertical position within the dome of the container.

Depending on the motor type, this pump will achieve a maximum delivery rate of 105 l/min and a maximum delivery head of 32 m liquid column in transferring liquids up to a maximum viscosity of 150 mPas (cP).



FLUX Container Pump F 430 PP-100/50 in combination with

- 1 = Commutator motor Type F 457/F 458-1
- 2 = Three-phase gearmotor Type F 414

Detailed motor data see pages 21 to 29

Values ± 10 % with water (20 °C) and a voltage of 230 Volt.



F 457



F 458-1



F 414

Container pump (tube set) in Polypropylene, thread on outlet G 1 1/4 A, (BSP 1 1/4" male), motors on page 21

Type	F 430 PP-100/50		
Version	with impellor		
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM		
Material	shaft in Hastelloy C, seal in FKM, impellor in Polypropylene		
max. temperature	50 °C		
outer-Ø	100 mm on the pump body		
Part No./Weight			
Immersion length 1000 mm	430 40 510/2,0 kg		
Immersion length 1200 mm	430 40 512/2,2 kg		
Immersion length 1500 mm	430 40 515/2,5 kg		
Accessories	Hose connection with nut G 1 1/4	DN 25 Part No. 959 04 052	DN 32 Part No. 959 04 054

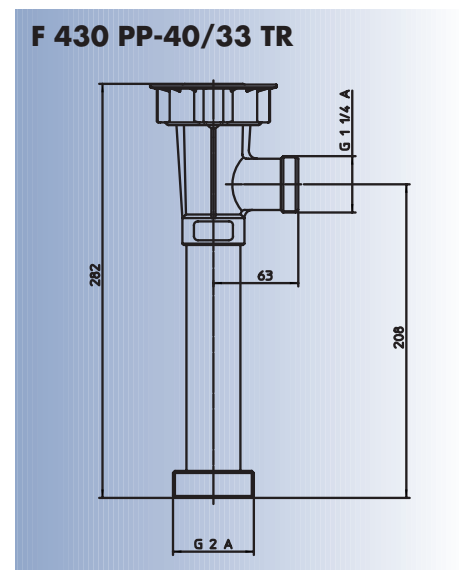
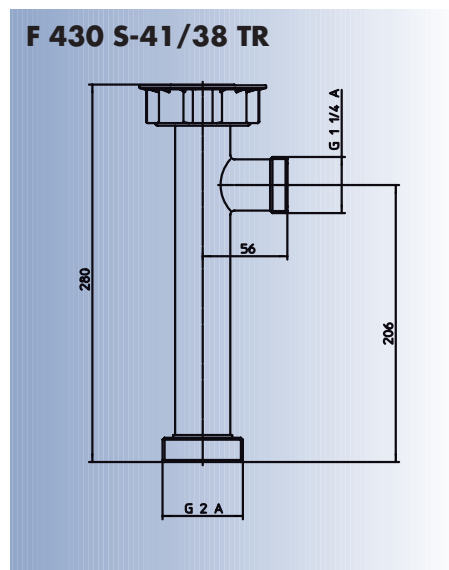
Accessories for fixing the pump onto the container	Part No.
Screw cap DN 150	001 14 063
Screw cap DN 225	001 14 064
in connection with FLUX vapour-proof gland, consisting of:	
Valve part (PP) Ø 50 mm	001 14 243
Threaded ring (PP) G 2	001 14 238

Centrifugal Pumps for horizontal and vertical use

Type	F 430 S-41/38 TR	F430 PP-40/33 TR
Material	Stainless steel 1.4571, seal in FKM, impellor in ETFE	Polypropylene, shaft in Hastelloy C, seal in FKM, impellor in ETFE
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM
Dimensions	see dimensional drawing	
Max. temperature	100 °C	50 °C
Outer-Ø	41 mm	40 mm
Part No./Weight	430 20 002/1,4 kg	430 40 002/0,6 kg
hose connections complete for inlet		
Stainless steel with brass nut G2		Polypropylene with nut G2
DN 32	959 04 059	DN 32 959 04 010
DN 38	959 04 060	DN 38 959 04 011

You will find the suitable motors and performance charts for the pump F 430 S-41/38 TR on page 10 and 11, for the F 430 PP-40/38 TR on page 14 and 15.

Dimensions



FLUX QUICK ACTION COUPLING SSK 400

FLUX Quick Action Coupling Type SSK 400 suits all FLUX barrel and container pumps Type F 424, F 425, F 426, F 427 and F 430 and allows a quick assembly/disassembly of pump and motor within a few seconds only. This allows the use of several pump tube sets with one drive motor only. The quick action coupling SSK 400 consists of a clamping element which is mounted onto the pump tube set and a threaded ring which is screwed onto the drive motor.

Type		Part No.
Quick Action Coupling SSK 400 complete	consisting of threaded ring (motor side) and clamping element (pump side)	001 10 802
or as individual parts:		
Threaded ring	to be screwed onto the drive motor	001 10 800
Clamping element	to be mounted onto the pump tube set	001 10 804





FLUX BRUSHLESS MOTOR FBM 4000 Ex IN DETAIL



The brushless motor Type FBM 4000 Ex is featuring a compact design, a robust double shell housing in aluminium and a very low noise level. The explosion-proof motor is tested and certified according to the latest ATEX-Directive 94/9/EC.

EC-Type-Examination Certificate PTB 03 ATEX 1042.

The combined on/off switch and easy to use speed controller allow precise dispensing operations.


Electronic monitoring of speed, voltage and temperature.

A integral no-volt release monitors the power and prevents unintentional re-start of the pump. This feature ensures additional safety for the user.

Due to negligible wear, the brushless motor design guarantees lowest cost of ownership, even with continuous use.



Brushless motor, explosion-proof to II 2 G EEx de IIC T5, protection class I.
Jet-proof according to IP 55. With power supply cable, 5 m long, with safety plug (not explosion-proof).

