



# 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 are 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 liquids. 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 liquids in food and beverage production, such as alcohols, essential oils and flavourings, as well as cleaning products and disinfectants used for cleaning purposes.





### **PURE version**



- High surface quality

AtEx

- Food-safe connections
- Quick to dismantle, easy to clean
- Also for alcoholic food products, cosmetics and pharmaceuticals and flammable cleaning products

### **B70V Sanitary in 3-A version**



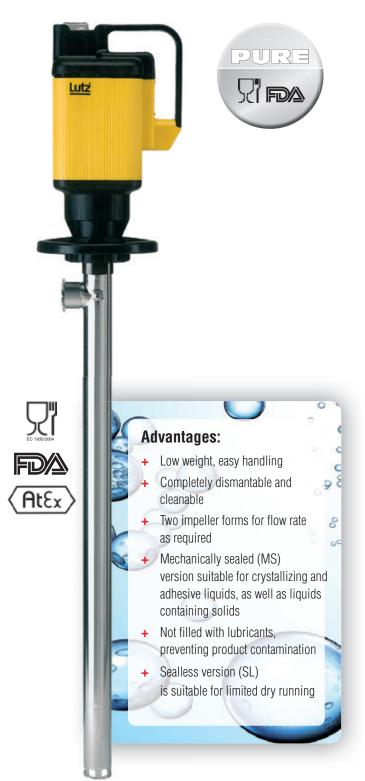








- Hygienically designed according to the latest 3-A standards
- Easily accessible and inspectable components
- Thread-free, manually detachable quick connections
- Polished metal surface
- For liquid foodstuffs and luxury foodstuffs, pharmaceutical substances and cosmetic products.



### Lutz drum pump

#### SS 41 in 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 liquids 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 alternatively EPDM
- Flow rate: up to 243 l/min
- Delivery Head: up to 26 m wc
- Viscosity: up to 750 mPas
- Immersion depth: 700 to 2000 mm





### Lutz complete drum drainage pump

#### RE SS 41 in PURE version

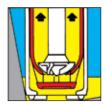
Lutz RE complete drum drainage pumps allow you to remove selected raw materials and valuable food products from drums and containers leaving virtually no residue.

#### **Properties:**

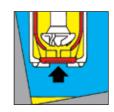
- Materials in contact with liquids in food quality
- Optimised drum residue discharge leaving a quantity of residue of approx. 0.1 litre
- Sealing mechanism in pump foot
- Lutz hand wheel for quick motor assembly/disassembly and as carry handle
- Optionally available with electrical or compressed air 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 alternatively EPDM
- Flow rate: up to 78 l/min
- Delivery 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





### Lutz mixing pump

#### MP SS 41 in 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 liquids 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 alternatively EPDM
- Flow rate: up to 216 l/min
- Delivery 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 in 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 liquids 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/minPumping pressure: up to 4 barViscosity: 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 liquids are enclosed and carried towards the pump outlet.





#### Advantages:

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





Not filled with lubricants,

preventing product contamination



### Lutz eccentric screw pump

#### B70V in PURE version

Lutz B70V PURE series eccentric screw pumps are well-suited for liquids which are highly viscous or susceptible to abrasion, as well as liquids with and without fibre or solid content. Quietrunning, 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 liquids 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 I/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 liquids such as highly viscous and sensitive products.







### Lutz eccentric screw pump

B70V Sanitary in 3-A 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

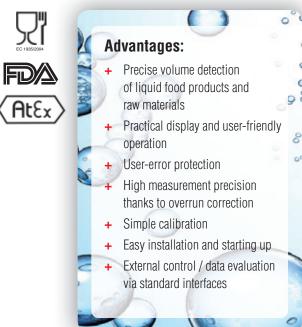


#### Hygienic Design

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.









### **Lutz flow meter**

#### TS VA10 SS in 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 liquids 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 alternatively 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.

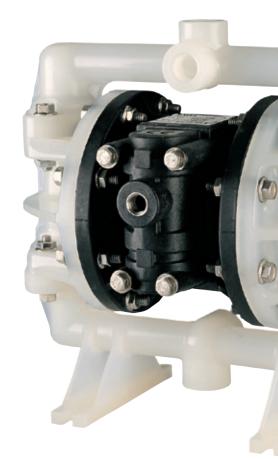




### FDA-conform double diaphragm pump

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.



### **Lutz Drum and Container Pumps**

### Pump tube SS PURE (stainless steel) for aqueous and fatty foodstuffs

Product detail	Pump tube		SS	-SL	SS-	-MS
w.	Type of impeller		L	R	L	R
	Category 1 / 2 (acc. to ATEX)			no	yes	yes
7	Immersion tube diameter:	up to mm	41	41	41	41
	Temperature of medium:	up to °C	100	100	100	100
	Material:	Pump tube	1.4571	1.4571	1.4571	1.4571
		Impeller	PP	SS	ETFE	ETFE
	Hose connection:	Tri-Clamp DN	32	32	32	32
	Length: 700 mm*** ▲	Order No. basic pump	0150-003	0150-000	0151-003	0151-000
	Length: 1000 mm*** ▲	Order No. basic pump	0150-004	0150-001	0151-004	0151-001
III.	Length: 1200 mm*** ▲	Order No. basic pump	0150-005	0150-002	0151-005	0151-002
	Version: PURE SL <sup>▲</sup>	Order No. additional price	0150-350	0150-351	_	_
	Version: PURE MS Viton® ▲	Order No. additional price	-	-	0151-350	0151-351
	Version: PURE MS EPDM ▲	Order No. additional price	-	-	0151-352	0151-353
	▲ Please choose Order-No, basic nump + Order-N	o. PLIRE additional price				

<sup>▲</sup> Please choose Order-No. basic pump + Order-No. PURE additional price

	Choice	of motors	S		<b>Operating</b>	data				
Part Por	Output: Voltage: Order No.	MI 4 - 500 W 230 V <b>0030-000</b>	with speed controller 500 W 230 V 0030-001		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	curve no.  up to I/min.  up to m wc  up to mPas  up to kg/dm³  Motor + pump tube	401 117 19 500 1,4 5,7	400 210 10 350 1,1 5,7	401 117 19 500 1,4 5,7	400 210 10 350 1,1 5,7
	Output: Voltage: LVR.:	MA II 3 460 W 230 V no <b>0060-000</b>	460 W 230 V yes <b>0060-008</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	curve no. up to I/min. up to m wc up to mPas up to kg/dm³ Motor + pump tube	403 95 14 350 1,6 7,5	402 178 9 200 1,2 7,5	403 95 14 350 1,6 7,5	402 178 9 200 1,2 7,5
	Output: Voltage: LVR.:	MA II 5 575 W 230 V no 0060-001	MA II 5 575 W 230 V yes 0060-009	MA II 5 S 575 W 230 V no acid-proof 0060-091	Flow rate* Delivery head* Viscosity** Density****	urve no. up to I/min. up to m wc up to mPas up to kg/dm³ Motor + pump tube	405 100 16 700 1,8 8,3	404 190 10 550 1,3 8,3	405 100 16 700 1,8 8,3	404 190 10 550 1,3 8,3
Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.	Output: Voltage: LVR.:	MA II 7 795 W 230 V no 0060-002	795 W 230 V yes <b>0060-010</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density*** Weight (kg)	curve no. up to I/min. up to m wc up to mPas up to kg/dm³ Motor + pump tube	407 115 20 500 1,9 9,5	406 210 13 400 1,4 9,5	407 115 20 500 1,9 9,5	406 210 13 400 1,4 9,5
	Output: Voltage: Protection switch: Order No.	<b>B4/GT</b> 750 W 230/400 V no <b>0004+019</b>	yes		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	411 100 12 500 2,2 13,7	410 180 13 400 2,0 13,7	411 100 12 500 2,2 13,7	410 180 13 400 2,0 13,7

<sup>\*</sup> Determined with water at 20 °C
\*\* Determined with oil

<sup>\*\*\*</sup> Special lengths 200–2500 mm on request

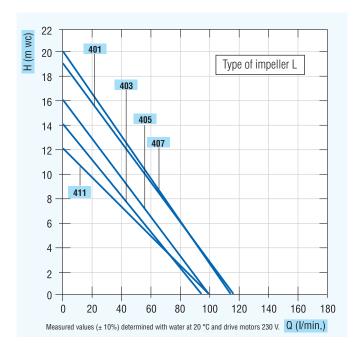
Determined with 3 m hose 3/4" and open nozzle 3/4". Higher densities possible for shorter operating periods.

### Pump Tube SS PURE (stainless steel)

for aqueous and fatty foodstuffs

#### Materials (coming into contact with the pumped medium):

Version:	SL-R	SL-L	MS-FPM	MS-EPDM
Housing:	SS (1.4571)	SS (1.4571)	SS (1.4571)	SS (1.4571)
Impeller:	SS (1.4571)	PP	ETFE	ETFE
Seals:	none	none	FPM	EPDM
Mechanical seals:	none	none	Carbon, Ceramic, PTFE, SS (1.4571), HC-4 (2.4610)	Carbon, Ceramic, PTFE, SS (1.4571), HC-4 (2.4610)
Bearing:	Pure Carbon	Pure Carbon	Pure Carbon	Pure Carbon
Drive shaft:	SS (1.4571)	SS (1.4571)	SS (1.4571)	SS (1.4571)



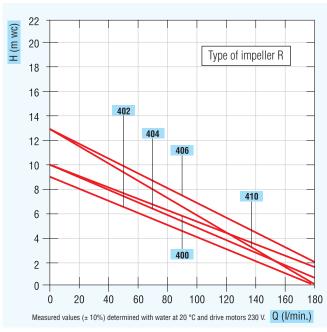


Illustration shows: Pump tube SS MS PURE with motor MA II Utilisable Length (Dimension C -40 mm) Dimension C Pump tube also available in PURE version with Tri-Clamp connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

Y'i FDA

Please remember that the flow rate is reduced as the Viscosity increases. The Density of the pumped liquid similarly affects the flow rate, though to a lesser extent.

### **Lutz Drum and Container Pumps**



### Pump tube SS PURE (stainless steel) for alcoholic, highly inflammable foodstuffs

Product detail	Pump tube		\$\$-	MS
y.	Type of impeller	L	R	
	Category 1 / 2 (acc. to ATEX)	yes	yes	
	Immersion tube diameter:	up to mm	41	41
	Temperature of medium:	up to °C	100	100
	Material:	Pump tube	1.4571	1.4571
		Impeller	ETFE	ETFE
	Hose connection:	Tri-Clamp DN	32	32
	Length: 700 mm*** ▲	Order No. basic pump	0151-003	0151-000
	Length: 1000 mm*** ▲	Order No. basic pump	0151-004	0151-001
	Length: 1200 mm*** ▲	Order No. basic pump	0151-005	0151-002
	Version: PURE Viton® ▲	Order No. additional price	0151-350	0151-351
	Version: PURE EPDM ▲	Order No. additional price	0151-352	0151-353

riangle Please choose Order-No. basic pump + Order-No. PURE additional price

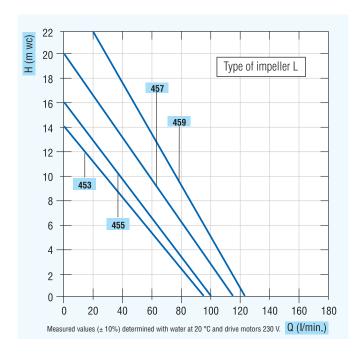
	Choice	of motors	S	Operating data		
	Output: Voltage: LVR.:	ME II 3 460 W 230 V yes 0050-000	460 W 230 V no <b>0050-016</b>	Characteristic curve no. Flow rate* up to I/min. Delivery head* up to m wc Viscosity** up to mPas Density**** up to kg/dm³ Weight (kg) Motor + pump tube	453 95 14 350 1,6 8,7	452 178 9 200 1,2 8,7
Atex	Output: Voltage: LVR.:	ME II 5 580 W 230 V yes 0050-001	580 W 230 V no <b>0050-017</b>	Characteristic curve no. Flow rate* up to I/min. Delivery head* up to m wc Viscosity** up to mPas Density**** up to kg/dm³ Weight (kg) Motor + pump tube	455 100 16 700 1,8 9,6	454 190 10 550 1,3 9,6
	Output: Voltage: LVR.:	ME II 7 795 W 230 V yes 0050-002	795 W 230 V no <b>0050-018</b>	Characteristic curve no. Flow rate* up to I/min. Delivery head* up to m wc Viscosity** up to mPas Density**** up to kg/dm³ Weight (kg) Motor + pump tube	457 115 20 500 1,9 10,8	456 210 13 400 1,4 10,8
Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. Compulsory for explosive areas, in case no special measures are taken (e.g. remote control).	Output: Voltage: LVR.:	ME II 8 930 W 230 V yes 0050-042	930 W 230 V no <b>0050-041</b>	Characteristic curve no. Flow rate* up to I/min. Delivery head* up to m wc Viscosity** up to mPas Density**** up to kg/dm³ Weight (kg) Motor + pump tube	459 123 26 750 1,9 10,8	458 243 15 650 1,4 10,8
	* Determine ** Determine	ed with water at 2 ed with oil	0 °C *** Special lengths 200–2500 mm on re	**** Determined with 3 m hose equest Higher densities possible for	3/4" and open nozzle 3/4". or shorter operating periods.	Special voltages and frequencies on request.

