

Safety

Economy

Diversity

Environment



Lutz®
The Fluid Managers

A Pump For All Seasons



Dear Reader

For many years Lutz has enjoyed the satisfaction of providing our worldwide customers with products which have given years of service in many diverse industries and markets.

As we cater responsibly for your many needs we would like to state clearly our mission, which is to consistently provide you with products which not only meet your specific requirements, but which are safe, reliable and cost-effective.

In this brochure, we would like to share with you, our „Seasons“ which we believe figuratively sum up our ideal to be always innovative, producing new solutions to meet your needs, whilst being constant in our endeavours to fulfil our mission.

We would like to thank all of our existing customers for their loyalty and trust in us which has given us a position of leadership, and those of you who would benefit from our products in the future.

Jürgen Lutz

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From the bucket to the pump



Transferring corrosive, flammable or toxic liquids presents its own challenges to personal safety and the environment.

At Lutz, we believe you will be able to find your optimum solution among the range of products which have been developed specifically to overcome the dangers and disadvantages of decanting such liquids.

1954

The company is founded by Karl Lutz.

1963

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

1972

The product innovation – a sealless pumping unit.

1987

The first pumping unit worldwide for complete drum drainage.



1988

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

1990

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

1990

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

1993

Modular flow meter system for efficiency and accurate measurement.

1994

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

2000

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



2000

New development of a flameproof relay module for flow meters.

2001

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

2001

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

2001

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

2004

Flow meter system HDO for thin bodied to highly viscous liquids.

2006

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



2007

Lutz B2 Vario pump for the laboratory and research sector.

2010

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

2010

Compressed air motor MD-200/MD-300 for the Lutz B2 Vario family.

2011

Lutz B70V Sanitary pump, according to the 3-A Sanitary Standard. For optimal pumping of thin-bodied to highly viscous media.



2012

The new generation of flow meters. The first flow meter with a touch screen display and background lighting display and usability, multilingual interface and compact design.

(*The Physikalisch-Technische Bundesanstalt (PTB), Braunschweig and Berlin, is the National Institute of natural and engineering sciences and the highest technical authority for metrology and physical safety engineering in the Federal Republic of Germany)



Environment

Getting started on any project demands a little concentration, but once the focus is there life becomes easier and with the right tools, the job is quickly done. No more spillage and waste. No claims against the environment, no unnecessary accidents.

80% of the transfer jobs can be effected with our basic materials which cover neutral, aggressive and highly corrosive liquids. Our separate corrosion guide provides a simple and quick way to determine the right pump material for your liquid.

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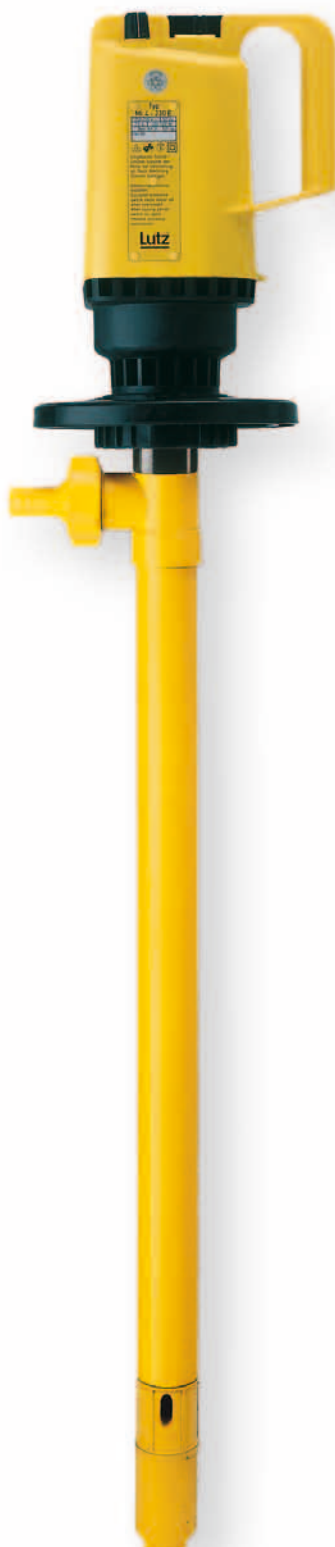
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Lutz Drum and Container Pumps

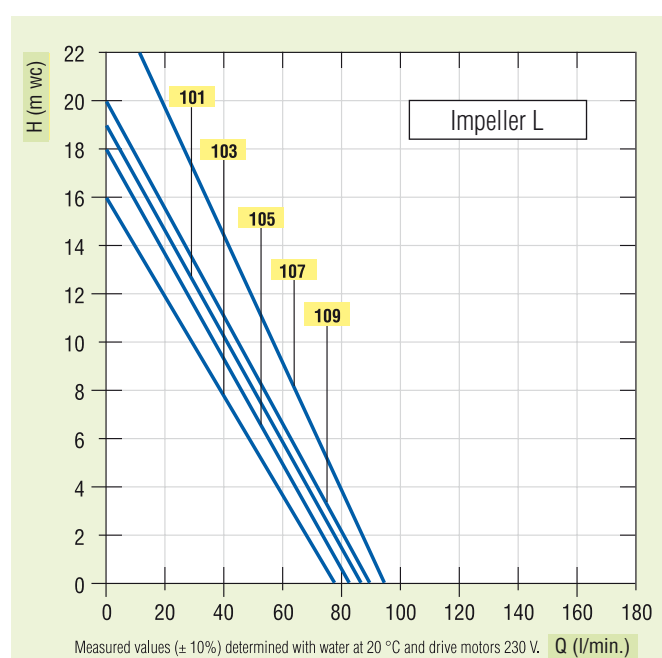
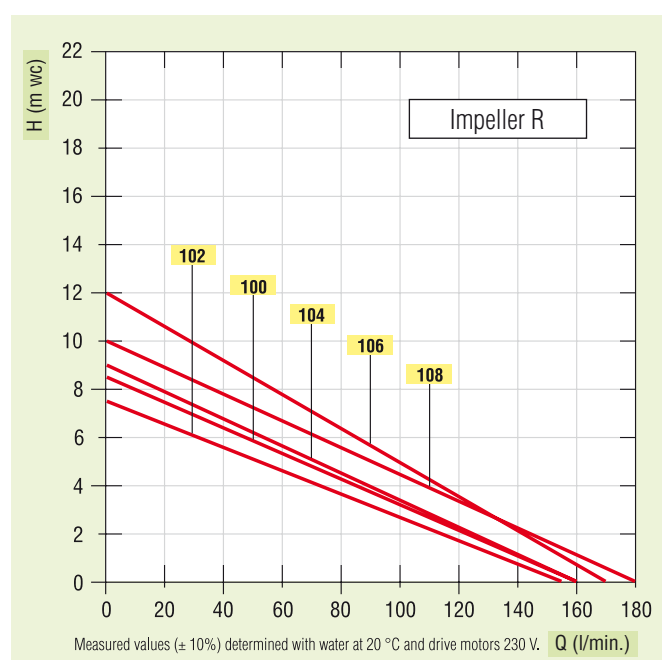
Pump tube PP (polypropylene)



Materials (coming into contact with the pumped medium)

	PP-MS	PP-SL
Housing:	PP/PVDF	PP/PVDF
Impeller:	PP	PP
Seals:	Viton®	none
Mechanical seal:	Carbon, SiC, Viton®, HC-4 (2.4610)	none
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)



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

Pump tube PP (polypropylene)

for corrosive and neutral liquids

Pump tube		PP-MS		PP-SL		Product detail
Type of impeller		R	L	R	L	
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	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.	0103-500	0103-504	0110-300	0110-304	
Length: 1000 mm*** shaft SS	Order No.	0103-501	0103-505	0110-301	0110-305	
Length: 1200 mm*** shaft SS	Order No.	0103-502	0103-506	0110-302	0110-306	
Length: 700 mm*** shaft HC	Order No.	0103-400	0103-404	0110-200	0110-204	
Length: 1000 mm*** shaft HC	Order No.	0103-401	0103-405	0110-201	0110-205	
Length: 1200 mm*** shaft HC	Order No.	0103-402	0103-406	0110-202	0110-206	
Length: 1400 mm*** shaft HC	Order No.	—	—	0110-213	0110-208	
Length: 1500 mm*** shaft HC	Order No.	—	—	0110-214	0110-209	
Length: 1600 mm*** shaft HC	Order No.	—	—	0110-215	0110-210	
Length: 1700 mm*** shaft HC	Order No.	—	—	0110-216	0110-211	
Length: 2000 mm*** shaft HC	Order No.	—	—	0110-217	0110-212	