Type	Capacity	Voltage	Frequency	Weight	Part No. Version
					with no-volt release safety circuit
FBM 4000 Ex	600 W	230 V	50-60 Hz	6,2 kg	400 01 000

Accessories for Barrel pump motors F 458, F 460, FBM 4000 Ex

		Part No.	
		System CEAG	System Stahl
CEE Explosion-proof plug	explosion-proof to II 2 G EEx de IIC T6, 3-pole, 220-240 Volt, jet-proof to IP 65	937 01 030	937 01 018
CEE Explosion-proof socket	explosion-proof to II 2 G EEx de IIC T6, 3-pole, 220-240 Volt, jet-proof to IP 65	937 50 041	937 50 022
Earth (ground) wire with crocodile clip	2 m long 3 m long 2 m long, reinforced version		931 90 008 931 90 013 931 90 015
Carrying handle	allowing easy immersion and removal of the pump		001 10 557

FLUX COMMUTATOR MOTOR F 460 Ex IN DETAIL

Explosion-proof commutator motor Type F 460 Ex featuring a compact design, a robust double shell housing in aluminium and a very low noise level. Tested and certified according to ATEX-Directive 94/9/EC.

Type F 460 Ex EL, 230 Volt, with infinitely variable speed control included in the switch knob for an easy control of the delivery rate.

EC-Type-Examination Certificate PTB 97 ATEX 1035.

An improved ventilation system provides optimal cooling and ensures an extended service life.


Additional safety by an integral no-volt release to prevent from any unintentional re-starting after a voltage discontinuity.

The commutator motor Type F 460-1 Ex is identical with Type F 460 Ex, but has a considerably higher capacity of 700 Watt. This model is recommended for applications requiring a higher delivery rate or when transferring medium viscosity products or liquids with a higher density.



F 460 Ex (pict.)
F 460 Ex EL
F 460-1 Ex

Commutator motor explosion-proof to II 2 G EEx de IIC T6, protection class I in 230, 240 or 110 Volt, protection class III in 42, 24 or 12 Volt. Jet-proof according to IP 55, version with no-volt release, with power supply cable, 5 m long, with safety plug (not explosion-proof). – 42, 24 and 12 Volt version without plug.

Type	Capacity	Voltage	Frequency	Weight	Part No. Version		
					with no-volt release, with variable speed control	with no-volt release, without variable speed control	without no-volt release, without variable speed control
							
F 460 Ex	460 W	230 V	50 Hz	5,1 kg	-	460 00 006	460 00 001
F 460 Ex EL	460 W	230 V	50 Hz	5,1 kg	460 00 028	-	-
F 460 Ex	460 W	240 V	50 Hz	5,1 kg	-	460 00 005	460 00 000
F 460 Ex	460 W	110 V	50 Hz	5,1 kg	-	460 00 007	460 00 002
F 460 Ex	460 W	42 V	50 Hz	5,1 kg	-	460 00 030	-
F 460 Ex	410 W	24 V	DC	5,1 kg	-	-	460 00 003
F 460 Ex	230 W	12 V	DC	5,1 kg	-	-	460 00 004
F 460-1 Ex	700 W	230 V	50 Hz	5,9 kg	-	460 01 004	460 01 001
F 460-1 Ex	700 W	240 V	50 Hz	5,9 kg	-	460 01 003	460 01 000
F 460-1 Ex	700 W	110 V*	50 Hz	5,9 kg	-	460 01 005	460 01 002

* Temperature class T5

230 Volt version, approved to VDE / GS standards.

Other voltages and/or frequencies on request.



Commutator motor Type F 458 featuring a compact design, a robust double shell housing in aluminium and a very low noise level. Type F 458 EL, 230 Volt, with infinitely variable speed control included in the switch knob for an easy control of the delivery rate. An improved ventilation system provides optimal cooling and ensures an extended service life. Totally enclosed, fan cooled motor design and special corrosion-resistant painting, making these models particularly suitable for use in corrosive, vapour laden atmospheres. Additional safety by an integral no-volt release to prevent from any unintentional re-starting after a voltage discontinuity.

The commutator motor Type F 458-1 is identical with Type F 458, but has a considerably higher capacity of 700 Watt. This model is recommended for applications requiring a higher delivery rate or when transferring products with a medium viscosity or liquids with a higher density.



F 458 (pict.)
F 458 EL
F 458-1

Commutator motor special corrosion-resistant painting, protection class I bei 240, 230 and 110 Volt. Protection class III in 24 or 12 Volt, Jet-proof according to IP 55, with no-volt release, power supply cable 5 m long and safety plug. – 24 and 12 Volt version without plug.

Type	Capacity	Voltage	Frequency	Weight	Part No. Version		
					with no-volt release, with variable speed control	with no-volt release, without variable speed control	without no-volt release, without variable speed control
F 458	460 W	230 V	50 Hz	5,1 kg	-	458 00 006	458 00 001
F 458 EL	460 W	230 V	50 Hz	5,1 kg	458 00 027	-	-
F 458	460 W	240 V	50 Hz	5,1 kg	-	458 00 005	458 00 000
F 458	460 W	110 V	50 Hz	5,1 kg	-	458 00 007*	458 00 002
F 458	410 W	24 V	DC	5,1 kg	-	-	458 00 003
F 458	230 W	12 V	DC	5,1 kg	-	-	458 00 004
F 458-1	700 W	230 V	50 Hz	5,9 kg	-	458 01 004	458 01 001
F 458-1	700 W	240 V	50 Hz	5,9 kg	-	458 01 003	458 01 000
F 458-1	700 W	110 V	50 Hz	5,9 kg	-	458 01 005*	458 01 002

* 50 Hz version only.
230 Volt version, approved to VDE / GS standards.
Other voltages and/or frequencies on request.



Accessories see page 21.

NOTE For transferring highly flammable liquids and for use in hazardous areas explosion-proof motors must be used.