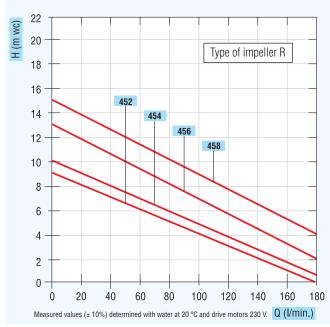
### **Pump Tube SS PURE (stainless steel)**

for alcoholic, highly inflammable foodstuffs

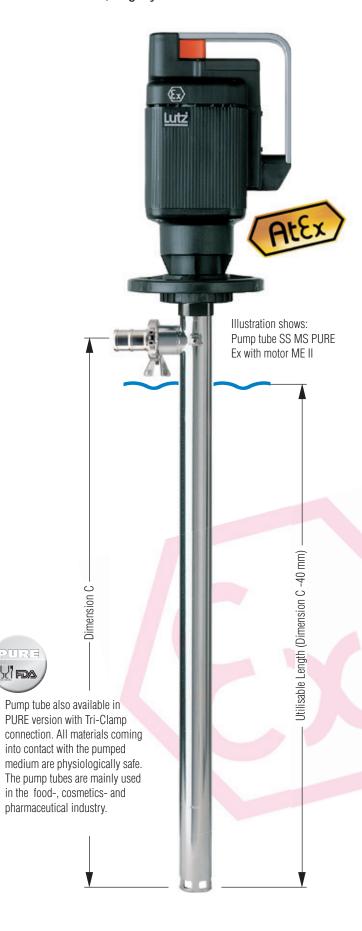
#### Materials (coming into contact with the pumped medium):

Version:	MS-FPM	MS-EPDM
Housing:	stainless steel (1.4571)	stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	FPM	EPDM
Mechanical seal:	Carbon, Ceramic, PTFE, stainless steel, HC-4 (2.4610)	Carbon, Ceramic, PTFE, stainless steel, HC-4 (2.4610)
Bearing:	Pure Carbon	Pure Carbon
Drive shaft:	stainless steel (1.4571)	stainless steel (1.4571)





Please remember that the flow rate is reduced as the **Viscosity** increases. The **Density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.



### **Lutz Drum and Container Pumps**

Pump tube RE-SS PURE (stainless steel) for complete drum drainage of aqueous and fatty foodstuffs

Product detail	Pump tube	RE-S	RE-SS-MS		
	Type of impeller		L	L	
(1)	Category 1 / 2 (acc. to ATEX)		no	yes	
51	Immersion tube diameter:	up to mm	41	41	
	Temperature of medium:	up to °C	100	100	
	Material:	Pump tube Impeller	1.4571 PP	1.4571 ETFE	
	Hose connection:	Tri-Clamp DN	32	32	
	Length: 700 mm*** ▲	Order No. basic pump	0151-156	0151-156	
	Length: 1000 mm*** ▲	Order No. basic pump	0151-157	0151-157	
	Length: 1200 mm*** ▲	Order No. basic pump	0151-158	0151-158	
	Version: PURE Viton® ▲	Order No. additional price	_	0151-360	
	Version: PURE EPDM ▲	Order No. additional price	0151-361	0151-362	

	Choice	of motors	5		Operating	data	
-Alexander	Output: Voltage: Order No.	MI 4 - 500 W 230 V <b>0030-000</b>	WI 4-E with speed controller 500 W 230 V 0030-001		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	700 78 17 700 1,4 6,0
	Output: Voltage: LVR.:	MA II 3 460 W 230 V no 0060-000	460 W 230 V yes <b>0060-008</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	701 77 14 500 1,6 7,8
	Output: Voltage: LVR.:	MA II 5 575 W 230 V no 0060-001	MA II 5 575 W 230 V yes 0060-009	MA II 5 S 575 W 230 V no acid-proof 0060-091	Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	702 77 14 900 1,8 8,6
Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.	Output: Voltage: LVR.:	MA II 7 795 W 230 V no <b>0060-002</b>	795 W 230 V yes <b>0060-010</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	703 70 18 700 1,9 9,8
	Output: Voltage: Protection switch: Order No.	<b>B4/GT</b> 750 W 230/400 V no <b>0004+019</b>	750 W 230/400 V yes <b>0004+067</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	705 55 8,5 600 2,2 14,0

<sup>\*</sup> Determined with water at 20 °C \*\*\* Special lengths
\*\* Determined with oil 200–2500 mm on request

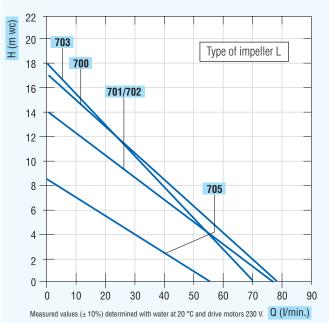
<sup>\*\*\*\*</sup> Determined with 3 m hose 3/4" and open nozzle 3/4". Higher densities possible for shorter operating periods.

### Pump tube RE-SS PURE (stainless steel)

for complete drum drainage of aqueous and fatty foodstuffs

#### Materials (coming into contact with the pumped medium):

Version:	MS-FPM	MS-EPDM
Housing:	stainless steel (1.4571)	stainless steel (1.4571)
Impeller:	ETFE	ETFE, optional PP
Sealing pot:	ETFE/stainless steel (1.4571)	ETFE/stainless steel (1.4571)
Seals:	FPM, PTFE	EPDM, PTFE
Mechanical seal:	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)
Bearing:	Pure Carbon	Pure Carbon
Drive shaft:	stainless steel (1.4571)	stainless steel (1.4571)



#### Complete drum drainage

Nearly completely drained. Residual quantity < 0.10 litres.

Illustration shows: Pump tube RE SS PURE with motor MA II Utilisable Length (Dimension C -40 mm) Dimension C Pump tube also available in PURE version with Tri-Clamp connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

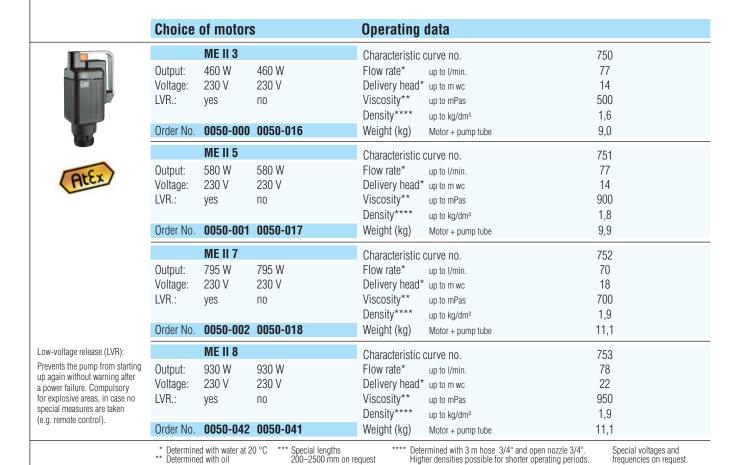
Please remember that the flow rate is reduced as the Viscosity increases. The Density of the pumped liquid similarly affects the flow rate, though to a lesser extent.

### **Lutz Drum and Container Pumps**

Pump tube RE-SS PURE (stainless steel) for complete drum drainage of alcoholic, highly inflammable foodstuffs

Product detail	Pump tube		RE-SS MS
	Type of impeller		L
	Category 1 / 2 (acc. to ATEX)	yes	
51	Immersion tube diameter:	up to mm	41
	Temperature of medium:	up to °C	100
	Material:	Pump tube Impeller	1.4571 ETFE
	Hose connection:	Tri-Clamp DN	32
	Length: 700 mm*** ▲	Order No. basic pump	0151-156
	Length: 1000 mm*** ▲	Order No. basic pump	0151-157
	Length: 1200 mm*** ▲	Order No. basic pump	0151-158
	Version: PURE Viton® ▲	Order No. additional price	0151-360
	Version: PURE EPDM *	Order No. additional price	0151-362

<sup>▲</sup> Please choose Order-No. basic pump + Order-No. PURE additional price

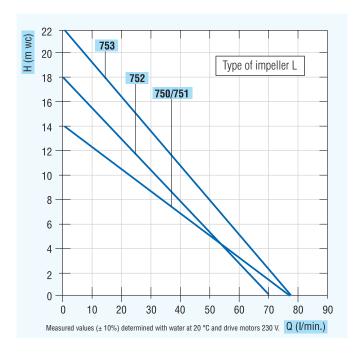


### Pump tube RE-SS PURE (stainless steel)

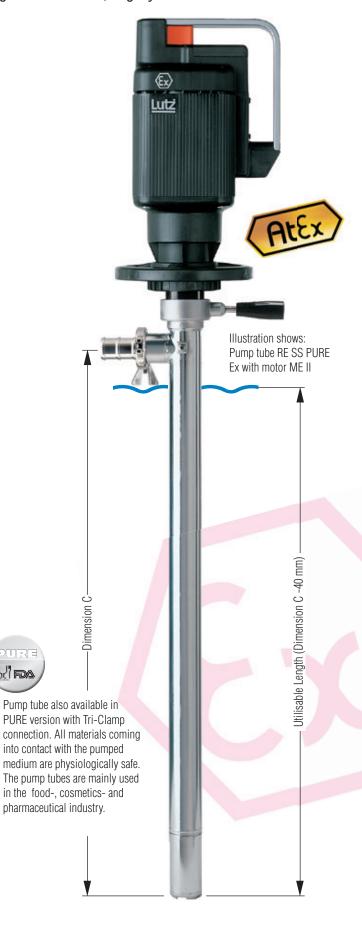
for complete drum drainage of alcoholic, highly inflammable foodstuffs

#### Materials (coming into contact with the pumped medium):

Version:	MS-FPM	MS-EPDM
Housing:	stainless steel (1.4571)	stainless steel (1.4571)
Impeller:	ETFE	ETFE
Sealing pot:	ETFE/stainless steel (1.4571)	ETFE/stainless steel (1.4571)
Seals:	FPM, PTFE	EPDM, PTFE
Mechanical seal:	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)
Bearing:	Pure Carbon	Pure Carbon
Drive shaft:	stainless steel (1.4571)	stainless steel (1.4571)







Please remember that the flow rate is reduced as the Viscosity increases. The Density of the pumped liquid similarly affects the flow rate, though to a lesser extent.

### **Lutz Drum and Container Pumps**

Pump tube MP-SS PURE (stainless steel) for mixing and pumping of aqueous and fatty foodstuffs

Product detail	Pump tube	MP-SS-MS		
w.	Type of impeller		R	R
	Category 1 / 2 (acc. to ATEX)		no	yes
5	Immersion tube diameter:	up to mm	41	41
	Temperature of medium:	up to °C	100	100
	Material:	Pump tube	1.4571	1.4571
		Impeller	SS	ETFE
	Hose connection:	Tri-Clamp DN	32	32
III.	Length: 700 mm*** ▲	Order No. basic pump	0151-240	0151-240
	Length: 1225 mm*** ▲	Order No. basic pump	0151-255	0151-255
ll l				
	Version: PURE Viton® ▲	Order No. additional price	-	0151-355
- 1	Version: PURE EPDM ▲	Order No. additional price	0151-356	0151-357
	▲ Please choose Order-No. basic pump + Order-	No. PURE additional price		

	Choice	of motors	3		Operating data		
-Akain's	Output: Voltage: Order No.	MI 4 - 500 W 230 V <b>0030-000</b>	WI 4-E with speed controller 500 W 230 V 0030-001		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	900 210 10 350 1,1 6,0
	Output: Voltage: LVR.:	MA II 3 460 W 230 V no <b>0060-000</b>	460 W 230 V yes <b>0060-008</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	curve no.  up to I/min.  up to m wc  up to mPas  up to kg/dm³  Motor + pump tube	901 178 9 200 1,2 7,8
	Output: Voltage: LVR.:	MA II 5 575 W 230 V no 0060-001	MA II 5 575 W 230 V yes 0060-009	MA II 5 S 575 W 230 V no acid-proof <b>0060-091</b>	Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	902 190 10 550 1,3 8,6
Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.	Output: Voltage: LVR.:	MA II 7 795 W 230 V no 0060-002	795 W 230 V yes <b>0060-010</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	903 210 13 400 1,4 9,8
	Output: Voltage: Protection switch: Order No.	<b>B4/GT</b> 750 W 230/400 V  no 0004+019	750 W 230/400 V yes <b>0004+067</b>		Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	905 140 10,5 400 2,0 14,0

<sup>\*</sup> Determined with water at 20 °C
\*\* Determined with oil

<sup>\*\*\*</sup> Special lengths 200–2500 mm on request

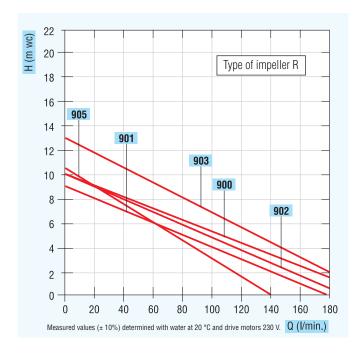
<sup>\*\*\*\*</sup> Determined with 3 m hose 3/4" and open nozzle 3/4". Higher densities possible for shorter operating periods.

