

Lutz Drum and Container Pumps Be in Control Every Day

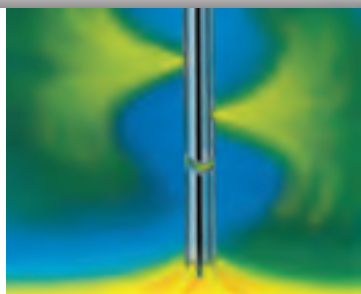
Drum Pump Sets

Laboratory and Drum Pumps

Pumps for complete drum drainage

Mixing Pumps

Container Pumps



Safety is our Concern

Consistent customer orientation

You can expect no less of us



Jürgen Lutz

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

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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 the ideal solution for all these applications.



More time for the essential things

Lutz Pump Sets



Motors

Powerful universal and compressed air motors

Nozzles

for safe filling and transferring of liquids

Drum adapter

For safe fixing the pump in the drum opening

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

0.1 Pump Set B1 Battery (polypropylene)

For thin-bodied fluids

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

For removing small quantities from hobbcocks, canisters and drums.

- **Motor B1 Battery,**
70 Watt internally ventilated

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|----------------------------------|---------------------|---------------------------|-------------------------|
| 1.3 | 200 | 20 | 6 |

Max. temperature of medium 40 °C

Specified values are maximum values determined with water at 20°C, measured directly at the pressure joint. Viscosity determined with oil.



Pump Set B1 Battery

for thin-bodied fluids



| For emptying canisters and drums | Pump B1 Battery PP 25-L SL | | | Set B1 Battery PP 25-L SL | | | Set B1 Battery PP 25-L SL with flow meter TR3-PP |
|----------------------------------|-------------------------------|----------|----------|------------------------------|----------|----------|---|
| | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | 1000 mm |
| Motor B1 Battery | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Flow meter TR3-PP | - | - | - | - | - | - | ✓ |
| Pump tube PP 25-L-SL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1,5 m PVC hose 3/4" | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Hose connectors 3/4" | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hose clamps | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Lutz nozzle with suspension hook | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Order No. | 0207-112 | 0207-113 | 0207-114 | 0207-090 | 0207-091 | 0207-092 | 0207-093 |
| Battery 10,8 V | 0332-027 | | | | | | |
| Battery charger | 0335-336 | | | | | | |

More time for the essential things

Pump Set B2 Battery (polypropylene) **0.2**

For thin-bodied fluids

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

For removing small quantities from hobbocks, canisters and drums.

- **Motor B2 Battery,**
260 Watt internally ventilated

| Impeller | Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-----------------|-------------------------------|------------------|------------------------|----------------------|
| Impeller | 1.6 | 400 | 65 (22) | 12 |
| Rotor | 1.6 | 400 | 80 (22) | 8 |

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 (information in the brackets).



Pump Set B1 Battery

for thin-bodied fluids



| For emptying canisters and drums | Pump B2 Battery PP 32-R SL / PP 32-L SL | | | Set B2 Battery PP 32-R SL / PP 32-L SL | | | Set B2 Battery PP 32-R SL / PP 32-L SL with flow meter TR3-PP |
|--|--|-----------------|-----------------|---|-----------------|-----------------|---|
| | Motor B2 Battery | ✓ | | | ✓ | | |
| Flow meter TR3-PP | - | | | - | | | ✓ |
| Pump tube PP 32-R-SL / PP 32-L-SL | ✓ | | | ✓ | | | ✓ |
| 1,5 m PVC hose 3/4" | - | | | ✓ | | | ✓ |
| Hose connectors 3/4" | ✓ | | | ✓ | | | ✓ |
| Hose clamps | - | | | ✓ | | | ✓ |
| Lutz nozzle with suspension hook | - | | | ✓ | | | ✓ |
| Immersion depth | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | 1000 mm |
| Order No. with pump tube PP 32-R SL | 0207-100 | 0207-101 | 0207-102 | 0207-060 | 0207-061 | 0207-062 | 0207-063 |
| Order No. with pump tube PP 32-L SL | 0207-103 | 0207-104 | 0207-105 | 0207-065 | 0207-066 | 0207-067 | 0207-068 |
| Battery 21,6 V | | | | 0332-026 | | | |
| Battery charger | | | | 0335-335 | | | |

Lutz Pump Sets

0.3 Pump Set B2 Battery (polyvinylidene flouride)

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

For removing small quantities from hobbocks, canisters and drums.

- **Motor B2 Battery,**
260 Watt internally ventilated

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 1.6 | 400 | 80 (45) | 8 |

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 (information in the brackets).

Pump Set B2 Battery

for acids and alkalis



| For emptying canisters and drums | Pump B2 Battery PVDF 32-R SL | | | Set B2 Battery PVDF 32-R SL | | | Set B2 Battery PVDF 32-R SL with flow meter TR3-PVDF |
|----------------------------------|------------------------------|-----------------|-----------------|-----------------------------|-----------------|-----------------|--|
| | Motor B2 Battery | ✓ | | | ✓ | | |
| Flow meter TR3-PVDF | - | | | - | | | ✓ |
| Pump tube PVDF 32-R-SL | ✓ | | | ✓ | | | ✓ |
| 1,5 m special chemical hose 3/4" | - | | | ✓ | | | ✓ |
| Hose connectors 3/4" | ✓ | | | ✓ | | | ✓ |
| Hose clamps | - | | | ✓ | | | ✓ |
| Nozzle PVDF | - | | | ✓ | | | ✓ |
| Immersion depth | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | 1000 mm |
| Order No. | 0207-109 | 0207-110 | 0207-111 | 0207-080 | 0207-081 | 0207-082 | 0207-083 |
| Battery 21,6 V | | | | 0332-026 | | | |
| Battery charger | | | | 0335-335 | | | |

More time for the essential things

Pump Set B2 Battery (stainless steel) **0.4**

For thin-bodied fluids

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

For removing small quantities from hobbocks, canisters and drums.

- **Motor B2 Battery,**
260 Watt internally ventilated

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|----------------------------------|---------------------|---------------------------|-------------------------|
| 1.6 | 400 | 80 (45) | 8 |

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 (information in the bracket).



Pump Set B2 Battery

for thin-bodied fluids
with PVC hose
und Lutz nozzle

Pump Set B2 Battery

for thin-bodied fluids
with universal chemical hose
and nozzle stainless steel



| For emptying canisters and drums | Pump B2 Battery SS 28-R SL | | | Set B2 Battery SS 28-R SL with PVC hose | | | Set B2 Battery SS 28-R SL with universal chemical hose | | | |
|-------------------------------------|----------------------------------|----------|----------|---|----------|----------|--|----------|----------|--|
| | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | |
| Motor B2 Battery | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Pump tube SS 28-R-SL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 1,5 m PVC hose 3/4" | - | - | - | ✓ | ✓ | ✓ | - | - | - | |
| 1,5 m universal chemical hose 3/4" | - | - | - | - | - | - | ✓ | ✓ | ✓ | |
| Hose connectors 3/4" | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Hose clamps | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Lutz nozzle with suspension hook | - | - | - | ✓ | ✓ | ✓ | - | - | - | |
| Nozzle Niro | - | - | - | - | - | - | ✓ | ✓ | ✓ | |
| Order No. | 0207-106 | 0207-107 | 0207-108 | 0207-070 | 0207-071 | 0207-072 | 0207-050 | 0207-051 | 0207-052 | |
| Battery 21,6 V | 0332-026 | | | | | | | | | |
| Battery charger | 0335-335 | | | | | | | | | |

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 hobboscks, 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).



Pump Set Lutz B2 Vario

for thin-bodied fluids



with shaft HC
(Hastelloy C)



| For emptying canisters and drums | Pump Lutz B2 Vario | | | Set Lutz B2 Vario | | |
|----------------------------------|--------------------|-----------------|-----------------|-------------------|-----------------|-----------------|
| | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm |
| Motor B2 Vario | | ✓ | | | ✓ | |
| Pump tube PP-SL 32 | | ✓ | | | ✓ | |
| 1,5 m PVC spiral hose 3/4" | | - | | | ✓ | |
| Hose connectors PP 3/4" | | ✓ | | | ✓ | |
| Hose clamps | | - | | | ✓ | |
| Lutz nozzle | | - | | | ✓ | |
| Wall bracket | | - | | | ✓ | |
| Immersion depth | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm |
| Order No. | 0201-500 | 0201-501 | 0201-502 | 0205-020 | 0205-021 | 0205-022 |

More time for the essential things

Pump Set Lutz B2 Vario (stainless steel) **2**

For thin-bodied fluids

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

For filling small quantities from hobboscks, canisters and drums.

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

Pump Set Lutz B2 Vario for thin-bodied fluids

Pump Set Lutz B2 Vario for thin-bodied fluids with universal chemical hose and nozzle stainless steel

| 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).



with shaft SS
(stainless steel 1.4571)



| For emptying canisters and drums | Pump Lutz B2 Vario | | | Set Lutz B2 Vario with PVC hose | | | Set Lutz B2 Vario with universal chemical hose | | |
|------------------------------------|--------------------|-----------------|-----------------|---------------------------------|-----------------|-----------------|--|-----------------|-----------------|
| | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Motor B2 Vario | ✓ | | | ✓ | | | ✓ | | |
| Pump tube SS-SL 28 | ✓ | | | ✓ | | | ✓ | | |
| 1,5 m PVC spiral hose 3/4" | - | | | ✓ | | | - | | |
| 1,5 m Universal chemical hose 3/4" | - | | | - | | | ✓ | | |
| Hose connectors SS 3/4" | ✓ | | | ✓ | | | ✓ | | |
| Hose clamps | - | | | ✓ | | | ✓ | | |
| Lutz nozzle with suspension hook | - | | | ✓ | | | - | | |
| Nozzle stainless steel | - | | | - | | | ✓ | | |
| Wall bracket | - | | | ✓ | | | ✓ | | |
| Immersion depth | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm | 500 mm | 700 mm | 1000 mm |
| Order No. | 0201-510 | 0201-511 | 0201-512 | 0205-030 | 0205-031 | 0205-032 | 0207-030 | 0207-031 | 0207-032 |

Lutz Pump Sets

3 Pump Set „Alkalis“ (polypropylene)

For thin-bodied alkalis

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

- **Motor MI-4**, 500 W internally ventilated, IP 24 or optionally with
- **Motor MA II 3**, 460 W externally ventilated, IP 54

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).



Motor MI-4
For individual application.
For aggressive and non-flammable liquids.

Pump Set Alkalis

with motor MI-4 internally ventilated

with shaft SS
(stainless steel 1.4571)

Pump Set Alkalis

with motor MA II 3 externally ventilated



| For emptying drums and containers | Pump with motor MI-4 | | Pump with motor MA II 3 | | Set with motor MI-4 | | Set with motor MA II 3 | |
|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|---------------------|-----------------|------------------------|-----------------|
| | | | | | | | | |
| Pump tube PP 41-L-SL SS | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m PVC spiral hose 3/4" | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| Hose connectors PP 3/4" | ✓ | | ✓ | | ✓ | | ✓ | |
| Hose clamps | - | | - | | ✓ | | ✓ | |
| Nozzle PP | - | | - | | ✓ | | ✓ | |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-105 | 0205-106 | 0205-125 | 0205-126 | 0205-101 | 0205-102 | 0205-121 | 0205-122 |

More time for the essential things

Pump Set „Acids“ (polypropylene) **4**

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, IP 54 or optionally with
- **Motor MI-4**, 500 W internally ventilated, IP 24

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).



Motor MA II 3

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

Pump Set

with motor MA II 3 externally ventilated



mit Welle HC (Hastelloy C)

Pump Set

with motor MI-4 internally ventilated



| For emptying drums and containers | Pump with motor MI-4 | | Pump with motor MA II 3 | | Set with motor MI-4 | | Set with motor MA II 3 | |
|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|---------------------|-----------------|------------------------|-----------------|
| | | | | | | | | |
| Pump tube PP 41-L-SL HC | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m PVC spiral hose 3/4" | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| Hose connectors PP 3/4" | ✓ | | ✓ | | ✓ | | ✓ | |
| Hose clamps | - | | - | | ✓ | | ✓ | |
| Nozzle PP | - | | - | | ✓ | | ✓ | |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-115 | 0205-116 | 0205-135 | 0205-136 | 0205-111 | 0205-112 | 0205-131 | 0205-132 |

Lutz Pump Sets

5 Pump Set „Concentrated Acids and Alkalis“ (polyvinylidene flouride)

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 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).

Pump Set Acids and Alkalis

with motor MA II 3 or MA II 5 externally ventilated

Motor MA II

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



| For emptying drums and containers | Pump with motor MA II 3 | | Pump with motor MA II 5 | | Set with motor MA II 3 | | Set with motor MA II 5 | |
|-----------------------------------|-------------------------|-----------------|-------------------------|-----------------|------------------------|-----------------|------------------------|-----------------|
| | | | | | | | | |
| Pump tube PVDF 41-L-SL | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m special chemical hose 3/4" | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| Hose connectors PVDF 3/4" | ✓ | | ✓ | | ✓ | | ✓ | |
| Hose clamps | - | | - | | ✓ | | ✓ | |
| Nozzle PVDF | - | | - | | ✓ | | ✓ | |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-215 | 0205-216 | 0205-205 | 0205-206 | 0205-211 | 0205-212 | 0205-201 | 0205-202 |

More time for the essential things

Pump Set „Mineral Oil Products“ (aluminium) **6**

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 MD2xL**, 1000 W / 6 bar with stop valve and nipple

Motor MI-4

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 1.4 | 500 | 87 (50) | 19 |

Motor MD2xL

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 2,8 | 1000 | 116 (60) | 36 |

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

Motor MI-4

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

Pump Set Mineral Oil Products

with Motor MD2xL, the compact compressed air motor is powerful and reliable.



| For emptying drums and containers | Pump with motor MI-4 | | Pump with motor MD2xL | | Set with motor MI-4 | | Set with motor MD2xL | |
|-----------------------------------|----------------------|-----------------|-----------------------|-----------------|---------------------|-----------------|----------------------|-----------------|
| | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Pump tube Alu 41-L-SL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2 m PVC spiral hose 1" | - | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Drum adapter PP | - | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Hose connectors Alu 1" | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hose clamps | - | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Nozzle Alu | - | - | - | - | ✓ | ✓ | ✓ | ✓ |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-305 | 0205-306 | 0205-325 | 0205-326 | 0205-301 | 0205-302 | 0205-321 | 0205-322 |

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

Lutz Pump Sets

7 Pump Set „Solvents“ (stainless steel)

For easily flammable hydrocarbons

such as ethanol, gasoline, butanol, iso-propanol, kerosene, methanol and petroleum.

- **Motor ME II 3**, 460 W or optionally with
- **Compressed air motor MD2xL**, 1000 W / 6 bar

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

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 MD2xL

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 2,8 | 1000 | 124 (75) | 35 |

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

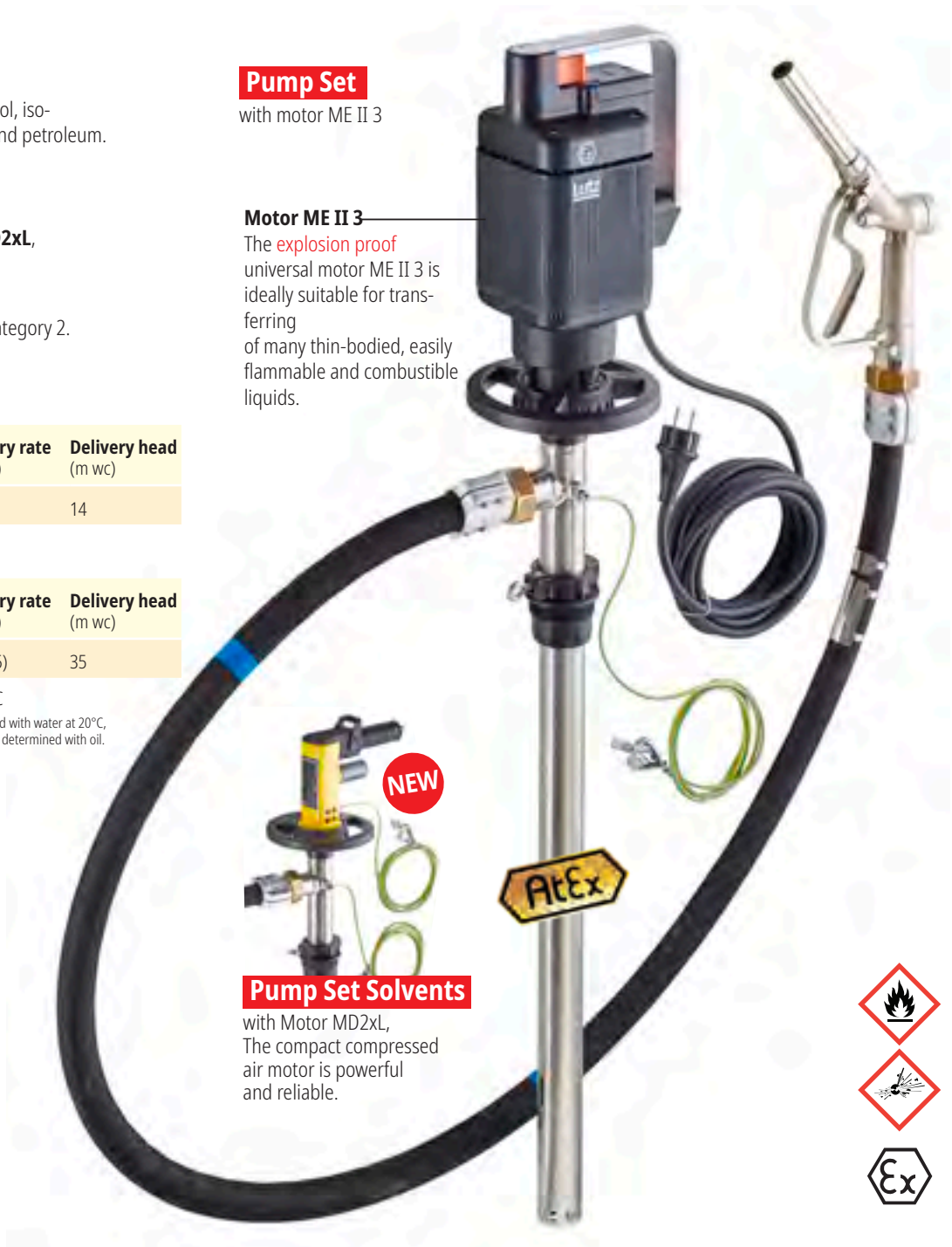
with motor ME II 3

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 MD2xL, The compact compressed air motor is powerful and reliable.



| For emptying drums and containers | Pump with motor ME II 3 | | Pump with motor MD2xL | | Set with motor ME II 3 | | Set with motor MD2xL | |
|-----------------------------------|-------------------------|-----------------|-----------------------|-----------------|------------------------|-----------------|----------------------|-----------------|
| | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Pump tube SS 41-L-SL | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m solvent hose 3/4" * | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| 2 m equipotential bonding cable | ✓ | | ✓ | | ✓ | | ✓ | |
| Nozzle brass | - | | - | | ✓ | | ✓ | |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-405 | 0205-406 | 0205-475 | 0205-476 | 0205-401 | 0205-402 | 0205-471 | 0205-472 |

*electrically conductive bound with hose connectors brass.

More time for the essential things

Pump Set „Hazardous Fluids“ (stainless steel) **8**

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 MD2xL**, 1000 W / 6 bar

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

Motor ME II 3

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 1.6 | 350 | 95 (50) | 14 |

Motor MD2xL

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 2,8 | 1000 | 124 (50) | 35 |

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).



Ex-plug

Can be optionally supplied with Ex-plug completely assembled.

Pump Set Ex

with motor ME II 3

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 MD2xL, The compact compressed air motor is powerful and reliable.



| For emptying drums and containers | Pump with motor ME II 3 | | Pump with motor MD2xL | | Set with motor ME II 3 | | Set with motor MD2xL | |
|------------------------------------|-------------------------|----------|-----------------------|----------|------------------------|----------|----------------------|----------|
| | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Pump tube SS 41-L-SL | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m universal chemical hose 3/4" * | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| 2 m equipotential bonding cable | ✓ | | ✓ | | ✓ | | ✓ | |
| Nozzle in stainless steel (1.4571) | - | | - | | ✓ | | ✓ | |
| Order No. | 0205-405 | 0205-406 | 0205-475 | 0205-476 | 0205-411 | 0205-412 | 0205-481 | 0205-482 |

*electrically conductive bound with hose connectors stainless steel.

Lutz Pump Sets

9 Pump Set „Solvents“ for complete drum drainage (stainless steel)

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 MD2xL**, 1000 W / 6 bar

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

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 MD2xL

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 2,8 | 1000 | 67 (40) | 28 |

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

Pump Set Solvents

with motor ME II 3

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 MD2xL, The compact compressed air motor is powerful and reliable.



| For complete drainage of drums and containers | Pump with motor ME II 3 | | Pump with motor MD2xL | | Set with motor ME II 3 | | Set with motor MD2xL | |
|---|-------------------------|----------|-----------------------|----------|------------------------|----------|----------------------|----------|
| | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Pump tube RE-SS 41-L-MS | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m solvent hose 3/4" * | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| 2 m equipotential bonding cable | ✓ | | ✓ | | ✓ | | ✓ | |
| Nozzle brass | - | | - | | ✓ | | ✓ | |
| Order No. | 0205-505 | 0205-506 | 0205-545 | 0205-546 | 0205-501 | 0205-502 | 0205-541 | 0205-542 |

*electrically conductive bound with hose connectors brass.

More time for the essential things

Pump Set „Hazardous Fluids“ for complete drum drainage (stainless steel) **10**

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 MD2xL**, 1000 W / 6 bar

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

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 MD2xL

| Density (kg/dm ³) | Viscosity (mPas) | Delivery rate (l/min.) | Delivery head (m wc) |
|-------------------------------|------------------|------------------------|----------------------|
| 2,8 | 1000 | 67 (40) | 28 |

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

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.

