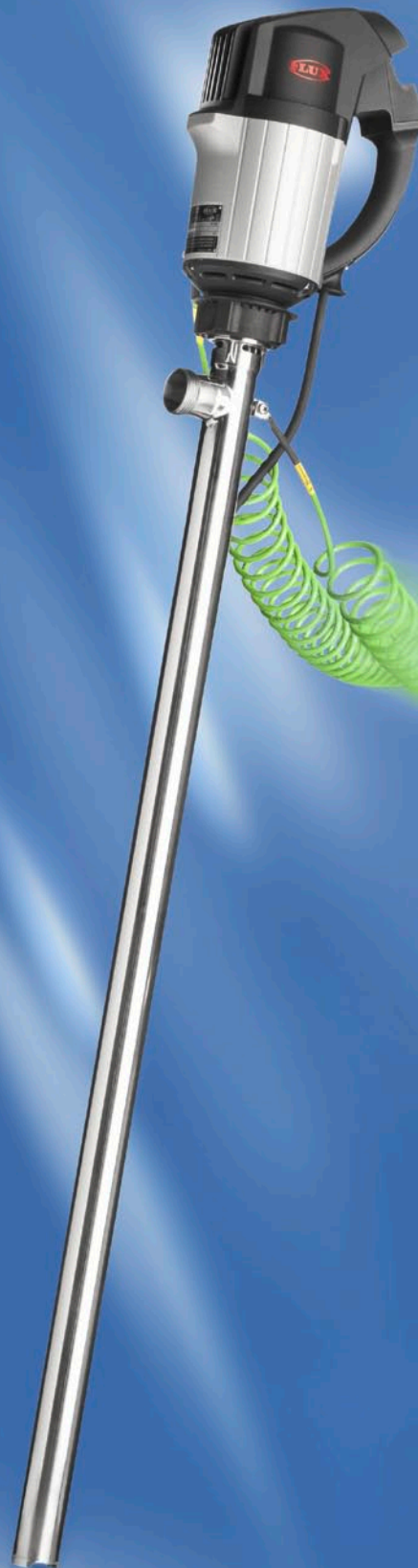


# FLUX Explosion-proof FP 430 Ex S barrel pump



**New!**



# FLUX Explosion-proof

The highest level of safety

The FP 430 Ex S is the first model in a new generation of barrel pumps with improved explosion protection. Thanks to design improvements, it offers users the highest level of safety during transport in explosion-prone areas, even when there is massive seal damage. The FP 430 Ex S will be available beginning in October 2012.

## Exemplary safety by tradition



FLUX brochure from 1954.

In 1953, the FLUX F 300 was the first explosion-proof barrel pump to be marketed anywhere in the world – a trailblazing achievement in this highly sensitive field. As in those days, FLUX draws on the latest state-of-the-art technology for continuous product improvement. A current example is FLUX's zone separation in the new explosion-proof barrel pumps.

## New: FLUX zone separation for barrel pumps

The engineers at FLUX regularly conduct risk assessments and product monitoring on their devices. Thus, new findings have led to a different evaluation of a potential ignition risk in extreme cases. This was the impetus for the explosion protection of the FLUX barrel pumps continue to improve. FLUX engineers have developed FLUX zone separation for barrel pumps.

This design measure separates the ball bearing in the upper area of the pump from Zone 0. It naturally ventilates the area below the ball bearing. This means that, by design, defective seals cannot cause the explosion-prone Zone 0 to spread. At the same time, massive seal damage can be detected more quickly. The rising medium can then escape outward.



## Certified conformity

The FLUX FP 430 Ex S barrel pump has been tested by the Physikalisch-Technische Bundesanstalt (PTB) and received EC design certification in conformity with ATEX guideline 94/9/EC in keeping with DIN EN 13463.



