

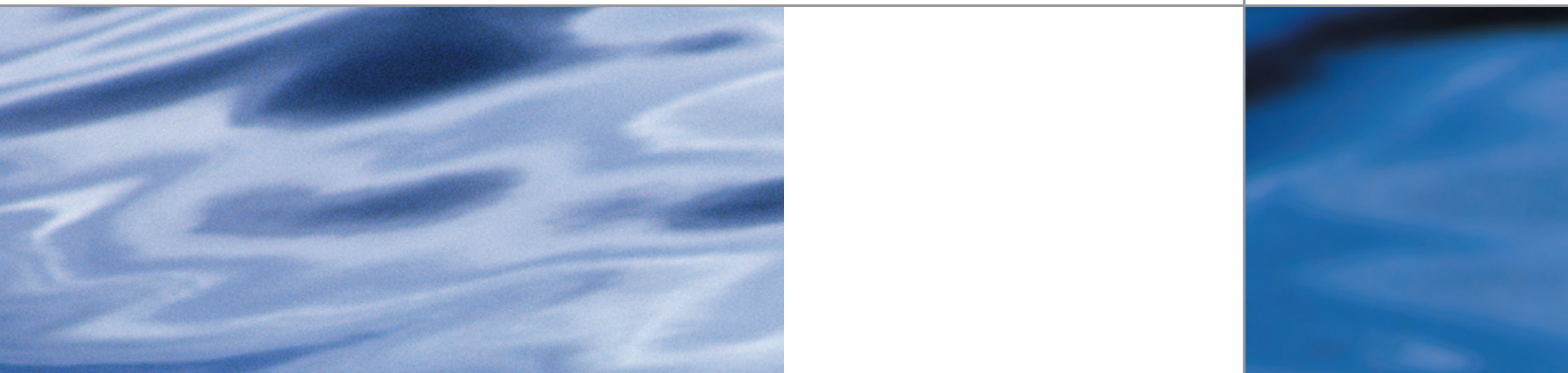


We deliver values.



drum and  
container pumps

## 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?  
Drum 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 drums 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 drum 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 drum-pump kits see our brochure FLUX pump kits



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# FLUX drum 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.

## polyvinylendene 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 drums 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 drums or containers in hazardous areas:

F 424 S – EC Type examination certificate  
PTB 11 ATEX 5009 X

F 425 S – EC Type examination certificate  
PTB 11 ATEX 5009 X

F 426 S – EC Type examination certificate  
PTB 11 ATEX 5009 X

F 430 S – EC Type examination certificate  
PTB 11 ATEX 5009

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 drum 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.**

# The sealless FLUX F 424



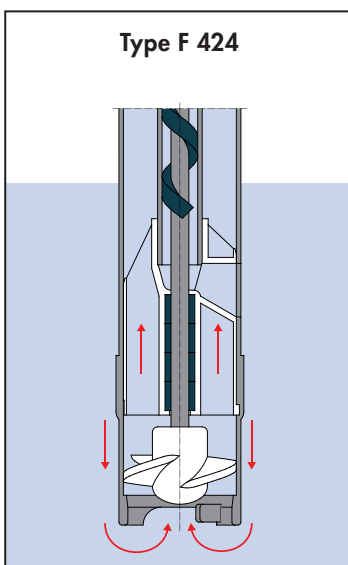
The liquids to be pumped are abrasive, but they do not leave any deposits. Dry running of the pump must not cause any problems. You are looking for a lightweight, general purpose pump in stainless steel, polypropylene or polyvinylendene fluoride.

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 drum 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)

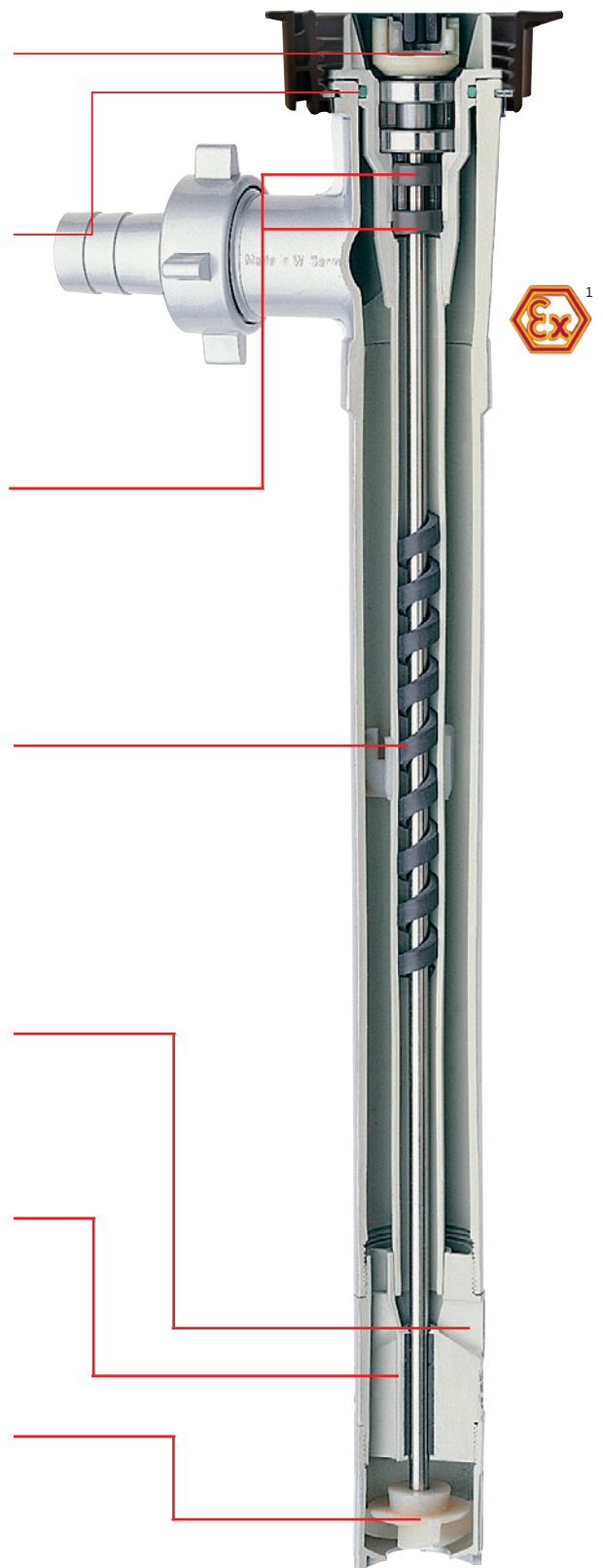
Radial shaft seals to prevent liquid and/or vapours entering the coupling area

Non-metallic helix shaped shaft support bearing

Pressure relief ports

Bottom bearing assembly which centers the shaft within the inner tube

Impeller in ETFE



# The FLUX F 430 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

Impeller in ETFE



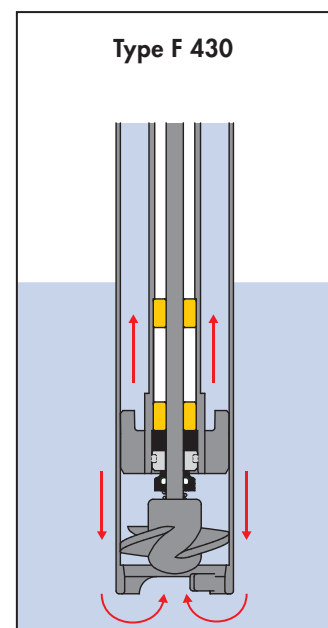
The pump must be used with many varying liquids, consequently the smallest residual left within the pump is unacceptable. You want to pump adhesive substances like paints or liquids which tend to crystallize or harden.

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 impeller 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.**



# The FLUX F 425 for emptying drums up to 99,98 %



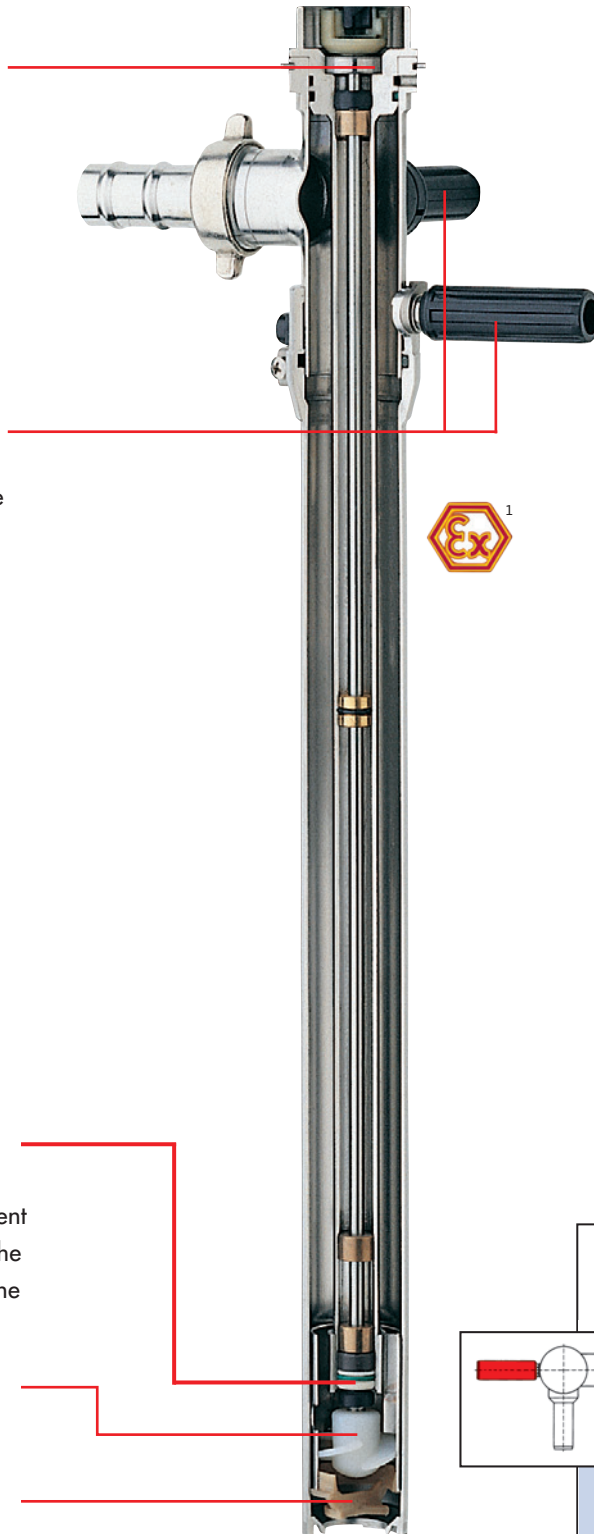
Flexible coupling  
between pump and  
motor

Operating levers  
to close/open  
the flowback stop valve

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

Impeller in ETFE

Flowback stop valve



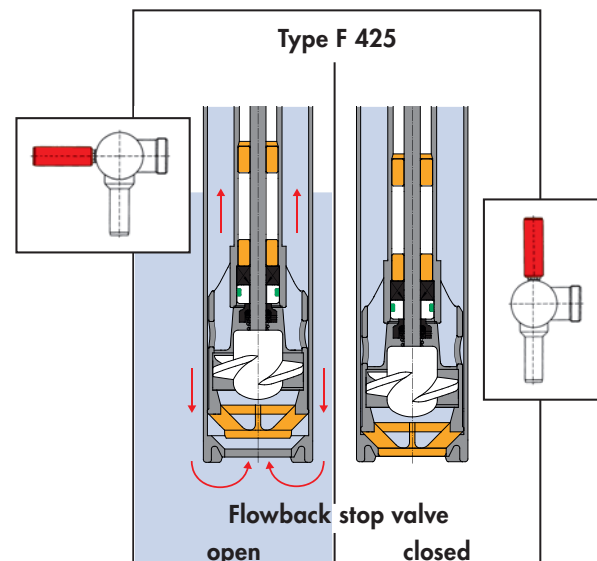
You are not prepared to accept any residual liquid in the drum in order to avoid problems and costs of disposal or to avoid losing high value liquids.

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 drum.