Choice of motors			Operating data						
	MI-4	MI-4-E	Characteristic curve no.	100	101	100	101		
	-	with speed controller	Delivery rate* up to l/min.	160	87	160	87		
			Delivery head* up to m wc	8.5	19	8.5	19		
Output	500 W	500 W	Viscosity** up to mPas	150	500	150	500		
Voltage:	230 V	230 V	Density**** up to kg/dm³	1.1	1.4	1.1	1.4		
Order No.	0030-000	0030-001	Weight (kg) motor + pump tube	3.9	3.9	3.9	3.9		
	MA II 3		Characteristic curve no.	102	103	102	103		
Output:	460 W	460 W	Delivery rate* up to l/min.	155	78	155	78		
Voltage:	230 V	230 V	Delivery head* up to m wc	7.5	16	7.5	16		
LVR:	no	yes	Viscosity** up to mPas	150	500	150	500		
			Density**** up to kg/dm³	1.2	1.6	1.2	1.6		
Order No.	0060-000	0060-008	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.	104	105	104	105	<p>Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. It's recommended when pumping hazardous liquids.</p>
Output:	575 W	575 W	575 W	Delivery rate* up to l/min.	160	83	160	83	
Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	9	18	9	18	
LVR:	no	yes	no	Viscosity** up to mPas	350	800	350	800	
			acid-proof	Density**** up to kg/dm³	1.3	1.8	1.3	1.8	
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	6.5	6.5	6.5	6.5	
	MA II 7			Characteristic curve no.	106	107	106	107	
Output:	795 W	795 W		Delivery rate* up to l/min.	170	95	170	95	
Voltage:	230 V	230 V		Delivery head* up to m wc	12	25	12	25	
LVR:	no	yes		Viscosity** up to mPas	350	800	350	800	
				Density**** up to kg/dm³	1.4	1.9	1.4	1.9	
Order No.	0060-002	0060-010		Weight (kg) motor + pump tube	7.7	7.7	7.7	7.7	
	MD-1	MD-2		Characteristic curve no.	108	109	108	109	
Output:	400 W	400 W		Delivery rate* up to l/min.	180	90	180	90	
Operating Pressure:	6 bar	6 bar		Delivery head* up to m wc	10	20	10	20	
				Viscosity** up to mPas	600	850	600	850	
				Density**** up to kg/dm³	1.3	1.8	1.3	1.8	
Order No.	0004-087	0004-088		Weight (kg) motor + pump tube	2.6	2.6	2.6	2.6	

Low-voltage release (LVR):
Prevents the pump from starting up again without warning after a power failure. It's 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.

Lutz Drum and Container Pumps

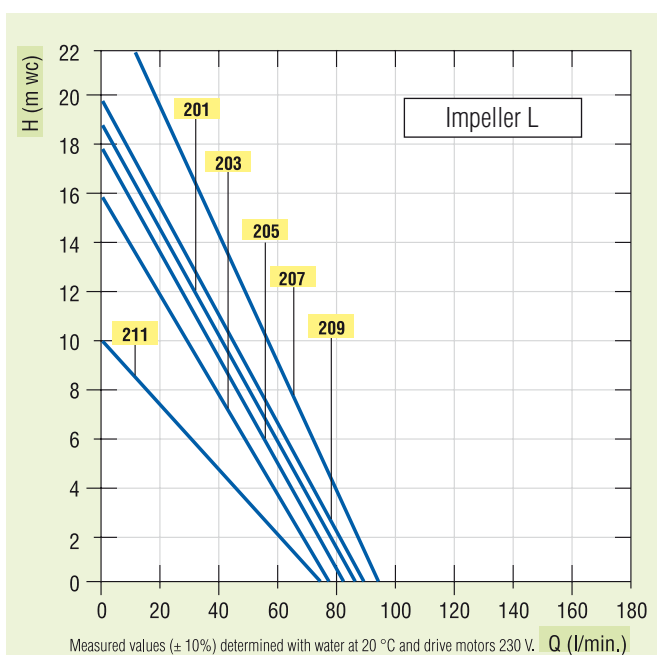
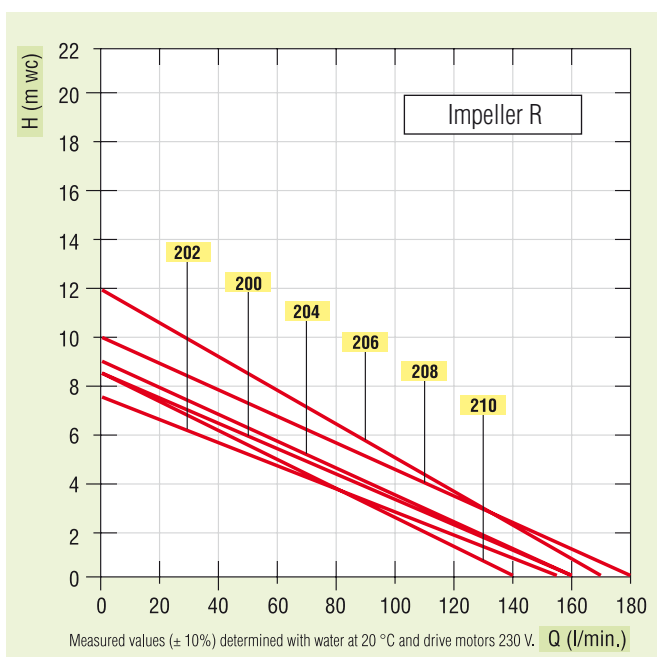
Pump tube PVDF (polyvinylidene fluoride)



Materials (coming into contact with the pumped medium)

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


Viton® is a registered trademark of DuPont Performance Elastomers.



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

Pump tube PVDF (polyvinylidene fluoride)

for highly corrosive chemicals and neutral liquids

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

Choice of motors			Operating data						
MI-4		MI-4-E	Characteristic curve no.	200	201	200	201		
-		with speed controller	Delivery rate* up to l/min.	160	87	160	87		
Output: 500 W		500 W	Delivery head* up to m wc	8.5	19	8.5	19		
Voltage: 230 V		230 V	Viscosity** up to mPas	150	500	150	500		
			Density**** up to kg/dm³	1.1	1.4	1.1	1.4		
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.	202	203	202	203		
Output: 460 W		460 W	Delivery rate* up to l/min.	155	78	155	78		
Voltage: 230 V		230 V	Delivery head* up to m wc	7.5	16	7.5	16		
LVR: no		yes	Viscosity** up to mPas	150	500	150	500		
			Density**** up to kg/dm³	1.2	1.6	1.2	1.6		
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.	204	205	204	205	
Output: 575 W		575 W	575 W	Delivery rate* up to l/min.	160	83	160	83	
Voltage: 230 V		230 V	230 V	Delivery head* up to m wc	9	18	9	18	
LVR: no		yes	no	Viscosity** up to mPas	350	800	350	800	
			acid-proof	Density**** up to kg/dm³	1.3	1.8	1.3	1.8	
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.	206	207	206	207		
Output: 795 W		795 W	Delivery rate* up to l/min.	170	95	170	95		
Voltage: 230 V		230 V	Delivery head* up to m wc	12	25	12	25		
LVR: no		yes	Viscosity** up to mPas	350	800	350	800		
			Density**** up to kg/dm³	1.4	1.9	1.4	1.9		
Order No.	0060-002	0060-010	Weight (kg) motor + pump tube	8.3	8.3	8.3	8.3		
MD-1		MD-2	Characteristic curve no.	208	209	208	209		
Output: 400 W		400 W	Delivery rate* up to l/min.	180	90	180	90		
Operating Pressure: 6 bar		6 bar	Delivery head* up to m wc	10	20	10	20		
			Viscosity** up to mPas	600	850	600	850		
			Density**** up to kg/dm³	1.3	1.8	1.3	1.8		
Order No.	0004-087	0004-088	Weight (kg) motor + pump tube	3.2	3.2	3.2	3.2		
B4/GT			Characteristic curve no.	210	211	210	211		
Output: 750 W		750 W	Delivery rate* up to l/min.	140	75	140	75		
Voltage: 230/400 V		230/400 V	Delivery head* up to m wc	8.5	10	8.5	10		
Protection switch: no		yes	Viscosity** up to mPas	400	400	400	400		
			Density**** up to kg/dm³	2.0	2.2	2.0	2.2		
Order No.	0004+019	0004+067	Weight (kg) motor + pump tube	11.5	11.5	11.5	11.5		

Low-voltage release (LVR):
Prevents the pump from starting up again without warning after a power failure. It's 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.