The new fully electronic adjustable barrel pump motor FEM 4070 with integrated no-volt release ensures optimum safety during the filling process. The 500 Watt power pack is equipped with 4 speed ranges. The ergonomically designed handle ensures a safe one-handed operation of the rotary switch for starting the pump and choosing the speed ranges via the touch button.

Additional benefits for the new FEM 4070:

- Electronic adjustable, complete overload protection in all 4 speed ranges
- Motor with no-volt release, thus ensuring optimum safety during the filling process
- 500 Watt electronic adjustable power pack with 4 speed ranges
- Preset speed range remains in case of a re-start
- Lifting eye for use with inertia hoist
- Automatically filling process within defined flow rates in conjunction with our FLUX flow meters
- Speed range adjustment via touch button
- Compact design
- Low noise level
- High durability
- Modern, application-oriented design
- Safe starting by rotary switch
- Favourable efficiency weight
- Advanced flow rate
- The motor can be combined with Stainless steel, Aluminium, Hastelloy C, Polypropylene and PVDF pumps
- For transferring neutral, aggressive, non flammable liquids



FEM 4070



F 457 (pict.)
F 457 EL

Powerful commutator motor Type F 457 featuring a compact design, an optimal cooling system, a low noise level and an extended service life.

Extremely light-weight and easy to handle, allowing a most universal use with neutral, corrosive, hardly flammable liquids.

Type F 457 EL with infinitely variable speed control device for an easy control of the delivery rate.

Commutator motor FEM 4070

double isolated according to protection class II, IP 24 splash-proof,
with electronic and thermal overload protection, 5 m cable and plug.

Type	Capacity	Voltage	Frequency	Weight	Part No.	
					Version	
					with variable speed control	without variable speed control
FEM 4070	500 W	230 V	50 Hz	2,6 kg	407 01 000	407 01 001
FEM 4070	500 W	240 V	50 Hz	2,6 kg	407 01 008	407 01 009
FEM 4070	500 W	110 V	50 Hz	2,6 kg	407 01 016	407 01 017

230 Volt version, approved to VDE / GS standards.



Commutator motor F 457

double isolated according to protection class II, IP 24 splash-proof,
with power supply cable, 5 m long, and 2-pole plug.

Type	Capacity	Voltage	Frequency	Weight	Part No.		
					Version		
					with no-volt release, with variable speed control	with no-volt release, without variable speed control	with no-volt release, without variable speed control
F 457	800 W	230 V	50 Hz	4,0 kg	-	457 01 005	457 01 002
F 457 EL	800 W	230 V	50 Hz	4,0 kg	457 01 003	-	-
F 457	800 W	240 V	50 Hz	4,0 kg	-	457 01 006	457 01 007
F 457 EL	800 W	240 V	50 Hz	4,0 kg	457 01 008	-	-
F 457	800 W	110 V	50 Hz	4,0 kg	-	457 01 009	457 01 010
F 457 EL	800 W	110 V	50 Hz	4,0 kg	457 01 011	-	-

Other voltages and/or frequencies on request.

230 Volt version, approved to VDE / GS standards.



Accessories		Part No.
Carrying handle	allowing an easy immersion and removal of the pump. in combination with Commutator motor F 457 or F 457 EL	001 10 533

NOTE For transferring highly flammable liquids and for use in hazardous areas explosion-proof motors must be used.

FLUX THREE-PHASE GEARMOTOR F 414 IN DETAIL

The robust three-phase gearmotor F 414 is especially designed for extreme operating conditions and extended operating periods.



F 414

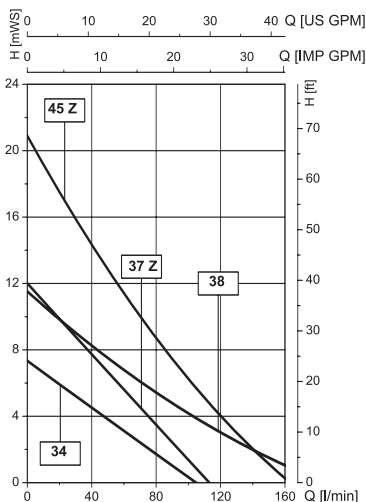
Three-phase Gearmotor

protection class I, jet-proof to IP 55, available with motor protection switch or with cable terminal box, without power supply cable.

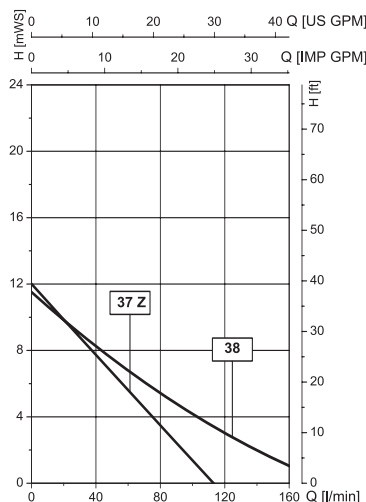
Type	Capacity	Voltage	Frequency	Range of setting motor protection switch	Weight	Part No. Version	
						with motor protection switch, mounted on the motor	without motor protection switch, with cable terminal box
F 414	0,55 kW	230/400 V	50 Hz	0,9–1,6 A	8,8/8,0 kg	414 01 112	414 01 110
F 414	0,75 kW	230/400 V	50 Hz	1,5–2,5 A	11,3/10,5 kg	414 01 123	414 01 122
F 414	1,1 kW	230/400 V	50 Hz	2,4–3,5 A	12,8/12,0 kg	414 01 131	414 01 130

Accessories	Part No.
Carrying handle allowing an easy immersion and removal of the pump in combination with the Three-phase Gearmotor F 414	001 10 582
Power supply cable 5 m long, complete with Cekon plug, 5-pole	934 08 020
Power supply cable 5 m long, without plug	934 08 025
Power supply cable yard ware	934 08 901
Cekon plug 5-pole	937 01 014

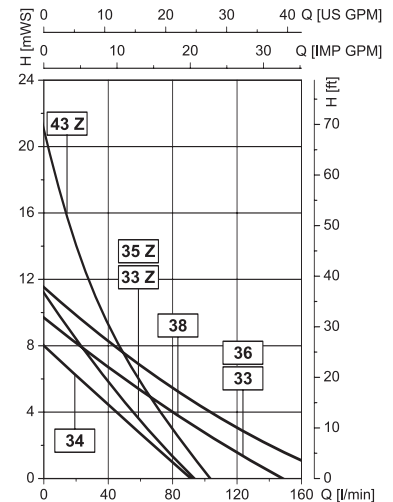
Motor F 414 in combination with barrel pump in Stainless steel



Motor F 414 in combination with barrel pump in Aluminium and Hastelloy C



Motor F 414 in combination with barrel pump in PP and PVDF



Values ± 10 % with water (20 °C) and a voltage of 230 Volt.