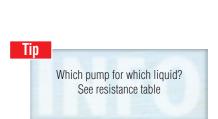
### Pump tube MP-SS PURE (stainless steel)

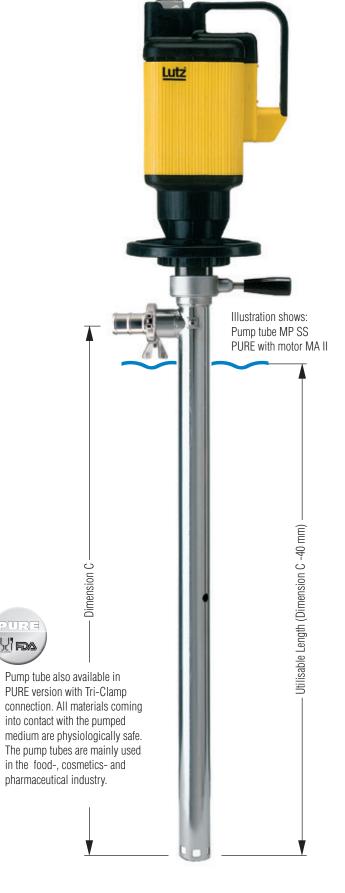
for mixing and pumping of aqueous and fatty foodstuffs

#### Materials (coming into contact with the pumped medium):

Version:	MS-FPM	MS-EPDM
Housing:	stainless steel (1.4571)	stainless steel (1.4571)
Impeller:	ETFE	ETFE optional SS
Seals:	FPM, PTFE	EPDM, PTFE
Mechanical seal:	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)
Bearing:	Pure Carbon	Pure Carbon
Drive shaft:	stainless steel (1.4571)	stainless steel (1.4571)







Please remember that the flow rate is reduced as the **Viscosity** increases. The **Density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.

## **Lutz Drum and Container Pumps**

Pump tube MP-SS PURE (stainless steel) for mixing and pumping of alcoholic, highly inflammable foodstuffs

Product detail	Pump tube	MP-SS MS	
	Type of impeller		R
<u></u>	Category 1 / 2 (acc. to ATEX)		yes
51	Immersion tube diameter:	up to mm	41
	Temperature of medium:	up to °C	100
	Material:	Pump tube Impeller	1.4571 ETFE
	Hose connection:	Tri-Clamp DN	32
l lik	Length: 700 mm*** ▲	Order No. basic pump	0151-240
	Length: 1225 mm*** ▲	Order No. basic pump	0151-255
	Version: PURE Viton® ▲	Order No. additional price	0151-355
	Version: PURE EPDM ▲	Order No. additional price	0151-357
	▲Please choose Order-No. basic pump + Order-No. PURE add	tional price	

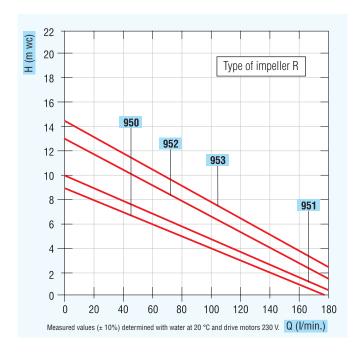
	Choice	of motors		Operating	data	
	Output: Voltage: LVR.: Order No.	ME II 3 460 W 230 V yes 0050-000	460 W 230 V no <b>0050-016</b>	Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	950 178 9 200 1,2 9,0
ALEX	Output: Voltage: LVR.:	ME II 5 580 W 230 V yes 0050-001	580 W 230 V no <b>0050-017</b>	Characteristic Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	951 190 10 550 1,3 9,9
	Output: Voltage: LVR.:	ME II 7 795 W 230 V yes 0050-002	795 W 230 V no <b>0050-018</b>	Characteristic Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	up to I/min.	952 210 13 400 1,4 11,1
Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. Compulsory for explosive areas, in case no special measures are taken (e.g. remote control).	Output: Voltage: LVR.:	ME II 8 930 W 230 V yes 0050-042	930 W 230 V no <b>0050-041</b>	Characteristic of Flow rate* Delivery head* Viscosity** Density**** Weight (kg)	curve no. up to I/min. up to m wc up to mPas up to kg/dm³ Motor + pump tube	953 216 14,5 650 1,4 11,1
	* Determine ** Determine	ed with water at 2 ed with oil	0 °C *** Special lengths 200–2500 mm on re	**** Dete equest High	rmined with 3 m hose 3/4" and open nozzle 3/4". wer densities possible for shorter operating periods.	Special voltages and frequencies on request.

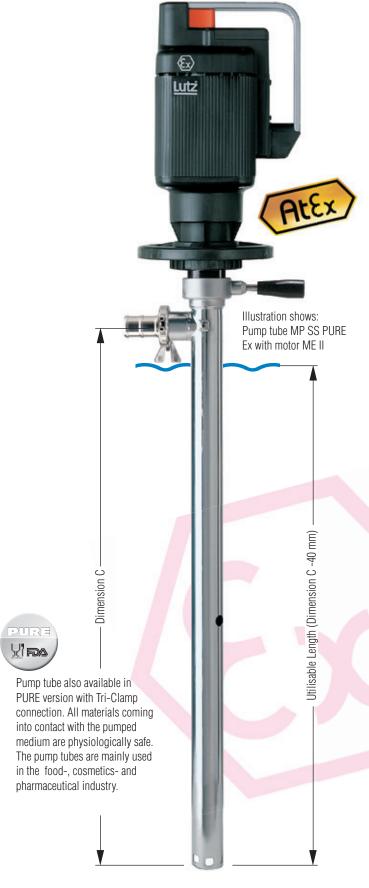
### Pump tube MP-SS PURE (stainless steel)

for mixing and pumping of alcoholic, highly inflammable foodstuffs

#### Materials (coming into contact with the pumped medium):

Version:	MS-FPM	MS-EPDM
Housing:	stainless steel (1.4571)	stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	FPM, PTFE	EPDM, PTFE
Mechanical seal:	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)	Carbon, Ceramic, PTFE, HC-4 (2.4610), stainless steel 1.4571)
Bearing:	Pure Carbon	Pure Carbon
Drive shaft:	stainless steel (1.4571)	stainless steel (1.4571)





Please remember that the flow rate is reduced as the **Viscosity** increases. The **Density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.

#### Lutz HD-E PURE for medium viscous foodstuffs



# The intelligent solution for the pumping of medium viscosity liquids

High efficiency, handy, low weight and easily disassembled for easy cleaning make the Lutz HD-E a practical drum pump system especially for medium viscosity liquids.

It is suitable for pumping acids and basic liquids, oils, used oil, waste disposal liquids, colours, foodstuffs, cosmetics and creams.

- ✓ Light and compact
- Simple and easily dismantled
- Easy to clean
- ✓ Suitable for continuous operation
- Practical Lutz hand wheel for motor separation and to carry
- ✓ Smooth flow
- For thin and thick liquids
- Constant volumetric flow

Product detail	Pump tube		HD-E PURE		
-	Category 1 / 2 (acc. to ATEX)		no		
	Immersion tube diameter:	max. mm	41		
	Temperature of medium:	max. °C	100		
	Material:	Pump tube Stator	Stainless steel (1.4571) PTFE		
	Hose connection:	Tri-Clamp DN	32		
	Length: 1000 mm <sup>▲</sup>	Order-No. basic pump	0155-010		
	Version PURE FPM <sup>▲</sup>	Order-No. additional price	0155-016		
	Version PURE EPDM ▲	Order-No. additional price	0155-017		
į	▲ Please choose Order-No. basic pump + Order-  Choice of motors	Operating data			
	Single phase motor				
	Output: 0,55 kW Voltage: 230 V Speed: 1500 1/min.	Delivery rate up to I/min. Delivery head up to bar Viscosity mPas	20 4 500-4000		

#### for viscosities from 500 to 4000 mPas

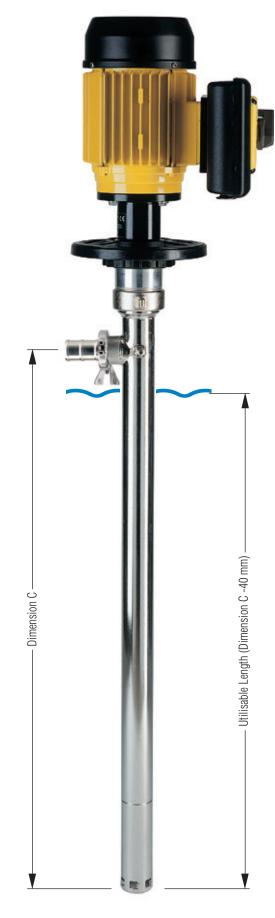
#### Materials (coming into contact with the pumped medium)

Version:	HD-E PURE FPM	HD-E PURE EPDM
Pump tube:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator:	PTFE	PTFE
Mechanical seal:	Stainless steel/Carbon/FPM	Stainless steel/Carbon/EPDM
Secondary seal:	FPM	EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)



Pump tube in PURE version also available with Tri-Clamp-connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.





### B70V-SR 12.1, 25.1 and 50.1 PURE for viscous foodstuffs

Product detail	Pump tub	es			B70V-SR PURE				
-	Size			12.1	12.1	25.1	25.1	50.1	50.1
*	Category 1 /	2 (acc. to ATE)	<)	no	yes	no	yes	no	yes
	Seal	Packing gland Mechanical sea	(St) (MS)	MS	MS	MS	MS	MS	MS
	Drive shaft	Torsion shaft Universal joint	(TS) shaft (UJ)	TS	UJ	TS	UJ	TS	UJ
	Delivery rate	*	up to I/min.	12	12	25	25	50	50
	Delivery head	<b>]</b> *	up to bar	6	6	6	6	6	6
	Temp. of medium**		max. °C	140	140	140	140	140	140
	Material pump tube			1.4571	1.4571	1.4571	1.4571	1.4571	1.4571
N N	Material stator			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
-	Immersion tu	be diameter	mm	54	54	54	54	54	54
U.	Pressure join	t	Tri-Clamp DN	50	50	50	50	50	50
	Weight		kg	7	7	7	7	7	7
	Length***		mm	1000	1000	1000	1000	1100	1100
	Order-No. basic pump ▲		0174-014	0174-024	0174-134	0174-144	0174-514	0174-524	
	Order-No. additional price PURE FPM •			0172-128	0173-138	0172-128	0173-138	0172-128	0173-138
	Order-No. ad	ditional price l	PURE EPDM *	0172-129	0173-139	0172-129	0173-139	0172-129	0173-139

riangle Please choose Order-No. basic pump + Order-No. PURE additional price

- \* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator
- \*\* with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)
- \*\*\* Special length 500 2000 mm on request (version with joint shaft only)
- Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA and temperature class T4







Choice of motors					
Universal motors non-ex. proof	MI 4	MI 4-E	MAII3	MA II 5	MAII7
Туре	500 W, 230 V	500 W, 230 V	460 W, 230 V	575 W, 230 V	795 W, 230 V
Protection class/Weight	IP 24 2,8 kg ohne Drehzahlst.	IP 24 2,8 kg mit Drehzahlst.	IP 54 4,6 kg	IP 54 5,4 kg	IP 54 6,6 kg
Order-No. (without low-voltage release)	0030-000	0030-001	0060-000	0060-001	0060-002
Order-No. (with low-voltage release)	-	-	0060-008	0060-009	0060-010



Universal motors ex. proof	ME II 3	ME II 5	ME II 7	ME II 8
Type	460 W, 230 V	580 W, 230 V	795 W, 230 V	930 W, 230 V
Protection class/Weight	IP 54 5,5 kg	IP 54 6,3 kg	IP 54 7,5 kg	IP 54 8 kg
Order-No. (with low-voltage release)	0050-000	0050-001	0050-002	0050-042
Order-No. (without low-voltage release)	0050-016	0050-017	0050-018	0050-041

