

Lutz Drum and Container Pumps Be in Control Every Day

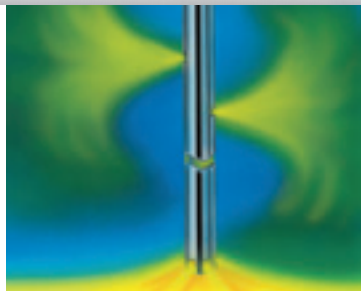
Drum Pump Sets

Laboratory and Drum Pumps

Pumps for complete drum drainage

Mixing Pumps

Container Pumps



Safety is our Concern

Lutz – the Development

Decades of innovative and convincing pump technology

1954

The company is founded by Karl Lutz.

1963

Explosion-proof motor for drum pumps, approved by the PTB*, Braunschweig.

1972

The product innovation – a sealless pumping unit.

1987

The first pumping unit worldwide for complete drum drainage.

1988

The new MA/ME generation of motors: Safety standards that are state of the art even today.



1990

EMIGA emission-proof drum adapter for enhanced safety and health protection at the work place.

1990

The first compressed air motor worldwide in a flameproof enclosure with an explosion-protection classification of Ex d IIC T6.

1993

Modular flow meter system for efficiency and accurate measurement.



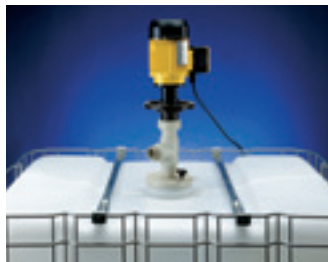
1994

Compressed-air-operated oil-free double diaphragm pumps extend the range of products.



2000

New development of a container pump for a safe transfer of chemicals.



2000

New development of a flameproof relay module for flow meters.

2001

Complete pump sets provide enhanced service and a high degree of customer-friendliness.

2001

Centrifugal pumps – easy circulation even in heavy-duty applications.

2001

Certification of all the motors, pumping units and flow meters for compliance with Atex.



2004

HDO Flow meter series for thin bodied to highly viscous fluids.

2006

Complete pump systems for the transfer of alternative fuels and additives from drums and containers.

2007

Lutz B2 Vario pump for the laboratory and research sector.



2010

Battery powered laboratory pump Lutz B1 for convenient and safe transfer of small liquid amounts.

2011

Lutz B70V Sanitary: Designed according to the latest directives for the high requirements of the food, beverage, pharmaceutical, and cosmetics industry.

2012

The new Lutz Flow Meter Series: In Touch with the Future.



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Drum Pump Sets

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Drum- and Container Pumps

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Jürgen Lutz

Consistent customer orientation

You can expect no less of us

Concern for safety and reliability plus responsible response to change have been the underlying factors which have helped us become an internationally successful company. Our faithful adherence to these concerns in fulfilling the needs of our customers has provided and will continue to provide the bedrock for sound innovative ideas.

Lutz is the reliable partner in the field of professional liquid handling. As supplier of innovative and high quality pumps and pump systems we support our customers in finding the adequate solution for their fluid handling requirements. Our products as well as our sales and service network contribute worldwide to a safe handling of fluids and the protecting of our environment.

We would be pleased to discuss with you any special requirements.

Sincerely yours,

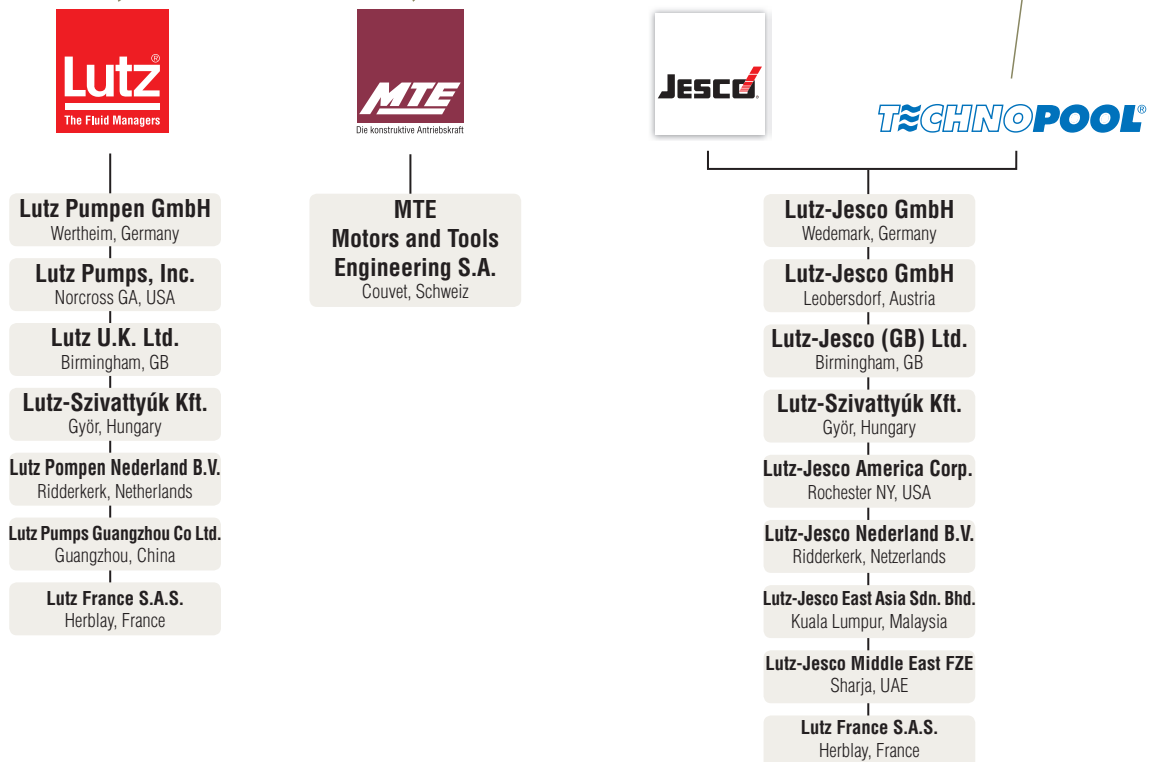
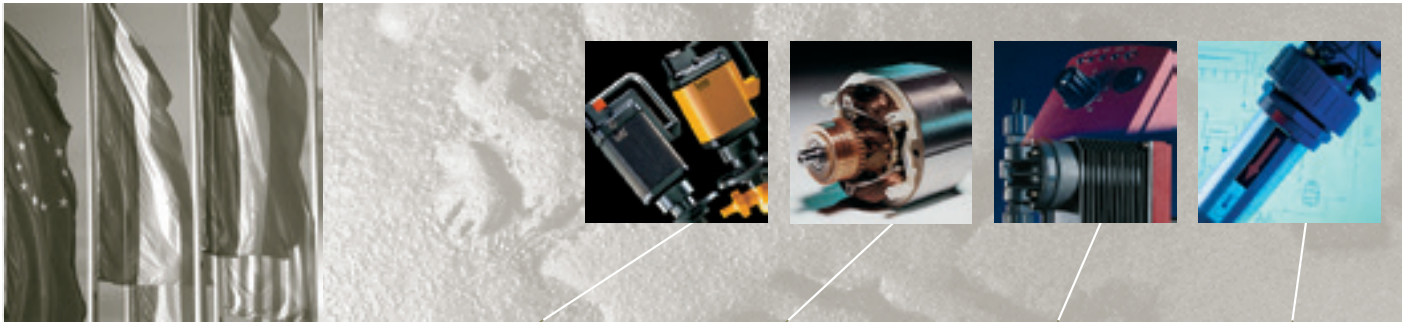


Enhanced safety

with Lutz

The Holding Structure

A clear concept



Retain what is good, be open to innovative ideas.

The Lutz Holding GmbH has its own subsidiaries in the USA, the UK, the Netherlands, France, Switzerland, Austria, Hungary, Malaysia, China and the United Arab Emirates. Through its distribution Lutz is represented in more than 80 countries worldwide.

Professional competence and various services within the companies of the Lutz group provide clear advantages and benefits to our customers. Today, the

company offers complex solutions for fluid handling, and even more. The fusion of selected enterprises considerably enlarges the product range. Additionally, the synergies resulting from the interfirm cooperation between Lutz Pumpen GmbH and MTE with Lutz-Jesco GmbH offer the customers interesting perspectives, too. Since 2003, the brand Technopool is adding water treatment equipment for pools to the product line.

The Best you can do:

Decide on Lutz



Save time and money with Lutz

Not only the price/performance ratio is outstanding, the costs of maintenance are even better: With Lutz pumps you maintain durability.

Reliable and solid

High quality materials and a proven design guarantee a long service life and a minimum of downtime.

Confidence in tried and tested quality

Personal, product and customer training, certification in compliance with DIN EN ISO 9001 and accurate inspection and testing of every single unit guarantee that you are always on the safe side.

Environmental protection is our primary concern

Environment consciousness is our primary concern. For this reason, Lutz does not "do things by halves". Complete drum drainage, pump tubes without a need for grease and gas displacement devices are a matter of course. EMIGA, the special emission-proof drum adapter by Lutz offers maximum health and environmental protection when handling hazardous material.

Service with system

Lutz pumps have hardly no wear parts, the systems are easily detachable and compatible, everything is documented – but nevertheless if service is needed, a world-wide service net and an extensive inventory ensure you that everything gets under way as fast as possible.



A tight grip on the future

With Lutz pumps you remain mobile and stay flexible for your future needs: The modular construction allows for a number of combinations.

Lutz – and our customers will always be on the safe side

Operational safety is the most essential thing. Lutz pumps have been approved for compliance with established standards and directives. They comply with all requirements laid down by ATEX, UL, PTB, VDE and CE.

Easy operator control through "punch and pump"

Unpack and get started: Lutz pumps systems are absolutely user friendly constructed, easy to clean and flush and if necessary can be disassembled/reassembled in minutes. A convenient hand wheel attaches the motor to the pump tube – connect and disconnect in seconds with no tools. The hand wheel serves as carrying handle at the same time.

Lutz provides comprehensive solutions

Irrespective of whether you want a complete set or a customised unit – Lutz provides solutions that are well-suited. A matching range of accessories guarantees efficient and safe operation in all areas of application.

Lutz Pump Sets

A quick solution for many applications



Fast assembly

Only few simple operations required

Immediately ready for use

Lutz pump sets save time and money. The annoying search for the ideal pump with suitable accessories has come to an end. Lutz is now offering you a choice of different pump sets. Optionally, the pumps can be combined with a flow meter. Thus, ordering is simple and you save time for the essential things.

Advantages at a glance:

- ✓ Ideally harmonised with the liquid being pumped
- ✓ Fast assembly
- ✓ Immediately ready for action
- ✓ Ideal for pumping and filling thin-bodied liquids
- ✓ Different pump sets for selection
- ✓ For emptying of canisters, drums and containers



Already pre-assembled

Immediately ready for action. Just delivered, you can start with the new pump sets from Lutz to empty thin-bodied liquids from canisters, drums and containers. We have made preparatory work saving your time.

Ideal combination

Whether acids or alkalis, light or concentrated, mineral oil products, hazardous fluids or solvents:

Lutz offers for all these applications the ideal solution.

More time for the essential things

Lutz Pump Sets

Motors

Powerful universal
and compressed
air motors

Drum adapter

For safe fixing the pump in the drum opening

Nozzles

for safe filling and
transferring of liquids

Hoses

Resistant to the pumped medium,
with practice-orientated 2 m hose

Pump tubes

Resistant to the pumped medium,
in different lengths, for emptying
of canisters, drums
and containers



Lutz Pump Sets

1 Pump Set Lutz B2 Vario (Polypropylene)

For thin-bodied fluids

such as battery acid, ammonia solution, photographic developer/-fixer, glycols, phosphoric acid, hydrochloric acid and hydrogen peroxide.

For filling small quantities from hobbcocks, canisters and drums.

- **Motor Lutz B2 Vario**, 200 W internally ventilated

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,3	300	75 (22)	7

Max. temperature of medium 50 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



For emptying canisters and drums		Pump Lutz B2 Vario*	Pump Set Lutz B2 Vario
	Imm. depth 500 mm	Order No. 0201-500	0205-020
	Imm. depth 700 mm	Order No. 0201-501	0205-021
	Imm. depth 1000 mm	Order No. 0201-502	0205-022



Pump Set: **Pump Lutz B2 Vario** polypropylene, 1.5 m PVC spiral hose 3/4", Lutz-nozzle, hose clamps, wall bracket.

*Pump B2 with hose connection PP 3/4"

More time for the essential things

2 Pump Set Lutz B2 Vario (Stainless Steel)

For thin-bodied fluids

such as oil-based lubricants, cleaner solvent, plasticizer.

For filling small quantities from hobbocs, canisters and drums.

- **Motor Lutz B2 Vario**, 200 W internally ventilated

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,3	300	68 (22)	6,5

Max. temperature of medium 90 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



Pump Set Lutz B2 Vario

for thin-bodied fluids

with shaft SS

(stainless steel 1.4571)

For emptying canisters and drums

Pump Lutz B2 Vario*

Pump Set Lutz B2 Vario



	Imm. depth	500 mm	Order No.	0201-510	0205-030
	Imm. depth	700 mm	Order No.	0201-511	0205-031
	Imm. depth	1000 mm	Order No.	0201-512	0205-032

Pump Set: **Pump Lutz B2 Vario** stainless steel, 1.5 m PVC spiral hose 3/4", Lutz-nozzle, hose clamps, wall bracket.

*Pump B2 with hose connection SS 3/4"

Lutz Pump Sets

3 Pump Set „Alkalis“

For thin-bodied alkalis

such as sodium chloride, kalihydrate, ammonia solution, formic acid and acetic acid.

- **Motor MI-4**, 500 W internally ventilated or optionally with
- **Motor MA II 3**, 460 W externally ventilated

Motor MI-4

For individual application.
For aggressive and non-flammable liquids.

Motor MI-4

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,4	500	87 (50)	19

Motor MA II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	500	78 (45)	16

Max. temperature of medium 50 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



Pump Set Alkalis

with motor MA II 3
externally ventilated





Pump Set Alkalis

with motor MI-4
internally ventilated

with shaft SS

(stainless steel 1.4571)



For emptying drums and containers		Pump*	Pump*	Set	Set
		with MI-4	with MA II 3	with MI-4	with MA II 3
	Imm. depth 1000 mm	Order No. 0205-105	0205-125	0205-101	0205-121
	Imm. depth 1200 mm	Order No. 0205-106	0205-126	0205-102	0205-122

Pump Set: **Motor MI-4 or MA II 3**, **pump tube PP 41-L-SL SS** polypropylene with stainless steel shaft, **2 m** PVC spiral hose 3/4" and hose connections, hose clamps, nozzle PP, drum adapter PP.

*Motor, pump tube PP, hose connection 3/4"

More time for the essential things

4 Pump Set „Acids“

For thin-bodied acids

such as hydrochloric acid, battery acid, ferric (III) chloride, phosphoric acid, chromic acid and citric acid.

- **Motor MA II 3**, 460 W externally ventilated or optionally with
- **Motor MI-4**, 500 W internally ventilated

Motor MA II 3

For fuming liquids or corrosive vapours. Powerful, externally ventilated universal motor.

Motor MA II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	500	78 (45)	16

Motor MI-4

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,4	500	87 (50)	19

Max. temperature of medium 50 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



Pump Set Acids
with motor MA II 3
externally ventilated



Easy fluid measurement optionally with flow meter TR90-PP
Order No.: 0213-032

with shaft HC
(Hastelloy C)



For emptying drums and containers		Pump*	Pump*	Set	Set
		with MI-4	with MA II 3	with MI-4	with MA II 3
	Imm. depth 1000 mm	Order No. 0205-115	0205-135	0205-111	0205-131
	Imm. depth 1200 mm	Order No. 0205-116	0205-136	0205-112	0205-132

Pump Set: **Motor MI-4 or MA II 3**, **pump tube PP 41-L-SL HC** polypropylene with Hastelloy C shaft, **2 m** PVC spiral hose 3/4" and hose connections, hose clamps, nozzle PP, drum adapter PP.

*Motor, pump tube PP, hose connection 3/4"

Lutz Pump Sets

5 Pump Set „Concentrated Acids and Alkalis“

For concentrated acids and alkalis

such as chloric acid, chromic acid, sulphuric acid, nitric acid, hydrofluoric acid and sodium hypochlorite.

- **Motor MA II 3**, 460 W externally ventilated or optionally with
- **Motor MA II 5**, 575 W externally ventilated

Motor MA II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	500	78 (45)	16

Motor MA II 5

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	800	83 (50)	17

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



Motor MA II 3
For fuming liquids or corrosive vapours. Powerful, externally ventilated universal motor.

Pump Set Acids and Alkalis

with motor MA II 3 or MA II 5 externally ventilated



Easy fluid measurement optionally with flow meter TR90-PVDF
Order No.: 0213-042



For emptying drums and containers	Pump*	Pump*	Set	Set
	with MA II 3	with MA II 5	with MA II 3	with MA II 5
Imm. depth 1000 mm	Order No. 0205-215	0205-205	0205-211	0205-201
Imm. depth 1200 mm	Order No. 0205-216	0205-206	0205-212	0205-202

Pump Set: **Motor MA II 3 or MA II 5**, pump tube PVDF 41-L-SL polyvinylidene-fluoride, **2 m** special chemical hose 3/4" and hose connections, hose clamps, nozzle PVDF, with swivel hose connection, drum adapter PP.

*Motor, pump tube PVDF, hose connection 3/4"

More time for the essential things

6 Pump Set „Mineral Oil Products“

For light viscous mineral oil products

such as Diesel, fuel oil, hydraulic oil, machinery oil and motor oil.

- **Motor MI-4**, 500 W internally ventilated or optionally with
- **Compressed air motor MD-1**, 400 W / 6 bar with stop valve and nipple

Motor MI-4
Universal motor for individual application. For aggressive and non-flammable liquids. Strong when handling mineral oil products.

Motor MI-4

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,4	500	87 (50)	19

Motor MD-1

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	850	90 (65)	20

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).

Pump Set Mineral Oil Products

with motor MI-4 internally ventilated or MD 1

Motor MD-1

The compact compressed air motor is powerful and reliable.



For emptying drums and containers

			Pump* with MI-4	Pump* with MD-1	Set with MI-4	Set with MD-1
	Imm. depth 1000 mm	Order No.	0205-305	0205-315	0205-301	0205-311
	Imm. depth 1200 mm	Order No.	0205-306	0205-316	0205-302	0205-312

Pump Set: **Motor MI-4 or MD-1**, pump tube **Alu 41-L-SL** aluminium, 2 m PVC spiral hose 1" and hose connections, hose clamps, nozzle Alu, drum adapter PP.

*Motor, pump tube alu, hose connection 1"

(For high viscous oils suitable Eccentric Screw Pumps are available, see separate leaflet)

Lutz Pump Sets

7 Pump Set „Solvents“

For easily flammable hydrocarbons

such as ethanol, gasoline, butanol, isopropanol, kerosene, methanol and petroleum.

- **Motor ME II 3**, 460 W or optionally with
- **Compressed air motor MD-2**, 400 W / 6 bar

Explosion proof according to ATEX Directive 2014/34/EU, category 2.

Motor ME II 3

The **explosion proof** universal motor ME II 3 is ideally suitable for transferring of many thin-bodied, easily flammable and combustible liquids.

Pump Set Solvents

with motor ME II 3 or MD-2



Motor MD-2

The compact compressed air motor is powerful and reliable.

Motor ME II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	350	95 (60)	14

Motor MD-2

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	500	110 (65)	20

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



For emptying drums and containers



Imm. depth 1000 mm

Order No.

Pump*
with ME II 3

Pump*
with MD-2

Set
with ME II 3

Set
with MD-2

0205-405

0205-425

0205-401

0205-421



Imm. depth 1200 mm

Order No.

0205-406

0205-426

0205-402

0205-422

Pump Set: **Motor ME II 3 or MD-2**, **pump tube SS 41-L-SL** stainless steel, **2 m** solvent hose 3/4", electrically conductive bound with hose connectors brass, nozzle brass, equipotential bonding cable, drum adapter PP (without Ex-plug).

*Motor, pump tube SS, equipotential bonding cable

More time for the essential things

8 Pump Set „Hazardous Fluids“

For hazardous fluids

such as acetone, conc. formic acid, ethyl acetate, butyl acetate, conc. acetic acid, nicotine, methyl benzene (toluol) and styrol.

- **Motor ME II 3**, 460 W or optionally with
- **Compressed air motor MD-2**, 400 W / 6 bar

Explosion proof according to ATEX Directive 2014/34/EU, category 2.

Motor ME II 3

The **explosion proof** universal motor ME II 3 is ideally suitable for transferring of many thin-bodied, easily flammable and combustible liquids.

Pump Set Ex

with motor ME II 3 or MD-2



Motor MD-2

The compact compressed air motor is powerful and reliable.



Ex-plug

Can be optionally supplied with Ex-plug completely assembled.

Motor ME II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	350	95 (60)	14

Motor MD-2

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	500	110 (65)	20

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



For emptying drums and containers



Imm. depth 1000 mm

Order No.

Pump*
with ME II 3

Pump*
with MD-2

Set
with ME II 3

Set
with MD-2

0205-405

0205-425

0205-411

0205-441



Imm. depth 1200 mm

Order No.

0205-406

0205-426

0205-412

0205-442

Pump Set: **Motor ME II 3 or MD-2**, **pump tube SS 41-L-SL** stainless steel, **2 m** universal chemical hose 3/4", electrically conductive bound with hose connectors stainless steel, nozzle stainless steel 1.4571, equipotential bonding cable, drum adapter PP (without Ex-plug).

*Motor, pump tube SS, equipotential bonding cable

Lutz Pump Sets

9 Pump Set „Solvents“ for complete drum drainage

For easily flammable hydrocarbons

such as ethanol, gasoline, butanol, isopropanol, kerosene, methanol and petroleum.

- **Motor ME II 3**, 460 W or optionally with
- **Compressed air motor MD-2**, 400 W / 6 bar

Explosion proof according to ATEX Directive 2014/34/EU, category 2.

Motor ME II 3

The **explosion proof** universal motor ME II 3 is ideally suitable for transferring of many thin-bodied, easily flammable and combustible liquids.

Pump Set Solvents

with motor ME II 3 or MD-2

Motor MD-2

The compact compressed air motor is powerful and reliable.

Motor ME II 3

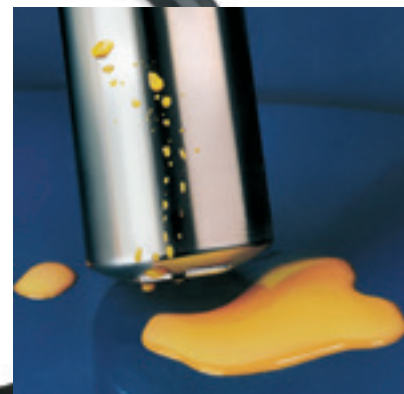
Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	500	77 (45)	14

Motor MD-2

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	700	68 (40)	17

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).





Complete drainage

Residual quantity < 0.10 litres



For complete drainage of drums and containers

			Pump* with ME II 3	Pump* with MD-2	Set with ME II 3	Set with MD-2
	Imm. depth 1000 mm	Order No.	0205-505	0205-525	0205-501	0205-521
	Imm. depth 1200 mm	Order No.	0205-506	0205-526	0205-502	0205-522

*Motor, pump tube RE-SS, equipotential bonding cable

Pump Set: Motor ME II 3 or MD-2, **pump tube RE-SS 41-L-MS** stainless steel, **2 m** solvent hose 3/4", electrically conductive bound with hose connectors brass, nozzle brass, equipotential bonding cable, drum adapter PP (without Ex-plug)

More time for the essential things

10 Pump Set „Hazardous Fluids“ for complete drum drainage

For hazardous fluids

such as acetone, conc. formic acid, ethyl acetate, butyl acetate, conc. acetic acid, nicotine, methyl benzene (toluol) and styrol.

- **Motor ME II 3**, 460 W or optionally with
- **Compressed air motor MD-2**, 400 W / 6 bar

Explosion proof according to ATEX Directive 2014/34/EU, category 2.

Motor ME II 3

The **explosion proof** universal motor ME II 3 is ideally suitable for transferring of many thin-bodied, easily flammable and combustible liquids.

Pump Set Ex

with motor ME II 3 or MD-2



Motor MD-2

The compact compressed air motor is powerful and reliable.



Ex-plug

Can be optionally supplied with Ex-plug completely assembled.

Motor ME II 3

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,6	500	77 (45)	14

Motor MD-2

Density (kg/dm ³)	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1,8	700	68 (40)	17

Max. temperature of medium 100 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil. When using a nozzle the delivery rate is reduced to approximate values (see brackets).



Complete drainage

Residual quantity < 0.10 litres



	For emptying drums and containers			
	Pump* with ME II 3	Pump* with MD-2	Set with ME II 3	Set with MD-2
Imm. depth 1000 mm	Order No. 0205-505	0205-525	0205-511	0205-531
Imm. depth 1200 mm	Order No. 0205-506	0205-526	0205-512	0205-532

*Motor, pump tube RE-SS, equipotential bonding cable

Pump Set: **Motor ME II 3 or MD-2**, **pump tube RE-SS 41-L-MS** stainless steel, **2 m** universal chemical hose 3/4", electrically conductive bound with hose connectors stainless steel, nozzle stainless steel (1.4571), equipotential bonding cable, drum adapter PP (without Ex-plug)

Lutz Battery Pump B1 for Laboratories

Mobile and user friendly



Convenient and safe transfer of small liquid amounts

Environmental protection, safety, energy and cost consciousness and easy handling: the demands which a pump has to meet are growing more and more. At Lutz, we have met this challenge and have completed our delivery program for a battery-powered pump series which lives up to these expectations. The Battery Pump B1 – which is also available as a complete pump set with accessories – incorporates the reliable and tested drum pump technology. This pump type was developed for applications where small amounts of liquids have to be filled from different containers like small cans up to 200-l-drums.

For each application the right solution from Lutz

With the battery-powered laboratory pump B1 and the electrical-powered pump B2 Vario, Lutz offers to the market a successful duo which is ideally suitable for a convenient and safe transfer of liquids in the laboratory and research sector or whatever industry you are in.



The battery charger can be used as table unit or can be mounted onto the wall.



Pump set immediately ready for use.
With 1.5 m PVC-hose and hose nozzle.

Safe and simple in everyday practice

Top Performance in a compact design

- ✓ Reliable and tested drum pump technique
- ✓ Modular design
- ✓ Infinitely variable speed controller for comfortable and safe filling applications
- ✓ Ergonomical design for easy handling
- ✓ Optimized complete drum drainage
- ✓ Sophisticated battery system
- ✓ Battery charger as wall bracket for safe storage
- ✓ Chemical-resistant
- ✓ Easy to service

Immediately ready for use – only few simple operations required



Remove the motor from the charging station



Connect the motor with the pump tube



Open the nozzle and fill up the requested liquid amount infinitely variable

Battery Pump Set B1 comprises:

Battery motor 9.6 V, pump tube polypropylene Ø 25 mm, 1.5 m PVC-hose DN 12 and hose nozzle

Pump		Lutz Battery Pump B1
Drive motor		Battery motor 9,6 V, on/off switch with variable speed controller
Material:		PP
Type of impeller		R
Category 1 / 2 (acc. to ATEX)		no
Immersion tube diameter:	up to mm	25
Hose connection:	Nominal diameter mm	12
	Outer thread	G 3/4
Delivery rate*	up to l/min.	16
Delivery head*	up to m wc	8
Temperature of medium:	max. °C	0 up to + 40
Viscosity**	up to mPas	200
Density	up to kg/dm ³	1.3
Weight (kg)	Motor + pump tube	1.2
Length: 500 mm	Order No.	0205-053
Length: 700 mm	Order No.	0205-054
Length: 1000 mm	Order No.	0205-055

* Determined with water at 20 °C ** Determined with oil
Special lengths, other voltages and frequencies on request.

Accessories

Recharger for battery motor	Order No.	0001-050
Curved spout PVC, G 3/4	Order No.	0201-094
Drum adapter (dimensions of threaded connections must be indicated)	Order No.	on request

Lutz Drum and Container Pumps

Lutz B2 Vario: Perfect for the laboratory and research sector



Lutz B2 Vario stands for: Versatile, maximum possible safety, and optimum price-performance ratio.

The innovation for increased safety and ease of use

Environmental protection, safety, energy and cost consciousness and easy handling: the demands which a pump has to meet are growing more and more. Simplicity and ease of handling must be inherent characteristics as well.

At Lutz, we have met this challenge and have developed a pump which lives up to these expectations. The electric drum and container pump **Lutz B2 Vario** incorporates a reliable and tested technique together with a number of functions providing perfect fluid management solutions, whatever industry you are in.

The advantages of the B2 Vario:

- ✓ **Variable speed motor** with safety cut out to enable the transfer of liquids in small amounts
- ✓ Easy and safe to operate by integrated ergonomically designed handles and nozzle
- ✓ Ultra quiet, long service life
- ✓ **Different lengths** available 500, 700 and 1000 mm for the use in small vessels up to 200 litre drums
- ✓ Sealless, lube free pump tube, thus no contamination of the liquid
- ✓ Wide range of applications possible due to sealless construction
- ✓ Available in **polypropylene, polyvinylidene fluoride** and **stainless steel** (1.4571)

Mounted hanger for storing nozzle and cable at the pump. Service-friendly construction, simple to dismantle and improved complete drainage function.



Lutz B2 Vario: (polypropylene or stainless steel)

The perfect solution to transfer small amounts of liquid




Safety First

Personal safety and the environment are of vital importance when it comes to handling chemicals, acids, alkalis or other dangerous liquids, particularly when transferring small amounts of liquid. The "Lutz B2 Vario" provides a complete solution. The infinitely variable speed controller with integrated on/off switch allows a controlled and comfortable filling of smaller and larger liquid amounts. The operator can gradually regulate the delivery rate from lowest up to requested speed by one movement of the hand.