### 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 drums up to 99,98 % is your pump.



# The FLUX mixing pump F 426

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

Impeller in ETFE



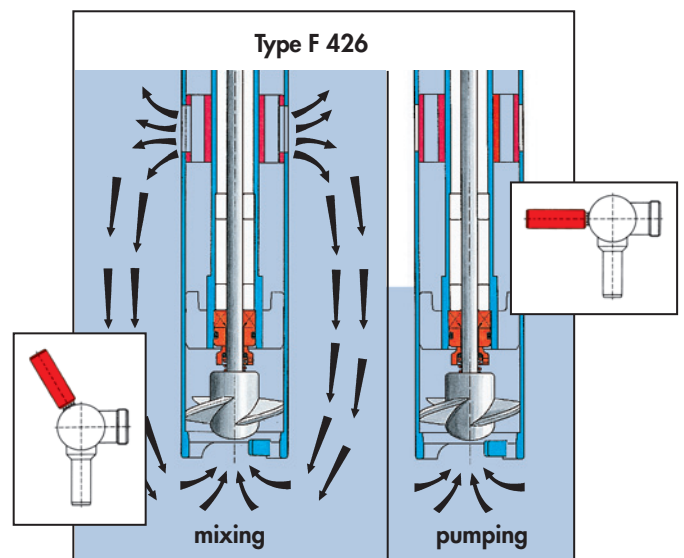
You want to mix and pump  
liquids within a closed drum or  
an open container.

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:

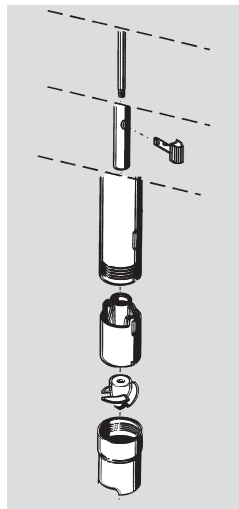
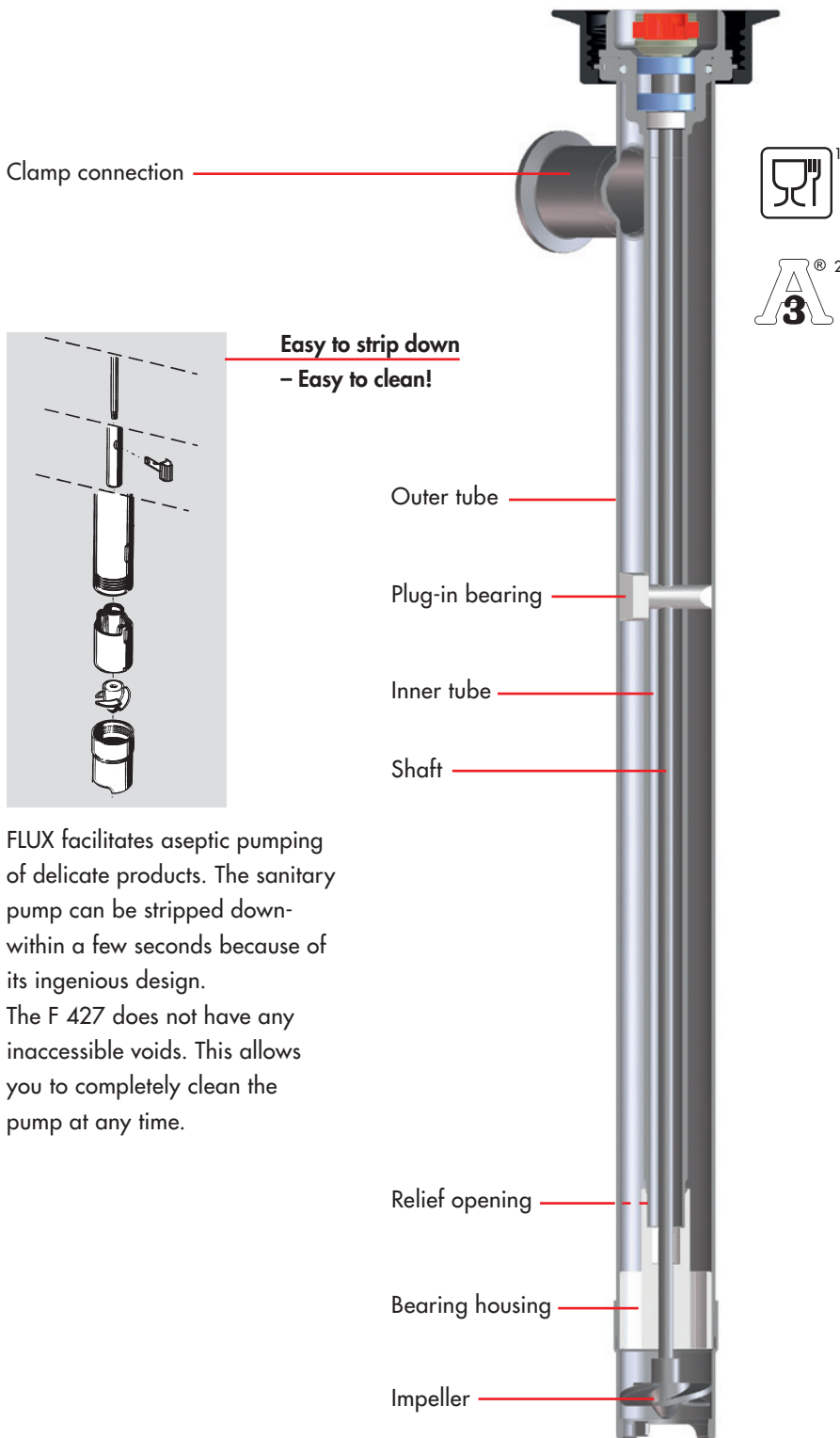
- No changes in the outer diameter of the pump tube in stainless steel as the pump works without any additional components
- Light and handy design
- Pump/drum connection glands are also in vapour-proof version available

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





# The FLUX F 427 can be taken apart completely



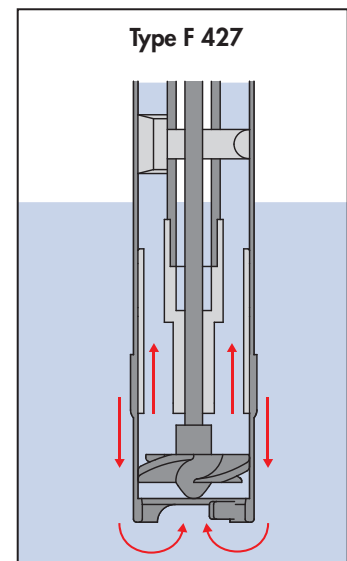
FLUX facilitates aseptic pumping of delicate products. The sanitary pump can be stripped down within a few seconds because of its ingenious design. The F 427 does not have any inaccessible voids. This allows you to completely clean the pump at any time.

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.

### Special advantages:

- All wetted parts are made of 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.**



<sup>1</sup> Products complying with EC 1935/2004 and EU 10/2011 available

<sup>2</sup> 3A-certified products available

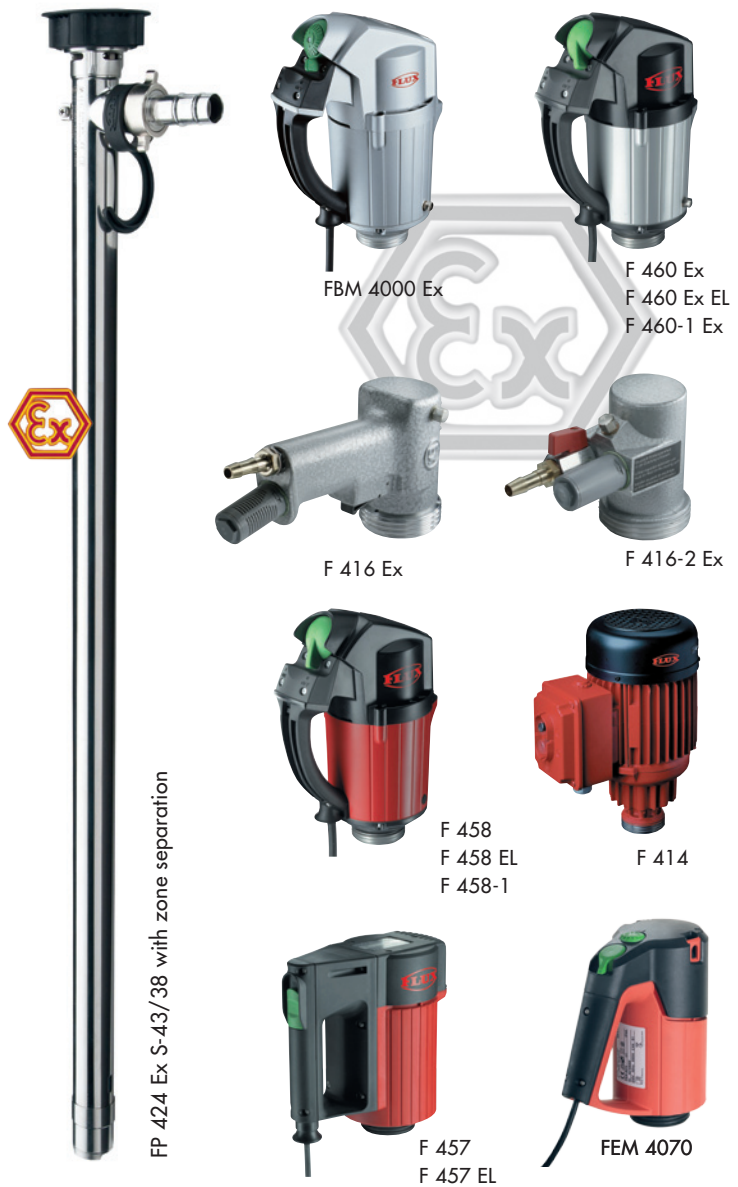
# FLUX drum pumps in stainless steel

FLUX drum 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 drums 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. 6,5 ft) and a quick action tap, the delivery rate will be approx. 18 GPM. Depending on the motor type a 55 GAL drum 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.

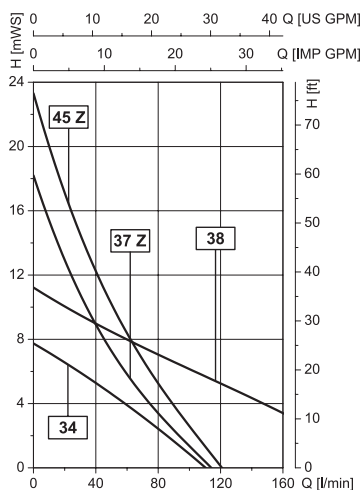


↗ This pump version will achieve a higher delivery rate!

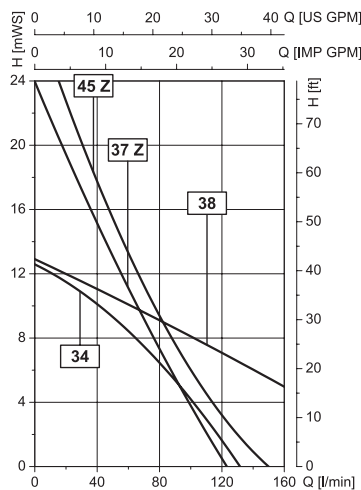
↗ This pump version will achieve a higher delivery head!