Ex-plug

Can be optionally supplied with Ex-plug completely assembled.

Pump Set Ex

with motor ME II 3

Pump Set Ex

with Motor MD2xL, The compact compressed air motor is powerful and reliable.



| For complete drainage of drums and containers | Pump with motor ME II 3 | | Pump with motor MD2xL | | Set with motor ME II 3 | | Set with motor MD2xL | |
|---|-------------------------|-----------------|-----------------------|-----------------|------------------------|-----------------|----------------------|-----------------|
| | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Pump tube RE-SS 41-L-MS | ✓ | | ✓ | | ✓ | | ✓ | |
| 2 m universal chemical hose 3/4" * | - | | - | | ✓ | | ✓ | |
| Drum adapter PP | - | | - | | ✓ | | ✓ | |
| 2 m equipotential bonding cable | ✓ | | ✓ | | ✓ | | ✓ | |
| Nozzle in stainless steel (1.4571) | - | | - | | ✓ | | ✓ | |
| Immersion depth | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm | 1000 mm | 1200 mm |
| Order No. | 0205-505 | 0205-506 | 0205-545 | 0205-546 | 0205-511 | 0205-512 | 0205-551 | 0205-552 |

*electrically conductive bound with hose connectors stainless steel.

Lutz Drum and Container Pumps

Lightweight, comfortable and powerful

New dimensions of flexibility

With the development of the new battery pumps B1 Battery and B2 Battery, Lutz launches a new dimension of mobility, battery performance, weight, life, capacity and ergonomics and offers maximum flexibility for the user. With the combination possibilities of the pump tubes in PP, PVDF and stainless steel in different lengths, a variety of fluids from different containers can be transferred.

Features/Benefits:

- » BLDC motor with a high level of efficiency up to 70%
- » Infinitely varied
- » Modular construction
- » Low weight
- » High battery capacity
- » Long service life
- » Low noise ≤ 70 dBA
- » Sophisticated quick-action coupling
- » Available in **polypropylene, polyvinylidene fluoride** and **stainless steel** (1.4571)



Up to
2500
Litres with one
battery charge!

B1 Battery:



Battery life:
25 minutes
at max. speed

1 Battery charge = 2 x 200 l Container*

* determined with pump tube PP 25-L SL

B2 Battery:



Battery life:
34 minutes
at max. speed

1 Battery charge = 12,6 x 200 l Container*

* determined with pump tube PP 32-R SL

Mobile pump unit on trolley

For flexible use, the pump and the drum can be easily and quickly brought to any location by the trolley (Order No. 0371-030).

Lutz Drum Pump B1/B2 Battery

B1 Battery:

- » Small to medium filling quantities
- » Low power
- » Low viscosity up to max. 200 mPas
- » Low pressures/low flow rates
- » Low density up to max. 1.3 kg/dm³
- » Automatic switch-off at overload



Replaceable battery with Li-Ion technology

Infinitely variable for all demands

Good handling due to compact design and low weight

Wear-free, low noise BLDC motor

Easy disassembly with quick fastener

B2 Battery:

- » Medium to large filling volume
- » Particularly high performance at a low weight
- » Higher viscosity up to max. 400 mPas
- » Higher pressures/flow rates
- » Higher density up to max. 1.6 kg/dm³
- » Higher battery life
- » Automatic switch-off at overload



Replaceable, high-performance Li-Ion technology

Infinitely variable for all demands

Easy handling by using a convenient carrying handle, compact design and low weight

Wear-free, low noise BLDC motor: Particularly high performance at low weight

Easy disassembly with quick fastener

Lutz Drum and Container Pumps

Drum pump Lutz B1/B2 Battery (polypropylene, PVDF or stainless steel)

| Product detail | | B1 Battery (motor and pump tube) | | PP-SL | | | |
|--|------------------------------------|---|---------------------|------------------------------------|-----------------|---------------|--|
|  | Material | Pump tube | | PP | | | |
| | | Impeller | | PP | | | |
| | Type of impeller | | | Impeller | | | |
| | category 1 / 2 (according to ATEX) | | | no | | | |
| | Immersion tube diameter | max. mm | | 25 | | | |
| | Hose connection | Nominal diameter | | 19 | | | |
| | | mm Outer thread | | G 1 | | | |
| | Temperature of medium | max. °C | | 0 up to +40 | | | |
| | Flow rate* | up to l/min. | | 20 | | | |
| | Delivery head* | up to m wc | | 6 | | | |
| | Viscosity** | up to mPas | | 200 | | | |
| | Density | up to kg/dm ³ | | 1.3 | | | |
| | Weight (kg) | Motor + pump tube | | 1.0 | | | |
| | Power | watts | | 70 | | | |
| Voltage | volts | | 10.8 | | | | |
| Length: 500 mm | Order No. | | 0207-112 | | | | |
| Length: 700 mm | Order No. | | 0207-113 | | | | |
| Length: 1000 mm | Order No. | | 0207-114 | | | | |
| * determined with water at 20 °C ** determined with oil Special lengths on request. Will be delivered without battery and battery charger. | | | | | | | |
| Suitable battery | | | | | | | |
| Order No. | 0332-027 | Voltage: | 10.8 V | capacity: 1.5 Ah, Li-Ionen battery | | | |
| Battery charger | | | | | | | |
| Order No. | 0335-336 | Input: | 100-240 V, 50/60 Hz | | | | |
| | | B2 Battery (motor and pump tube) | PP-SL | PP-SL | PVDF-SL | SS-SL | |
|  | Material | Pump tube | PP | PP | PVDF | 1.4571 | |
| | | Impeller | PP | PP | ETFE | ETFE | |
| | Type of impeller | | Rotor | Impeller | Rotor | Rotor | |
| | category 1 / 2 (according to ATEX) | | no | no | no | no | |
| | Immersion tube diameter | max. mm | 32 | 32 | 32 | 28 | |
| | Hose connection | Nominal diameter | 19 | 19 | 19 | 19 | |
| | | mm Outer thread | G 1 | G 1 | G 1 | G 1 | |
| | Temperature of medium | max. °C | -15 up to +50 | -15 up to +50 | -15 up to +90 | -15 up to +90 | |
| | Flow rate* | up to l/min. | 80 | 65 | 80 | 80 | |
| | Delivery head* | up to m wc | 8 | 12 | 8 | 8 | |
| | Viscosity** | up to mPas | 400 | 400 | 400 | 400 | |
| | Density | up to kg/dm ³ | 1.6 | 1.6 | 1.6 | 1.6 | |
| | Weight (kg) | Motor + pump tube | 1.6 | 1.6 | 2.0 | 2.5 | |
| | Power | watts | 260 | 260 | 260 | 260 | |
| Voltage | volts | 21.6 | 21.6 | 21.6 | 21.6 | | |
| Length: 500 mm | Order No. | 0207-100 | 0207-103 | 0207-109 | 0207-106 | | |
| Length: 700 mm | Order No. | 0207-101 | 0207-104 | 0207-110 | 0207-107 | | |
| Length: 1000 mm | Order No. | 0207-102 | 0207-105 | 0207-111 | 0207-108 | | |
| * determined with water at 20 °C ** determined with oil Special lengths on request. Will be delivered without battery and battery charger. | | | | | | | |
| Suitable battery | | | | | | | |
| Order No. | 0332-026 | Voltage: | 21.6 V | capacity: 4 Ah, Li-Ionen battery | | | |
| Battery charger | | | | | | | |
| Order No. | 0335-335 | Input: | 100-240 V, 50/60 Hz | | | | |

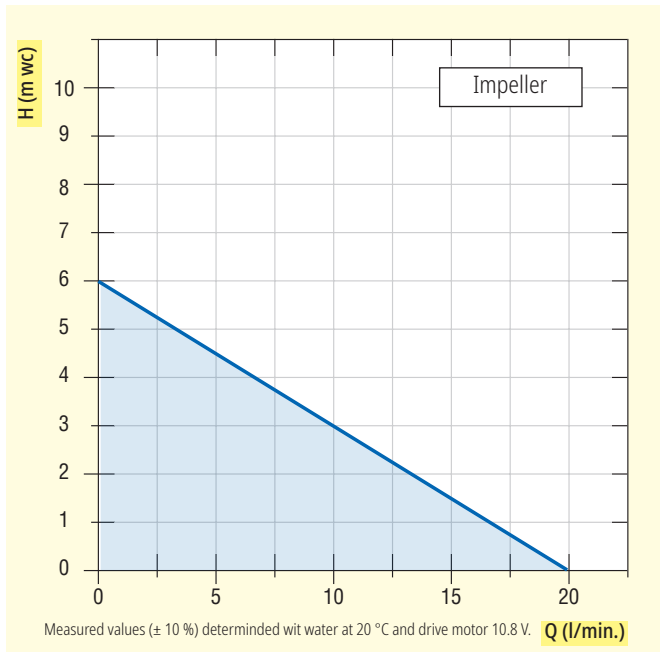
Drum Pump Lutz B1/B2 Battery

Lightweight, comfortable and powerful

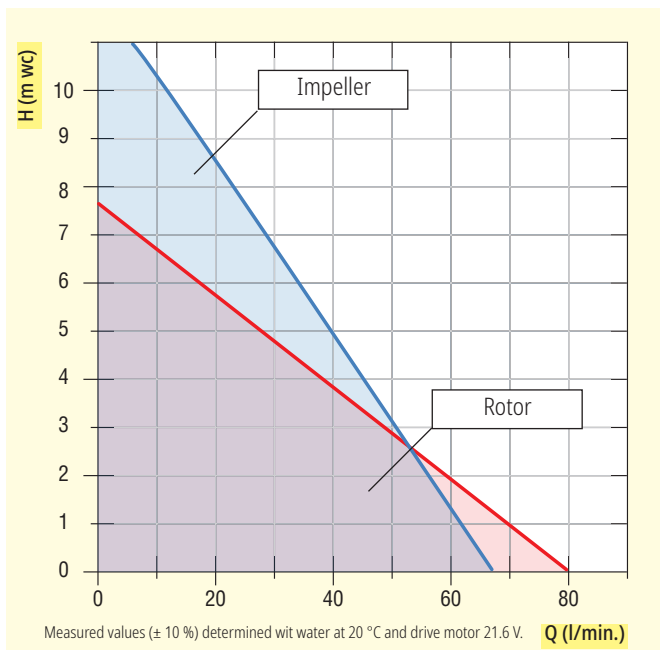
Materials (coming into contact with the pumped medium)

| Version: | PP-SL | PVDF-SL | SS-SL |
|------------------|-------------|-------------|--------------------------|
| Housing: | PP/PVDF | PVDF | Stainless steel (1.4571) |
| Impeller: | PP | ETFE | ETFE |
| Seals: | none | none | none |
| Mechanical seal: | none | none | none |
| Bearing: | ETFE/PTFE | ETFE/PTFE | ETFE/PTFE |
| Drive shaft: | Hastelloy C | Hastelloy C | Stainless steel (1.4571) |

Lutz B1 Battery



Lutz B2 Battery



 Suitable range of accessories see pages 77-79

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, PVDF 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: | Rotor | | Rotor |
| | 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 |
| | Flow 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: | Rotor | |
| | Category 1 / 2 (acc. to ATEX) | no | |
| | Immersion tube diameter: | up to mm | 28 |
| | Hose connection: | Nominal diameter mm | 19 |
| | | Outer thread | G 1 |
| | Flow 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

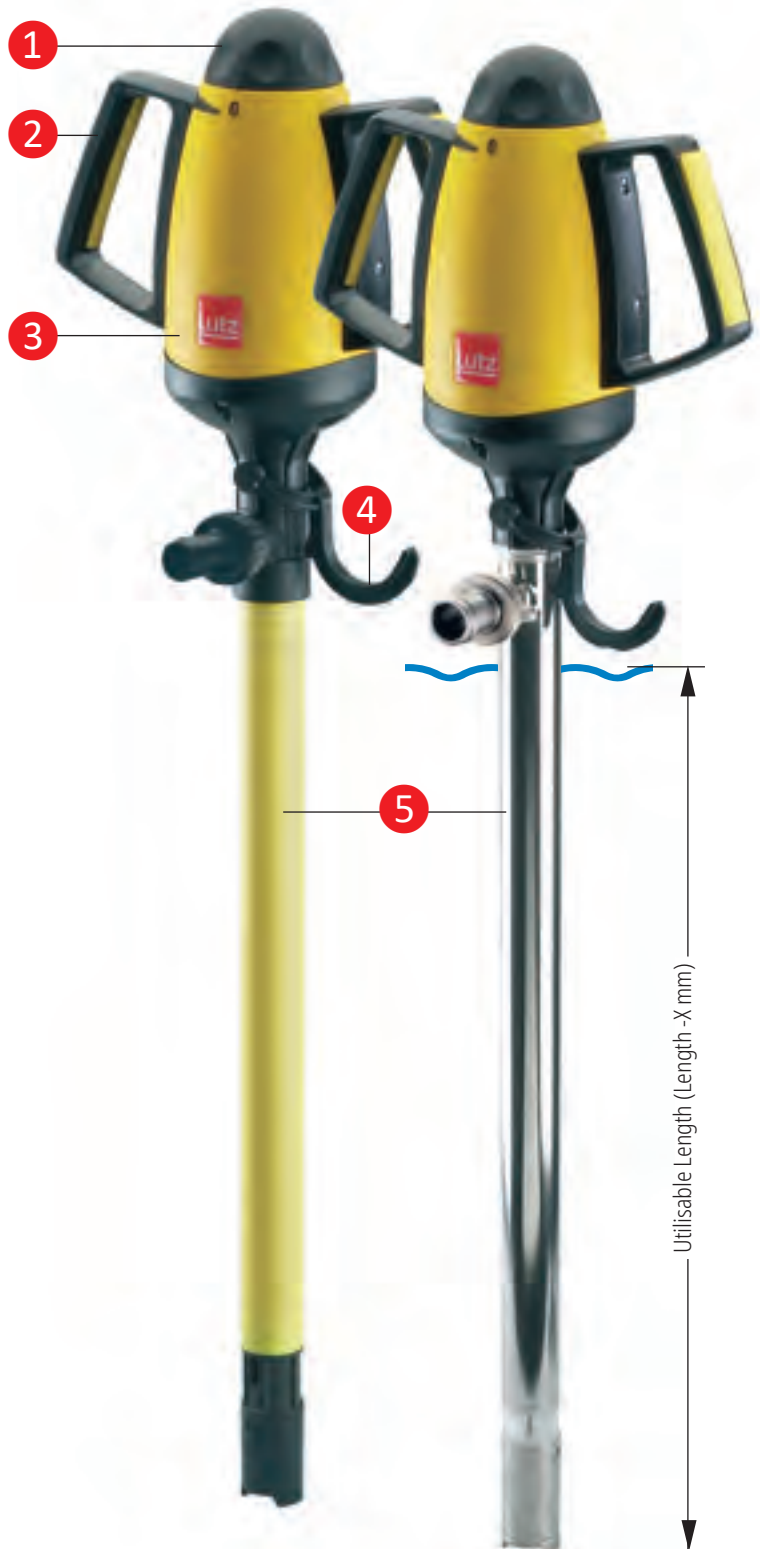
Special lengths, other voltages and frequencies on request.

Materials (coming into contact with the pumped medium):

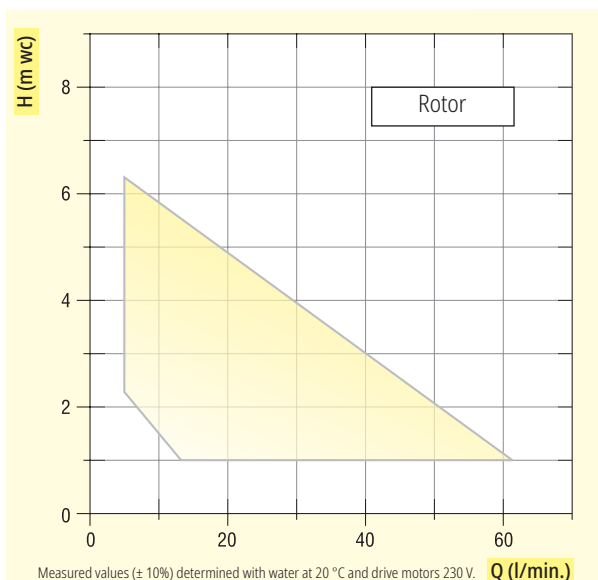
| Version: | PP-SL | PVDF-SL | SS-SL |
|-------------------|-------------|-------------|-------------|
| Housing: | PP/PVDF | PVDF | SS (1.4571) |
| Rotor: | PP | ETFE | ETFE |
| Seals: | none | none | none |
| Mechanical seals: | none | none | none |
| Bearing: | ETFE/PTFE | ETFE/PTFE | ETFE/PTFE |
| 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
CE



X = pump tube PP/PVDF: -40 mm
pump tube Inox: -53 mm



 Suitable range of accessories see pages 73-75

Lutz Drum and Container Pumps

Your individual pump selection

Safety first

The explosion proof models of Lutz drum pumps provide optimum protection when handling easily flammable, 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.



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

- ✓ 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

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.

You will find more information in our separate leaflet:
Certified solutions for the food and beverage industry
(Order-No. 0699-315)



Regulation (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.



FDA Approval

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



Atex Directive

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 rotor or impeller) 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



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 flammable and non-flammable liquids. HC is used especially for highly aggressive, easily flammable 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 stainless 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.

Stainless steel pump tubes in physiologically safe version (PU). All materials coming into contact with the pumped liquid are physiologically safe.



The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

When does one have to use an explosion proof 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.

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

Caution!

A pump tube with an explosion proof motor must be used for easily flammable liquids. Refer to page 37



Pump Power: Range of Motors

Universal Motor: 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 explosion proof.

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

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

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. More information see below.



| Type | 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 |

Three-phase gear Motor B4/GT



Three-phase gear motor, 0.75 kW, 230/400 V, 50 Hz, energy efficiency class IE 3. With terminal box or attached motor protection switch with ON/OFF function.

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.

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

Absolutely undemanding

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

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.

CE IP 54/IP 55

| Type | Voltage V | Frequency Hz | Output W | Weight kg | Order No. (cable terminal box) | Order No. (protection switch) |
|-------|--------------|-----------------|-------------|--------------|--------------------------------------|-------------------------------------|
| B4/GT | 230-400 | 50 | 750 | 11.0 | 0004-050 | 0004-052 |

Universal Motor: 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 explosion proof

- ✓ 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-flammable 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.



| Type | 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 |

Pump Power: Range of Motors

Lutz Compressed Air Motors MDxL Series



MD1xL
Ideal for stationary operation.



MD2xL
With convenient grip as standard equipment.



Energy efficiency and reducing the operating costs is most important for the user of pumps. With the development of the new MDxL compressed air motors, Lutz has taken account of this requirement and set new standards. Compressed air is an expensive energy. The more important it is to achieve the highest possible efficiency.

With the oil-free, 1000 watts powerful air motor you can achieve **the same delivery capacity with 20% less connection pressure and 4% less air consumption** comparable to other products.

The motors have a very good start-up behaviour also with low pressure. **This saves energy and costs.**

During the development of the motors, the Lutz engineers succeeded in a significant increase of performance which enable the transferring of viscous liquid up to 100,000 mPas and thus the motors are almost universally applicable.

The motors can also be used to pump easy flammable liquids and comply with the Atex guidelines. The motor is infinitely varied and this allows a smooth and controlled filling.

Features/Benefits:

- ✓ High power and high efficiency due to optimization of the flow control
- ✓ Infinitely varied
- ✓ Modular construction
- ✓ Oil-free version available
- ✓ Easy handling
- ✓ Long lifetime
- ✓ Atex-certification
- ✓ Good start behaviour



Two motors for almost any requirement

- ✓ High performance class up to 1000 watts
- ✓ High viscosity up to 100,000 mPas
- ✓ Applicable oil-free

| Type | Air pressure bar | Performance W | Weight kg | Order No. |
|-------|---------------------|------------------|--------------|-----------|
| MD1xL | 6 | 1000 | 1.0 | 0004-725 |
| MD2xL | 6 | 1000 | 1.4 | 0004-735 |

When used in Ex environments, the maximum permissible operating pressure is limited to 5 bar.

Explosion proof Universal Motor: ME II

Explosion proof in compliance with II 2 G Ex db eb 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 explosion proof), optionally available with explosion proof plug.

- ✓ Explosion proof 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 are not taken back easily. The ME II explosion proof universal motor is the answer (German Patent DE 38 15427 C2) for pumping a large variety of thin-bodied, easily flammable 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, explosion proof in compliance with II 2 G Ex db eb IIC T5 or T6 and built and approved in keeping with the explosion protection ATEX Directive 2014/34/EU and IEC Ex.

Who is afraid of voltages?