Lutz Drum and Container Pumps

Lutz B2 Vario (polypropylene or stainless steel)

Product detail		Pump	Lutz B2 Vario PP-SL 32	Lutz B2 Vario PVDF-SL 32
	Drive motor	Universal motor 200 W, 230 V, 50 Hz, on/off switch with variable speed controller, double insulated on protection class II, protection class IP 24, with integrated motor protection switch, 3 m connection cable		
	Material:	Pump tube	PP	PVDF
		Impeller	PP	ETFE
	Type of impeller		R	R
	Category 1 / 2 (acc. to ATEX)		no	no
	Immersion tube diameter:	up to mm	32	32
	Hose connection:	Nominal diameter mm	19	19
		Outer thread	G 1	G 1
	Delivery rate*	up to l/min.	75	75
	Delivery head*	up to m wc	7	6,5
	Temperature of medium:	up to °C	- 15 up to + 50	- 15 up to + 90
	Viscosity**	up to mPas	300	300
	Density	up to kg/dm ³	1.3	1.3
Weight (kg)	Motor + pump tube	2.2 - 2.5	2.3 - 2.6	
Length: 500 mm	Order No.	0201-500	0201-580	
Length: 700 mm	Order No.	0201-501	0201-581	
Length: 1000 mm	Order No.	0201-502	0201-582	

* Determined with water at 20 °C ** Determined with oil Special lengths, other voltages and frequencies on request.

Pump Lutz B2 Vario SS-SL 28

	Drive motor	Universal motor 200 W, 230 V, 50 Hz, on/off switch with variable speed controller, double insulated on protection class II, protection class IP 24, with integrated motor protection switch, 3 m connection cable		
	Material:	Pump tube	Stainless steel 1.4571	
		Impeller	ETFE	
	Type of impeller		R	
	Category 1 / 2 (acc. to ATEX)		no	
	Immersion tube diameter:	up to mm	28	
	Hose connection:	Nominal diameter mm	19	
		Outer thread	G 1	
	Delivery rate*	up to l/min.	68	
	Delivery head*	up to m wc	6.5	
	Temperature of medium:	up to °C	- 15 up to + 90	
	Viscosity**	up to mPas	300	
	Density	up to kg/dm ³	1.3	
Weight (kg)	Motor + pump tube	2.9 - 3.5		
Length: 500 mm	Order No.	0201-510		
Length: 700 mm	Order No.	0201-511		
Length: 1000 mm	Order No.	0201-512		

* Determined with water at 20 °C ** Determined with oil Special lengths, other voltages and frequencies on request.

Lutz B2 Vario

for the laboratory and research sector

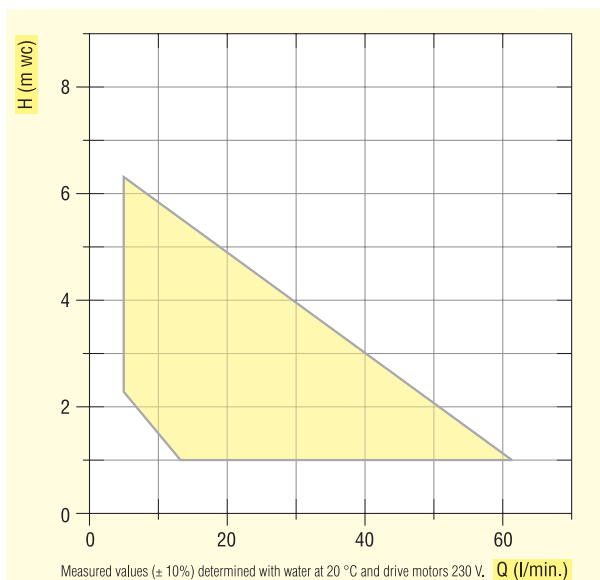
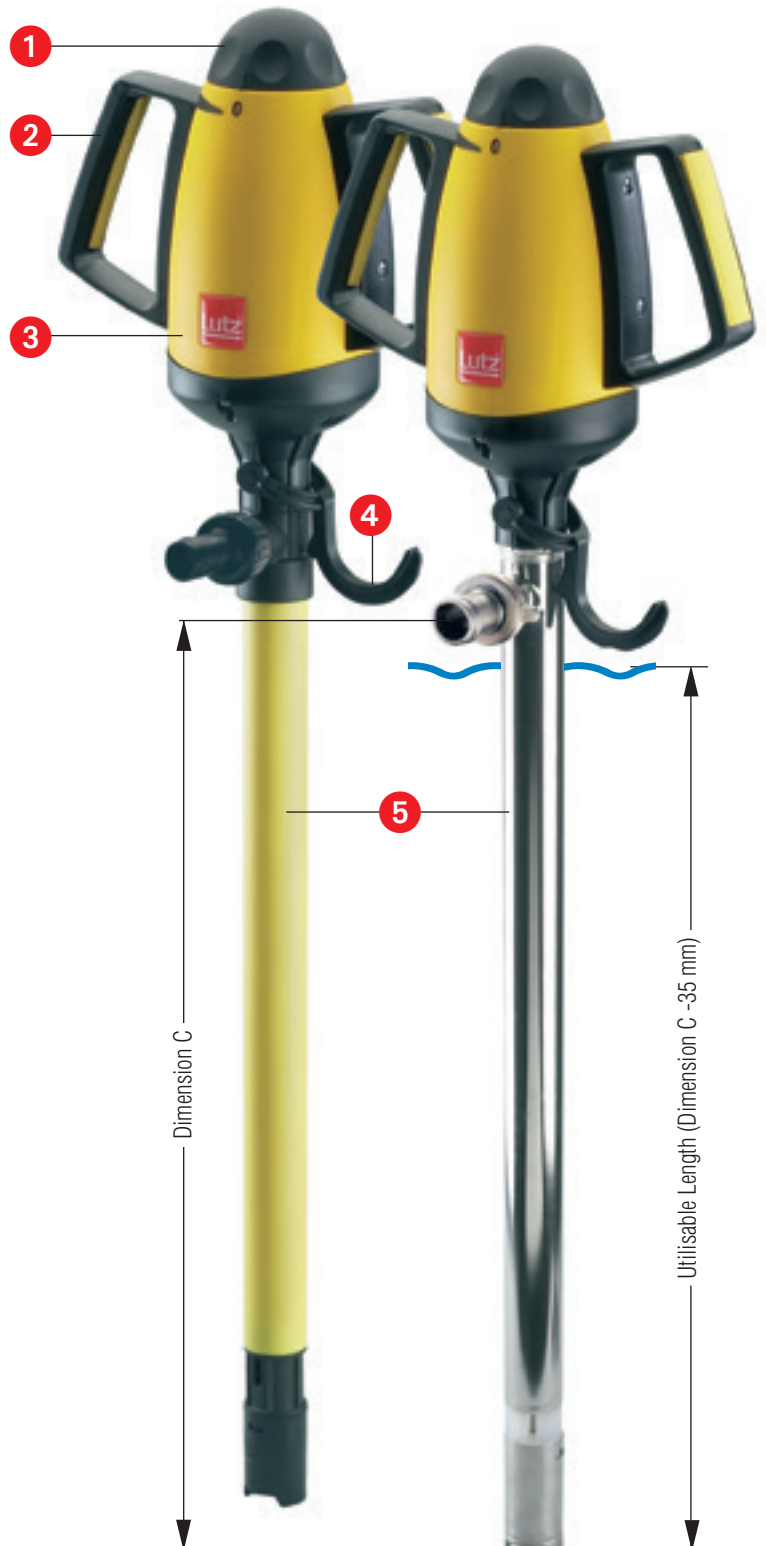
Materials (coming into contact with the pumped medium):

Version:	PP-SL	PVDF-SL	Niro-SL
Housing:	PP/PVDF	PVDF	SS (1.4571)
Impeller:	PP	ETFE	ETFE
Seals:	none	none	none
Mechanical seals:	none	none	none
Bearing:	ETFE/PTFE	ETFE/PTFE	ETFE/PTFE
Drive shaft:	Hastelloy C	Hastelloy C	SS (1.4571)

- 1 Infinitely variable speed controller for safe liquid transfer
- 2 Easy and safe to operate by ergonomically designed handles
- 3 Powerful universal motor with improved service life
- 4 Hanger for professional storage of nozzle and cable
- 5 Modular designed sealless pump tube in polypropylene, polyvinylidene fluoride or stainless steel with improved complete drainage function



IP 24



Suitable range of accessories
see pages 73-75

Lutz Drum and Container Pumps

Your individual pump selection

Safety first

The explosionproof models of Lutz drum pumps provide optimum protection when handling easily inflammable, combustible material and when working in potentially explosive environments. The drum pumps are made of stainless steel (1.4571) and Hastelloy C. They comply with all the international standards and provisions as well as with the directives according to ATEX 2014/34/EU and IEC Ex.



Lutz drum and container pumps are always the right choice.

The right solution for each and every liquid

We have the pump suited to any liquid to be pumped – without compromise. Acids and alkalis have no impact on polypropylene and PVDF drum pumps. Aluminium pumps ensure unrestricted flow of diesel and oil. Stainless steel is particularly suitable for corrosive and neutral liquids, it proves especially useful in the pharmaceuticals and food industry. Hastelloy C, which is extremely resistant, does not stop at highly aggressive acids or alkalis. Your choice is not restricted to the type of impeller. Lutz drum pumps are available as sealless versions and as well as versions with mechanical seals.



Lutz Drum and Container Pumps

in PURE Version

Lutz Drum and Container Pumps PURE version

Pumps and flow meters in contact with food products are considered to be “food contact materials” and are thus subject to strict legal regulations.

The new Lutz PURE series includes products which are in accordance with ATEX Directives as well as with FDA Regulation and European Regulation according to 1935/2004/EC.

NEW



- ✓ Physiologically safe type
- ✓ High surface quality
- ✓ Food-safe connections
- ✓ Not filled with lubricants, preventing product contamination
- ✓ Also for alcoholic food products, cosmetics and pharmaceuticals and flammable cleaning products



EC 1935/2004

The “food safe” sign or “glass and fork” symbol stands for suitability for foodstuffs. 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.



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).



Lutz pumps from the PURE series are also available in an explosion-proof version in accordance with ATEX Directive 2014/34/EU. 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.

The frequently used universal solution

Pump tubes: PP/PVDF/ALU

Due to their carefully adapted material combinations, the modular Lutz pump tubes are suitable for almost all applications, in which thin-bodied and slightly viscous liquids need to be pumped. PP and PVDF are ideally suited for acids and alkalis, aluminium is particularly well suited for oil and cooling lubricants.

Excellent design: Almost anything is possible

Once again, the focus is on a broad range of applications—hence the modular design. The design of the pump tubes permits a sealless version of the pump tube as well as a version with mechanical seals. The sealless versions do not feature any seals that come into contact with the medium—not even O-ring seals. In the version with mechanical seals, the drive shaft is secured with one mechanical seal with two shaft seals behind it. Depending on your requirements, the impeller is optimised either with regard to the delivery rate or the pumping head.

We use our intelligence: Smart material selection

We select the materials with regard to the applications. PVDF offers the highest degree of chemical resistance. There are no grease fillings in the shaft tube, so there is no way that the fluid to be pumped can be contaminated. All the models are equipped with universally resistant PTFE slide bearings.

Logical decision: Service-friendly design

Maintenance without the need for special tools—that's what we call service-friendly. The pump tubes boast a straightforward and coherent design. The motor can be disconnected quickly through the convenient hand wheel that is also used as a carrying handle.

How economical can you get?

A large number of standard components help save resources and keep inventory costs at bay.

Two-to-one for your success: one pump tube, two sealing systems

Everything well thought out

These models are convincing in their simple design of the connecting head, of the T-fitting and of the pump tube. They guarantee a high degree of resistance and minimum wear, and thus an extended service life.

High quality – for you!

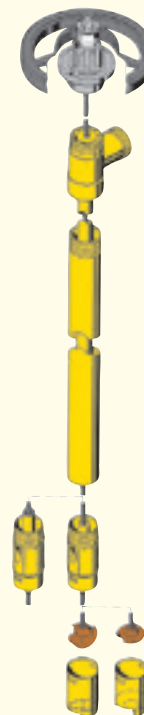
The metal connecting head with an exceptionally corrosion-resistant coating enhances the heat dissipation of the bearing friction. The outer tube is extremely rigid due to thick walls. You can select either a stainless steel or Hastelloy C drive shaft.

Assembly and replacement made simple

Save time and money. The sealing modules of the pumps with mechanical seals (MS) and of the sealless pumps (SL) can be replaced rapidly and conveniently—should they be worn. It is possible at any time to convert a pump with mechanical seal to a sealless pump. No additional modifications are required. The robust pump foot (model R or L) is easy to detach.

Practically indestructible

The double high-quality PTFE shaft bearing guarantees a long service life of these pumps.



German Patent:

DE 196 14 350 C2



Untiring: Lutz Pump Tubes

Pump tubes: Stainless steel/Hastelloy C

Untiring: Pump tubes: Stainless steel/Hastelloy C

These "universal geniuses" don't take offence easily: robust Lutz pump tubes for a vast range of applications, even with extensive mechanical stress. Ideally suited for thin-bodied to slightly viscous liquids.

The pump tubes stainless steel are suited for delivering neutral and aggressive, easily inflammable and non-inflammable liquids. HC is used especially for highly aggressive, easily inflammable chemicals.

Tried and tested a thousand times in practice

In this case, a broad range of applications was the primary objective of the design engineers. The sealless version does not feature any seals that come into contact with the medium. In the version with mechanical seals, the drive shaft is secured with one mechanical seal with two shaft seals behind it.

The material is what matters

Stainless steel pump tubes feature an extremely resistant pure carbon bearing, Hastelloy C pump tubes feature an extremely resistant ceramic bearing. Another benefit: There are no grease fillings in the shaft tube, so there is no way the fluid to be pumped can be contaminated.

New: Stainless steel pump tubes in PURE version. All materials coming into contact with the pumped fluids are physiologically safe. The pump tubes are mainly used in the food-, cosmetics and pharmaceutical industry.



SS



HC

When does one have to use an explosionproof pump, when not?

Several factors play a role where safety is at stake. The liquid to be delivered, the circumstances of the delivery and the environment. Explosion protection measures are imperative for flammable liquids belonging to explosion group II (according to EN/IEC 60 079-0).

The hazard imposed by the gases increases from explosion group II A and II B to II C. Accordingly, the demands placed in the operating appliances used for these explosion groups also rises.

Of course, this is the reason why operating appliances, for example, which are approved for II C, are also usable for all other explosion groups.

Caution!

A pump tube with an explosionproof motor must be used for easily inflammable liquids. Refer to page 32

Some examples:

- | | |
|-------------|--------------------------------------------|
| Group II A: | e.g. acetone, gasoline, toluene |
| Group II B: | e.g. ethene, ethylene oxide, diethyl ether |
| Group II C: | e.g. acetylene, hydrogen, carbon disulfide |

Pump Power: Range of Motors



MI 4/MI 4-E



Double insulation in keeping with type of protection class II, splash water protected in keeping with IP 24, double-pole ON/OFF switch and single-pole thermal overcurrent release. 5-m connection cable with plug. Not explosionproof.

- ✓ Light and convenient
- ✓ Powerful
- ✓ Good price/performance ratio
- ✓ Optionally available with speed controller

Undemanding universal motor designed for industrial applications and suitable for pumping thin-bodied, slightly viscous, neutral, aggressive and non-inflammable fluids. It demonstrates its power even when handling acids and alkalis.

More information see below.

Everything under control: MI 4-E

The MI 4-E motor is additionally equipped with a speed controller. This ensures controlled filling and refilling of fluids at any time.

We recommend the use of the MA II 5-S motor for extremely aggressive environments.

Typ	Voltage V	Frequency Hz	Output W	Weight kg	Order No. (with Low-voltage release)	Order No. (without low-voltages-release)
MI-4-230	220-230	50	450-500	2.8	-	0030-000
MI-4-230 E	220-230	50	450-500	2.8	-	0030-001
MI-4-230	230	60	400	2.8	-	0030-015
MI-4-230 E	230	60	400	2.8	-	0030-016
MI-4-120	110-120	50-60	550-640	2.8	-	0030-003
MI-4-120 E	110-120	50-60	550-640	2.8	-	0030-006
MI-4-100 E	100	50-60	520-550	2.8	-	0030-008



MA II



Double-pole ON/OFF switch, splash water protected in keeping with IP 54, single-pole thermal overcurrent release. 5-m connection cable with shock-proof plug. Not explosionproof

- ✓ Robust, rigid design
- ✓ Double insulation with protective conductor connection
- ✓ Integrated low voltage release (option)
- ✓ Optimised cooling air conduction
- ✓ Externally cooled
- ✓ Double wall housing
- ✓ Available in three power ratings

The convenient and powerful MA II universal motors are ideal for pumping thin-bodied to slightly viscous, aggressive and non-inflammable fluids.

Double protection is even better

Robust and durable: The inner part of the double wall housing is made of aluminium, the outer part is made of special acid-proof plastic. Aggressive and corrosive vapours cannot intrude into the inner part of the motor. The air flow for cooling the motor is conducted between the two walls of the housing.

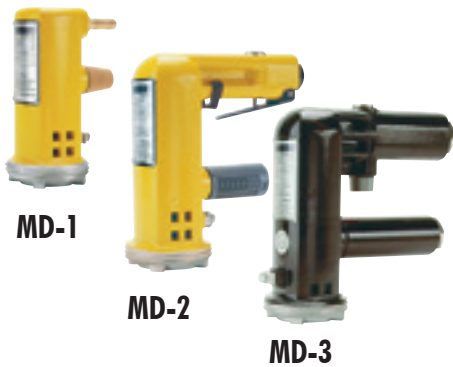
Safety and protection

A low voltage release prevents uncontrolled starting of the motor. There is double insulation between the live parts and the outer surface of the motor and the pump tube that can be touched.

Acid-proof version: The indestructible

The acid-proof motor version MA II 5-S is armed against all types of "aggression". The motors feature a metal housing with a special anti-acid coating, a plastic shell and additional sealing of the inner part of the motor.

Typ	Voltage V	Frequency Hz	Output W	Weight kg	Order No. (with Low-voltage release)	Order No. (without low-voltages-release)
MA II 3	220-230	50	430-460	4.6	0060-008	0060-000
	100-120	50-60	430	4.6	0060-016	0060-044
MA II 5	220-230	50	540-575	5.4	0060-009	0060-001
	220-230	60	450-490	5.4	0060-043	0060-042
	100-120	50-60	510	5.4	0060-017	0060-045
	42	50	520	5.4	0060-014	0060-006
	24	=	400	5.4	0060-015	0060-007
MA II 5 S	220-230	50	540-575	5.4	-	0060-091
	100-120	50-60	510	5.4	-	0060-094
MA II 7	220-230	50	790-795	6.6	0060-010	0060-002
	100-120	50-60	700	6.6	0060-018	0060-046



MD-1

MD-2

MD-3



Overload-proof and explosionproof compressed air motor. 400 W at an operating pressure of 6 bar. Air consumption approx. 0.88 Nm³/min (unconfined air). Operating range of from 3 – 6 bar. Low-noise operation through muffler.

- ✓ Explosionproof
- ✓ Overloadproof
- ✓ Compact design
- ✓ Delivery flow is easy to control
- ✓ Optionally with/without manual operation

MD compressed air motors

Especially in environments, in which electricity may constitute a hazard. The compact MD compressed air motors automatically adjust to the respective load. Ideal for handling thin-bodied, aggressive, slightly viscous and easily inflammable liquids assigned to explosion groups II A, II B and II C.

MD-3: Play it safe

The first compressed air motor in an explosionproof enclosure. Flashback arresters, spring loaded spherical safety relief valves, plastic rotors and extremely long threads guarantee even more safety when pumping easily inflammable liquids. This virtually eliminates operating errors.

Trio grande: The models

Three different versions of the MD compressed air motors are available: MD-1 without manual operation for automatic control. MD-2 with manual operation and interlock. MD-3 with on/off pushbutton. Approved according to ATEX Ex II 2 G.

Type	Betriebsdruck W	Output W	Weight kg	Order No.
MD-1	6	400	1.1	0004-087
MD-2	6	400	1.5	0004-088
MD-3	6	400	2.1	0004-090



B4/GT three-phase gear motor

CE IP 54/IP 55

Three-phase gear motor, 0.75 kW, 230/400 V, 50 Hz, efficiency level IE 2. With terminal box or attached motor protection switch with ON/OFF function.

- ✓ Especially smooth and quiet operation
- ✓ Special models available

The B4/GT has a proven record of success in plant construction and as a drum pump drive. The perfect system for thin-bodied to slightly viscous liquids. These "undemanding" partners hardly ever show signs of wear. The ideal solution for long periods of operation.

A wide range of capabilities

The B4/GT motor is suitable for stationary applications with terminal box and external

protection switch in the control cabinet and equally well as a mobile multi-talent – in this case with a protection switch attached.

Absolutely undemanding

The flange mounted single-stage gears are oil-lubricated and extremely easy to maintain.

Type	Voltage V	Frequency Hz	Output W	Weight kg	Order No. (cable terminal box)	Order No. (protection switch)
B4/GT	230-400	50	750	10.0	0004+019	0004+067

Pump Power: The motors ME II



ME II



Explosionproof in compliance with II 2 G Ex de IIC T 5 or T6. Double-pole ON/OFF switch, splash water protected in keeping with IP 54, double-pole thermal overcurrent release. 5 m connection cable with safety plug (not explosionproof), optionally available with explosionproof plug.

- ✓ Explosionproof in compliance with Atex and IEC Ex
- ✓ Low voltage release by default
- ✓ Optionally available without low voltage release
- ✓ Double isolation with protective conductor connection
- ✓ Optimised cooling air conduction
- ✓ Externally cooled
- ✓ Double wall housing
- ✓ Available in four power ratings

These motors aren't taken aback easily. The ME II explosionproof universal motor is the answer (German Patent DE 38 15427 C2) for pumping a large variety of thin-bodied, easily inflammable and combustible liquids..

Double walls provide optimum protection

The inner part of the double wall housing is made of aluminium, the outer part is made of special acidproof, non-conducting plastic. This prevents aggressive and corrosive vapours from intruding into the inner part of the motor. The air flow for cooling the motor is conducted between the two walls of the housing.

Tested quality and safety

Complies with the European Standards EN/IEC 60 079-0, EN/IEC 60 079-1 and EN/IEC 60 079-7, explosionproof in compliance with II 2 G Ex de IIC T5 or T6 and built and approved in keeping with the explosion protection Atex Directive 2014/34/EU and IEC Ex.

A low voltage release prevents uncontrolled starting of the motor. All the motors of the ME II series feature a protective conductor connection. There is double insulation between the live parts and the outer surface of the motor that can be touched as well as between the live parts and the pump tube. This guarantees protection against spark discharge during potential equalisation, specially in explosive areas.

German Patent:

DE 38 15427 C2

Who is afraid of voltages?

Type	Voltage V	Frequency Hz	Output W	Weight kg	Order No. (with low-voltage release)	Order No. (without low-voltage release)
ME II 3	220-230	50	430-460	5.5	0050-000	0050-016
	100-120	50	380-440	5.5	0050-003	-
	110-120	60	400-460	5.5	0050-006	0050-009
ME II 5	220-230	50	540-580	6.3	0050-001	0050-017
	220-230	60	475-515	6.3	0050-034	0050-035
	24	=	400	6.3	0050-013	0050-015
ME II 7	220-230	50	750-795	7.5	0050-002	0050-018
ME II 8	220-230	50	880-930	8.0	0050-042	0050-041



Some like it hot

Lutz explosionproof drum pumps

Power

Our extensive range of motors comprises explosionproof compressed air and electric motors. Both the motor and the pump tube are approved as explosionproof in keeping with Atex Directive 2014/34/EU, since the motor and the pump tube form an integral assembly.

Handy and convenient

In the case of explosionproof pumps, the motor and the pump tube are also connected and disconnected in no time at all via the hand wheel. The hand wheel is also used as a carrying handle.

Safety benefits from experience

For more than 50 years, explosion protection has played a major role in the philosophy of our company. This stands for experience that you - as a planner and operator - can trust. In 1963, Physikalisch-Technische Bundesanstalt (PTB) granted Lutz the first approval for an explosionproof drum pump. Today, motors and pump tubes are subject to Atex Directive 2014/34/EU. The motors and pump tubes are each awarded their own certificate. Lutz - as the manufacturer, certifies this through the EC Declaration of Conformity.

Explosion protection is a







matter of public concern!

The manufacturer is not the only one responsible for ensuring that all the requirements of the explosion protection directive are met. The plant operator is equally responsible. The commissioning regulations depend on the intended use of the pump. Apart from this, every country has its national regulations with which the plant operator must comply in everyday practice - for his own safety and the safety of his employees.



Lutz Drum and Container Pumps

Pump tube PP (polypropylene) for corrosive and neutral liquids

Product detail	Pump tube	PP-SL		PP-MS				
	Type of impeller	L	R	L	R			
	Category 1 / 2 (acc. to ATEX)	no	no	no	no			
	Immersion tube diameter	up to mm	41	41	41	41		
	Temperature of medium	up to °C	50	50	50	50		
	Material	Pump tube Impeller	PP PP	PP PP	PP PP	PP PP		
	Hose connection	Nominal diameter mm Outer thread	19-32 G 1 1/4	19-32 G 1 1/4	19-32 G 1 1/4	19-32 G 1 1/4		
	Length: 700 mm*** shaft SS	Order No.	0110-304	0110-300	0103-504	0103-500		
	Length: 1000 mm*** shaft SS	Order No.	0110-305	0110-301	0103-505	0103-501		
	Length: 1200 mm*** shaft SS	Order No.	0110-306	0110-302	0103-506	0103-502		
	Length: 700 mm*** shaft HC	Order No.	0110-204	0110-200	0103-404	0103-400		
	Length: 1000 mm*** shaft HC	Order No.	0110-205	0110-201	0103-405	0103-401		
	Length: 1200 mm*** shaft HC	Order No.	0110-206	0110-202	0103-406	0103-402		
	Length: 1400 mm*** shaft HC	Order No.	0110-208	0110-213	–	–		
	Length: 1500 mm*** shaft HC	Order No.	0110-209	0110-214	–	–		
	Length: 1600 mm*** shaft HC	Order No.	0110-210	0110-215	–	–		
Length: 1700 mm*** shaft HC	Order No.	0110-211	0110-216	–	–			
Length: 2000 mm*** shaft HC	Order No.	0110-212	0110-217	–	–			
Choice of motors		Operating data						
	MI-4	MI-4-E	Characteristic curve no.	101	100	101	100	
	-	with speed controller	Flow rate* up to l/min.	87	160	87	160	
	Output: 500 W	500 W	Delivery head* up to m wc	19	8.5	19	8.5	
	Voltage: 230 V	230 V	Viscosity** up to mPas	500	150	500	150	
Order No.	0030-000	0030-001	Density**** up to kg/dm³	1.4	1.1	1.4	1.1	
			Weight (kg) Motor + pump tube	3.9	3.9	3.9	3.9	
	MA II 3		Characteristic curve no.	103	102	103	102	
	Output: 460 W	460 W	Flow rate* up to l/min.	78	155	78	155	
	Voltage: 230 V	230 V	Delivery head* up to m wc	16	7.5	16	7.5	
	LVR.: no	yes	Viscosity** up to mPas	500	150	500	150	
	Order No.	0060-000	0060-008	Density**** up to kg/dm³	1.6	1.2	1.6	1.2
				Weight (kg) Motor + pump tube	5.7	5.7	5.7	5.7
	MA II 5	MA II 5	MA II 5 S	Characteristic curve no.	105	104	105	104
	Output: 575 W	575 W	575 W	Flow rate* up to l/min.	83	160	83	160
	Voltage: 230 V	230 V	230 V	Delivery head* up to m wc	18	9	18	9
	LVR.: no	yes	no	Viscosity** up to mPas	800	350	800	350
Order No.	0060-001	0060-009	Density**** up to kg/dm³	1.8	1.3	1.8	1.3	
		0060-091	Weight (kg) Motor + pump tube	6.5	6.5	6.5	6.5	
Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. Its recommended when pumping hazardous liquids.	MA II 7		Characteristic curve no.	107	106	107	106	
	Output: 795 W	795 W	Flow rate* up to l/min.	90	170	90	170	
	Voltage: 230 V	230 V	Delivery head* up to m wc	22	12	22	12	
	LVR.: no	yes	Viscosity** up to mPas	800	350	800	350	
Order No.	0060-002	0060-010	Density**** up to kg/dm³	1.9	1.4	1.9	1.4	
			Weight (kg) Motor + pump tube	7.7	7.7	7.7	7.7	
	MD-1	MD-2	Characteristic curve no.	109	108	109	108	
	Output: 400 W	400 W	Flow rate* up to l/min.	90	180	90	180	
	Operating pressure: 6 bar	6 bar	Delivery head* up to m wc	20	10	20	10	
	Order No.	0004-087	0004-088	Viscosity** up to mPas	850	600	850	600
				Density**** up to kg/dm³	1.8	1.3	1.8	1.3
			Weight (kg) Motor + pump tube	2.6	2.6	2.6	2.6	

* Determined with water at 20 °C
** Determined with oil

*** 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.

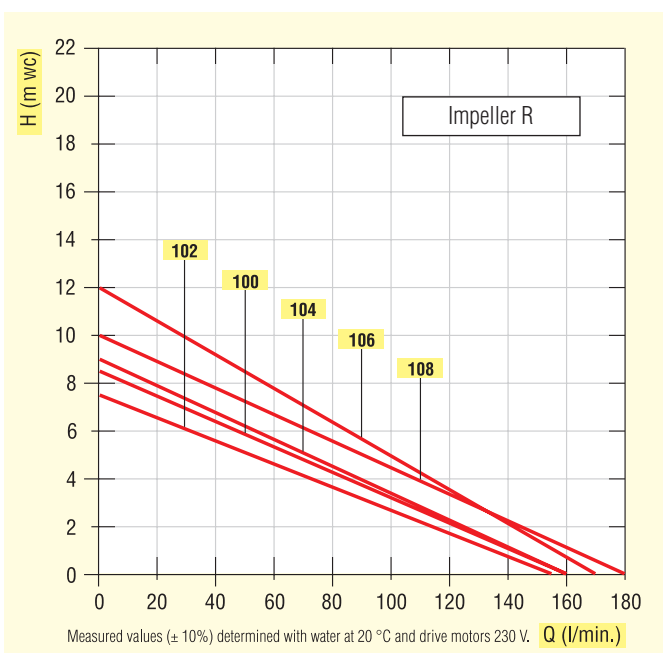
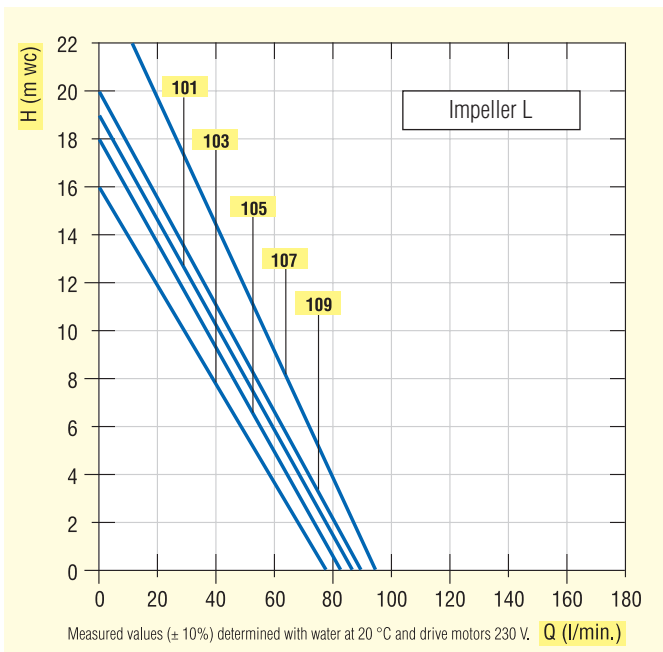
Special voltages and frequencies on request.