In combination with air motors FLUX barrel and container pumps are very lightweight, easy to handle and extremely powerful at the same time.

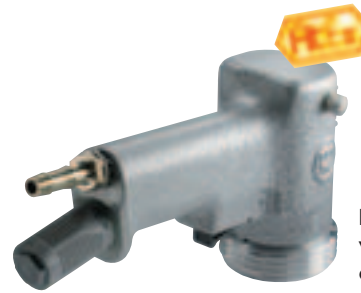
FLUX air motors are explosion-proof according to ATEX-Directive 94/9/EC. PTB Registration No. 02 ATEX D022.

These motors are recommended for transferring highly flammable liquids and are particularly suitable for applications requiring a powerful and easy to adjust motor.

The speed can be adjusted via the filter-regulator-lubricator unit on models F 416 Ex and F 416-1 Ex or on a ball valve on model F 416-2 Ex.

Power at 6 bar operating pressure – 470 Watt.

Power at 3 bar operating pressure – 170 Watt.



F 416 Ex
with trigger
operated valve



F 416-1 Ex
without valve



F 416-2 Ex
with ball valve

Air Motor explosion-proof to II 2 G cp IIC T6,
easily variable speed control by adjusting either the air supply pressure or volume,
motor overload-proof, air connection G 1/4 (BSP 1/4" female).

Type	Capacity	Operating pressure max.	Air consumption	Version	Weight	Part No.
F 416 Ex	470 W	6 bar	14 l/sec	with trigger operated valve	1,4 kg	416 00 100
F 416-1 Ex	470 W	6 bar	14 l/sec	without valve	0,9 kg	416 00 020
F 416-2 Ex	470 W	6 bar	14 l/sec	with ball valve	1,0 kg	416 00 030
Accessories						Part No.
Filter-regulator-lubricator unit	consisting of water separator, pressure gauge and lubricator. Thread on inlet and outlet G 1/4 (BSP 1/4" female)					001 10 100
Compressed air hose	DN 10, electrically conductive (blue)					001 10 098
Hose coupling	brass, spring-actuated, with hose nozzle DN 10 for compressed air hose					959 13 066
Nipple	brass, DN 10 – G 1/4 A (BSP 1/4" male) for hose coupling					959 13 065
Hose nozzle	brass, DN 10 – G 1/4 A (BSP 1/4" male) for compressed air hose					959 05 022
Earth (ground) wire with crocodile clip	2 m long 3 m long 2 m long, reinforced version					931 90 008 931 90 013 931 90 015

CAPACITY RANGE



Motor Type	FBM 4000 Ex			F 458 F 458 EL	F 460 Ex F 460 Ex EL		F 458-1	F 460-1 Ex		
Pump tube set Type	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	
F 430 S-41/38	220	11	800	200	9,5	800	220	12	700	
F 430 S-41/37 Z	110	17,5	1000	100	14	1000	115	19	900	
F 430 S-50/38	220	11	800	200	9,5	800	220	12	700	
F 430 S-50/45 Z	120	23	800	130	19	900	145	25	900	
F 424 S-43/38	220	11	800	200	9,5	800	220	12	700	
F 424 S-43/37 Z	110	17,5	1000	100	14	1000	115	19	900	
F 424 S-50/45 Z	120	23	800	130	19	900	145	25	900	
F 425 S-41/34	110	8	800	115	8	800	115	10	900	
F 426 S-41/38	220	11	800	200	9,5	800	220	12	700	
F 427 S3-43/38	220	11	800	200	9,5	800	220	12	700	
F 430 AL-41/38	220	11	800	200	9,5	800	220	12	700	
F 430 AL-41/37 Z	110	17,5	1000	100	14	1000	115	19	800	
F 430 AL-50/38	220	11	800	200	9,5	800	220	12	700	
F 430 HC-40/38	220	11	800	200	9,5	800	220	12	700	
F 430 PP/PVDF-40/33	160	10,5	800	170	9,5	800	190	12	900	
F 430 PP/PVDF-40/33 Z	85	15,5	1000	85	15	1000	90	20	900	
F 430 PP/PVDF-50/38	220	11	800	200	9,5	800	220	12	700	
F 430 PP/PVDF-50/43 Z	105	30	1000	95	23	1000	110	28	900	
F 424 PP/PVDF-41/36	175	11	800	170	9,5	800	190	12	900	
F 424 PP/PVDF-41/35 Z	85	15,5	1000	85	15	1000	90	20	900	
F 424 PP/PVDF-50/38	220	11	800	200	9,5	800	220	12	700	
F 424 PP-50/43 Z	125	30	1000	95	23	1000	110	28	900	
F 425 PP-50/34	110	8	800	90	7	1000	110	10	900	
F 426 PP-50/33	160	10,5	800	170	9,5	800	190	12	900	

Values \pm 10% with water (20 °C) and a voltage of 230 Volt.