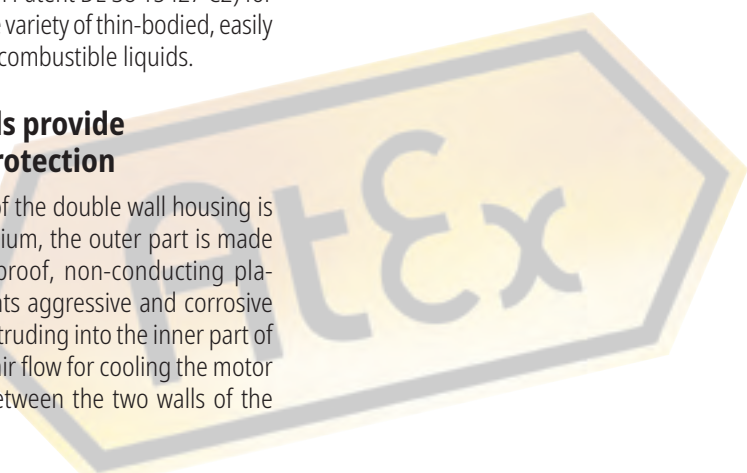
A low voltage release prevents uncontrolled starting of the motor. All the motors of the ME II series feature a protective conductor connection. There is double insulation between the live parts and the outer surface of the motor that can be touched as well as between the live parts and the pump tube.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

German Patent:

DE 38 15427 C2



CE Ex IP 54



| 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 |

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: | Impeller | Rotor | Impeller | Rotor | | | |
| | 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 | PP | PP | PP | PP | | |
| | | Impeller/Rotor | 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: 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 mWS | 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 mWS | 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 mWS | 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 | 6.5 | 6.5 | 6.5 | 6.5 |
| 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. | 107 | 106 | 107 | 106 | |
| | Output: 795 W | 795 W | Flow rate* up to l/min. | 95 | 170 | 95 | 170 | |
| | Voltage: 230 V | 230 V | Delivery head* up to mWS | 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 | 7.7 | 7.7 | 7.7 | 7.7 | |
|  | MD1xL | MD2xL | Characteristic curve no. | 109 | 108 | 109 | 108 | |
| | Output: 1000 W | 1000 W | Flow rate* up to l/min. | 116 | 216 | 116 | 216 | |
| | Operating pressure: 6 bar | 6 bar | Delivery head* up to mWS | 36 | 16 | 36 | 16 | |
| | | infinitely varied | Viscosity** up to mPas | 1000 | 1000 | 1000 | 1000 | |
| | Order No. | 0004-725 | 0004-735 | Density:**** up to kg/dm³ | 2.8 | 2.8 | 2.8 | 2.8 |
| | | | Weight (kg) Motor + pump tube | 2.5 | 2.5 | 2.5 | 2.5 | |

* 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.

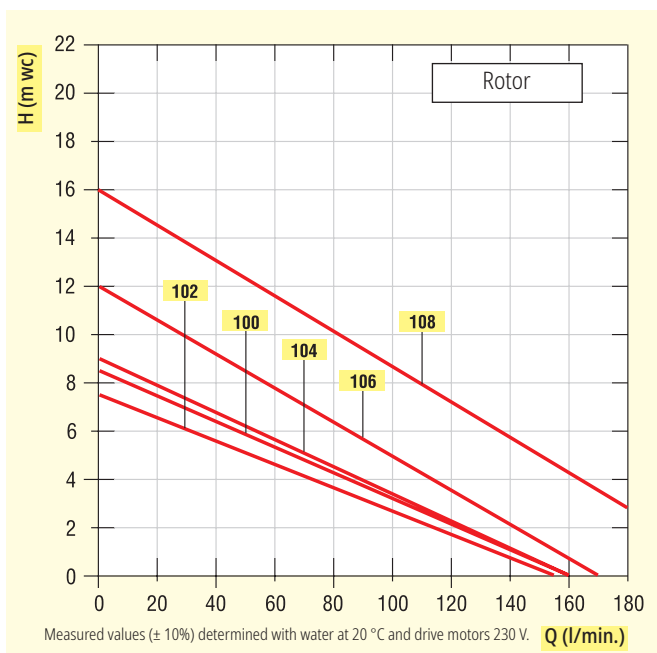
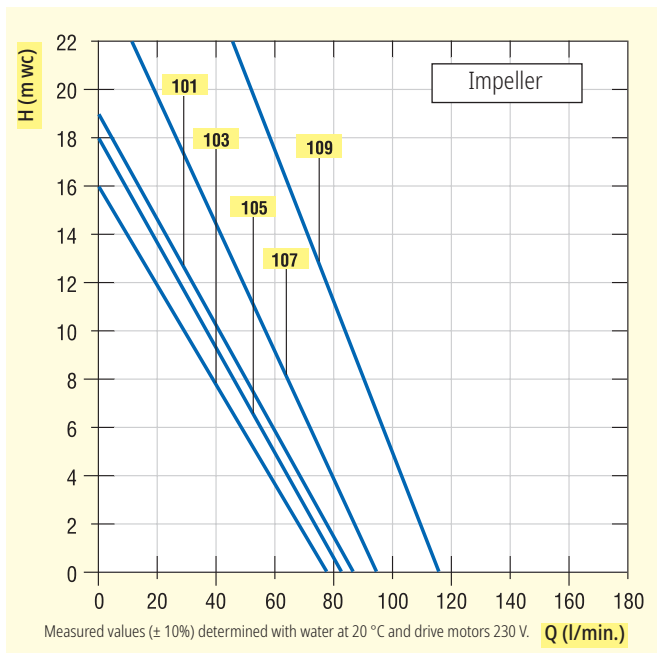
Special voltages and frequencies on request.

Pump Tube PP (polypropylene)

for corrosive and neutral liquids

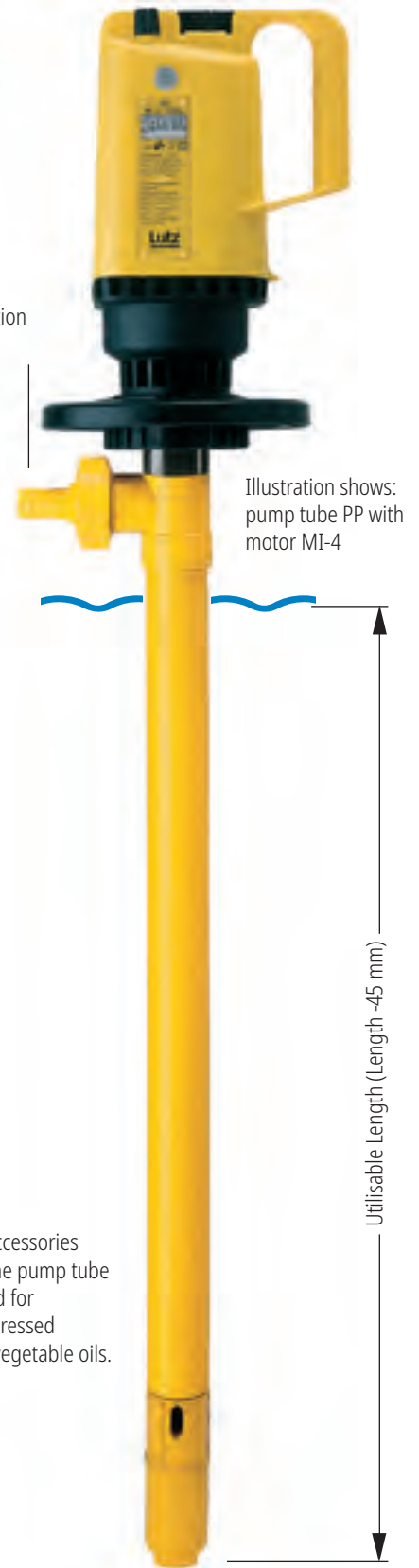
Materials (coming into contact with the pumped medium):

| Version: | SL | MS |
|-------------------|---|---|
| Housing: | PP/PVDF | PP/PVDF |
| Impeller/Rotor: | 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 83



With selected accessories (see page 96) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.



Suitable range of accessories
see pages 80-96

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: | | Impeller | Rotor | Impeller | Rotor | | |
| | 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 Impeller/Rotor | PVDF ETFE | PVDF ETFE | PVDF ETFE | PVDF ETFE | | |
| | 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*** | 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 | Characteristic curve no. | 201 | 200 | 201 | 200 | |
| | - | with speed controller | Flow rate* up to l/min. | 87 | 160 | 87 | 160 | |
| | Output: 500 W | 500 W | Delivery head* up to mWS | 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 | Weight (kg) Motor + pump tube | 4.5 | 4.5 | 4.5 | 4.5 | | |
|  | MA II 3 | | Characteristic curve no. | 203 | 202 | 203 | 202 | |
| | Output: 460 W | 460 W | Flow rate* up to l/min. | 78 | 155 | 78 | 155 | |
| | Voltage: 230 V | 230 V | Delivery head* up to mWS | 16 | 7.5 | 16 | 7.5 | |
| | LVR.: no | yes | Viscosity** up to mPas | 500 | 150 | 500 | 150 | |
| Order No. | 0060-000 0060-008 | Weight (kg) Motor + pump tube | 6.3 | 6.3 | 6.3 | 6.3 | | |
|  | MA II 5 | MA II 5 | MA II 5 S | Characteristic curve no. | 205 | 204 | 205 | 205 |
| | 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 mWS | 18 | 9 | 18 | 9 |
| | LVR.: no | yes | no | Viscosity** up to mPas | 800 | 350 | 800 | 350 |
| Order No. | 0060-001 0060-009 0060-091 | Weight (kg) Motor + pump tube | 7.1 | 7.1 | 7.1 | 7.1 | | |
|  | MA II 7 | | | Characteristic curve no. | 207 | 206 | 207 | 206 |
| | Output: 795 W | 795 W | | Flow rate* up to l/min. | 95 | 170 | 95 | 170 |
| | Voltage: 230 V | 230 V | | Delivery head* up to mWS | 25 | 12 | 25 | 12 |
| | LVR.: no | yes | | Viscosity** up to mPas | 800 | 350 | 800 | 350 |
| Order No. | 0060-002 0060-010 | Weight (kg) Motor + pump tube | 8.3 | 8.3 | 8.3 | 8.3 | | |
|  | MD1xL | MD2xL | | Characteristic curve no. | 209 | 208 | 209 | 208 |
| | Output: 1000 W | 1000 W | | Flow rate* up to l/min. | 116 | 216 | 116 | 216 |
| | Operating pressure: 6 bar | 6 bar | | Delivery head* up to mWS | 36 | 16 | 36 | 16 |
| | | infinitely varied | | Viscosity** up to mPas | 1000 | 1000 | 1000 | 1000 |
| Order No. | 0004-725 0004-735 | Weight (kg) Motor + pump tube | 3.1 | 3.1 | 3.1 | 3.1 | | |
|  | B4/GT | | | Characteristic curve no. | 211 | 210 | 211 | 210 |
| | 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 mWS | 10 | 8.5 | 10 | 8.5 |
| | Protection switch no | yes | | Viscosity** up to mPas | 400 | 400 | 400 | 400 |
| Order No. | 0004-050 0004-052 | Weight (kg) Motor + pump tube | 12.5 | 12.5 | 12.5 | 12.5 | | |

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.

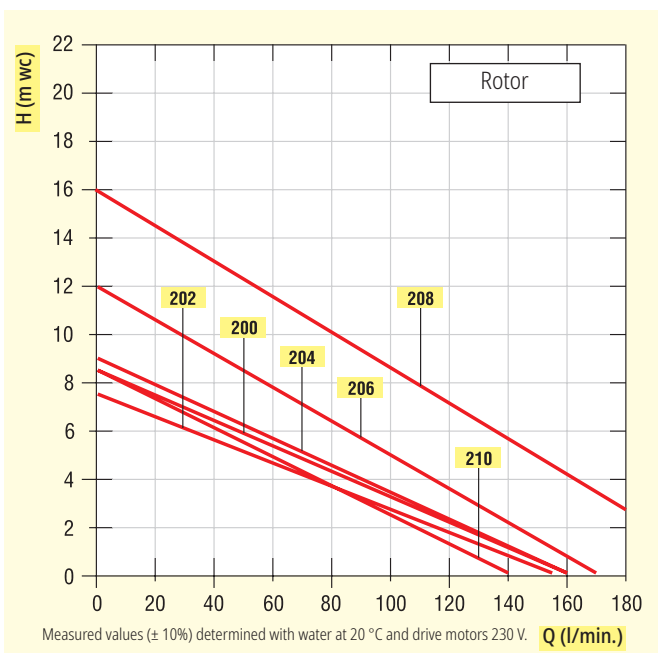
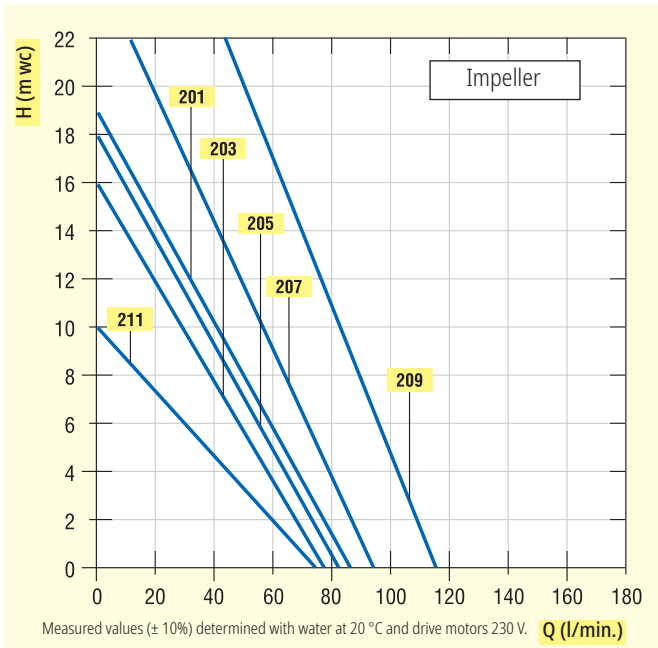
Special voltages and frequencies on request.

Pump Tube PVDF (polyvinylidene fluoride)

for highly corrosive chemicals and neutral liquids

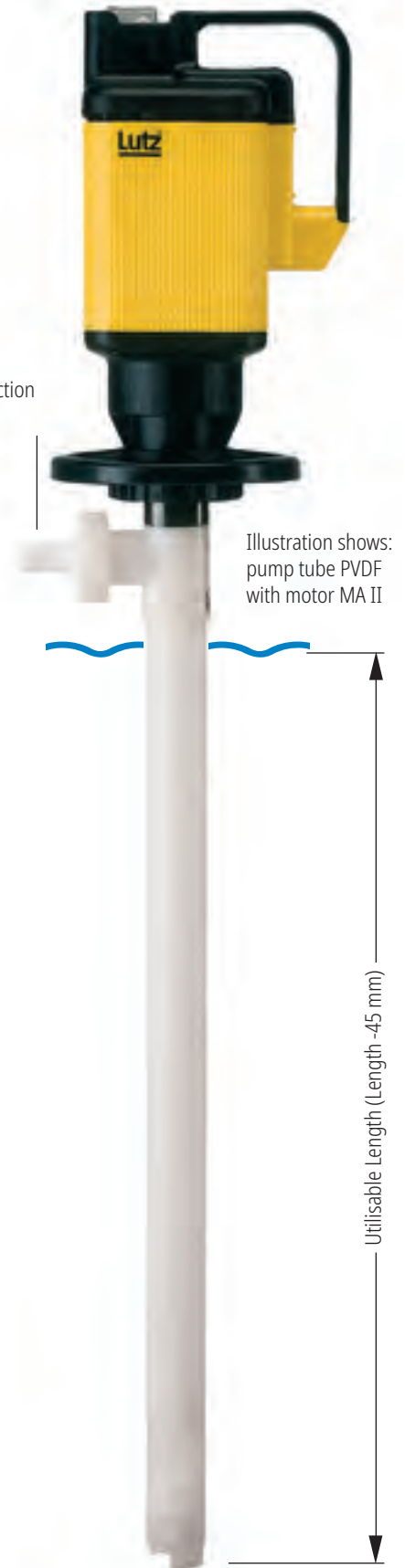
Materials (coming into contact with the pumped medium):

| Version: | SL | MS |
|-------------------|---------------|--------------------------------|
| Housing: | PVDF | PVDF |
| Impeller/Rotor: | 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.

Accessories
hose connection
see page 83



Suitable range of accessories
see pages 80-96

Lutz Drum and Container Pumps

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

| Product detail | Pump tube | Alu-SL | | Alu-MS | | | | |
|---|-------------------------------|-------------------------------------|-------------------------------|-------------------------------|------------------|------------------|------|------|
|  | Type of impeller: | | Impeller | Rotor | Impeller | Rotor | | |
| | 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 Impeller/Rotor | Alu ETFE | Alu ETFE | Alu ETFE | Alu ETFE | | |
| | 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*** | 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 mWS | 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 mWS | 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 mWS | 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 | 6.9 | 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 mWS | 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 | |
|  | MD1xL | MD2xL | Characteristic curve no. | 309 | 308 | 309 | 308 | |
| | Output: 1000 W | 1000 W | Flow rate* up to l/min. | 116 | 216 | 116 | 216 | |
| | Operating pressure: 6 bar | 6 bar | Delivery head* up to mWS | 36 | 16 | 36 | 16 | |
| | | infinitely varied | Viscosity** up to mPas | 1000 | 1000 | 1000 | 1000 | |
| | Order No. | 0004-725 | 0004-735 | Density:**** up to kg/dm³ | 2.8 | 2.8 | 2.8 | 2.8 |
| | | | | Weight (kg) Motor + pump tube | 2.9 | 2.9 | 2.9 | 2.9 |
|  | 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 mWS | 10 | 8.5 | 10 | 8.5 | |
| | Protection switch: no | yes | Viscosity** up to mPas | 400 | 400 | 400 | 400 | |
| | Order No. | 0004-050 | 0004-052 | Density:**** up to kg/dm³ | 2.2 | 2.0 | 2.2 | 2.0 |
| | | | | Weight (kg) Motor + pump tube | 12.3 | 12.3 | 12.3 | 12.3 |

* 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.

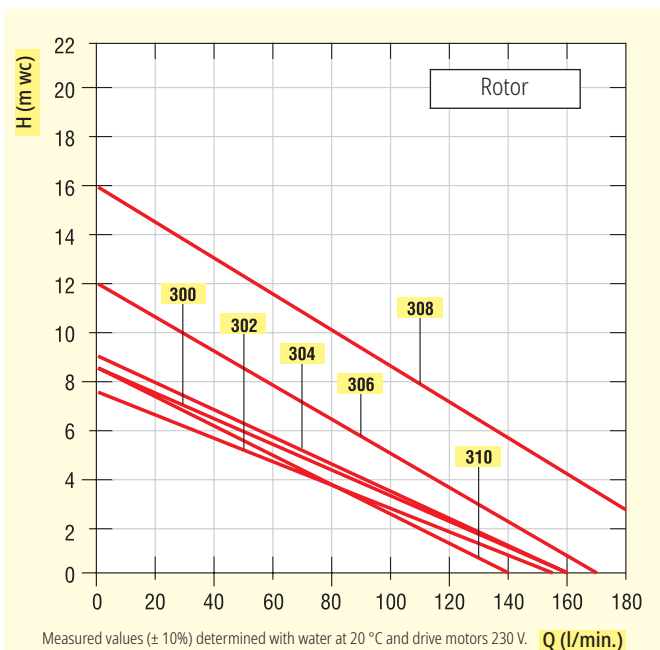
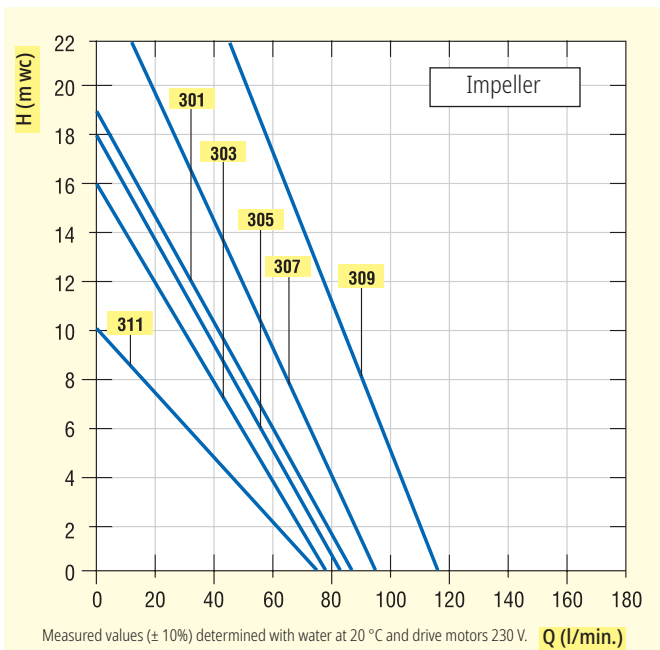
Special voltages and frequencies on request.

Pump Tube Alu (aluminium)

for neutral, non flammable liquids

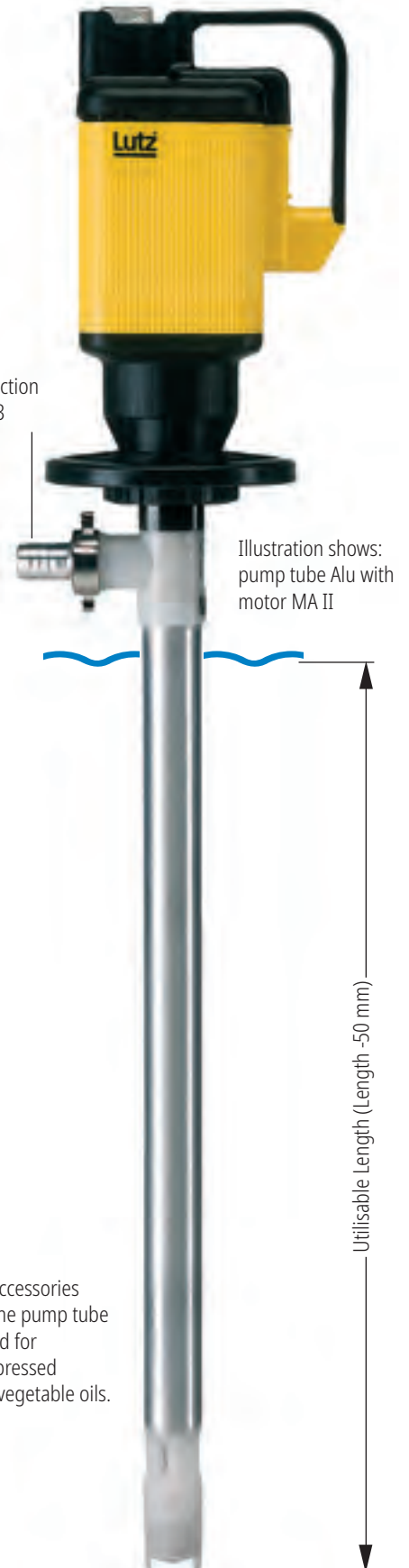
Materials (coming into contact with the pumped medium):

| Version: | SL | MS |
|-------------------|--------------------------|-------------------------------------|
| Housing: | Alu, PVDF | Alu, PVDF |
| Impeller/Rotor: | 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 83



With selected accessories (see page 96) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.



