

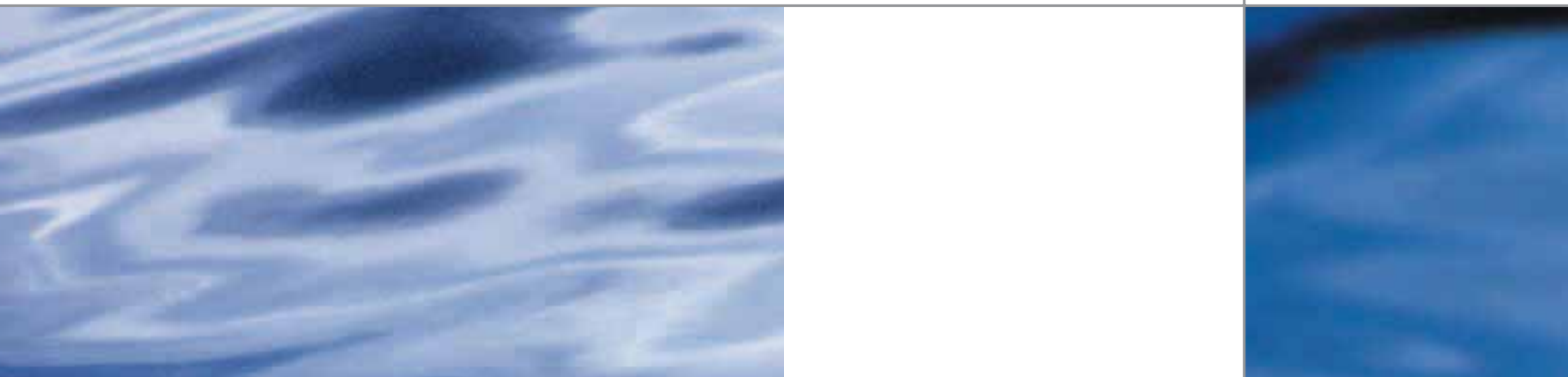


We deliver values.



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

The FLUX F 430 with mechanical seal

Flexible coupling
between motor and
pump

Steel cored inner tube
in PP and PVDF pro-
vides 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



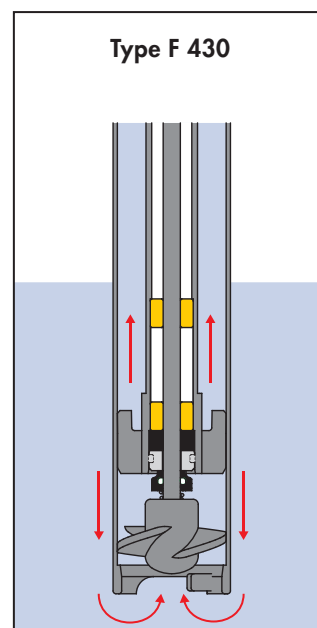
The pump must be used with many varying liquids, consequently the smallest residual left within the pump is unacceptable. You want to pump adhesive substances like paints or liquids which tend to crystallize or harden.

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.



FLUX drum pumps in polypropylene

FLUX drum 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 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.



F 430 PP-40/33



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



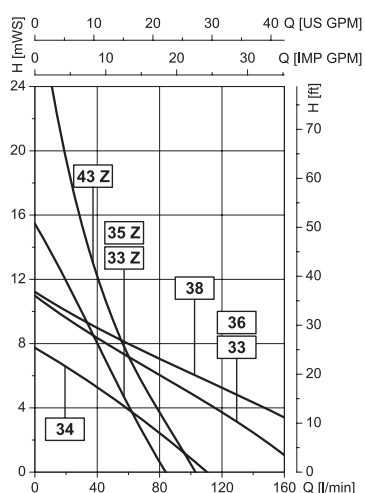
F 416-2 Ex

↑ This pump version will achieve a higher delivery rate!