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Lutz Drum and Container Pumps

Pump tube SS (stainless steel)



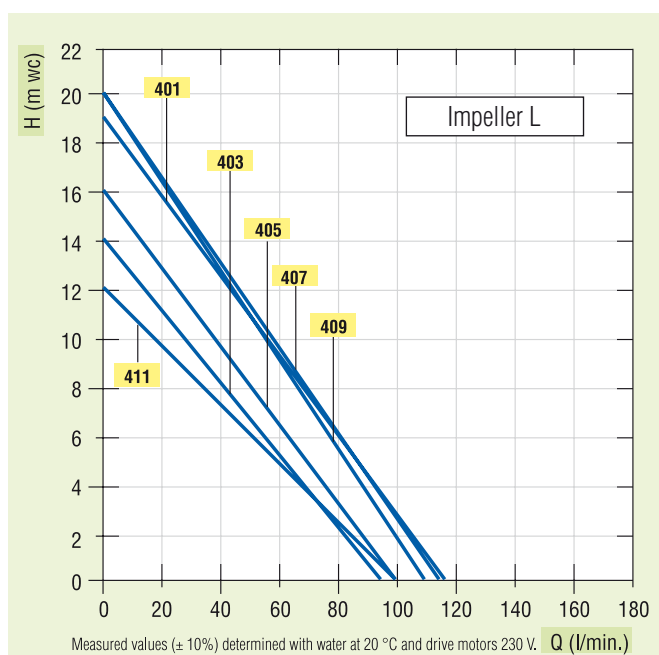
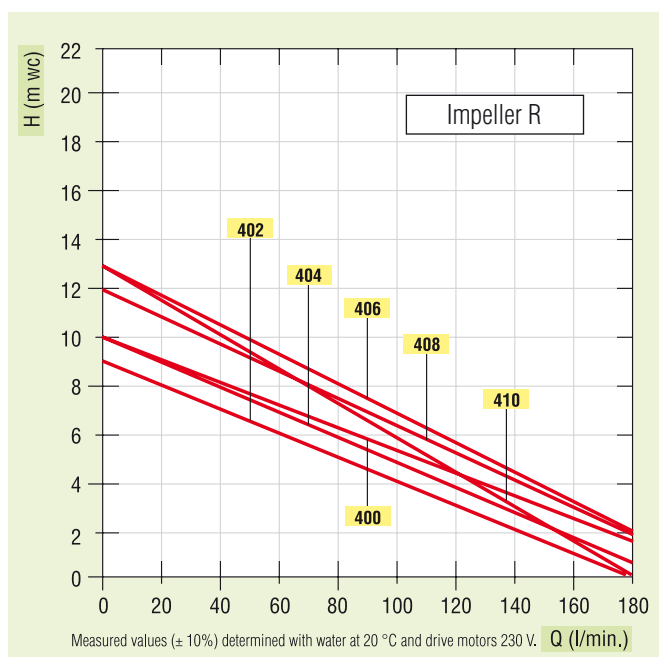
Pump tubes in physiologically safe version (FDA)

All materials coming into contact with the pumped medium are FDA approved materials.

Materials (coming into contact with the pumped medium)

	SS-MS	SS-SL
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	Viton®	none
Mechanical seal:	Carbon, ceramic, Viton®, stainless steel	none
Bearing:	Pure carbon	Pure carbon
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)


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

Pump tube SS (stainless steel)

for corrosive and neutral liquids

Pump tube		SS-MS		SS-SL		Product detail
Type of impeller		R	L	R	L	
Category 1 / 2 (acc. to ATEX)		yes	yes	yes	yes	
Immersion tube diameter:	up to mm	41	41	41	41	
Temperature of medium:	up to °C	100	100	100	100	
Material:	Pump tube	1.4571	1.4571	1.4571	1.4571	
	Impeller	ETFE	ETFE	ETFE	ETFE	
Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32	
	Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4	
Length: 700 mm***	Order No.	0151-000	0151-003	0150-000	0150-003	
Length: 1000 mm***	Order No.	0151-001	0151-004	0150-001	0150-004	
Length: 1200 mm***	Order No.	0151-002	0151-005	0150-002	0150-005	
Length: 1400 mm***	Order No.	–	–	0150-113	0150-108	
Length: 1500 mm***	Order No.	–	–	0150-114	0150-109	
Length: 1600 mm***	Order No.	–	–	0150-115	0150-110	
Length: 1700 mm***	Order No.	–	–	0150-116	0150-111	
Length: 2000 mm***	Order No.	–	–	0150-117	0150-112	

Choice of motors			Operating data							
MI-4		MI-4-E	Characteristic curve no.	400	401	400	401			
	-	with speed controller	Delivery rate* up to l/min.	210	117	210	117			
			Delivery head* up to m wc	10	19	10	19			
Output:	500 W	500 W	Viscosity** up to mPas	350	500	350	500			
Voltage:	230 V	230 V	Density**** up to kg/dm³	1.1	1.4	1.1	1.4			
Order No.	0030-000	0030-001	Weight (kg) motor + pump tube	5.7	5.7	5.7	5.7			
MA II 3			Characteristic curve no.	402	403	402	403			
Output:	460 W	460 W	Delivery rate* up to l/min.	178	95	178	95			
Voltage:	230 V	230 V	Delivery head* up to m wc	9	14	9	14			
LVR:	no	yes	Viscosity** up to mPas	200	350	200	350			
			Density**** up to kg/dm³	1.2	1.6	1.2	1.6			
Order No.	0060-000	0060-008	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.	404	405	404	405	
Output:	575 W	575 W	575 W	Delivery rate* up to l/min.	190	100	190	100		
Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	10	16	10	16		
LVR:	no	yes	no	Viscosity** up to mPas	550	700	550	700		
			acid-proof	Density**** up to kg/dm³	1.3	1.8	1.3	1.8		
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	8.3	8.3	8.3	8.3		
MA II 7			Characteristic curve no.	406	407	406	407	<p>Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. It's recommended when pumping hazardous liquids.</p>		
Output:	795 W	795 W	Delivery rate* up to l/min.	210	115	210	115			
Voltage:	230 V	230 V	Delivery head* up to m wc	13	20	13	20			
LVR:	no	yes	Viscosity** up to mPas	400	500	400	500			
			Density**** up to kg/dm³	1.4	1.9	1.4	1.9			
Order No.	0060-002	0060-010	Weight (kg) motor + pump tube	9.5	9.5	9.5	9.5			
MD-1			MD-2	Characteristic curve no.	408	409	408	409		
Output:	400 W	400 W	Delivery rate* up to l/min.	210	110	210	110			
Operating Pressure:	6 bar	6 bar	Delivery head* up to m wc	12	20	12	20			
			Viscosity** up to mPas	400	500	400	500			
			Density**** up to kg/dm³	1.3	1.8	1.3	1.8			
Order No.	0004-087	0004-088	Weight (kg) motor + pump tube	4.4	4.4	4.4	4.4			
B4/GT			Characteristic curve no.	410	411	410	411			
Output:	750 W	750 W	Delivery rate* up to l/min.	180	100	180	100			
Voltage:	230/400 V	230/400 V	Delivery head* up to m wc	13	12	13	12			
Protection switch:	no	yes	Viscosity** up to mPas	400	500	400	500			
			Density**** up to kg/dm³	2.0	2.2	2.0	2.2			
Order No.	0004+019	0004+067	Weight (kg) motor + pump tube	13.7	13.7	13.7	13.7			

* 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.