Pump Tube PP (polypropylene)

for corrosive and neutral liquids

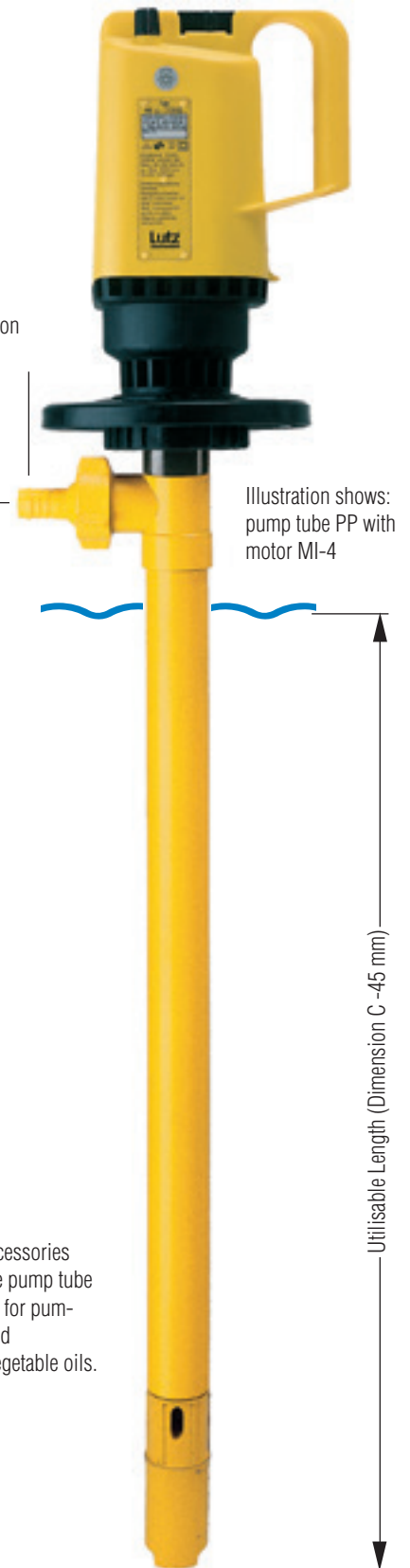
Materials (coming into contact with the pumped medium):

Version:	SL	MS
Housing:	PP/PVDF	PP/PVDF
Impeller:	PP	PP
Seals:	none	FPM
Mechanical seals:	none	Carbon, SiC, FPM, HC-4 (2.4610)
Bearing:	ETFE/PTFE	ETFE/PTFE
Drive shaft:	Stainless steel (1.4571) or HC-4 (2.4610)	Stainless steel (1.4571) or HC-4 (2.4610)



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.

Accessories
hose connection
see page 79




With selected accessories (see page 92) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.



Suitable range of accessories
see pages 76-92


Lutz Drum and Container Pumps


Pump tube PVDF (polyvinylidene fluoride) for highly corrosive chemicals and neutral liquids


Product detail	Pump tube	PVDF-SL		PVDF-MS		
	Type of impeller	L	R	L	R	
	Category 1 / 2 (acc. to ATEX)	no	no	no	no	
	Immersion tube diameter:	up to mm	41	41	41	41
	Temperature of medium:	up to °C	100	100	100	100
	Material:	Pump tube	PVDF	PVDF	PVDF	PVDF
		Impeller	ETFE	ETFE	ETFE	ETFE
	Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32
		Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4
	Length: 700 mm***	Order No.	0122-204	0122-200	0123-404	0123-400
	Length: 1000 mm***	Order No.	0122-205	0122-201	0123-405	0123-401
Length: 1200 mm***	Order No.	0122-206	0122-202	0123-406	0123-402	

Choice of motors

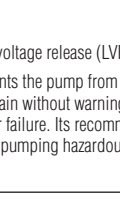
Operating data


	MI-4	MI-4-E	Operating data				
		-	with speed controller	Characteristic curve no.	201	200	201
Output:	500 W	500 W	Flow rate* up to l/min.	87	160	87	160
Voltage:	230 V	230 V	Delivery head* up to m wc	19	8.5	19	8.5
Order No.	0030-000	0030-001	Viscosity** up to mPas	500	150	500	150
			Density**** up to kg/dm³	1.4	1.1	1.4	1.1
			Weight (kg) Motor + pump tube	4.5	4.5	4.5	4.5


	MA II 3			Operating data			
	Output:	460 W	460 W	Characteristic curve no.	203	202	203
Voltage:	230 V	230 V	Flow rate* up to l/min.	78	155	78	155
LVR.:	no	yes	Delivery head* up to m wc	16	7.5	16	7.5
Order No.	0060-000	0060-008	Viscosity** up to mPas	500	150	500	150
			Density**** up to kg/dm³	1.6	1.2	1.6	1.2
			Weight (kg) Motor + pump tube	6.3	6.3	6.3	6.3

	MA II 5	MA II 5	MA II 5 S	Operating data				
	Output:	575 W	575 W	575 W	Characteristic curve no.	205	204	205
Voltage:	230 V	230 V	230 V	Flow rate* up to l/min.	83	160	83	160
LVR.:	no	yes	no	Delivery head* up to m wc	18	9	18	9
Order No.	0060-001	0060-009	0060-091	Viscosity** up to mPas	800	350	800	350
			acid-proof	Density**** up to kg/dm³	1.8	1.3	1.8	1.3
				Weight (kg) Motor + pump tube	7.1	7.1	7.1	7.1

Low-voltage release (LVR.):
Prevents the pump from starting up again without warning after a power failure. Its recommended when pumping hazardous liquids.

	MA II 7		Operating data				
	Output:	795 W	795 W	Characteristic curve no.	207	206	207
Voltage:	230 V	230 V	Flow rate* up to l/min.	95	170	95	170
LVR.:	no	yes	Delivery head* up to m wc	25	12	25	12
Order No.	0060-002	0060-010	Viscosity** up to mPas	800	350	800	350
			Density**** up to kg/dm³	1.9	1.4	1.9	1.4
			Weight (kg) Motor + pump tube	8.3	8.3	8.3	8.3

	MD-1	MD-2	Operating data				
	Output:	400 W	400 W	Characteristic curve no.	209	208	209
Operating pressure:	6 bar	6 bar	Flow rate* up to l/min.	90	180	90	180
Order No.	0004-087	0004-088	Delivery head* up to m wc	20	10	20	10
			Viscosity** up to mPas	850	600	850	600
			Density**** up to kg/dm³	1.8	1.3	1.8	1.3
			Weight (kg) Motor + pump tube	3.2	3.2	3.2	3.2

	B4/GT		Operating data				
	Output:	750 W	750 W	Characteristic curve no.	211	210	211
Voltage:	230/400 V	230/400 V	Flow rate* up to l/min.	75	140	75	140
Protection switch:	no	yes	Delivery head* up to m wc	10	8.5	10	8.5
Order No.	0004+019	0004+067	Viscosity** up to mPas	400	400	400	400
			Density**** up to kg/dm³	2.2	2.0	2.2	2.0
			Weight (kg) Motor + pump tube	11.5	11.5	11.5	11.5

* Determined with water at 20 °C *** Special lengths 200–2500 mm on request
** Determined with oil

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

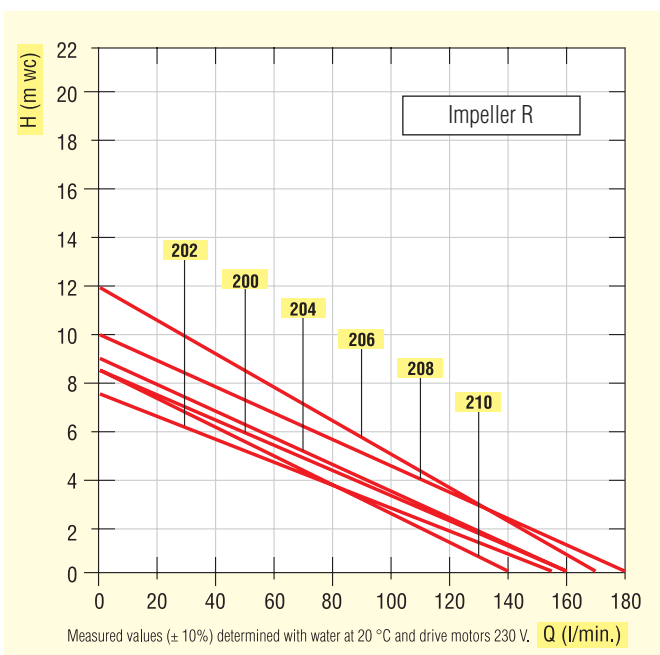
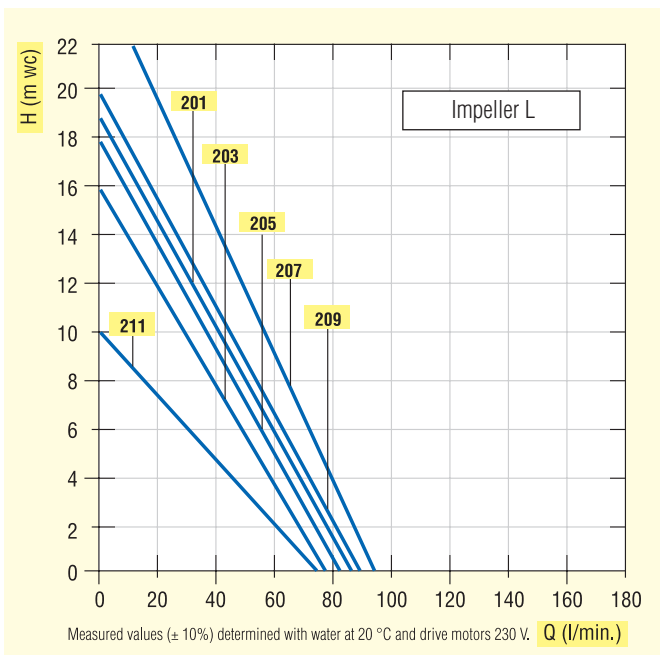
Special voltages and frequencies on request.

Pump Tube PVDF (polyvinylidene fluoride)

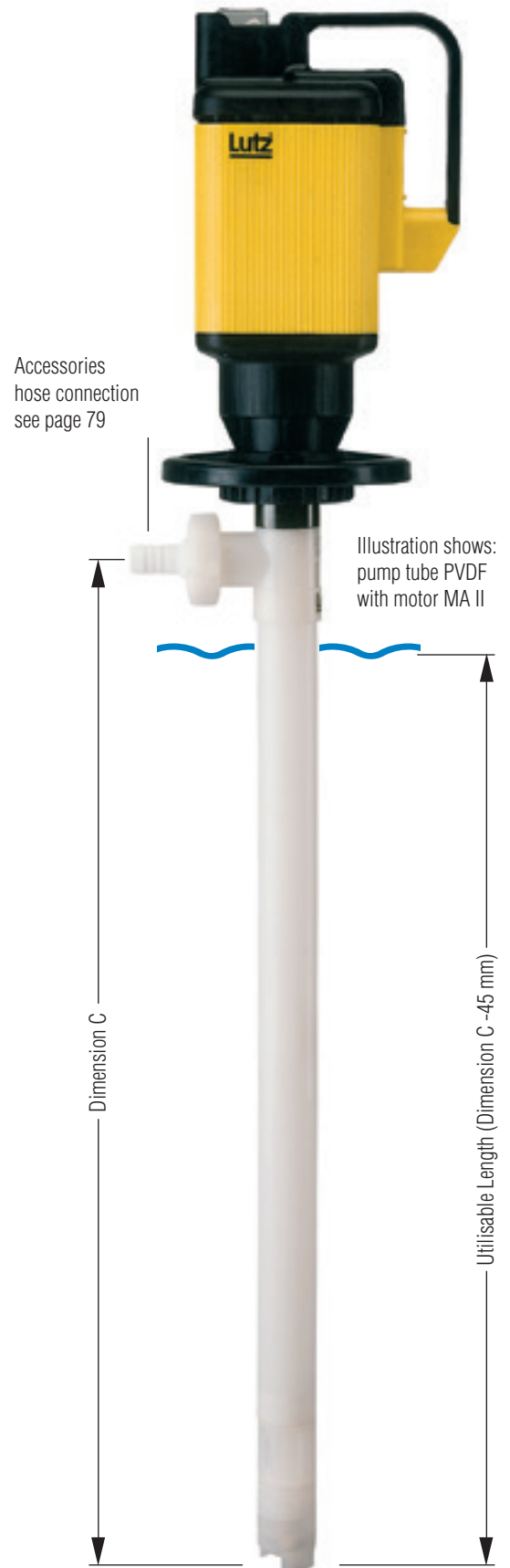
for highly corrosive chemicals and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	SL	MS
Housing:	PVDF	PVDF
Impeller:	ETFE	ETFE
Seals:	none	FPM
Mechanical seals:	none	Carbon/SiC, FPM, HC-4 (2.4610)
Bearing:	ETFE/PTFE	ETFE/PTFE
Drive shaft:	HC-4 (2.4610)	HC-4 (2.4610)






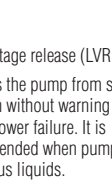


Please remember that the flow rate is reduced as the **viscosity** increases. The **density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.



Suitable range of accessories
see pages 76-92

Lutz Drum and Container Pumps

Pump tube Alu (aluminium) for neutral, non flammable liquids

Productdetail	Pump tube	Alu-SL		Alu-MS						
	Type of impeller	L	R	L	R					
	Category 1 / 2 (acc. to ATEX)	no	no	no	no					
	Immersion tube diameter:	up to mm	41	41	41	41				
	Temperature of medium:	up to °C	100	100	100	100				
	Material:	Pump tube	Alu	Alu	Alu	Alu				
		Impeller	ETFE	ETFE	ETFE	ETFE				
	Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32				
		Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4				
	Length: 700 mm***	Order No.	0132-304	0132-300	0133-504	0133-500				
	Length: 1000 mm***	Order No.	0132-305	0132-301	0133-505	0133-501				
Length: 1200 mm***	Order No.	0132-306	0132-302	0133-506	0133-502					
Length: 1500 mm***	Order No.	0132-309	-	-	-					
Choice of motors		Operating data								
	MI-4		MI-4-E		Characteristic curve no.	301	300	301	300	
	-	with speed controller			Flow rate* up to l/min.	87	160	87	160	
	Output: 500 W	500 W			Delivery head* up to m wc	19	8.5	19	8.5	
	Voltage: 230 V	230 V			Viscosity** up to mPas	500	150	500	150	
	Order No.	0030-000	0030-001			Density**** up to kg/dm³	1.4	1.1	1.4	1.1
					Weight (kg) Motor + pump tube	4.3	4.3	4.3	4.3	
	MA II 3			Characteristic curve no.	303	302	303	302		
	Output: 460 W	460 W			Flow rate* up to l/min.	78	155	78	155	
	Voltage: 230 V	230 V			Delivery head* up to m wc	16	7.5	16	7.5	
	LVR.: no	yes			Viscosity** up to mPas	500	150	500	150	
	Order No.	0060-000	0060-008			Density**** up to kg/dm³	1.6	1.2	1.6	1.2
						Weight (kg) Motor + pump tube	6.1	6.1	6.1	6.1
	MA II 5			MA II 5	MA II 5 S	Characteristic curve no.	305	304	305	304
	Output: 575 W	575 W	575 W			Flow rate* up to l/min.	83	160	83	160
	Voltage: 230 V	230 V	230 V			Delivery head* up to m wc	18	9	18	9
	LVR.: no	yes	no			Viscosity** up to mPas	800	350	800	350
		acid-proof			Density**** up to kg/dm³	1.8	1.3	1.8	1.3	
Order No.	0060-001	0060-009	0060-091			Weight (kg) Motor + pump tube	6.9	6.9	6.9	6.9
	MA II 7			Characteristic curve no.	307	306	307	306		
	Output: 795 W	795 W			Flow rate* up to l/min.	95	170	95	170	
	Voltage: 230 V	230 V			Delivery head* up to m wc	25	12	25	12	
	LVR.: no	yes			Viscosity** up to mPas	800	350	800	350	
	Order No.	0060-002	0060-010			Density**** up to kg/dm³	1.9	1.4	1.9	1.4
						Weight (kg) Motor + pump tube	8.1	8.1	8.1	8.1
		MD-1		MD-2		Characteristic curve no.	309	308	309	308
		Output: 400 W	400 W			Flow rate* up to l/min.	90	180	90	180
		Operating pressure: 6 bar	6 bar			Delivery head* up to m wc	20	10	20	10
		Order No.	0004-087	0004-088			Viscosity** up to mPas	850	600	850
						Density**** up to kg/dm³	1.8	1.3	1.8	1.3
					Weight (kg) Motor + pump tube	3.0	3.0	3.0	3.0	
	B4/GT			Characteristic curve no.	311	310	311	310		
	Output: 750 W	750 W			Flow rate* up to l/min.	75	140	75	140	
	Voltage: 230/400 V	230/400 V			Delivery head* up to m wc	10	8.5	10	8.5	
	Protection switch: no	yes			Viscosity** up to mPas	400	400	400	400	
	Order No.	0004+019	0004+067			Density**** up to kg/dm³	2.2	2.0	2.2	2.0
						Weight (kg) Motor + pump tube	11.3	11.3	11.3	11.3

Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.

* Determined with water at 20 °C *** Special lengths 200–2500 mm on request
 ** Determined with oil

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

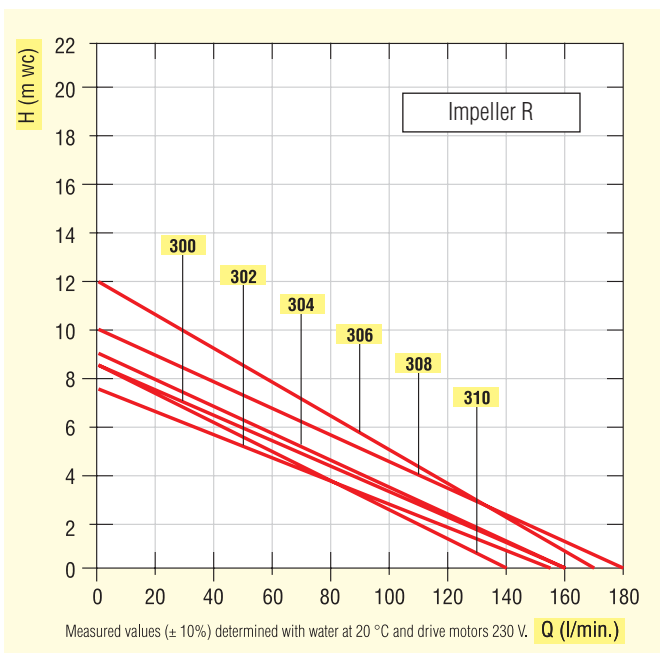
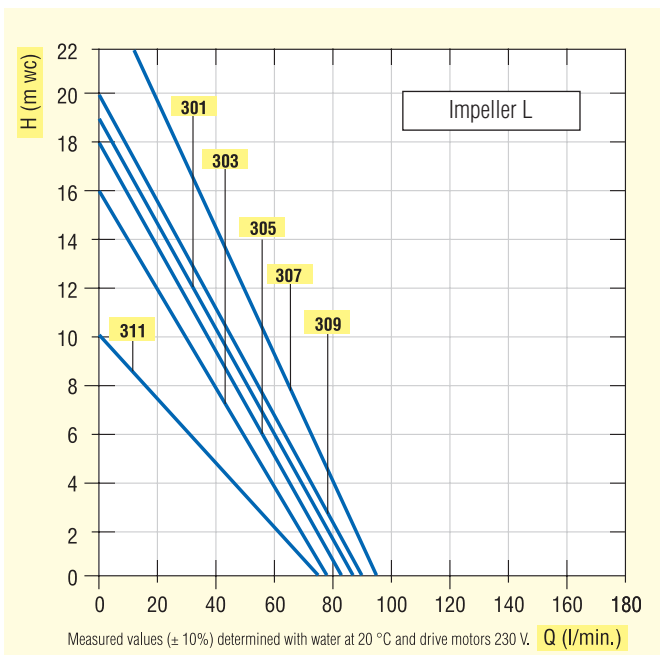
Special voltages and frequencies on request.

Pump Tube Alu (aluminium)

for neutral, non flammable liquids

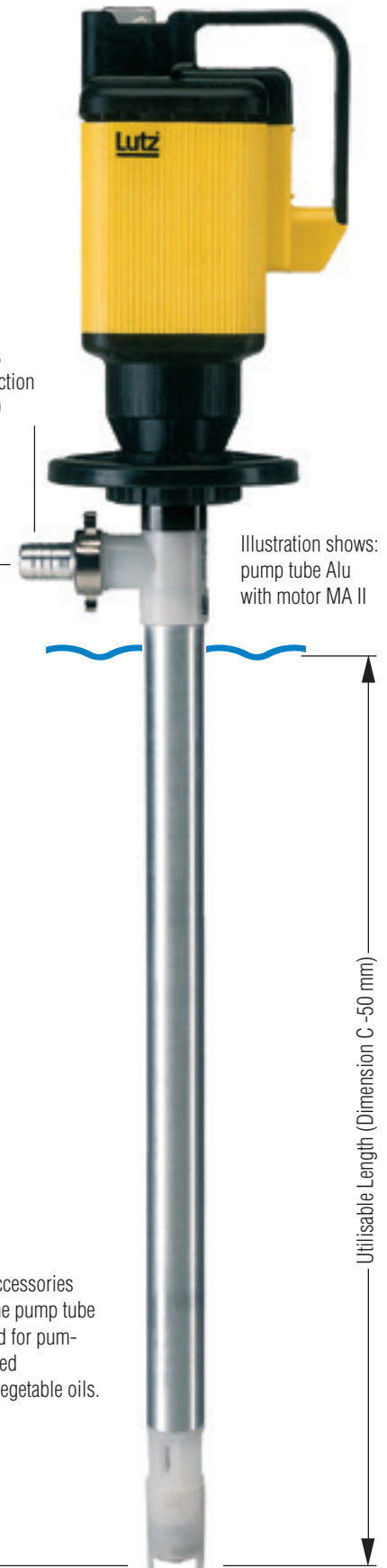
Materials (coming into contact with the pumped medium):

Version:	SL	MS
Housing:	Alu, PVDF	Alu, PVDF
Impeller:	ETFE	PP ETFE
Seals:	none	FPM
Mechanical seals:	none	Carbon, SiC, FPM, HC, HC-4 (2.4610)
Bearing:	ETFE	ETFE
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.

Accessories
hose connection
see page 79








With selected accessories (see page 92) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.



Suitable range of accessories
see pages 76-92

Lutz Drum and Container Pumps

Pump tube SS (stainless steel) for corrosive and neutral liquids

Product detail	Pump tube	SS-SL	SS-MS						
	Type of impeller	L	R	L	R				
	Category 1 / 2 (acc. to ATEX)	yes	yes	yes	yes				
	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	ETFE	ETFE	ETFE	ETFE			
	Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32			
		Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4			
	Length: 700 mm***	Order No.	0150-003	0150-000	0151-003	0151-000			
	Length: 1000 mm***	Order No.	0150-004	0150-001	0151-004	0151-001			
Length: 1200 mm***	Order No.	0150-005	0150-002	0151-005	0151-002				
Length: 1400 mm***	Order No.	0150-108	0150-113	–	–				
Length: 1500 mm***	Order No.	0150-109	0150-114	–	–				
Length: 1600 mm***	Order No.	0150-110	0150-115	–	–				
Length: 1700 mm***	Order No.	0150-111	0150-116	–	–				
Length: 2000 mm***	Order No.	0150-112	0150-117	–	–				
Choice of motors		Operating data							
	MI-4	MI-4-E	Characteristic curve no.	401	400	401	400		
	-	with speed controller	Flow rate* up to l/min.	117	210	117	210		
Output:	500 W	500 W	Delivery head* up to m wc	19	10	19	10		
Voltage:	230 V	230 V	Viscosity** up to mPas	500	350	500	350		
Order No.	0030-000	0030-001	Density**** up to kg/dm³	1.4	1.1	1.4	1.1		
			Weight (kg) Motor + pump tube	5.7	5.7	5.7	5.7		
	MA II 3		Characteristic curve no.	403	402	403	402		
	Output:	460 W	460 W	Flow rate* up to l/min.	95	178	95	178	
	Voltage:	230 V	230 V	Delivery head* up to m wc	14	9	14	9	
	LVR.:	no	yes	Viscosity** up to mPas	350	200	350	200	
	Order No.	0060-000	0060-008	Density**** up to kg/dm³	1.6	1.2	1.6	1.2	
				Weight (kg) Motor + pump tube	7.5	7.5	7.5	7.5	
	MA II 5		MA II 5	MA II 5 S	Characteristic curve no.	405	404	405	404
	Output:	575 W	575 W	575 W	Flow rate* up to l/min.	100	190	100	190
	Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	16	10	16	10
	LVR.:	no	yes	no	Viscosity** up to mPas	700	550	700	550
			acid-proof	Density**** up to kg/dm³	1.8	1.3	1.8	1.3	
Order No.	0060-001	0060-009	0060-091	Weight (kg) Motor + pump tube	8.3	8.3	8.3	8.3	
MA II 7		Characteristic curve no.	407	406	407	406			
Output:	795 W	795 W	Flow rate* up to l/min.	115	210	115	210		
Voltage:	230 V	230 V	Delivery head* up to m wc	20	13	20	13		
LVR.:	no	yes	Viscosity** up to mPas	500	400	500	400		
Order No.	0060-002	0060-010	Density**** up to kg/dm³	1.9	1.4	1.9	1.4		
			Weight (kg) Motor + pump tube	9.5	9.5	9.5	9.5		
	MD-1	MD-2	Characteristic curve no.	409	408	409	408		
	Output:	400 W	400 W	Flow rate* up to l/min.	110	210	110	210	
Operating pressure:	6 bar	6 bar	Delivery head* up to m wc	20	12	20	12		
Order No.	0004-087	0004-088	Viscosity** up to mPas	500	400	500	400		
			Density**** up to kg/dm³	1.8	1.3	1.8	1.3		
			Weight (kg) Motor + pump tube	4.4	4.4	4.4	4.4		
	B4/GT		Characteristic curve no.	411	410	411	410		
	Output:	750 W	750 W	Flow rate* up to l/min.	100	180	100	180	
Voltage:	230/400 V	230/400 V	Delivery head* up to m wc	12	13	12	13		
Protection switch:	no	yes	Viscosity** up to mPas	500	400	500	400		
Order No.	0004+019	0004+067	Density**** up to kg/dm³	2.2	2.0	2.2	2.0		
			Weight (kg) Motor + pump tube	13.7	13.7	13.7	13.7		

Low-voltage release (LVR):
Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.

*Determined with water at 20 °C
** Determined with oil

*** 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.

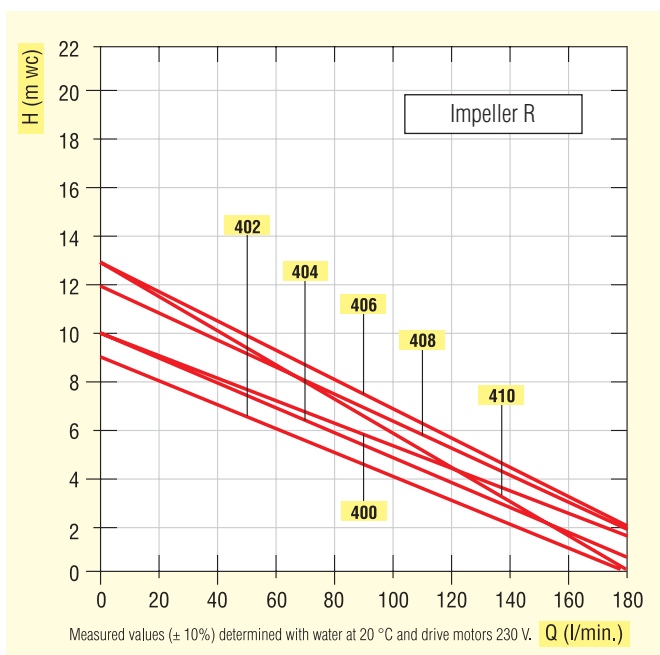
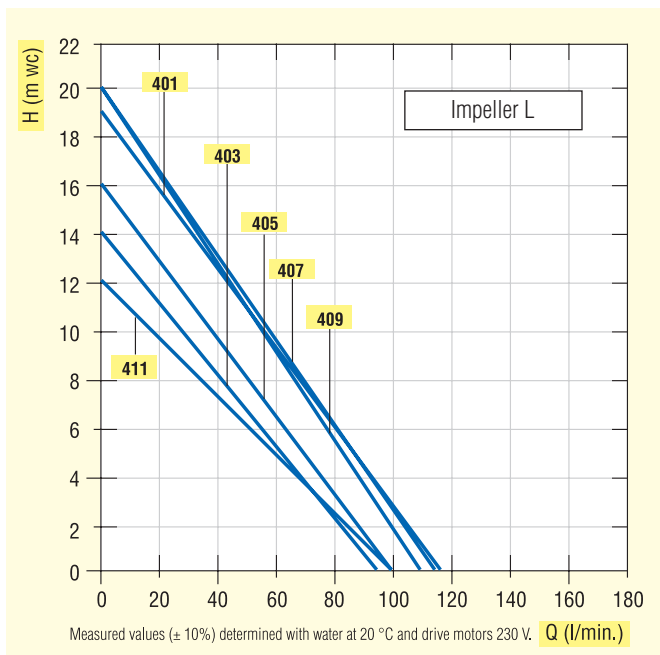
Special voltages and frequencies on request.