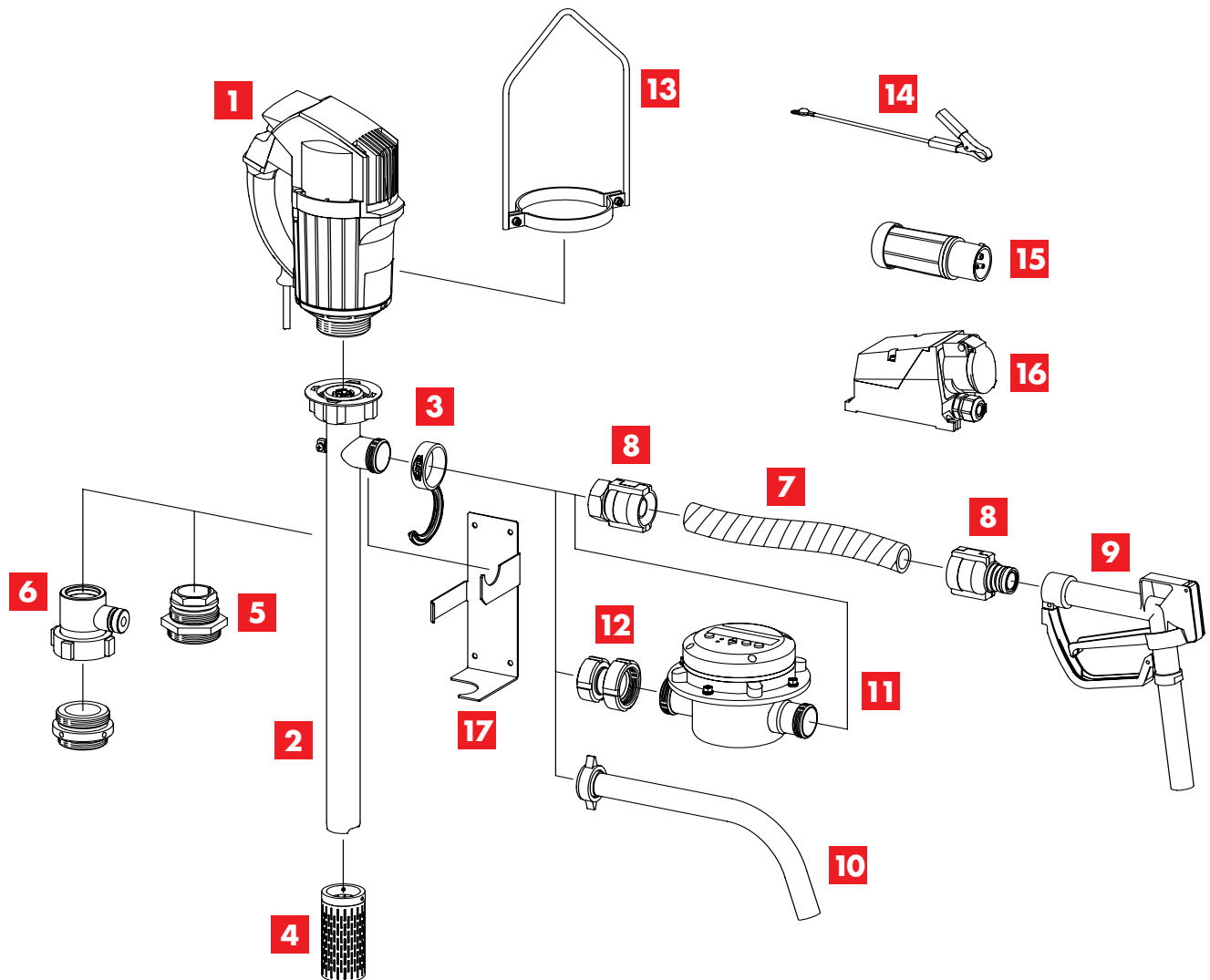
	F 414			F 416 Ex	F 416-1 Ex F 416-2 Ex			FEM 4070			F 457	F 457 EL	
	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	Delivery rate* l/min	Delivery head** m	Viscosity max. mPas (Δ cP)	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	115	12	1000	120	24	1200	105	16	800	120	20	1000	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	160	21	1000	145	30	1200	–	–	–	150	26	900	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	115	12	1000	120	24	1200	105	16	800	120	20	1000	
	160	21	1000	145	30	1200	–	–	–	150	26	900	
	100	7	1000	130	13	1200	105	7,5	800	120	11	900	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	115	12	1000	120	24	1200	105	16	800	120	20	1000	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	145	10	1000	205	13	1200	165	9,5	600	190	12	800	
	90	11	1000	100	24	1200	85	18	600	90	20	1000	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	105	21	1000	105	30	1200	100	26	800	110	30	900	
	145	10	1000	205	13	1200	165	9,5	600	190	12	800	
	90	11	1000	100	24	1200	85	18	800	90	20	1000	
	185	11	900	240	13	1000	215	10	600	220	12	800	
	105	21	1000	105	30	1200	100	26	800	110	30	900	
	90	8	1000	110	12	1200	105	7,5	800	120	11	1000	
	145	10	900	205	13	1200	165	9,5	800	190	12	800	

* Maximum delivery rate with free outlet; obtained on the outlet connection.

** Maximum delivery head with closed outlet; obtained on the outlet connection.

GENERAL VIEW FLUX BARREL AND CONTAINER PUMP WITH ACCESSORIES FOR HIGHLY FLAMMABLE LIQUIDS (EXPLOSION-PROOF VERSION)

It is not merely the pump that makes the FLUX solution a perfect equipment. On this page you will find a general view on the explosion-proof FLUX barrel pump together with all accessories for transferring highly flammable liquids. With all items in bold printing you will have a ready to use pump assembly, which may be completed by other accessories shown on this page.