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

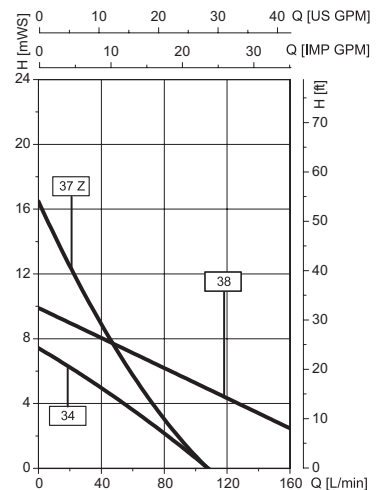
motor FBM 4000 Ex



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



motor FEM 4070



Detailed motor data see pages 21 to 29

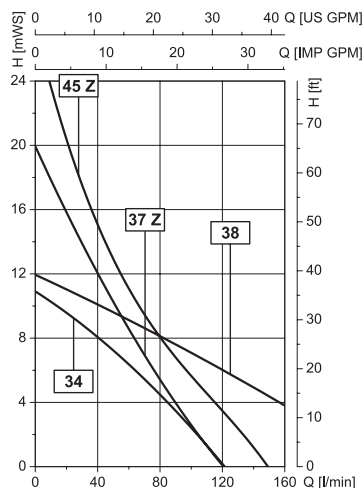
**drum pump (tube set) in stainless steel, thread on outlet G 1 1/4 male, motors on page 21**

type/curve	FP 424 Ex S-43/38 <sup>1</sup>	FP 424 Ex S-43/37 Z <sup>1</sup>	FP 424 Ex S-50/45 Z <sup>1</sup>
version			
seal type	sealless within the liquid section		
material	shaft in stainless steel 316 Ti, impeller in ETFE, o-ring in FKM		
max. temperature	212 °F		
outer-Ø	1 11/16"	1 11/16"	2"
part no. / weight			
immersion length 27"	424 22 007 / 4,85 lbs	424 22 107 / 4,85 lbs	424 22 207 / 6,61 lbs
immersion length 39"	424 22 010 / 6,39 lbs	424 22 110 / 6,39 lbs	424 22 210 / 8,81 lbs
immersion length 47"	424 22 012 / 7,27 lbs	424 22 112 / 7,27 lbs	424 22 212 / 10,6 lbs
type/curve	FP 425 Ex S-41/34 <sup>1,2</sup>	F 426 S-41/38	F 427 S3-43/38
version	99,98 % drum emptying	mixing pump	sanitary pump
seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM		sealless within the liquid section
material	shaft in stainless steel 316 Ti, seal in FKM, impeller in ETFE		shaft in stainless steel 316 Ti, impeller in ETFE, o-ring in FKM
max. temperature	212 °F		
outer-Ø	1 19/32"	1 19/32"	1 11/16"
part no. / weight			
immersion length 27"	425 22 008 / 6,61 lbs	-	427 20 307 / 6,61 lbs
immersion length 39"	425 22 011 / 8,37 lbs	426 20 010 / 8,37 lbs	427 20 310 / 6,39 lbs
immersion length 47"	425 22 013 / 9,70 lbs	426 20 012 / 9,70 lbs	427 20 312 / 7,27 lbs
type/curve	F 430 S-41/38 <sup>1</sup>	F 430 S-41/37 Z <sup>1</sup>	F 430 S-50/45 Z
version			
seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM		
material	shaft in stainless steel 316 Ti, seal in FKM, impeller in ETFE		
max. temperature	212 °F		
outer-Ø	1 19/32"	1 19/32"	2"
part no. / weight			
immersion length 27"	430 20 107 / 5,29 lbs	430 20 407 / 5,29 lbs	430 20 207 / 7,49 lbs
immersion length 39"	430 20 110 / 6,61 lbs	430 20 410 / 6,61 lbs	430 20 210 / 9,92 lbs
immersion length 47"	430 20 112 / 7,93 lbs	430 20 412 / 7,93 lbs	430 20 212 / 11,46 lbs
accessories	hose connection complete with nut G 1 1/4 female DN 19 part no. 959 04 061		DN 25 part no. 959 04 041

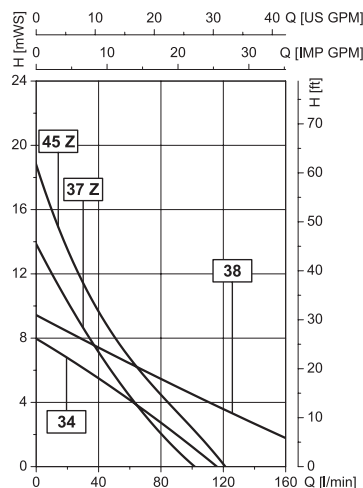
Pump models in immersion lengths of 8 – 118" (in steps of 4") on request

<sup>2</sup> Model for higher delivery head on request.

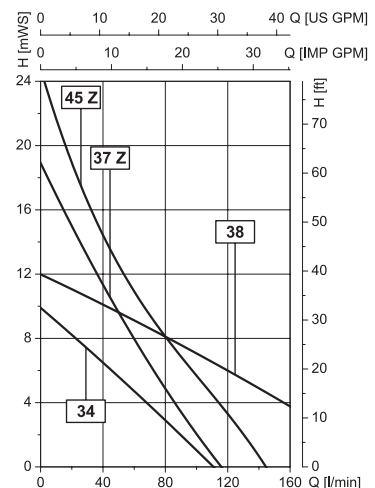
**motor F 457 or F 457 EL**



**motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL**



**motor F 458-1 or F 460-1 Ex**



<sup>1</sup> with zone separation

Values ± 10% with water (68 °F) and a voltage of 230 Volt. Curves with a voltage of 120 Volt / 60 Hz are similar.

# FLUX drum pumps in aluminium alloy and hastelloy C

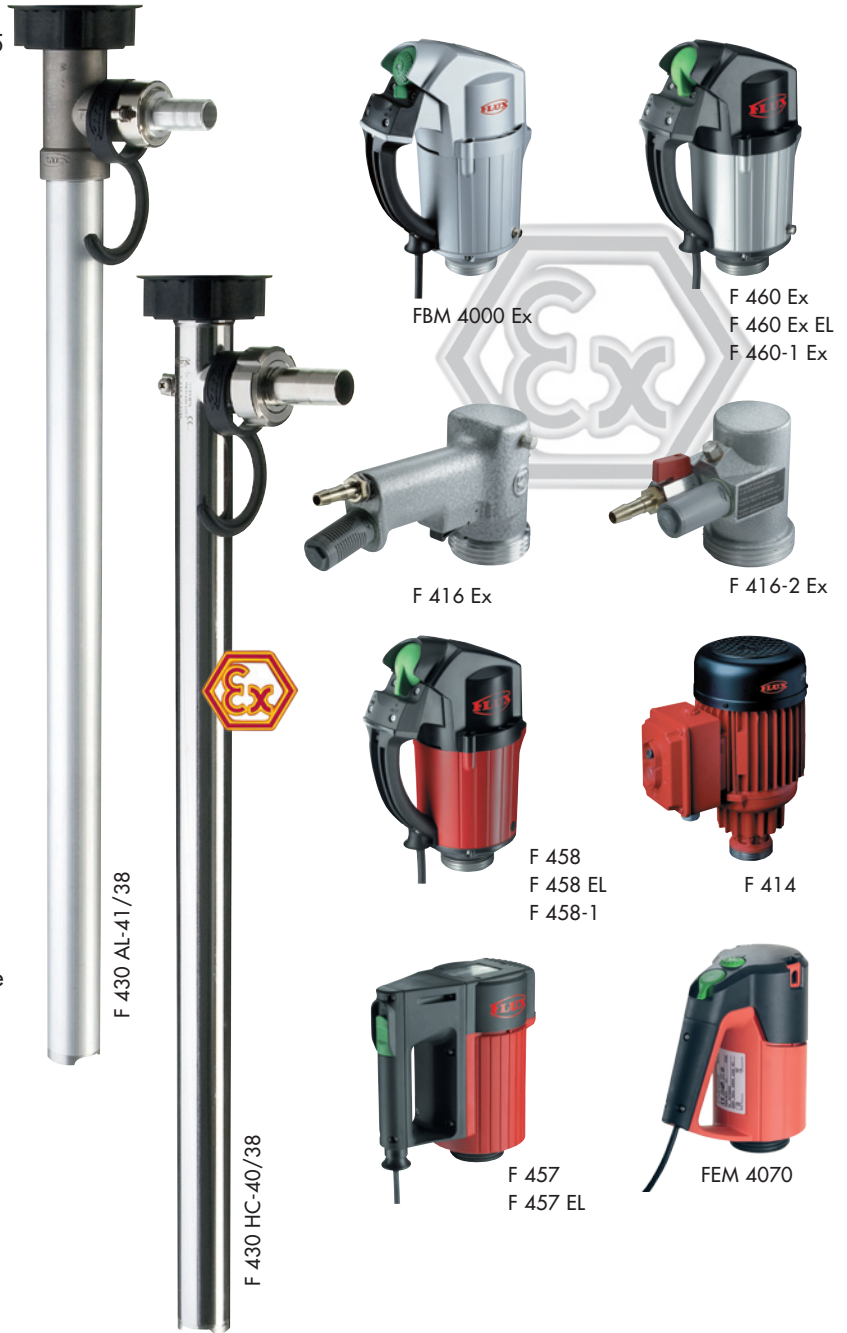
FLUX drum pumps in aluminium alloy AlMg5 are suitable for transferring neutral, hardly flammable liquids.

FLUX drum 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 drums or containers. In addition, hastelloy C is chemically resistant to most of acids and alkalis, allowing the most universal use of this pump type.

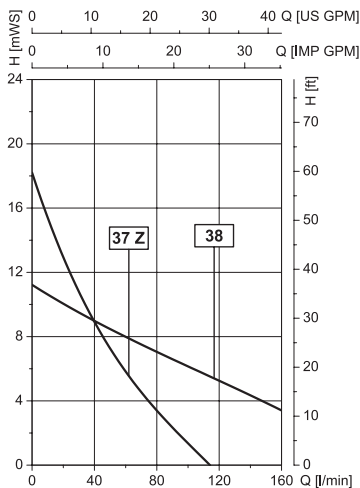
**With the help of the performance charts you can compare the delivery rates achieved by each pump model powered by the various FLUX motors. Detailed motor data are shown on pages 21 to 29.**

When using the pump with a discharge hose (of approx. 6,5 ft) and a quick action tap, the delivery rate will be approx. 18 GPM. Depending on the motor type a 55 GAL drum can be emptied within 3 – 4 minutes.

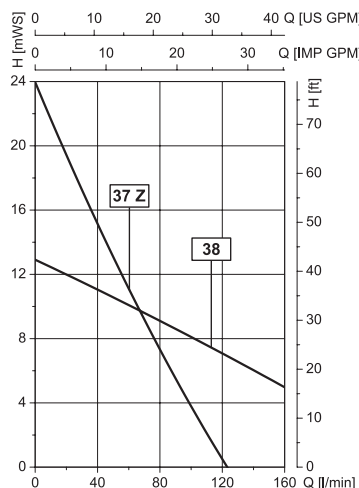
The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.



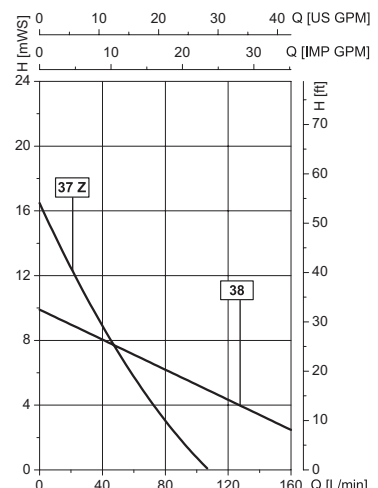
motor FBM 4000 Ex



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



motor FEM 4070



**Drum Pump (tube set) in Aluminium Alloy, thread on outlet G 1¼ A (BSP 1¼" 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, impeller in ETFE		
Max. temperature	212 °F (for short periods)		
Outer-Ø	1 19/32"	1 19/32"	2"
<b>Part No. / Weight</b>			
Immersion length 27"	<b>430 10 107 / 2,64 lbs</b>	<b>430 10 407 / 2,64 lbs</b>	<b>430 10 307 / 3,30 lbs</b>
Immersion length 39"	<b>430 10 110 / 3,30 lbs</b>	<b>430 10 410 / 3,30 lbs</b>	<b>430 10 310 / 3,96 lbs</b>
Immersion length 47"	<b>430 10 112 / 3,74 lbs</b>	<b>430 10 412 / 3,74 lbs</b>	<b>430 10 312 / 4,63lbs</b>

Pump models in immersion lengths of 8 – 78" (in steps of 4") on request.

**Drum pump (tube set) in Hastelloy C, thread on outlet G 1¼ A, (BSP 1¼" 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, impeller in ETFE
Max. temperature	248 °F
Outer-Ø	1 1/16"
<b>Part No. / Weight</b>	
Immersion length 27"	<b>430 30 107 / 5,07 lbs</b>
Immersion length 39"	<b>430 30 110 / 6,61 lbs</b>
Immersion length 47"	<b>430 30 112 / 7,71 lbs</b>

Other immersion lengths on request.