Suitable range of accessories
see pages 80-96

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: | Impeller | Rotor | Impeller | Rotor | | | |
| | 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 Impeller/Rotor | 1.4571 ETFE | 1.4571 ETFE | 1.4571 ETFE | 1.4571 ETFE | | |
| | 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*** | 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 mWS | 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 mWS | 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 |
| Voltage: | 230 V | 230 V | 230 V | Delivery head* up to mWS | 16 | 10 | 16 | 10 |
| LVR.: | no | yes | no | Viscosity** up to mPas | 700 | 550 | 700 | 550 |
| 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 | 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 mWS | 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 |
|  | MD1xL | MD2xL | | Characteristic curve no. | 409 | 408 | 409 | 408 |
| | Output: | 1000 W | 1000 W | Flow rate* up to l/min. | 124 | 276 | 124 | 276 |
| Operating pressure: | 6 bar | 6 bar | ininitely varied | Delivery head* up to mWS | 35 | 20 | 35 | 20 |
| Order No. | 0004-725 | 0004-735 | | Viscosity** up to mPas | 1000 | 1000 | 1000 | 1000 |
| | | | | Density:**** up to kg/dm³ | 2.8 | 2.8 | 2.8 | 2.8 |
| | | | | Weight (kg) Motor + pump tube | 4.3 | 4.3 | 4.3 | 4.3 |
|  | 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 | Protection switch | no | yes | no | yes | |
| Order No. | 0004-050 | 0004-052 | | Viscosity** up to mPas | 500 | 400 | 500 | 400 |
| | | | | Density:**** up to kg/dm³ | 2.2 | 2.0 | 2.2 | 2.0 |
| | | | | Weight (kg) Motor + pump tube | 14.7 | 14.7 | 14.7 | 14.7 |

* 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.

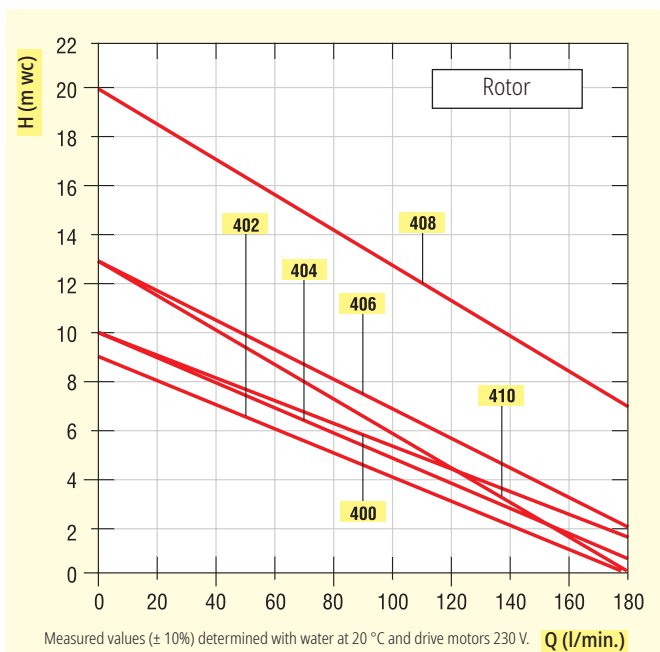
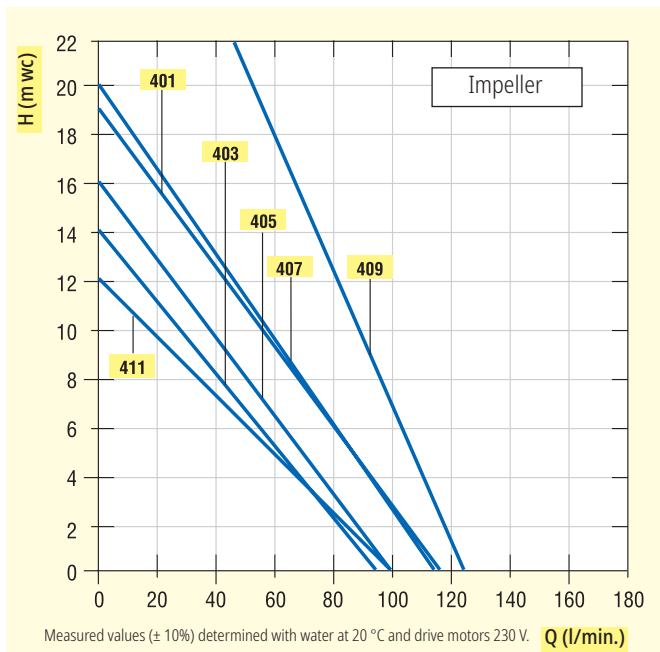
Special voltages and frequencies on request.

Pump Tube SS (stainless steel)

for corrosive and neutral liquids

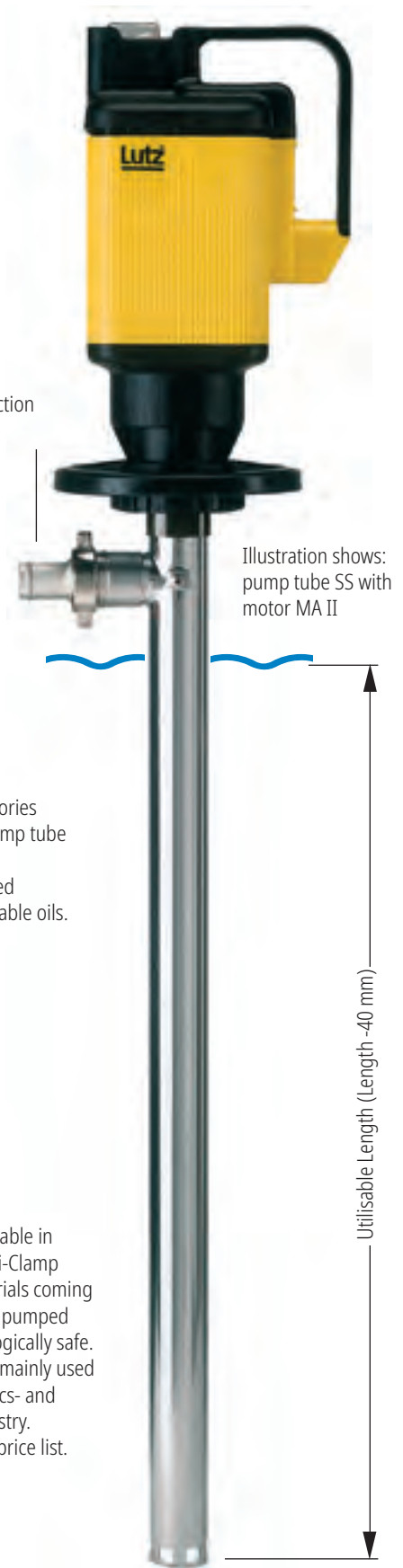
Materials (coming into contact with the pumped medium):

| Version: | SL | MS | SL PURE | MS PURE |
|------------------|-------------|---------------------------------------|-------------|---|
| Housing: | SS (1.4571) | SS (1.4571) | SS (1.4571) | SS (1.4571) |
| Impeller/Rotor: | 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 83



With selected accessories (see page 96) the pump tube also can be used for pumping cold-pressed rapeseed- and vegetable oils.

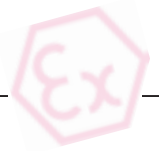


Pump tube also available in PURE version with Tri-Clamp connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry. Additional costs see price list.




Suitable range of accessories
see pages 80-96




Lutz Drum and Container Pumps



Pump tube SS (stainless steel) for highly flammable liquids

| Product detail | Pump tube | SS-SL | | SS-MS | | |
|---|-------------------------------|---------------------|-----------------|-----------------|-----------------|-----------------|
|  | Type of impeller: | Impeller | Rotor | Impeller | Rotor | |
| | 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/Rotor | 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 mWS | 14 | 9 | 14 | 9 |
| | LVR.: | yes no | Viscosity** | up to mPas | 350 | 200 | 350 | 200 |
| | | | Density:**** | up to kg/dm ³ | 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 mWS | 16 | 10 | 16 | 10 |
| | LVR.: | yes no | Viscosity** | up to mPas | 700 | 550 | 700 | 550 |
| | | | Density:**** | up to kg/dm ³ | 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 mWS | 20 | 13 | 20 | 13 |
| | LVR.: | yes no | Viscosity** | up to mPas | 500 | 400 | 500 | 400 |
| | | | Density:**** | up to kg/dm ³ | 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 mWS | 26 | 15 | 26 | 15 |
| | LVR.: | yes no | Viscosity** | up to mPas | 750 | 650 | 750 | 650 |
| | | | Density:**** | up to kg/dm ³ | 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 | |
|  | MD1xL MD2xL | | Characteristic curve no. | 461 | 460 | 461 | 460 | |
| | Output: | 1000 W 1000 W | Flow rate* | up to l/min. | 124 | 276 | 124 | 276 |
| | Operating pressure: | 6 bar 6 bar | Delivery head* | up to mWS | 35 | 20 | 35 | 20 |
| | | infinitely varied | Viscosity** | up to mPas | 1000 | 1000 | 1000 | 1000 |
| | | | Density:**** | up to kg/dm ³ | 2.8 | 2.8 | 2.8 | 2.8 |
| Order No. 0004-725 0004-735 | | | Weight (kg) Motor + pump tube | 4.3 | 4.3 | 4.3 | 4.3 | |

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
** 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.

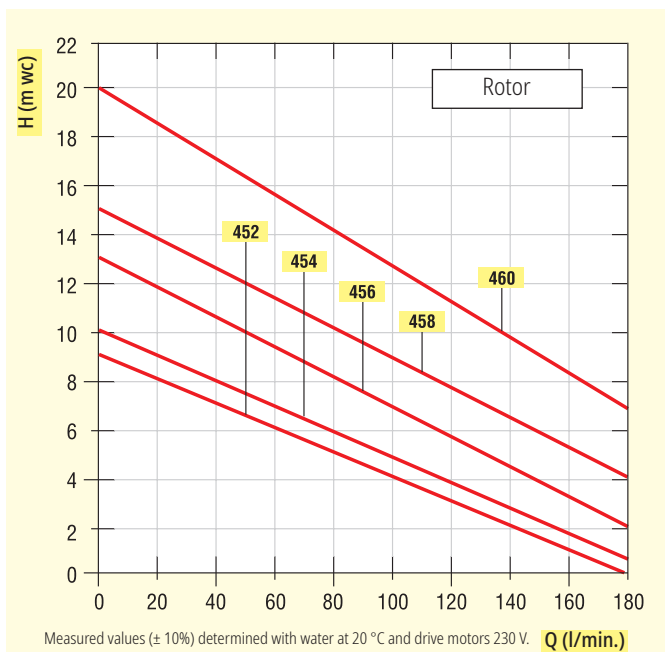
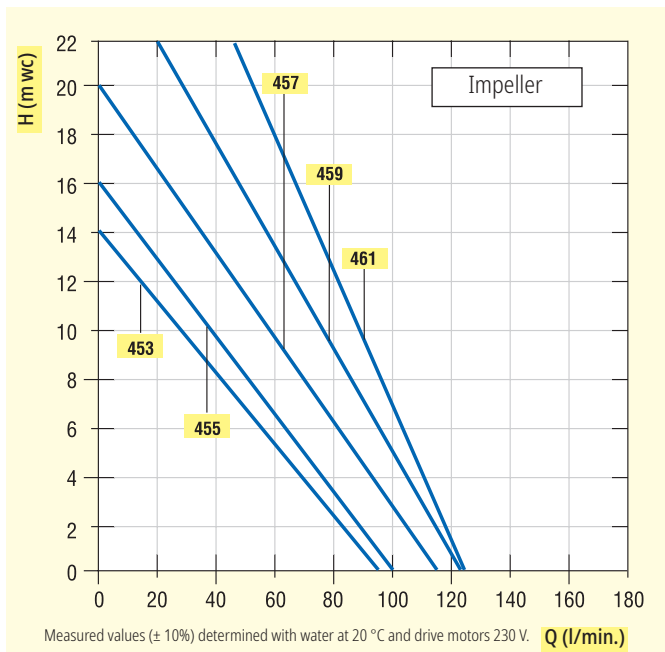
Special voltages and frequencies on request.

Pump Tube SS (stainless steel)

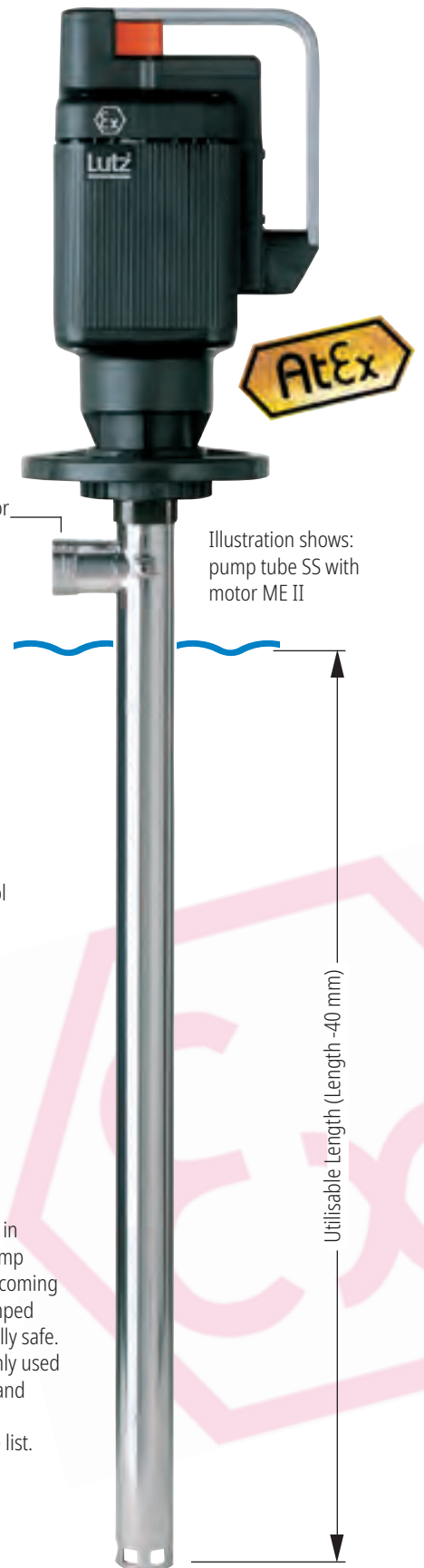
for highly flammable liquids

Materials (coming into contact with the pumped medium):

| Version: | SL | MS | MS PURE |
|------------------|-------------|---------------------------------------|---|
| Housing: | SS (1.4571) | SS (1.4571) | SS (1.4571) |
| Impeller/Rotor: | ETFE | ETFE | ETFE |
| Seals: | none | FPM | FPM, EPDM |
| Mechanical seal: | 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.



Please note:

With a suitable threaded connection the pump tube also can be used for pum-ping hazardous substances for fire control and civil protection.






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 80-96

Lutz Drum and Container Pumps

Pump tube HC (Hastelloy C) for highly corrosive chemicals

| Product detail | Pump tube | HC-SL | | | | |
|--|---|---------------------------------------|---------------------------------------|---------------------------------------|------|------|
|  | Type of impeller: | Impeller | Rotor | | | |
| | 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/Rotor | 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 | | | | |
|  | MI 4 | MI 4-E | Characteristic curve no. | 501 | 500 | |
| | - | with speed controller | Flow rate* up to l/min. | 117 | 210 | |
| | Output: 500 W | 500 W | Delivery head* up to mWS | 19 | 10 | |
| | Voltage: 230 V | 230 V | Viscosity** up to mPas | 500 | 350 | |
| Order No. 0030-000 0030-001 | | Density:**** up to kg/dm ³ | 1.4 | 1.1 | | |
|  | 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 mWS | 14 | 9 | |
| | LVR.: no | yes | Viscosity** up to mPas | 350 | 200 | |
| | Order No. 0060-000 0060-008 | | Density:**** up to kg/dm ³ | 1.6 | 1.2 | |
| | 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 mWS | 16 | 10 |
| | LVR.: no | yes | no | Viscosity** up to mPas | 700 | 550 |
| | Order No. 0060-001 0060-009 0060-091 | | acid proof | Density:**** up to kg/dm ³ | 1.8 | 1.3 |
| <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 mWS | 20 | 13 | |
| | LVR.: no | yes | Viscosity** up to mPas | 500 | 400 | |
| | Order No. 0060-002 0060-010 | | Density:**** up to kg/dm ³ | 1.9 | 1.4 | |
|  | MD1xL | MD2xL | Characteristic curve no. | 509 | 508 | |
| | Output: 1000 W | 1000 W | Flow rate* up to l/min. | 124 | 276 | |
| | Operating pressure: 6 bar | 6 bar | Delivery head* up to mWS | 35 | 20 | |
| | Order No. 0004-725 0004-735 | | ininitely varied | Viscosity** up to mPas | 1000 | 1000 |
|  | 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 mWS | 12 | 13 | |
| | Protection switch: no | yes | Viscosity** up to mPas | 500 | 400 | |
| Order No. 0004-050 0004-052 | | Density:**** up to kg/dm ³ | 2.2 | 2.0 | | |
| | | Weight (kg) Motor + pump tube | 16.2 | 16.2 | | |

* 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.

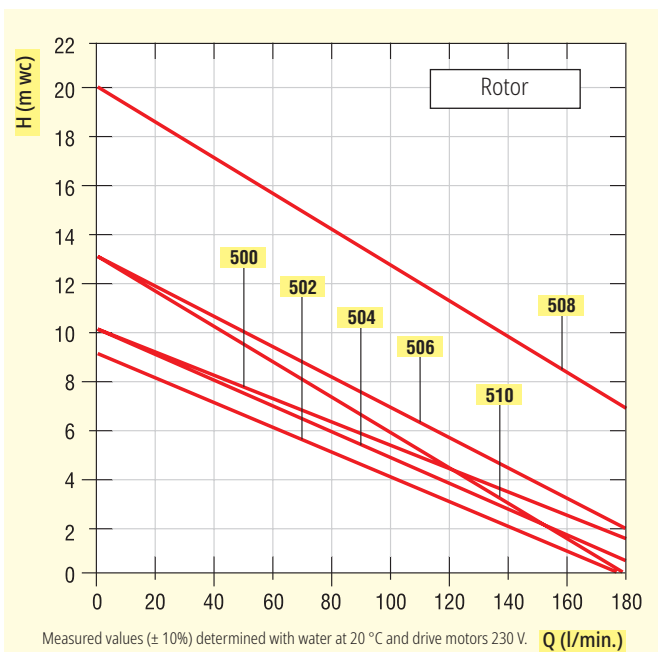
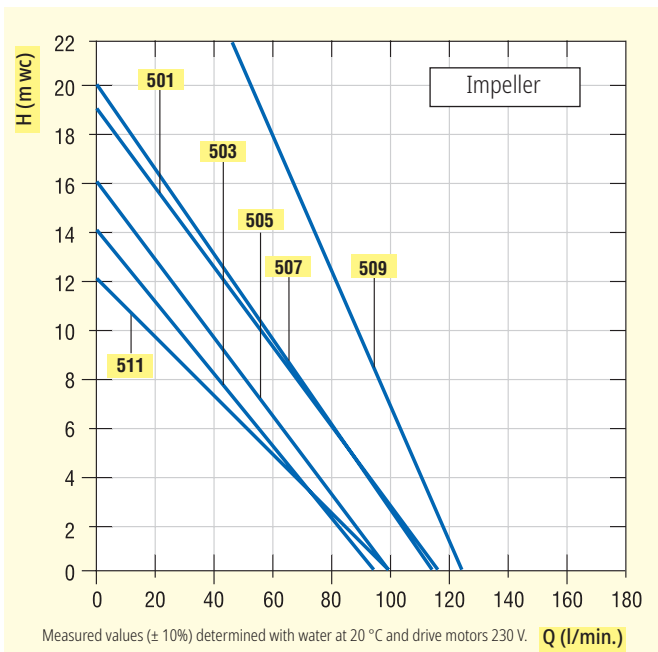
Special voltages and frequencies on request.

Pump Tube HC (Hastelloy C)

for highly corrosive chemicals

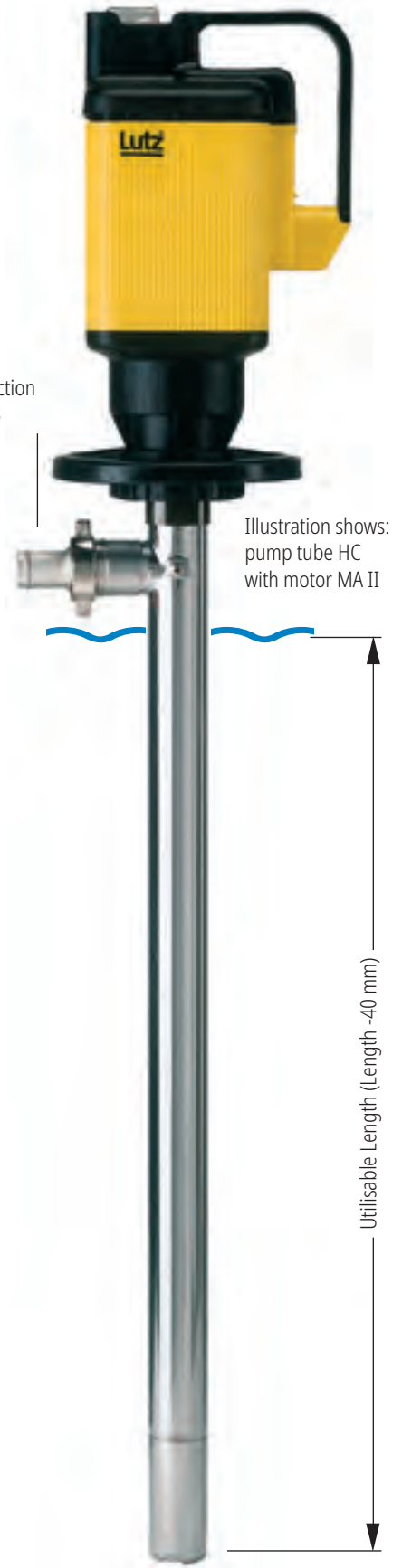
Materials (coming into contact with the pumped medium):

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



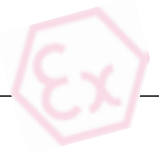
Please remember that the flow rate is reduced as the **viscosity** increases. The **density** of the pumped liquid similarly affects the flow rate, though to a lesser extent.