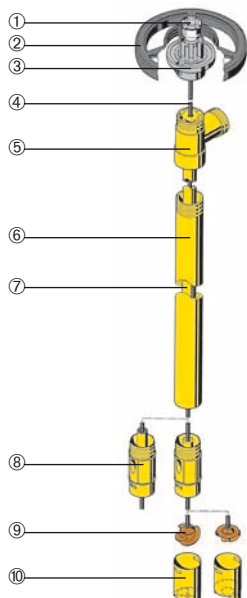
Special voltages and frequencies on request.

Don't be stuck in one place



The modular concept behind the construction of the Lutz drum pump, provides not only for fixed installations, but also assures a great degree of flexibility in movement. The hand wheel makes the pump easy to carry and provides a simple but quick means of coupling and un-coupling the motor.

Just ten parts in the construction allow the pumps to be service and user friendly. Interchangeability of parts and no special tools reduce downtime to a bare minimum.



- ① **Coupling**
- ② **Hand wheel**
- ③ **Bearing housing**
- ④ **Shaft**
- ⑤ **Outrun piece**
- ⑥ **Outer tube**
- ⑦ **Inner tube**
- ⑧ **Cartridge bearing**
- ⑨ **Impeller**
- ⑩ **Pump foot**



Diversity

The heat is on. Different jobs may demand different tools or a different approach to provide a satisfactory solution to your transfer problem. Here we provide exceptional materials and exceptional pumps to cover those oily, greasy, sticky, shear sensitive and highly viscous liquids. From intermittent to round-the-clock transfer, we have a fluid management solution at hand, never mind the industry you are in.

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Lutz Drum and Container Pumps

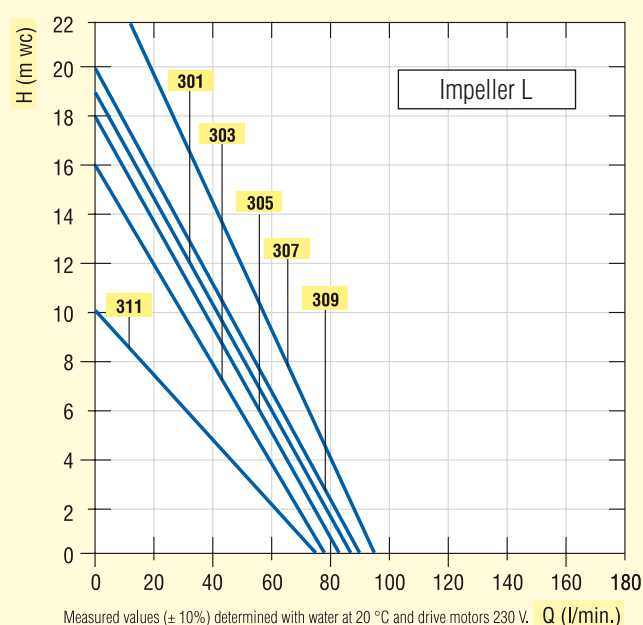
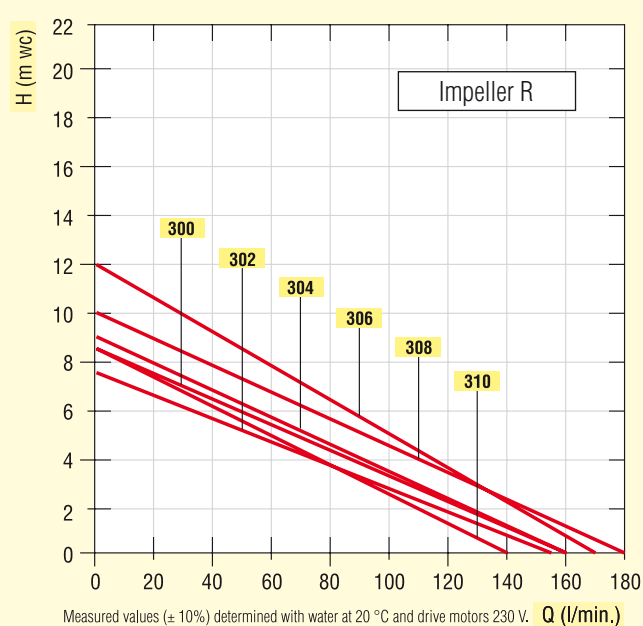
Pump tube Alu (aluminium)



Materials (coming into contact with the pumped medium)

	Alu-MS	Alu-SL
Housing:	Alu, PVDF	Alu, PVDF
Impeller:	ETFE	ETFE
Seals:	Viton®	none
Mechanical seal:	Carbon, SiC, Viton®, HC-4 (2.4610)	none
Bearing:	ETFE	ETFE
Drive shaft:	Stainless Steel (1.4571)	Stainless Steel (1.4571)


Viton® is a registered trademark of DuPont Performance Elastomers.



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

Pump tube Alu (aluminium)

for neutral, non flammable liquids

Pump tube		Alu-MS		Alu-SL		Product detail
Type of impeller		R	L	R	L	
Category 1 / 2 (acc. to ATEX)		no	no	no	no	
Immersion tube diameter:	up to mm	41	41	41	41	
Temperature of medium:	up to °C	100	100	100	100	
Material:	Pump tube	Alu	Alu	Alu	Alu	
	Impeller	ETFE	ETFE	ETFE	ETFE	
Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32	
	Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4	
Length: 700 mm***	Order No.	0133-500	0133-504	0132-300	0132-304	
Length: 1000 mm***	Order No.	0133-501	0133-505	0132-301	0132-305	
Length: 1200 mm***	Order No.	0133-502	0133-506	0132-302	0132-306	
Length: 1500 mm***	Order No.	—	—	—	0132-309	

Choice of motors

Operating data

MI-4		MI-4-E	Characteristic curve no.	300	301	300	301
-		with speed controller	Delivery rate* up to l/min.	160	87	160	87
			Delivery head* up to m wc	8.5	19	8.5	19
Output:	500 W	500 W	Viscosity** up to mPas	150	500	150	500
Voltage:	230 V	230 V	Density**** up to kg/dm³	1.1	1.4	1.1	1.4
Order No.	0030-000	0030-001	Weight (kg) motor + pump tube	4.3	4.3	4.3	4.3



MA II 3			Characteristic curve no.	302	303	302	303
Output:	460 W	460 W	Delivery rate* up to l/min.	155	78	155	78
Voltage:	230 V	230 V	Delivery head* up to m wc	7.5	16	7.5	16
LVR:	no	yes	Viscosity** up to mPas	150	500	150	500
			Density**** up to kg/dm³	1.2	1.6	1.2	1.6
Order No.	0060-000	0060-008	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.	304	305	304	305
Output:	575 W	575 W	575 W	Delivery rate* up to l/min.	160	83	160	83
Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	9	18	9	18
LVR:	no	yes	no	Viscosity** up to mPas	350	800	350	800
			acid-proof	Density**** up to kg/dm³	1.3	1.8	1.3	1.8
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	6.9	6.9	6.9	6.9

MA II 7			Characteristic curve no.	306	307	306	307
Output:	795 W	795 W	Delivery rate* up to l/min.	170	95	170	95
Voltage:	230 V	230 V	Delivery head* up to m wc	12	25	12	25
LVR:	no	yes	Viscosity** up to mPas	350	800	350	800
			Density**** up to kg/dm³	1.4	1.9	1.4	1.9
Order No.	0060-002	0060-010	Weight (kg) motor + pump tube	8.1	8.1	8.1	8.1

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

MD-1		MD-2						
Output:	400 W	400 W	Characteristic curve no.	308	309	308	309	
Operating Pressure:	6 bar	6 bar	Delivery rate*	up to l/min.	180	90	180	90
			Delivery head*	up to m wc	10	20	10	20
			Viscosity**	up to mPas	600	850	600	850
			Density****	up to kg/dm³	1.3	1.8	1.3	1.8
Order No.	0004-087	0004-088	Weight (kg)	motor + pump tube	3.0	3.0	3.0	3.0



B4/GT			Characteristic curve no.	310	311	310	311	
Output:	750 W	750 W	Delivery rate*	up to l/min.	140	75	140	75
Voltage:	230/400 V	230/400 V	Delivery head*	up to m wc	8.5	10	8.5	10
Protection			Viscosity**	up to mPas	400	400	400	400
switch:	no	yes	Density****	up to kg/dm³	2.0	2.2	2.0	2.2
Order No.	0004+019	0004+067	Weight (kg)	motor + pump tube	11.3	11.3	11.3	11.3



* 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.