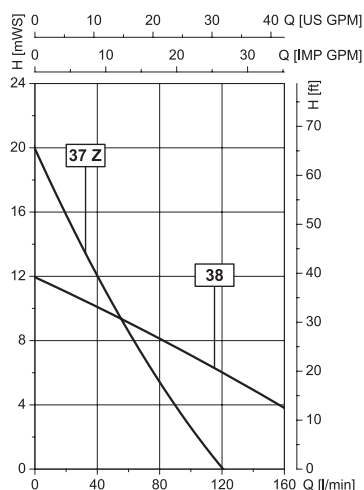
This pump version will achieve a higher delivery rate!



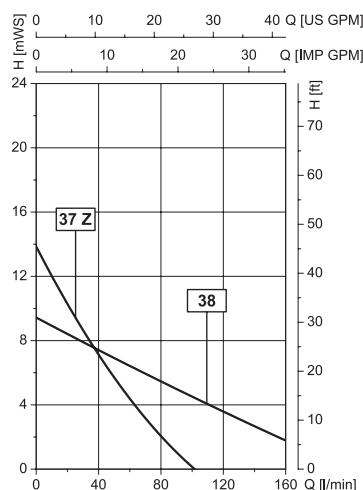
This pump version will achieve a higher delivery head!

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

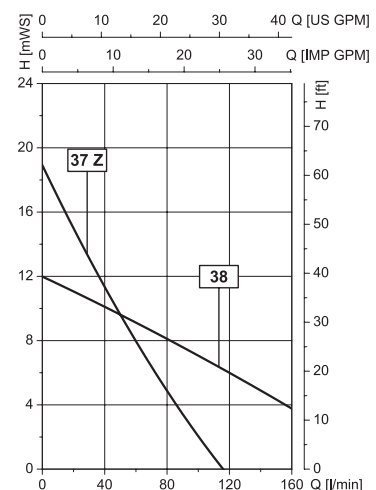
**motor F 457 or F 457 EL**



**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 (68 °F) and a voltage of 230 Volt. Curves with a voltage of 120 Volt / 60 Hz are similar.

# FLUX drum pumps in polypropylene

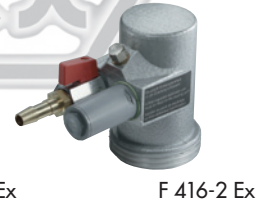
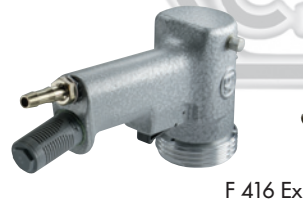
FLUX drum pumps in polypropylene are used for chemically and aggressive liquids such as acids and alkalis, together with most thin and neutral liquids.

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. 6,5 ft) and a quick action tap, the delivery rate will be approx. 18 GMP.

Depending on the motor type a 55 GAL drum 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.

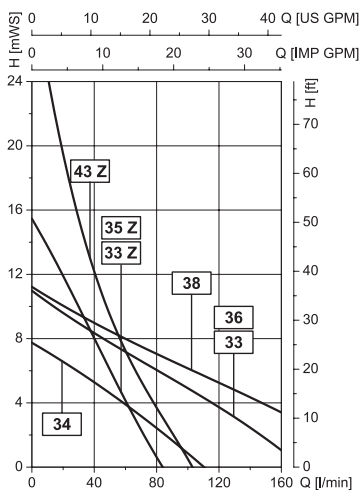


↙ This pump version will achieve a higher delivery rate!

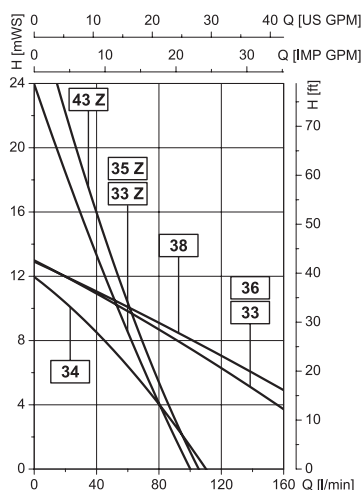
↗ This pump version will achieve a higher delivery head!

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

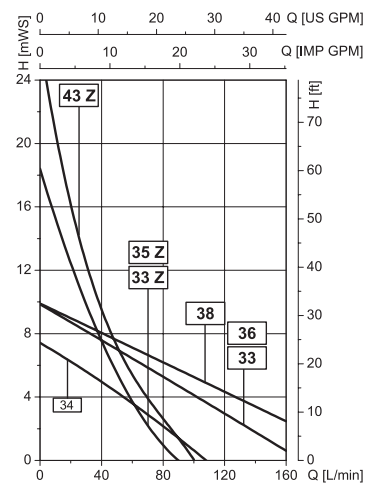
motor FBM 4000 Ex



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



motor FEM 4070



**Drum 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, impeller in ETFE, o-ring in FKM			
Max. temperature	122 °F			
Outer-Ø	1 19/32"	1 19/32"	2"	2"
<b>Part No. / Weight</b>				
Immersion length 27"	424 40 007 / 1,76 lbs	424 40 107 / 1,76 lbs	424 40 207 / 1,98 lbs	424 40 307 / 1,98 lbs
Immersion length 39"	424 40 010 / 2,20 lbs	424 40 110 / 2,20 lbs	424 40 210 / 2,86 lbs	424 40 310 / 2,86 lbs
Immersion length 47"	424 40 012 / 2,64 lbs	424 40 112 / 2,64 lbs	424 40 212 / 3,53 lbs	424 40 312 / 3,53 lbs

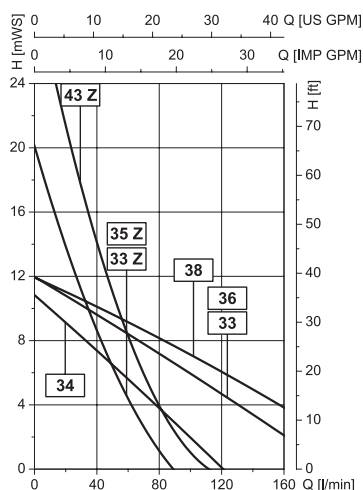
Type/Curve	F 425 PP-50/34	F 426 PP-50/33
Version	99,98 % drum emptying	mixing pump
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM	
Material	shaft in Hastelloy C, seal in FKM, impeller in ETFE	
Max. temperature	122 °F	
Outer-Ø	2"	2"
<b>Part No. / Weight</b>		
Immersion length 27"	425 40 048 / 3,53 lbs	-
Immersion length 39"	425 40 051 / 4,41 lbs	426 40 001 / 3,97 lbs
Immersion length 47"	425 40 053 / 5,07 lbs	426 40 002 / 4,63 lbs

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, impeller in ETFE			
Max. temperature	122 °F			
Outer-Ø	1 19/16"	1 19/16"	2"	2"
<b>Part No. / Weight</b>				
Immersion length 27"	430 40 107 / 2,42 lbs	430 40 407 / 2,42 lbs	430 40 207 / 2,42 lbs	430 40 307 / 2,42 lbs
Immersion length 39"	430 40 110 / 3,08 lbs	430 40 410 / 3,08 lbs	430 40 210 / 3,30 lbs	430 40 310 / 3,30 lbs
Immersion length 47"	430 40 112 / 3,53 lbs	430 40 412 / 3,53 lbs	430 40 212 / 3,75 lbs	430 40 312 / 3,75 lbs

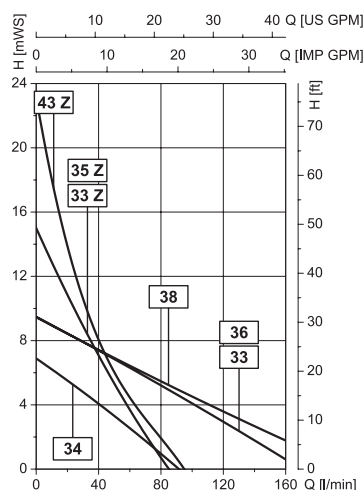
**Accessories** Hose connection complete with nut G 1¼ DN 19 **Part No. 959 04 053** DN 25 **Part No. 959 04 052**

Pump models in immersion lengths of 8 – 118" mm (in steps of 4") on request.

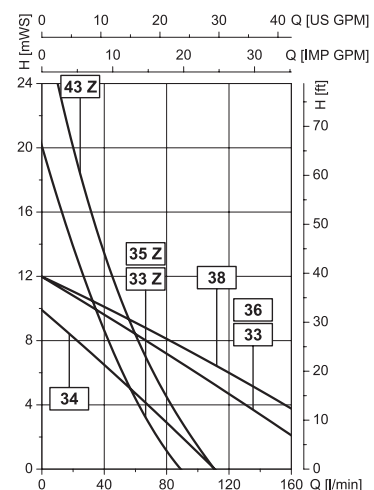
**motor F 457 or F 457 EL**



**motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL**



**motor F 458-1 or F 460-1 Ex**



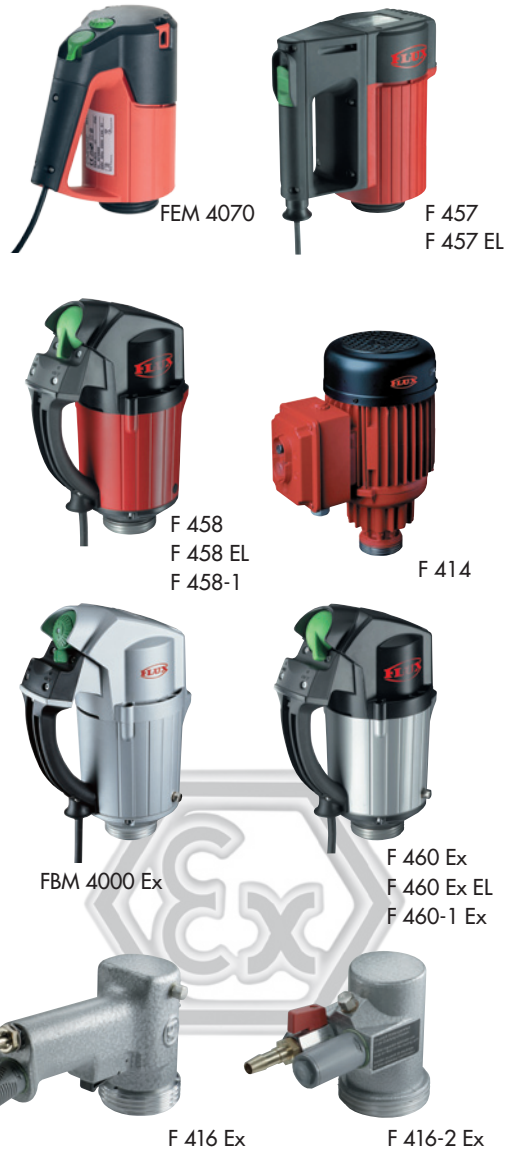
Values ± 10% with water (68 °F) and a voltage of 230 Volt. Curves with a voltage of 120 Volt / 60 Hz are similar.

# FLUX drum pumps in polyvinylidene fluoride

FLUX drum 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. 6,5 ft) and a quick action tap, the delivery rate will be approx. 18 GPM. Depending on the motor type a 55 GAL drum can be emptied within 3 – 4 minutes. The delivery rates shown in the performance charts are obtained at the outlet connection of the pump.

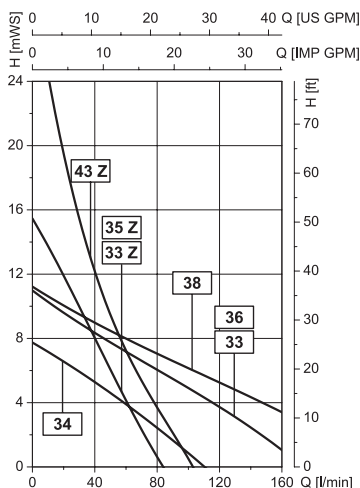


↙ This pump version will achieve a higher delivery rate!

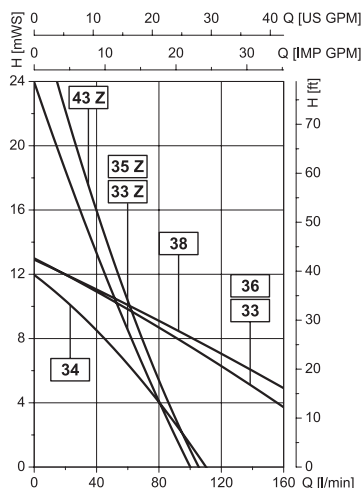
↗ This pump version will achieve a higher delivery head!