Accessories
hose connection
see page 83




Suitable range of accessories
see pages 80-96




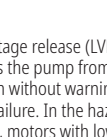

Lutz Drum and Container Pumps



Pump tube HC (Hastelloy C) for highly flammable chemicals

| Product detail | Pump tube | HC-SL | | |
|---|-------------------------------|-------------------------------------|------------------|------------------|
|  | Type of impeller: | Impeller | Rotor | |
| | 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/Rotor | 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 mWS | 14 9 |
| | LVR.: | yes no | Viscosity** | up to mPas | 350 200 |
| | | | Density:**** | up to kg/dm ³ | 1.6 1.2 |
| | Order No. | 0050-000 0050-016 | 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 mWS | 16 10 |
| | LVR.: | yes no | Viscosity** | up to mPas | 700 550 |
| | | | Density:**** | up to kg/dm ³ | 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 mWS | 20 13 |
| | LVR.: | yes no | Viscosity** | up to mPas | 500 400 |
| | | | Density:**** | up to kg/dm ³ | 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 |
| | Voltage: | 230 V 230 V | Delivery head* | up to mWS | 26 15 |
| | LVR.: | yes no | Viscosity** | up to mPas | 750 650 |
| | | | Density:**** | up to kg/dm ³ | 1.9 1.4 |
| | Order No. | 0050-042 0050-041 | Weight (kg) Motor + pump tube | 12.3 | 12.3 |
|  | MD1xL MD2xL | | Characteristic curve no. | 561 | 560 |
| | Output: | 1000 W 1000 W | Flow rate* | up to l/min. | 124 276 |
| | Operating pressure: | 6 bar 6 bar | Delivery head* | up to mWS | 35 20 |
| | | | Viscosity** | up to mPas | 1000 1000 |
| | | | Density:**** | up to kg/dm ³ | 2.8 2.8 |
| | Order No. | 0004-725 0004-735 | Weight (kg) Motor + pump tube | 5.8 | 5.8 |

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
** 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.

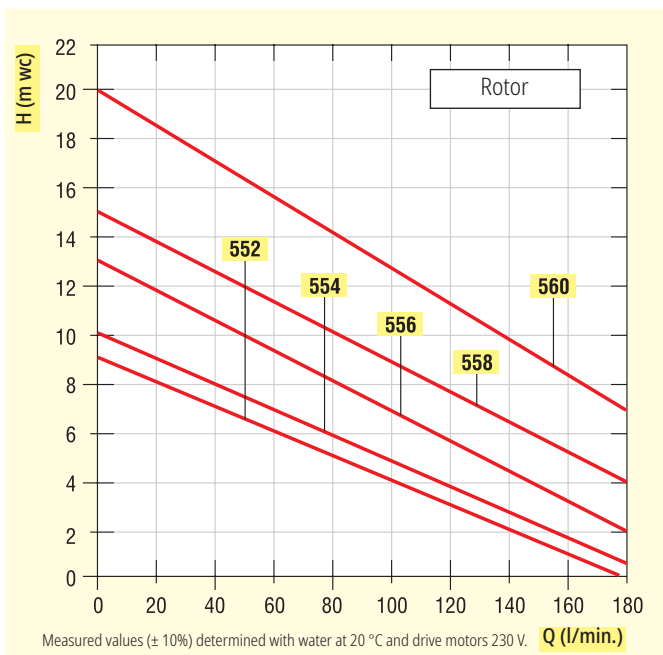
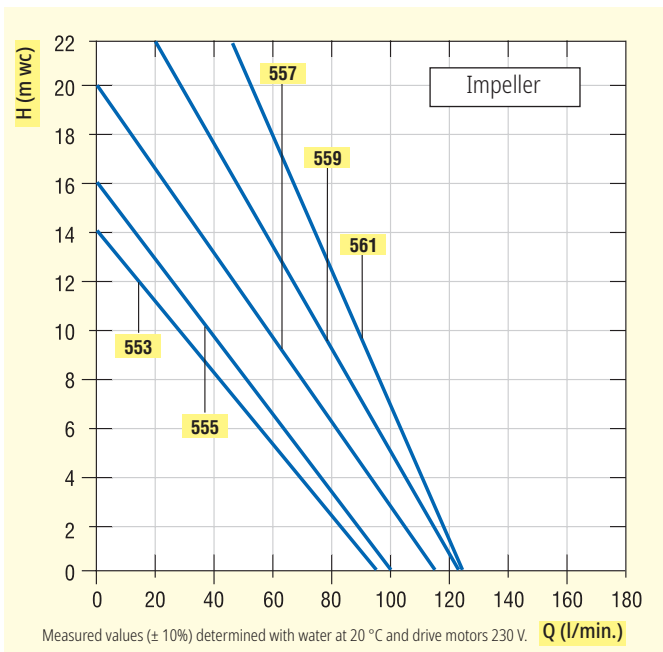
Special voltages and frequencies on request.

Pump Tube HC (Hastelloy C)

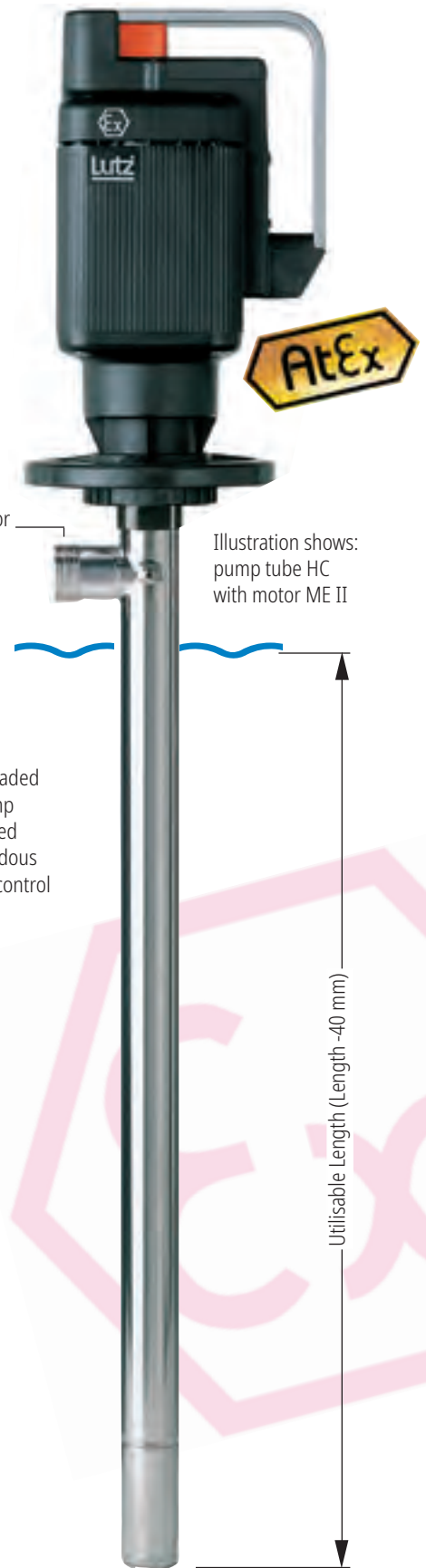
for highly flammable chemicals

Materials (coming into contact with the pumped medium):

| Version: | SL |
|-----------------|------------------|
| Housing: | HC-22 (2.4602) |
| Impeller/Rotor: | 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.



Conductive hose connector see page 84

Illustration shows: pump tube HC with motor ME II

Please note:

With a suitable threaded connection the pump tube also can be used for pum-ping hazardous substances for fire control and civil protection.



Suitable range of accessories see pages 80-96

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.**

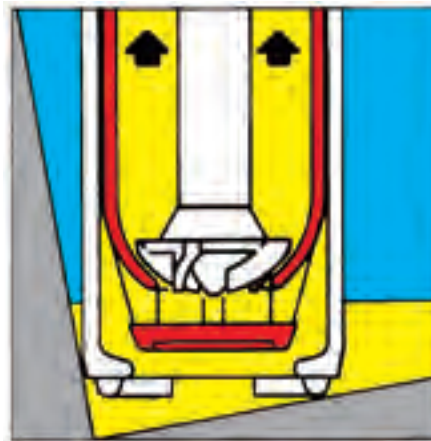
Competitive edge instead of drawback

Experts, never tired of work:

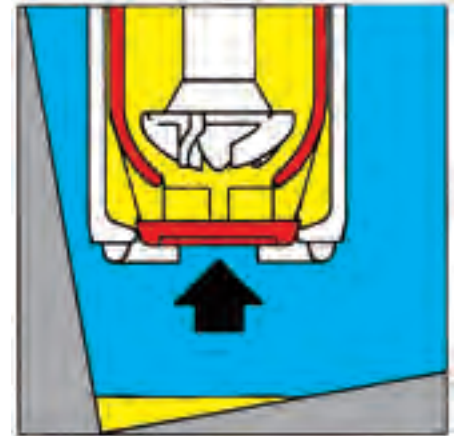
Lutz pump tubes RE in stainless steel and polypropylene. They do not only protect the environment, but also help to save money. On the one hand, the liquid is used to the maximum, on the other hand, the cost for disposing of residuals is drastically reduced, since only the slightest residue remains in 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 convince with their simple 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 their strengths in the field of aggressive, neutral, easily flammable and non flammable 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.

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.

Important

A stainless steel pump tube and an explosion proof motor with Atex certification must be used for pumping easily flammable liquids. Please refer to pages 36-37.



Logical decision: Service-friendly design

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

Small but very useful

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
















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-flammable liquids.



MA II

These motors aren't taken back easily. The ME II explosion proof universal motors are the nostrum (German Patent DE 3815427 C2 - for pumping a large variety of thin-bodied, easily flammable and combustible liquids.








ME II

Small Motor - Great Effect

MDxL compressed air motors are available in two versions: MD1xL ideal for stationary operation, MD2xL infinitely variable speed with convenient grip as standard equipment. The motors can also be used to pump easy flammable liquids and comply with the Atex guidelines.



MD1xL



MD2xL




MD1xL/MD2xL compressed air motors

Tip

For detailed information on the motors please refer to pages 34-37.

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.






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

| Product detail | Pump tube | RE-PP GLRD | | | |
|---|-------------------------------|---------------------------------------|-------------------------------|---------------------------------------|------|
|  | Type of impeller: | Impeller | | | |
| | Category 1 / 2 (acc. to ATEX) | no | | | |
| | Immersion tube diameter: | up to mm | 41 | | |
| | Temperature of medium: | up to °C | 50 | | |
| | Material: | Pump tube Impeller | PP PP | | |
| | Hose connection: | Nominal diameter mm Outer thread | 19-32 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 | |
| | - | with speed controller | Flow rate* up to l/min. | 70 | |
| Output: 500 W | 500 W | Delivery head* up to mWS | 12 | | |
| Voltage: 230 V | 230 V | Viscosity** up to mPas | 1000 | | |
| Order No. 0030-000 | 0030-001 | Density:**** up to kg/dm ³ | 1.6 | | |
| | | Weight (kg) Motor + pump tube | 4.0 | | |
|  | MA II 3 | | Characteristic curve no. | 601 | |
| | Output: 460 W | 460 W | Flow rate* up to l/min. | 60 | |
| | Voltage: 230 V | 230 V | Delivery head* up to mWS | 11 | |
| | LVR.: no | yes | Viscosity** up to mPas | 800 | |
| Order No. 0060-000 | 0060-008 | Density:**** up to kg/dm ³ | 1.7 | | |
| | | Weight (kg) Motor + pump tube | 5.8 | | |
|  | MA II 5 | MA II 5 | MA II 5 S | Characteristic curve no. | 602 |
| | Output: 575 W | 575 W | 575 W | Flow rate* up to l/min. | 60 |
| | Voltage: 230 V | 230 V | 230 V | Delivery head* up to mWS | 11.5 |
| | LVR.: no | yes | no | Viscosity** up to mPas | 1200 |
| Order No. 0060-001 | 0060-009 | 0060-091 | acid proof | Density:**** up to kg/dm ³ | 2.0 |
| | | | Weight (kg) Motor + pump tube | 6.6 | |
|  | MA II 7 | | Characteristic curve no. | 603 | |
| | Output: 795 W | 795 W | Flow rate* up to l/min. | 69 | |
| | Voltage: 230 V | 230 V | Delivery head* up to mWS | 15 | |
| | LVR.: no | yes | Viscosity** up to mPas | 1000 | |
| Order No. 0060-002 | 0060-010 | Density:**** up to kg/dm ³ | 2.0 | | |
| | | Weight (kg) Motor + pump tube | 7.8 | | |
|  | MD1xL | MD2xL | Characteristic curve no. | 604 | |
| | Output: 1000 W | 1000 W | Flow rate* up to l/min. | 69 | |
| | Operating pressure: 6 bar | 6 bar | Delivery head* up to mWS | 19 | |
| | | infinitely varied | Viscosity** up to mPas | 1000 | |
| Order No. 0004-725 | 0004-735 | Density:**** up to kg/dm ³ | 2.8 | | |
| | | Weight (kg) Motor + pump tube | 2.6 | | |

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

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

***Special lengths 400–1500 mm on request

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

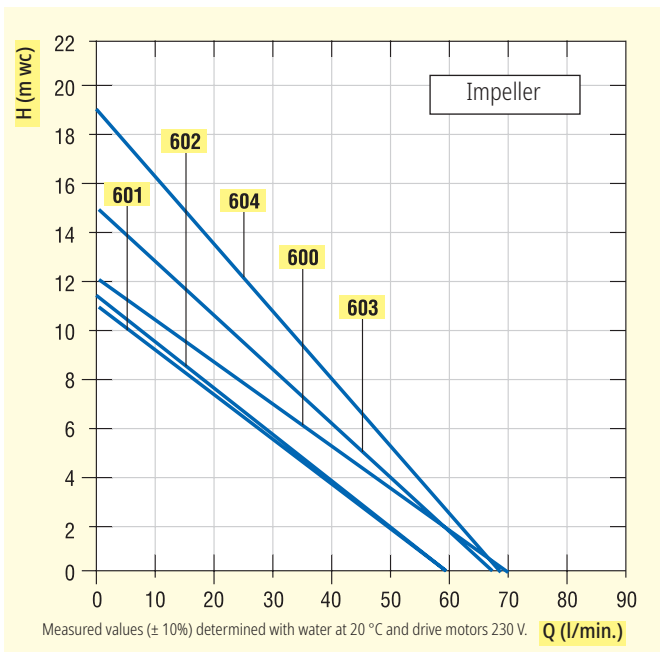
Special voltages and frequencies on request.

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) or HC-4 (2.4610) |

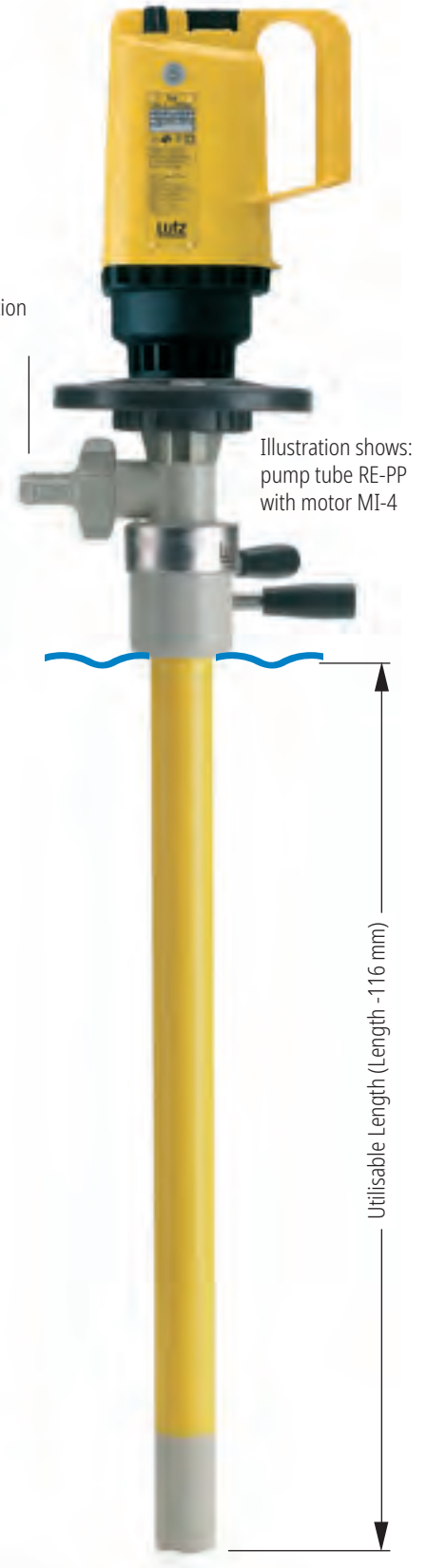


Tip

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 83



Suitable range of accessories
see pages 80-96

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 GLRD | | | |
|--|-------------------------------|-------------------------------------|---|------------------|---|
|  | Type of impeller: | Impeller | | | |
| | 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 mWS 17 Viscosity** up to mPas 700 Density:**** up to kg/dm ³ 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 mWS 14 Viscosity** up to mPas 500 Density:**** up to kg/dm ³ 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 | MA II 5 | | MA II 5 S | Characteristic curve no. 702 Flow rate* up to l/min. 77 Delivery head* up to mWS 14 Viscosity** up to mPas 900 Density:**** up to kg/dm ³ 1.8 Weight (kg) Motor + pump tube 8.6 |
| | 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. 703 Flow rate* up to l/min. 70 Delivery head* up to mWS 18 Viscosity** up to mPas 700 Density:**** up to kg/dm ³ 1.9 Weight (kg) Motor + pump tube 9.8 | | |
| | Output: 795 W | 795 W | | | |
| | Voltage: 230 V | 230 V | | | |
| | LVR.: no | yes | | | |
| Order No. | 0060-002 | 0060-010 | | | |
|  | MD1xL | MD2xL | Characteristic curve no. 704 Flow rate* up to l/min. 67 Delivery head* up to mWS 28 Viscosity** up to mPas 1000 Density:**** up to kg/dm ³ 2.8 Weight (kg) Motor + pump tube 4.6 | | |
| | Output: 1000 W | 1000 W | | | |
| | Operating pressure: 6 bar | 6 bar infinitely varied | | | |
| | Order No. | 0004-725 | | 0004-735 | |
|  | B4/GT | | Characteristic curve no. 705 Flow rate* up to l/min. 55 Delivery head* up to mWS 8.5 Viscosity** up to mPas 600 Density:**** up to kg/dm ³ 2.2 Weight (kg) Motor + pump tube 15.0 | | |
| | Output: 750 W | 750 W | | | |
| | Voltage: 230/400 V | 230/400 V | | | |
| | Protection switch: no | yes | | | |
| Order No. | 0004-050 | 0004-052 | | | |

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

***Special lengths
 400–2000 mm on request

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

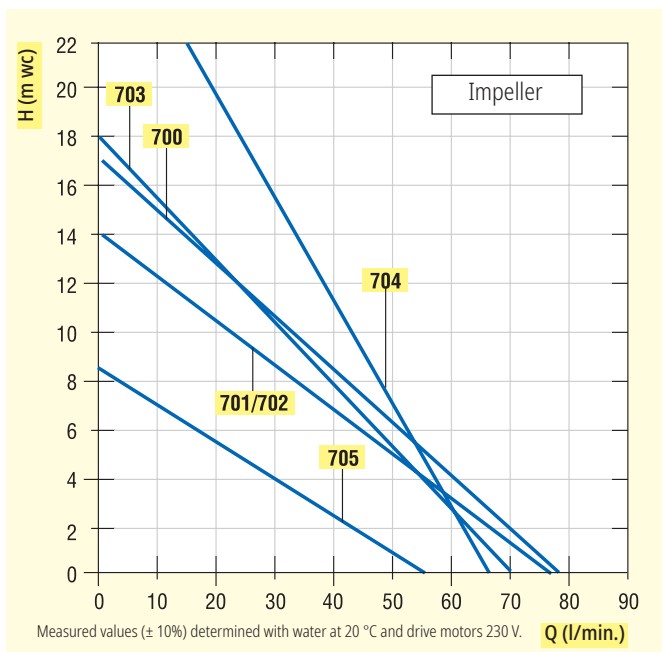
Special voltages and frequencies on request.