Pump Tube SS (stainless steel)

for corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	SL	MS	SL PURE	MS PURE
Housing:	SS (1.4571)	SS (1.4571)	SS (1.4571)	SS (1.4571)
Impeller:	ETFE	ETFE	PP	ETFE
Seals:	none	FPM	none	EPDM, FPM
Mechanical seal:	none	Carbon, Ceramic, FPM, Stainless steel	none	Carbon, Ceramic, FPM, EPDM, Stainless steel
Bearing:	Pure Carbon	Pure Carbon	Pure Carbon	Pure Carbon
Drive shaft:	SS (1.4571)	SS (1.4571)	SS (1.4571)	SS (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.

Accessories
hose connection
see page 79



Illustration shows:
pump tube SS with
motor MA II



With selected accessories (see page 92) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.



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. Additional costs see price list.

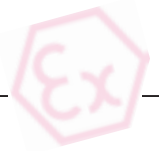
Dimension C

Utilisable Length (Dimension C -40 mm)




Suitable range of accessories
see pages 76-92

Lutz Drum and Container Pumps




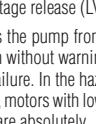



Pump tube SS (stainless steel) for highly inflammable liquids

Product detail	Pump tube	SS-SL		SS-MS		
	Type of impeller	L	R	L	R	
	Category 1 / 2 (acc. to ATEX)	yes	yes	yes	yes	
	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	ETFE	ETFE	ETFE	ETFE
	Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32
		Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4
	Length: 700 mm***	Order No.	0150-003	0150-000	0151-003	0151-000
	Length: 1000 mm***	Order No.	0150-004	0150-001	0151-004	0151-001
	Length: 1200 mm***	Order No.	0150-005	0150-002	0151-005	0151-002
	Length: 1400 mm***	Order No.	0150-108	0150-113	–	–
	Length: 1500 mm***	Order No.	0150-109	0150-114	–	–
	Length: 1600 mm***	Order No.	0150-110	0150-115	–	–
Length: 1700 mm***	Order No.	0150-111	0150-116	–	–	
Length: 2000 mm***	Order No.	0150-112	0150-117	–	–	

Choice of motors

Operating data

	ME II 3			Characteristic curve no.	453	452	453	452		
	Output:	460 W	460 W	Flow rate*	up to l/min.	95	178	95	178	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	14	9	14	9	
	LVR.:	yes	no	Viscosity**	up to mPas	350	200	350	200	
				Density****	up to kg/dm³	1.6	1.2	1.6	1.2	
Order No. 0050-000 0050-016				Weight (kg)	Motor + pump tube	8.7	8.7	8.7	8.7	
	ME II 5			Characteristic curve no.	455	454	455	454		
	Output:	580 W	580 W	Flow rate*	up to l/min.	100	190	100	190	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	16	10	16	10	
	LVR.:	yes	no	Viscosity**	up to mPas	700	550	700	550	
				Density****	up to kg/dm³	1.8	1.3	1.8	1.3	
Order No. 0050-001 0050-017				Weight (kg)	Motor + pump tube	9.6	9.6	9.6	9.6	
	ME II 7			Characteristic curve no.	457	456	457	456		
	Output:	795 W	795 W	Flow rate*	up to l/min.	115	210	115	210	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	20	13	20	13	
	LVR.:	yes	no	Viscosity**	up to mPas	500	400	500	400	
				Density****	up to kg/dm³	1.9	1.4	1.9	1.4	
Order No. 0050-002 0050-018				Weight (kg)	Motor + pump tube	10.8	10.8	10.8	10.8	
	ME II 8			Characteristic curve no.	459	458	459	458		
	Output:	930 W	930 W	Flow rate*	up to l/min.	123	243	123	243	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	26	15	26	15	
	LVR.:	yes	no	Viscosity**	up to mPas	750	650	750	650	
				Density****	up to kg/dm³	1.9	1.4	1.9	1.4	
Order No. 0050-042 0050-041				Weight (kg)	Motor + pump tube	10.8	10.8	10.8	10.8	
	MD-1 MD-2 MD-3			Characteristic curve no.	461	460	461	460		
	Output:	400 W	400 W	400 W	Flow rate*	up to l/min.	110	210	110	210
	Operating pressure:	6 bar	6 bar	6 bar	Delivery head*	up to m wc	20	12	20	12
				Viscosity**	up to mPas	500	400	500	400	
				Density****	up to kg/dm³	1.8	1.3	1.8	1.3	
Order No. 0004-087 0004-088 0004-090				Weight (kg)	Motor + pump tube	4.4	4.4	4.4	4.4	

Low-voltage release (LVR.):

Prevents the pump from starting up again without warning after a power failure. In the hazardous location, motors with low-voltage release are absolutely precribed.

* Determined with water at 20 °C *** Special lengths 200–2500 mm on request
 ** Determined with oil

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

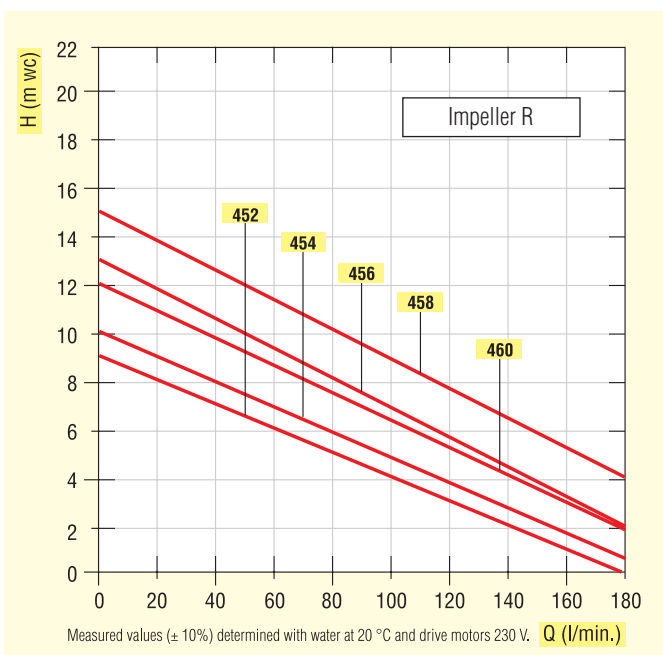
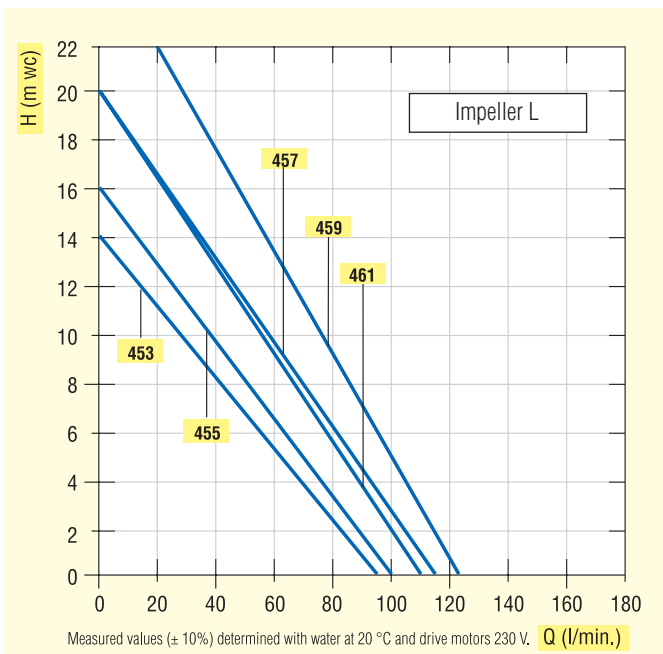
Special voltages and frequencies on request.

Pump Tube SS (stainless steel)

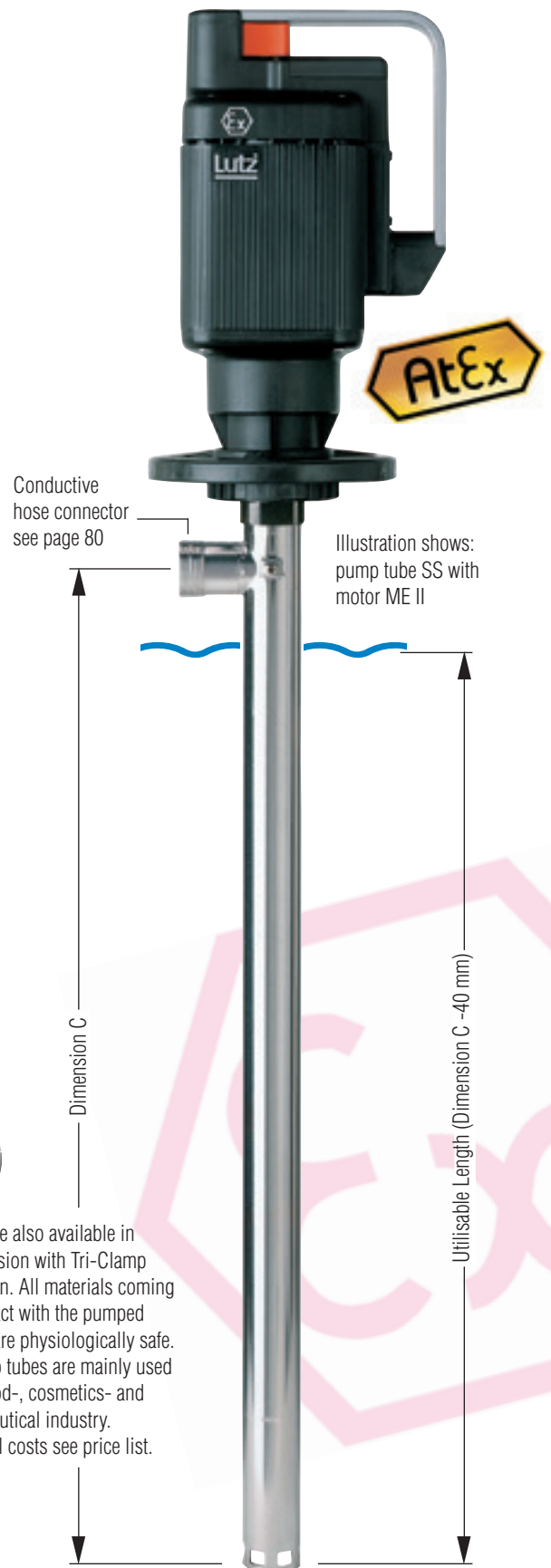
for highly inflammable liquids

Materials (coming into contact with the pumped medium):

Version:	SL	MS	MS PURE
Housing:	SS (1.4571)	SS (1.4571)	SS (1.4571)
Impeller:	ETFE	ETFE	ETFE
Seals:	none	FPM	FPM, EPDM
Mechanical seals:	none	Carbon, Ceramic, FPM, Stainless steel	Carbon, Ceramic, FPM, EPDM, Stainless steel
Bearing:	Pure Carbon	Pure Carbon	Pure Carbon
Drive shaft:	SS (1.4571)	SS (1.4571)	SS (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.








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. Additional costs see price list.



Suitable range of accessories see pages 76-92

Lutz Drum and Container Pumps

Pump tube HC (Hastelloy C) for highly corrosive chemicals

Product detail	Pump tube	HC-SL					
	Type of impeller	L	R				
	Category 1 / 2 (acc. to ATEX)	yes	yes				
	Immersion tube diameter:	up to mm	42	42			
	Temperature of medium:	up to °C	120	120			
	Material:	Pump tube	HC	HC			
		Impeller	ETFE	ETFE			
	Hose connection:	Nominal diameter mm	19-32	19-32			
		Outer thread	G 1 1/4	G 1 1/4			
Length: 1000 mm***	Order No.	0162-204	0162-201				
Length: 1200 mm***	Order No.	0162-205	0162-202				
Choice of motors		Operating data					
	MI 4	MI 4-E	Characteristic curve no.	501	500		
	-	with speed	Flow rate*	up to l/min.	117	210	
	Output: 500 W	500 W	Delivery head*	up to m wc	19	10	
	Voltage: 230 V	230 V	Viscosity**	up to mPas	500	350	
	Order No. 0030-000	0030-001	Density****	up to kg/dm³	1.4	1.1	
		Weight (kg)	Motor + pump tube	7.2	7.2		
	MA II 3		Characteristic curve no.	503	502		
	Output: 460 W	460 W	Flow rate*	up to l/min.	95	178	
	Voltage: 230 V	230 V	Delivery head*	up to m wc	14	9	
	LVR.: no	yes	Viscosity**	up to mPas	350	200	
	Order No. 0060-000	0060-008	Density****	up to kg/dm³	1.6	1.2	
			Weight (kg)	Motor + pump tube	9.0	9.0	
	MA II 5		MA II 5	MA II 5 S	Characteristic curve no.	505	504
	Output: 575 W	575 W	575 W	Flow rate*	up to l/min.	100	190
	Voltage: 230 V	230 V	230 V	Delivery head*	up to m wc	16	10
	LVR.: no	yes	no	Viscosity**	up to mPas	700	550
Order No. 0060-001	0060-009	0060-091	Density****	up to kg/dm³	1.8	1.3	
		acid-proof	Weight (kg)	Motor + pump tube	9.8	9.8	
<p>Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.</p>	MA II 7		Characteristic curve no.	507	506		
	Output: 795 W	795 W	Flow rate*	up to l/min.	115	210	
	Voltage: 230 V	230 V	Delivery head*	up to m wc	20	13	
	LVR.: no	yes	Viscosity**	up to mPas	500	400	
	Order No. 0060-002	0060-010	Density****	up to kg/dm³	1.9	1.4	
		Weight (kg)	Motor + pump tube	11.0	11.0		
	MD-1		MD-2	Characteristic curve no.	509	508	
	Output: 400 W	400 W	Flow rate*	up to l/min.	110	210	
	Operating-pressure: 6 bar	6 bar	Delivery head*	up to m wc	20	12	
	Order No. 0004-087	0004-088	Viscosity**	up to mPas	500	400	
			Density****	up to kg/dm³	1.8	1.3	
		Weight (kg)	Motor + pump tube	5.9	5.9		
	B4/GT		Characteristic curve no.	511	510		
	Output: 750 W	750 W	Flow rate*	up to l/min.	100	180	
	Voltage: 230/400 V	230/400 V	Delivery head*	up to m wc	12	13	
	Protection switch: no	yes	Viscosity**	up to mPas	500	400	
	Order No. 0004+019	0004+067	Density****	up to kg/dm³	2.2	2.0	
		Weight (kg)	Motor + pump tube	15.2	15.2		

* Determined with water at 20 °C *** Special lengths

** Determined with oil 200-2500 mm on request

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

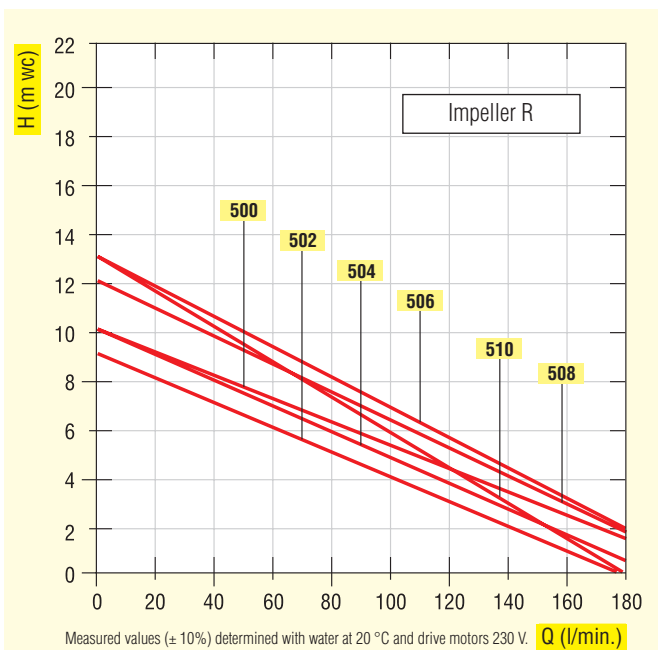
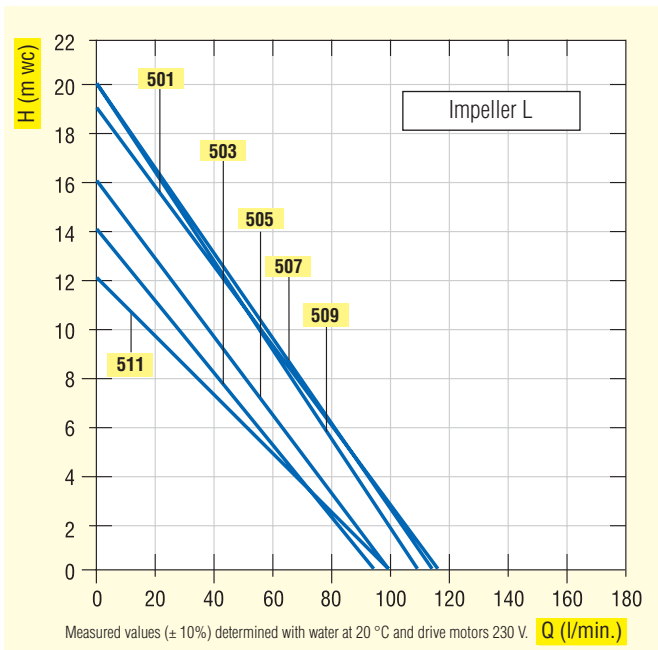
Special voltages and frequencies on request.

Pump Tube HC (Hastelloy C)

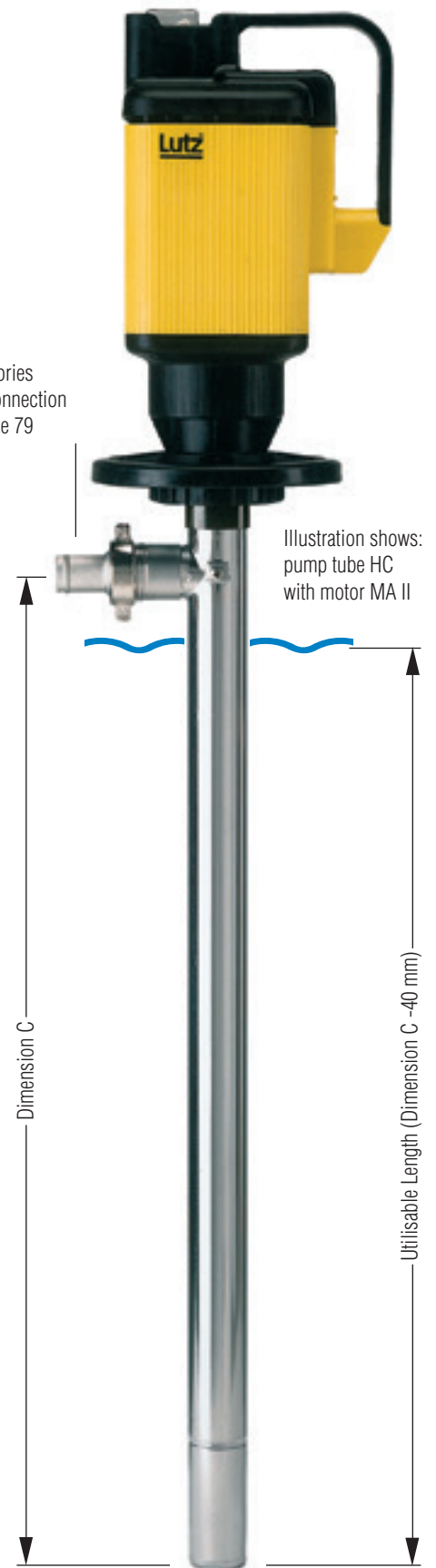
for highly corrosive chemicals

Materials (coming into contact with the pumped medium):

Version:	SL
Housing:	HC-22 (2.4602)
Impeller:	ETFE
Seals:	FPM (FEP coated)
Bearing:	ETFE, Carbon
Drive shaft:	HC-4 (2.4610)



Accessories
hose connection
see page 79

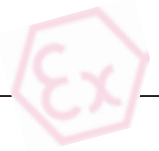


Please remember that the flow rate is reduced as the **viscosity** increases. The **density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.




Suitable range of accessories
see pages 76-92











Lutz Drum and Container Pumps



Pump tube HC (Hastelloy C) for highly inflammable chemicals

Productdetail	Pump tube	HC-SL		
	Type of impeller	L	R	
	Category 1 / 2 (acc. to ATEX)	yes	yes	
	Immersion tube diameter:	up to mm	42	42
	Temperature of medium:	up to °C	120	120
	Material:	Pump tube Impeller	HC ETFE	HC ETFE
	Hose connection:	Nominal diameter mm Outer thread	19-32 G 1 1/4	19-32 G 1 1/4
	Length: 1000 mm***	Order No.	0162-204	0162-201
	Length: 1200 mm***	Order No.	0162-205	0162-202

Choice of motors Operating data

 	ME II 3			Characteristic curve no.	553	552		
	Output:	460 W	460 W	Flow rate*	up to l/min.	95	178	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	14	9	
	LVR.:	yes	no	Viscosity**	up to mPas	350	200	
	Order No.	0050-000	0050-016	Density****	up to kg/dm³	1.6	1.2	
 	ME II 5			Weight (kg)	Motor + pump tube	10.2	10.2	
	ME II 5			Characteristic curve no.	555	554		
	Output:	580 W	580 W	Flow rate*	up to l/min.	100	190	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	16	10	
	LVR.:	yes	no	Viscosity**	up to mPas	700	550	
 	ME II 7			Density****	up to kg/dm³	1.8	1.3	
	Order No.	0050-001	0050-017	Weight (kg)	Motor + pump tube	11.1	11.1	
	ME II 7			Characteristic curve no.	557	556		
	Output:	795 W	795 W	Flow rate*	up to l/min.	115	210	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	20	13	
 	ME II 8			Viscosity**	up to mPas	500	400	
	LVR.:	yes	no	Density****	up to kg/dm³	1.9	1.4	
	Order No.	0050-002	0050-018	Weight (kg)	Motor + pump tube	12.3	12.3	
	ME II 8			Characteristic curve no.	559	558		
	Output:	930 W	930 W	Flow rate*	up to l/min.	123	243	
 	MD-1 MD-2 MD-3			Delivery head*	up to m wc	26	15	
	Output:	400 W	400 W	400 W	Viscosity**	up to mPas	750	650
	Operating-pressure:	6 bar	6 bar	6 bar	Density****	up to kg/dm³	1.9	1.4
	Order No.	0004-087	0004-088	0004-090	Weight (kg)	Motor + pump tube	12.3	12.3
	MD-1 MD-2 MD-3			Characteristic curve no.	561	560		
Output:	400 W	400 W	400 W	Flow rate*	up to l/min.	110	210	
Operating-pressure:	6 bar	6 bar	6 bar	Delivery head*	up to m wc	20	12	
Order No.	0004-087	0004-088	0004-090	Viscosity**	up to mPas	500	400	
MD-1 MD-2 MD-3			Density****	up to kg/dm³	1.8	1.3		
Order No.	0004-087	0004-088	0004-090	Weight (kg)	Motor + pump tube	5.9	5.9	

Low-voltage release (LVR.):

Prevents the pump from starting up again without warning after a power failure. In the hazardous location, motors with low-voltage release are absolutely precribed.

* Determined with water at 20 °C *** Special lengths 200–2500 mm on request

** Determined with oil

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

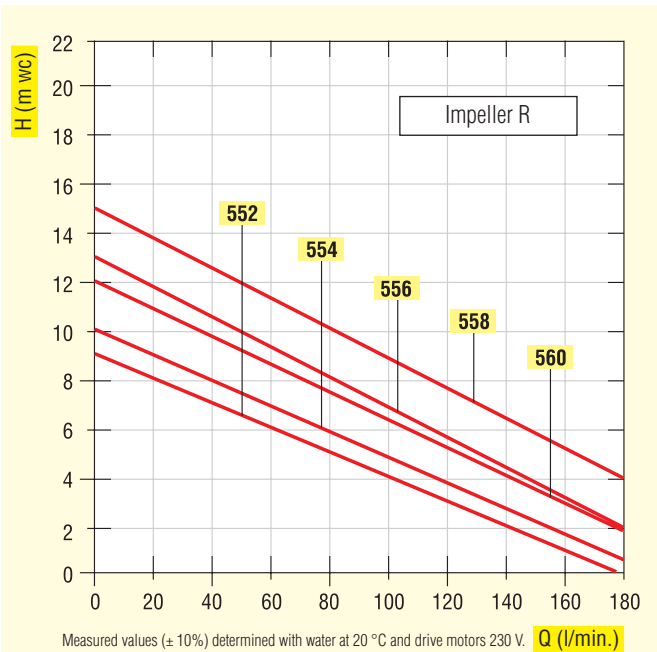
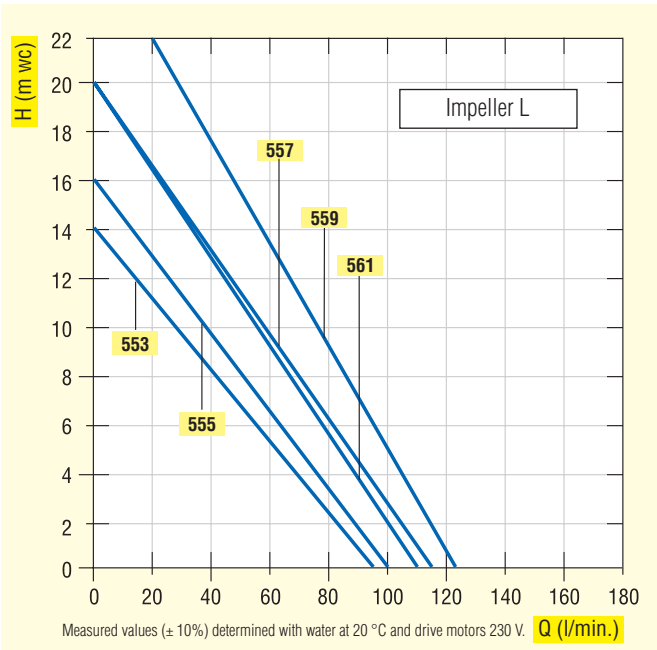
Special voltages and frequencies on request.

Pump Tube HC (Hastelloy C)

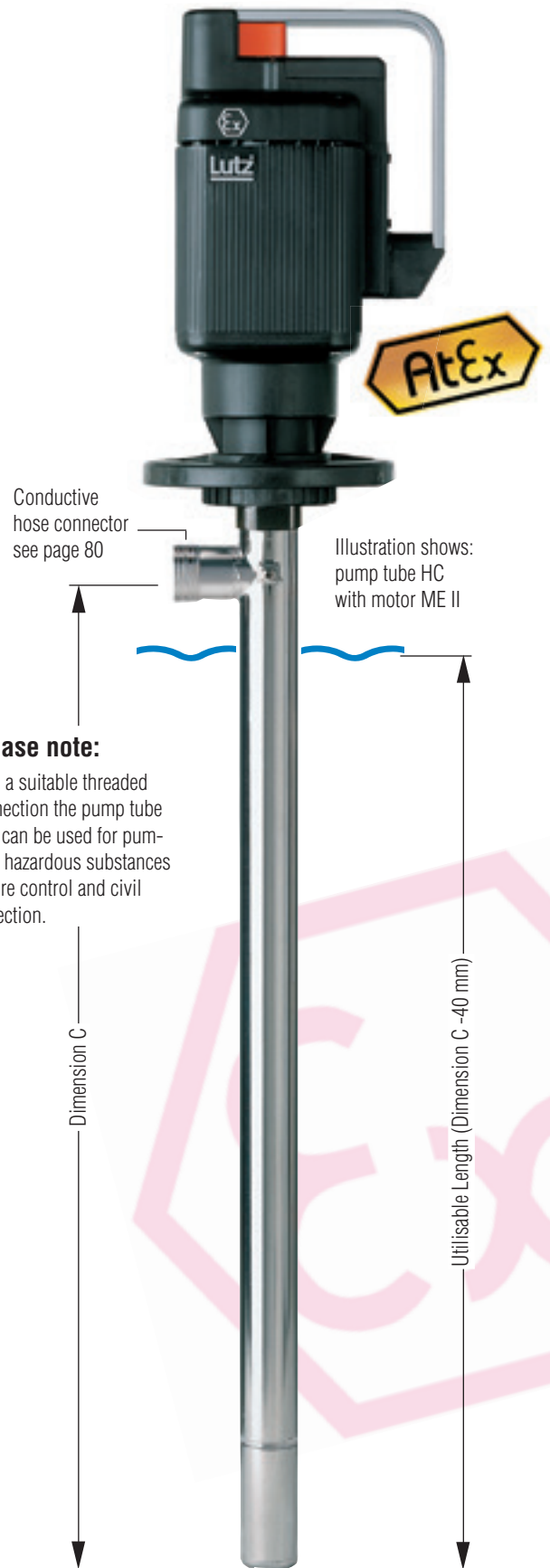
for highly inflammable chemicals

Materials (coming into contact with the pumped medium):

Version:	SL
Housing:	HC-22 (2.4602)
Impeller:	ETFE
Seals:	FPM (FEP coated)
Bearing:	ETFE, Carbon
Drive shaft:	HC-4 (2.4610)



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.