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

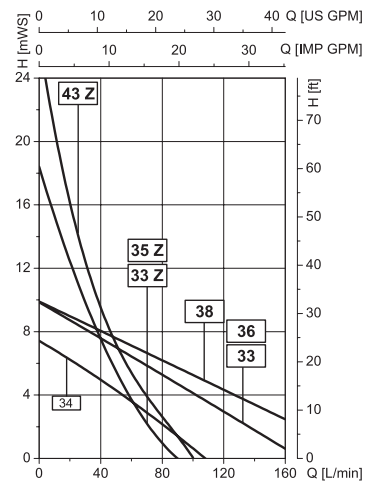
motor FBM 4000 Ex



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



motor FEM 4070





**Drum 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		
Material	shaft in Hastelloy C, impeller in ETFE, o-ring in FKM		
Max. temperature	176 °F		
Outer-Ø	1 19/32"	1 19/32"	2"
<b>Part No. / Weight</b>			
Immersion length 27"	<b>424 60 007 / 2,42 lbs</b>	<b>424 60 107 / 2,42 lbs</b>	<b>424 60 207 / 3,08 lbs</b>
Immersion length 39"	<b>424 60 010 / 3,08 lbs</b>	<b>424 60 110 / 3,08 lbs</b>	<b>424 60 210 / 4,18 lbs</b>
Immersion length 47"	<b>424 60 012 / 3,53 lbs</b>	<b>424 60 112 / 3,53 lbs</b>	<b>424 60 212 / 4,85 lbs</b>

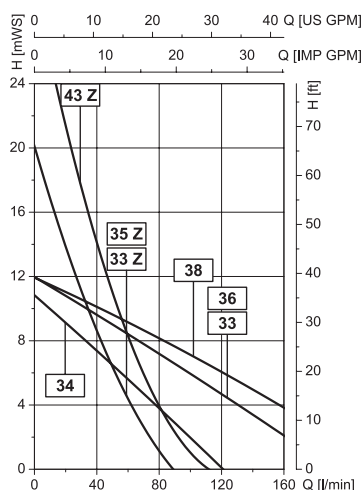
  

Type/Curve	F 430 PVDF-40/33	F 430 PVDF-40/33 Z	F 430 PVDF-50/43 Z	F 430 PVDF-50/38
Version	↙↘	↙↘	↙↘	↙↘
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM			
Material	shaft in Hastelloy C, seal in FKM, impeller in ETFE			
Max. temperature	176 °F			
Outer-Ø	1 1/16"	1 1/16"	2"	2"
<b>Part No. / Weight</b>				
Immersion length 27"	<b>430 60 107 / 3,08 lbs</b>	<b>430 60 407 / 3,08 lbs</b>	<b>430 60 207 / 3,08 lbs</b>	<b>430 60 307 / 3,75 lbs</b>
Immersion length 39"	<b>430 60 110 / 3,75 lbs</b>	<b>430 60 410 / 3,75 lbs</b>	<b>430 60 210 / 3,75 lbs</b>	<b>430 60 310 / 4,63 lbs</b>
Immersion length 47"	<b>430 60 112 / 4,41 lbs</b>	<b>430 60 412 / 4,41 lbs</b>	<b>430 60 212 / 4,41 lbs</b>	<b>430 60 312 / 5,51 lbs</b>

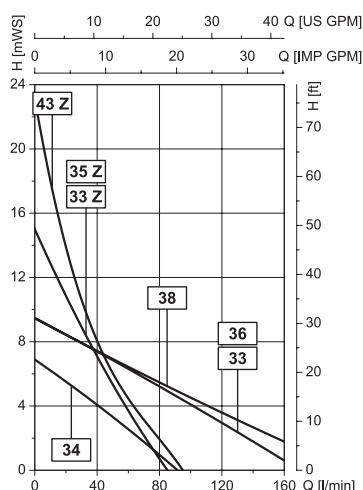
**Accessories** Hose connection with nut G 1¼ DN 19 **Part No. 959 04 101** DN 25 **Part No. 959 04 102**

Pump models in immersion lengths of 8 – 118" (in steps of 4") on request.

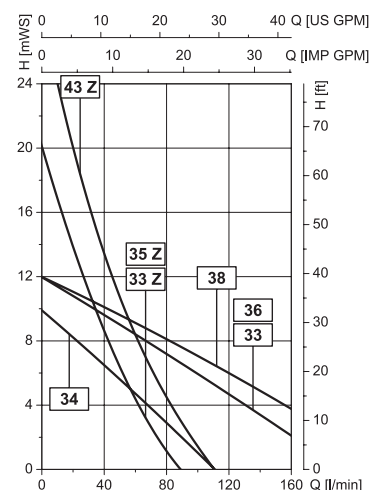
**motor F 457 or F 457 EL**



**motor F 458, F 458 EL, F 460 Ex or F 460 Ex EL**



**motor F 458-1 or F 460-1 Ex**



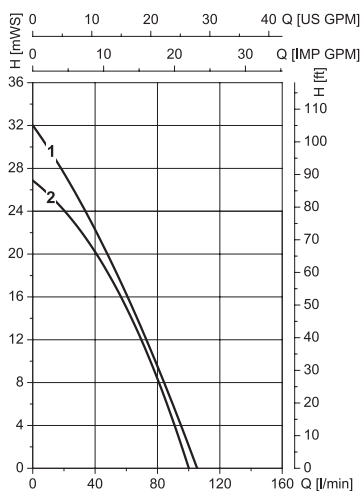
Values ± 10% with water (68 °F) and a voltage of 230 Volt. Curves with a voltage of 120 Volt / 60 Hz are similar.

# 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 250 GAL-Containers, this pump provides the high safety and ease of handling you do appreciate on FLUX drum 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 28 GPM and a maximum delivery head of 105 ft 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 (68 °F) and a voltage of 230 Volt. Curves with a voltage of 120 Volt / 60 Hz are similar.



## Container pump (tube set) in Polypropylene, thread on outlet G 1¼ A (BSP 1¼" male), motors on page 21

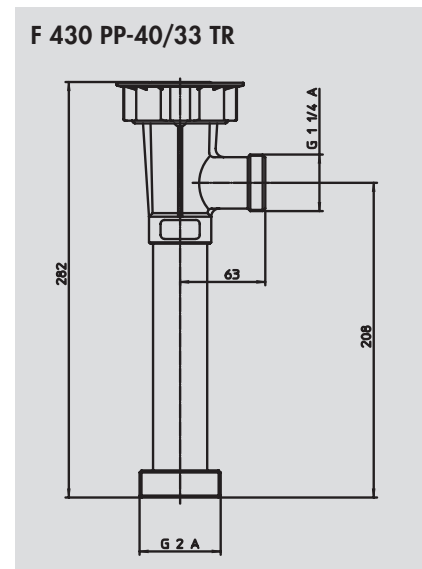
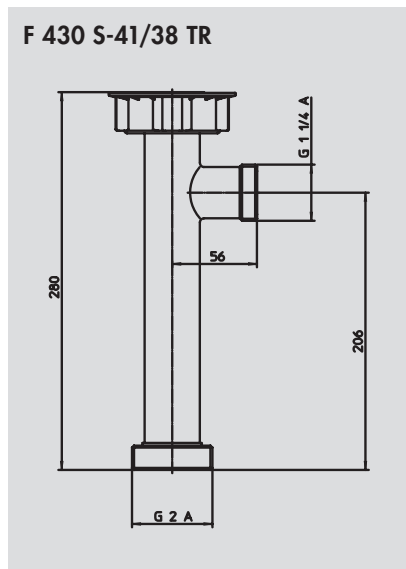
Type	F 430 PP-100/50
Version	with impeller
Seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM
Material	shaft in Hastelloy C, seal in FKM, impeller in Polypropylene
Max. temperature	122 ° F
Outer-Ø	4" on the pump body
Part No./Weight	
Immersion length 39"	430 40 510 / 5 lbs
Immersion length 47"	430 40 512 / 5 lbs
Immersion length 60"	430 40 515 / 6 lbs

**Accessories** Hose connection with nut G 1¼ DN 25 **Part No. 959 04 052** DN 32 **Part No. 959 04 054**

centrifugal pumps for horizontal and vertical use		
type	<b>F 430 S-41/38 TR</b>	<b>F 430 PP-40/33 TR</b>
seal type	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM	mechanical seal in ceramic oxide, PTFE/carbon, o-rings in FKM
material	stainless steel 1.4571, seal in FKM, impeller in ETFE	polypropylene, shaft in hastelloy C, seal in FKM, impeller in ETFE
dimensions	see dimensional drawing	
max. temperature	212 °F	122 °F
outer-Ø	1 13/32"	1 7/16"
part no. / weight	<b>430 20 002 / 3 lbs</b>	<b>430 40 002 / 1,3 lbs</b>
<b>hose connections complete for inlet</b>		
material	stainless steel with brass nut G 2 female	polypropylene with nut G 2 female
DN 32	<b>959 04 059</b>	<b>959 04 010</b>
DN 38	<b>959 04 060</b>	<b>959 04 011</b>

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 pump 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 drum 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.
<b>quick action coupling SSK 400 complete</b>	consisting of threaded ring (motor side) and clamping element (pump side)	<b>001 10 802</b>
or as individual parts:		
<b>threaded ring</b>	to be screwed onto the drive motor	<b>001 10 800</b>
<b>clamping element</b>	to be mounted onto the pump tube set	<b>001 10 804</b>





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 10 ATEX 1054 X.

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

Electronic monitoring of speed, voltage and temperature.

An 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 2G Ex d e IIC T6 / T5 Gb, protection class I. Jet-proof according to IP 55. With power supply cable, 16" 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	13,66 lbs	400 01 000

## Accessories

		part no.	
		System CEAG	System Stahl
CEE Explosion-proof plug	explosion-proof to II 2 G Ex de (ia) II C T6 / T5, 3-pole, 220-240 Volt, jet-proof to IP 55	937 01 030	937 01 018
CEE Explosion-proof socket	explosion-proof to II 2 G Ex de (ia) II C T6 / T5, 3-pole, 220-240 Volt, jet-proof to IP 55	937 50 041	937 50 022
Earth (ground) wire with crocodile clip	13 ft long 6 ft long, reinforced version		931 90 023 931 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 10 ATEX 1053 X.

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.

120 V, 60 Hz version UL-listed, File No. E67399, class I, group C + D.



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

**Commutator motor**, explosion-proof to II 2 G Ex d e IIC T6 / T5 Gb, 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 novolt release, with power supply cable, 16" long, with safety plug (not explosion-proof). – 42, 24 and 12 volt version without plug.

Type	Capacity	Voltage	Frequency	Weight	Part No. Version	
					with variable speed control	without variable speed control
						
F 460 Ex UL	460 W	120 V	60 Hz	11,24 lbs	–	460 00 031
F 460 Ex	460 W	230 V	50 – 60 Hz	11,24 lbs	–	460 00 026
F 460 Ex	410 W	24 V	DC	11,24 lbs	–	460 00 003
F 460 Ex	230 W	12 V	DC	11,24 lbs	–	460 00 004
F 460 Ex EL	230 W	230 V	50 Hz	11,24 lbs	460 00 028	–
F 460-1 Ex UL	700 W	120 V	60 Hz	13,00 lbs	–	460 01 024
F 460-1 Ex	700 W	230 V	50 – 60 Hz	13,00 lbs	–	460 01 001
<b>Accessories</b>					<b>Part No.</b>	
<b>Earth (ground) wire with crocodile clip</b>	6 ft long, reinforced version 13 ft long				931 90 015 931 90 023	
<b>Carrying handle</b>	allowing easy immersion and removal of the pump in combination with commutator motors Type F 460 Ex, F 460 Ex EL, F 460-1 Ex or FBM 4000 Ex.				001 10 557	

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



# FLUX commutator motor F 458 in detail



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.

120 V, 60 Hz version approved to CSA standards, File No. LR 39984-7.



F 458 (pic)  
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 novolt release, power supply cable 16" long and safety plug. – 24 and 12 volt version without plug.