### B70V-SR 12.1, 25.1 and 50.1 PURE

for viscosities from 1 - 30,000 mPas

#### Materials (coming into contact with the pumped medium):

Version:	B70V-SR PURE PTFE/FPM	B70V-SR PURE PTFE/EPDM
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM	EPDM
Mechanical seal: Torsion shaft Universal joint shaft	WC/SiC/FPM WC/WC/FPM	WC/SiC/EPDM WC/WC/EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	PTFE	PTFE

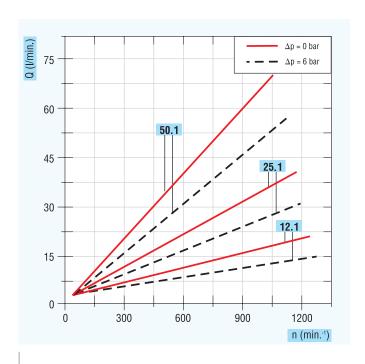


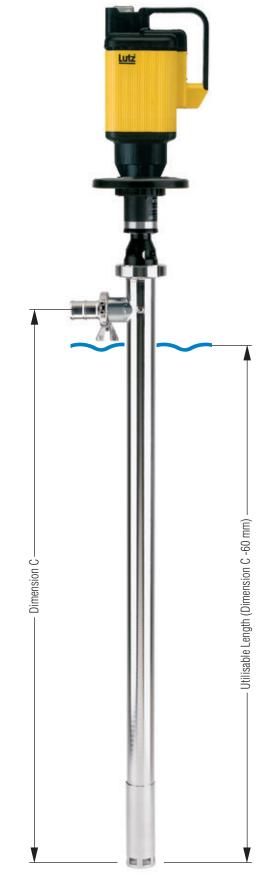
Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

#### **Important Information!**

When pumping in "Zone O" areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range. Medium table with liquid examples see chemical resistance table.





#### B70V 12.1 and 25.1 PURE for viscous foodstuffs

Product detail	Pump tubes				B70V PURE			
	Size			12.1	12.1	25.1	25.1	
700	Category 1 / 2	2 (acc. to ATEX)		no	yes	no	yes	
- T	Seal	Mechanical seal	(MS)	MS	MS	MS	MS	
	Drive shaft	Torsion shaft Universal joint sh	(TS) aft (UJ)	TS	UJ	TS	UJ	
	Delivery rate*	· l	ıp to I/min.	12	12	25	25	
	Delivery head	l* l	ıp to bar	6	6	6	6	
	Temp. of medium**		nax. °C	140	140	140	140	
	Material pump tube			1.4571	1.4571	1.4571	1.4571	
	Material stator		TFE	PTFE	PTFE	PTFE		
	Immersion tu	be diameter r	nm	54	54	54	54	
	Pressure join	t 1	ri-Clamp DN	50	50	50	50	
	Weight	ŀ	g	7	7	7	7	
	Length***	ľ	nm	1000	1000	1000	1000	
	Order-No. basic pump ▲		0172-004	0173-014	0172-124	0173-134		
	Order-No. additional price PURE FPM *		0172-128	0173-138	0172-128	0173-138		
	Order-No. ad	ditional price PL	IRE EPDM 🌥	0172-129	0173-139	0172-129	0173-139	

- ▲ Please choose Order-No. basic pump + Order-No. PURE additional price
- Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator
- with PTEF Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)
  Special length 500 2000 mm on request (version with joint shaft only)

**Choice of motors** 

Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA and temperature class T4





Three-phase motor 230/400 V, 50 Hz, Efficiency level IE 2  $(\geq 0.75 \text{ kW})$  according to directive 2005/32/EG. Special voltages, frequencies, protection classes as well as higher explosion proof protection classes on request.

Motors with cable terminal box	For B70V - 12.1		For B70V - 25.1	
Туре	0,37 kW, 700 1/min.	0,55 kW, 900 1/min.	0,55 kW, 700 1/min.	0,75 kW, 900 1/min.
Protection class/Weight	IP 55 15,7 kg	IP 55 11,3 kg	IP 55 15,7 kg	IP 55 17,3 kg
Order-No.	0172+803	0172+806	0172+809	0172+812
Oluci-No.	0172+003	0172+000	01724005	01727012

Motors with protection switch	For B70V - 12.1		For B70V - 25.1	
Туре	0,37 kW, 700 1/min.	0,55 kW, 900 1/min.	0,55 kW, 700 1/min.	0,75 kW, 900 1/min.
Protection class/Weight	IP 54 15,7 kg	IP 54 11,3 kg	IP 54 15,7 kg	IP 54 17,3 kg
Order-No.	0172+802	0172+805	0172+808	0172+811

Motors, explosion proof	For B70V - 12.1		For B70V - 25.1	
Туре	0,37 kW, 700 1/min.	0,55 kW, 900 1/min.	0,55 kW, 700 1/min.	0,65 kW, 900 1/min.
Protection class	II 2 G Ex e II T3			
Protection class/Weight	IP 54 16,4 kg	IP 54 17,2 kg	IP 54 18 kg	IP 54 15,3 kg
Order-No.	0172-801	0172-804	0172-807	0172-810

Motors with frequency converter	For B70V - 12.1	For B70V - 25.1	
Type	0,55 kW, 0-900 1/min.	0,55 kW, 0-900 1/min.	0,75 kW, 0-900 1/min.
Protection class/Weight	IP 54 13,5 kg	IP 54 13,5 kg	IP 54 15 kg
Order-No.	0172-769	0172-769	0172-768

for viscosities from 1 - 100,000 mPas

#### Materials (coming into contact with the pumped medium):

Version:	B70V PURE PTFE/FPM	B70V PURE PTFE/EPDM
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM	EPDM
Mechanical seal: Torsion shaft Universal joint shaft	WC/SiC/FPM WC/WC/FPM	WC/SiC/EPDM WC/WC/EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	PTFE	PTFE

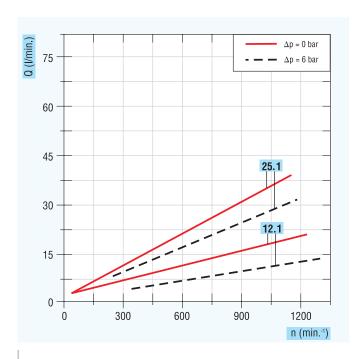


Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

#### **Important Information!**

When pumping in "Zone O" areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range. Medium table with liquid examples see chemical resistance table.





#### B70V 25.2 PURE for viscous foodstuffs

Product detail	<b>Pump tubes</b>		B70V	PURE
	Size		25.2	25.2
7000	Category 1 / 2 (a	cc. to ATEX)	no	yes
		acking gland (St) lechanical seal (MS)	MS	MS
		orsion shaft (TS) niversal joint shaft (UJ)	TS	UJ
	Delivery rate*	up to I/min.	25	25
	Delivery head*	up to bar	10	10
	Temp. of medium	n** max. °C	140	140
	Material pump tu	ibe	1.4571	1.4571
	Material stator		PTFE	PTFE
121	Immersion tube of	diameter mm	54	54
	Pressure joint	Tri-Clamp DN	50	50
	Weight	kg	7	7
	Length***	mm	1100	1100
	Order-No. basic p	pump <b>≜</b>	0172-254	0173-264
	Order-No. addition	onal price PURE FPM A	0172-128	0173-138
	Order-No. addition	onal price PURE EPDM A	0172-129	0173-139
	▲ Places choose Orde	r-No hasic numn ± Order-No P	LIRE additional price	

- ▲ Please choose Order-No. basic pump + Order-No. PURE additional price
- \* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator
- \*\* with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)
- \*\*\* Special length 500 2000 mm on request (version with joint shaft only)
- Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA and temperature class T4





#### **Choice of motors**



Three-phase motor 230/400 V, 50 Hz,

Efficiency level IE 2 (≥ 0,75 kW) according to directive 2005/32/EG.

Special voltages, frequencies, protection classes as well as higher explosion proof protection classes on request.

Motors with cable terminal box	For B70V - 25.2	
Туре	0,75 kW, 700 1/min.	1,1 kW, 900 1/min.
Protection class/Weight	IP 55 17,3 kg	IP 55 21,1 kg
Order-No.	0172+815	0172+818

 Motors with protection switch
 For B70V - 25.2

 Type
 0,75 kW, 700 1/min.
 1,1 kW, 900 1/min.

 Protection class/Weight
 IP 54 17,3 kg
 IP 54 21,1 kg

 Order-No.
 0172+814
 0172+817

 Motors, explosion proof
 For B70V - 25.2

 Type
 0,65 kW, 700 1/min.
 1,0 kW, 900 1/min.

 Protection class
 II 2 G Ex e II T3
 II 2 G Ex e II T3

 Protection class/Weight
 IP 54 20 kg
 IP 54 20 kg

 Order-No.
 0172-813
 0172-816

Motors with frequency converterFor B70V - 25.2Type1,1 kW, 0-900 1/min.Protection class/WeightIP 54 20 kgOrder-No.0172-767

for viscosities from 1 - 100,000 mPas

#### Materials (coming into contact with the pumped medium):

Version:	B70V PURE PTFE/FPM	B70V PURE PTFE/EPDM
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM	FPM or EPDM
Mechanical seal: Torsion shaft Universal joint shaft	WC/SiC/FPM WC/WC/FPM	WC/SiC/EPDM WC/WC/EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	PTFE	PTFE

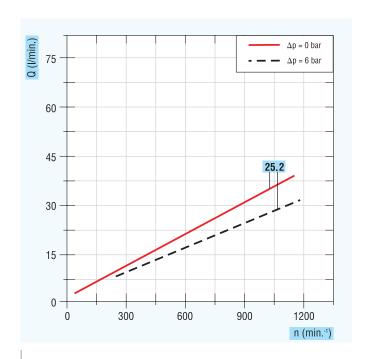


Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

#### **Important Information!**

When pumping in "Zone O" areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range. Medium table with liquid examples see chemical resistance table.





Product detail	Pump tubes		B70V PURE	
1887	Size	50.1	50.1	75.1
700	Category 1 / 2 (acc. to ATEX)	no	yes	no
4	Seal Packing gland (St) Mechanical seal (MS)	MS	MS	MS
	Drive shaft Torsion shaft (TS) Universal joint shaft (UJ)	TS	UJ	UJ
	Delivery rate* up to I/min.	50	50	75
	Delivery head* up to bar	6	6	6
ll l	Temp. of medium** max. °C	140	140	140
III	Material pump tube	1.4571	1.4571	1.4571
	Material stator	PTFE	PTFE	PTFE
	Immersion tube diameter mm	54	54	54
421	Pressure joint Tri-Clamp DN	50	50	50
	Weight kg	7	7	7
200	Length*** mm	1100	1100	1100
	Order-No. basic pump ▲	0172-504	0173-514	0173-564
	Order-No. additional price PURE FPM ^	0172-128	0173-138	0173-140
	Order-No. additional price PURE EPDM	0172-129	0173-139	0173-141
	<ul> <li>▲ Please choose Order-No. basic pump + Order-No.</li> <li>* Determined with water at 20 °C, three-phase motor (: with PTFE Stator (the medium temperature of explosion Special length 500 - 2000 mm on request (version we explosion proof eccentric screw pur for pumping inflammable liquids of the Choice of motors</li> </ul>	900 rpm) and elastomer stator on proof eccentric screw pumps B70 may not ex ith joint shaft only) np approved category 1 / 2 (acc. to	o ATEX)	Ex ALE
	Motors with cable terminal box	For B70V - 50.1		
			4.4.134/.000.4/:-	
	Tyne	1 1 kW /()() 1/min	1 1 KW 900 1/min	
(0)	Type Protection class/Weight	1,1 kW, 700 1/min. IP 55 21 kg	1,1 kW, 900 1/min. IP 55 21,1 kg	



230/400 V, 50 Hz, Efficiency level IE 2 ( $\geq$  0,75 kW) according to directive 2005/32/EG.

Special voltages, frequencies, protection classes as well as higher explosion proof protection classes on request.