Suitable range of accessories see pages 76-92

Lutz Pump Tubes RE for complete drum drainage

In stainless steel and polypropylene



*Pump tube RE: Environmentally friendly and cost-efficient.
The first pump tube for complete drainage worldwide.*

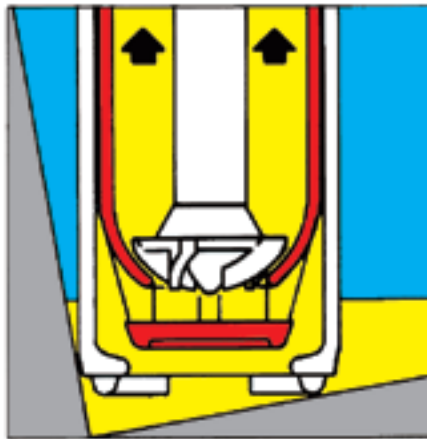
Competitive edge instead of drawback

Experts, never tired of work:

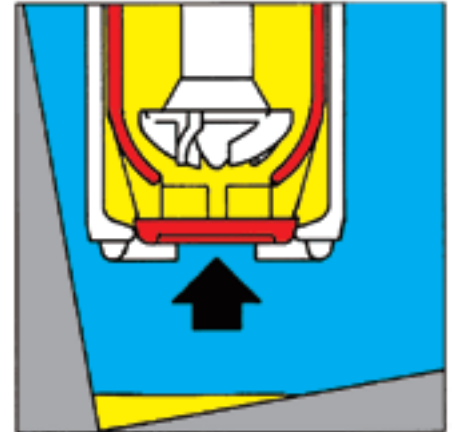
Lutz pump tubes RE in stainless steel and polypropylene. Not only are they environmentally safe, they also help to save money. On the one hand, the liquid is used to the maximum, on the other hand, the cost for disposing of residuals is drastically reduced, since only the slightest residue remains in the containers.

Open to everything but absolutely leak-proof...

The power is transferred to the drive shaft via a flexible coupling that is sealed well and bedded in a shaft tube. The impeller feeds the liquid safely to the hose connection on top of the pump.



The sealing cap is open – the liquid is pumped out.



The closed sealing cap prevents a return flow when the pump is removed.

Patented solution

With the motor running, the pump foot is closed by lowering the sealing cap within the pump tube. The sealing cap locks the pump foot and prevents the entered liquid from flowing back into the drum. Closing is done in no time at all – carried out by a small lever below the hand wheel. With the motor switched off, the pump tube holding the liquid can be removed and inserted into the next drum. A development that has rightfully been patented.

German Patent:

DE 37 18325 C2

Down-to-earth technology

RE pump tubes for complete drainage feature a simple yet very convincing concept. Simple – and that is exactly why it is ingenious – since the integration of the RE concept offers considerable advantages. Due to their technology, these pumps guarantee maximum pump out of the fluid, literally draining the container "to the dregs". The residues amount to less than 0.10 l.

Residues less than 0.10 l

Pump Tubes for complete drum drainage

In polypropylene (PP) and stainless steel (SS 1.4571)

These pump tubes for complete drainage are suitable for applications, in which thin-bodied liquids need to be drained almost completely from drums and other containers. PP likes to demonstrate its capabilities in handling acids and alkalis. Stainless steel pump tubes have a way with aggressive, neutral, easily inflammable and non inflammable fluids.

Excellent design: Almost anything is possible

Like all components designed by Lutz, these pump tubes boast a straightforward and logic design. In the version with mechanical seals, the drive shaft is secured with a mechanical seal with two shaft sealing rings behind it. The motor can be disconnected quickly through the convenient Lutz hand wheel.



The material is what matters

We select the materials with regard to the liquids to be pumped. Both the pump tube models feature an extremely resistant pure carbon bearing and there are no grease fillings in the shaft tube, so there is no way the fluid to be pumped can be contaminated. The drive shaft is optionally available in Hastelloy C4 for use with acids and alkalis. Stainless steel pump tubes have FEP coated seals.

New: Stainless steel pump tubes in PURE version. All materials coming into contact with the pumped fluids are physiologically safe. The pump tubes are mainly used in the food-, cosmetics and pharmaceutical industry.

Logical decision: Service-friendly design

Maintenance without the need for special tools – that's what we call service-friendly.

Important !

A stainless steel pump tube and an explosionproof motor with Atex certification must be used for pumping easily inflammable liquids. Please refer to pages 31-32.

Small but very useful

Undemanding universal motor designed for industrial applications and suitable for pumping thin-bodied, slightly viscous, neutral, aggressive and non-inflammable liquids. It demonstrates its power even when handling acids and alkalis.



     IP 24

MI 4/MI 4-E

Lightweight but dependable

The convenient and powerful MA II universal motors. Ideal for pumping thin-bodied to slightly viscous, aggressive and non-inflammable liquids.



    IP 54

MA II

Safety first

These motors aren't taken aback easily. The ME II explosionproof universal motors are the nostrum (German Patent DE 38 15427 C2 - for pumping a large variety of thin-bodied, easily inflammable and combustible liquids.



 IP 54 

ME II

Trio grande: The models

Three different versions of the MD compressed air motors are available. MD-1 without manual operation for automatic control, MD-2 with manual operation and interlock, MD-3 with on/off pushbutton. Approved according to ATEX Ex II 2 G.



MD-1



MD-2



MD-3

MD-1/MD-2/MD-3 compressed air motors

Tip

For detailed information on the motors please refer to pages 30-32.

Reliable and powerful, thus suitable for extreme conditions

The B4/GT has a proven record of success in plant constructions and as a drum pump drive. The perfect system for thin-bodied to slightly viscous liquids. These "undemanding" partners hardly ever show signs of wear. The ideal solution for long periods of operation.




 IP 54/IP 55

B4/GT three-phase gear motor


Lutz Drum and Container Pumps


Pump tube RE-PP (polypropylene) for complete drum drainage of corrosive and neutral liquids

Productdetail	Pump tube	RE-PP MS	
	Type of impeller	L	
	Category 1 / 2 (acc. to ATEX)	no	
	Immersion tube diameter:	up to mm	41
	Temperature of medium:	up to °C	50
	Material:	Pump tube	PP
		Impeller	PP
	Hose connection:	Nominal diameter mm	19-32
		Outer thread	G 1 1/4
	Length: 700 mm*** shaft SS	Order No.	0103-020
	Length: 1000 mm*** shaft SS	Order No.	0103-021
	Length: 1200 mm*** shaft SS	Order No.	0103-022
	Length: 700 mm*** shaft HC	Order No.	0103-040
Length: 1000 mm*** shaft HC	Order No.	0103-041	
Length: 1200 mm*** shaft HC	Order No.	0103-042	

Choice of motors

Operating data


	MI-4	MI-4-E	Characteristic curve no. 600 Flow rate* up to l/min. 70 Delivery head* up to m wc 12 Viscosity** up to mPas 1000 Density**** up to kg/dm³ 1.6 Weight (kg) Motor + pump tube 4.0
	-	with speed controller	
	Output: 500 W	500 W	
	Voltage: 230 V	230 V	
	Order No. 0030-000	0030-001	

	MA II 3		Characteristic curve no. 601 Flow rate* up to l/min. 60 Delivery head* up to m wc 11 Viscosity** up to mPas 800 Density**** up to kg/dm³ 1.7 Weight (kg) Motor + pump tube 5.8
	Output: 460 W	460 W	
	Voltage: 230 V	230 V	
	LVR.: no	yes	
	Order No. 0060-000	0060-008	

	MA II 5	MA II 5	MA II 5 S	Characteristic curve no. 602 Flow rate* up to l/min. 60 Delivery head* up to m wc 11.5 Viscosity** up to mPas 1200 Density**** up to kg/dm³ 2.0 Weight (kg) Motor + pump tube 6.6
Output: 575 W	575 W	575 W		
Voltage: 230 V	230 V	230 V		
LVR.: no	yes	no	acid-proof	
Order No. 0060-001	0060-009	0060-091		

Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.

	MA II 7		Characteristic curve no. 603 Flow rate* up to l/min. 69 Delivery head* up to m wc 15 Viscosity** up to mPas 1000 Density**** up to kg/dm³ 2.0 Weight (kg) Motor + pump tube 7.8
Output: 795 W	795 W		
Voltage: 230 V	230 V		
LVR.: no	yes		
Order No. 0060-002	0060-010		

	MD-1	MD-2	Characteristic curve no. 604 Flow rate* up to l/min. 60 Delivery head* up to m wc 12 Viscosity** up to mPas 1000 Density**** up to kg/dm³ 2.0 Weight (kg) Motor + pump tube 2.7
	Output: 400 W	400 W	
	Operating pressure: 6 bar	6 bar	
	Order No. 0004-087	0004-088	

* Determined with water at 20 °C *** 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.

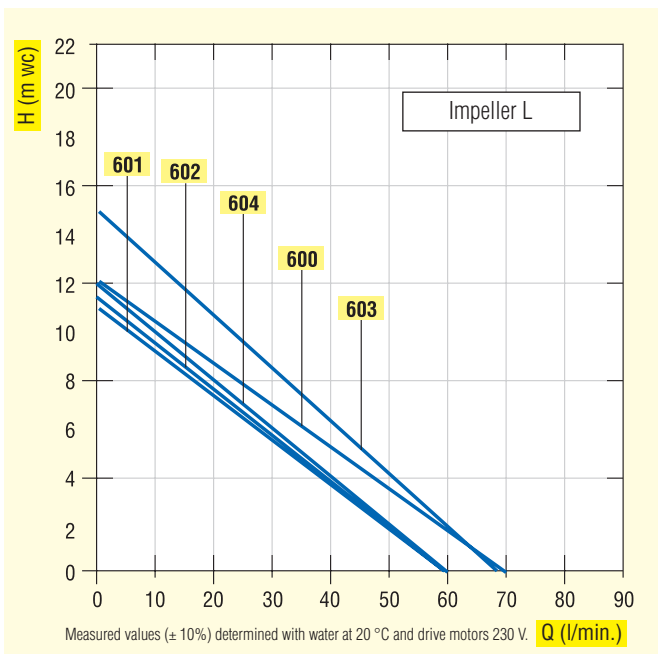
Special voltages and frequencies on request.

Pump Tube RE-PP (polypropylene)

for complete drum drainage of corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	MS
Housing:	PP
Impeller:	PP
Sealing pot:	PP
Seals:	FPM
Mechanical seals:	Carbon, Ceramic, FPM, HC-4 (2.4610)
Bearing:	Pure Carbon
Drive shaft:	Stainless steel (1.4571)

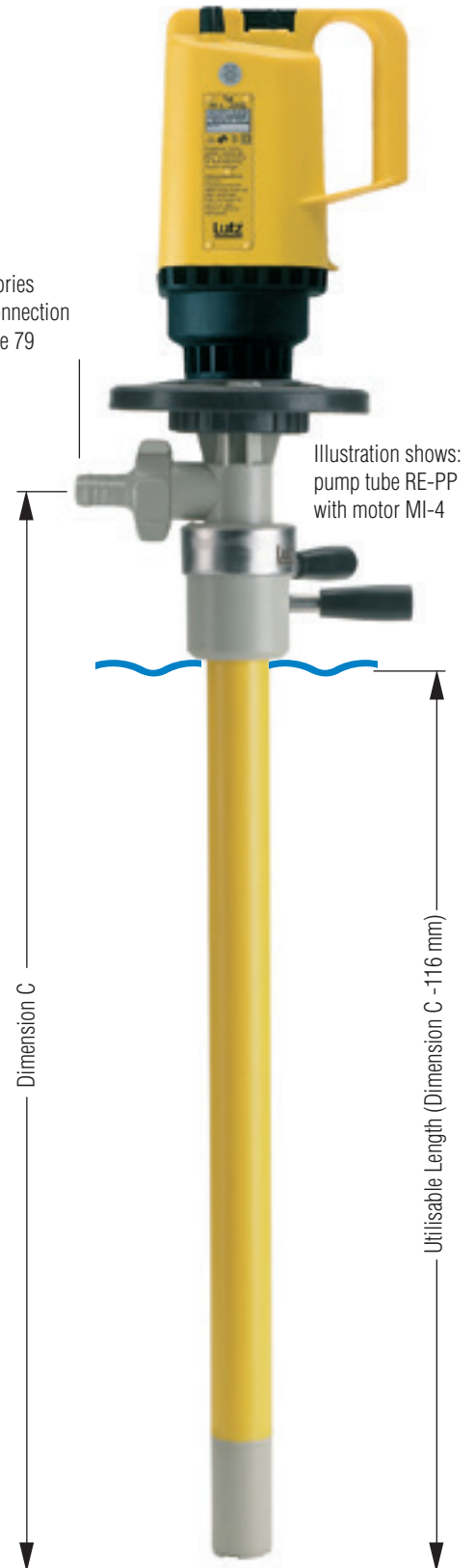


Tip

Which pump for which liquid?
See resistance table !

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.

Accessories
hose connection
see page 79



Suitable range of accessories
see pages 76-92

Lutz Drum and Container Pumps

Pump tube RE-SS (stainless steel) for complete drum drainage of corrosive and neutral liquids

Product detail	Pump tube	RE-SS MS		
	Type of impeller	L		
	Category 1 / 2 (acc. to ATEX)	yes		
	Immersion tube diameter:	up to mm	41	
	Temperature of medium:	up to °C	100	
	Material:	Pump tube Impeller	1.4571 ETFE	
	Hose connection:	Nominal diameter mm Outer thread	19-32 G 1 1/4	
	Length: 700 mm***	Order No.	0151-156	
Length: 1000 mm***	Order No.	0151-157		
Length: 1200 mm***	Order No.	0151-158		
Choice of motors		Operating data		
	MI-4	MI-4-E	Characteristic curve no. 700 Flow rate* up to l/min. 78 Delivery head* up to m wc 17 Viscosity** up to mPas 700 Density**** up to kg/dm³ 1.4 Weight (kg) Motor + pump tube 6.0	
	-	with speed controller		
	Output: 500 W	500 W		
	Voltage: 230 V	230 V		
Order No.	0030-000	0030-001		
	MA II 3		Characteristic curve no. 701 Flow rate* up to l/min. 77 Delivery head* up to m wc 14 Viscosity** up to mPas 500 Density**** up to kg/dm³ 1.6 Weight (kg) Motor + pump tube 7.8	
	Output: 460 W	460 W		
	Voltage: 230 V	230 V		
	LVR.: no	yes		
	Order No.	0060-000		0060-008
	MA II 5			Characteristic curve no. 702 Flow rate* up to l/min. 77 Delivery head* up to m wc 14 Viscosity** up to mPas 900 Density**** up to kg/dm³ 1.8 Weight (kg) Motor + pump tube 8.6
	Output: 575 W	575 W		
	Voltage: 230 V	230 V		
	LVR.: no	yes		
	Order No.	0060-001		
MA II 5 S		Characteristic curve no. 703 Flow rate* up to l/min. 70 Delivery head* up to m wc 18 Viscosity** up to mPas 700 Density**** up to kg/dm³ 1.9 Weight (kg) Motor + pump tube 9.8		
Output: 575 W	575 W			
Voltage: 230 V	230 V			
LVR.: no	yes			
Order No.	0060-002		0060-010	
	MD-1	MD-2	Characteristic curve no. 704 Flow rate* up to l/min. 68 Delivery head* up to m wc 17 Viscosity** up to mPas 700 Density**** up to kg/dm³ 1.8 Weight (kg) Motor + pump tube 4.7	
	Output: 400 W	400 W		
	Operating pressure: 6 bar	6 bar		
	Order No.	0004-087		0004-088
	B4/GT			Characteristic curve no. 705 Flow rate* up to l/min. 55 Delivery head* up to m wc 8.5 Viscosity** up to mPas 600 Density**** up to kg/dm³ 2.2 Weight (kg) Motor + pump tube 14.0
Output: 750 W	750 W			
Voltage: 230/400 V	230/400 V			
Protection switch: no	yes			
Order No.	0004+019	0004+067		

Low-voltage release (LVR):
Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.

* Determined with water at 20 °C *** 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.

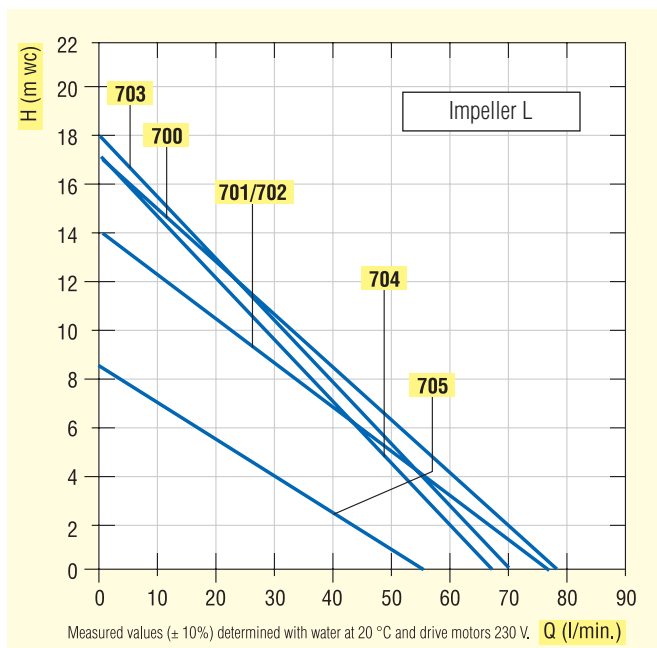
Special voltages and frequencies on request.

Pump Tube RE-SS (stainless steel)

for complete drum drainage of corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	MS	MS PURE
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Impeller:	ETFE	PP
Sealing pot:	ETFE/Stainless steel (1.4571)	ETFE/Stainless steel (1.4571)
Seals:	FEP coated	EPDM
Mechanical seals:	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.

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.

Accessories
hose connection
see page 79

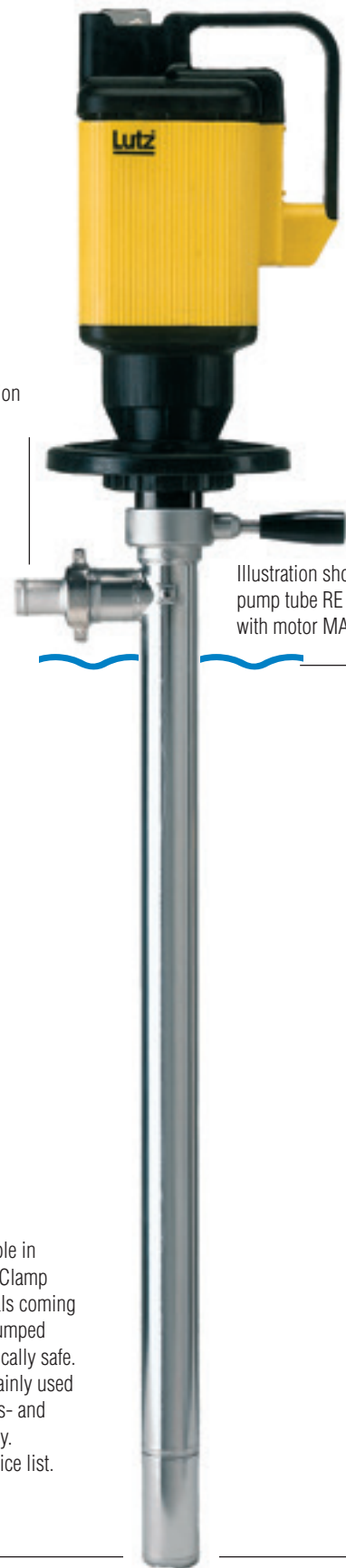


Illustration shows:
pump tube RE SS
with motor MA II

Dimension C

Utilisable Length (Dimension C - 40 mm)



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. Additional costs see price list.




Suitable range of accessories
see pages 76-92




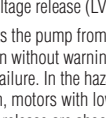

Lutz Drum and Container Pumps



Pump tube RE-SS (stainless steel) for complete drum drainage of highly inflammable liquids

Product detail	Pump tube	RE-SS MS	
	Type of impeller	L	
	Category 1 / 2 (acc. to ATEX)	yes	
	Immersion tube diameter:	up to mm	41
	Temperature of medium:	up to °C	100
	Material:	Pump tube Impeller	1.4571 ETFE
	Hose connection:	Nominal diameter mm Outer thread	19-32 G 1 1/4
	Length: 700 mm***	Order No.	0151-156
	Length: 1000 mm***	Order No.	0151-157
	Length: 1200 mm***	Order No.	0151-158

Choice of motors Operating data

	ME II 3			Characteristic curve no.	750	
	Output:	460 W	460 W	Flow rate*	up to l/min. 77	
	Voltage:	230 V	230 V	Delivery head*	up to m wc 14	
	LVR.:	yes	no	Viscosity**	up to mPas 500	
				Density****	up to kg/dm³ 1.6	
	Order No.	0050-000	0050-016	Weight (kg)	Motor + pump tube 9.0	
	ME II 5			Characteristic curve no.	751	
	Output:	580 W	580 W	Flow rate*	up to l/min. 77	
	Voltage:	230 V	230 V	Delivery head*	up to m wc 14	
	LVR.:	yes	no	Viscosity**	up to mPas 900	
				Density****	up to kg/dm³ 1.8	
	Order No.	0050-001	0050-017	Weight (kg)	Motor + pump tube 9.9	
	ME II 7			Characteristic curve no.	752	
	Output:	795 W	795 W	Flow rate*	up to l/min. 70	
	Voltage:	230 V	230 V	Delivery head*	up to m wc 18	
	LVR.:	yes	no	Viscosity**	up to mPas 700	
				Density****	up to kg/dm³ 1.9	
	Order No.	0050-002	0050-018	Weight (kg)	Motor + pump tube 11.1	
	ME II 8			Characteristic curve no.	753	
	Output:	930 W	930 W	Flow rate*	up to l/min. 78	
	Voltage:	230 V	230 V	Delivery head*	up to m wc 22	
	LVR.:	yes	no	Viscosity**	up to mPas 950	
				Density****	up to kg/dm³ 1.9	
	Order No.	0050-042	0050-041	Weight (kg)	Motor + pump tube 11.1	
	MD-1	MD-2	MD-3	Characteristic curve no.	754	
	Output:	400 W	400 W	400 W	Flow rate*	up to l/min. 68
	Operating pressure:	6 bar	6 bar	6 bar	Delivery head*	up to m wc 17
					Viscosity**	up to mPas 700
					Density****	up to kg/dm³ 1.8
	Order No.	0004-087	0004-088	0004-090	Weight (kg)	Motor + pump tube 4.7

Low-voltage release (LVR.):
Prevents the pump from starting up again without warning after a power failure. In the hazardous location, motors with low-voltage release are absolutely prescribed.

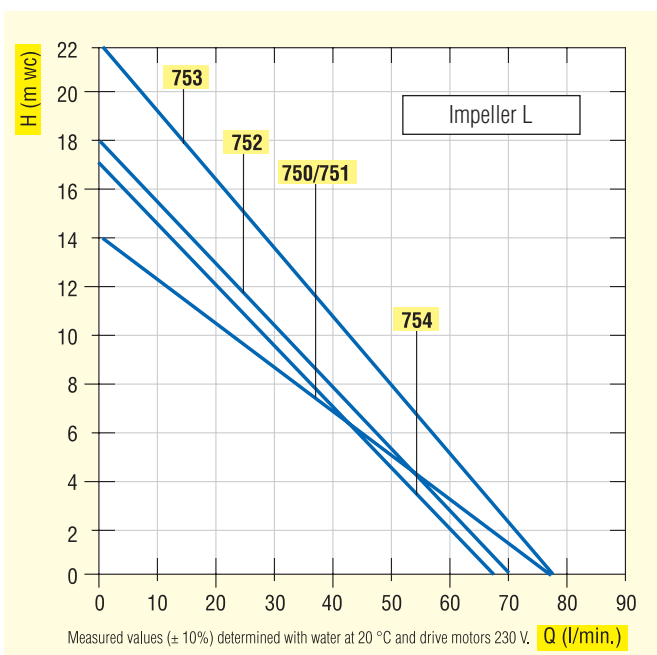
* Determined with water at 20 °C *** Special lengths 200–2500 mm on request
** Determined with oil
**** Determined with 3 m hose 3/4" and open nozzle 3/4". Higher densities possible for shorter operating periods.
Special voltages and frequencies on request.

Pump Tube RE-SS (stainless steel)

for complete drum drainage of highly inflammable liquids

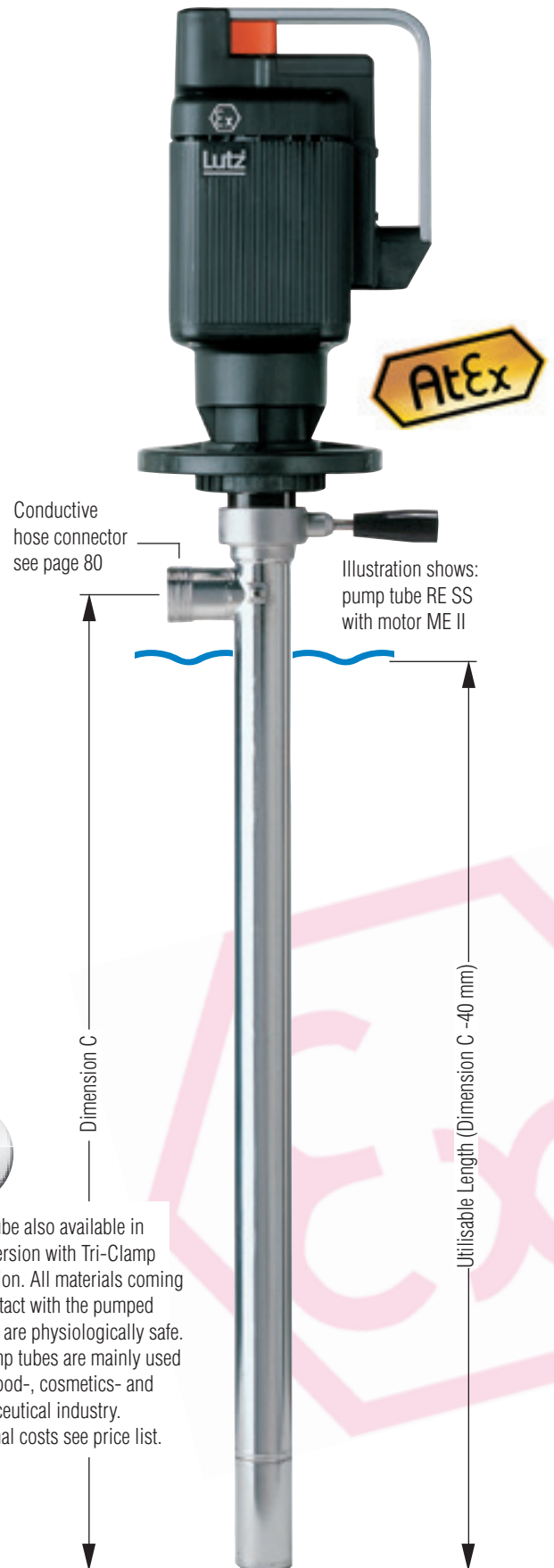
Materials (coming into contact with the pumped medium):

Version:	MS	MS PURE
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:	FEP coated	FPM
Mechanical seals:	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)



Tip
The right pump for "hot applications".

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.



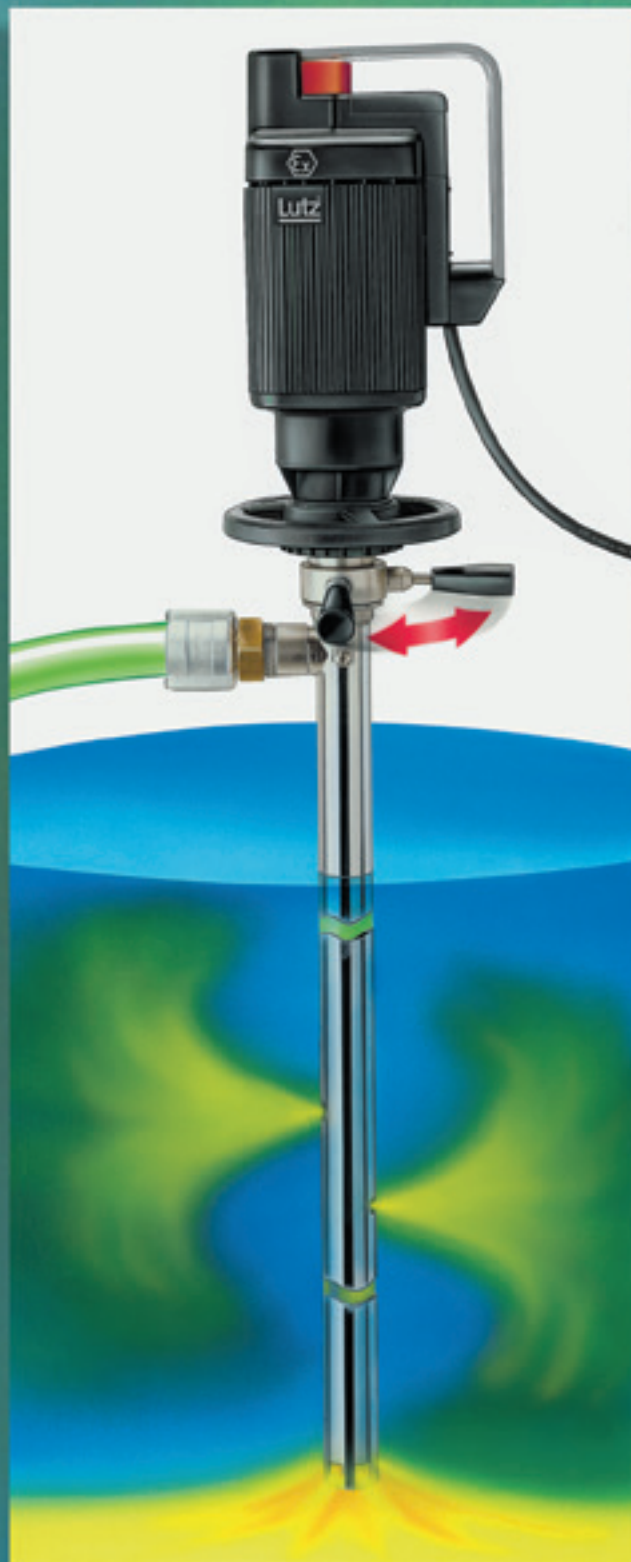
Pump tube also available in PURE version with Tri-Clamp connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry. Additional costs see price list.



Suitable range of accessories see pages 76-92

Pump Tubes MP for mixing and pumping

Multi talent: Lutz pump tube MP for mixing and pumping



Simply double the reward: Lutz pump tubes for mixing and pumping

Some fluids take offence at being kept on hold. They will simply sediment. We are referring to numerous emulsions, dispersions and suspensions used in industrial and trade environments. This is not due to their impatience but to the different weight of the individual ingredients. The Lutz MP can cater for two needs, since it combines a mixer and a pump in one unit and is thus the ideal solution for "critical relationships" of this kind.