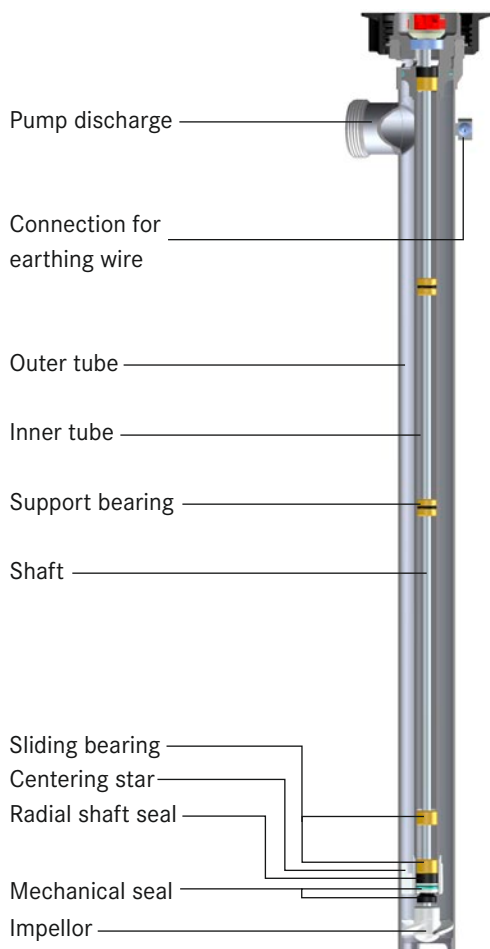
Semi-automatic canister filling in explosion zone 1.



FLUX zone separation for barrel pumps.

# FP 430 Ex S barrel pump

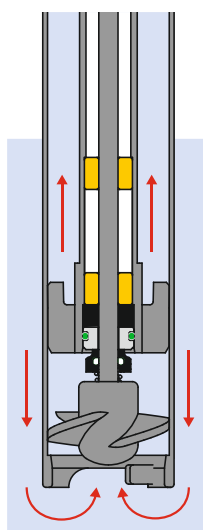
With mechanical seal



## Functional description

The FP 430 Ex S is a barrel pump with a mechanical seal that works based on the principle of an axial-flow propeller pump. The pump unit consists of drive motor and pump. Via a clutch, the motor drives the drive shaft which has an impellor attached to its end. Delivery by the pump requires that the impellor is completely covered with the fluid. The

fluid is transferred axially due to the rotation, i.e. towards the pump discharge along the pump shaft.



In the FP 430 Ex S, the mechanical seal seals the inner tube from the fluid. In this way, the seal prevents the fluid from getting into the inner tube. The shaft is in contact with the fluid only in the area of the impellor.

## Product characteristics

- ▶ With mechanical seal
- ▶ Can be dismantled into two parts: 1. inner tube with shaft, mechanical seal and impellor 2. outer tube
- ▶ Pulsation-free delivery
- ▶ Delivery against closed valve possible (e.g. hand nozzle)
- ▶ Low weight
- ▶ Can be combined with various motors as required
- ▶ Motors with speed adjustment available
- ▶ FOOD version also available

## Examples of media

- ▶ acetone, alcohol, essential oils, benzene, ethylene, ethyl glycol, ethylene glycol, isopropanol, kerosene, methylene, toluol, xylene, etc.

## Technical data

- ▶ Max. delivery rate: 240 litres per minute\*
- ▶ Max. viscosity: 1000 mPas
- ▶ Immersion lengths standard: 700/1000/1200 mm
- ▶ Pump discharge connection: Threaded 1 1/4"
- ▶ Pump diameter: 41 mm
- ▶ Main material: stainless steel 1.4571
- ▶ Seal material: depended fluid to be pumped

## General advantages

- ▶ **FLUX zone separation provides greater explosion protection**
- ▶ **One pump for various fluids**
- ▶ **Quick detection of major seal damage**
- ▶ **Several pumps may be driven by one motor**
- ▶ **Also transports solids-laden fluids, such as paints, dispersions**
- ▶ **Easy to dismantle and clean (except mechanical seal)**
- ▶ **Fluids can be changed quickly**
- ▶ **Short changeover times**
- ▶ **Can be carried by one person**
- ▶ **Use with valves possible (e.g. hand nozzle)**

## Further advantages FOOD version

- ▶ **Certified for contact with food according to the latest EU requirements**
- ▶ **Also certified according to FDA requirements**



\* At the pump discharge with water (20°C), motor: F 416 Ex



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 staff's excellent expertise and real customer orientation.

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