Lutz Drum and Container Pumps

Pump tube HC (Hastelloy C)



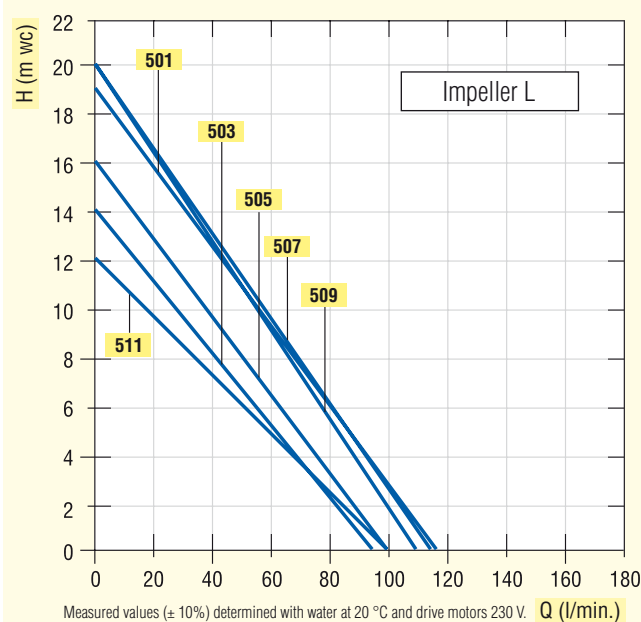
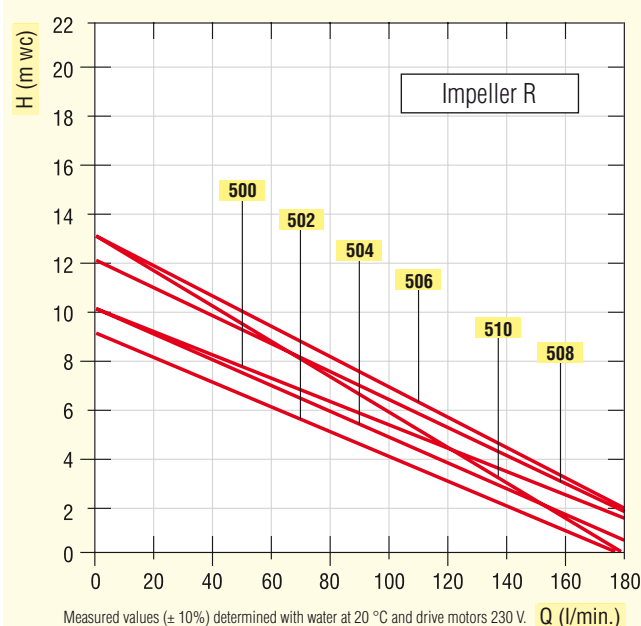
Note: The pump tube in HC is approved for use with flammable liquids.
For the correct motor selection see page 56.

Materials (coming into contact with the pumped medium)

HC-SL

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


Viton® is a registered trademark of DuPont Performance Elastomers.



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

Pump tube HC (Hastelloy C)

for highly corrosive chemicals

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

Choice of motors			Operating data		
Output: Voltage: LVR.: Order No.	MI-4	MI-4-E	Characteristic curve no.	500	501
	-	with speed controller	Flow rate* up to l/min.	210	117
	500 W	500 W	Delivery head* up to m ws	10	19
	230 V	230 V	Viscosity** up to mPas	350	500
			Density**** up to kg/dm³	1.1	1.4
	0030-000	0030-001	Weight (kg) Motor + pump tube	7.2	7.2
Output: Voltage: LVR.: Order No.	MA II 3		Characteristic curve no.	502	503
	460 W	460 W	Flow rate* up to l/min.	178	95
	230 V	230 V	Delivery head* up to m ws	9	14
	no	yes	Viscosity** up to mPas	200	350
			Density**** up to kg/dm³	1.2	1.6
	0060-000	0060-008	Weight (kg) Motor + pump tube	9.0	9.0
Output: Voltage: LVR.: Order No.	MA II 5	MA II 5	Characteristic curve no.	504	505
	575 W	575 W	Flow rate* up to l/min.	190	100
	230 V	230 V	Delivery head* up to m ws	10	16
	no	yes	Viscosity** up to mPas	550	700
		acid-proof	Density**** up to kg/dm³	1.3	1.8
	0060-001	0060-009	Weight (kg) Motor + pump tube	9.8	9.8
Output: Voltage: LVR.: Order No.	MA II 7		Characteristic curve no.	506	507
	795 W	795 W	Flow rate* up to l/min.	210	115
	230 V	230 V	Delivery head* up to m ws	13	20
	no	yes	Viscosity** up to mPas	400	500
			Density**** up to kg/dm³	1.4	1.9
	0060-002	0060-010	Weight (kg) Motor + pump tube	11.0	11.0
Output: Operating-pressure: Order No.	MD-1	MD-2	Characteristic curve no.	508	509
	400 W	400 W	Flow rate* up to l/min.	210	110
	6 bar	6 bar	Delivery head* up to m ws	12	20
			Viscosity** up to mPas	400	500
			Density**** up to kg/dm³	1.3	1.8
	0004-087	0004-088	Weight (kg) Motor + pump tube	5.9	5.9
Output: Voltage: Protection switch: Order No.	B4/GT		Characteristic curve no.	510	511
	750 W	750 W	Flow rate* up to l/min.	180	100
	230/400 V	230/400 V	Delivery head* up to m ws	13	12
	no	yes	Viscosity** up to mPas	400	500
			Density**** up to kg/dm³	2.0	2.2
	0004+019	0004+067	Weight (kg) Motor + pump tube	15.2	15.2

Low-voltage release (LVR):
Prevents the pump from starting up again without warning after a power failure. It's 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.

Lutz Drum and Container Pumps

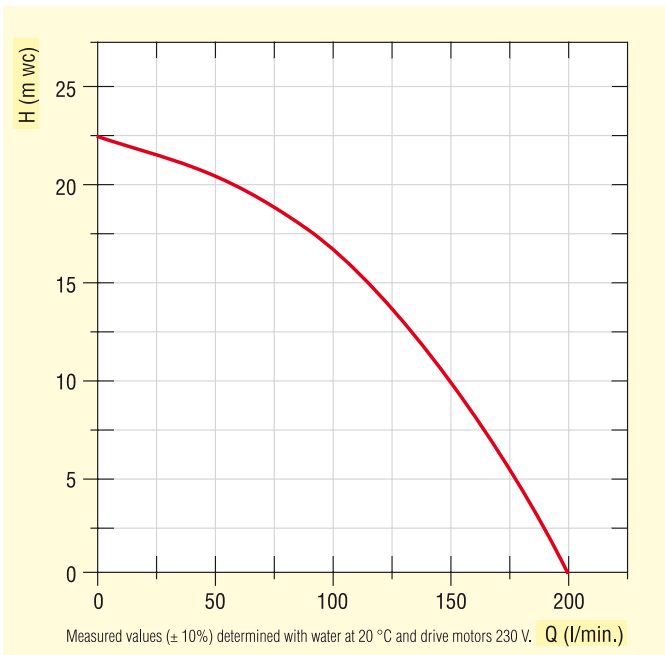
Container pump B50



Materials (coming into contact with the pumped medium)

Container pump	B50 PP/HC	B50 PP/SS
Pump tube:	Polypropylene (PP)	Polypropylene (PP)
Stator:	PPO / PPE	PPO / PPE
Mechanical seal:	Carbon / SiC / HC	Carbon / SiC / HC
Secondary seal:	Viton® (EPDM)	Viton® (EPDM)
Drive shaft:	HC-4 (2.4610)	Stainless steel (1.4571)

Viton® is a registered trademark of DuPont Performance Elastomers.