Universally Applicable

"Mixer" and Pump in a single unit



immerse



mix/pump



pump

Desired turbulences

The special flow conditions in the container generated by the pump tube for mixing and pumping thoroughly remix and homogenize sedimented media – even in remote corners of the container bottom. In a flash, you will have a homogenized mix ready for further processing.

All the functions in one go

A construction comprising an immersion tube and a locking mechanism that has been tried and tested in practice provides for opening and closing of the mixing apertures. This proven design facilitates simultaneous mixing and pumping. Of course, it's your choice: With the discharge connection closed, you can also mix first and pump afterwards. The pump tube functions are conveniently controlled by devices outside the drum.

Take advantage of a wide range of capabilities

Lutz pump tubes for mixing and pumping are available in stainless steel or polypropylene to match all kinds of chemical resistance requirements. Combined with a wide range of motors, they are capable of meeting a vast number of demands with respect to mixing and pumping inhomogeneous, aggressive and easily inflammable fluids.

Perfect fit

Lutz pump tubes MP for mixing and pumping are compact, that is exactly why they make it big: They have no problems at all fitting through the standardised bung hole of a 200-l drum. Simply push it in, fasten it using a drum adapter – and off you go!

Pump Tubes for mixing and pumping

In polypropylene (PP) and stainless steel (SS 1.4571)

These pump tubes for mixing and pumping are suitable for applications, in which thin-bodied liquids in drums and other containers need to be remixed and homogenised before being pumped. PP likes to demonstrate its capabilities in handling acids and alkalis. Stainless steel pump tubes have a way with aggressive, neutral and easily inflammable fluids.

Excellent design: Almost anything is possible

Like all components designed by Lutz, these pump tubes boast a straightforward and logic design. In the version with mechanical seals, the drive shaft is secured with a mechanical seal with two shaft sealing rings behind it. The motor can be disconnected quickly through the convenient Lutz hand wheel. If you want to mix only, a shut-off device must be provided on the discharge side.



The material is what matters

We select the materials with regard to the liquids to be pumped. Both the pump tube models feature an extremely resistant pure carbon bearing and there are no grease fillings in the shaft tube, so there is no way the fluid to be pumped can be contaminated. The drive shaft is optionally available in Hastelloy C4 for use with acids and alkalis. Stainless steel pump tubes have FEP coated seals.

New: Stainless steel pump tubes in PURE version. All materials coming into contact with the pumped fluids are physiologically safe. The pump tubes are mainly used in the food-, cosmetics and pharmaceutical industry.

Logical decision: Service-friendly design

Maintenance without the need for special tools – that's what we call service-friendly.

Important!

A stainless steel pump tube and an explosionproof motor with Atex certification must be used for pumping easily inflammable liquids. Please refer to pages 31-32.

Small but very useful

Undemanding universal motor designed for industrial applications and suitable for pumping thin-bodied, slightly viscous, neutral, aggressive and non-inflammable liquids. It demonstrates its power even when handling acids and alkalis.



EMV DVE GS CE IP 24

MI 4/MI 4-E

Lightweight but dependable

The convenient and powerful MA II universal motors. Ideal for pumping thin-bodied to slightly viscous, aggressive and non-inflammable liquids.



EMV DVE GS CE IP 54

MA II

Safety first

These motors aren't taken aback easily. The ME II explosionproof universal motors are the nostrum - German Patent DE 38 15427 C2-for pumping a large variety of thin-bodied, easily inflammable and combustible liquids.



Ex IP 54 CE

ME II

Trio grande: The models

Three different versions of the MD compressed air motors are available. MD-1 without manual operation for automatic control, MD-2 with manual operation and interlock, MD-3 with on/off bushbutton. Approved according to Atex Ex II 2 G.



MD-1



MD-2



MD-3

Ex CE

MD-1/MD-2/MD-3 compressed air motors

Tip

For detailed information on the motors please refer to pages 30-32.

Reliable and powerful, thus suitable for extreme conditions

The B4/GT has a proven record of success in plant constructions and as a drum pump drive. The perfect system for thin-bodied to slightly viscous liquids. These "undemanding" partners hardly ever show signs of wear. The ideal solution for long periods of operation.




CE IP 54/IP 55




B4/GT three-phase gear motor

Lutz Drum and Container Pumps

Pump tube MP-PP (polypropylene) for mixing and pumping of corrosive and neutral liquids

Productdetail	Pump tube	MP-PP-SL		MP-PP MS		
	Type of impeller	L	R	L	R	
	Category 1 / 2 (acc. to ATEX)	no	no	no	no	
	Immersion tube diameter:	up to mm	50	50	50	50
	Temperature of medium:	up to °C	50	50	50	50
	Material:	Pump tube	PP	PP	PP	PP
		Impeller	PP	PP	PP	PP
	Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32
		Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4
	Length: 1000 mm*** shaft SS	Order No.	0110-150	0110-160	0103-150	0103-160
	Length: 1200 mm*** shaft SS	Order No.	-	0110-152	-	-
Length: 1000 mm*** shaft HC	Order No.	0110-170	0110-180	-	-	
Length: 1200 mm*** shaft HC	Order No.	-	0110-172	-	-	

Choice of motors Operating data

	MI-4	MI-4-E	Characteristic curve no.	802	801	802	801		
	-	with speed controller	Flow rate* up to l/min.	87	160	87	160		
	Output: 500 W	500 W	Delivery head* up to m wc	19	8.5	19	8.5		
	Voltage: 230 V	230 V	Viscosity** up to mPas	500	150	500	150		
	Order No. 0030-000	0030-001	Density**** up to kg/dm³	1.4	1.1	1.4	1.1		
			Weight (kg) Motor + pump tube	4.1	4.1	4.1	4.1		
	MA II 3		Characteristic curve no.	804	803	804	803		
	Output: 460 W	460 W	Flow rate* up to l/min.	78	155	78	155		
	Voltage: 230 V	230 V	Delivery head* up to m wc	16	7.5	16	7.5		
	LVR.: no	yes	Viscosity** up to mPas	500	160	500	160		
	Order No. 0060-000	0060-008	Density**** up to kg/dm³	1.6	1.2	1.6	1.2		
			Weight (kg) Motor + pump tube	5.9	5.9	5.9	5.9		
		MA II 5	MA II 5	MA II 5 S	Characteristic curve no.	806	805	806	805
	Output: 575 W	575 W	575 W	Flow rate* up to l/min.	80	160	80	160	
	Voltage: 230 V	230 V	230 V	Delivery head* up to m wc	17	9	17	9	
	LVR.: no	yes	no	Viscosity** up to mPas	800	350	800	350	
Order No. 0060-001	0060-009	0060-091	Density**** up to kg/dm³	1.8	1.3	1.8	1.3		
		acid-proof	Weight (kg) Motor + pump tube	6.7	6.7	6.7	6.7		
Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.	MA II 7		Characteristic curve no.	808	807	808	807		
	Output: 795 W	795 W	Flow rate* up to l/min.	90	170	90	170		
	Voltage: 230 V	230 V	Delivery head* up to m wc	22	12	22	12		
	LVR.: no	yes	Viscosity** up to mPas	800	350	800	350		
	Order No. 0060-002	0060-010	Density**** up to kg/dm³	1.9	1.4	1.9	1.4		
		Weight (kg) Motor + pump tube	7.9	7.9	7.9	7.9			
	MD-1	MD-2	Characteristic curve no.	810	809	810	809		
	Output: 400 W	400 W	Flow rate* up to l/min.	90	180	90	180		
	Operating pressure: 6 bar	6 bar	Delivery head* up to m wc	20	10	20	10		
	Order No. 0004-087	0004-088	Viscosity** up to mPas	850	600	850	600		
			Density**** up to kg/dm³	1.8	1.3	1.8	1.3		
		Weight (kg) Motor + pump tube	2.8	2.8	2.8	2.8			

* Determined with water at 20 °C *** Special lengths

** Determined with oil 400–2500 mm on request

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

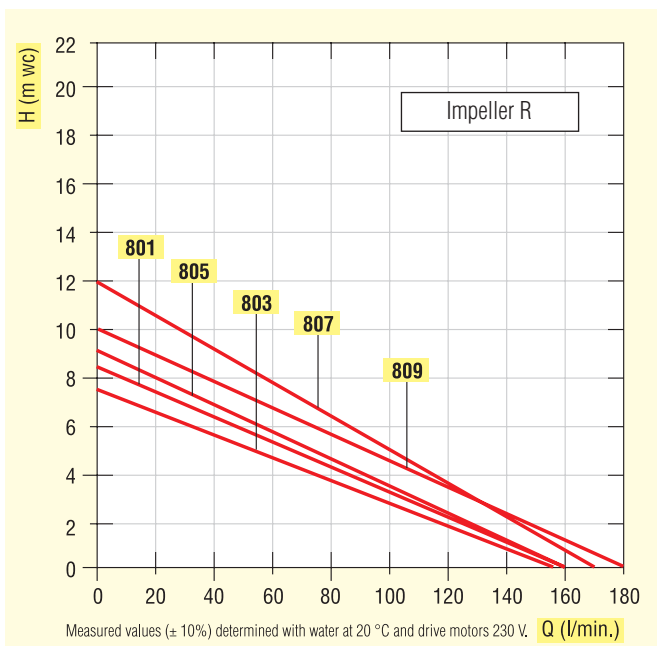
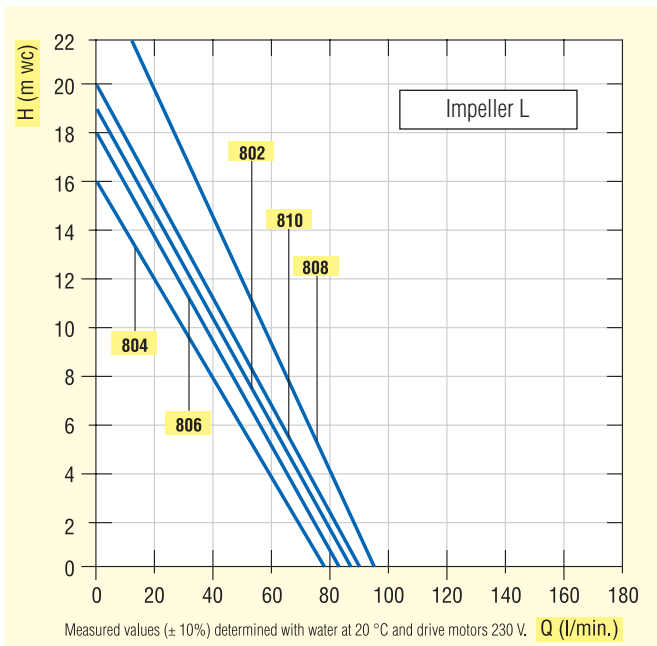
Special voltages and frequencies on request.

Pump Tube MP-PP (polypropylene)

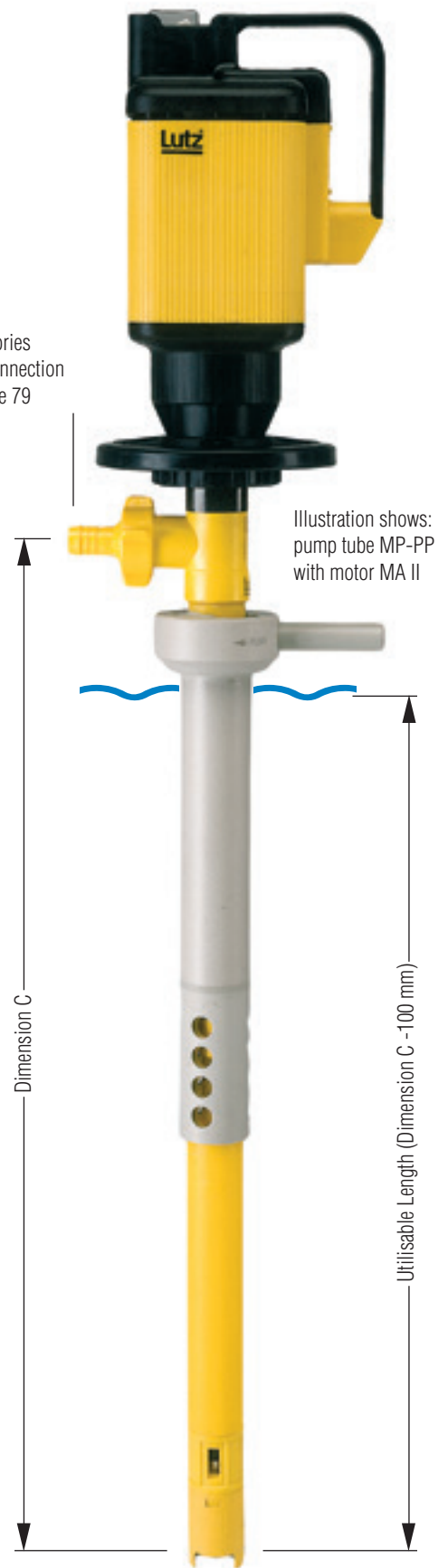
for mixing and pumping of corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	SL	MS
Housing:	PP/PVDF	PP/PVDF
Impeller:	PP	PP
Seals:	none	FPM
Mechanical seals:	none	Carbon, SiC, FPM, HC
Bearing:	ETFE/PTFE	ETFE/PTFE
Drive shaft:	Stainless steel (1.4571) or HC-4 (2.4610)	Stainless steel (1.4571) or HC-4 (2.4610)



Accessories
hose connection
see page 79







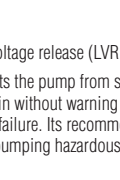






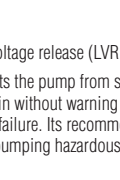






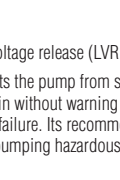



Please remember that the flow rate is reduced as the **viscosity** increases. The **density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.



Suitable range of accessories
see pages 76-92

Lutz Drum and Container Pumps

Pump tube MP-SS (stainless steel) for mixing and pumping of corrosive and neutral liquids

Product detail	Pump tube	MP-SS MS																																																																																																																																						
	Type of impeller	R																																																																																																																																						
	Category 1 / 2 (acc. to ATEX)	yes																																																																																																																																						
	Immersion tube diameter:	up to mm	41																																																																																																																																					
	Temperature of medium:	up to °C	100																																																																																																																																					
	Material:	Pump tube Impeller	1.4571 ETFE																																																																																																																																					
	Hose connection:	Nominal diameter mm Outer thread	19-32 G 1 1/4																																																																																																																																					
	Length: 1000 mm***	Order No.	0151-240																																																																																																																																					
	Length: 1200 mm***	Order No.	0151-255																																																																																																																																					
<table border="1"> <thead> <tr> <th>Choice of motors</th> <th>Operating data</th> </tr> </thead> <tbody> <tr> <td>  <table border="1"> <thead> <tr> <th>MI-4</th> <th>MI-4-E</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>with speed contoller</td> </tr> <tr> <td>Output: 500 W</td> <td>500 W</td> </tr> <tr> <td>Voltage: 230 V</td> <td>230 V</td> </tr> <tr> <td>Order No. 0030-000</td> <td>0030-001</td> </tr> </tbody> </table> </td> <td> <table border="1"> <tbody> <tr> <td>Characteristic curve no.</td> <td>900</td> </tr> <tr> <td>Flow rate* up to l/min.</td> <td>210</td> </tr> <tr> <td>Delivery head* up to m wc</td> <td>10</td> </tr> <tr> <td>Viscosity** up to mPas</td> <td>350</td> </tr> <tr> <td>Density**** up to kg/dm³</td> <td>1.1</td> </tr> <tr> <td>Weight (kg) Motor + pump tube</td> <td>6.0</td> </tr> </tbody> </table> </td> </tr> <tr> <td>  <table border="1"> <thead> <tr> <th>MA II 3</th> </tr> </thead> <tbody> <tr> <td>Output: 460 W</td> </tr> <tr> <td>Voltage: 230 V</td> </tr> <tr> <td>LVR.: no</td> </tr> <tr> <td>Order No. 0060-000</td> </tr> </tbody> </table> </td> <td> <table border="1"> <tbody> <tr> <td>Characteristic curve no.</td> <td>901</td> </tr> <tr> <td>Flow rate* up to l/min.</td> <td>178</td> </tr> <tr> <td>Delivery head* up to m wc</td> <td>9</td> </tr> <tr> <td>Viscosity** up to mPas</td> <td>200</td> </tr> <tr> <td>Density**** up to kg/dm³</td> <td>1.2</td> </tr> <tr> <td>Weight (kg) Motor + pump tube</td> <td>7.8</td> </tr> </tbody> </table> </td> </tr> <tr> <td>  <table border="1"> <thead> <tr> <th>MA II 5</th> <th>MA II 5</th> <th>MA II 5 S</th> </tr> </thead> <tbody> <tr> <td>Output: 575 W</td> <td>575 W</td> <td>575 W</td> </tr> <tr> <td>Voltage: 230 V</td> <td>230 V</td> <td>230 V</td> </tr> <tr> <td>LVR.: no</td> <td>yes</td> <td>no</td> </tr> <tr> <td>Order No. 0060-001</td> <td>0060-009</td> <td>0060-091</td> </tr> </tbody> </table> </td> <td> <table border="1"> <tbody> <tr> <td>Characteristic curve no.</td> <td>902</td> </tr> <tr> <td>Flow rate* up to l/min.</td> <td>190</td> </tr> <tr> <td>Delivery head* up to m wc</td> <td>10</td> </tr> <tr> <td>Viscosity** up to mPas</td> <td>550</td> </tr> <tr> <td>Density**** up to kg/dm³</td> <td>1.3</td> </tr> <tr> <td>Weight (kg) Motor + pump tube</td> <td>8.6</td> </tr> </tbody> </table> </td> </tr> <tr> <td> <p>Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. 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* Determined with water at 20 °C *** Special lengths 600–2500 mm on request

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

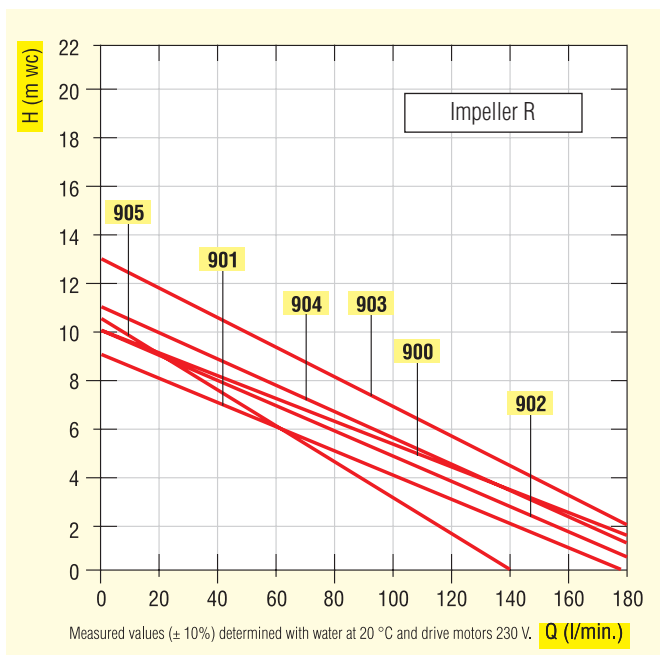
Special voltages and frequencies on request.

Pump Tube MP-SS (stainless steel)

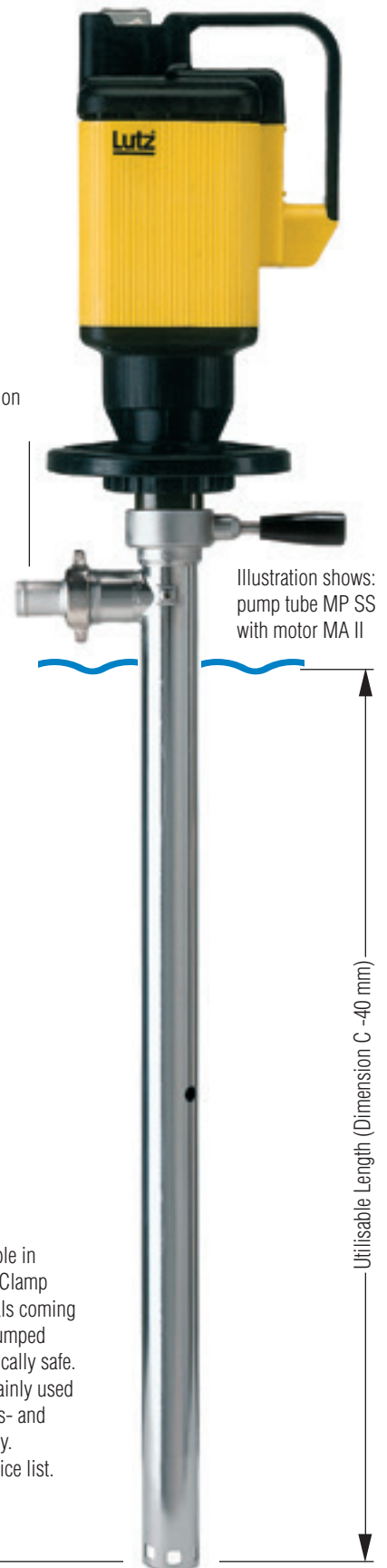
for mixing and pumping of corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

Version:	MS	MS PURE
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	FPM (FEP coated)	FPM
Mechanical seals:	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)



Accessories
hose connection
see page 79



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. Additional costs see price list.

Tip

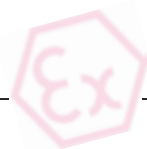
Which pump for which liquid?
See resistance table

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.




Suitable range of accessories
see pages 76-92











Lutz Drum and Container Pumps



Pump tube MP-SS (stainless steel) for mixing and pumping of highly inflammable liquids

Product detail	Pump tube	MP-SS MS	
	Type of impeller	R	
	Category 1 / 2 (acc. to ATEX)	yes	
	Immersion tube diameter:	up to mm	41
	Temperature of medium:	up to °C	100
	Material:	Pump tube	1.4571
		Impeller	ETFE
	Hose connection:	Nominal diameter mm	19-32
		Outer thread	G 1 1/4
Length: 1000 mm***	Order No.	0151-240	
Length: 1200 mm***	Order No.	0151-255	

Choice of motors Operating data

 	ME II 3			Characteristic curve no.	950		
	Output:	460 W	460 W	Flow rate*	up to l/min.	178	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	9	
	LVR.:	yes	no	Viscosity**	up to mPas	200	
				Density****	up to kg/dm ³	1.2	
	Order No.	0050-000	0050-016	Weight (kg)	Motor + pump tube	9.0	
 	ME II 5			Characteristic curve no.	951		
	Output:	580 W	580 W	Flow rate*	up to l/min.	190	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	10	
	LVR.:	yes	no	Viscosity**	up to mPas	550	
				Density****	up to kg/dm ³	1.3	
	Order No.	0050-001	0050-017	Weight (kg)	Motor + pump tube	9.9	
 	ME II 7			Characteristic curve no.	952		
	Output:	795 W	795 W	Flow rate*	up to l/min.	210	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	13	
	LVR.:	yes	no	Viscosity**	up to mPas	400	
				Density****	up to kg/dm ³	1.4	
	Order No.	0050-002	0050-018	Weight (kg)	Motor + pump tube	11.1	
 	ME II 8			Characteristic curve no.	953		
	Output:	930 W	930 W	Flow rate*	up to l/min.	216	
	Voltage:	230 V	230 V	Delivery head*	up to m wc	14.5	
	LVR.:	yes	no	Viscosity**	up to mPas	650	
				Density****	up to kg/dm ³	1.4	
	Order No.	0050-042	0050-041	Weight (kg)	Motor + pump tube	11.1	
 	MD-1	MD-2	MD-3	Characteristic curve no.	954		
	Output:	400 W	400 W	400 W	Flow rate*	up to l/min.	200
	Operating pressure:	6 bar	6 bar	6 bar	Delivery head*	up to m wc	11
					Viscosity**	up to mPas	400
					Density****	up to kg/dm ³	1.3
	Order No.	0004-087	0004-088	0004-090	Weight (kg)	Motor + pump tube	4.7

Low-voltage release (LVR.):

Prevents the pump from starting up again without warning after a power failure. In the hazardous location, motors with low-voltage release are absolutely prescribed.

* Determined with water at 20 °C *** Special lengths

** Determined with oil

600–2500 mm on request

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

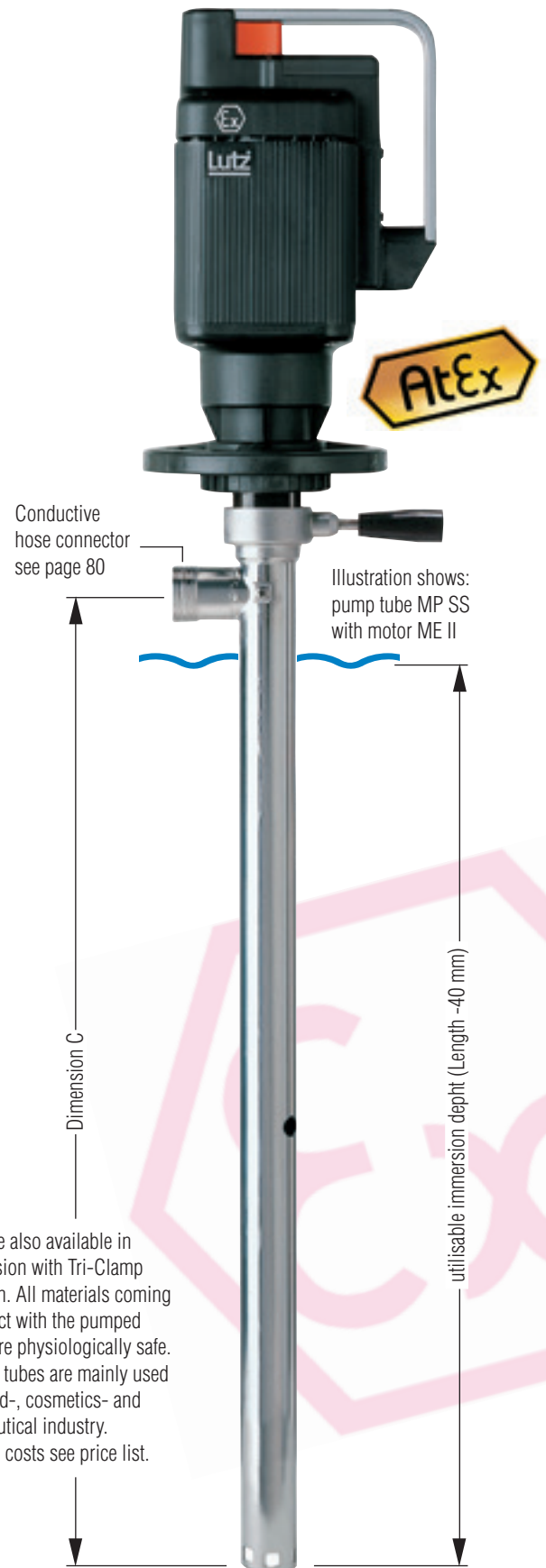
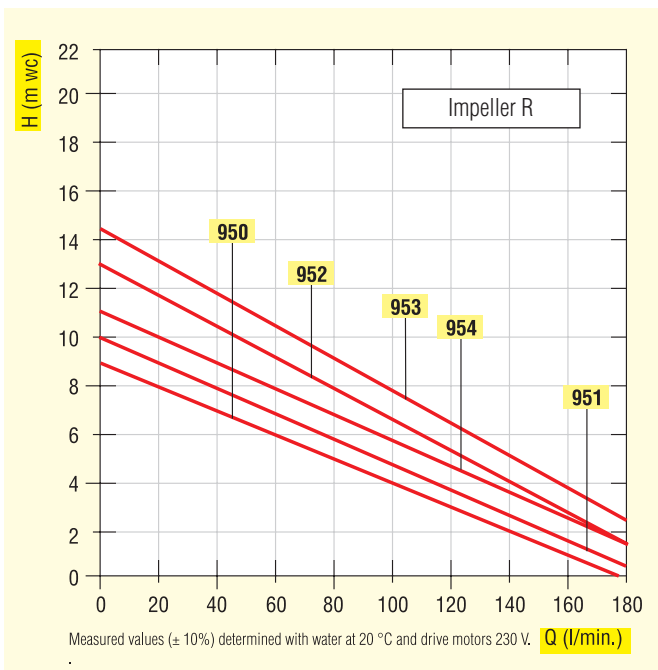
Special voltages and frequencies on request.

Pump Tube MP-SS (stainless steel)

for mixing and pumping of highly inflammable liquids

Materials (coming into contact with the pumped medium):

Version:	MS	MS PURE
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	FPM (FEP coated)	FPM
Mechanical seals:	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)



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. Additional costs see price list.



Suitable range of accessories see pages 76-92

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

Container Pump B50



Container Pump B50

The solution you can safely rely on

Great development: Container pump

Safety, fast, economically: container pumps convince in the liquid transfer by low wear, high delivery rates and fast emptying. The model B50 is the functional answer to changed requirements in practice to the trend to ever larger bundles – up to 1200-litres-containers.

- ✓ Easy and fast disassembly
- ✓ Convenient to clean
- ✓ Smooth running
- ✓ High pump capacity
- ✓ Short emptying times
- ✓ Low degree of wear
- ✓ Ease of handling
- ✓ Few components
- ✓ Low weight, mobile unit
- ✓ Convenient Lutz hand-wheel for disconnecting the motor and for use as a handle
- ✓ Due to the adapter, it can be attached to almost any container filler neck
- ✓ Driven by a powerful capacitor start motor (230 V, 50 Hz, with a 5-m connecting cable and plug)

Responsible Care

The B50 container pump, is the contribution of Lutz to "Responsible Care". Responsible Care is the chemical industry's voluntary commitment to continual improvement in all aspects of health, safety and environmental (HS&E) performance and to openness in communication about its activities and its achievements.

Practice-oriented design

These pumps meet all criteria for an optimal emptying of container by their vertical wet-set-up design. Thus also the necessity for floor drains is void – thereby fewer leakage risks. They are suitable for endurance run, have a low weight, work with low speeds and offer highest industrial safety.

The Lutz container pump is so conceived that it can almost immersed and fixed into each container opening without the necessity of adjustment. The advantages by the cartridge of the Lutz container pump B50 is in the cost reduction by fast emptying, in the omission of redundant hose connectors and an improved environmental protection.