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) |

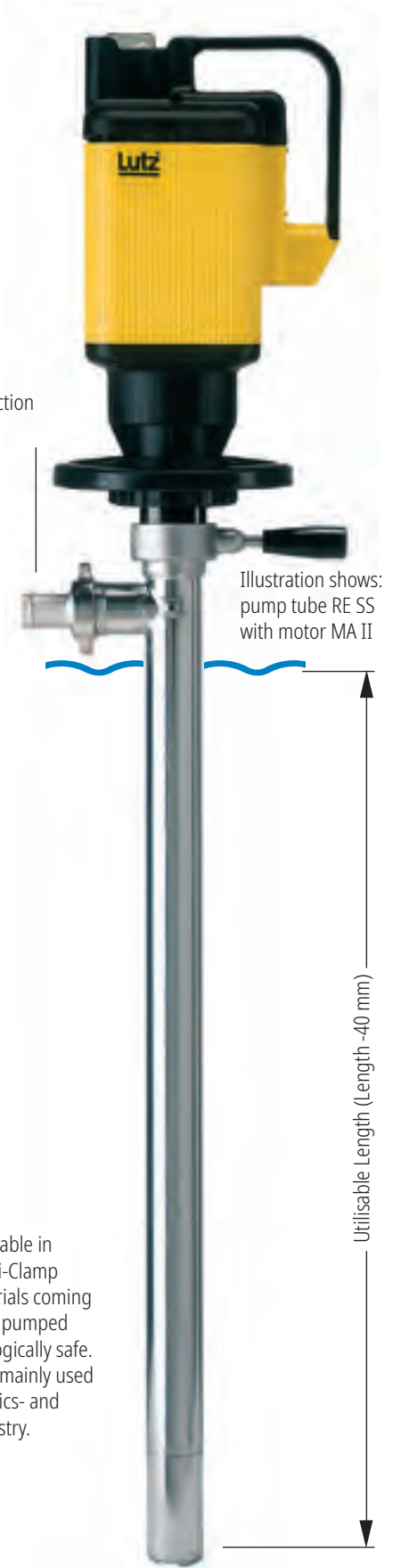


Complete drum drainage

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 83



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.




Suitable range of accessories
see pages 80-96




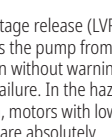

Lutz Drum and Container Pumps



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

| Product detail | Pump tube | RE-SS GLRD | |
|---|-------------------------------|-------------------------------------|------------------|
|  | Type of impeller: | Impeller | |
| | 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 mWS 14 |
| | LVR.: | yes no | Viscosity** | up to mPas 500 |
| | | | Density:**** | up to kg/dm ³ 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 mWS 14 |
| | LVR.: | yes no | Viscosity** | up to mPas 900 |
| | | | Density:**** | up to kg/dm ³ 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 mWS 18 |
| | LVR.: | yes no | Viscosity** | up to mPas 700 |
| | | | Density:**** | up to kg/dm ³ 1.9 |
| | Order No. | 0050-002 0050-018 | Weight (kg) Motor + pump tube | 11.1 |
| <p>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.</p>  | 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 mWS 22 |
| | LVR.: | yes no | Viscosity** | up to mPas 950 |
| | | | Density:**** | up to kg/dm ³ 1.9 |
| | Order No. | 0050-042 0050-041 | Weight (kg) Motor + pump tube | 11.1 |
|  | MD1xL MD2xL | | Characteristic curve no. | 754 |
| | Output: | 1000 W 1000 W | Flow rate* | up to l/min. 67 |
| | Operating pressure: | 6 bar 6 bar | Delivery head* | up to mWS 28 |
| | | infinitely varied | Viscosity** | up to mPas 1000 |
| | | | Density:**** | up to kg/dm ³ 2.8 |
| | Order No. | 0004-725 0004-735 | Weight (kg) Motor + pump tube | 4.6 |

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

***Special lengths
400–2000 mm on request

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

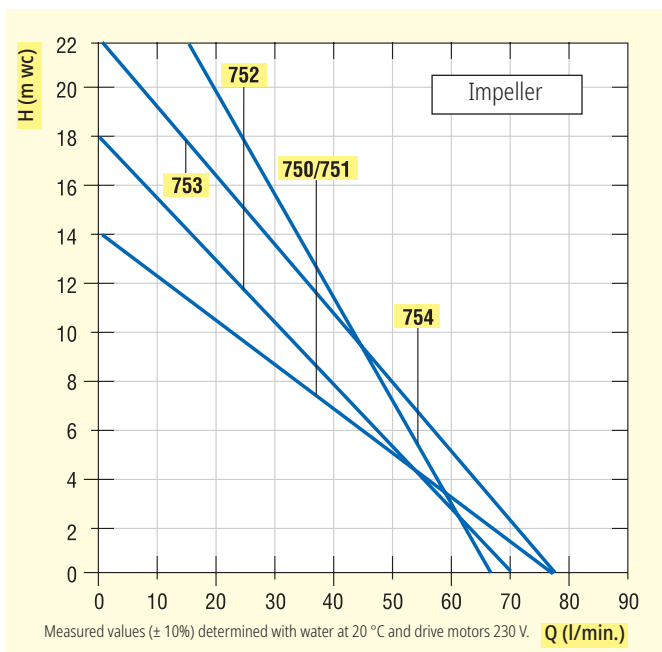
Special voltages and frequencies on request.

Pump Tube RE-SS (stainless steel)

for complete drum drainage of highly flammable liquids

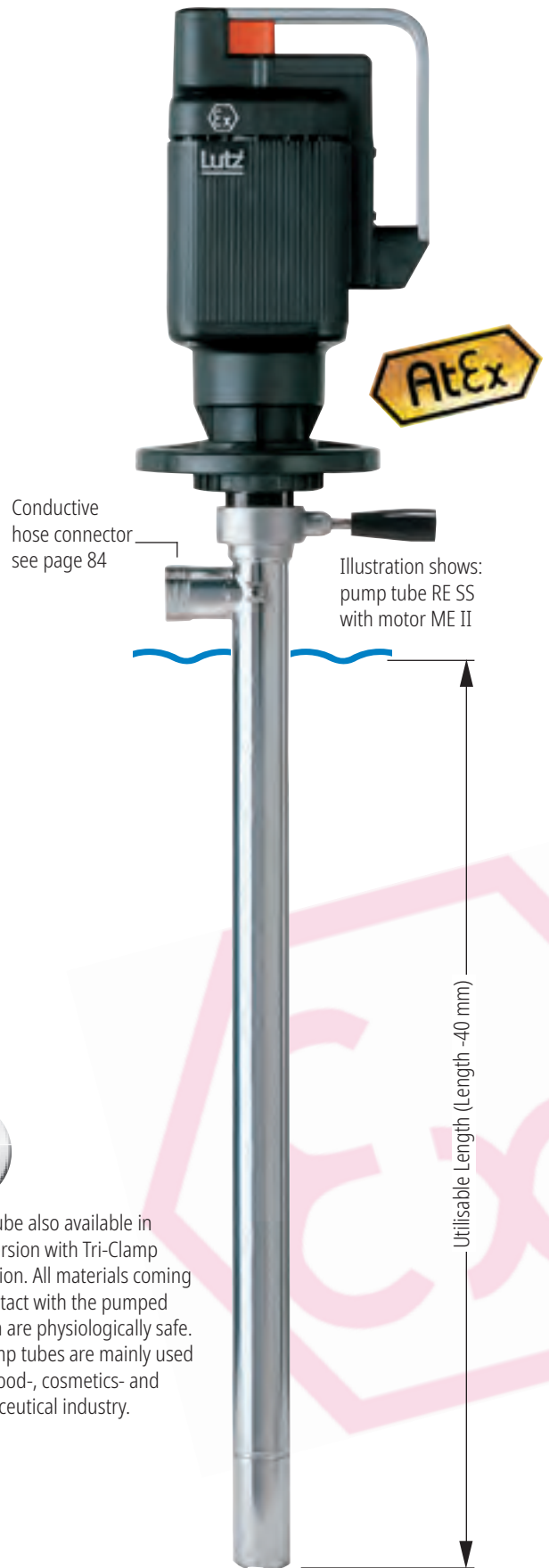
Materials (coming into contact with the pumped medium):

| 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.



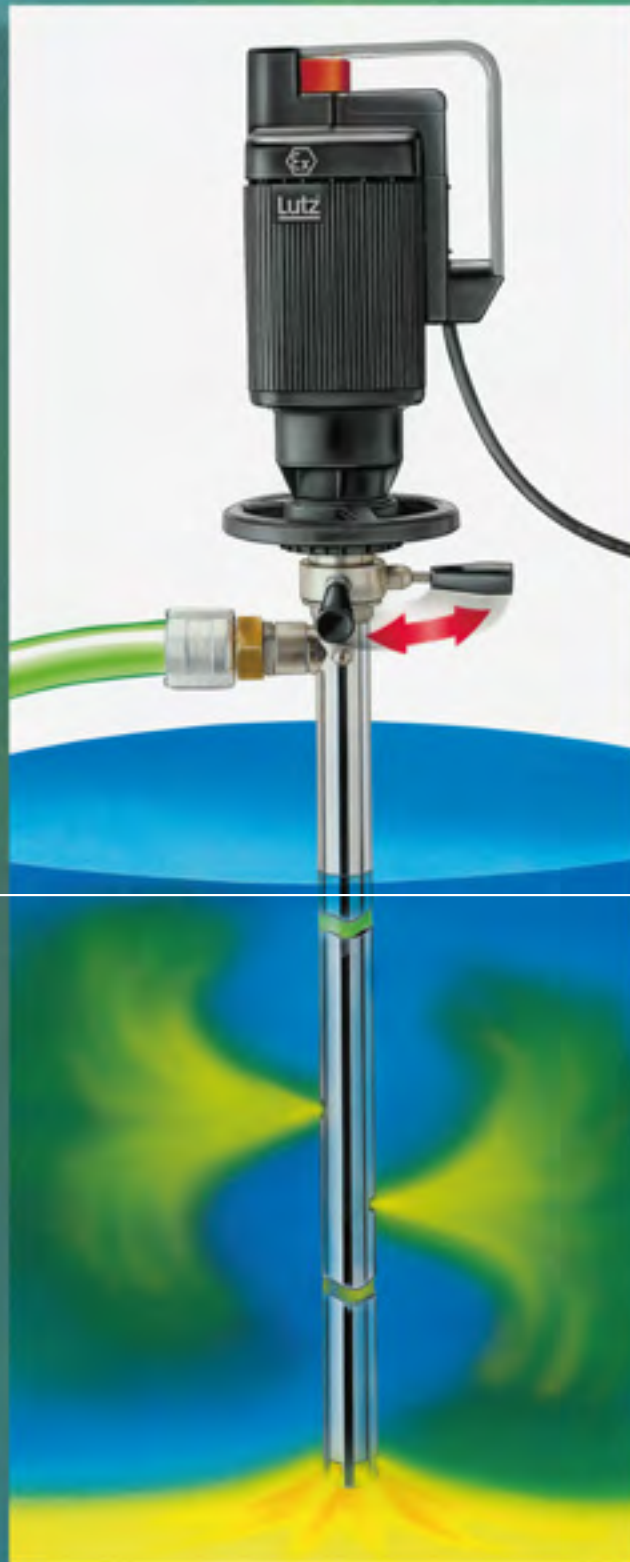
Pump tube also available in PURE version with Tri-Clamp connection. All materials coming into contact with the pumped medium are physiologically safe. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.



Suitable range of accessories see pages 80-96

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 flammable 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 flammable 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.

Important

A stainless steel pump tube and an explosion proof motor with ATEX certification must be used for pumping easily flammable liquids. Please refer to pages 36-37.

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.



Small but very useful

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














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-flammable liquids.




MA II

Safety first

These motors aren't taken back easily. The ME II explosion proof universal motors are the nostrum (German Patent DE 3815427 C2 - for pumping a large variety of thin-bodied, easily flammable and combustible liquids.








ME II

Small Motor - Great Effect

MDxL compressed air motors are available in two versions: MD1xL ideal for stationary operation, MD2xL infinitely variable speed with convenient grip as standard equipment. The motors can also be used to pump easy flammable liquids and comply with the Atex guidelines.



MD1xL



MD2xL




MD1xL/MD2xL compressed air motors

Tip

For detailed information on the motors please refer to pages 34-37.

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.







B4/GT three-phase gear motor




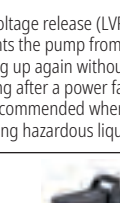

Lutz Drum and Container Pumps

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: | | Impeller | Rotor | Impeller | Rotor | |
| | 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/Rotor | 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. | 0110-350 | * | 0103-350 | * |
| | Length: 1200 mm*** | shaft SS | Order No. | * | 0110-360 | * | * |
| Length: 1000 mm*** | shaft HC | Order No. | 0110-355 | * | * | * | |
| Length: 1200 mm*** | shaft HC | Order No. | * | 0110-365 | * | * | |

*available on request

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 mWS | 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 | |
|  | 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 mWS | 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 | |
|  | 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. | 83 | 160 | 83 | 160 |
| | Voltage: 230 V | 230 V | 230 V | Delivery head* up to mWS | 18 | 9 | 18 | 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 |
|  | MA II 7 | | | Characteristic curve no. | 808 | 807 | 808 | 807 |
| | Output: 795 W | 795 W | | Flow rate* up to l/min. | 95 | 170 | 95 | 170 |
| | Voltage: 230 V | 230 V | | Delivery head* up to mWS | 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 |
|  | MD1xL | MD2xL | | Characteristic curve no. | 810 | 809 | 810 | 809 |
| | Output: 1000 W | 1000 W | | Flow rate* up to l/min. | 116 | 216 | 116 | 216 |
| | Operating pressure: 6 bar | 6 bar | infinitely varied | Delivery head* up to mWS | 36 | 16 | 36 | 16 |
| | | | | Viscosity** up to mPas | 1000 | 1000 | 1000 | 1000 |
| | Order No. 0004-725 | 0004-735 | | Density:**** up to kg/dm³ | 2.8 | 2.8 | 2.8 | 2.8 |
| | | | Weight (kg) Motor + pump tube | 2.7 | 2.7 | 2.7 | 2.7 | |

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

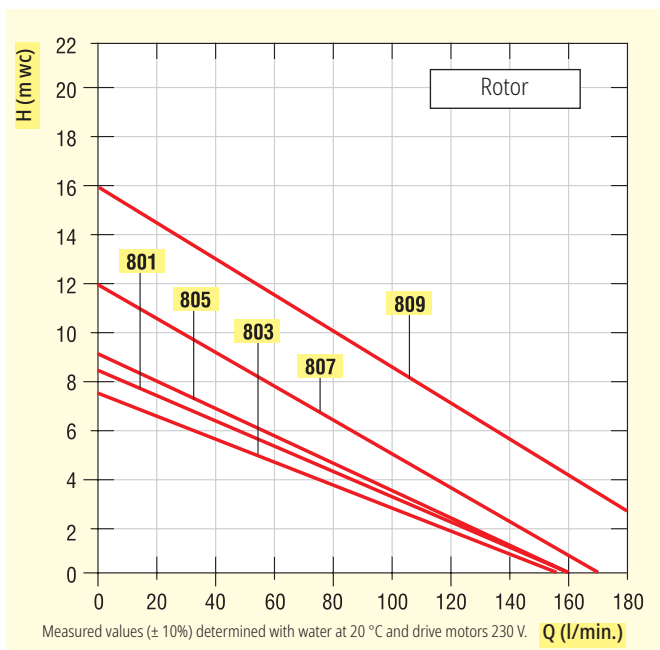
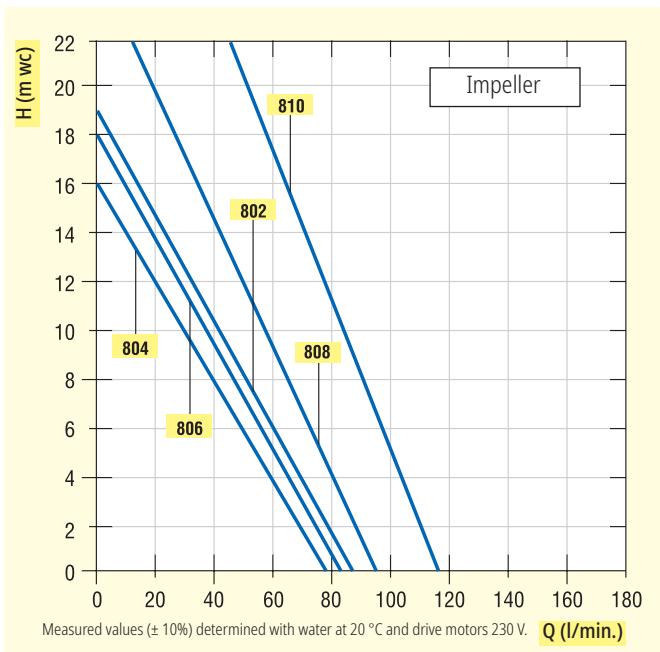
* Determined with water at 20 °C ** Determined with oil ***Special lengths 400–2000 mm on request ****Determined with 3 m hose 3/4" and open nozzle 3/4". Higher densities possible for shorter operating periods. Special voltages and frequencies on request.

Pump Tube MP-PP (polypropylene)

for mixing and pumping of corrosive and neutral liquids

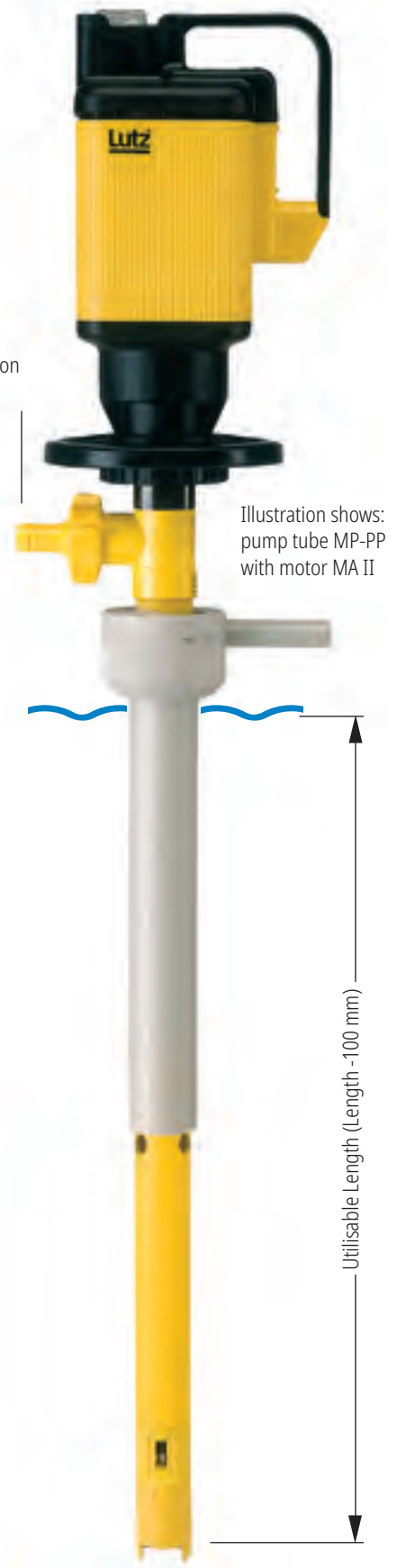
Materials (coming into contact with the pumped medium):

| Version: | SL | MS |
|-------------------|---|---|
| Housing: | PP/PVDF | PP/PVDF |
| Impeller/Rotor: | 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) |



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 83



Suitable range of accessories
see pages 80-96

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 GLRD | | | |
|---|-------------------------------|----------------------------|---|------------------|--|
|  | Type of impeller: | Rotor | | | |
| | 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 | | |
| | | Rotor | ETFE | | |
| | Hose connection: | Nominal diameter mm | 19-32 | | |
| | | Outer thread | G 1 1/4 | | |
| Length: 1000 mm*** | Order No. | 0151-240 | | | |
| Length: 1225 mm*** | Order No. | 0151-255 | | | |
| Choice of motors | | Operating data | | | |
|  | MI 4 | MI 4-E | Characteristic curve no. 900 Flow rate* up to l/min. 210 Delivery head* up to mWS 10 Viscosity** up to mPas 350 Density:**** up to kg/dm³ 1.1 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. 901 Flow rate* up to l/min. 178 Delivery head* up to mWS 9 Viscosity** up to mPas 200 Density:**** up to kg/dm³ 1.2 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 | MA II 5 | | MA II 5 S | Characteristic curve no. 902 Flow rate* up to l/min. 190 Delivery head* up to mWS 10 Viscosity** up to mPas 550 Density:**** up to kg/dm³ 1.3 Weight (kg) Motor + pump tube 8.6 |
| | 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 |
| MA II 7 | | | Characteristic curve no. 903 Flow rate* up to l/min. 210 Delivery head* up to mWS 13 Viscosity** up to mPas 400 Density:**** up to kg/dm³ 1.4 Weight (kg) Motor + pump tube 9.8 | | |
| Output: 795 W | 795 W | | | | |
| Voltage: 230 V | 230 V | | | | |
| LVR.: no | yes | | | | |
| Order No. | 0060-002 | 0060-010 | | | |
|  | MD1xL | MD2xL | Characteristic curve no. 904 Flow rate* up to l/min. 245 Delivery head* up to mWS 21 Viscosity** up to mPas 1000 Density:**** up to kg/dm³ 2.8 Weight (kg) Motor + pump tube 4.6 | | |
| | Output: 1000 W | 1000 W | | | |
| | Operating pressure: 6 bar | 6 bar infinitely varied | | | |
| | Order No. | 0004-725 | | 0004-735 | |
|  | B4/GT | | Characteristic curve no. 905 Flow rate* up to l/min. 140 Delivery head* up to mWS 10.5 Viscosity** up to mPas 400 Density:**** up to kg/dm³ 2.0 Weight (kg) Motor + pump tube 15.0 | | |
| | Output: 750 W | 750 W | | | |
| | Voltage: 230/400 V | 230/400 V | | | |
| | Protection switch | no | | yes | |
| | Order No. | 0004-050 | | 0004-052 | |
| | | | | | |

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 600–2500 mm on request

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

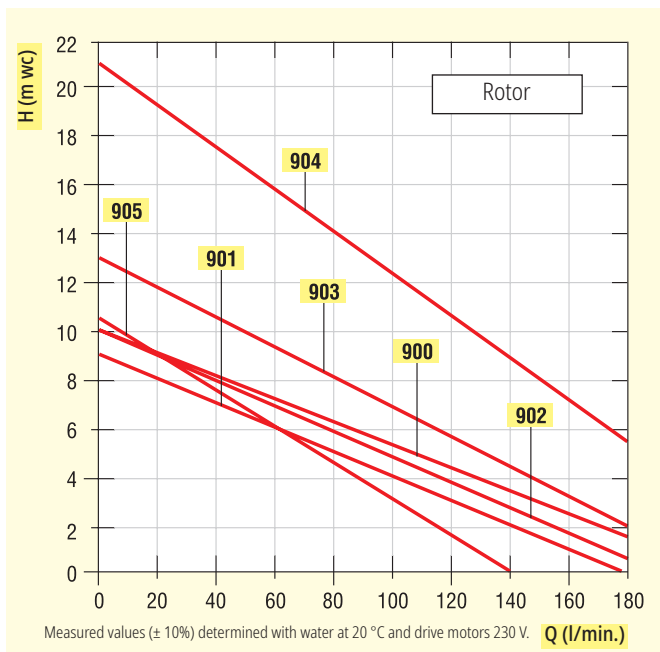
Special voltages and frequencies on request.