- 1** Drive Motor

- 2** Barrel Pump (pump tube set)

- 3** FLUX-Clip

- 4** Suction strainer

- 5** Compression gland

- 6** Fume gland Type FES

- 7** Flexible hose*

- 8** Swaged hose fittings*

- 9** Quick action tap

- 10** Discharge spout

- 11** Liquid meter

- 12** Connecting piece FMC 100

- 13** Carrying handle

- 14** Earth (ground) wire

- 15** Explosion-proof plug

- 16** Explosion-proof socket

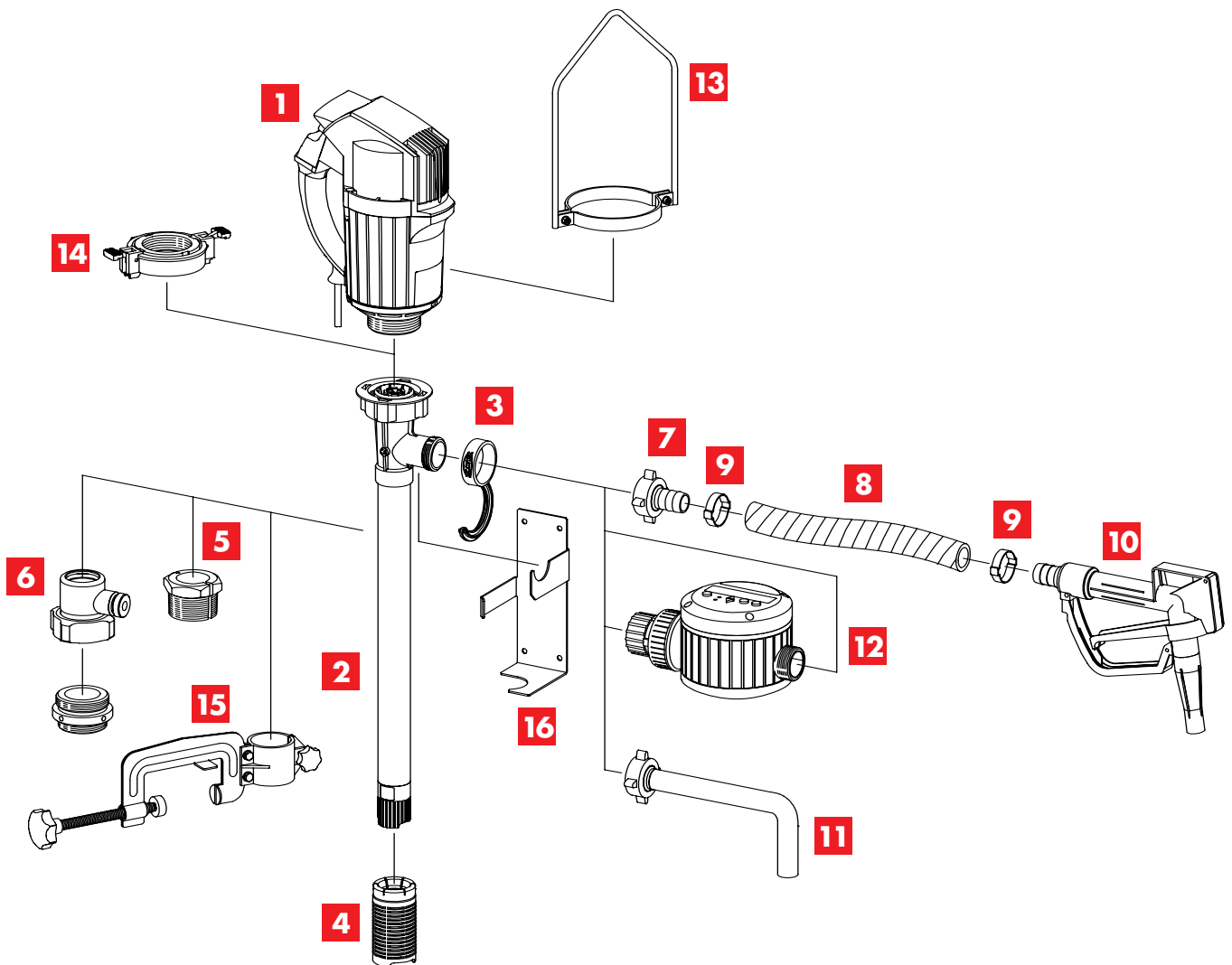
- 17** Wall bracket

* On request also available completely mounted and tested for electrical conductivity.

GENERAL VIEW FLUX BARREL AND CONTAINER PUMP WITH ACCESSORIES FOR NON-FLAMMABLE LIQUIDS



It is not merely the pump that makes the FLUX solution a perfect equipment. On this page you will find a general view on the FLUX barrel pump together with all accessories for transferring non-flammable liquids. With all items in bold printing you will have a ready to use pump assembly, which may be completed by other accessories shown on this page.



- 1** Drive Motor

- 2** Barrel Pump (pump tube set)

