### **SAFETEC PUMP SET**

To empty full containment re-usable IBC's and drums, compatible with CDS / QC couplings





# Environmental protection and sustainability

#### Safe handling of dangerous chemicals

All over the world, the requirements for environmental protection and sustainability are steadily increasing. At the same time, the safety requirements for handling hazardous chemicals are increasing accordingly.

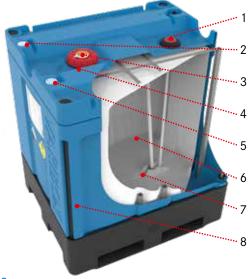
For these reasons, more and more chemical packaging is being brought onto the market in drums or IBC containers that are sealed and that are emptied using a permanently installed immersion tube using a suction process.



#### Picture 1

#### Advantages:

- Completely closed and sealed container.
- No contamination of the contents with dirt or foreign matter.
- Optimum occupational safety even in event of incorrect operation, as the quick-action coupling means that **no unintentional leakage** of media is possible.
- **No drips**. No manual handling of parts exposed to chemicals, no need to open caps or closures.
- Reduced cleaning costs for reusable IBC's, since the sealing means they can be refilled without cleaning and flushing.
- As there is no floor outlet and the option of doublewalled container design, the IBC can be set up without additional WHG collecting tray.



#### Picture 2

#### Details:

- 1. **Connection with immersion tube** For emptying the container
- 2. **Dipstick** For leakage control
- Combi-Vent for pressure equalization when emptying and filling
  Source and
- 4. Screw cap for filling, sealed.
- Inspection opening for visual inspection of inner tank
- 6. **Inner container** to carry the liquid
- 7. Lowest point (swamp) ensures that container can be almost completely emptied
- 8. **Outer container** Double wall as protection



### **SAFETEC** pump set

#### The solution for emptying

With classic drum or container pumps, it is not possible to empty full containment IBC's, as there are no openings for inserting a drum pump. A self-priming pump is needed for emptying the container through an immersion tube. For this purpose, FLUX has developed the SAFETEC pump set. The pump set contains all the components required for safe emptying of the container.



Pump set SAFETEC with optional accessories

Advantages:

- All components of the pump set are mounted in a compact console. The console is delivered with a wall bracket, which can optionally be mounted on a trolley.
- An integrated sensor detects and signals when the container is empty and switches off the pump.
- With integrated quantity measurement, the SAFETEC pump set is suitable for filling containers or for batch dosing. \*
- Comfortable operation via an **graphical touch panel** (can be operated with chemical gloves). \*
- Maximum safety through hermetically sealed selfpriming pump and additional leakage tray
- The leakage tray can be equipped with a leak sensor.\*



Mobile version

Connect the container with corresponding coupling and hose, then connect it to the pump set. Also connect the pump set to your system or your extraction point with another hose.

The pump set empties the container, reports automatically when the container is empty (option) and switches itself off. If you use a nozzle on the pressure side of the pump set, you can also use the COMFORT D version of the pump set to dose or fill the medium from the container into a smaller container.

Simply enter the desired amount via the touch panel and fill using the nozzle. The pump set switches off auto-matically when the required quantity is reached.

\* optional

### **SAFETEC** pump set

#### Components

#### Self-priming centrifugal pump MAGSON MAS

Due to the magnetic coupling, there is no shaft seal to the motor and the pump **is hermetically sealed**. Therefore no leakage is possible and the pump is almost **maintenance-free**. Manufactured with PP or ETFE body, the resistance of the pump can be selected to suit the chemicals on site. The pump is self-priming up to a suction height of 5m, produces strong suction and runs **quietly and smoothly**.

#### **IBC Level Sensor**

Protects the pump from running dry. This sensor detects when air bubbles appear in the pipeline. As soon as the container is empty and air is sucked in, the sensor detects this and switches the pump off.





#### Tray Level sensor (option)

This sensor detects any liquid that may collect in the leakage tray. The pump is switched off and the fault is shown on the display.

**Flow meter (option)** Included in the SAFETEC KOMFORT D pump set, records the flow rate and enables dosing and filling.





#### Welded console made of PP with removable Acrylic glass pane

The console accommodates all components required for emptying the container and the pump, including any control components. A hinged acrylic glass cover is attached to the front. This is for added security, as a splash guard and access guard that is hinged to the console. Inside, the console is designed as a drip pan for dripping. The console is supplied with a wall bracket or alternatively with a bracket for hanging on standard IBCs.