Type	Capacity	Voltage	Frequency	Weight	Part No. Version	
					with variable speed control	without variable speed control
F 458 CSA	460 W	120 V	60 Hz	11,24 lbs	–	458 00 026
F 458	460 W	230 V	50 – 60 Hz	11,24 lbs	–	458 00 025
F 458	410 W	24 V	DC	11,24 lbs	–	458 00 003
F 458	230 W	12 V	DC	11,24 lbs	–	458 00 004
F 458 EL	460 W	230 V	50 Hz	11,24 lbs	458 00 027	–
F 458-1 CSA	700 W	120 V	60 Hz	13,00 lbs	–	458 01 021
F 458-1	700 W	230 V	50 – 60 Hz	13,00 lbs	–	458 01 020
<b>Accessories</b>					<b>Part No.</b>	
Carrying handle	allowing easy immersion and removal of the pump in combination with commutator motors Type F 458, F 458 EL or F 458-1				001 10 557	

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.

# FLUX commutator motor F 457 in detail

The strongest drum pump motor with 800 watt. Collector motor in compact design with very good air cooling, low noise level and long service life. Optionally available with an integrated undervoltage trigger that prevents an uncontrolled start and therefore guarantees optimum safety.

The F 457 EL motor also has an easy to operate electronic speed setting to control the pumping volume.



F 457 (pict)  
F 457 EL

## Commutator motor F 457

double isolated according to protection class II, IP 24 splash-proof, with power supply cable, 16" 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
F 457	800 W	120 V	60 Hz	8,82 lbs	-	457 01 000
F 457 EL	800 W	120 V	60 Hz	8,82 lbs	457 01 001	-
F 457	800 W	230 V	50 - 60 Hz	8,82 lbs	-	457 01 037
F 457 EL	800 W	230 V	50 - 60 Hz	8,82 lbs	457 01 003	-

Other voltages and/or frequencies on request.

230 volt version, approved to VDE / GS standards.  
other voltages and/or frequencies on request.



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



# FLUX commutator motor FEM 4070 in detail



With progressively controllable speed for various pumping volumes and a concentrated power of 500 watt. It can be combined with all FLUX barrel pumps. The ergonomically shaped handle allows safe single-handed operation of the rotary switch to start the pump and the setting knob to adjust the speed. The following features are the FEM 4070 advantages:

- Optimum overload protection in all speed ranges
- With integrated undervoltage trigger to prevent an unintentional start after a temporary loss of power
- Integrated suspension option
- Compact design
- Low weight
- Low noise level
- Long service life



FEM 4070

## Commutator motor FEM 4070

double isolated according to protection class II, IP 24 splash-proof, with electronic and thermal overload protection, electronic adjustable power pack with 4 speed ranges, 16" cable and plug.

Type	Capacity	Voltage	Frequency	Weight	Part No. Version	
					with novolt release	without novolt release
FEM 4070	500 W	120 V	60 Hz	5,8 lbs	407 01 012	407 01 013
FEM 4070	500 W	230 V	50 - 60 Hz	5,8 lbs	407 01 023	-

230 volt version, approved to VDE / GS standards.



**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.



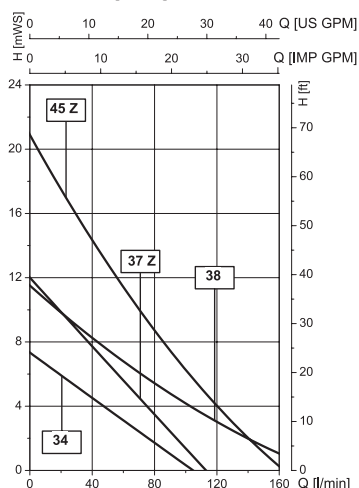
F 414

**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.

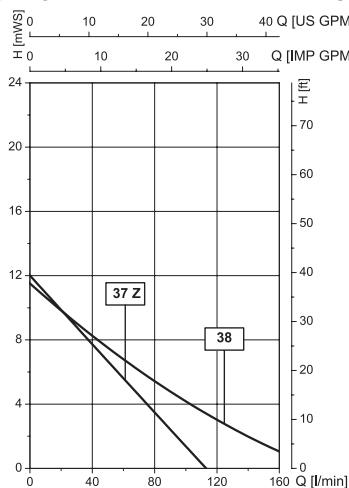
type	capacity	voltage	frequency	range of setting motor protection switch	weight	part no. version	
						with motor protection switch, mounted on the motor	without motor protection switch, with cable terminal box
F 414	0,55 kW	230/400 V	50 Hz	0,9 – 1,6 A	19/18 lbs	414 01 112	414 01 110
F 414	0,75 kW	230/400 V	50 Hz	1,5 – 2,5 A	25/23 lbs	414 01 137	414 01 136
F 414	1,1 kW	230/400 V	50 Hz	2,4 – 3,5 A	28/26 lbs	414 01 139	414 01 138

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	16" long, complete with Cekon plug, 5-pole	934 08 020
power supply cable	16" long, without plug	934 08 025
power supply cable	yard ware	934 08 901
cekon plug	5-pole	937 01 014

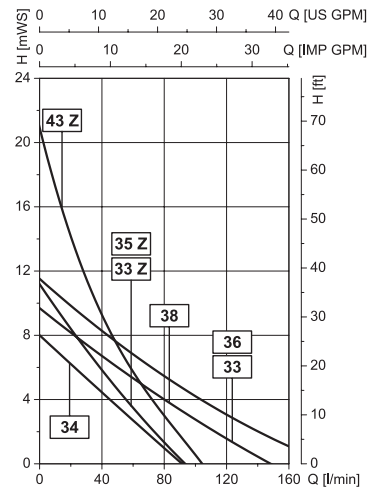
motor F 414 in combination with drum pump in stainless steel



motor F 414 in combination with drum pump in aluminium and hastelloy C



motor F 414 in combination with drum pump in PP and PVDF



In combination with air motors FLUX drum 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 D022-1.

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 86 psi operating pressure – 470 watt.

Power at 43 psi 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 c IIC T6, easily variable speed control by adjusting either the air supply pressure or volume, motor overload-proof, air connection G ¼ (BSP ¼" female).

type	capacity	operating pressure max.	air consumption	version	weight	part no.
F 416 Ex	470 W	86 psi	17 cfm	with trigger operated valve	3,10 lbs	416 00 122
F 416-1 Ex	470 W	86 psi	17 cfm	without valve	2,00 lbs	416 00 125
F 416-2 Ex	470 W	86 psi	17 cfm	with ball valve	2,20 lbs	416 00 030
<b>accessories:</b>						<b>part no.</b>
<b>filter-regulator lubricator unit</b>	consisting of water separator, pressure gauge and lubricator. Thread on inlet and outlet G ¼ (BSP ¼" female)					001 10 100
<b>compressed air hose</b>	DN 10, electrically conductive (blue)					001 10 098
<b>hose coupling</b>	brass, spring-actuated, with hose nozzle DN 10 for compressed air hose					959 13 066
<b>nipple</b>	brass, DN 10 – G ¼ A (BSP ¼" male) for hose coupling					959 13 065
<b>hose nozzle</b>	brass, DN 10 – G ¼ A (BSP ¼" male) for compressed air hose					959 05 022
<b>earth (ground) wire with crocodile clip</b>	20 ft long 9,8 ft long, reinforced version					931 90 023 931 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* GPM	Delivery head** ft	Viscosity max. cP	Delivery rate* GPM	Delivery head** ft	Viscosity max. cP	Delivery rate* GPM	Delivery head** ft	Viscosity max. cP	
F 430 S-41/38	58	36	800	53	31	800	58	39	700	
F 430 S-41/37 Z	29	57	1000	26	46	1000	30	62	900	
F 430 S-50/38	58	36	800	53	31	800	58	39	700	
F 430 S-50/45 Z	32	75	800	34	62	900	38	82	900	
F 424 S-43/38	58	36	800	53	31	800	58	39	700	
F 424 S-43/37 Z	29	57	1000	26	46	1000	30	62	900	
F 424 S-50/45 Z	32	75	800	34	62	900	38	82	900	
F 425 S-41/34	29	26	800	30	26	800	30	33	900	
F 426 S-41/38	58	36	800	53	31	800	58	39	700	
F 427 S3-43/38	58	36	800	53	31	800	58	39	700	
F 430 AL-41/38	58	36	800	53	31	800	58	39	700	
F 430 AL-41/37 Z	29	57	1000	26	46	1000	30	62	800	
F 430 AL-50/38	58	36	800	53	31	800	58	39	700	
F 430 HC-40/38	58	36	800	53	31	800	58	39	700	
F 430 PP/PVDF-40/33	42	34	800	45	31	800	50	39	900	
F 430 PP/PVDF-40/33 Z	22	51	1000	22	49	1000	24	66	900	
F 430 PP/PVDF-50/38	58	36	800	53	31	800	58	39	700	
F 430 PP/PVDF-50/43 Z	28	98	1000	25	75	1000	29	92	900	
F 424 PP/PVDF-41/36	46	36	800	45	31	800	50	39	900	
F 424 PP/PVDF-41/35 Z	22	51	1000	22	49	1000	24	66	900	
F 424 PP/PVDF-50/38	58	36	800	53	31	800	58	39	700	
F 424 PP-50/43 Z	33	98	1000	25	75	1000	29	92	900	
F 425 PP-50/34	29	26	800	24	23	1000	29	33	900	
F 426 PP-50/33	42	34	800	45	31	800	50	39	900	

Values ± 10 % with water (68 °F) and a voltage of 230 Volt.



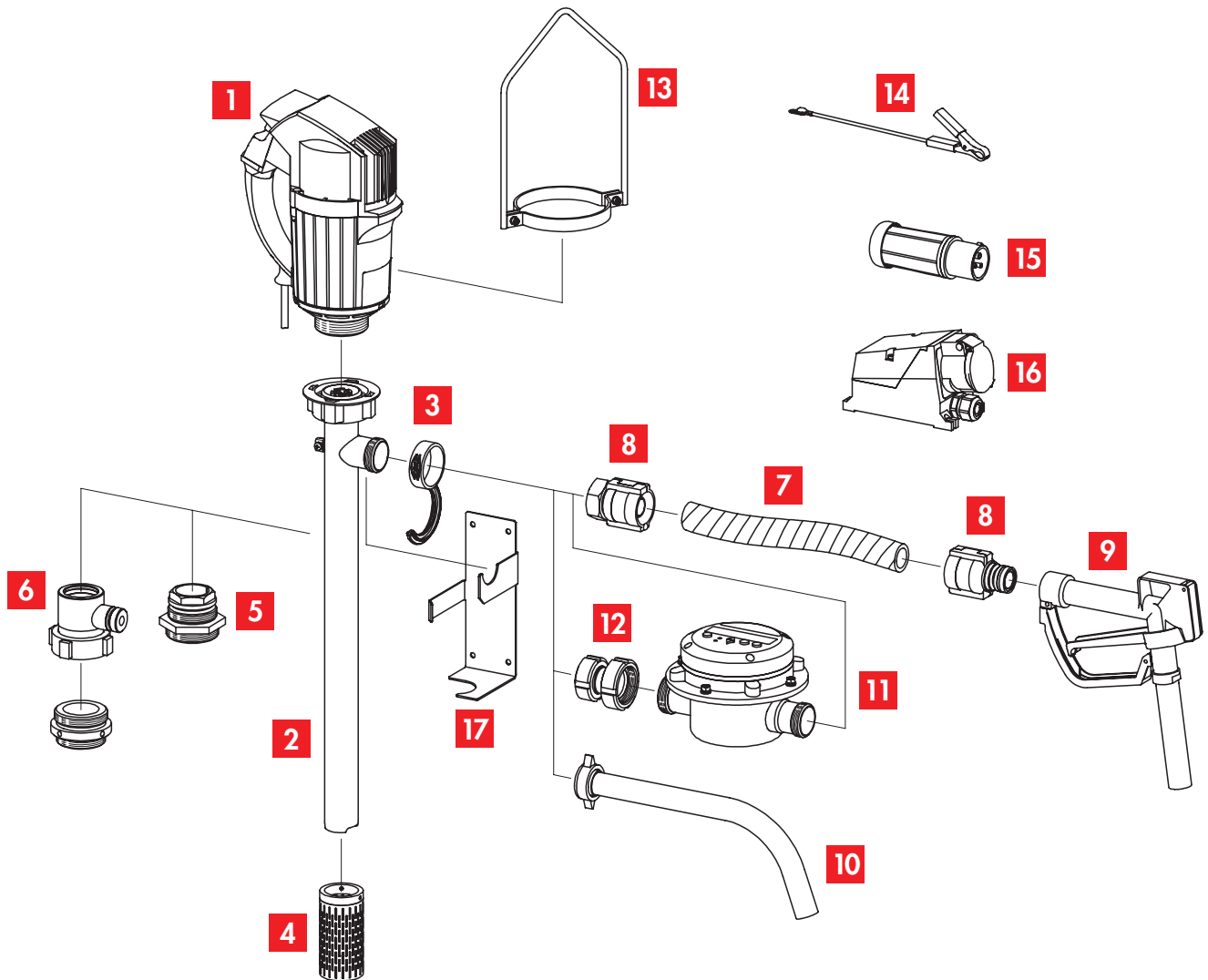
	F 414			F 416 Ex	F 416-1 Ex F 416-2 Ex		FEM 4070			F 457	F 457 EL	
	Delivery rate* GPM	Delivery head** ft	Viscosity max. cP	Delivery rate* GPM	Delivery rate** ft	Viscosity max. cP	Delivery rate* GPM	Delivery head** ft	Viscosity max. cP	Delivery rate* GPM	Delivery head** ft	Viscosity max. cP
	49	36	900	63	43	1000	57	33	600	58	39	800
	30	39	1000	32	79	1200	28	52	800	32	66	1000
	49	36	900	63	43	1000	57	33	600	58	39	800
	42	69	1000	38	98	1200	-	-	-	40	85	900
	49	36	900	63	43	1000	57	33	600	58	39	800
	30	39	1000	32	79	1200	28	52	800	32	66	1000
	42	69	1000	38	98	1200	-	-	-	40	85	900
	26	23	1000	34	43	1200	28	24	800	32	36	900
	49	36	900	63	43	1000	57	33	600	58	39	800
	49	36	900	63	43	1000	57	33	600	58	39	800
	49	36	900	63	43	1000	57	33	600	58	39	800
	30	39	1000	32	79	1200	28	52	800	32	66	1000
	49	36	900	63	43	1000	57	33	600	58	39	800
	49	36	900	63	43	1000	57	33	600	58	39	800
	38	33	1000	54	43	1200	43	31	600	50	39	800
	24	36	1000	26	79	1200	22	59	600	24	66	1000
	49	36	900	63	43	1000	57	33	600	58	39	800
	28	69	1000	28	98	1200	26	85	800	29	98	900
	38	33	1000	54	43	1200	43	31	600	50	39	800
	24	36	1000	26	79	1200	22	59	800	24	66	1000
	49	36	900	63	43	1000	43	33	600	58	39	800
	28	69	1000	28	98	1200	26	85	800	29	98	900
	24	26	1000	29	39	1200	28	24	800	32	36	1000
	38	33	900	54	43	1200	43	31	800	50	39	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 drum 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 drum 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** drum 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