- 3** FLUX-Clip

- 4** Suction strainer

- 5** Compression gland

- 6** Fume gland Type FES

- 7** Hose connection

- 8** Flexible hose*

- 9** Hose clip

- 10** Quick action tap

- 11** Discharge spout

- 12** Liquid meter

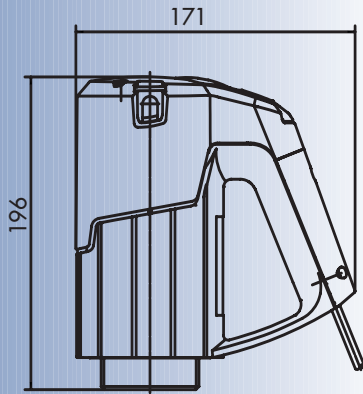
- 13** Carrying handle

- 14** Quick action coupling Type SSK 400

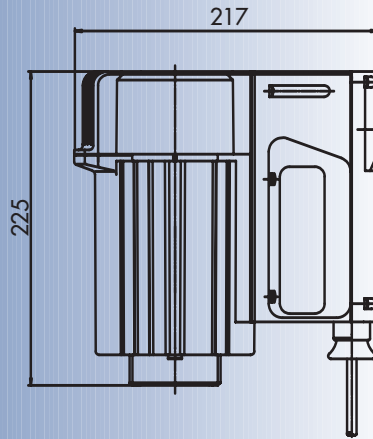
- 15** Attachment clamp

- 16** Wall bracket

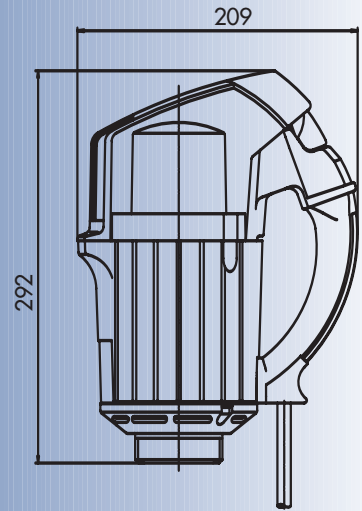
FEM 4070



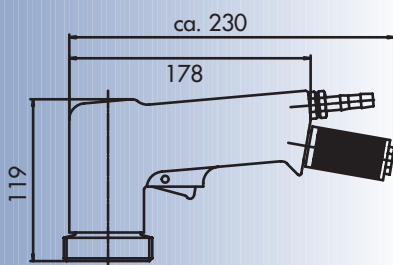
F 457/ F 457 EL



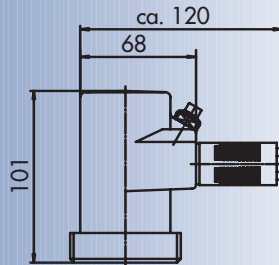
F 458/ F 458 EL/ F 458-1/ F 460 Ex/ F 460 Ex EL/ F 460-1 Ex/ FBM 4000 Ex



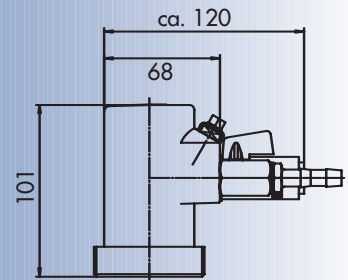
F 416 Ex



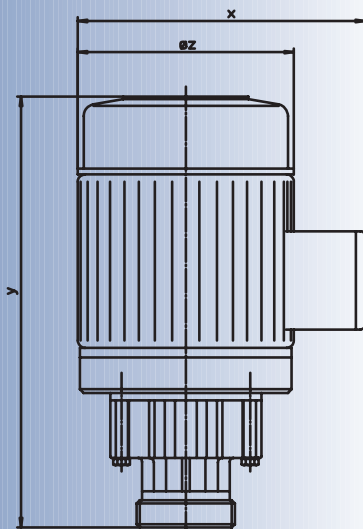
F 416-1 Ex



F 416-2 Ex



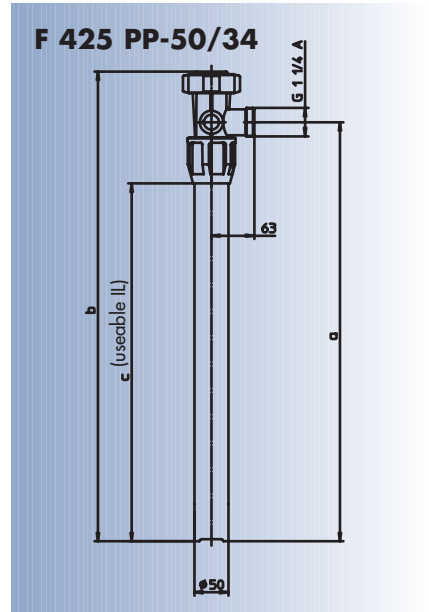
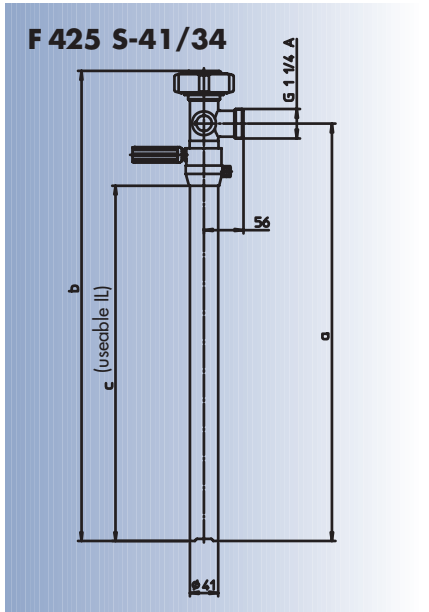
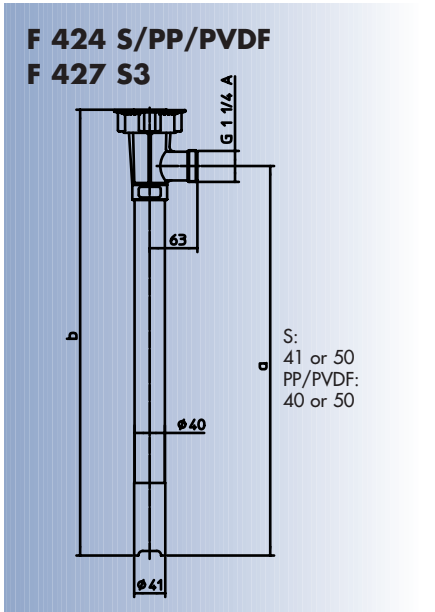
F 414