Motors with cable terminal box	For B70V - 50.1		
Туре	1,1 kW, 700 1/min.	1,1 kW, 900 1/min.	
Protection class/Weight	IP 55 21 kg	IP 55 21,1 kg	
Order-No.	0172+826	0172+818	
Motors with cable terminal box	For B70V - 75.1		
Type Protection class/Weight	1,1 kW, 700 1/min. IP 55 21 kg	1,5 kW, 700 1/min. IP 55 33 kg	1,5 kW, 900 1/min. IP 55 30 kg
Order-No.	0172+826	0172-761	0172+829
	E		
Motors with protection switch	For B70V - 50.1		
Type	1,1 kW, 700 1/min.	1,1 kW, 900 1/min.	
Protection class/Weight	IP 54 21 kg	IP 54 21,1 kg	
Order-No.	0172+825	0172+817	
Motors with protection switch	For B70V - 75.1		
Type	1.1 kW. 700 1/min.	1,5 kW, 700 1/min.	1,5 kW, 900 1/min.
Protection class/Weight	IP 54 21 kg	IP 54 33 ka	IP 54 30 ka
Order-No.	0172+825	0172-760	0172+828
0.000.110.	01121020	0.1.2 100	0.112.1020
Motors, explosion proof	For B70V - 50.1		
Туре	0,65 kW, 700 1/min.	1,0 kW, 900 1/min.	
Protection class	II 2 G Ex e II T3	II 2 G Ex e II T3	
Protection class/Weight	IP 54 20 kg	IP 54 20 kg	
Order-No.	0172-813	0172-816	
Materia with frances and a monthly	For D70V F0 4	For D70V 7F 4	
Motors with frequency converter	For B70V - 50.1	For B70V - 75.1	
Version	1,1 kW, 0-900 1/min.	1,5 kW, 0-900 1/min.	
Protection class/Weight	IP 54 20 kg	IP 54 34 kg	
Order-No.	0172-767	0172-766	

for viscosities from 1 - 100,000 mPas

#### Materials (coming into contact with the pumped medium):

Version:	B70V PURE PTFE/FPM	B70V PURE PTFE/EPDM
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM	EPDM
Mechanical seal: Torsion shaft Universal joint shaft	WC/SiC/FPM WC/WC/FPM	WC/SiC/EPDM WC/WC/EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	PTFE	PTFE

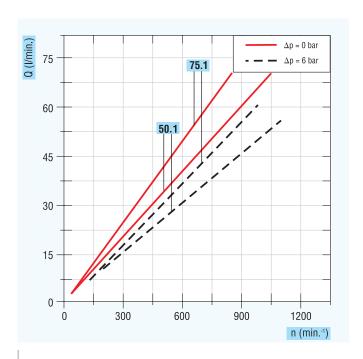


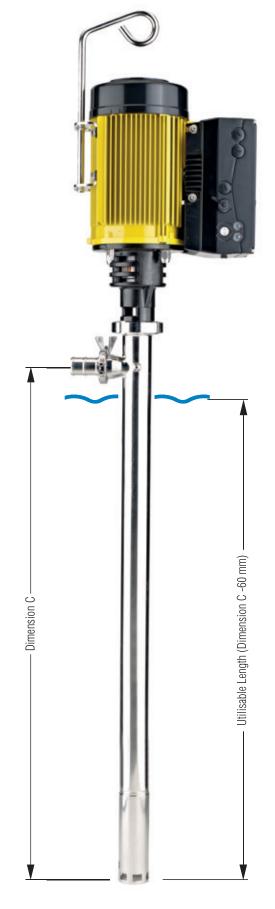
Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

#### **Important Information!**

When pumping in "Zone O" areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range. Medium table with liquid examples see chemical resistance table.





### B70V 120.1 PURE for viscous and pasty foodstuffs

Product detail	Pump tubes	B70V PURE
7	Size	120.1
	Category 1 / 2 (acc. to ATEX)	no
TI.	Seal Mechanical seal (MS)	MS
	Drive shaft Universal joint shaft (UJ)	UJ
	Delivery rate* up to I/min.	120
	Delivery head* up to bar	6
	Temp. of medium max. °C	140
	Material pump tube	1.4571
	Material stator	PTFE
THE	Pumpendurchmesser** max. mm	131
7114	Pressure joint Tri Clamp DN	50
45	Weight kg	21
	Length*** mm	1100
	Order-No. basic pump *	0175-201
	Order-No. additional price PURE FPM *	0175-208
	Order-No. additional price PURE EPDM	

<sup>▲</sup> Please choose Order-No. basic pump + Order-No. PURE additional price

- \* Determined with water at 20 °C, three-phase motor (600 bzw. 700 1/min.) and elastomer stator
- \*\* required bunghole Ø 133 mm
- \*\*\* Special length 500 2000 mm on request

#### **Choice of motors**



Motors with cable terminal box	For B70V - 120.1	
Type Protection class/Weight	2,2 kW, 600 1/min. IP 55 32 kg	3,0 kW, 600 1/min. IP 55 39 kg
Order-No.	0175+800	0175+801

Motors with frequency converter	For B70V - 120.1
Version Protection class/Weight	3,0 kW, 0-600 1/min. IP 54 44 kg
Order-No.	0175+802

Three-phase motors 230/400 V, 50 Hz, Efficiency level IE 2 ( $\geq$  0,75 kW) according to directive 2005/32/EG. Special voltages, frequencies, protection class on request.

#### for viscosities from 1 - 120.000 mPas

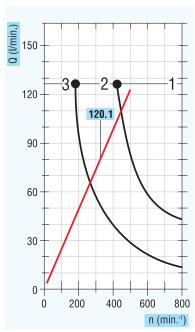
#### Materials (coming into contact with the pumped medium):

Version:	B70V PURE PTFE/FPM	B70V PURE PTFE/EPDM
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM	FPM
Mechanical seal:*	WC/WC, FPM	WC/WC, EPDM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	PTFE	PTFE

<sup>\*</sup> Mechanical seal pairing on request.



Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.



#### Range 1:

Thin-bodied and lubricating fluids such as wine, milk, oils etc.  $\eta < 7000 \text{ mPas}$ 

#### Range 2:

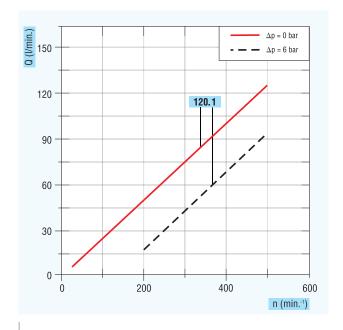
Abrasive and viscous fluids such as pulps, adhesives, paints, inks, etc.  $\eta <$  20,000 mPas

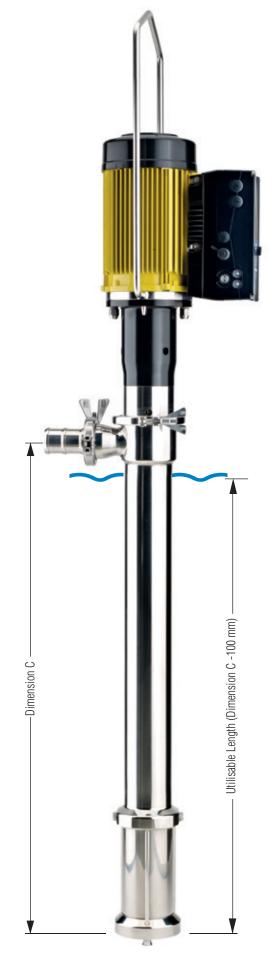
#### Range 3:

Very abrasive and highly viscous fluids such as honey, greases, syrups, etc.  $\eta > 20,\!000 \text{ mPas}$ 

#### **Viscosity range:**

Up to limit of flowabilty





B70V-H-SR Sanitary 12.1, 25.1 and 50.1 for viscous foodstuffs, pharmaceutical and cosmetic products

Product detail	Pump tubes		B70V-H-SR Sanitary		
-	Size		12.1	25.1	50.1
	Seal Mechanical seal	(MS)	MS	MS	MS
- FI	Delivery rate*	up to I/min.	12	25	50
	Delivery head*	up to bar	6	6	8
	Temp. of medium**	max. °C	100	100	100
	Material pump tube		1.4404	1.4404	1.4404
	Immersion tube diameter	mm	54	54	54
	Pressure joint	Tri-Clamp	DN 50	DN 50	DN 50
	Weight	kg	7	7	7
1.	Length	mm	1100	1100	1100
U	Stator EPDM Seal EPDM	Order-No.	-	-	0174-516
	Stator PTFE Seal EPDM	Order-No.	0174-017	0174-137 •	0174-517 •
	Stator PTFE Seal FPM	Order-No.	0174-018	0174-138	0174-518

- \* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator
- \*\* with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)
- Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA and temperature class T4





	Choice of motors					
	Universal motors non-ex. proof	MI 4	MI 4-E	MAII3	MA II 5	MAII7
was a second	Type Protection class/Weight	500 W, 230 V IP 24 2,8 kg	500 W, 230 V IP 24 2,8 kg with speed contr.	460 W, 230 V IP 54 4,6 kg	575 W, 230 V IP 54 5,4 kg	795 W, 230 V IP 54 6,6 kg
	Order-No. (without low-voltage release)	0030-000	0030-001	0060-000	0060-001	0060-002
	Order-No. (with low-voltage release)	-	-	0060-008	0060-009	0060-010



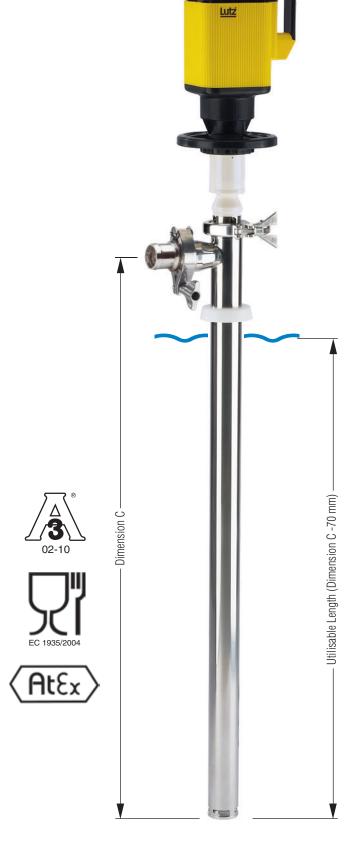
Universal motors ex. proof	ME II 3	ME II 5	ME II 7	ME II 8
Туре	460 W, 230 V	580 W, 230 V	795 W, 230 V	930 W, 230 V
Protection class/Weight	IP 54 5,5 kg	IP 54 6,3 kg	IP 54 7,5 kg	IP 54 8 kg
Order-No. (with low-voltage release)	0050-000	0050-001	0050-002	0050-042
Order-No. (without low-voltage release)	0050-016	0050-017	0050-018	0050-041

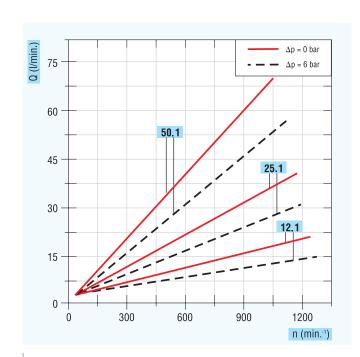
# B70V-H-SR Sanitary 12.1, 25.1 and 50.1

for viscosities up to 30,000 mPas

### Materials (coming into contact with the pumped medium):

Version:	B70V-H-SR Sanitary 12.1/25.1/50.1
Housing:	Stainless steel (1.4404)
Rotor:	Stainless steel (1.4571)
Seals:	EPDM, FPM
Mechanical seal:	SiC/Carbon/EPDM (FPM), optional SiC/SiC/EPDM (FPM)
Drive shaft:	Stainless steel (1.4571)
Stator material:	PTFE, EPDM (Size 50.1)





# **Lutz Eccentric Screw Pumps**

B70V-H-D Sanitary 12.1, 25.1 for viscous foodstuffs, pharmaceutical and cosmetic products

Product detail	Pump tubes		B70V-H-D	Sanitary
Tit	Size		12.1	25.1
J.	Seal Mechanical seal	(MS)	MS	MS
9	Delivery rate*	up to I/min.	12	25
	Delivery head*	up to bar	6	8
	Temp. of medium**	max. °C	100	100
	Material pump tube		1.4404	1.4404
	Immersion tube diameter	mm	54	54
	Pressure joint	Tri-Clamp	DN 50	DN 50
	Weight	kg	7	7
	Length	mm	1100	1100
1	Stator PTFE Seal EPDM	Order-No.	0172-007 •	0172-127 •
III	Stator PTFE Seal FPM	Order-No.	0172-020	0172-140

- Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator
- with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)
- Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA and temperature class T4



IP 54 15,3 kg



Protection class/Weight

Three-phase motor 230/400 V, 50 Hz, RAL 9005,

Efficiency level IE 2  $(\geq 0.75 \text{ kW})$  according to directive 2005/32/EG.

Special voltages, frequencies, protection classes on request.