Container pump B50

For bulk transfer of chemicals




Simplicity and maximum working safety

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

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

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

Container pump		B50 PP/HC	B50 PP/SS	Product detail
Category 1 / 2 (acc. to ATEX)		no	no	
Immersion tube diameter:	max. mm	100	100	
Temperature of medium:	max. °C	40	40	
Material:	Pump tube	PP	PP	
	Impeller/diffuser material	PPO / PPE	PPO / PPE	
	Drive shaft	Hastelloy C (2.4610)	Stainless steel (1.4571)	
Outrun piece:		G 1 1/2 Outer thread	G 1 1/2 Outer thread	
Length: 1100 mm	Order No.	0180-001	0180-501	

Choice of motors		Operating data	
Single phase motor			
Output:	0.55 kW 0.75 kW	Delivery rate* up to l/min.	200
Density:	up to 1.3 kg/dm ³ up to 1.8 kg/dm ³	Delivery head* up to m wc	22
Speed:	2800 1/min. 2700 1/min.	Viscosity up to mPas	100
Prot. class:	IP 54 IP 54	Weight (kg) Motor + pump tube	10.5 – 13.5
Order No.	0180-030 0180-031		



*Determined with water at 20 °C

Motors in special voltages and frequencies on request.

Through thick and thin



Chemical
Beverage
Pharmaceutical
Food industry

Printing ink
Liquid soap
Liquid wax
Honey
Fruit pulp
Fruit juice
Glucose
Gear oil



Resin
Lacquer
Latex emulsion
Motor oil
Polyester resin
Shampoo
Tomato ketchup
Yoghurt





High viscosity pumps

Viscous liquids often present a challenge in trying to transfer them. To share this task with you, we have a range of progressive cavity pumps which covers viscosities from 500 mPas to 120,000 mPas.

Our pumps have been designed along with a modular concept that provides a maximum of flexibility with a minimum of fuss. Simplicity and ease of handling are inherent characteristics. Choice of motors electric or pneumatic, shaft, sealing method and stators provide the best for user-friendliness.

Flows from 12 to 120 l/min. at pressures up to 10 bar make easy work of emptying drums and containers.

All pumps can be quickly disassembled and cleaned, an essential requirement for the food, beverage, cosmetic and pharmaceutical industries.

Running at relatively low speeds, shear sensitive liquids and liquids containing solids present no problem. Likewise sticky liquids such as molasse, glucose and honey.



Drum and Container Pumps

Eccentric screw pump Lutz HD-E



Pump tubes in physiologically safe version (FDA)

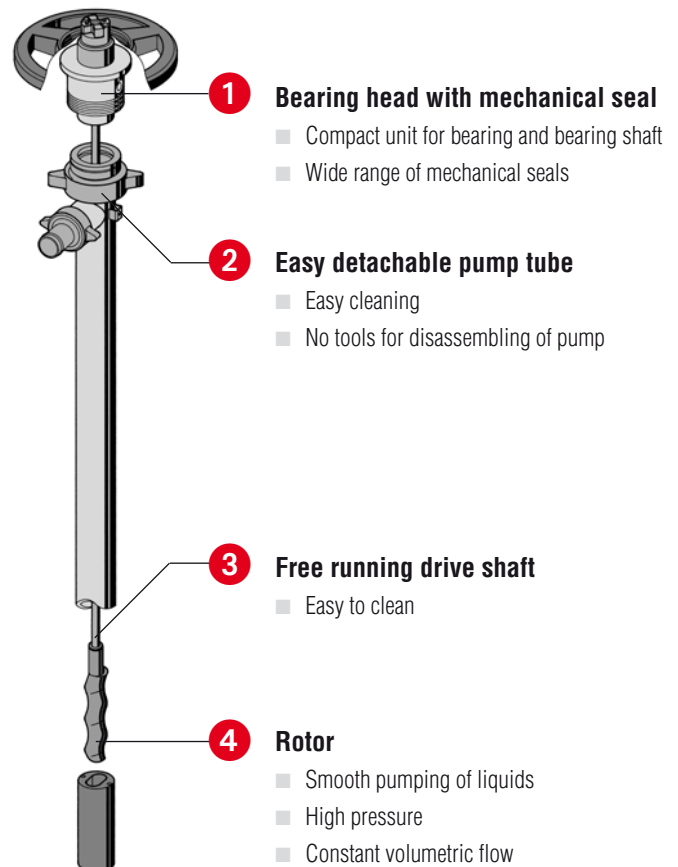
All materials coming into contact with the pumped medium are FDA approved materials.

Materials (coming into contact with the pumped medium)

HD-E

Pump tube:	Stainless steel (1.4571)
Stator:	PTFE
Mechanical seal:	Carbon/CrMo-casting (bellows constr.)
Secondary seal:	Viton®
Drive shaft:	Stainless steel (1.4571)

Viton® is a registered trademark of DuPont Performance Elastomers.



Lutz Eccentric screw pump HD-E

for viscosities from 500 to 4000 mPas



The intelligent solution for the pumping of medium viscous liquids

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

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

- ✓ light and compact
- ✓ simple and easily dismantled
- ✓ easy to clean
- ✓ suitable for continuous operation
- ✓ practical Lutz hand wheel for motor separation and for carrying
- ✓ smooth flow
- ✓ for thin and thick liquids
- ✓ constant volumetric flow

Pump tube HD-E Product detail

Category 1 / 2 (acc. to ATEX)		no
Immersion tube diameter:	up to mm	41
Temperature of medium:	up to °C	100
Material:	Pump tube	Stainless steel (1.4571)
	Stator	PTFE
Hose connection:	Nominal diameter mm	19-32
	Outer thread	G 1 1/4
Length: 1000 mm	Order-No.	0155-010



Choice of motors Operating data

Single phase motor			
Output:	0.55 kW	Delivery rate	up to l/min.
Voltage:	230 V	Delivery head	up to bar
Speed:	1500 1/min.	Viscosity	up to mPas
Protection class:	IP 54	Weight(kg)	motor + pump tube
Order No.	0155-032		



Motors in special voltages and frequencies on request.

Lutz Drum and Container Pumps

Eccentric screw pump B70V-SR, B70V HD-SR 12.1 and 25.1



Materials (coming into contact with the pumped medium)

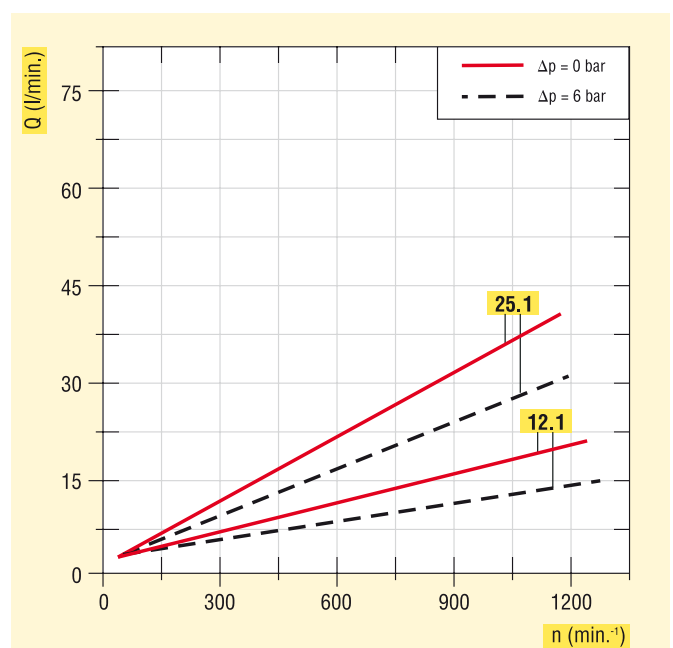
	B70V-SR 12.1/25.1	B70V HD-SR 12.1/25.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)
Mechanical seal:	Carbon/CrMo-Casting, Viton®	WC/WC/EPDM
Packing gland:	PTFE Soft packing safe for use with foodstuffs	—
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.