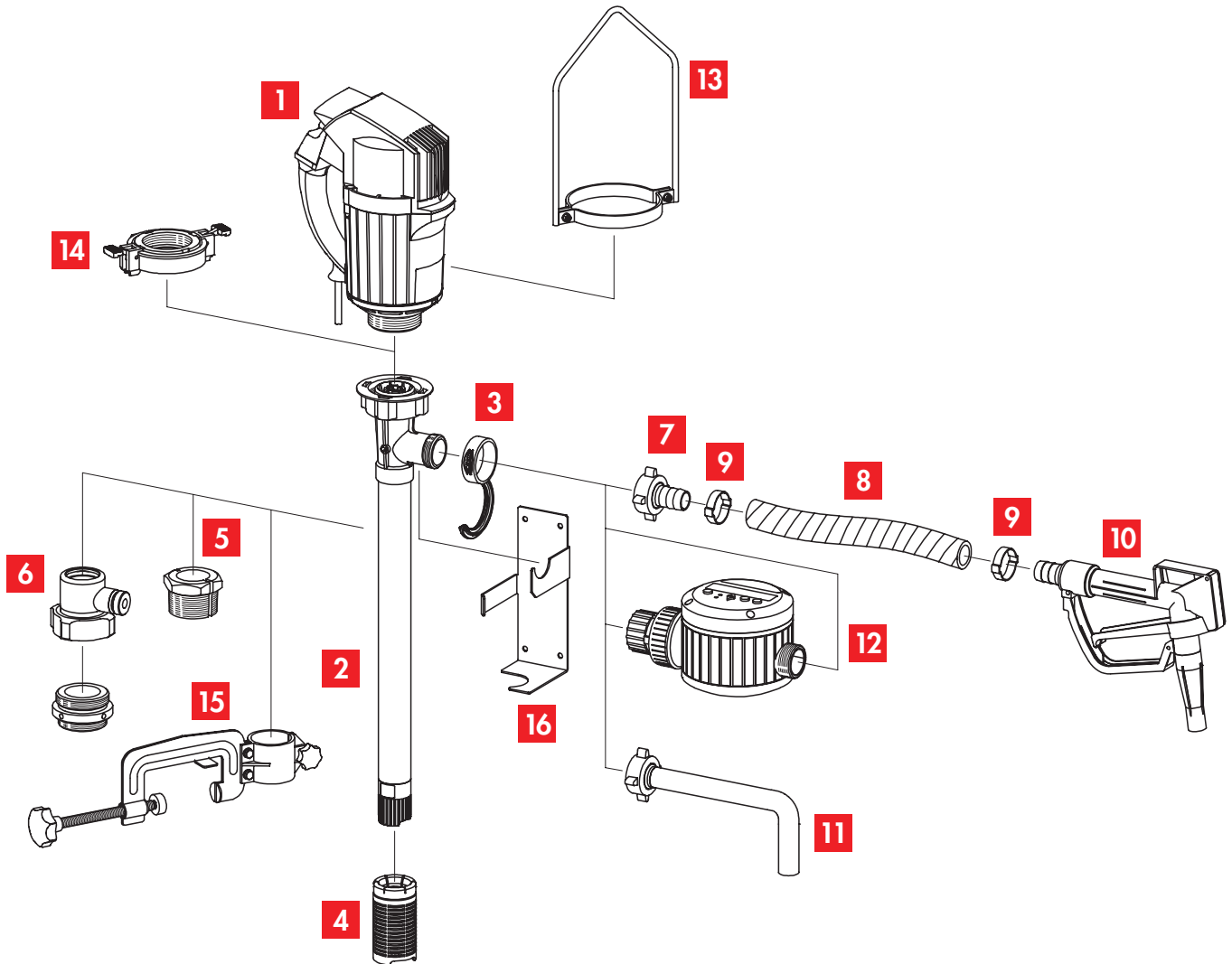
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\* On request also available completely mounted and tested for electrical conductivity.

# general view FLUX drum and container pump with accessories for non-flammable liquids



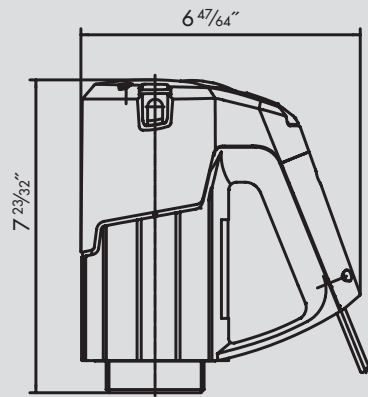
It is not merely the pump that makes the FLUX solution a perfect equipment. On this page you will find a general view on the FLUX drum pump together with all accessories for transferring non-flammable liquids. With all items in bold printing you will have a ready to use pump assembly, which may be completed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



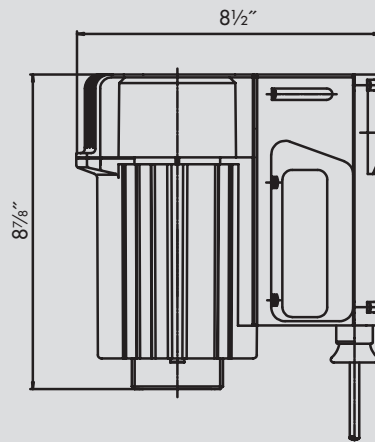
- |                                    |  |
|------------------------------------|--|
| <b>1</b> drive motor               | <b>9</b> hose clip                           |
| <b>2</b> drum pump (pump tube set) | <b>10</b> quick action tap                   |
| <b>3</b> FLUX-clip                 | <b>11</b> discharge spout                    |
| <b>4</b> suction strainer          | <b>12</b> liquid meter                       |
| <b>5</b> compression gland         | <b>13</b> carrying handle                    |
| <b>6</b> fume gland type FES       | <b>14</b> quick action coupling type SSK 400 |
| <b>7</b> hose connection           | <b>15</b> attachment clamp                   |
| <b>8</b> flexible hose*            | <b>16</b> wall bracket                       |

# dimensions FLUX motors

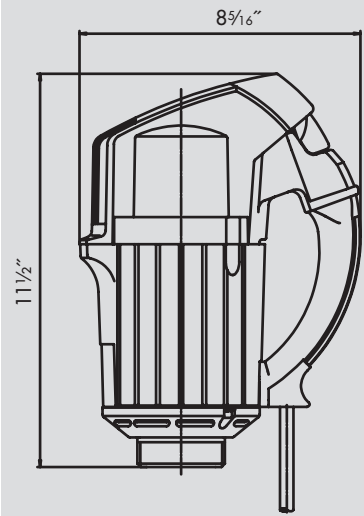
FEM 4070



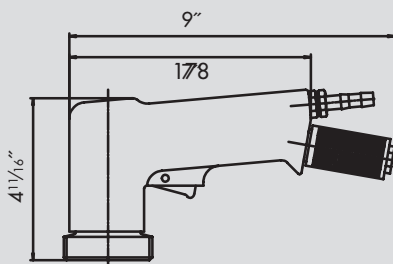
F 457/F 457 EL



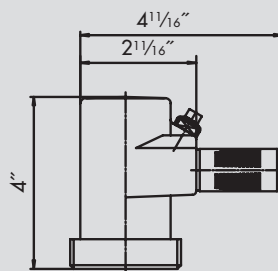
F 458/F 458 EL/F 458-1/  
F 460 Ex/F 460 Ex EL/  
F 460-1 Ex/FBM 4000 Ex



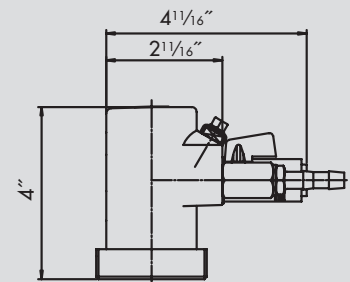
F 416 Ex



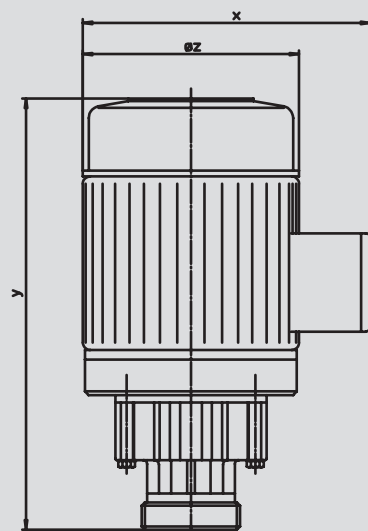
F 416-1 Ex



F 416-2 Ex



F 414

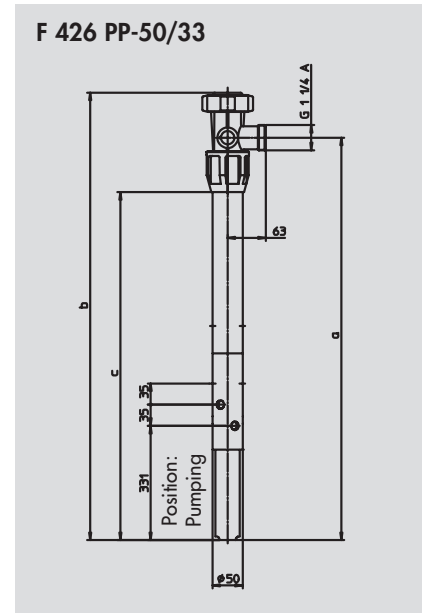
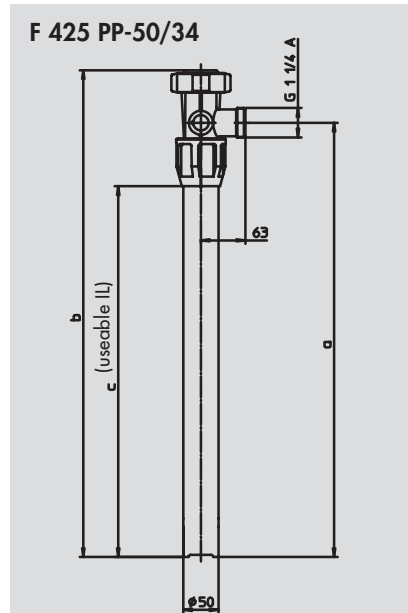
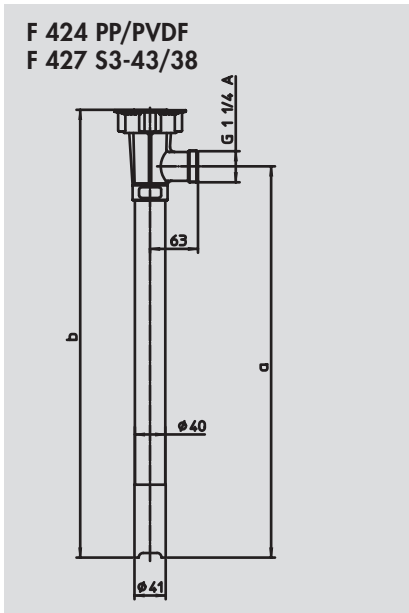