Choice of motors				
Motors with protection switch	For B70V-H-D Sani	tary - 12.1	For B70V-H-D Sani	tary - 25.1
Version	0,55 kW, 700 1/min.	0,55 kW, 900 1/min.	0,55 kW, 700 1/min.	0,75 kW, 900 1/min.
Protection class/Weight	IP 54 16,5 kg	IP 54 11 kg	IP 54 16,5 kg	IP 55 17 kg
Order-No.	0172+808	0172+805	0172+808	0172+811
Motors, explosion proof	For B70V-H-D San	itary - 12.1	For B70V-H-D San	itary - 25.1
Type	0,37 kW, 700 1/min.	0,55 kW, 900 1/min.	0,55 kW, 700 1/min.	0,65 kW, 900 1/min.
Protection class	II 2 G Ex e II T3			

Order-No.	0172-801	0172-804	0172-807	0172-810
Motors with frequency converter	For B70V-H-D Sanit	tary - 12.1	For B70V-H-D Sani	tary - 25.1
Version	0,55 kW, 0-900 1/min.		0,55 kW, 0-900 1/min.	0,75 kW, 0-900 1/min.
Protection class/Weight	IP 54 13,5 kg		IP 54 13,5 kg	IP 54 15 kg
Order-No	0172-769		<b>0172-769</b>	<b>0172-768</b>

IP 54 17,2 kg

IP 54 18 kg

IP 54 16,4 kg

# B70V-H-D Sanitary 12.1, 25.1

for viscosities up to 100.000 mPas

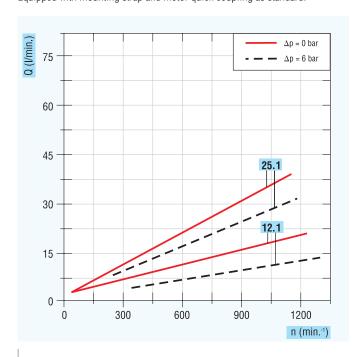
### Materials (coming into contact with the pumped medium):

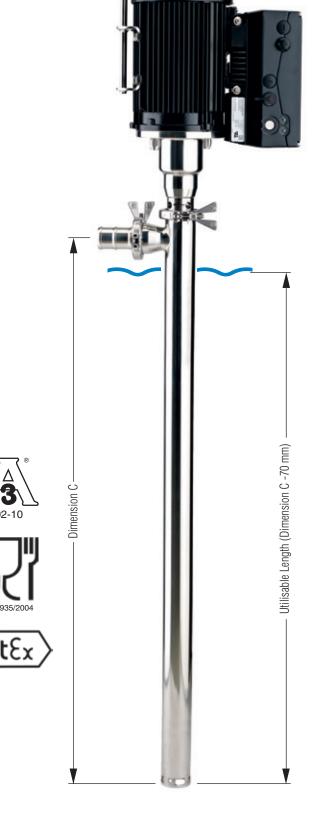
Version:	B70V-H-D Sanitary 12.1/25.1
Housing:	Stainless steel (1.4404)
Rotor:	Stainless steel (1.4571)
Seals:	EPDM, FPM
Mechanical seal:	SiC/Carbon/EPDM (FPM), optional SiC/SiC/EPDM (FPM)
Drive shaft:	Stainless steel (1.4571)
Stator material:	PTFE





Equipped with mounting strap and motor quick coupling as standard.





# **Lutz Eccentric Screw Pumps**

B70V-H-D Sanitary 25.2, 50.1, 75.1 for viscous foodstuffs, pharmaceutical and cosmetic products

Product detail	Pump tubes			B70V-H-D Sanitary	1
Tit	Size		25.2	50.1	75.1
J.	Seal Mechanical seal	(MS)	MS	MS	MS
5	Delivery rate*	up to I/min.	25	50	75
	Delivery head*	up to bar	10	8	6
	Temp. of medium**	max. °C	100	100	100
	Material pump tube		1.4404	1.4404	1.4404
	Immersion tube diameter	mm	54	54	54
	Pressure joint	Tri-Clamp	DN 50	DN 50	DN 50
	Weight	kg	7	7	7
N.	Length	mm	1100	1100	1100
	Stator EPDM Seal EPDM	Order-No.	-	0172-506	-
	Stator PTFE Seal EPDM	Order-No.	0172-257	0172-507 •	0172-557
	Stator PTFE Seal FPM	Order-No.	0172-270	0172-520	0172-570
	<ul> <li>Explosion proof eccentric</li> </ul>	erature of explosion proof eccentric s c screw pump approved (	mer stator crew pumps B70 may not exceed 100°C) category 1 / 2 (acc. to ATEX) n group IIA and temperature	class T4	EX ALEX





Motors with protection switch	For B70V-H-D Sanitary - 25.2	For B70V-H-D Sanitary - 50.1
Version	0,75 kW, 700 1/min.	1,1 kW, 900 1/min.
Protection class/Weight	IP 54 17 kg	IP 54 21,5 kg
Order-No.	0172+814	0172+817

Motors, explosion proof	For B70V-H-D Sanitary - 25.2	For B70V-H-D Sanitary - 50.1	For B70V-H-D Sanitary - 25.2, 50.	1, 75.1
Version	0,65 kW, 700 1/min.	1,0 kW, 900 1/min.	1,3 kW, 900 1/min.	1,9 kW, 900 1/min.
Protection class	II 2 G Ex e II T3	II 2 G Ex e II T3	II 2 G Ex e II T3	II 2 G Ex e II T3
Protection class/Weight	IP 54 20 kg	IP 54 20 kg	IP 54 39 kg	IP 54 51 kg
Order-No.	0172-813	0172-816	0172-856	0172-857

Three-phase motor 230/400 V, 50 Hz, RAL 9005,

Efficiency level IE 2 (≥ 0,75 kW) according to directive 2005/32/EG.

Special voltages, frequencies, protection classes on request.

Motors with frequency converter	For B70V-H-D Sani	tary - 25.2	For B70V-H-D Sanitary - 50.1
Version	0,75 kW, 0-900 1/min.	1,1 kW, 0-900 1/min.	1,1 kW, 0-900 1/min.
Protection class/Weight	IP 54 15 kg	IP 54 20 kg	IP 54 20 kg
Order-No.	0172-768	0172-767	0172-767

Motors with cable terminal box	For B70V-H-D Sani	tary - 75.1
Version Protection class/Weight	1,5 kW, 700 1/min. IP 55 33 kg	1,5 kW, 900 1/min. IP 55 30 kg
Order-No.	0172-761	0172+829

Motors with protection switch For	r B70V-H-D Sani	ary - 75.1
1.1	, ,	1,5 kW, 900 1/min.
Protection class/Weight IP 5	54 33 kg	IP 54 30 kg
Order-No. <b>017</b>	72-760	0172+828

Motors with frequency converter	For B70V-H-D Sanitary - 75.1
Version Protection class/Weight	1,5 kW, 0-900 1/min. IP 54 34 kg
Order-No.	0172-766

# B70V-H-D Sanitary 25.2, 50.1, 75.1

for viscosities up to 100.000 mPas

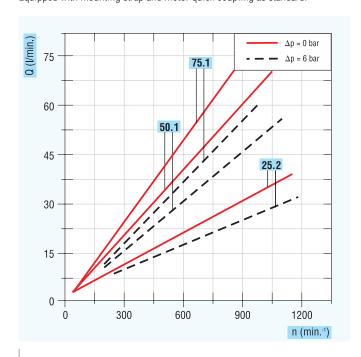
### Materials (coming into contact with the pumped medium):

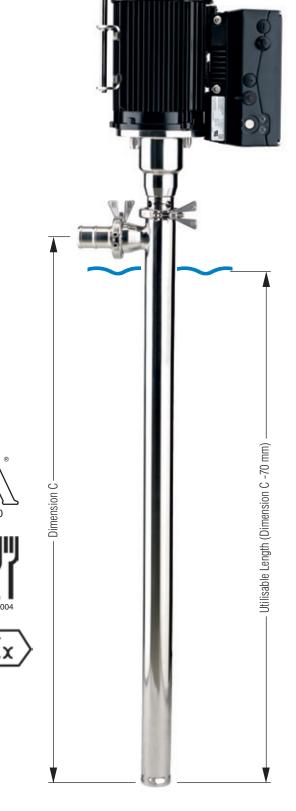
Version:	B70V-H-D Sanitary 25.2/50.1/75.1
Housing:	Stainless steel (1.4404)
Rotor:	Stainless steel (1.4571)
Seals:	EPDM, FPM
Mechanical seal:	SiC/Carbon/EPDM (FPM), optional SiC/SiC/EPDM (FPM)
Drive shaft:	Stainless steel (1.4571)
Stator material:	PTFE, EPDM (Size 50.1)

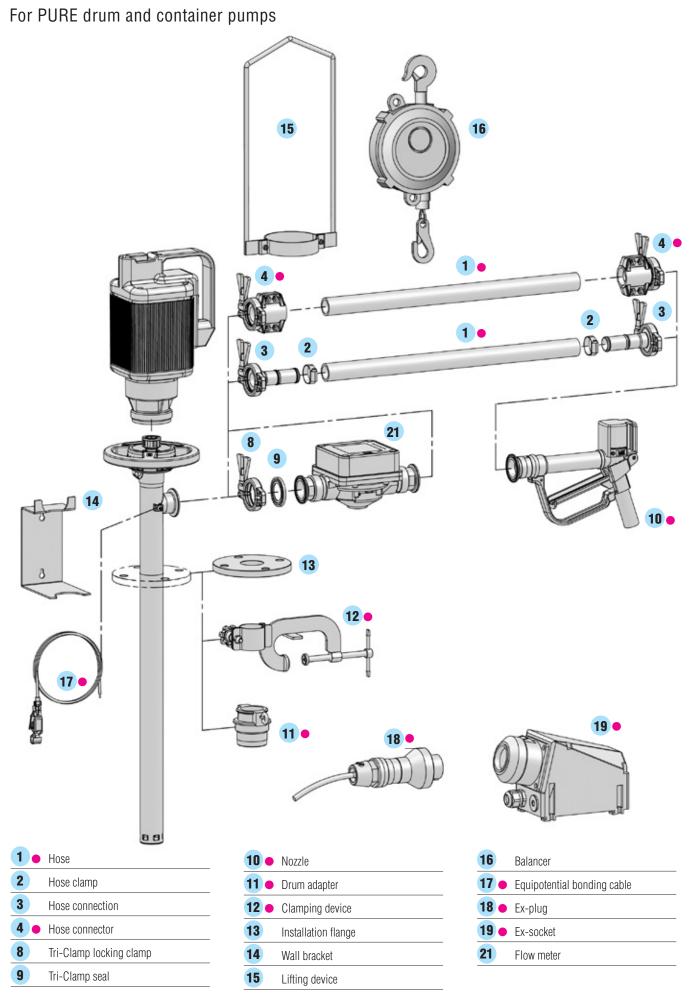




Equipped with mounting strap and motor quick coupling as standard.







Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

### For PURE drum and container pumps

### Specification Order-No. Product detail

### 1 PVC spiral hose

Hose for food liquids made of PVC with woven layer and embedded galvanized steel spiral, smooth interior and exterior, complies with EU Regulation 1935/2004 EG.

Operating pressure: up to 14 bar
Temperature of medium: -5 °C up to +65 °C

 Nominal diameter:
 Weight:

 DN 19 (3/4")
 0,45 kg/m
 0374-466

 DN 25 (1")
 0,67 kg/m
 0374-467

 DN 32 (1 1/4")
 0,80 kg/m
 0374-468

 DN 38 (1 1/2")
 1,15 kg/m
 0374-469



### 1 Food chemical hose

Colour coding: "blue/white/blue".

Ideal for food and luxury foodstuffs, pharmaceuticals, cosmetics and hygiene products, complies with EU Regulation 1935/2004 EC and FDA and ATEX requirements. Internal finish: UPE light with spiraled OHM conductive stripes UPE black, smooth, non-bleeding, abrasion-resistant.

Intermediate layer: EPDM conductive

External finish: EPDM light grey, conductive, non-bleeding, ozone- and UV resistant, hardly inflammable, Type  $\Omega$  smaller 10 $^{6}$  ohm (to EN 12115).

natury initatifitable, Type 12 Sinalier 10° Offitt (to EN 12

Operating pressure: up to 16 bar Temperature of medium: up to 16 bar -30 up to +100 °C

can be sterilized at 130°C for 30 minutes (open system)

 Nominal diameter:
 Weight:

 DN 19 (3/4")
 0,6 kg/m

 DN 25 (1")
 0,8 kg/m

 DN 32 (1 1/4")
 0,9 kg/m

 DN 38 (1 1/2")
 1,2 kg/m

0374-475 • 0374-476 • 0374-477 • 0374-478 •



### 2 Stepless 1-ear hose clamp

1-ear hose clamp of stainless steel for the safe fixing of different hoses onto the hose connection. (Advices for selecting the suitable hose clamp - see hoses).