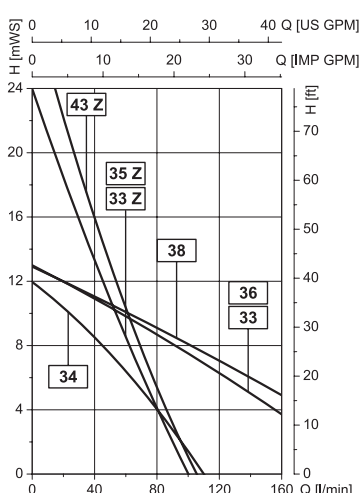
↑ This pump version will achieve a higher delivery head!

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

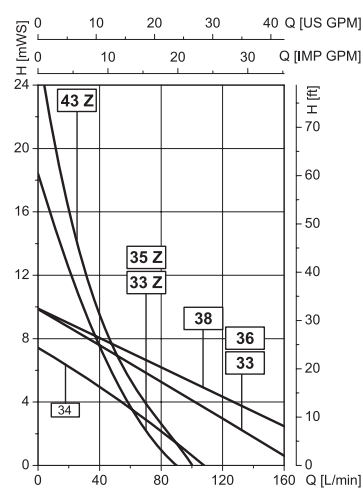
motor FBM 4000 Ex











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



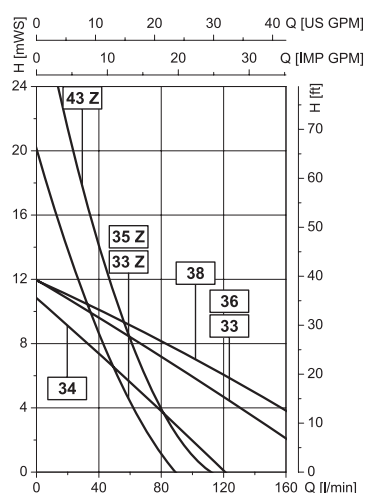
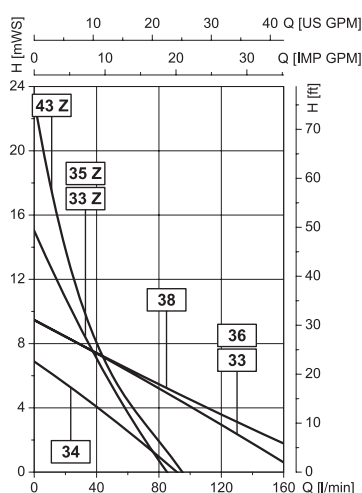
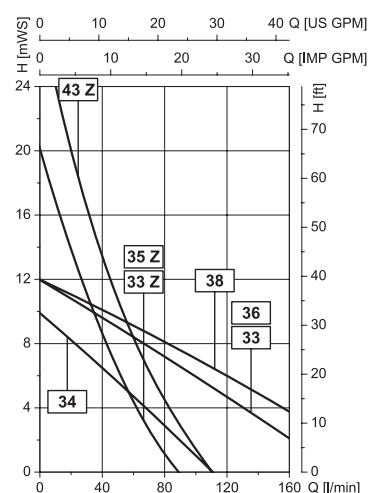
motor FEM 4070



drum pump (tube set) in polypropylene, thread on outlet G 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 | 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 kgv | 424 40 307 / 0,9 kg |
| Immersion length 1.000 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 1.200 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 % 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 | 50 °C | | | |
| outer-Ø | 50 mm | | 50 mm | |
| part no. / weight | | | | |
| immersion length 700 mm | 425 40 048 / 1,6 kg | | – | |
| immersion length 1.000 mm | 425 40 051 / 2,0 kg | | 426 40 001 / 1,8 kg | |
| immersion length 1.200 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, impeller 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 1.000 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 1.200 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 female DN 19 part no. 959 04 053 DN 25 part no. 959 04 052 | | | |

Pump models in immersion lengths of 200 – 3.000 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 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. 2 m) and a quick action tap, the delivery rate will be approx. 70 l/min.