#### **BASIC** version Fitted with main switch with integrated motor protection switch for manual pump control

Includes control panel with main switch, ON / OFF button and pump dry run protection. If the container is empty and the pump sucks in air, it is switched off

> **KOMFORT** version Touch panel displays operating status ON / OFF; Fault container empty / dry run; leakage fault (option) as well as an emergency stop button and a main switch.

#### **KOMFORT D version**

Touch Panel including dosing. Display of operating status ON / OFF; Fault container empty / dry run; leakage fault (option) as well as emergency stop button and a main switch. Dosing is controlled via the graphical user interface.

Manual ON / OFF switching via touch panel for manual operation In automatic mode, different filling quantities can be stored and selected. After filling has started, the pump starts and stops automatically as soon as the desired filling quantity is reached.

If the container is empty and the pump sucks in air, it is also automatically switched off and the operating status is displayed on the touch panel.

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0.00

M1

Pump set SAFETEC mobile

As an option for hanging on an IBC, the pump set can also be made mobile using a trolley. This gives you full flexibility to use the pump set exactly where you need it. And everything moves with you, including cables and hoses which can be hung on the back. Any drips from the hose are caught by the trough of the trolley.



STANDARD version

automatically.











## Accessories for your pump set

#### Couplings

• Various couplings, or extraction head connections for your container

#### **Configured suction hoses**

- 2 m PVC hose DN 20 with CDS coupling
- 2 m PVC hose DN 20 with QC extraction head
- 2 m chemical hose DN 20 with CDS coupling
- 2 m chemical hose DN 20 with QC extraction head

### Configured discharge hoses

- 3 m PVC hose or chemical hose DN 20 with hand nozzle for manual filling
- 3 m PVC hose or chemical hose DN20 with Outlet unit and integrated check valve for semi-automatic dosing. The dosing process is started with the start / stop button on the outlet unit. When the target quantity is reached, the pump stops automatically (only with the KOMFORT D).

#### **Individual parts**

- 1-ear clamps
- Hose sockets
- Hoses
- Hand nozzles



















# The SAFETEC product line at a glance

SAFETEC pump set Furnishing	BASIC	STANDARD	KOMFORT	KOMFORT "D"
Pump MAS 13/115; self-priming; PP or ETFE; 230V; 0,75kW	•	•	•	•
PP Console with drip tray and Acrylic glass door	•	•	•	•
5 m cable with Schuko-plug	•	•	•	
Motor protection switch with ON/OFF switch	•	-	_	-
On-site control panel with main switch, ON/OFF button	-	•	-	-
On-site control panel Komfort operation via Touch Panel	_	-	•	•
Dosing via flow meter FMC	-	-	-	•
Sensor for low level notification / dry run protection	\$	•	•	•
Leakage monitoring in the leakage tray	-	-	\$	\$
"M" mobile version	\$	\$	\$	\$

 - not possible

### Technical data

SAFETEC pump set	PP	ETFE	
Pump material	PP	ETFE	
Piping material	PVC	PVDF	
Sealings	EPDM	FKM	
Max. temperature of liquid [°C]	6	60	
Max. flow rate [I/min] *	4	40	
Max. delivery height [mWs]	1	13	
Motor power [kW]	0,	0,75	
Voltage [V]	23	230	
Connection at suction and discharge side	G	G 1 ¼	
Weight [kg]	5	50	
Dimensions B x H x T [mm]	840 x 8	840 x 850 340	

 $^{\star}$  with 2 m suction hose DN 19 and CDS coupling as well as 3 m pressure hose DN 19 with nozzle



Today the FLUX name is recognised around the globe as the trademark for top standards in pump technology. Everything started with the invention of the electric drum pump in 1950. Nowadays FLUX has an extensive range of products each of which can be customized. FLUX pumps are used for example in the chemical and pharmaceutical industries; in machinery and plant engineering as well as companies in electroplating, effluent treatment and the foodstuffs sector.

Whether single-product or system solution – FLUX quality is synonymous with a long service life, excellent economy and maximum safety.

In addition to the excellent product quality FLUX customers appreciate the superb level of expertise our staff has to offer as well as their genuine customer focus.

These days FLUX-GERÄTE GMBH supplies pumps to almost 100 countries around the globe.

#### FLUX-GERÄTE GMBH

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