.....

for Tri-Clamp 0204-870 / PVC spiral hose DN 19, fabric reinforced for Tri-Clamp 0204-870 / Food chemical hose DN 19	0300-417 0300-422
for Tri-Clamp 0204-872 / PVC spiral hose DN 25, fabric reinforced for Tri-Clamp 0204-872 / Food chemical hose DN 25	0300-446 0300-442
for Tri-Clamp 0204-874 / PVC spiral hose DN 32, fabric reinforced for Tri-Clamp 0204-874 / Food chemical hose DN 32	0300-453 0300-460



### For PURE drum and container pumps

Product detail

### Specification

Order-No.



#### **Caution:**

The assembler is responsible for the professional bonding of the hose according to the current Pressure Equipment Directive.

### 3 Hose connection with Tri-Clamp

For connection of the hose onto the pump, nozzle or Tri-clamp armatures (consisting of hose connector, locking clamp and seal)

Material: stainless steel (1.4404)

Connection:	for hose with nominal diameter:	Seal:	
Tri-Clamp DN 32	DN 19 (3/4")	EPDM	0204-870
Tri-Clamp DN 32	DN 19 (3/4")	FPM	0204-871
Tri-Clamp DN 32	DN 25 (1")	EPDM	0204-872
Tri-Clamp DN 32	DN 25 (1")	FPM	0204-873
Tri-Clamp DN 32	DN 32 (1 1/4")	EPDM	0204-874
Tri-Clamp DN 32	DN 32 (1 1/4")	FPM	0204-875
Tri-Clamp DN 32	DN 40 (1 1/2")	EPDM	0204-876
Tri-Clamp DN 32	DN 40 (1 1/2")	FPM	0204-877

### For individual needs, e.g. for connection to on-site Tri-clamp armatures: Tri-clamp hose connector (1.4404):

DN 32 for hose DN 19	0370-093
DN 32 for hose DN 25	0370-094
DN 32 for hose DN 32	0370-095
DN 32 for hose DN 40	0370-096

#### Tri-clamp locking clamp (1.4408):

DN 25/32/40		0370-088

### Tri-Clamp seals:

DN 32. EPDM	0314-592
DN 32. FPM	0314-593
DN 40, EPDM	0314-594
DN 40, FPM	0314-595

### 3 Adapter fitting Tri-Clamp

DN 32 on tube fitting DIN 11851 **0172-668** Rd 58 x 1/6 (DIN 405)



### 4 Hose connector with Tri-clamp

For connection of conductive hose onto the pump, nozzle or Tri-clamp armatures in explosive hazardous area. The hose connector ensures a highly conduction transition between conductive hose and pump/armature. The ohmic resistance between the armatures must be lower than 106 Ohm. (Consisting of hose connector, clamp collars, locking clamp and seal). Material: stainless steel (1.4404)

Connection:	for hose with nominal diameter:	Seal:	
Tri-Clamp DN 32	DN 19 (3/4")	EPDM	0204-860 🔵
Tri-Clamp DN 32	DN 19 (3/4")	FPM	0204-861 🔵
Tri-Clamp DN 32	DN 25 (1")	EPDM	0204-862 🔵
Tri-Clamp DN 32	DN 25 (1")	FPM	0204-863 🔵
Tri-Clamp DN 32	DN 32 (1 1/4")	EPDM	0204-864 🔵
Tri-Clamp DN 32	DN 32 (1 1/4")	FPM	0204-865 🔵
Tri-Clamp DN 40**	DN 40 (1 1/2")	EPDM	0204-866 🔵
Tri-Clamp DN 40**	DN 40 (1 1/2")	FPM	0204-867 🔵

### For individual needs, e.g. for connection to on-site Tri-clamp armatures: Tri-clamp hose connector (1.4404):

DN 32 for hose DN 19	0300-174
DN 32 for hose DN 25	0300-175
DN 32 for hose DN 32	0300-176
DN 40 for hose DN 40	0300-177

### Clamp collar (1.4408):

DN 19	0300-180
DN 25	0300-181
DN 32	0300-182
DN 40	0300-183

### Tri-Clamp locking clamp (1.4408):

DN 25/32/40 **0370-088** 

#### **Tri-Clamp Seals:**

DN 32, EPDM	0314-592
DN 32, FPM	0314-593
DN 40, EPDM	0314-594
DN 40, FPM	0314-595

### For PURE drum and container pumps

	Specification	Order-No.	Product detail
10	Nozzle SS  Ideally suitable for filling and transferring liquids — also for combustible and highly inflammable liquids — in food and pharmaceutical industry.  Stainless steel (1.4571) housing and valve tappet. With hoop guard and rotating joint.		
	Operating pressure: up to 3 bar Viscosity: up to 760 mPas Flow rate: up to 50 l/min. (water) Temperature of medium: up to 80 °C Weight: approx. 1 kg Connection: Tri-Clamp DN 32 Seal: FPM or EPDM		
	Basic price nozzle SS <sup>*</sup> Additional price version: PURE FPM <sup>*</sup> Additional price version: PURE EPDM <sup>®*</sup>	0204-370 • 0204-820 • 0204-821 •	
	▲Please choose Order-No. basic price nozzle + Order No. additional price version: PURE		
11	<b>Drum adapter in PP</b> For fixing the pump in the drum opening. For pump tube $\emptyset$ 41 mm Outer thread G 2	0208-007	
11	Drum adapter in PE (electrically conductive)		
	For fixing the pump in the drum opening.		
	For pump tube Ø 41 mm Outer thread G 2 Outer thread BCS 56 x 4 Outer thread BCS 70 x 6	0208-055 • 0208-052 • 0208-054 •	
12	Clamping device SS (1.4571)		
	To fasten the drum pumps in open-topped drums and containers. For pump tube $\varnothing$ 41 mm	0205-040 •	
13	Installation flange SS (1.4571)		
	For fixing the drum and container pump according to DIN 2573, DN 50, PN 6 to a companion flange. The flange is welded onto the pump tube. For pump tube $\varnothing$ 41 mm	0151-622	
14	Wall bracket For safe storage of the pump when not in use.	0204-308	
15	Lifting device		
	To simplify the process of lifting the pump in and out of drums and containers.		
	For pumps with motors MA II and ME II For pumps with motors B4/GT	0211-047 0214-196	

### For PURE drum and container pumps

### Product detail

### Specification

Order-No.



#### 16 Hoist

for drum pump, with infinitely adjustable load balancer for easy lifting and moving of the pump.

0371-012

Load bearing capacity: 10-14 kg Tackle: 2 m



### 17 Equipotential bonding cable

Serves to create electrically conductive connection between explosion proof pump and container as earthing and equipontential bonding function.

2 m long with fastening clip

0204-994



### 18 Ex-plug

Ensures the safe mains connection of the pump in explosive hazardous areas. CEE round plug in accordance with EEx de IIC T6, splash proof in compliance with IP 65.

3-pole (alternating current) system CEAG for motor ME II 3-pole (alternating current) system STAHL for motor ME II

0336-536 **O** 

### 19 Ex-socket

Ensures the safe mains connection of the pump in explosive hazardous areas. CEE-socket in accordance with EEx de IIC T6, splash proof in compliance with IP 65.

3-pole (alternating current) system CEAG for motor ME II 3-pole (alternating current) system STAHL for motor ME II

0336-531

0336-542



### 21 Modular electronical flow meter system, TS series, type VA10 in PURE version

For measuring of liquid foodstuffs, pharmaceuticals and cosmetics. Wide application range: directly at the drum pump, decentralized or in-line operation possible.

With touch screen display, multilingual menu and simple plain text operation.

Also with volume preselection.

(Suitable connecting parts see items 8 and 9)

For more details see separate flow meter leaflet.



#### 8 Tri-Clamp locking clamp (1.4408)

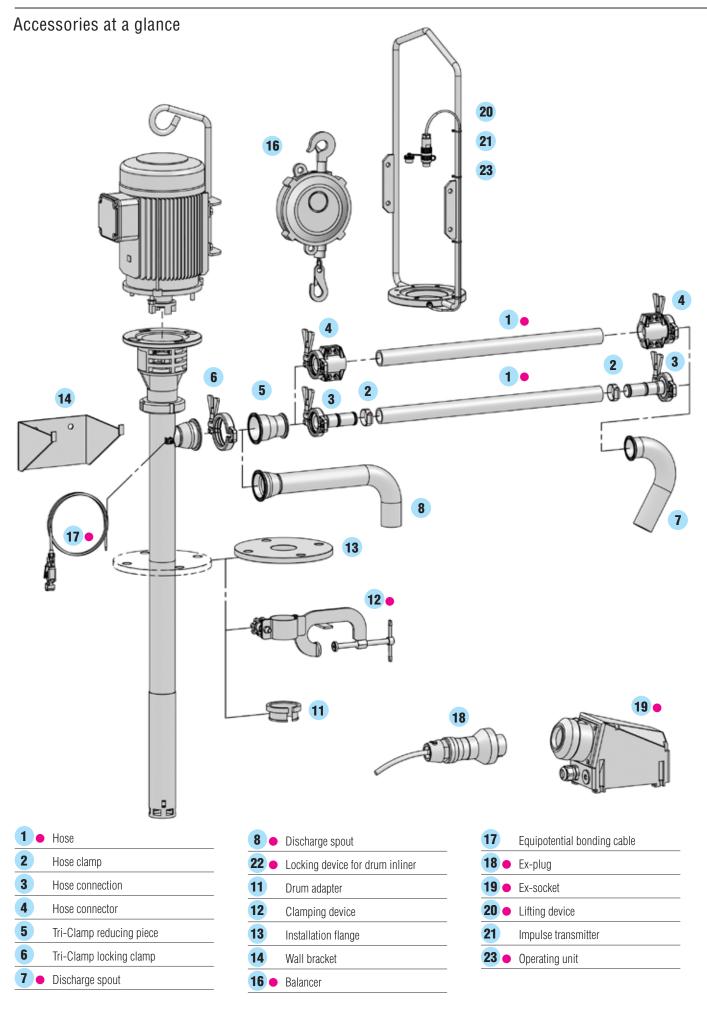
For fixing the flow meter VA10 PURE at the pump. (Suitable seal see item 9)

DN 25/32/40 0370-088 •

#### 9 Tri-Clamp seal

For fixing the flow meter VA10 PURE at the pump.

DN 00 FDM	-00
DN 32, FPM <b>0314-5</b>	593
DN 40, EPDM <b>0314-5</b>	594
DN 40, FPM <b>0314-5</b>	595



Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

### For B70 PURE and B70 Sanitary

### Specification Order-No. Product detail

### 1 PVC spiral hose

Hose for food liquids made of PVC with woven layer and embedded galvanized steel spiral, smooth interior and exterior, complies with EU Regulation 1935/2004 EG.

Operating pressure: max. 14 bar
Temp. of medium: -5 °C up to +65 °C

 Nominal diameter:
 Weight:

 DN 25 (1")
 0,67 kg/m
 0374-467

 DN 32 (1 1/4")
 0,80 kg/m
 0374-468

 DN 38 (1 1/2")
 1,15 kg/m
 0374-469

 DN 50 (2")
 1,60 kg/m
 0374-470



#### 1 Food chemical hose

Colour coding: "blue/white/blue".

Ideal for food and luxury foodstuffs, pharmaceuticals, cosmetics and hygiene products, complies with EU Regulation 1935/2004 EC and FDA and ATEX requirements. Internal finish: UPE light with spiraled OHM conductive stripes UPE black, smooth,

non-bleeding, abrasion-resistant. Intermediate layer: EPDM conductive

 $\hbox{\it External finish: EPDM light grey, conductive, non-bleeding, ozone- and UV resistant,}\\$ 

hardly inflammable, Type  $\Omega$  smaller 10<sup>6</sup> ohm (to EN 12115).

Operating pressure: up to 16 bar Temperature of medium: up to 16 bar -30 up to +100 °C

can be sterilized at 130°C for 30 minutes (open system)

 Nominal diameter:
 Weight:

 DN 25 (1")
 0,8 kg/m

 DN 32 (1 1/4")
 0,9 kg/m

 DN 38 (1 1/2")
 1,2 kg/m

 DN 50 (2")
 1,9 kg/m

0374-476 **•** 0374-477 **•** 

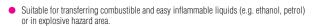
0374-478 **•** 0374-479 **•** 



### 2 Stepless 1-ear hose clamp

1-ear hose clamp of stainless steel for the safe fixing of different hoses onto the hose connection.

for Tri-Clamp 0204-872 / PVC spiral hose DN 25, fabric reinforced for Tri-Clamp 0204-872 / Food chemical hose DN 25	0300-446 0300-442
for Tri-Clamp 0204-874 / PVC spiral hose DN 32, fabric reinforced for Tri-Clamp 0204-874 / Food chemical hose DN 32	0300-453 0300-460
for Tri-Clamp 0204-876 / PVC spiral hose DN 38, fabric reinforced for Tri-Clamp 0204-876 / Food chemical hose DN 38	0300-465 0300-465
for Tri-Clamp 0204-872 / PVC spiral hose DN 50, fabric reinforced for Tri-Clamp 0204-872 / Food chemical hose DN 50	0300-473 0300-477



### For B70 PURE and B70 Sanitary

Product detail **Specification** Order-No.