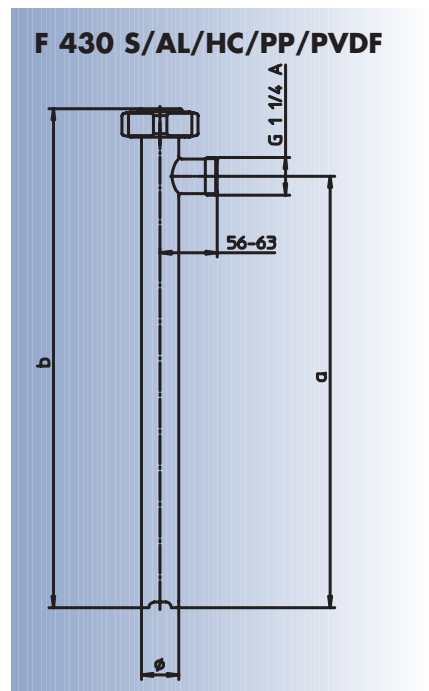
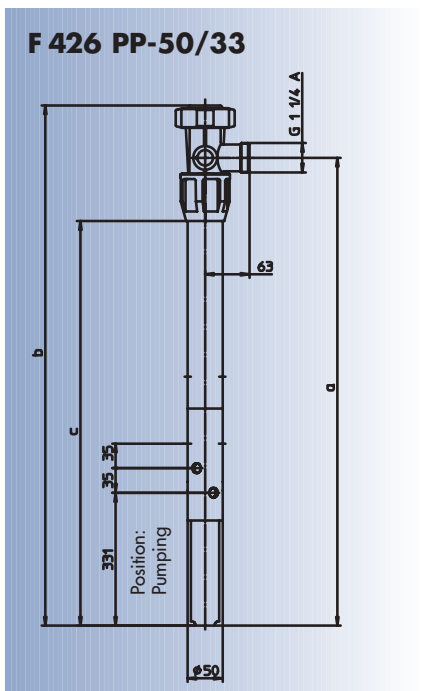
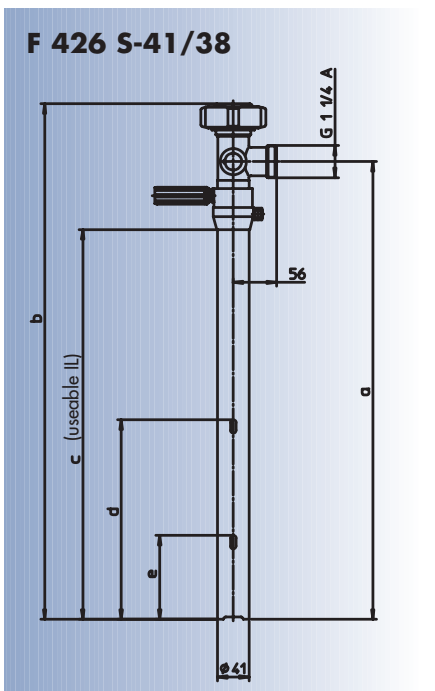
Type F 414

Capacity	X	Y	Øz
0,55 kW	200	285	143
0,75 kW	217	311	160
1,1 kW	217	311	160

NOTE with motor and pump assembled, the total length reduces by 16 mm.



Type	F 424 S/PP/PVDF and F 427 S3			F 425 S-41/34			F 425 PP-50/34		
Dimensions in mm	Ø	a	b	a	b	c	a	b	c
Immersion length 700 mm	S: 43 or 50.	715	790	815	890	738	816	891	726
Immersion length 1000 mm	PP/PVDF:	1015	1090	1115	1190	1038	1116	1191	1026
Immersion length 1200 mm	41 or 50.	1215	1290	1315	1390	1238	1316	1391	1226
	on models PP/PVDF-41/35 Z, dimensions a and b are reduced by 8 mm.			with open valve dimensions a and b are increased by 7 mm.			with open valve dimensions a and b are increased by 8 mm.		



Type	F 426 S-41/38					F 426 PP-50/33			F 430 S/AL/HC/PP/PVDF		
Dimensions in mm	a	b	c	d	e	a	b	c	Ø	a	b
Immersion length 700 mm	-	-	-	-	-	-	-	-	S/AL: 41 or 50.	706	780
Immersion length 1000 mm	1106	1181	1018	352	202	1106	1180	1016	HC: 40. PP/PVDF:	1006	1080
Immersion length 1200 mm	1306	1381	1218	352	202	1306	1380	1216	40 or 50.	1206	1280

For example: Type F 430 S-41/38 with an immersion length of 1000 mm has a total length (shown as dimension „b“) of 1080 mm. The total length of the pump including motor type F 460 Ex is 1080 mm + 292 mm - 16 mm = 1356 mm.

FLUX ACCESSORIES & COMPLEMENTS



It is not merely the pump that makes the FLUX solution a perfect equipment. FLUX Pump Kits include everything for that quick start required by today's busy engineers and buyers: a ready to work, straight out of the box pump. All component parts – pump, motor and accessories – are carefully selected to complement each other.

FLUX Pump Kits are available for:

- acids and alkalis
- concentrated acids and alkalis
- petroleum products
- highly flammable liquids
- universal applications
- 99,98 % barrel emptying

Select the most suitable combination and see the advantages of buying a FLUX Pump Kit, the new all-inclusive service!



If you want to keep your liquids under control, FLUX barrel and container pumps can be completed by a Liquid Meter Type FMC 100. Various models are available in PP, ETFE or stainless steel for flowrates of 10 – 100 l/min. An easy-to-read 7-digit LCD unit together with multifunctional keys ensures a simple calibration and input, everything for easy use by the operator.

All models are explosion-proof to II 2 G EEx ia IIB T6 according to ATEX-Directive 94/9/EC.

For detailed information on FLUX Pump Kits, FLUX Liquid Meters and other FLUX products please ask for our sales brochures. Just fill in the form on the following page and return it by FAX.



YES!

I am interested in top class pump technology.
Please send the following catalogues:

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| <input type="checkbox"/> FLUX Pump-Kits | <input type="checkbox"/> FLUX Air-operated Diaphragm Pumps |
| <input type="checkbox"/> FLUX High Viscosity Liquid Pumps | <input type="checkbox"/> FLUX Mixers |
| | <input type="checkbox"/> FLUX Liquid Meters |

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INNOVATORS IN FLOW TECHNOLOGY

All around the globe, FLUX is synonymous with top standards in pump technology. Whether it is barrel pumps, high viscosity liquid pumps, vertical centrifugal immersion pumps, air-operated diaphragm pumps, liquid meters, mixers or top class accessories – FLUX with its complete and comprehensive range is always the one to address to. Benefit from our competence. We look forward to hearing from you!

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