Important Information!

When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.


Viscosity range from aqueous to fluidity range.



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

Lutz Eccentric screw pump B70V-SR 12.1 and 25.1

for viscosities from 1 - 40,000 mPas

Pump tube		B70V-SR						Product detail
Size		12.1	12.1	12.1	25.1	25.1	25.1	
Seal	Packing gland (St) Mechanical seal (MS)	MS	MS	St	MS	MS	St	
Drive shaft	Torsion shaft (TS) Universal joint shaft (UJ)	TS	UJ	UJ	TS	UJ	UJ	
Delivery rate*	up to l/min.	12	12	12	25	25	25	
Delivery head*	up to bar	6	6	6	8	8	8	
Temp. of medium**	up to °C	140	140	140	140	140	140	
Material pump tube		1.4571	1.4571	1.4571	1.4571	1.4571	1.4571	
Immersion tube diameter	mm	54	54	54	54	54	54	
Pressure joint	Outer thread	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	
Weight	kg	7	7	7	7	7	7	
Length***	mm	1000	1000	1000	1000	1000	1000	
Stator NBR light (T max. 80 °C)	Order No.	—	—	—	0174-131	0174-141	0174-121	
Stator Viton (T max. 140 °C)	Order No.	—	—	—	0174-132	0174-142	0174-122	
Stator PTFE (T max. 140 °C)	Order No.	0174-014	0174-024	0174-004	0174-134	0174-144	0174-124	
B70V HD-SR Stator PTFE (Tmax. 100 °C)	Order No.		0174-026			0174-146		

* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator

Combination of packing gland and torsion shaft on request.

** with PTFE Stator with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)

*** Special length 500 - 2000 mm on request (version with joint shaft only)

● Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX)

for pumping inflammable liquids of the explosion group IIA (B70V-SR) or IIB (B70V HD-SR) and temperature class T4



Choice of motors

Universal motors non-ex. proof	MI-4	MI-4-E	MA II 3	MA II 5	MA II 7
Type	500 W, 230 V	500 W, 230 V	460 W, 230 V	575 W, 230 V	795 W, 230 V
Protection class/Weight	IP 24 2.8 kg	IP 24 2.8 kg	IP 54 4.6 kg	IP 54 5.4 kg	IP 54 6.6 kg
	-	with speed contr.			
Order No. (without low-voltage release)	0030-000	0030-001	0060-000	0060-001	0060-002
Order No. (with low-voltage release)	—	—	0060-008	0060-009	0060-010



Universal motors explosion proof	ME II 3	ME II 5	ME II 7	ME II 8
Type	460 W, 230 V	580 W, 230 V	795 W, 230 V	930 W, 230 V
Protection class/Weight	IP 54 5.5 kg	IP 54 6.3 kg	IP 54 7.5 kg	IP 54 8 kg
Order No. (with low-voltage release)	0050-000	0050-001	0050-002	0050-042
Order No. (without low-voltage release)	0050-016	0050-017	0050-018	0050-041



Compressed air motors	MD-1	MD-2	MD-3
Type	400 W	400 W	400 W
Operating pressure:	6 bar	6 bar	6 bar
Weight	1.1 kg	1.5 kg	2.1 kg
Order No.	0004-087	0004-088	0004-090



Lutz Drum and Container Pumps

Eccentric screw pump B70V-SR and B70V HD-SR 50.1



Materials (coming into contact with the pumped medium)

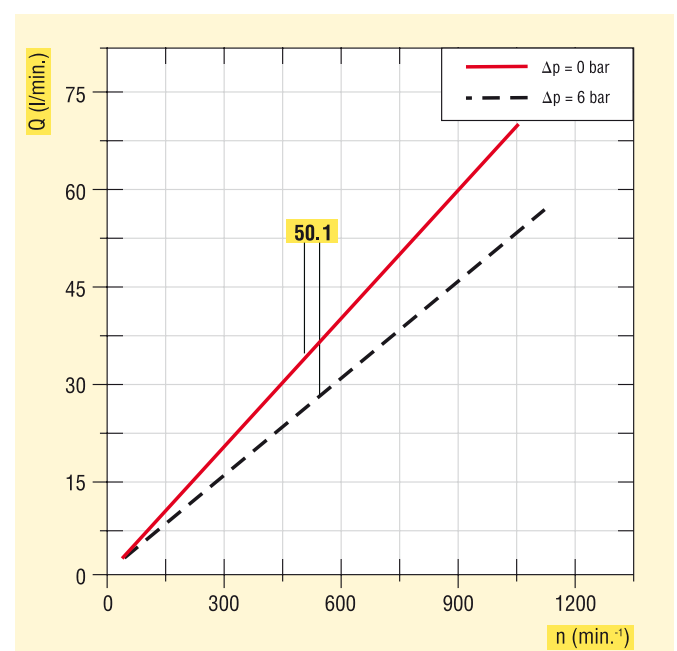
	B70V-SR 50.1	B70V HD-SR 50.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)
Mechanical seal:	Carbon/CrMo-Casting, Viton®	WC/WC/EPDM
Packing gland:	PTFE Soft packing safe for use with foodstuffs	–
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.

Important Information!

When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.


Viscosity range from aqueous to fluidity range.



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

Lutz Eccentric screw pump B70V-SR and B70V HD-SR 50.1

for viscosities from 1 - 40,000 mPas

Pump tube		B70V-SR			Product detail
Size		50.1	50.1	50.1	
Seal	Packing gland (St) Mechanical seal (MS)	MS	MS	St	
Drive shaft	Torsion shaft (TS) Universal joint shaft (UJ)	TS	UJ	UJ	
Delivery rate*	up to l/min.	50	50	50	
Delivery head*	up to bar	8	8	8	
Temp. of medium**	up to °C	140	140	140	
Material pump tube		1.4571	1.4571	1.4571	
Immersion tube diameter	mm	54	54	54	
Pressure joint	Outer thread	G 1 1/2	G 1 1/2	G 1 1/2	
Weight	kg	7	7	7	
Length***	mm	1100	1100	1100	
Stator NBR light (T max. 80 °C)	Order No.	0174-511	0174-521	0174-501	
Stator Viton (T max. 140 °C)	Order No.	0174-512	0174-522	0174-502	
Stator PTFE (T max. 140 °C)	Order No.	0174-514	0174-524	0174-504	
B70V HD-SR Stator PTFE (Tmax. 100 °C)	Order No.		0174-526		

* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator

Combination of packing gland and torsion shaft on request.

** with PTFE Stator with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)

*** Special length 500 - 2000 mm on request (version with joint shaft only)

**** Mechanical seal: carbon/CrMo-casting, Viton® and SIC/SIC

● Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX)
for pumping inflammable liquids of the explosion group IIA (B70V-SR) or IIB (B70V HD-SR) and temperature class T4



Choice of motors

Universal motors non-ex. proof	MI-4	MI-4-E	MA II 3	MA II 5	MA II 7
Type	500 W, 230 V	500 W, 230 V	460 W, 230 V	575 W, 230 V	795 W, 230 V
Protection class/Weight	IP 44 2.8 kg	IP 44 2.8 kg with speed contr.	IP 54 4.6 kg	IP 54 5.4 kg	IP 54 6.6 kg
Order No. (without low-voltage release)	0030-000	0030-001	0060-000	0060-001	0060-002
Order No. (with low-voltage release)	—	—	0060-008	0060-009	0060-010



Universal motors explosion proof	ME II 3	ME II 5	ME II 7	ME II 8
Type	460 W, 230 V	580 W, 230 V	795 W, 230 V	930 W, 230 V
Protection class/Weight	IP 54 5.5 kg	IP 54 6.3 kg	IP 54 7.5 kg	IP 54 8 kg
Order No. (with low-voltage release)	0050-000	0050-001	0050-002	0050-042
Order No. (without voltage release)	0050-016	0050-017	0050-018	0050-041



Compressed air motors	MD-1	MD-2	MD-3
Type	400 W	400 W	400 W
Operating pressure	6 bar	6 bar	6 bar
Weight	1.1 kg	1.5 kg	2.1 kg
Order No.	0004-087	0004-088	0004-090



Different voltages and frequencies see page 56-57.