#### **Caution:**

The assembler is responsible for the professional bonding of the hose according to the current Pressure Equipment Directive.

### Hose connection with Tri-Clamp

For connection of the hose onto the eccentric screw pump B70, discharge spout or Tri-clamp armatures (consisting of hose connector, locking clamp and seal) Material: Stainless steel (1.4404)

Connection:	for hose with nominal diameter:	Seal:
Tri-Clamp DN 32**	DN 19 (3/4")	<b>EPDM</b>
Tri-Clamp DN 32**	DN 19 (3/4")	FPM
Tri-Clamp DN 32**	DN 25 (1")	<b>EPDM</b>

Tri-Clamp DN 32**	DN 19 (3/4")	FPM	0204-871
Tri-Clamp DN 32**	DN 25 (1")	EPDM	0204-872
Tri-Clamp DN 32**	DN 25 (1")	FPM	0204-873
Tri-Clamp DN 32**	DN 32 (1 1/4")	EPDM	0204-874
Tri-Clamp DN 32**	DN 32 (1 1/4")	FPM	0204-875
Tri-Clamp DN 32**	DN 40 (1 1/2")	EPDM	0204-876
Tri-Clamp DN 32**	DN 40 (1 1/2")	FPM	0204-877
Tri-Clamp DN 50	DN 40 (1 1/2")	EPDM	0172-746
Tri-Clamp DN 50	DN 40 (1 1/2")	FPM	0204-878
Tri-Clamp DN 50	DN 50 (2")	EPDM	0204-879
Tri-Clamp DN 50	DN 50 (2")	FPM	0204-880

0204-870

#### For individual needs, e.g. for connection to on-site Tri-clamp armatures: Tri-clamp hose connector (1.4404):

DN 32 for hose DN 19	•	,	0370-093
DN 32 for hose DN 25			0370-094
DN 32 for hose DN 32			0370-095
DN 32 for hose DN 40			0370-096
DN 50 for hose DN 50			0370-097

### Tri-clamp locking clamp (1.4408):

DN 25/32/40			0370-088
DN 50			0370-084

### **Tri-Clamp Seals:**

DN 32, EPDM	0314-592
DN 32, FPM	0314-593
DN 40, EPDM	0314-594
DN 40, FPM	0314-595
DN 50, EPDM	0314-590
DN 50, FPM	0314-591

<sup>\*\*</sup> If using for eccentric screw pumps B70 an additional reducing piece DN 50 to DN 25/32/40 (Item 5) and a locking clamp (Item. 6) are required.

### Adapter fitting Tri-Clamp

DN 32 on tube fitting DIN 11851	0172-668
Rd 58 x 1/6 (DIN 405)	

0172-747 DN 50 on tube fitting DIN 11851 Rd 78 x 1/6 (DIN 405)

Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

### For B70 PURE and B70 Sanitary

#### **Specification** Order-No. Product detail

### Hose connector with Tri-clamp

For connection of conductive hose onto the eccentric screw pump B70, Discharge spout or Tri-Clamp armatures in explosive hazardous area.

The hose connector ensures a highly conduction transition between conductive hose and pump/armature.

The ohmic resistance between the armatures must be lower than 10<sup>6</sup> Ohm. (Consisting of hose connector, clamp collars, locking clamp and seal)

Material: Stainless steel (1.4404)

Connection:	for hose Nominal diameter:	Seal:	
Tri-Clamp DN 32**	DN 19 (3/4")	EPDM	0204-860 🔵
Tri-Clamp DN 32**	DN 19 (3/4")	FPM	0204-861 🔵
Tri-Clamp DN 32**	DN 25 (1")	EPDM	0204-862 🔵
Tri-Clamp DN 32**	DN 25 (1")	FPM	0204-863 🔵
Tri-Clamp DN 32**	DN 32 (1 1/4")	EPDM	0204-864 🔵
Tri-Clamp DN 32**	DN 32 (1 1/4")	FPM	0204-865 🔵
Tri-Clamp DN 40**	DN 40 (1 1/2")	EPDM	0204-866 🔵
Tri-Clamp DN 40**	DN 40 (1 1/2")	FPM	0204-867 🔵
Tri-Clamp DN 50	DN 50 (2")	EPDM	0204-868 🔵
Tri-Clamp DN 50	DN 50 (2")	FPM	0204-869 🔵

#### For individual needs, e.g. for connection to on-site Tri-clamp armatures: Tri-clamp hose connector (1.4404):

	0300-174
	0300-175
	0300-176
	0300-177
	0300-178
`	,

### Clamp collar (1.4408):

DN 19	0300-180
DN 25	0300-181
DN 32	0300-182
DN 40	0300-183
DN 50	0300-184

### Tri-Clamp locking clamp (1.4408):

DN 50 Tri-Clamp Seals:	0370-084
DN 25/32/40	0370-088 0370-084

0314-592
0314-593
0314-594
0314-595
0314-590
0314-591

<sup>\*\*</sup> If using for eccentric screw pumps B70 an additional reducing piece DN 50 to DN 25/32/40 (Item 5) and a locking clamp (Item. 6) are required.



### For B70 PURE and B70 Sanitary

 Product detail	Specification	Order-No.
	5 Tri-Clamp reducing piece Suitable for connection of Tri-Clamp armatures DN 25/32/40 to a Tri-Clamp DN 50 connecting piece. Material: Stainless steel (1.4408) DN 50 onto DN 25/32/40	0300-185 •
	6 Tri-Clamp locking clamp Suitable for connection of armatures DN 50 to a connecting piece DN 50. Material: Stainless steel (1.4408) incl. seal. DN 50, Seal EPDM DN 50, Seal FPM	0172-745 • 0204-477 •
	7 Discharge spout  Zur Montage am Schlauchende zum direkten Ab- and Umfüllen in Behältnissen, inkl. Seal and Klammer.  Material: Stainless steel (1.4301/EPDM)  Tri-Clamp DN 32  Tri-Clamp DN 40	0370-098 • 0370-099 •
	8 Discharge spout  For mounting at the end of the hose for direct filling and transferring in containers incl. seal and clamp.  Material: Stainless steel (1.4571, 1.4404/EPDM).  Tri-Clamp DN 50	0172-748 ●
	22 Locking device at the bottom for drum inliner For mounting onto the pump foot. Protects sensitive drum inliner and bags from damage. For pump tube B70V-H Sanitary	0172-771 •
	Drum adapter in PP  For fixing the eccentric screw pump B70 in the drum opening.  For pump tube Ø 52-54 mm  Universal for all current drum and bunghole openings	0208-056
1000	12 Clamping device SS (1.4571)  To fasten the eccentric screw pump B70 in open-topped drums and containers.  For pump tube Ø 52-54 mm	0205-052 •
	Installation flange SS (1.4571)  For fixing the eccentric screw pump B70 according to DIN 2573, DN 50, PN 6, to a companion flange. The flange is welded onto the pump tube. For pump tube Ø 52-54 mm	0170-310
1	14 Wall bracket  For safe storage of the eccentric screw pump B70 when not in use.  for B70V for B70V-SR	0204-309 0204-307

### For B70 PURE and B70 Sanitary

	Specification		Order-No.	Product detail
16	Hoist for eccentric screw pumps, with infinit for easy lifting and moving of the pum Load bearing capacity: 18-22 kg Load bearing capacity: 22-25 kg Load bearing capacity: 25-30 kg		0371-013 0371-014 0371-015	
17	Equipotential bonding cable Serves to create electrically conductiv and container as earthing and equipor 2 m long with fastening clip 2 m long with two fastening clips	e connection between explosion proof pump ntential bonding function. for B70V-H Sanitary	0204-994 <b>•</b> 0204-992 <b>•</b>	
18		the pump in explosive hazardous areas.  Ex de IIC T6, splash proof in compliance with IP 65.  for B70V-SR (Ex) for B70V-SR (Ex) for B70V (Ex) for B70V (Ex)	0336-536 • 0336-540 • 0336-537 • 0336-541 •	
19	Ex-socket Ensures the safe mains connection of CEE-socket in accordance with EEx de 3-pole (alternating current) CEAG 3-pole (alternating current) STAHL 5-pole (three phase current) STAHL 5-pole (three phase current) STAHL	the pump in explosive hazardous areas. e IIC T6, splash proof in compliance with IP 65. for B70V-SR (Ex) for B70V-SR (Ex) for B70V (Ex) for B70V (Ex)	0336-531 • 0336-542 • 0336-420 • 0336-543 •	
23		IC T6 with thermal and electromagnetic trip,	0335-414 • 0335-419 • 0335-420 •	
18	Coupling part, motor side  When sourcing your own motor pleas to suit the relative shaft diameter.  Shaft diameter:  Ø 14 mm Ø 19 mm Ø 24 mm Ø 28 mm  Intermediate flange for	(only in combination with intermediate flange)	0302-028 0302-027 0302-026 0302-029 0172-850	
19	Lifting device	ump in and out of drums or containers.	0155-154 0174-607	

### Contact-free indirect measurement



Product detail Specification

1 Lifting device with integrated impulse sensor Comprises of:

Impulse sensor with connecting cable and 14-wire coupling plug, lifting device and flange plate. (Please order suitable impulse transmitter and control unit additionally)

Additional price\* for three-phase motors up to 1.1 kW

0172-891

Additional price\* for three-phase motors up to 1.5 kW and explosion proof three-phase motors Ex

0172-892

Order-No.

Complete set for retrofitting available pumps

0172-890

\*(Please indicate Ref. No. for additional price when ordering a pump)

### 2 Impulse transmitter

Must be ordered additionally suitable for the shaft diameter of the motor

For shaft diameters: Ø 19 mm 0172-824 Ø 20 mm 0172-825 Ø 24 mm 0172-826 Ø 25 mm 0172-827 Ø 28 mm 0172-828 Ø 30 mm 0172-829

Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

### Contact-free indirect measurement

	Specification		Order-No.	Product detail
	<b>Control unit</b> With touch screen display and menu-navigated operation is intended for evaluation of impulses and display of flow battery-operated**	ı. volume,		
	Control unit BE10 Control unit Ex BE10B		0230-000 0230-010 •	
	Power supply unit NG10 230 V			
	for external power supply of the operating unit 220-240 V, 50-60 Hz, II (2) G [Ex ib] IIC		0230-230	· ·
	Accessories optional			
Re	Relay module RM30			
	For three-phase motors up to 1.5 kW			2
	allows the filling with pre-selection (batch function), 400 V, 1.5 kW, 50 Hz, II (2) G [Ex ib] IIC		0230-220	
	Power cable RM30 400V			
	400 V, 50 Hz, 5-wire, 5 m long	For RM30	0211-388	
C	Connecting cable motor RM30 400V			
	400 V, 50 Hz, 5-wire, 0.6 m long	For RM30	0211-386	
For thre	Relay module RM10			
	For three-phase motors with frequency converter			
	allows the filling with pre-selection (batch function), 220-240 V, 50-60 Hz, II (2) G [Ex ib] IIC		0230-200	
Pnv	Power cable RM10 230V			
	230 V, 50 Hz, 5 m long	For RM10	0211-155	
	Adapter cable motor RM-FU 230V/24V			P 8
	For three-phase motors with frequency converter 230V AC/24V DC	For RM10	0230-323	

 $<sup>^{\</sup>star\star}$  Limited battery operation without power supply unit possible

Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

# Twice the **COMPETENCE**...







# Professional Fluid Management

Drum pump sets

Drum and container pumps

Eccentric screw drum pumps

Flow meter systems

Air operated double diaphragm pumps Vertical and horizontal centrifugal pumps









#### Lutz Pumpen GmbH

P.O. Box 14  $62 \cdot D$ -97864 Wertheim · Phone: (+49 93 42) 8 79-0 · Fax: (+49 93 42) 87 94 04 · E-Mail: info@lutz-pumpen.de www.lutz-pumpen.de

# ...simply UNIQUE











# A Measured Step Forward



Dosing pumps and accessories Chlorinators

Measuring and control technology

System and process technology
Chemical centrifugal pumps
Water disinfection













Lutz-Jesco GmbH





### Lutz Pumpen GmbH

P.O. Box 14 62 D-97864 Wertheim Phone: (0 93 42) 8 79-0 Fax: (0 93 42) 87 94 04 E-Mail: info@lutz-pumpen.de