Pump Tube MP-SS (stainless steel)

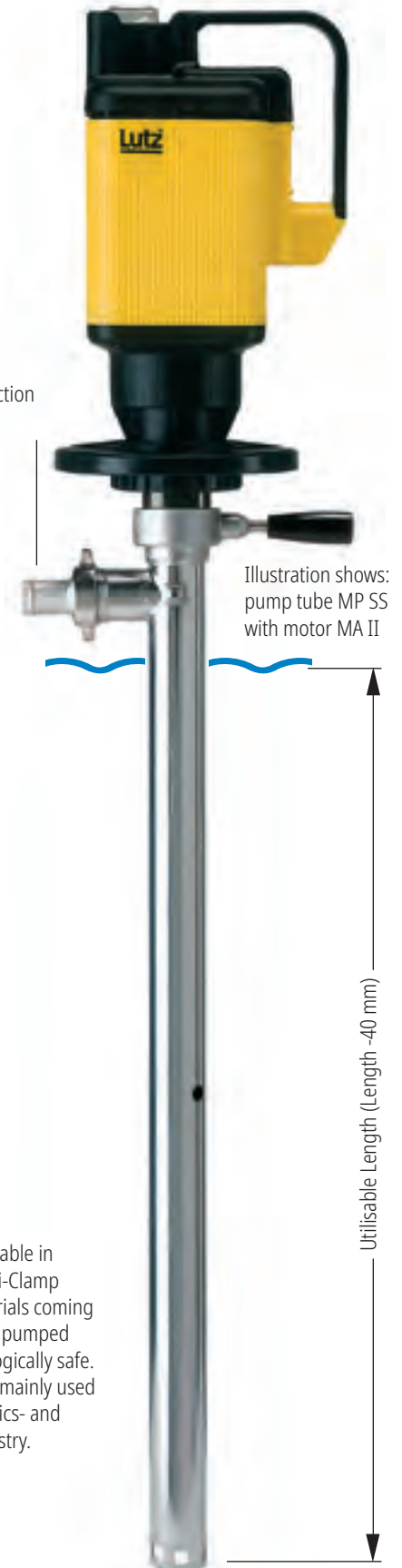
for mixing and pumping of corrosive and neutral liquids

Materials (coming into contact with the pumped medium):

| Version: | MS | MS PURE |
|-------------------|---|---|
| Housing: | Stainless steel (1.4571) | Stainless steel (1.4571) |
| Rotor: | 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 83



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.

Tip

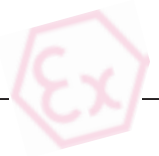
Which pump for which liquid?
See resistance table

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 80-96


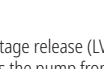

Lutz Drum and Container Pumps



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

| Product detail | Pump tube | MP-SS GLRD | |
|---|-------------------------------|---------------------|---------|
|  | Type of impeller: | Rotor | |
| | 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 |
| | | Rotor | ETFE |
| | Hose connection: | Nominal diameter mm | 19-32 |
| | | Outer thread | G 1 1/4 |
| Length: 1000 mm*** | Order No. | 0151-240 | |
| Length: 1225 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 mWS 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 mWS 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 mWS 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 mWS 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 |
|  | MD1xL MD2xL | | Characteristic curve no. | 954 |
| | Output: | 1000 W 1000 W | Flow rate* | up to l/min. 245 |
| | Operating pressure: | 6 bar 6 bar | Delivery head* | up to mWS 21 |
| | | infinitely varied | Viscosity** | up to mPas 1000 |
| | | | Density:**** | up to kg/dm ³ 2.8 |
| | Order No. | 0004-725 0004-735 | Weight (kg) Motor + pump tube | 4.6 |

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
** Determined with oil

***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.

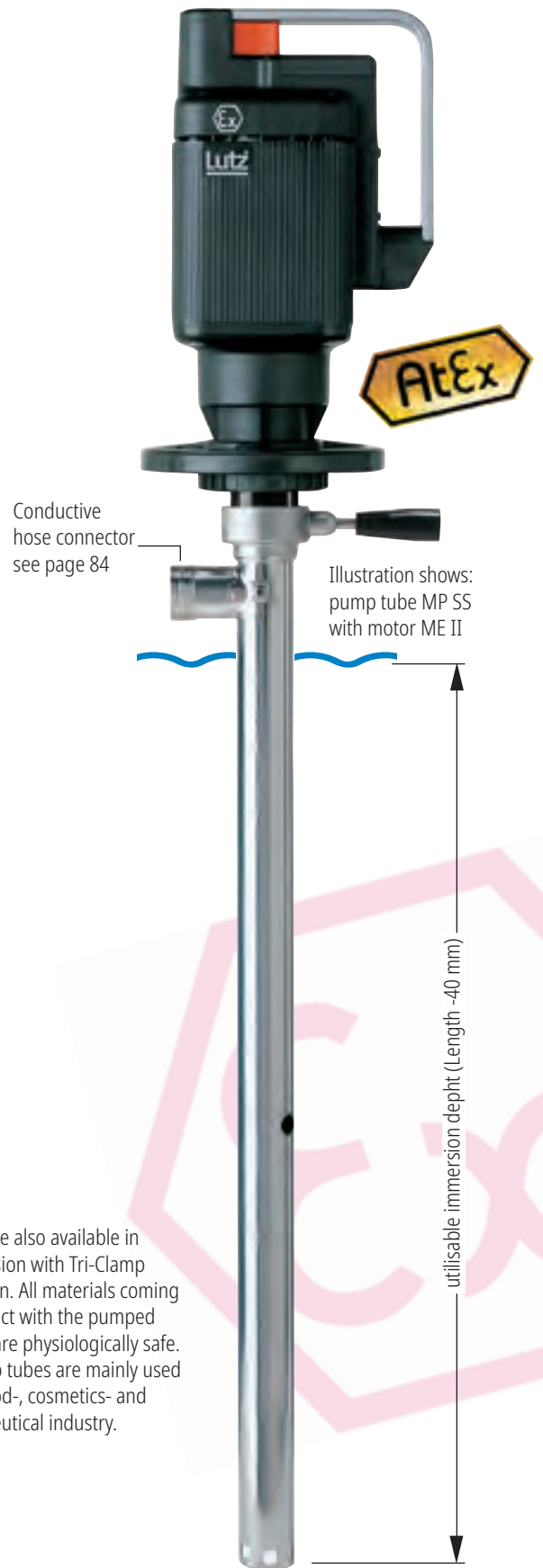
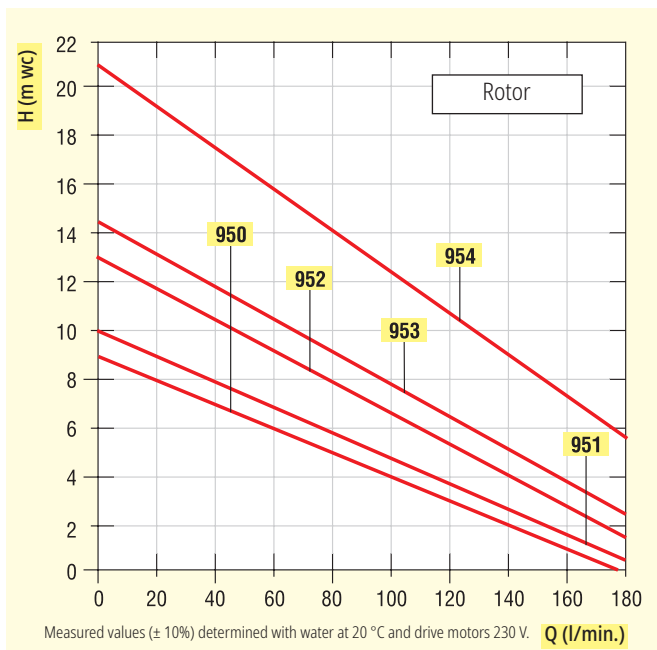
Special voltages and frequencies on request.

Pump Tube MP-SS (stainless steel)

for mixing and pumping of highly flammable liquids

Materials (coming into contact with the pumped medium):

| Version: | MS | MS PURE |
|-------------------|---|---|
| Housing: | Stainless steel (1.4571) | Stainless steel (1.4571) |
| Rotor: | 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.



Suitable range of accessories see pages 80-96

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



Saves time when emptying containers

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.

- ✓ 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
- ✓ Driven by a powerful capacitor start motor (230 V, 50 Hz, with a 5 m connecting cable and plug)
- ✓ Quick-change system for container caps for nominal sizes DN 150 and DN 225.

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 B50 can be adapted to all common IBC containers via the quick-change system of the container caps.

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.

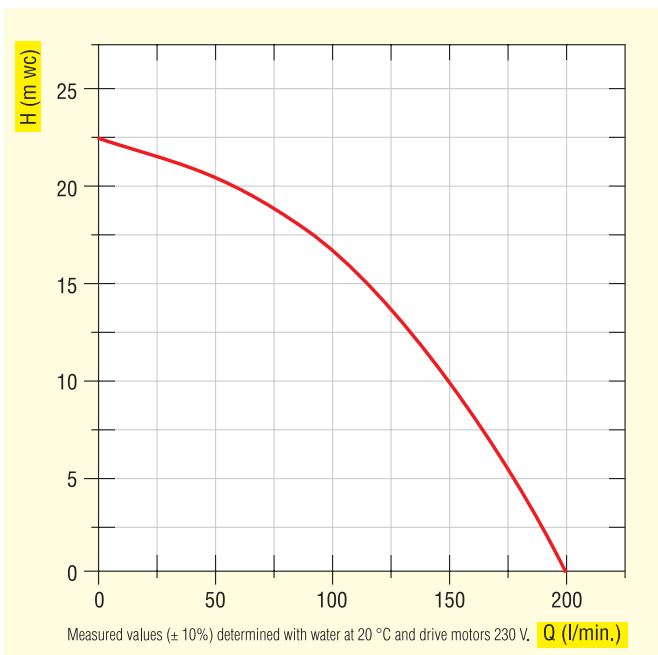


Container Pump B50

for bulk transfer of chemicals

Materials (coming into contact with the pumped medium):

| Version: | B50 PP/HC | B50 PP/SS |
|----------------------------|----------------------|--------------------------|
| Pump tube: | Polypropylen (PP) | Polypropylen (PP) |
| Impeller/diffuser material | PPO / PPE | PPO / PPE |
| Mechanical seals: | Carbon / SiC / HC | Carbon / SiC / HC |
| Secondary seal: | FPM (EPDM) | FPM (EPDM) |
| Drive shaft: | Hastelloy C (2.4610) | Stainless steel (1.4571) |
| Container cap: | PE/PP | PE/PP |



The quick-change system of the container caps makes it possible to adapt the B50 pump to the nominal diameter of the IBC container in just a few simple steps and then securely fix it there.



Suitable range of accessories see page 97

Accessories Lutz Drum and Container Pumps

"Getting started"



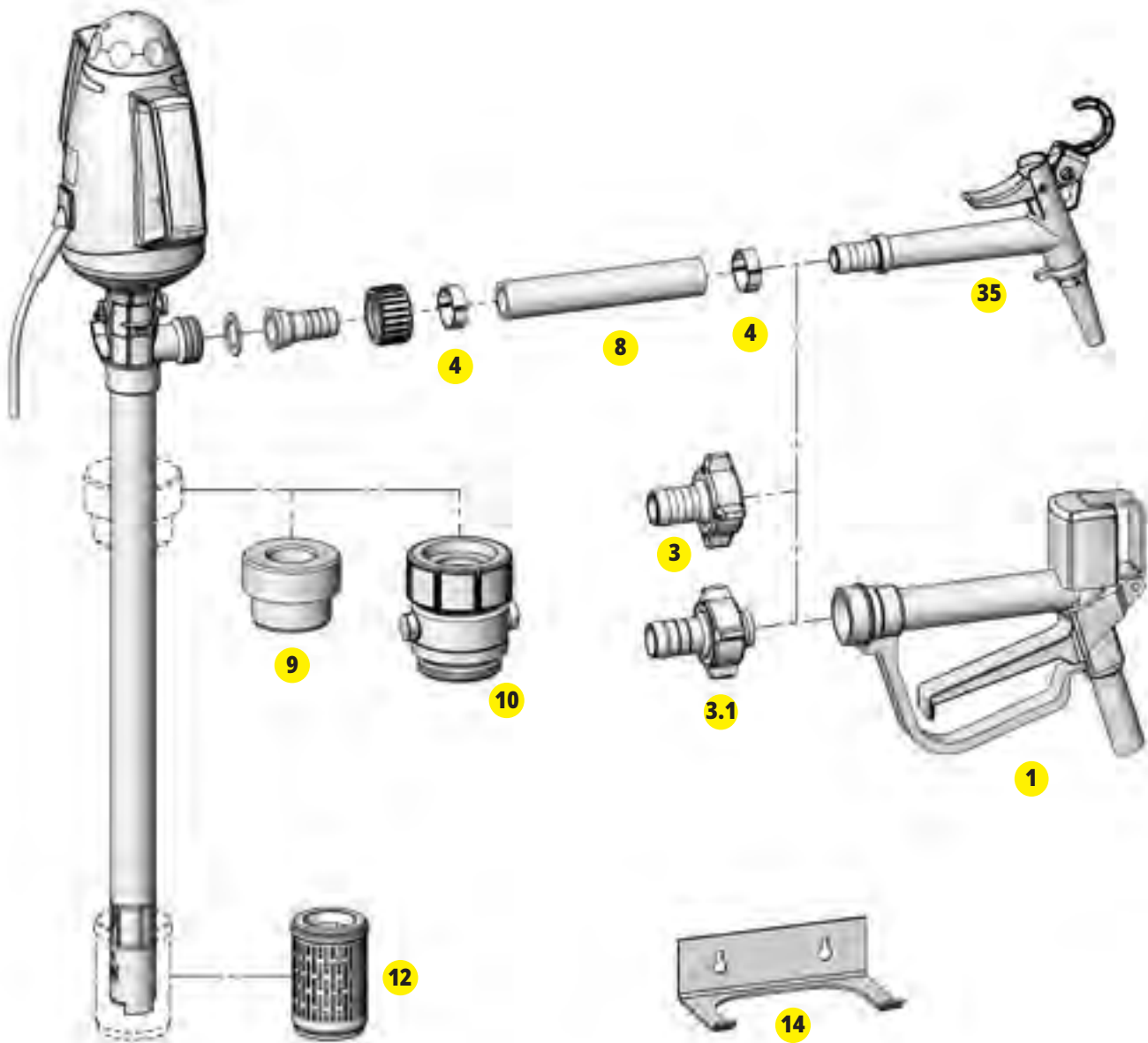
Perfectly equipped with the range of Lutz accessories

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 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 B1/B2 Battery and 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>Hose fitting for pump tube PP</p> <p>Comprises of: Lutz nozzle, 1.5 m PVC hose 3/4", hose connector with wing nut, hose clamps</p> <p>For pump tube B1/B2 Battery PP</p> | <p>0201-551</p> |
|  | <p>Hose fitting for pump tube PVDF</p> <p>Comprises of: Nozzle PVDF, 1.5 m special chemical hose 3/4", hose connector with wing nut, hose clamps</p> <p>For pump tube B1/B2 Battery PVDF</p> | <p>0201-554</p> |
|  | <p>Hose fitting for pump tube SS</p> <p>Comprises of: Nozzle SS/FEP, 1.5 m universal chemical hose 3/4", hose connector with wing nut, hose clamps</p> <p>For pump tube B1/B2 Battery stainless steel</p> | <p>0201-556</p> |
|  | <p>35 Lutz nozzle PP</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). With suspension hook. 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> |

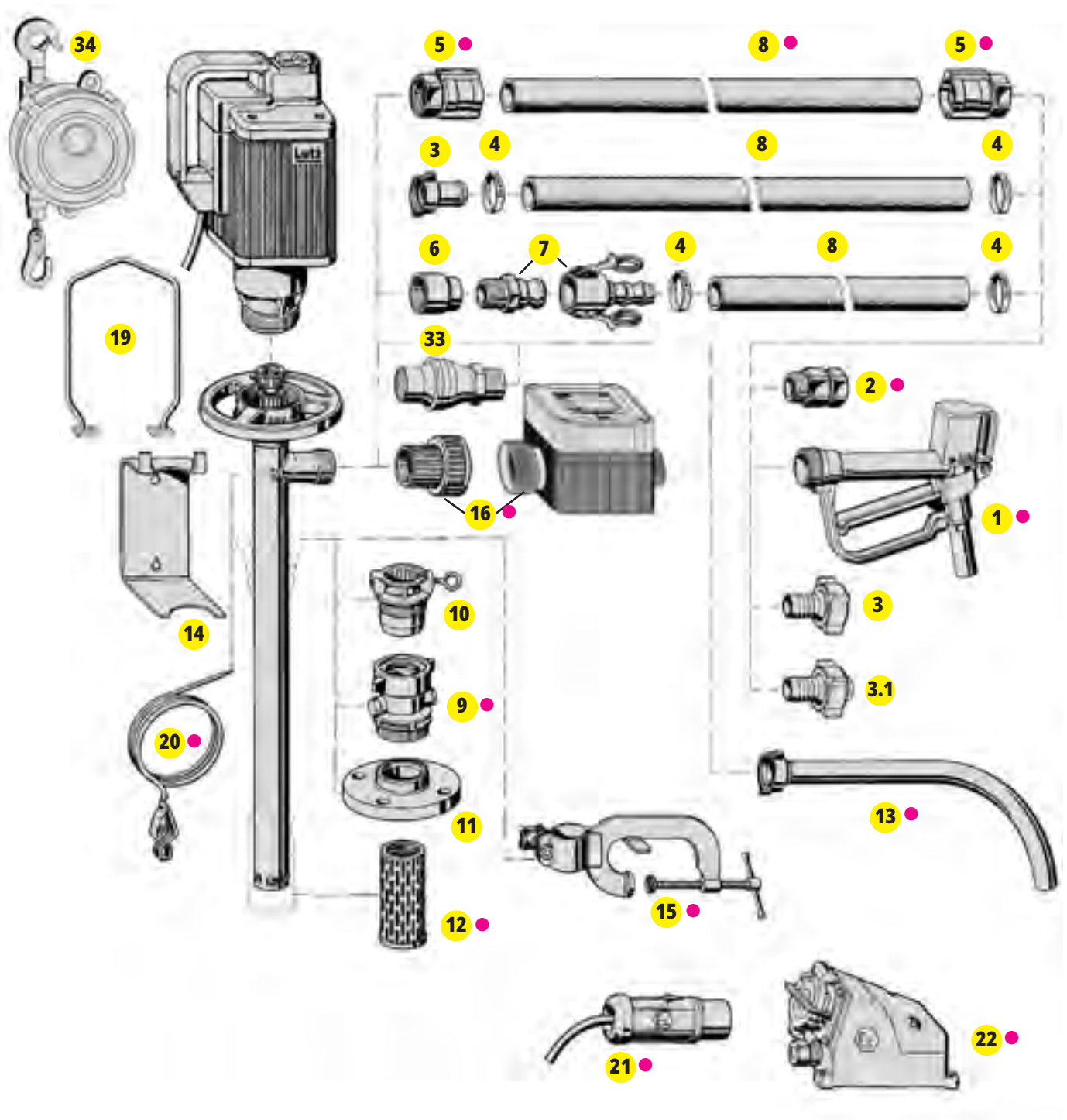
for drum and laboratory pump B1/B2 Battery and Lutz B2 Vario

| Specification | Order-No. | Product detail | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------|---|------------------|-----------------|---------------|-----------------|-----------|---|---------|----------|-----------|-----------------|---------|----------|------------|-----------------|---------|----------|------------|-----------------|---------|----------|------------|-----------------|---------|----------|------------|-----------------|--|---|
| <p>9 Drum adapter PP For fixing the pump B2 in the drum or container opening.</p> <p>For pump tube: For pump type:</p> <table border="0"> <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> | 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 | |  |
| 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 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: For pump type: PP PP-SL 32</p> | 0204-251 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>12 Foot strainer Made of PP for mounting onto the pump foot. Keeps impurities away from the rotating parts.</p> <p>Material: For pump tube: PP ø 32 mm</p> | 0204-539 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Universal line adapter For Europe, UK, USA, Australia, China 100-240 V, max. 2.5 A</p> | 0336-195 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <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. For pump Lutz B2 Vario</p> | 0102-079 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Electronical flow meter, TR series For efficient flow rate measuring of various liquids. Ease of handling, compact design, available in polypropylene (PP) or polyvinylidene fluoride (PVDF).</p> <table border="0"> <tr> <td>TR3-PP</td> <td>Connection G1</td> <td>0213-051</td> </tr> <tr> <td>TR3-PVDF</td> <td>Connection G1</td> <td>0213-061</td> </tr> </table> <p>For more details see separate flow meter leaflet.</p> | TR3-PP | Connection G1 | 0213-051 | TR3-PVDF | Connection G1 | 0213-061 | |  | | | | | | | | | | | | | | | | | | | | | | |
| TR3-PP | Connection G1 | 0213-051 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TR3-PVDF | Connection G1 | 0213-061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Trolley for steel and plastic drums Suitable for 200-litre drum, with 2 swivel castors and 2 fixed castors made of painted tubular steel frame, with holder for nozzle, hose and cable</p> | 0371-030 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Nozzles, hoses and hose connections 81-87.