Lutz Drum and Container Pumps

Container Pump B50



Simplicity and maximum working safety

Bulk chemical transfer or filling is made light work of with the B50 with flows up to 200 l/min. and quick installation.

The B50 is constructed along the lines of a drum pump in order to maintain the proven features. These include: long life, reliability, low maintenance, reduced downtime, process and transfer time savings and not least enhanced safety and efficiency.

The vertically mounted pump runs at low speed with a direct coupled motor. The motor is secured with the Lutz hand wheel for quick assembly and disassembly, and with power to cover densities from 1.0 to 1.9 kg/dm³ and viscosities up to 100 mPas without penalty. The pump is positively mounted into the container with a specially designed adaptor.

The pump is designed and constructed with proven centrifugal hydraulics guaranteeing stable performance characteristics.

The single robust housing design with an immersion depth of 1100 mm successfully achieves weight reduction and the minimisation of parts.

Product detail		Container pump	B50 PP/HC	B50 PP/SS	
	Category 1 / 2 (acc. to ATEX)		no	no	
	Immersion tube diameter:	max. mm	100	100	
	Temperature of medium:	max. °C	40	40	
	Material:	Pump tube	PP	PP	
		Impeller/diffuser material	PPO / PPE	PPO / PPE	
		Drive shaft	Hastelloy C (2.4610)	Stainless steel (1.4571)	
	Outrun piece:		G 1 1/2 Outer thread	G 1 1/2 Outer thread	
Length: 1100 mm	Order No.	0180-001	0180-501		
		Choice of motors	Operating data		
	Single phase motor				
	Output:	0.55 kW 0.75 kW	Flow rate* up to l/min.	200	200
	Density:	up to 1.3 kg/dm ³ up to 1.8 kg/dm ³	Delivery head* up to m wc	22	22
	Speed:	2800 1/min. 2700 1/min.	Viscosity up to mPas	100	100
	Prot. class:	IP 54 IP 54	Weight (kg) Motor + pump tube	10.5 – 13.5	10.5 – 13.5
	Order No.	0180-030 0180-031			

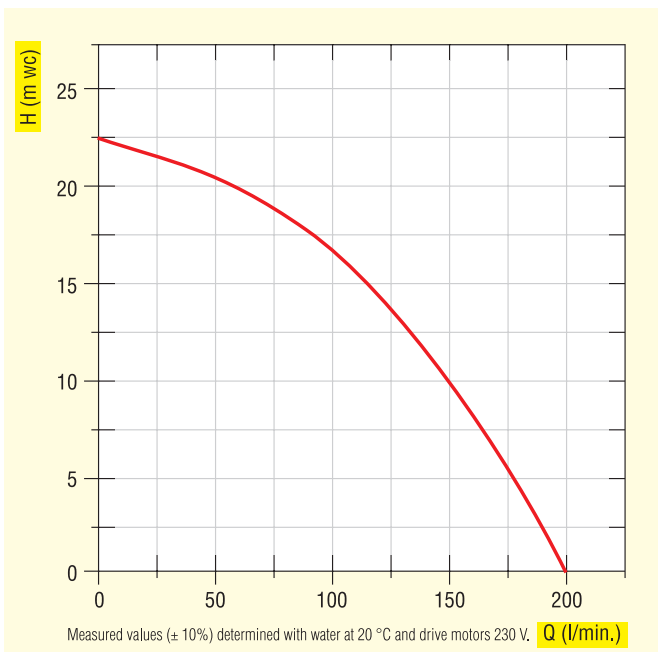
*Determined with water at 20 °C

Container Pump B50

for bulk transfer of chemicals

Materials (coming into contact with the pumped medium):

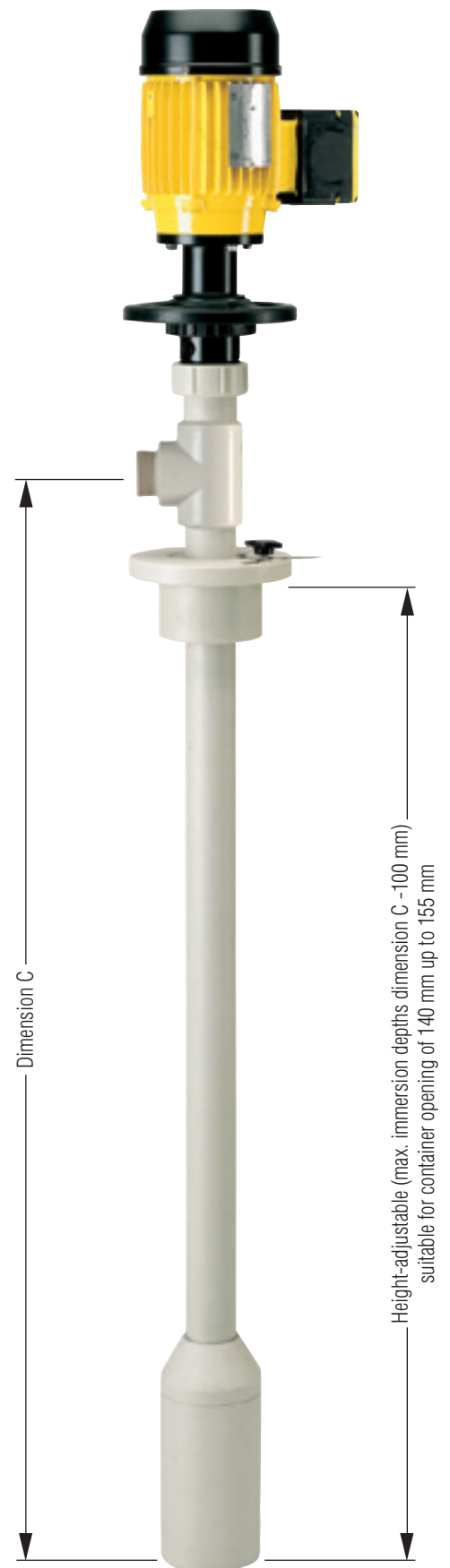
Version:	B50 PP/HC	B50 PP/SS
Pumpwerk:	Polypropylen (PP)	Polypropylen (PP)
Lauftrad / Leitrad:	PPO / PPE	PPO / PPE
Mechanical seals:	Carbon / SiC / HC	Carbon / SiC / HC
Sekundärdichtung:	FPM (EPDM)	FPM (EPDM)
Drive shaft:	Hastelloy C (2.4610)	Hastelloy C (2.4610)



Suitable accessories:

Flow meter for easy volume preselection


With the modular flow meter system Lutz offer an economic solution for safe and rational volume measurement of your liquids. Flow meters, type ST and SL, convince by their easy operation, compact construction and easy connection to the container pump. By using a relay module easy volume presetting is possible. For more information, please refer to separate flow meter leaflet.



Suitable range of accessories
see page 93

Accessories Lutz Drum and Container Pumps

„Getting started“



The main image shows a close-up of a Lutz drum pump's central vertical shaft and various connection points. The pump is mounted on a red base. Several accessories are shown in inset images on the left side of the pump:

- A spray nozzle with a trigger handle.
- A yellow metal drum adapter.
- A cylindrical metal foot strainer.
- Two black hoses with different fittings.
- A red and black electronic flow meter.

Perfectly equipped with the range of Lutz accessories

In keeping with our philosophy of making life safe and simple, we have a complete range of accessories available for you suitable for both mobile and stationary applications. The range of Lutz accessories makes your pump a perfect filling system.

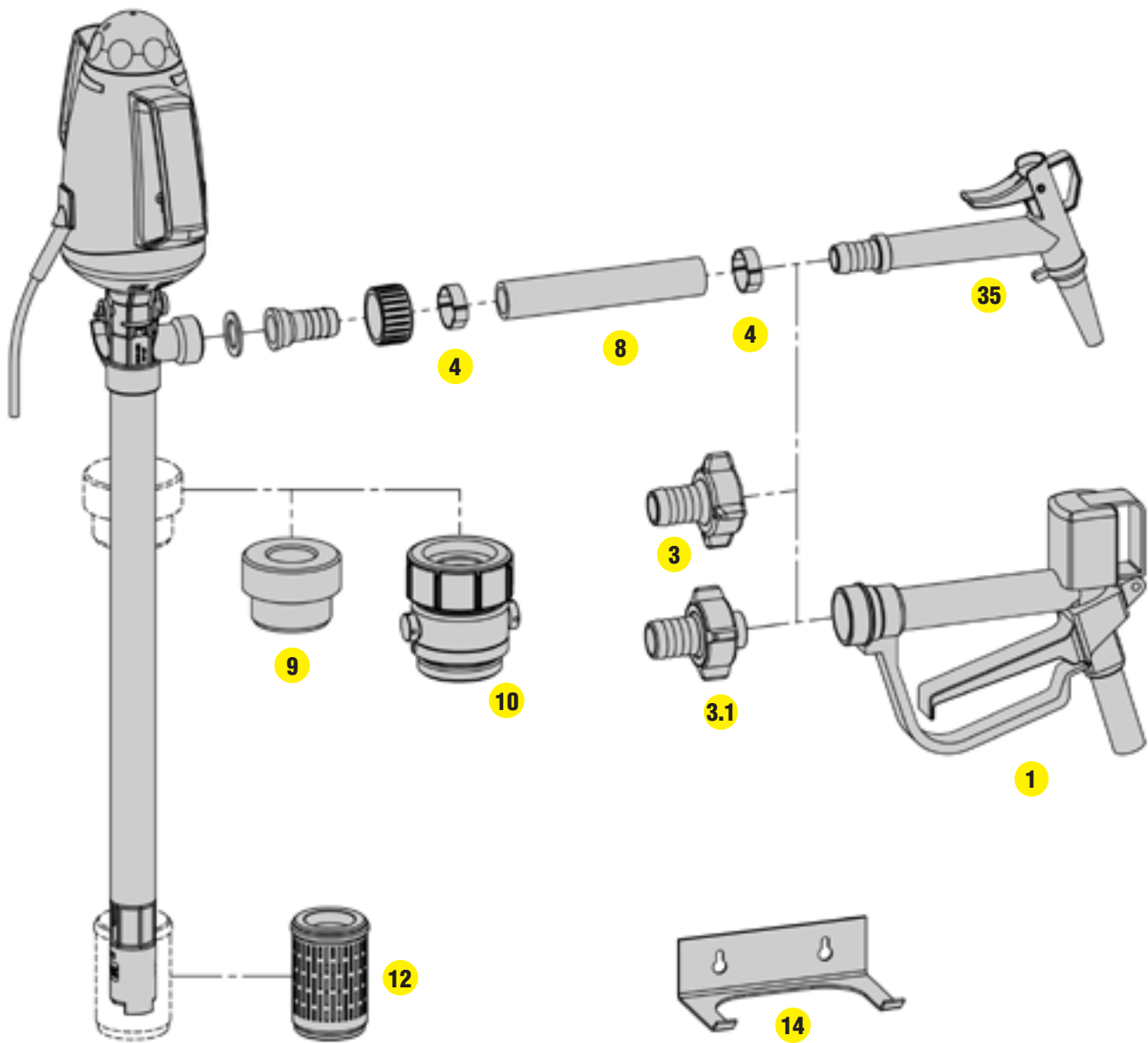
Available e.g. are:

- Nozzles
- Hoses
- Emission-proof drum adapters
- Flow meters
- Foot strainers
- Installation flanges
- and much more

The full range of Lutz accessories caters to your specific needs.

Accessories






Accessories for drum and laboratory pump B 2 at a glance



- 1** Nozzle
- 3** Hose connection
- 3.1** Hose connection, rotatable
- 4** Hose clamp
- 8** Hose
- 9** Drum adapter
- 10** Emission proof drum adapter
- 12** Foot strainer
- 14** Wall bracket
- 35** Lutz nozzle

Accessories

for drum and laboratory pump Lutz B2 Vario

Product detail	Specification	Order-No.																																
	<p>Set-accessories</p> <p>Comprises of: Lutz nozzle, 1.5 mtr. PVC-hose 3/4", hose connection, hose clamps, wall bracket</p> <p>For pump Lutz B2 Vario PP-SL ø 32</p>	<p>0201-550</p>																																
	<p>35 Lutz nozzle PP for Lutz B2 Vario</p> <p>For filling and transferring neutral and aggressive liquids. The liquid stream can be regulated by a turnlock fastener. Outlet spout ø 12 mm (conical). Polypropylene (PP) housing. FPM (FPM) seals.</p> <p>Operating pressure: max. 1 bar at 20 °C Viscosity: max. 300 mPas Flow rate: max. 40 l/min. (water) Temperature of medium: max. 50 °C Weight: approx. 0.1 kg Connection: hose liner DN 19 (3/4")</p>	<p>0201-215</p>																																
	<p>4 Hose clamp</p> <p>Stainless steel hose clamp to fix hoses at the pump outlet connection and accessories.</p> <p>Ear clamp Nominal diameter: DN 19 (3/4")</p>	<p>0301-257</p>																																
	<p>9 Drum adapter PP</p> <p>For fixing the pump B2 in the drum or container opening.</p> <table border="0"> <tr> <td>For pump tube:</td> <td>For pump type:</td> <td></td> <td></td> </tr> <tr> <td>ø 32 mm</td> <td>PP-SL 32</td> <td>G 2 outer thread</td> <td>0204-328</td> </tr> <tr> <td>ø 32 mm</td> <td>PP-SL 32</td> <td>ø 56,7 mm</td> <td>0208-009</td> </tr> <tr> <td>ø 28 mm</td> <td>SS-SL 28</td> <td>ø 56,7 mm</td> <td>0208-010</td> </tr> <tr> <td>ø 32 mm</td> <td>PP-SL 32</td> <td>BCS 70 x 6</td> <td>0208-027</td> </tr> <tr> <td>ø 32 mm</td> <td>PP-SL 32</td> <td>BCS 56 x 4</td> <td>0208-051</td> </tr> <tr> <td>ø 28 mm</td> <td>SS-SL 28</td> <td>BCS 56 x 4</td> <td>0208-050</td> </tr> <tr> <td>ø 28 mm</td> <td>SS-SL 28</td> <td>BCS 70 x 6</td> <td>0208-053</td> </tr> </table>	For pump tube:	For pump type:			ø 32 mm	PP-SL 32	G 2 outer thread	0204-328	ø 32 mm	PP-SL 32	ø 56,7 mm	0208-009	ø 28 mm	SS-SL 28	ø 56,7 mm	0208-010	ø 32 mm	PP-SL 32	BCS 70 x 6	0208-027	ø 32 mm	PP-SL 32	BCS 56 x 4	0208-051	ø 28 mm	SS-SL 28	BCS 56 x 4	0208-050	ø 28 mm	SS-SL 28	BCS 70 x 6	0208-053	
For pump tube:	For pump type:																																	
ø 32 mm	PP-SL 32	G 2 outer thread	0204-328																															
ø 32 mm	PP-SL 32	ø 56,7 mm	0208-009																															
ø 28 mm	SS-SL 28	ø 56,7 mm	0208-010																															
ø 32 mm	PP-SL 32	BCS 70 x 6	0208-027																															
ø 32 mm	PP-SL 32	BCS 56 x 4	0208-051																															
ø 28 mm	SS-SL 28	BCS 56 x 4	0208-050																															
ø 28 mm	SS-SL 28	BCS 70 x 6	0208-053																															
	<p>10 Emission proof drum adapter</p> <p>To prevent emission of dangerous gases when using a drum pump, so protecting the operator, the environment and the drive motor from hazardous, aggressive gases and vapours. Two venting valves ensure pressure compensation between inside of the drum and surrounding atmosphere.</p> <p>Connection for gas displacement pipe: G 3/8 Screw-in thread: G 2 outer thread Seals: FPM</p> <p>Material: PP For pump type: PP-SL 32</p>	<p>0204-251</p>																																

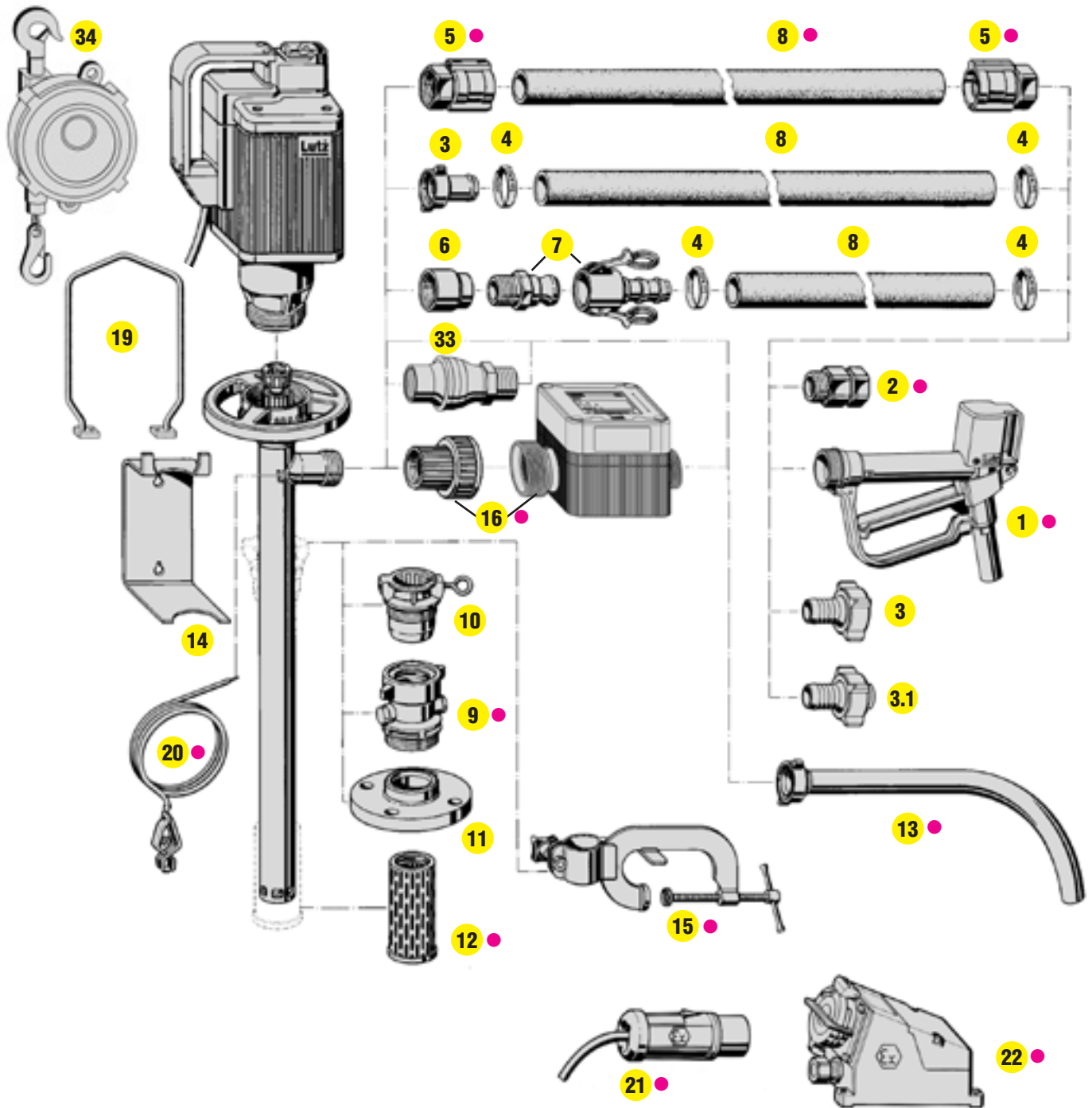
for drum and laboratory pump Lutz B2 Vario

Specification	Order-No.	Product detail
<p>12 Foot strainer Made of PP for mounting onto the pump foot. Keeps impurities away from the rotating parts.</p> <p>Material: PP For pump tube: ø 32 mm</p>	0204-539	
<p>14 Wall bracket For storage of drum and laboratory pump Lutz B2 Vario. This facility helps to protect pumps from damage and maintain their value.</p> <p>For pump Lutz B2 Vario</p>	0102-079	

Nozzles, hoses and hose connections
see pages 77-83.

Accessories

At a glance




- 1** ● Nozzle
- 2** ● Turning knuckle
- 3** ● Hose connection
- 3.1** ● Hose connection, rotatable
- 4** ● Hose clamp
- 5** ● Hose connector
- 6** ● Reducing sleeve
- 7** ● Quick-action hose coupling

- 8** ● Hose
- 9** ● Emission proof drum adapter
- 10** ● Drum adapter
- 11** ● Installation flange
- 12** ● Foot strainer
- 13** ● Discharge spout
- 14** ● Wall bracket
- 15** ● Clamping device

- 16** ● Flow meter
- 19** ● Lifting device
- 20** ● Equipotential bonding cable
- 21** ● Ex-plug
- 22** ● Ex-socket
- 33** ● Check valve
- 34** ● Hoist

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

Specification	Order-No.	Product detail
<p>1 PP nozzle</p> <p>For filling and transferring neutral and aggressive liquids. With hoop guard and two outlet spouts \varnothing 23 mm (cylindrical) and \varnothing 12 mm (conical). Polypropylene (PP) housing and valve tappet.</p> <p>Operating pressure: max. 3 bar at 20 °C Viscosity: max. 760 mPas Flow rate: max. 50 l/min. (Water) Temperature of medium: max. 50 °C Weight: approx. 0.25 kg Connection: outer thread G 1 1/4 Seal: FPM (FPM) EPDM FEP/FPM</p>	<p>0204-380 0204-385 0204-387</p>	
<p>1 PVDF nozzle</p> <p>For filling and transferring neutral and aggressive liquids. With hoop guard and two outlet spouts \varnothing 23 mm (cylindrical) and \varnothing 12 mm (conical). Polyvinylidenfluoride (PVDF) housing and valve tappet. FPM (FPM) seals. Additional costs for seals FFPM or FEP/FPM see price list.</p> <p>Operating pressure: max. 3 bar at 20 °C Viscosity: max. 760 mPas Flow rate: max. 50 l/min. (Water) Temperature of medium: max. 80 °C Weight: approx. 0.3 kg Connection: outer thread G 1 1/4</p>	<p>0204-390</p>	
<p>1 Stainless steel nozzle</p> <p>Ideally suitable for filling and transferring liquids - also for combustible and easy inflammable liquids - in food and pharmaceutical industry. Stainless steel (1.4571) housing and valve tappet. With hoop guard and rotating joint. Additional costs for seals EPDM. NEW: Nozzle in PURE-version available. Additional costs see price list.</p> <p>Operating pressure: max. 3 bar Viscosity: max. 760 mPas Flow rate: max. 50 l/min. (Water) Temperature of medium: max. 80 °C Weight: approx. 1 kg Connection: outer thread G 1 1/4 Seal: FPM (FPM) FEP/FPM</p>	<p>0204-370 ● 0204-377 ●</p>	 



Hose connection (item 3) or hose connector (item 5)
for quick starting up.

Accessories

Nozzles, check valves



Product detail	Specification	Order-No.
	<p>1 Brass nozzle Brass housing and valve tappet, nickel-plated. PTFE seals. With hoop guard and rotating joint. For filling and transferring solvents and neutral liquids.</p> <p>Operating pressure: max. 4 bar Viscosity: max. 760 mPas Flow rate: max. 80 l/min. (Water) Temperature of medium: max. 80 °C Weight: approx. 0.6 kg Connection: outer thread G 1 1/4</p>	<p>0372-502 ●</p>
	<p>1 Aluminium nozzle For filling and transferring fuel and diesel oil. Aluminium housing and valve tappet. NBR seals. With hoop guard and rotating joint.</p> <p>Operating pressure: max. 4 bar Viscosity: max. 760 mPas Flow rate: max. 60 l/min. (Water) Temperature of medium: max. 60 °C Weight: approx. 0.5 kg Connection: inner thread G 1</p>	<p>0372-250</p>
	<p>1 Automatic aluminium nozzle Automatic switch-off with ball-tilt safety release. Housing in aluminium, internal components in brass/Delrin. Swivel hose connection is possible.</p> <p>Operating pressure: max. 0.5 up to 4 bar Viscosity: max. 7 mPas Flow rate: max. 80 l/min. (Water) Temperature of medium: max. 60 °C Weight: approx. 1.1 kg Connection: outer thread G 1 Seal: PTFE</p> <p>2 Rotating joint Rotating connection between hose connector and nozzle. FEP/FPM seals.</p> <p>Material: Nominal diameter: Brass inner thread G 1/outer thread G 1 Stainless steel inner thread G 1/outer thread G 1 Stainless steel outer thread G 1/outer thread G 1</p>	<p>0372-245 ●</p> <p>0372-120 ● 0370-012 ● 0370-011 ●</p>
	<p>33 Check valve Prevents backflow of the liquid at downtime of the pump.</p> <p>Material: Nominal diameter: Operating pressure: Stainless steel 1.4301 inner thread G 1 1/4 max. 16 bar 0372-017 Stainless steel 1.4401 inner thread G 1 1/4, seal PTFE max. 16 bar 0372-050 Stainless steel 1.4401 inner thread G 1 1/4/outer thread G 1 1/4 seal PTFE (preferred for horizontal fitting) max. 16 bar 0204-516 PVC inner thread G 1 1/4/outer thread G 1 1/4 seal EPDM (preferred for horizontal fitting) max. 6 bar 0204-517</p>	

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

Specification	Order-No.	Product detail
<p>3 Hose connection</p> <p>Hose connector with wing nut for connecting the hoses to the pump tube or nozzle.</p>		
<p>Connection: inner thread G 1 1/4</p>		
<p>Material: Nominal diameter:</p>		
PP	DN 13 (1/2")	0204-409
PP	DN 19 (3/4")	0204-410
PP	DN 25 (1")	0204-411
PP	DN 32 (1 1/4")	0204-412
PP grey	DN 19 (3/4")	0204-419
PVDF	DN 19 (3/4")	0204-421
PVDF	DN 25 (1")	0204-422
PVDF	DN 32 (1 1/4")	0204-423
Alu	DN 19 (3/4")	0204-403
Alu	DN 25 (1")	0204-404
Alu	DN 32 (1 1/4")	0204-405
Stainless steel	DN 19 (3/4")	0204-400
Stainless steel	DN 25 (1")	0204-401
Stainless steel	DN 32 (1 1/4")	0204-402
HC	DN 25 (1")	0204-407
<p>Connection: outer thread G 1</p>		
<p>Material: Nominal diameter:</p>		
Brass	DN 19 (3/4")	0204-428
Brass	DN 25 (1")	0204-429
		
<p>3.1 Hose connection rotatable</p> <p>Hose connector with wing nut for connecting the hoses to the PP and PVDF nozzle.</p>		
<p>Connection: inner thread G 1 1/4</p>		
<p>Material: Nominal diameter: Seal</p>		
PP	DN 19 (3/4")	Seal FPM/FPM 0204-424
PP	DN 25 (1")	Seal FPM/FPM 0204-434
PP	DN 32 (1 1/4")	Seal FPM/FPM 0204-367
PP	DN 19 (3/4")	Seal FEP/FPM 0204-430
PP	DN 25 (1")	Seal FEP/FPM 0204-431
PP	DN 19 (3/4")	Seal EPDM 0204-432
PP	DN 25 (1")	Seal EPDM 0204-433
PVDF	DN 19 (3/4")	Seal FPM/FPM 0204-435
PVDF	DN 25 (1")	Seal FPM/FPM 0204-425
PVDF	DN 32 (1 1/4")	Seal FPM/FPM 0204-368
Connecting sleeve	PP	G 1 1/4" 0204-353*
	PVDF	G 1 1/4" 0204-354*
		
<p>* Necessary when using a hose connection rotatable at the pump tube.</p>		




Accessories

Hose clamps, hose connections

Product detail	Specification	Order-No.	
	<p>4 Stepless 1-ear hose clamp</p> <p>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).</p>		
	Size:	26.3 - 29.5 mm	0300-415
		28.0 - 31.0 mm	0301-257
		28.3 - 31.5 mm	0300-420
		30.3 - 33.5 mm	0300-425
		30.8 - 34.0 mm	0300-430
		31.5 - 35.0 mm	0300-435
		32.8 - 36.0 mm	0300-440
		35.8 - 39.0 mm	0300-445
		39.8 - 43.0 mm	0300-450
		42.3 - 45.5 mm	0300-455
		43.8 - 47.0 mm	0300-460
		49.8 - 53.0 mm	0300-465
	60.3 - 63.5 mm	0300-470	
	64.8 - 68.0 mm	0300-475	
	<p>5 Hose connector</p> <p>The use of conductive hoses is obligatory in explosion hazard areas. The ohmic resistance between the armatures must be less than 10⁹ ohm. The hose connection must ensure a highly conductive transition between hose and pump tube.</p>		
	Brass		
	for hose DN 19 (3/4")	inner thread G 1 (EN12 115)	0302-073 ●
	for hose DN 19 (3/4")	outer thread G 1 (EN12 115)	0302-074 ●
	for hose DN 19 (3/4")	inner thread G 1 1/4 (EN12 115)	0302-106 ●
	for hose DN 25 (1")	inner thread G 1 (EN12 115)	0302-011 ●
	for hose DN 25 (1")	outer thread G 1 (EN12 115)	0302-010 ●
	for hose DN 25 (1")	inner thread G 1 1/4 (EN12 115)	0302-012 ●
	for hose DN 32 (1 1/4")	outer thread G 1 1/4 (EN12 115)	0302-093 ●
	for hose DN 32 (1 1/4")	inner thread G 1 1/4 (EN12 115)	0302-107 ●
	Brass for mineral oil hose DN 19 / DN 25		
	for mineral oil hose DN 19 (3/4")	inner thread G 1 (EN12 115)	0302-111 ●
	for mineral oil hose DN 25 (1")	inner thread G 1 (EN12 115)	0302-112 ●
	for mineral oil hose DN 25 (1")	inner thread G 1 1/4 (EN12 115)	0302-113 ●
	Stainless steel (1.4571)		
	for hose DN 19 (3/4")	inner thread G 1 (EN12 115)	0302-108 ●
	for hose DN 19 (3/4")	inner thread G 1 1/4 (EN12 115)	0302-109 ●
	for hose DN 25 (1")	inner thread G 1 (EN12 115)	0302-014 ●
	for hose DN 25 (1")	outer thread G 1 (EN12 115)	0302-013 ●
	for hose DN 25 (1")	inner thread G 1 1/4 (EN12 115)	0302-015 ●
for hose DN 32 (1 1/4")	outer thread G 1 1/4 (EN12 115)	0302-094 ●	
for hose DN 32 (1 1/4")	inner thread G 1 1/4 (EN12 115)	0302-110 ●	





