

# Certified solutions

for the food and beverage industry



**Safety is our concern**

# Lutz pumps and flow meters for the food industry

During food production, raw materials and finished food products come into contact with various objects and materials, and must be suitable for this. This also includes devices and machine parts for commercial food production. These are defined as "food contact materials" and are specified in food product legislation.

## Regulation (EC) 1935/2004



Pumps and flow meters in contact with food products are also considered to be food contact materials and are thus subject to strict legal regulations. In accordance with EU Regulation no. 1935/2004, these are to be produced in accordance with good manufacturing practice and may not release substances which pose a hazard to the health, cause unacceptable changes to the food products or impair their odour or taste.

Lutz drum pumps, flow meters and accessories meet the requirements of Regulation (EC) 1935/2004 and bear the "glass and fork" symbol to indicate their suitability for foodstuffs. The associated Regulation (EC) 10/2011 on plastics in contact with foodstuffs lists the migration values of chemicals which may not be exceeded in defined reagent tests.

## FDA approval



The Food and Drug Administration in the USA certifies materials and substances and also defines limit values for extractable substances which must be complied with, as is the case with elastomers for aqueous or fatty food products (21 CFR 177.2600).

## 3-A Sanitary Standard



Beyond the safety of the materials used, the 3-A Sanitary Standard places stringent design requirements calling for a hygienically flawless and easy-to-clean design. Lutz 3-A Sanitary pumps consistently meet the requirements for hygienic design and are certified in accordance with the current version of the "3-A Sanitary Standards for Centrifugal and Positive Rotary Pumps, Number 02-10" and thus equipped for the international market.

Lutz 3-A Sanitary pumps are consistently designed with manually detachable, threadless connections in areas coming into contact with media. They are quick and easy to dismantle for thorough cleaning and disinfection by hand or with tools such as a water stream or cleaning machines. All products covered in the product are easily accessible and visible.

## Atex Directive



Pumps and flow meters from the PURE and Sanitary series are also available in an explosion-proof version in accordance with ATEX Directive 94/9/EC. They are well-suited for pumping highly flammable media in food and beverage production, such as alcohols, essential oils and flavourings, as well as cleaning products and disinfectants used for cleaning purposes.



- Pump tube SS 41 PURE
- Pump tube RE SS PURE
- Pump tube MP SS PURE
- Pump tube HD-E PURE
- Pump tube B70V D/SR PURE
- Flow meter VA10 PURE
- Nozzle SS PURE



The "food safe" sign or "glass and fork" symbol stands for suitability for food-stuffs. This symbol denotes products which were tested to determine their physical and chemical composition and have been found to be safe for contact with food in accordance with the requirements of Regulation (EC) 1935/2004.



- Pump tube B70V-H-D Sanitary
- Pump tube B70V-H-SR Sanitary



The 3-A symbol serves to identify operating equipment which conforms to the 3-A sanitary standards in terms of design and production. The 3-A guidelines apply to the design, production and cleaning options for the daily food accessories used in the handling, production and packaging of edible products with stringent hygiene requirements.



## Lutz drum pump SS 41 PURE version

A versatile and variable drum pump ideal for corrosive and neutral, aqueous to slightly viscous fluids in the production and processing of food products.

### Properties:

- Materials in contact with media in food quality
- Shaft seal: Mechanically sealed (MS) or sealless (SL)
- Lutz hand wheel for quick motor assembly/disassembly and as carry handle
- Optionally available with electrical or compressed air drive with stageless speed controller
- Explosion-proof versions approved in accordance with the ATEX Directive 94/9/EC Category 1/2

### Technical data:

- Materials: Stainless steel 1.4571, ETFE, high-grade carbon, ceramic, FPM or alternately EPDM
- Flow rate: up to 243 l/min
- Pumping head: up to 26 m wc
- Viscosity: up to 750 mPas
- Immersion depth: 700 to 2000 mm

### Plus points:

- + Low weight, easy handling
- + Completely dismantable and cleanable
- + Two impeller forms for flow rate as required
- + Mechanically sealed (MS) version suitable for crystallizing and adhesive media, as well as media containing solids
- + Not filled with lubricants, preventing product contamination
- + Sealless version (SL) is suitable for limited dry running



## Lutz complete drum drainage pump RE SS 41 PURE version

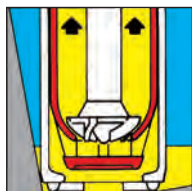
Lutz RE complete drum drainage pumps allow you to remove selected raw materials and valuable food products from drums and containers leaving virtually no residue.