Depending on the motor type a 200 l 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.



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



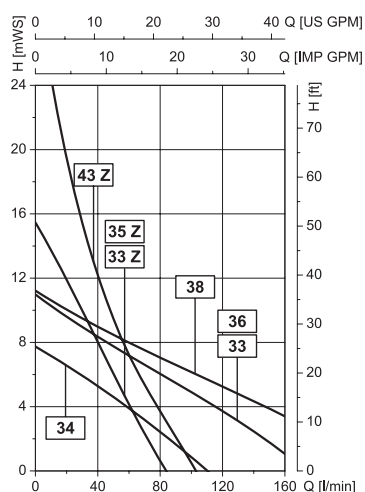
This pump version will achieve a higher delivery rate!



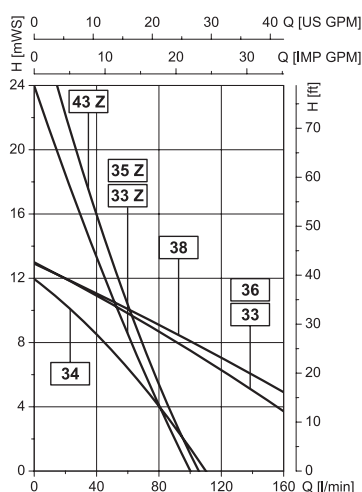
This pump version will achieve a higher delivery head!

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

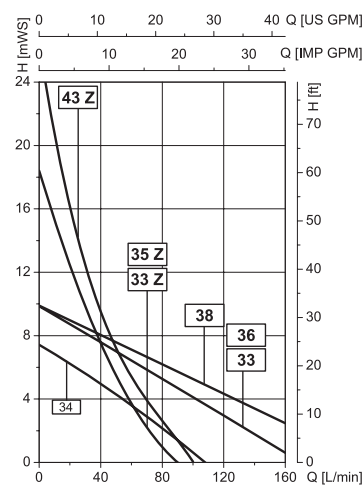
motor FBM 4000 Ex



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



motor FEM 4070



drum pump (tube set) in polyvinylidene fluoride, thread on outlet, G 1¼ male, motors on page 21

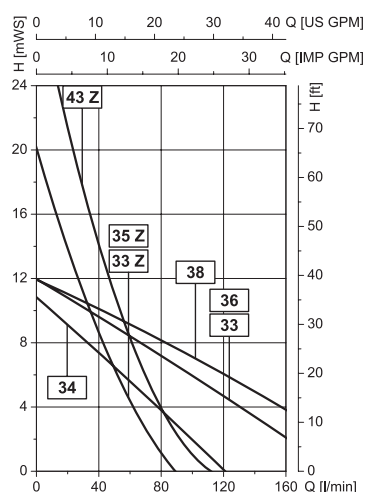
| type/curve | F 424 PVDF-41/36 | F 424 PVDF-41/35 Z | F 424 PVDF-50/38 |
|---------------------------|---|--------------------------|---------------------|
| version | | | |
| seal type | sealless within the liquid section | | |
| material | shaft in hastelloy C, impeller in ETFE, o-ring in FKM | | |
| 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 1.000 mm | 424 60 010 / 1,4 kg | 424 60 110 / 1,4 kg | 424 60 210 / 1,9 kg |
| immersion length 1.200 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, impeller 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 1.000 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 1.200 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 |

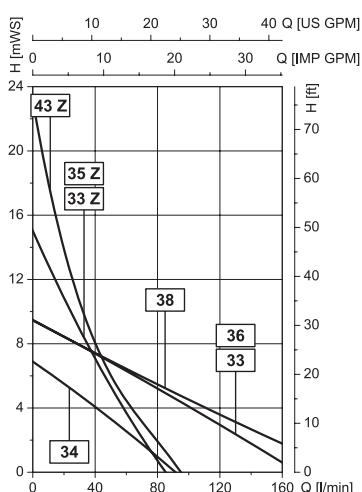
accessories hose connection with nut G 1¼ female DN 19 part no. 959 04 101 DN 25 part no. 959 04 102

Pump models in immersion lengths of 200 – 3.000 mm (in steps of 100 mm) on request.