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 flammable 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 flammable 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.</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: min. 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:</p> <p>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 flammable 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> | | |
| Material: | Nominal diameter: | |
| 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> | | |
| Material: | Nominal diameter: | |
| 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> | | |
| Material: | Nominal diameter: | |
| 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 clips, hose connections

| Product detail | Specification | Order-No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|-----------------------------|-------------------|-----------------------|-----------------------------|-------------------|-----------------------|---------------------------------|-------------------|---------------------|-----------------------------|-------------------|---------------------|-----------------------------|-------------------|---------------------|---------------------------------|-------------------|-------------------------|---------------------------------|-------------------|-------------------------|---------------------------------|-------------------|-----------------------------------|-----------------------------|-------------------|---------------------------------|-----------------------------|-------------------|---------------------------------|---------------------------------|-------------------|-----------------------|-----------------------------|-------------------|-----------------------|---------------------------------|-------------------|---------------------|-----------------------------|-------------------|---------------------|-----------------------------|-------------------|---------------------|---------------------------------|-------------------|-------------------------|---------------------------------|-------------------|-------------------------|---------------------------------|-------------------|--|
|  | <p>4 Hose clips</p> <p>Stainless steel hose clips with threaded screw for fixing hoses of various nominal bore at the hose connection.</p> <p>Nominal diameter: DN 19 (3/4") DN 25 (1") DN 32 - 38 (1 1/4" - 1 1/2")</p> | <p>0301-400 0301-401 0302-402</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | <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 10⁶ ohm. The hose connection must ensure a highly conductive transition between hose and pump tube.</p> <p>Brass</p> <table border="0"> <tr> <td>for hose DN 19 (3/4")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-073 ●</td> </tr> <tr> <td>for hose DN 19 (3/4")</td> <td>outer thread G 1 (EN12 115)</td> <td>0302-074 ●</td> </tr> <tr> <td>for hose DN 19 (3/4")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-106 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-011 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>outer thread G 1 (EN12 115)</td> <td>0302-010 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-012 ●</td> </tr> <tr> <td>for hose DN 32 (1 1/4")</td> <td>outer thread G 1 1/4 (EN12 115)</td> <td>0302-093 ●</td> </tr> <tr> <td>for hose DN 32 (1 1/4")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-107 ●</td> </tr> </table> <p>Brass for mineral oil hose DN 19 / DN 25</p> <table border="0"> <tr> <td>for mineral oil hose DN 19 (3/4")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-111 ●</td> </tr> <tr> <td>for mineral oil hose DN 25 (1")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-112 ●</td> </tr> <tr> <td>for mineral oil hose DN 25 (1")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-113 ●</td> </tr> </table> <p>Stainless steel (1.4571)</p> <table border="0"> <tr> <td>for hose DN 19 (3/4")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-108 ●</td> </tr> <tr> <td>for hose DN 19 (3/4")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-109 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>inner thread G 1 (EN12 115)</td> <td>0302-014 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>outer thread G 1 (EN12 115)</td> <td>0302-013 ●</td> </tr> <tr> <td>for hose DN 25 (1")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-015 ●</td> </tr> <tr> <td>for hose DN 32 (1 1/4")</td> <td>outer thread G 1 1/4 (EN12 115)</td> <td>0302-094 ●</td> </tr> <tr> <td>for hose DN 32 (1 1/4")</td> <td>inner thread G 1 1/4 (EN12 115)</td> <td>0302-110 ●</td> </tr> </table> | 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 ● | 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 ● | 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 ● | |
| 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 ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 flammable liquids (e.g. ethanol, petrol) or in explosive hazard area.

Double nipple, reducing sleeves, quick-action hose couplings

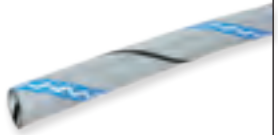


| Specification | Order-No. | Product detail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|-----------------|-----------------|-----|---------------------------|----------|-----------------|-------|-------------------------|--|-----------------|-------|---------------------------|----------|-----------------|--------------------------|-------------------------|--|-----------------|--------------------------|---------------------------|---------------|-----------------|----|-------------------------|--|-----------------|----|---------------------------|----------|-----------------|---|---|
| <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>Temperature of medium: -5 up to +65 °C</p> <table border="0"> <tr> <td>Nominal diameter:</td> <td>Weight:</td> <td>Operating pressure:</td> </tr> <tr> <td>DN 19 (3/4")</td> <td>0.31 kg/m</td> <td>max. 5 bar</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.51 kg/m</td> <td>max. 5 bar</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>0.66 kg/m</td> <td>max. 4.5 bar</td> </tr> </table> <p><small>*Hose for food liquids, made of PVC with imbedded galvanized steel helix, inside and outside smooth, complies with EU-regulations 10/2011 and 1935/2004.</small></p> | Nominal diameter: | Weight: | Operating pressure: | DN 19 (3/4") | 0.31 kg/m | max. 5 bar | DN 25 (1") | 0.51 kg/m | max. 5 bar | DN 32 (1 1/4") | 0.66 kg/m | max. 4.5 bar | <p>0374-457* 0374-440* 0374-441</p> | | | | | | |
| Nominal diameter: | Weight: | Operating pressure: | | | | | | | | | | | | | | | | | | |
| DN 19 (3/4") | 0.31 kg/m | max. 5 bar | | | | | | | | | | | | | | | | | | |
| DN 25 (1") | 0.51 kg/m | max. 5 bar | | | | | | | | | | | | | | | | | | |
| DN 32 (1 1/4") | 0.66 kg/m | max. 4.5 bar | | | | | | | | | | | | | | | | | | |
|  | <p>8 PVC hose, fabric reinforced Hose made of PVC, fabric reinforced. For aggressive, non-flammable liquids.</p> <p>Temperature of medium: -10 up to +60 °C</p> <table border="0"> <tr> <td>Nominal diameter:</td> <td>Weight:</td> <td>Operating pressure:</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>0.715 kg/m</td> <td>max. 7 bar</td> </tr> </table> | Nominal diameter: | Weight: | Operating pressure: | DN 32 (1 1/4") | 0.715 kg/m | max. 7 bar | <p>0374-425</p> | | | | | | | | | | | | |
| Nominal diameter: | Weight: | Operating pressure: | | | | | | | | | | | | | | | | | | |
| DN 32 (1 1/4") | 0.715 kg/m | max. 7 bar | | | | | | | | | | | | | | | | | | |
|  | <p>8 Mineral oil hose Colour coding: "yellow". Hose for mineral oil products of all kinds and super up to 50 % aromatics and methanol content. Inner rubber NBR and outer rubber chloroprene (CR). Electrically conductive: Type Ω/T (<10⁶ Ohm between the fittings, <10⁹ Ohm through the hose wall) according to DIN EN 12115:2011.</p> <table border="0"> <tr> <td>Operating pressure:</td> <td>max. 16 bar</td> </tr> <tr> <td>Temperature of medium:</td> <td>-30 up to +90 °C</td> </tr> <tr> <td>Nominal diameter:</td> <td>Weight:</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>1.0 kg/m</td> </tr> </table> <p>Hose for mineral oil products of all kinds and super up to 50 % aromatics and methanol content. Inner rubber NBR (conductive) and outer rubber NBR (not conductive). Electrically conductive: Type Ω-CL (<10⁶ Ohm between the fittings) according to TRbF 50 appendix B (TRbF 131/2).</p> <table border="0"> <tr> <td>Operating pressure:</td> <td>max. 10 bar</td> </tr> <tr> <td>Temperature of medium:</td> <td>-25 up to +65 °C</td> </tr> <tr> <td>Nominal diameter:</td> <td>Weight:</td> </tr> <tr> <td>DN 19 (3/4")</td> <td>0.4 kg/m</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.5 kg/m</td> </tr> </table> | Operating pressure: | max. 16 bar | Temperature of medium: | -30 up to +90 °C | Nominal diameter: | Weight: | DN 32 (1 1/4") | 1.0 kg/m | Operating pressure: | max. 10 bar | Temperature of medium: | -25 up to +65 °C | Nominal diameter: | Weight: | DN 19 (3/4") | 0.4 kg/m | DN 25 (1") | 0.5 kg/m | <p>0374-413 ●</p> <p>0374-461 ● 0374-462 ●</p> |
| Operating pressure: | max. 16 bar | | | | | | | | | | | | | | | | | | | |
| Temperature of medium: | -30 up to +90 °C | | | | | | | | | | | | | | | | | | | |
| Nominal diameter: | Weight: | | | | | | | | | | | | | | | | | | | |
| DN 32 (1 1/4") | 1.0 kg/m | | | | | | | | | | | | | | | | | | | |
| Operating pressure: | max. 10 bar | | | | | | | | | | | | | | | | | | | |
| Temperature of medium: | -25 up to +65 °C | | | | | | | | | | | | | | | | | | | |
| Nominal diameter: | Weight: | | | | | | | | | | | | | | | | | | | |
| DN 19 (3/4") | 0.4 kg/m | | | | | | | | | | | | | | | | | | | |
| DN 25 (1") | 0.5 kg/m | | | | | | | | | | | | | | | | | | | |
|  | <p>8 Solvent hose Colour coding: "blue". Hose suitable for a wide range of commercial solvents. Inner rubber of special coating and outer rubber of NBR/PVC-Compound. (starting from DN 32 with galvanized steel helix, it is suitable as suction and pressure hose). Electrically conductive: Type Ω/T (<10⁶ Ohm between the fittings, <10⁹ Ohm through the hose wall) according to DIN EN 12115:2011.</p> <table border="0"> <tr> <td>Operating pressure:</td> <td>max. 16 bar</td> </tr> <tr> <td>Range of temperature:</td> <td>-20 up to +80 °C (dependant on the liquid), steaming out up to 130 °C for max. 30 minutes (open ends)</td> </tr> <tr> <td>Nominal diameter:</td> <td>Weight:</td> </tr> <tr> <td>DN 19 (3/4")</td> <td>0.6 kg/m</td> </tr> <tr> <td>DN 25 (1")</td> <td>0.8 kg/m</td> </tr> <tr> <td>DN 32 (1 1/4")</td> <td>1.2 kg/m</td> </tr> </table> | Operating pressure: | max. 16 bar | Range of temperature: | -20 up to +80 °C (dependant on the liquid), steaming out up to 130 °C for max. 30 minutes (open ends) | Nominal diameter: | Weight: | DN 19 (3/4") | 0.6 kg/m | DN 25 (1") | 0.8 kg/m | DN 32 (1 1/4") | 1.2 kg/m | <p>0374-416 ● 0374-417 ● 0374-418 ●</p> | | | | | | |
| Operating pressure: | max. 16 bar | | | | | | | | | | | | | | | | | | | |
| Range of temperature: | -20 up to +80 °C (dependant on the liquid), steaming out up to 130 °C for max. 30 minutes (open ends) | | | | | | | | | | | | | | | | | | | |
| Nominal diameter: | Weight: | | | | | | | | | | | | | | | | | | | |
| DN 19 (3/4") | 0.6 kg/m | | | | | | | | | | | | | | | | | | | |
| DN 25 (1") | 0.8 kg/m | | | | | | | | | | | | | | | | | | | |
| DN 32 (1 1/4") | 1.2 kg/m | | | | | | | | | | | | | | | | | | | |

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

| Specification | Order-No. | Product detail |
|--|--|---|
| <p>8 Universal chemical hose</p> <p>Colour coding: "blue/white/blue". Suitable for clean chemicals, cosmetics, photo-chemicals, paints and glues, washing and cleaning products, hygienic products as well as foodstuffs and luxury foodstuffs, (for more information see resistance table). Conform to FDA and USP class VI. Complies with EU-regulations 10/2011 and 1935/2004. Internal finish: UPE light with spiraled OHM conductive stripes UPE black, smooth, non-bleeding, abrasion-resistant. Intermediate layer: EPDM conductive (complies with the requirements of the recommendation XXI category 2 of the BfR and FDA standards). External finish: EPDM light grey, conductive, non-bleeding, ozone- and UV resistant, hardly flammable, (starting from DN 25 with galvanized steel helix, suitable as suction and pressure hose). Electrically conductive: Type Ω/T ($<10^6$ Ohm between the fittings, $<10^9$ Ohm through the hose wall) according to DIN EN 12115:2011.</p> <p>Operating pressure: max. 16 bar Range of temperature: -30 up to +100 °C (dependant on the liquid), steaming out up to 130°C for max. 30 minutes (open ends)</p> <p>Nominal diameter: Weight: DN 19 (3/4") 0.6 kg/m DN 25 (1") 0.8 kg/m DN 32 (1 1/4") 0.9 kg/m</p> | <p>0374-475 ● 0374-476 ● 0374-477 ●</p> |  |
| <p>8 Special chemical hose FEP</p> <p>Colour coding: "blue/white/red". Suitable for all commonly used media, ideal also for very pure products. Suitable as suction and pressure hose. Internal finish: FEP transparent, smooth, seamless, non-leaching, non-dyeing, not electrically conductive (in conformity with FDA and USP Class VI demands). External finish: EPDM electrically conductive. Light grey with OHM conductive stripes, with galvanized steel helix. Electrically conductive: Type $\Omega-C$ ($<10^6$ Ohm between the fittings) according to DIN EN 12115:2011. (NOT suitable for non-conductive, flammable liquids!)</p> <p>Operating pressure: max. 16 bar Range of temperature: -30 up to +100 °C (dependant on the liquid), steaming out for cleaning and sterilisation permissible up to 150°C for max. 30 minutes (open ends)</p> <p>Nominal diameter: Weight: DN 19 (3/4") 0.7 kg/m DN 25 (1") 1.0 kg/m DN 32 (1 1/4") 1.1 kg/m</p> | <p>0374-428 0374-429 0374-430</p> |  |
| <p>Special chemical hose PTFE</p> <p>Colour coding: "blue/white/red". Suitable for all commonly used media, ideal also for very pure products. Suitable as suction and pressure hose. Internal finish: PTFE black, smooth, seamless, electrically conductive (Conform to FDA and USP class VI. Complies with EU-regulations 10/2011 and 1935/2004). External finish: EPDM electrically conductive. Black, galvanized steel helix. Electrically conductive: Type Ω/T ($<10^6$ Ohm between the fittings, $<10^9$ Ohm through the hose wall) according to DIN EN 12115:2011.</p> <p>Operating pressure: max. 16 bar Range of temperature: -30 up to +150 °C (dependant on the liquid), steaming out for cleaning and sterilisation permissible up to 150°C for max. 30 minutes (open ends)</p> <p>Nominal diameter: Weight: DN 19 (3/4") 0.7 kg/m DN 25 (1") 1.0 kg/m</p> | <p>0374-481 ● 0374-482 ●</p> |  |

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, brass, stainless steel | Tri-Sure 2", BCS 56 x 4 OT, Mauser 2", BCS 70 x 6 OT |
| Brass, stainless steel | M 64 x 4 OT |

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

0204-364

Container cap

DN 150

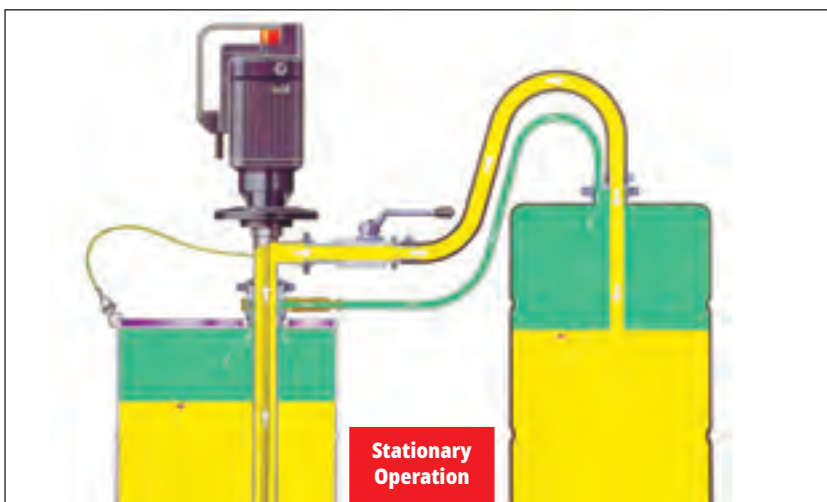
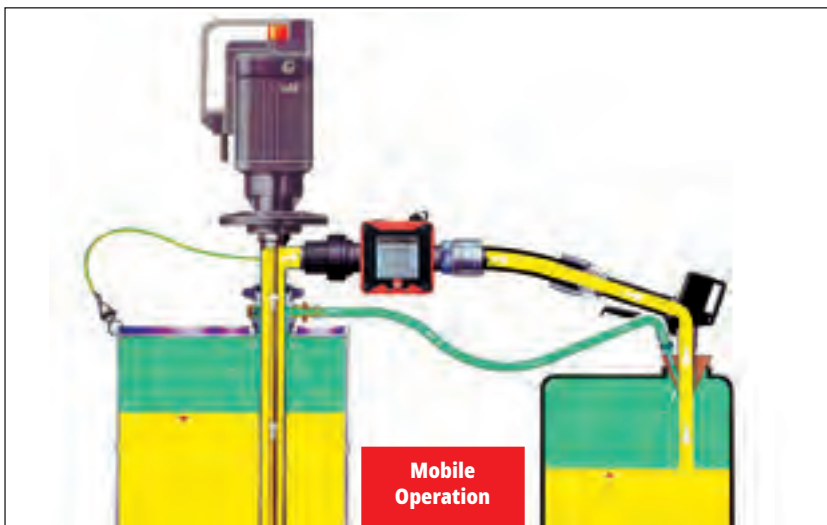
0373-060

DN 225

0373-061

● Suitable for transferring combustible and easy flammable 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

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 88

Order-No.

0204-202

0204-253



0373-153

Product detail



Accessories

EMIGA: for safe handling of hazardous liquids

| Product detail | Specification | Order-No. |
|---|---|--|
|  | <p>Gas sealing kit with nozzle for flexible operation 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 Variable system for use with a nozzle in such areas as fuels and solvents, etc.</p> <p>Gas sealing kit for nozzle 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</p> <p>Other emission proof drum adapters see page 84</p> <p>Nozzle stainless steel, G 1 1/4</p> <p>Gas sealing hose: PVC hose DN 9</p> <p>Alternatively for flammable liquids: Solvent hose DN 9</p> <p>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 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 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</p> <p>Other emission proof adapters see page 84</p> <p>Automatic nozzle in aluminium DN 25, seal PTFE</p> <p>Discharge pipe cpl. for automatic nozzle Alu (necessary when using a valve pad)</p> <p>Gas sealing hose: PVC hose DN 9</p> <p>Alternatively for flammable liquids: Solvent hose DN 9</p> <p>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 Additional costs: Emission proof hose with connection flange PVDF* (serving to return with sealless pump tubes arising gases back into the container)</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> | 0208-007 |  |
| <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> | 0204-215 |  |
| <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> | 0208-013 |  |
| <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</p> <p>0208-052</p> <p>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</p> <p>PVDF ø 41 mm</p> <p>Alu ø 41 mm</p> <p>SS ø 41 mm</p> | <p>0110-191</p> <p>0122-001</p> <p>0132-120</p> <p>0151-622</p> |  |

*in connection with a new pump tube

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 Not suitable for pump tube RE-PP</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 2 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>Housing:</td> <td>Aluminium</td> <td>Range of temperature:</td> <td>-10 up to 80 °C</td> </tr> <tr> <td>Oval gears:</td> <td>LCP</td> <td>Display:</td> <td>2-lines, 6- and 5-digits</td> </tr> <tr> <td>Seal:</td> <td>FPM</td> <td>Protection class:</td> <td>IP 67</td> </tr> <tr> <td>Nominal pressure:</td> <td>4 bar</td> <td>Battery:</td> <td>Lithium, CR123A, 3V</td> </tr> <tr> <td>Range of measurement:</td> <td>3 - 80 l/min.</td> <td>Weight approx.:</td> <td>1.4 kg</td> </tr> <tr> <td>Range of viscosity:</td> <td>1 - 1000 mPas</td> <td>Connection:</td> <td>G 1 1/4"</td> </tr> <tr> <td>Accuracy of measurement:</td> <td colspan="3">+/- 0.5 %</td> </tr> </table> | Housing: | Aluminium | Range of temperature: | -10 up to 80 °C | Oval gears: | LCP | Display: | 2-lines, 6- and 5-digits | Seal: | FPM | Protection class: | IP 67 | Nominal pressure: | 4 bar | Battery: | Lithium, CR123A, 3V | Range of measurement: | 3 - 80 l/min. | Weight approx.: | 1.4 kg | Range of viscosity: | 1 - 1000 mPas | Connection: | G 1 1/4" | Accuracy of measurement: | +/- 0.5 % | | | <p>0211-610</p> |
| Housing: | Aluminium | Range of temperature: | -10 up to 80 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oval gears: | LCP | Display: | 2-lines, 6- and 5-digits | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seal: | FPM | Protection class: | IP 67 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal pressure: | 4 bar | Battery: | Lithium, CR123A, 3V | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Range of measurement: | 3 - 80 l/min. | Weight approx.: | 1.4 kg | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Range of viscosity: | 1 - 1000 mPas | Connection: | G 1 1/4" | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accuracy of measurement: | +/- 0.5 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

● Suitable for transferring combustible and easy flammable 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> |

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