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

Double nipple, reducing sleeves, quick-action hose couplings

Specification	Order-No.	Product detail																															
<p>Double nipple Stainless steel (1.4571) G 1 1/4 outer thread</p>	0300-106																																
<p>6 Reducing sleeve To connect quick action hose coupling with pump tube. Inner thread G 1 1/4 and G 1</p> <p>Material: PP Brass Stainless steel</p>	<p>0204-072 0372-018 0372-019</p>																																
<p>7 Quick-action hose coupling Ensure rapid, water-tight and leakproof connection between pump and hose. Available in aluminium, brass, stainless steel and polypropylene.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">Alu</td> <td style="width: 35%;">male element DN 25 (1")</td> <td style="width: 15%;"></td> <td style="width: 35%; text-align: right;">0372-020</td> </tr> <tr> <td>Alu</td> <td>female element DN 25 (1")</td> <td>Seal NBR</td> <td style="text-align: right;">0372-021</td> </tr> <tr> <td>Brass</td> <td>male element DN 25 (1")</td> <td></td> <td style="text-align: right;">0372-022</td> </tr> <tr> <td>Brass</td> <td>female element DN 25 (1")</td> <td>Seal FPM</td> <td style="text-align: right;">0372-023</td> </tr> <tr> <td>Stainless steel (1.4571)</td> <td>male element DN 25 (1")</td> <td></td> <td style="text-align: right;">0372-024</td> </tr> <tr> <td>Stainless steel (1.4571)</td> <td>female element DN 25 (1")</td> <td>Seal FEP/EPDM</td> <td style="text-align: right;">0372-025</td> </tr> <tr> <td>PP</td> <td>male element DN 25 (1")</td> <td></td> <td style="text-align: right;">0372-026</td> </tr> <tr> <td>PP</td> <td>female element DN 25 (1")</td> <td>Seal FPM</td> <td style="text-align: right;">0372-027</td> </tr> </table>	Alu	male element DN 25 (1")		0372-020	Alu	female element DN 25 (1")	Seal NBR	0372-021	Brass	male element DN 25 (1")		0372-022	Brass	female element DN 25 (1")	Seal FPM	0372-023	Stainless steel (1.4571)	male element DN 25 (1")		0372-024	Stainless steel (1.4571)	female element DN 25 (1")	Seal FEP/EPDM	0372-025	PP	male element DN 25 (1")		0372-026	PP	female element DN 25 (1")	Seal FPM	0372-027	 <p>A complete quick-action hose coupling is consisting of reducing sleeves plus female and male coupling element.</p>
Alu	male element DN 25 (1")		0372-020																														
Alu	female element DN 25 (1")	Seal NBR	0372-021																														
Brass	male element DN 25 (1")		0372-022																														
Brass	female element DN 25 (1")	Seal FPM	0372-023																														
Stainless steel (1.4571)	male element DN 25 (1")		0372-024																														
Stainless steel (1.4571)	female element DN 25 (1")	Seal FEP/EPDM	0372-025																														
PP	male element DN 25 (1")		0372-026																														
PP	female element DN 25 (1")	Seal FPM	0372-027																														

Accessories

PVC hoses, mineral oil hoses, solvent hoses

Product detail	Specification	Order-No.																
	<p>8 PVC-spiral hose PVC hose, with steel helix for aggressive, non-flammable liquids.</p> <p>Operating pressure: max. 10 bar Temperature of medium: -15 up to +65 °C Nominal diameter: Weight: Suitable hose clamp:</p> <table border="0"> <tr> <td>DN 19 (3/4")</td> <td>0.33 kg/m</td> <td>0300-415</td> <td>0374-457</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.52 kg/m</td> <td>0300-435</td> <td>0374-440</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>0.6 kg/m</td> <td>0300-450</td> <td>0374-441</td> </tr> </table>	DN 19 (3/4")	0.33 kg/m	0300-415	0374-457	DN 25 (1")	0.52 kg/m	0300-435	0374-440	DN 32 (1 1/4")	0.6 kg/m	0300-450	0374-441					
DN 19 (3/4")	0.33 kg/m	0300-415	0374-457															
DN 25 (1")	0.52 kg/m	0300-435	0374-440															
DN 32 (1 1/4")	0.6 kg/m	0300-450	0374-441															
	<p>8 PVC hose Fabric reinforced PVC hose for aggressive, non-flammable liquids.</p> <p>Operating pressure: max. 6 bar Temperature of medium: 0 up to +60 °C Nominal diameter: Weight: Suitable hose clamp:</p> <table border="0"> <tr> <td>DN 32 (1 1/4")</td> <td>0.5 kg/m</td> <td>0300-450</td> <td>0374-425</td> </tr> </table>	DN 32 (1 1/4")	0.5 kg/m	0300-450	0374-425													
DN 32 (1 1/4")	0.5 kg/m	0300-450	0374-425															
	<p>8 Electrically conductive hoses Caution: Electrical conductivity is assured through the assigned materials and their composition. If correctly installed, resistance during the entire life of the hoses will remain with type Ω smaller 10^6 ohm and with type Ω smaller 10^2 ohm (to EN 12115).</p> <p>Mineral oil hose Colour coding: "yellow". Hose for mineral oil products of all kinds up to 50 % aromatics and methanol content. Inner rubber NBR (antistatic) and outer rubber chloroprene (CR). Type Ω smaller 10^6 ohm (to EN 12115)</p> <p>Operating pressure: max. 10 bar Temperature of medium: -35 up to +60 °C Nominal diameter: Weight: Suitable hose clamp:</p> <table border="0"> <tr> <td>DN 32 (1 1/4")</td> <td>1.0 kg/m</td> <td>0300-455</td> <td>0374-413 ●</td> </tr> <tr> <td>DN 38 (1 1/2")</td> <td>1.2 kg/m</td> <td>0300-465</td> <td>0374-414 ●</td> </tr> </table> <p>Hose for mineral oil products of all kinds up to 50 % aromatics and methanol content. Inner rubber NBR (antistatic) and outer rubber NBR. Type Ω smaller 10^6 ohm (to EN 12115)</p> <p>Operating pressure: max. 10 bar Temperature of medium: -30 up to +65 °C Nominal diameter: Weight: Suitable hose clamp:</p> <table border="0"> <tr> <td>DN 19 (3/4")</td> <td>0.6 kg/m</td> <td>0300-415</td> <td>0374-461 ●</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.8 kg/m</td> <td>0300-440</td> <td>0374-462 ●</td> </tr> </table>	DN 32 (1 1/4")	1.0 kg/m	0300-455	0374-413 ●	DN 38 (1 1/2")	1.2 kg/m	0300-465	0374-414 ●	DN 19 (3/4")	0.6 kg/m	0300-415	0374-461 ●	DN 25 (1")	0.8 kg/m	0300-440	0374-462 ●	
DN 32 (1 1/4")	1.0 kg/m	0300-455	0374-413 ●															
DN 38 (1 1/2")	1.2 kg/m	0300-465	0374-414 ●															
DN 19 (3/4")	0.6 kg/m	0300-415	0374-461 ●															
DN 25 (1")	0.8 kg/m	0300-440	0374-462 ●															
	<p>8 Solvent hose Colour coding: "blue". Hose suitable for a wide range of commercial solvents. Inner rubber of special coating (not conductive) and outer rubber of chloroprene (CR). Type Ω smaller 10^6 ohm (to EN 12115)</p> <p>Operating pressure: max. 10 bar Temperature of medium: -35 up to +60 °C Nominal diameter: Weight: Suitable hose clamp:</p> <table border="0"> <tr> <td>DN 19 (3/4")</td> <td>0.6 kg/m</td> <td>0300-430</td> <td>0374-416 ●</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.8 kg/m</td> <td>0300-445</td> <td>0374-417 ●</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>1.2 kg/m</td> <td>0300-455</td> <td>0374-418 ●</td> </tr> <tr> <td>DN 38 (1 1/2")</td> <td>1.5 kg/m</td> <td>0300-465</td> <td>0374-450 ●</td> </tr> </table>	DN 19 (3/4")	0.6 kg/m	0300-430	0374-416 ●	DN 25 (1")	0.8 kg/m	0300-445	0374-417 ●	DN 32 (1 1/4")	1.2 kg/m	0300-455	0374-418 ●	DN 38 (1 1/2")	1.5 kg/m	0300-465	0374-450 ●	
DN 19 (3/4")	0.6 kg/m	0300-430	0374-416 ●															
DN 25 (1")	0.8 kg/m	0300-445	0374-417 ●															
DN 32 (1 1/4")	1.2 kg/m	0300-455	0374-418 ●															
DN 38 (1 1/2")	1.5 kg/m	0300-465	0374-450 ●															

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

Universal chemical hoses, special chemical hoses and hoses for foodstuffs

Specification	Order-No.	Product detail																				
<p>8 Universal chemical hose</p> <p>Colour coding: "blue/white/blue". Suitable for 95% of all customary industrial chemicals such as almost all acids and alkalis, mineral oil products and solvents of all kinds. Internal finish: Smooth special lining of ultra high molecular polyethylene (U-PE) and white intermediate safety layer. External finish: Electrically conductive EPDM. Intermediate layers: Textile mesh in tinned copper fibres and tin-plated steel wire filament. If correctly installed, resistance during the entire life of the hose will remain under 10⁶ ohm. Type Ω smaller 10⁶ Ohm (to EN 12115).</p> <p>Operating pressure: max. 10 bar Temperature of medium: -30 up to +100 °C</p> <table border="0"> <tr> <td>Nominal diameter:</td> <td>Weight:</td> <td>Suitable hose clamp:</td> <td></td> </tr> <tr> <td>DN 19 (3/4")</td> <td>0.8 kg/m</td> <td>0300-425</td> <td>0374-420 ●</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.9 kg/m</td> <td>0300-445</td> <td>0374-419 ●</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>1.2 kg/m</td> <td>0300-455</td> <td>0374-421 ●</td> </tr> <tr> <td>DN 38 (1 1/2")</td> <td>1.5 kg/m</td> <td>0300-465</td> <td>0374-453 ●</td> </tr> </table>	Nominal diameter:	Weight:	Suitable hose clamp:		DN 19 (3/4")	0.8 kg/m	0300-425	0374-420 ●	DN 25 (1")	0.9 kg/m	0300-445	0374-419 ●	DN 32 (1 1/4")	1.2 kg/m	0300-455	0374-421 ●	DN 38 (1 1/2")	1.5 kg/m	0300-465	0374-453 ●		
Nominal diameter:	Weight:	Suitable hose clamp:																				
DN 19 (3/4")	0.8 kg/m	0300-425	0374-420 ●																			
DN 25 (1")	0.9 kg/m	0300-445	0374-419 ●																			
DN 32 (1 1/4")	1.2 kg/m	0300-455	0374-421 ●																			
DN 38 (1 1/2")	1.5 kg/m	0300-465	0374-453 ●																			
<p>8 Special chemical hose</p> <p>Colour coding: "blau/white/red". Suitable for all commonly used chemicals, ideal also for very pure media. Internal finish: PTFE FEP transparent, smooth, seamless, non-leaching, non-dyeing (in conformity with FDA and USP Class VI demands). Intermed. layer: EPDM. External finish: EPDM electrically conductive with OHM conductive stripes.</p> <p>Operating pressure: max. 16 bar Temperature of medium: -30 up to +100 °C</p> <table border="0"> <tr> <td>Nominal diameter:</td> <td>Weight:</td> <td>Suitable hose clamp:</td> <td></td> </tr> <tr> <td>DN 19 (3/4")</td> <td>0.6 kg/m</td> <td>0300-430</td> <td>0374-428</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.9 kg/m</td> <td>0300-445</td> <td>0374-429</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>1.1 kg/m</td> <td>0300-455</td> <td>0374-430</td> </tr> </table>	Nominal diameter:	Weight:	Suitable hose clamp:		DN 19 (3/4")	0.6 kg/m	0300-430	0374-428	DN 25 (1")	0.9 kg/m	0300-445	0374-429	DN 32 (1 1/4")	1.1 kg/m	0300-455	0374-430						
Nominal diameter:	Weight:	Suitable hose clamp:																				
DN 19 (3/4")	0.6 kg/m	0300-430	0374-428																			
DN 25 (1")	0.9 kg/m	0300-445	0374-429																			
DN 32 (1 1/4")	1.1 kg/m	0300-455	0374-430																			

Accessories

Emission proof drum adapters



To permit reliable application, emission protection for „on site“ pumping operations must be made as convenient as possible under practical conditions. The Lutz EMIGA system achieves more for the user while involving less work:

- ✓ All that is needed is a single drum adapter with two integrated valves.
- ✓ Due to „active seal“, emission protection is guaranteed even in the event of wear and tear, damage or pump tube diameter tolerances.
- ✓ The lower part of the adapter can be adapted to varying thread and diameter sizes in container openings.
- ✓ Simple installation using a plug-in-connection for individual adaption.
- ✓ Stability ensured by integrated spring loaded mechanism.
- ✓ Suitable container cup for container emptying available.
- ✓ Larger dimensioned air valves cater for pressure equalisation by the fast emptying of containers.

Product detail



Specification

Order-No.

9 Emission proof drum adapter

To prevent emission of dangerous gases when using a drum pump, so protecting the operator, the environment and the drive motor from hazardous, aggressive gases and vapours. Two venting valves ensure pressure compensation between inside of the drum and surrounding atmosphere.

Connection for gas displacement pipe: G 3/8; Screw-in thread: G 2 outer thread

Seals: FPM or EPDM.

Other threads and seal materials on request.

Material:	Pump tube diameter:	
PP	41 mm	
PVDF	41 mm	
Brass	41 mm	
Stainless steel	41 mm	

0204-250
0204-465
0204-252 ●
0204-253 ●

Following special threads are available

PP, Messing, Edelstahl	Tri-Sure 2", BCS 56 x 4 OT, Mauser 2", BCS 70 x 6 OT
Messing, Edelstahl	M 64 x 4 OT

Air valve for emptying of containers (additional costs see price list)

0204-364

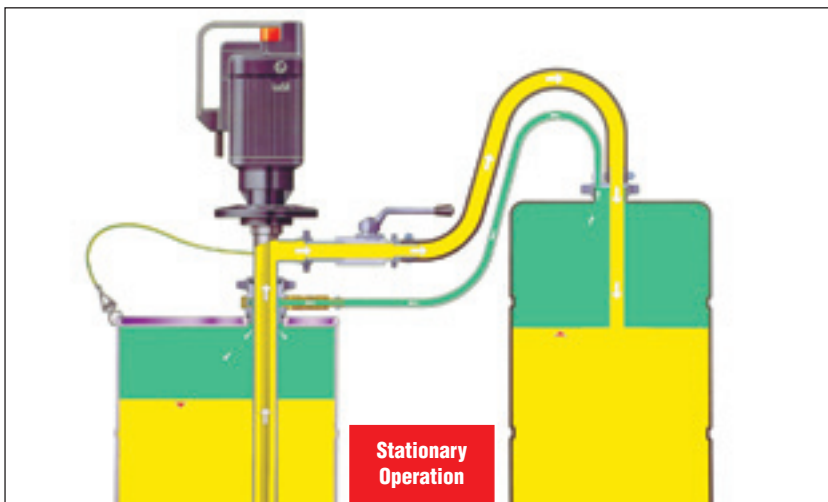
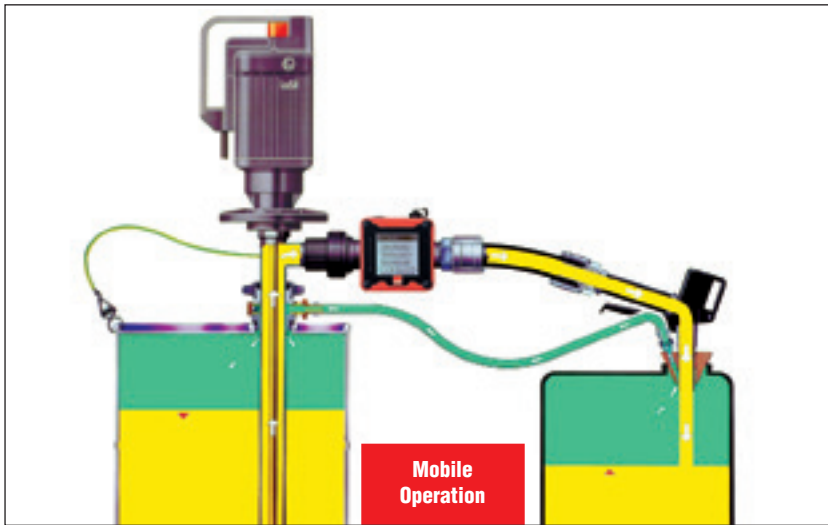
Container cap

DN 150
 DN 225

0373-060
0373-061

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

EMIGA: emission proof drum adapters with gas displacement system



Concern about air pollution has never been so widespread as it is today. Acting on its sense of environmental responsibility, Lutz has further developed its emission proof drum adapter as a complete gas displacement system. Harmful gases and vapours created when transporting hazardous media remain practically in a closed system while themselves ensuring the necessary pressure compensation.

- ✓ Prevents emissions of harmful gases and vapours when filling **and** emptying.
- ✓ Protects the operator as well as the environment from noxious, toxic and/or severely oxidising emissions.
- ✓ All advantages of the reliable Lutz-EMIGA-system will be maintained.
- ✓ For flexible operation with nozzle or stationary operation by fixed union.
- ✓ A check valve integrated into the gas displacement pipe, prevents the gas from back-flow at standstill of the pump.

Specification

Order-No.

Product detail

Gas sealing kit with union for stationary operation

Reliable connection by fixed union on the container.
Stop valve and fast-action coupling ensure as fast and safe changing of drum.

Gas sealing kit with union

comprising of:
Stop valve, connection fittings, sealing plug, drip-free fast action coupling closing on two sides, hose connection with wing nut

Shown in addition here:
Emission drum adapter stainless steel

Gas sealing hose:
PVC-hose DN 9

Other emission proof drum adapters see page 84

0204-202



0204-253

0373-153



Accessories

EMIGA: for safe handling of hazardous liquids

Product detail	Specification	Order-No.
	<p>Gas sealing kit with nozzle for flexible operation</p> <p>The sealing plug adapts on different drum and container openings (D = 40-75 mm). Combined with a nozzle a safe transferring even into small vessels ist possible. A valve integrated into the gas displacement pipe, prevents the gas from back-flow at standstill of the pump or changing the drum.</p> <hr/> <p>Application with pump tube SS 41 and nozzle SS</p> <p>Variable system for use with a nozzle in such areas as fuels and solvents, etc.</p> <p>Gas sealing kit for nozzle</p> <p>comprises of: Conical sealing plug, check valve for gas displacement pipe, screw-in nipple with wing nut and connection piece, hose clamps</p> <p>Shown in addition here: Emission proof drum adapter stainless steel Other emission proof drum adapters see page 84 Nozzle stainless steel, G 1 1/4 Gas sealing hose: PVC hose DN 9 Alternatively for flammable liquids: Solvent hose DN 9 Emission proof hose (serving to return with sealless pump tubes arising gases back into the container)</p>	<p>0204-201</p> <p>0204-253</p> <p>0204-370</p> <p>0373-153</p> <p>0374-415</p> <p>0204-272</p>
	<p>Application with pump tube SS 41 and automatic nozzle Alu</p> <p>In conjunction with an automatic nozzle, the flow rate is cut off automatically when the maximum level is reached.</p> <p>Gas sealing kit for nozzle</p> <p>comprises of: Conical sealing plug, check valve for gas displacement pipe, screw-in nipple with wing nut and connection piece, hose clamps</p> <p>Shown in addition here: Emission proof drum adapter stainless steel Other emission proof adapters see page 84 Automatic nozzle in aluminium DN 25, seal PTFE Discharge pipe cpl. for automatic nozzle Alu (necessary when using a valve pad) Gas sealing hose: PVC hose DN 9 Alternatively for flammable liquids: Solvent hose DN 9 Emission proof hose (serving to return with sealless pump tubes arising gases back into the container)</p>	<p>0204-201</p> <p>0204-253</p> <p>0372-245</p> <p>0204-274</p> <p>0373-153</p> <p>0374-415</p> <p>0204-272</p>

EMIGA: emission proof drum adapters with gas displacement system, drum adapters, installation flanges

Specification	Order-No.	Product detail
<p>Application with pump tube PP 41 und nozzle PP Prevents emissions when handling severely oxidising or fuming acids and alkalis.</p> <p>Gas sealing kit for nozzle comprises of: Conical sealing plug, check valve for gas displacement pipe, pipe fitting</p> <p>Shown in addition here: Emission proof drum adapter PP Nozzle PP/FPM (FPM) G 1 1/4 Nozzle outlet spout PP Gas sealing hose: PVC hose DN 9</p> <p>Additional costs: Emission proof hose with connection flange PVDF* (serving to return with sealless pump tubes arising gases back into the container)</p> <p><small>*in connection with a new pump tube</small></p>	<p>0204-510</p> <p>0204-250</p> <p>0204-380</p> <p>0204-297</p> <p>0373-153</p> <p>0204-511</p>	
<p>10 Drum adapter in PP Drum adapter for continuous pump tube diameters. For fixing the pump in the drum opening. Outer thread G 2</p>	<p>0208-007</p>	
<p>10 Drum adapter in ST 37 Separable drum adapter for pump tubes with enlarged pump foot. For fixing the pump in the drum opening. Thread G 2 and M 64 x 4</p>	<p>0204-215</p>	
<p>10 Drum adapter in steel, galvanized For fixing the pump in the drum opening. Outer thread G 2 For mixing pump tube PP</p>	<p>0208-013</p>	
<p>10 Drum adapter PE (electrically conductive) For fixing the pump in the drum opening. Outer thread G 2 Outer thread BCS 56 x 4 Outer thread BCS 70 x 6</p>	<p>0208-055 0208-052 0208-054</p>	
<p>11 Installation flange 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.</p> <p>Material: For pump tube:</p> <p>PP ø 41 mm PVDF ø 41 mm Alu ø 41 mm SS ø 41 mm</p>	<p>0110-191 0122-001 0132-120 0151-622</p>	

Accessories

Foot strainers, pump security rack, discharge spouts, wall bracket, clamping device, oval gear flow meter

Product detail	Specification	Order-No.																
	<p>12 Foot strainer Available in PP, PVDF and stainless steel, for mounting on the pump foot. Keeps impurities away from the rotating parts.</p> <table border="0"> <tr> <td>Material:</td> <td>For pump tube:</td> <td></td> </tr> <tr> <td>PP</td> <td>PP Ø 41 mm</td> <td>0343-177</td> </tr> <tr> <td>PVDF</td> <td>PVDF and Alu Ø 41 mm</td> <td>0343-187</td> </tr> <tr> <td>Stainless steel</td> <td>SS Ø 41 mm</td> <td>0204-617 ●</td> </tr> </table>	Material:	For pump tube:		PP	PP Ø 41 mm	0343-177	PVDF	PVDF and Alu Ø 41 mm	0343-187	Stainless steel	SS Ø 41 mm	0204-617 ●					
Material:	For pump tube:																	
PP	PP Ø 41 mm	0343-177																
PVDF	PVDF and Alu Ø 41 mm	0343-187																
Stainless steel	SS Ø 41 mm	0204-617 ●																
	<p>Pump security rack For pump tubes up to Ø 50 mm</p>	<p>0204-093</p>																
	<p>13 Discharge spout Serving to transfer and fill liquids directly into other vessels. They are available in PP, alu and stainless steel and are threaded onto the pump outlet connection.</p> <table border="0"> <tr> <td>Material:</td> <td>Nominal diameter:</td> <td>Wing nut:</td> <td></td> </tr> <tr> <td>PP</td> <td>DN 19 (3/4")</td> <td>G 1 1/4</td> <td>0204-200</td> </tr> <tr> <td>Alu</td> <td>DN 25 (1")</td> <td>G 1 1/4</td> <td>0204-373</td> </tr> <tr> <td>SS</td> <td>DN 25 (1")</td> <td>G 1 1/4</td> <td>0204-225 ●</td> </tr> </table>	Material:	Nominal diameter:	Wing nut:		PP	DN 19 (3/4")	G 1 1/4	0204-200	Alu	DN 25 (1")	G 1 1/4	0204-373	SS	DN 25 (1")	G 1 1/4	0204-225 ●	
Material:	Nominal diameter:	Wing nut:																
PP	DN 19 (3/4")	G 1 1/4	0204-200															
Alu	DN 25 (1")	G 1 1/4	0204-373															
SS	DN 25 (1")	G 1 1/4	0204-225 ●															
	<p>14 Wall bracket For storage of drum pumps. This facility helps protect pumps from damage, and maintains their value.</p> <p>For pump tubes with hand wheel</p>	<p>0204-308</p>																
	<p>15 Clamping device To fasten the drum pumps in open-topped drums and containers. Suitable for different pump tube diameters.</p> <p>For pump tubes: PP, PVDF, Alu, SS and HC</p>	<p>0205-040 ●</p>																
	<p>16 Oval gear flow meter MDO 1 For efficient flow measurement of mineral oils and alternative fuels. Easy handling, compact construction and quick assembly onto the pump.</p> <table border="0"> <tr> <td>Measuring principle:</td> <td>Oval gear</td> <td></td> </tr> <tr> <td>Range of measurement:</td> <td>3 - 80 l/min.</td> <td></td> </tr> <tr> <td>Range of viscosity:</td> <td>1 - 2000 mPas</td> <td></td> </tr> <tr> <td>Accuracy of measurement:</td> <td>± 0,5%</td> <td></td> </tr> <tr> <td>Connection:</td> <td>G 1 1/4</td> <td>0211-600</td> </tr> </table>	Measuring principle:	Oval gear		Range of measurement:	3 - 80 l/min.		Range of viscosity:	1 - 2000 mPas		Accuracy of measurement:	± 0,5%		Connection:	G 1 1/4	0211-600		
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● Suitable for transferring combustible and easy inflammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

Electronical flow meters, lifting devices, hoist, electrical accessories

Specification	Order-No.	Product detail
<p>16 Electronical flow meter, TR series</p> <p>For easy and precise flow rate measuring of various liquids. Ease of handling, compact design and ideally to combine with all drum and container pumps (connection G 1 or G 1 1/4), available in polypropylene (PP) or polyvinylidene fluoride (PVDF).</p> <p>For more details see separate flow meter leaflet.</p>		
<p>16 Modular electronical flow meter system, TS series</p> <p>For metering all kinds of liquids. Wide range of applications: Directly at the drum pump, remote or in-line operation possible. Convenient pre-setting of required volume using a touch screen display. Multilingual menus and simple plain-text operation. A comprehensive range of system components offers practical problem solutions.</p> <p>For more details see separate flow meter leaflet.</p>		
<p>19 Lifting device</p> <p>To simplify the process of lifting the pump in and out of drums and containers.</p> <p>For motors MA II and ME II For motors B4/GT</p>	<p>0211-047 0214-196</p>	
<p>34 Hoist</p> <p>for drum pump, with infinitely adjustable load balancer for easy lifting and moving of the pump.</p> <p>Load bearing capacity: 10-14 kg Tackle: 2 m</p>	<p>0371-012</p>	
<p>Connecting cable</p> <p>For extension of the connecting line for universal motors, 2 or 3-wired (three-phase motors 4-wired). According to requirements the cable is available in every necessary length.</p> <p>H05 RN-F, 3 x 1 mm² for motor MA II H07 RN-F, 2 x 2,5 mm² for motor MA II (42 V, 24 V) H07 RN-F, 3 x 1,5 mm² for motor ME II H07 RN-F, 4 x 1,5 mm² for three-phase motors</p>	<p>0466-000 0466-003 0336-074 ● 0336-339 ●</p>	
<p>Cekon-plug</p> <p>5-pole - 16 A For three-phase gear motors B4/GT</p>	<p>0336-415</p>	

Accessories

for explosion proof applications

Product detail	Specification	Order-No.
	<p>20 Equipotential bonding cable Serves to create electrically conductive connection between explosion proof pump and container as earthing and equipotential bonding function.</p> <p>2 m long with fastening clip</p>	<p>0204-994 ●</p>
	<p>21 Ex-plug CEE round plug in accordance with EEx de IIC T6, splash proof in compliance with IP 65.</p> <p>3-pole (alternating current) CEAG for motor ME II 3-pole (alternating current) STAHL for motor ME II</p>	<p>0336-536 ● 0336-540 ●</p>
	<p>22 Ex-socket CEE-socket in accordance with EEx de IIC T6, splash proof in compliance with IP 65.</p> <p>3-pole (alternating current) for motor ME II 3-pole (alternating current) STAHL for motor ME II</p>	<p>0336-531 ● 0336-542 ●</p>

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

for compressed air supply of motors MD-1, MD-2 and MD-3

Specification	Order-No.	Product detail
<p>25 Maintenance unit For cleaning and oiling the supply air. With manometer for setting operating pressure.</p> <p>Operating pressure: max. 10 bar</p>	0204-152	
<p>26 Coupling (female part) Self-disconnecting in brass. For screwing in the maintenance unit.</p> <p>G 3/8 outer thread</p>	0372-154	
<p>27 Nipple (male part) In brass G 3/8 outer thread</p>	0372-045	
<p>28 Air hose coupling connector For connection to a coupling.</p> <p>For compressed air hose DN 9</p>	0372-155	
<p>29 Stop valve Chromium-plated brass for regulating the compressed air as well as the speed of the compressed air motors.</p> <p>G 3/8 outer thread/inner thread</p>	0372-043	
<p>30 Compressed air hose PVC-hose with intermediate woven layer, DN 9, for air supply to compressed air motors.</p> <p>Operating pressure: max. 14 bar at 20 °C</p>	0373-153	
<p>31 Hose clamp (Chromated steel: 1.4016)</p> <p>For compressed air hose DN 9</p>	0301-156	
<p>32 Coupling with hose connector (female part) Self-disconnecting in brass, with hose connector DN 9.</p> <p>For compressed air hose DN 9</p>	0372-166	

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State of art: 04.16 Order-No. 0699-302 Mt. 500/04.16



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