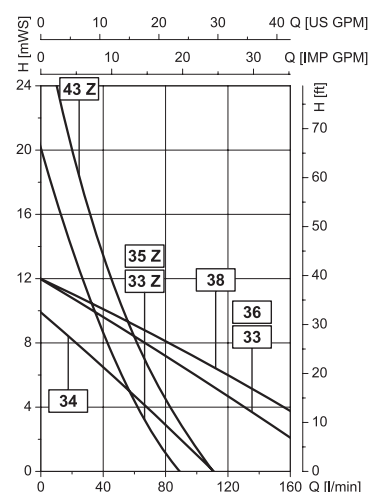
motor F 457 or F 457 EL



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.

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 | CC | 5,1 kg | – | – | 458 00 003 |
| F 458 | 230 W | 12 V | CC | 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.

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, 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 | without 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 | – | – |

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 |

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, 5 m cable and plug.

| type | capacity | voltage | frequency | weight | part no. version | |
|----------|----------|---------|-----------|--------|----------------------|-------------------------|
| | | | | | with no-volt release | without no-volt release |
| 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.

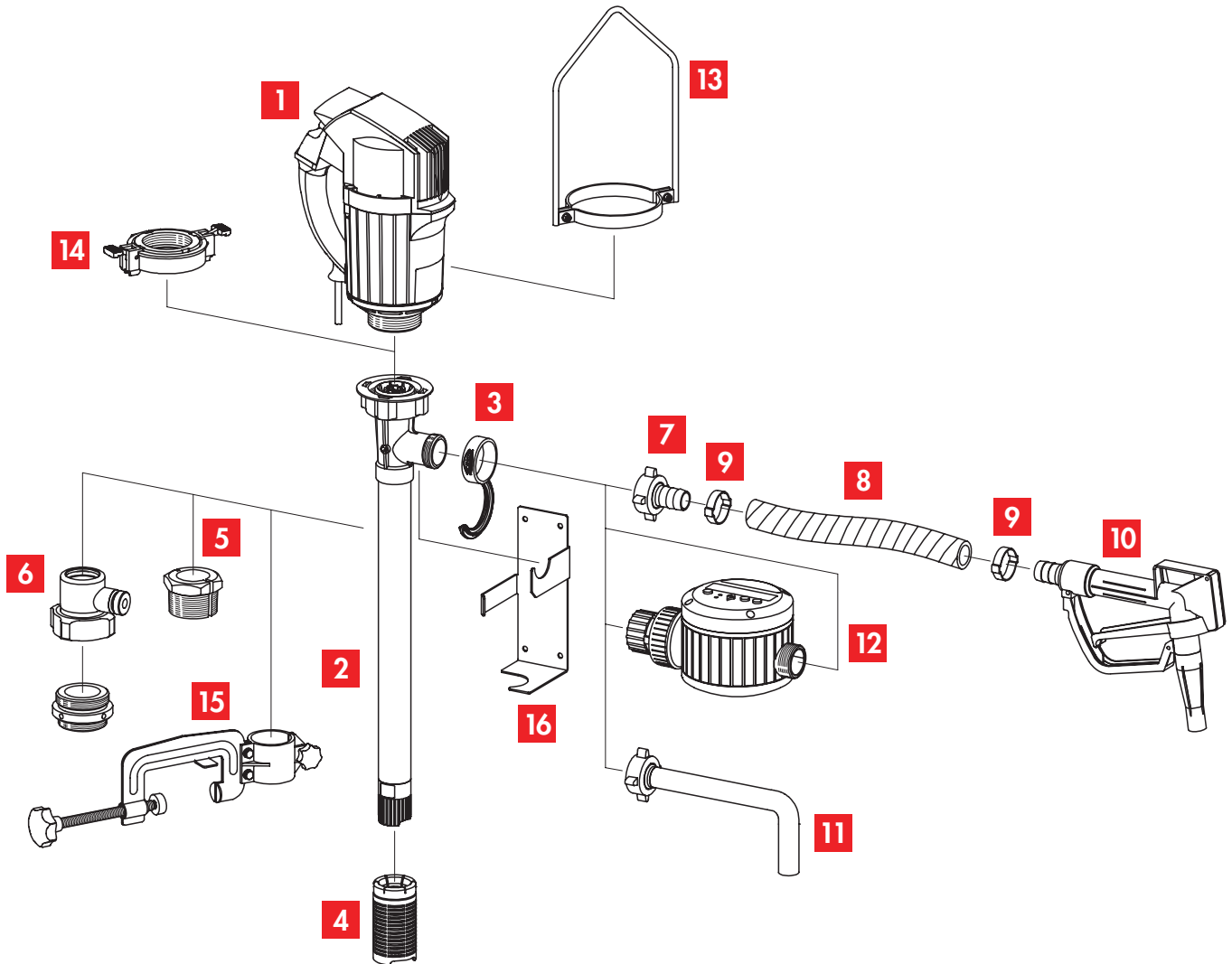


Note: For transferring highly flammable liquids and for use in hazardous areas explosion-proof motors must be used.

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.



1 drive motor

2 drum 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

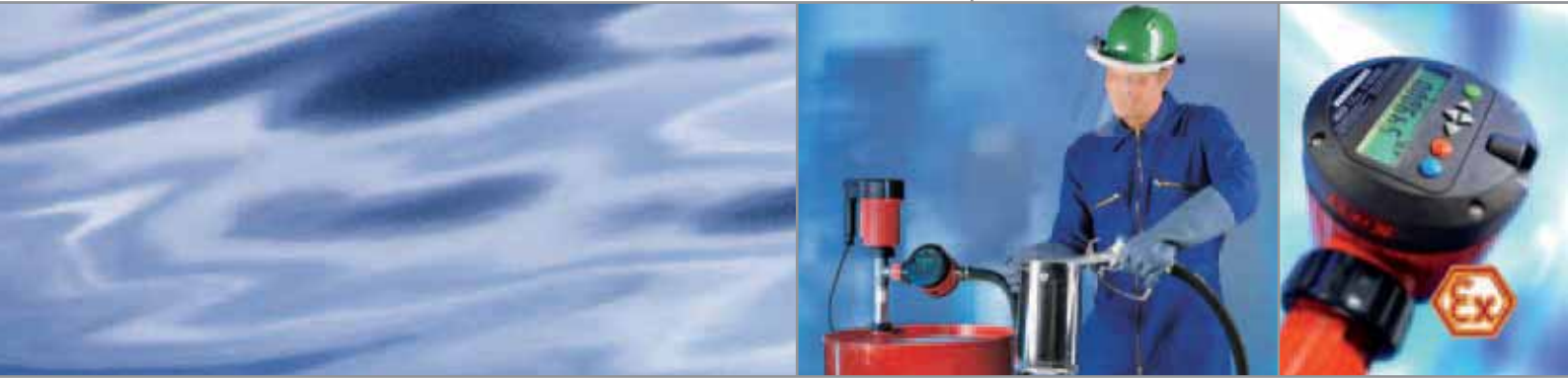
12 liquid meter

13 carrying handle

14 quick action coupling type SSK 400

15 attachment clamp

16 wall bracket



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 % drum emptying

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



Flow meters and FLUXTRONIC®

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..

For detailed information on FLUX Pump Kits, FLUX Liquid Meters and other FLUX products please ask for our sales brochures.