### Properties:

- Materials in contact with media in food quality
- Optimised drum residue discharge leaving a quantity of residue of approx. 0.1 litre
- Sealing mechanism in pump foot
- Lutz hand wheel for quick motor assembly/disassembly and as carry handle
- Optionally available with electrical or compressed air drive and with stageless speed controller
- Explosion-proof versions approved in accordance with the ATEX Directive 94/9/EC Category 1/2

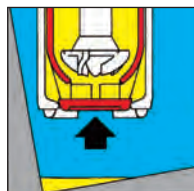
### Technical data:

- Materials: Stainless steel 1.4571, PTFE, ETFE, high-grade carbon, ceramic, FPM or alternately EPDM
- Flow rate: up to 78 l/min
- Pumping head: up to 23 m wc
- Viscosity: up to 850 mPas
- Immersion depth: 700, 1000 and 1200 mm



#### Sealing pot is open:

The fluid is being pumped



#### Sealing pot is closed:

No fluid will return after the pump has been shut off and removed

### Plus points:

- + Maximum pump utilisation and reduced drum cleaning effort
- + Completely dismantable and cleanable
- + No leakage when the pump is turned over or at an inclined position
- + Also suitable for crystallizing and adhesive media, as well as media containing solids
- + Not filled with lubricants, preventing product contamination





### Plus points:

- + Agitator and pump in a single device
- + Can change function during ongoing operation without having to be switched
- + High mixing performance and flow rate for thorough homogenisation and rapid drainage
- + Completely dismantable and cleanable
- + Also suitable for crystallizing and adhesive media, as well as media containing solids
- + Not filled with lubricants, preventing product contamination

## Lutz mixing pump MP SS 41 PURE version

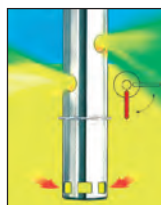
Lutz MP mixing pumps combine the function of agitator and pump in a single device. They are specifically developed for mixing and pumping food products which tend to form sediment after long periods of standing and must be homogenised before being processed.

### Properties:

- Materials in contact with media in food quality
- For emulsions, dispersions, suspensions and colours which tend to form sediment
- Mixing apertures in the outer pipe can be opened and closed using a lever below the hand wheel
- Lutz hand wheel for quick motor assembly/disassembly and as carry handle
- Optionally available with electrical or compressed air drive with stageless speed controller
- Explosion-proof versions approved in accordance with the ATEX Directive 94/9/EC Category 1/2

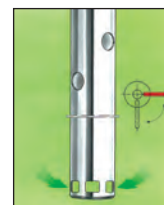
### Technical data:

- Materials: Stainless steel 1.4571, PTFE, ETFE, high-grade carbon, ceramic, FPM or alternately EPDM
- Flow rate: up to 216 l/min
- Pumping head: up to 14.5 m wc
- Viscosity: up to 650 mPas
- Immersion depth: 1000 and 1200 mm



### Mixing apertures open:

The fluid is being mixed and pumped



### Mixing apertures closed:

The fluid is being pumped

## Lutz eccentric screw pump HD-E SS PURE version

The Lutz HD-E combines the advantages of a handy drum pump and the gentle operation of a robust eccentric screw pump. Ideal for pumping viscous raw materials and food products.

### Properties:

- Displacement pump using the eccentric screw principle
- Materials in contact with media in food quality
- Low pulsation, even pumping flow
- Practically no abrasive effect on the medium
- Compact dimensions
- Easily detachable outer pipe
- High-performance single-phase 230 V/ 50 Hz motor or oil-free compressed air motor

### Technical data:

- Materials: Stainless steel 1.4571, PTFE, NBR, FPM
- Flow rate: up to 20 l/min
- Pumping pressure: up to 4 bar
- Viscosity: 500 to 4000 mPas
- Immersion depth: 1000 mm



### The pumping principle:

A metallic eccentric screw rotates in an elastomer or solids stator. The rotation leads to chambers being formed in which the media are enclosed and carried towards the pump outlet.