## type F 414

capacity	x	y	Øz
0,55 kW	8"	11"	5 19/32"
0,75 kW	8 1/2"	12"	6 3/16"
1,1 kW	8 1/2"	12"	6 3/16"

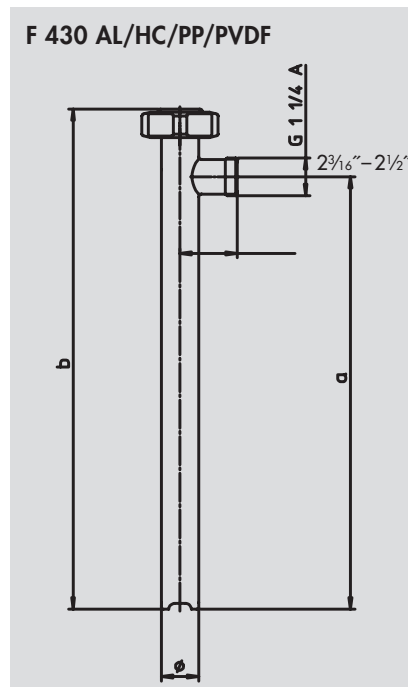
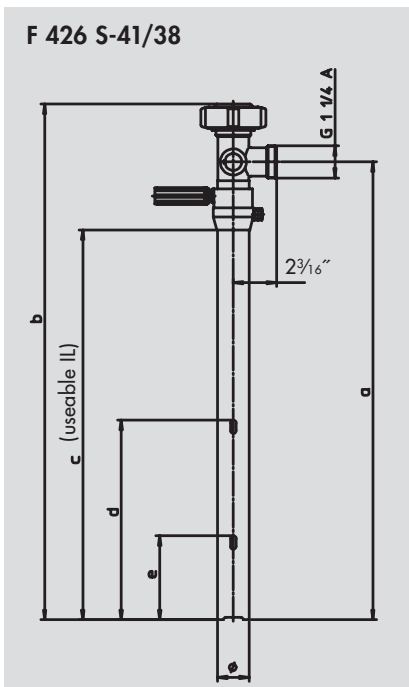
**Note:** with motor and pump assembled, the total length reduces by 5/8".





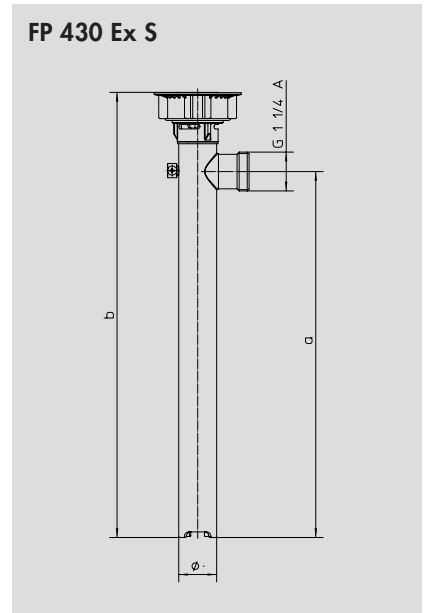
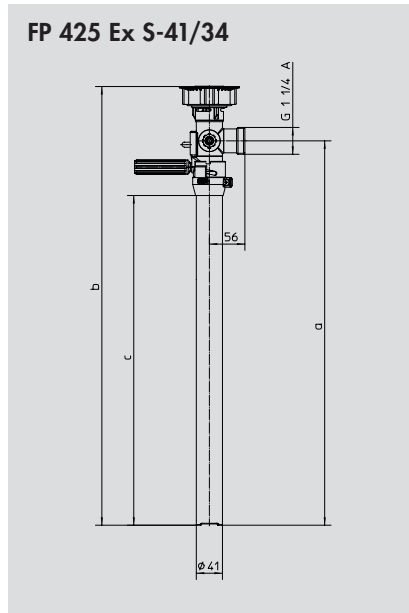
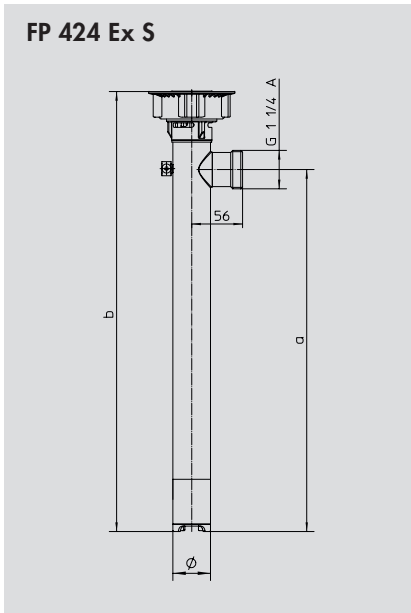
type	F 424 PP/PVDF and (S with Ø 2") F 427 S3			F 425 PP-50/34*				F 426 PP-50/33			
dimensions in mm	Ø	a	b	Ø	a	b	c	Ø	a	b	c
immersion length 27"	1 1/32" or 2"	28"	31"	2"	32"	35"	28 1/2"	-	-	-	-
immersion length 39"		40"	43"	2"	44"	47"	40 1/2"	2"	43 1/2"	46 1/2"	40"
immersion length 47"		48"	51"	2"	52"	55"	48 1/2"	2"	51 1/2"	54 1/2"	48"

\*With open valve dimensions a and b are increased by 0,3".



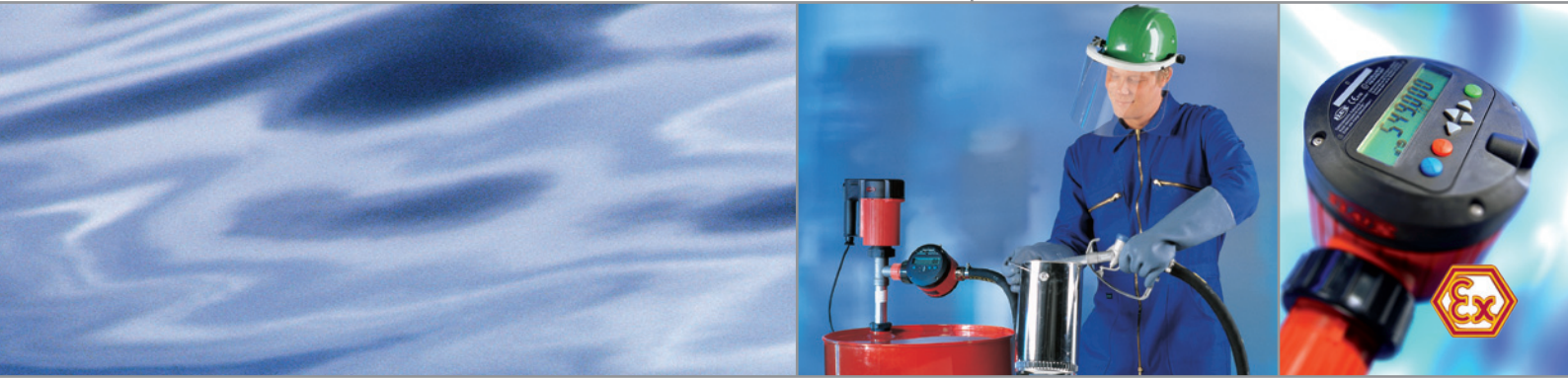
type	F 426 S-41/38						F 430 AL/HC/PP/PVDF (S with Ø 2")		
dimensions in mm	Ø	a	b	c	d	e	Ø	a	b
immersion length 27"	-	-	-	-	-	-	1 1/16" or 2"	28"	31"
immersion length 39"	1 1/32"	43 1/2"	46 1/2"	40"	14"	8"		40"	42 1/2"
immersion length 47"	1 1/32"	51 1/2"	54 1/2"	48"	14"	8"		47 1/2"	50 1/2"

# drum and container pumps with zone separation



type	FP 424 Ex S			FP 425 Ex S-41/38*				FP 430 Ex S		
	Ø	a	b	Ø	a	b	c	Ø	a	b
immersion length 27"	1 11/16" or 2"	27 1/2"	31"	1 19/32"	31 1/2"	35"	28 1/2"	1 19/32"	27 1/2"	31"
immersion length 39"		39"	42 1/2"	1 19/32"	43 1/2"	47"	40"	1 19/32"	39"	42 1/2"
immersion length 47"		47"	50 1/2"	1 19/32"	51 1/2"	54 1/2"	48"	1 19/32"	47"	50 1/2"

\*With open valve dimensions a and b are increased by 0,3"



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
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- highly flammable liquids
- universal applications
- 99,98 % drum emptying

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



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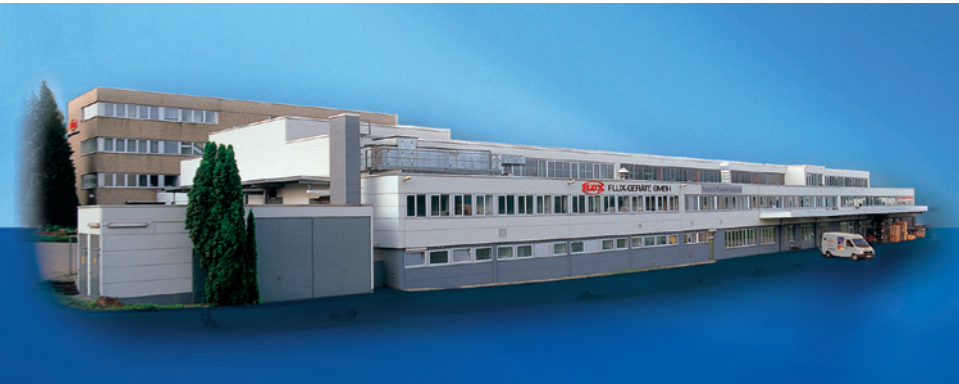
Flow meters based on the nutating disc (FMC) or oval rotor principle (FMO) offer the right solution for any application.

In combination with the FLUXTRONIC® evaluation electronics, filling and dosing processes of almost all fluids can be carried out with maximal precision and safety. This goes for a wide range of liquids from thin to highly viscous. In automatic operation, signals can be output for control purposes. In this way, the most varied processes can be controlled..

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FLUX is a world renowned brand for the highest standards in pump technology. It all began in 1950 with the invention of the electric barrel pump. Today, FLUX offers a wide range of products which can be configured individually. For example, FLUX pumps are used in the chemical and pharmaceutical industries, in machine and plant construction, as well as in electroplating, sewage treatment plants, and the food industry.

Whether as a stand-alone or a system solution, FLUX quality means long useful life, excellent economic efficiency and a maximum of safety.

Apart from the outstanding FLUX product quality and reliability, our clients appreciate the expertise and dedication of our employees to customer service.

Today, FLUX-GERÄTE GMBH supplies pumps to almost one hundred countries world wide.

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