

Hybrid pump
For highly flammable products



New!



Hybrid pump Kit

The self-priming pump solution for highly flammable products

The patented FP 428 H Ex hybrid pump, together with the brushless motor FBM 3000 EX, is mounted on a wall in zone 1. The hybrid pump's self-priming feature makes removal of fluid easy by use of the suction pipe.

Function description

During the suction operation, the pump is self-priming because it performs like a positive displacement pump. Centrifugal forces drive the movable rotor blades towards the inside wall of the pump chamber. When the medium flows into the pump chamber, it presses the blades away from the wall. The pump is then in delivery mode and works on the principle of a rotary pump.

The explosion-protected hybrid pump has an integrated temperature monitor and, as such, dry-running protection. This guarantees a high level of operational safety. The pump is driven by the FBM 3000 Ex, a brushless explosion-proof direct current motor. The pump and motor are mounted on a wall in zone 1. The fluid is then easily transferred using the suction pipe.



Suction operation



Transition



Delivery operation



Product characteristics

- ▶ Self-priming
- ▶ Suitable for static suction lifts of up to 4 metres (0.4 bar)
- ▶ No auxiliary fluid needed to initially fill the pump chamber
- ▶ Drums emptied down to smallest residue
- ▶ Pulsation-free and even delivery
- ▶ Nominal delivery pressure up to 2 bar
- ▶ Integrated running-dry protection due to temperature monitor
- ▶ Almost wear-free due to the use of high-quality materials
- ▶ Wall mounting via console in zone 1
- ▶ Brushless motor FBM 3000 Ex with infinitely variable speed regulation and undervoltage tripping
- ▶ High-efficiency operation
- ▶ Degree of protection IP55

Examples of media

- ▶ Highly flammable liquids such as acetone, petrol, butanol, ethanol, methanol, xylene and solvents
- ▶ Neutral and non-flammable, low-viscosity media such as organic acids, dilute inorganic acids and lyes
- ▶ Hardly inflammable media such as diesel fuel and low-viscosity oils
- ▶ Pure media without solid matter
- ▶ Viscosity range 0 to 150 mPas

Materials

- ▶ Pump Kit Solvents: stainless steel 1.4571, brass, PEEK (carbon fibre reinforced thermoplastic), ceramics and PTFE, nitrile rubber
- ▶ Pump Kit Chemicals: stainless steel 1.4571, PEEK (carbon fibre reinforced thermoplastic), ceramics and PTFE, UPE

Technical data

- ▶ Weight: 5.3 kg
- ▶ Suction pipe: Ø 28 mm, length 1.0 m or 1.20 m
- ▶ Suction hose: inside diameter 19 mm (DN 19), length 2.50 m
- ▶ Pressure hose: inside diameter 19 mm (DN 19), lengths: 2.5 m, 3.5 m or 6 m
- ▶ Maximal delivery rate (Q max.):
 - 65 l/min, at pressure hose length 2.5 m
 - 60 l/min, at pressure hose length 3.5 m
 - 55 l/min, at pressure hose length 6.0 m

Advantages

- ▶ **Variable applications**
Delivery also over long distances
- ▶ **High flexibility**
Delivery even out of narrow-necked containers
- ▶ **Undertable installation possible**
due to low space requirement
- ▶ **Easy handling**
Suction pipe is simply re-plugged, while pump remains at the wall in zone 1
- ▶ **Easy dosing**
due to infinitely variable regulation of the motor in conjunction with the pump nozzle
- ▶ **Low costs of disposal and resource-conserving**
due to small residual quantities
- ▶ **Long service life**
due to the use of high-quality materials
- ▶ **High level of operational safety**
due to integrated temperature monitor
- ▶ **Immediate start of operation**
Pump needs not be filled prior to operation
- ▶ **Tailor-made offers**
defined pumping sets for solvents and chemicals

Application example

- ▶ Emptying drums containing solvents:
From 200 litre drum with 2.5 m suction and pressure hose, 1 m suction pipe in about 3 min. From 1,000 litre drum with 2.5 m suction and pressure hose, 1.2 suction pipe in about 15 min



Filling of solvents from a 200 litre drum into different containers.



FLUX is a world renowned brand for the highest standards in pump technology. It all began in 1950 when the electric barrel pump was invented. Today, our wide range of products includes barrel and container pumps, centrifugal immersion pumps, excentric worm drive pumps and air-operated diaphragm pumps as well as mixers, flow meters and, of course, an extensive range of accessories.

Apart from the outstanding quality of our FLUX products, our customers appreciate our staffs' excellent expertise and real customer orientation.

Put us to the test. We are looking forward to hearing from you.

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