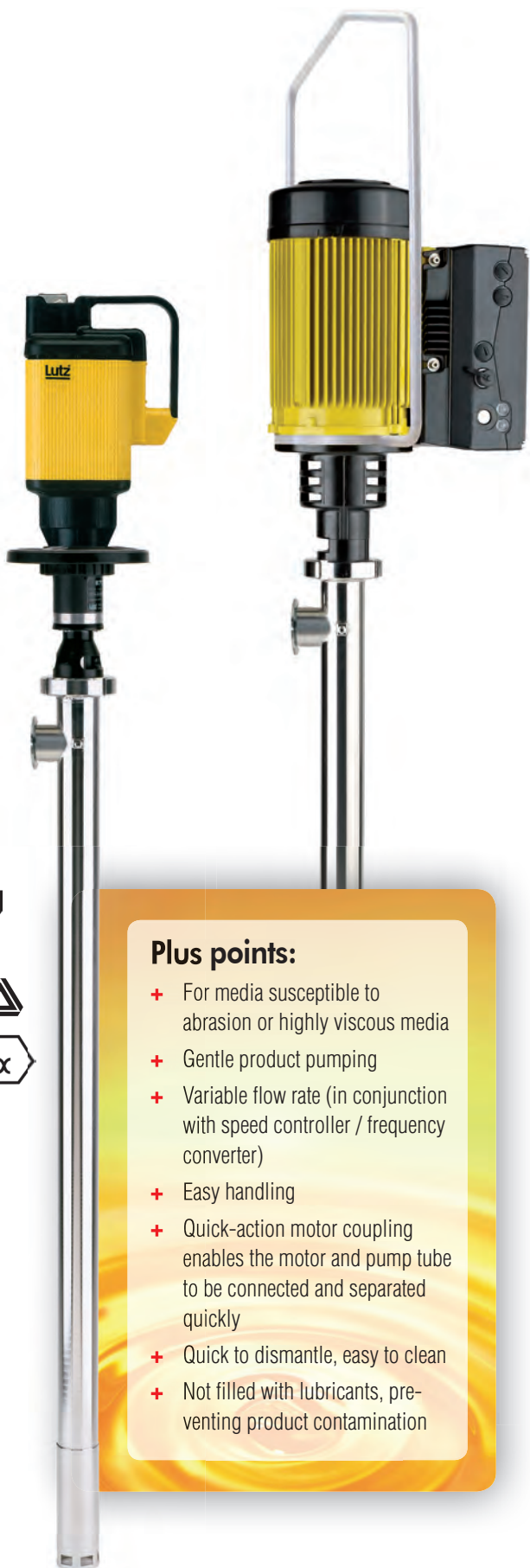


### Plus points:

- + Ideal for slightly to moderately viscous media
- + Gentle product pumping
- + Quiet operation
- + Easy handling
- + Simple cleaning without tools
- + Not filled with lubricants, preventing product contamination







### Plus points:

- + For media susceptible to abrasion or highly viscous media
- + Gentle product pumping
- + Variable flow rate (in conjunction with speed controller / frequency converter)
- + Easy handling
- + Quick-action motor coupling enables the motor and pump tube to be connected and separated quickly
- + Quick to dismantle, easy to clean
- + Not filled with lubricants, preventing product contamination

## Lutz eccentric screw pump B70V PURE in version

Lutz B70V PURE series eccentric screw pumps are well-suited for media which are highly viscous or susceptible to abrasion, as well as media with and without fibre or solid content. Quiet-running, low-wear three-phase or compressed air drives, or reduction gear and universal drive for mobile use.

### Properties:

- Displacement pump using the eccentric screw principle
- Materials in contact with media in food quality
- Low pulsation, even pumping flow
- Practically no abrasive effect on the medium
- Easily detachable outer pipe
- For mobile and stationary use
- Optionally available with integrated frequency converter

### Technical data:

- Materials: Stainless steel 1.4571, WC/SiC, NBR, FPM, PTFE
- Flow rate: up to 120 l/min
- Pumping pressure: up to 10 bar
- Viscosity: up to flowability limit
- Immersion depth: 1000 and 1100 mm

### Frequency converter

Enables stageless adjustment of the drive speed (0-900 1/min) for media such as highly viscous and sensitive products.





## Lutz eccentric screw pump B70V Sanitary version

Lutz B70V sanitary pumps ensure gentle and hygienic pumping of liquid food and beverages, pharmaceutical substances and cosmetic products and are certified and approved in accordance with the latest "3-A Sanitary Standards for Centrifugal and Positive Rotary Pumps Number 02-10."

### Properties:

- Displacement pump using the eccentric screw principle
- Hygienic design in accordance with the latest 3-A standards
- Low pulsation, even pumping flow
- Practically no abrasive effect on the medium
- Tri-clamp connection according to DIN 32676
- Deadleg-free design, polished surfaces
- Easily accessible and inspectable components
- Optionally available with integrated frequency converter
- Explosion-proof versions approved in accordance with the ATEX Directive 94/9/EC Category 1/2

### Technical data:

- Stainless steel (1.4571 / 1.4404) and 3-A/FDA and/or 1935/2004/EC conform plastics (PTFE) and elastomers (50.1) EPDM, FPM
- Open or closed (optional) mechanical seal WC/SiC in accordance with 3A Sanitary Standard
- Flow rate: up to 75 l/min
- Pumping pressure: up to 10 bar
- Viscosity: up to flowability limit
- Immersion depth: 1100 mm



### Hygienic Design

Only manually detachable, thread-free connections are used in the areas in contact with the medium. The low-deadleg design virtually eliminates microbiological problems caused by germs and bacteria.



### Plus points:

- + For media susceptible to abrasion or highly viscous media
- + Gentle product pumping
- + Maintains the medium's consistency, structure and substances contained
- + Quick and easy to clean and disinfect
- + Mechanical seal according to 3-A standard
- + Drive via quick-action coupling or detachable hand wheel





### Plus points:

- + Precise volume detection of liquid food products and raw materials
- + Practical display and user-friendly operation
- + User-error protection
- + High measurement precision thanks to overrun correction
- + Simple calibration
- + Easy installation and starting up
- + External control / data evaluation via standard interfaces

## Lutz flow meter TS VA10 SS PURE version

The VA10 SS PURE flow measurement device with touch screen display and backlighting is very impressive thanks to its simple, practical display and user-friendly operation, multi-language interface and compact construction. The user guide with instructions in plain text, system reporting and assistance texts as well as safety and monitoring functions virtually eliminate the possibility of errors. It can also be operated manually or by external control.

### Properties:

- Operates via nutating disc
- Materials in contact with media in food quality
- Touch screen display
- Multi-language menu guide
- Instructions in plain text
- Integrated assistance function
- Safety and monitoring functions
- With and without volume preselection
- "Plug & Play" module concept
- Explosion-proof versions approved in accordance with the ATEX Directive 94/9/EC Category 1/2

### Technical data:

- Materials: Stainless steel 1.4581, ETFE, PVDF, PTFE, FEP or alternately EPDM
- Flow rate: 10 to 100 l/min
- Pumping pressure: up to 10 bar
- Viscosity: up to 5000 m Pas

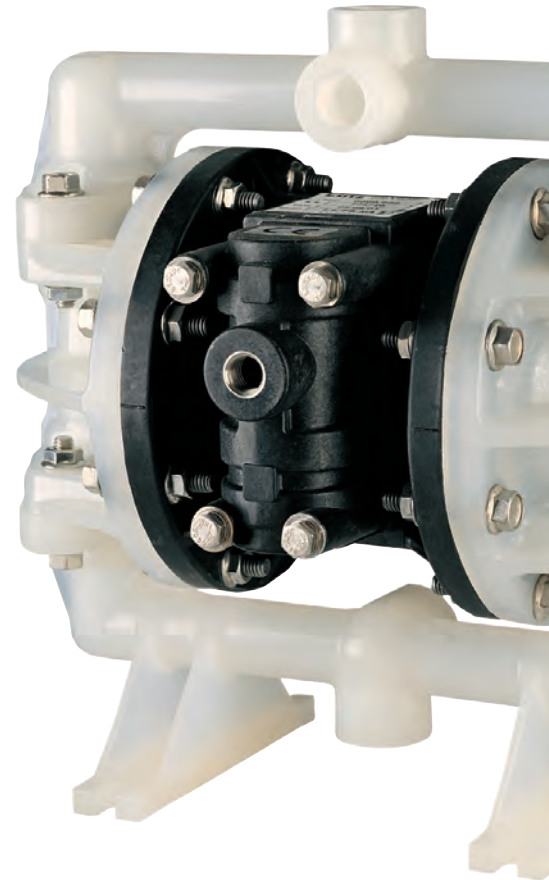
### Volume preset

A relay module which can be integrated into the metering system automatically shuts off the pump motor and/or solenoid valve once the volume preset has been reached.



## FDA-conform double diaphragm pump DMP 1/2"-1" made of plastic

In order to ensure a reliable filling process, the hoses, nozzles and curved spouts meet the requirements of the food and beverage industry.



## Other accessories for food and beverages

In order to ensure a reliable filling process, the hoses, nozzles and curved spouts meet the requirements of the food and beverage industry.



## Certified quality

All materials used have been tested and conform to the required standards.  
Our high quality standards are certified by a declaration of conformity.



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