Lutz Drum and Container Pumps

Eccentric screw pump B70V 12.1 and 25.1



Materials (coming into contact with the pumped medium)

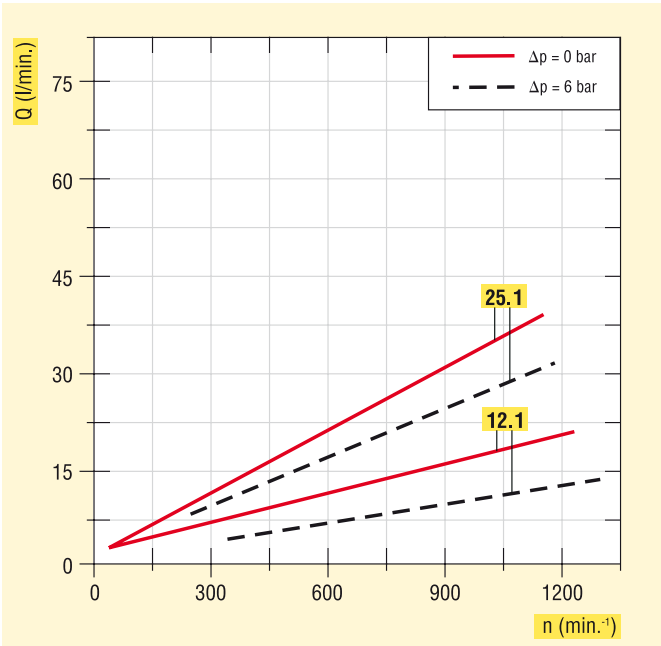
	B70V 12.1/25.1	B70V 25.1 Steel	B70V HD 12.1/25.1
Housing:	Stainless steel (1.4571)	galvanized steel	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	soft-nitrided steel	Stainless steel (1.4571)
Seals:	FPM (Viton®) FPM (Viton®)	FPM (Viton®)	
Mechanical seal:	Carbon/CrMo-Casting, Viton® (optional SIC/SIC, Viton®)	Carbon/CrMo-Casting, Viton® (optional SIC/SIC, Viton®)	WC/WC/EPDM
Packing gland:	PTFE Soft packing safe for use with foodstuffs	—	—
Drive shaft:	Stainless steel (1.4571)	galvanized steel	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	NBR light, Viton®, PTFE	PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.

Important Information!

When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.


Viscosity range from aqueous to fluidity range.



When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Lutz Eccentric screw pump B70V 12.1 and 25.1

for viscosities from 1 - 100,000 mPas

Pump tube		B70V							Product detail
Size		12.1	12.1	12.1	25.1	25.1	25.1	25.1 Steel	
Seal	Packing gland (St) Mechanical seal (MS)	MS	MS	St	MS	MS	St	MS	
Drive shaft	Torsion shaft (TS) Universal joint shaft (UJ)	TS	UJ	UJ	TS	UJ	UJ	TS	
Delivery rate*	up to l/min.	12	12	12	25	25	25	25	
Delivery head*	up to bar	6	6	6	8	8	8	8	
Temp. of medium**	max. °C	140	140	140	140	140	140	80	
Material pump tube		1.4571	1.4571	1.4571	1.4571	1.4571	1.4571	galv. Steel	
Immersion tube diameter	mm	54	54	54	54	54	54	54	
Pressure joint	Outer thread	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	
Weight	kg	7	7	7	7	7	7	7	
Length***	mm	1000	1000	1000	1000	1000	1000	1000	
Stator NBR light (Tmax. 80 °C)	Order No.	—	—	—	0172-121	0173-131	0173-121	0171-121	
Stator Viton® (Tmax. 140 °C)	Order No.	—	—	—	0172-122	0173-132	0173-122	0171-122	
Stator PTFE (Tmax. 140 °C)	Order No.	0172-004	0173-014	0173-004	0172-124	0173-134	0173-124	0171-124	
B70V HD-D Stator PTFE (Tmax. 140 °C)	Order No.		0173-016			0173-136			

* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator

Combination of packing gland and torsion shaft on request.

** with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)

*** Special lengths 500 - 2000 mm on request (version with joint shaft only)

● Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA (B70V) or IIB (B70V HD-D) and temperature class T4



Choice of motors

Motors with cable terminal box		For B70V - 12.1		For B70V - 25.1	
Type		0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min.	0.75 kW, 900 1/min.
Protection class/Weight		IP 55 15.7 kg	IP 55 11.3 kg	IP 55 15.7 kg	IP 55 17.3 kg
Order No.		0172+803	0172+806	0172+809	0172+812
Motors with protection switch		For B70V - 12.1		For B70V - 25.1	
Type		0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min.	0.75 kW, 900 1/min.
Protection class/Weight		IP 54 15.7 kg	IP 54 11.3 kg	IP 54 15.7 kg	IP 54 17.3 kg
Order No.		0172+802	0172+805	0172+808	0172+811
Motors, explosion proof		For B70V - 12.1		For B70V - 25.1	
Type		0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min.	0.65 kW, 900 1/min.
Protection class		II 2 G Ex e II T3	II 2 G Ex e II T3	II 2 G Ex e II T3	II 2 G Ex e II T3
Protection class/Weight		IP 54 16.4 kg	IP 54 17.2 kg	IP 54 18 kg	IP 54 15.3 kg
Order No.		0172-801	0172-804	0172-807	0172-810
Motors with frequency converter		For B70V - 12.1		For B70V - 25.1	
Type		0.55 kW, 0-900 1/min.	0.55 kW, 0-900 1/min.	0.75 kW, 0-900 1/min.	
Protection class/Weight		IP 54 13.5 kg	IP 54 13.5 kg	IP 54 15 kg	
Order No.		0172-769	0172-769	0172-768	
Compressed air motors		For B70V - 12.1		For B70V - 25.1	
Type		4 DA, 0.45 kW, 900 1/min., weight 5 kg, operating pressure at 6 bar, air consumption 55 Nm³/h, 87 dB (A)		6 DA, 1.0 kW, 900 1/min., weight 10 kg, operating pressure at 6 bar, air consumption 80 Nm³/h, 87 dB (A)	
Air supply thread		G 3/8		G 1/2	
Order No.		0172-821		0172-822	



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



Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

Lutz Drum and Container Pumps

Eccentric screw pump B70V 25.2 and 50.1



Materials (coming into contact with the pumped medium)

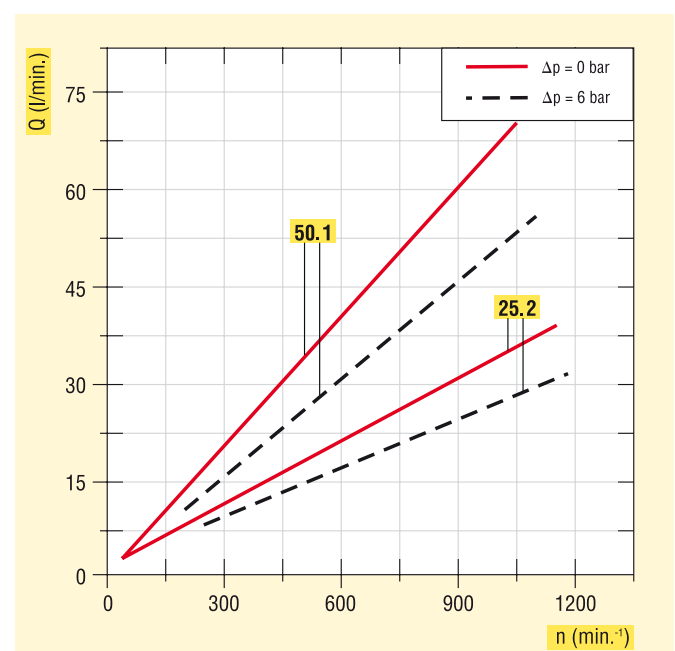
	B70V 25.2/50.1	B70V HD-D25.2/50.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)
Mechanical seal:	Carbon/CrMo-Casting, Viton®	WC/WC/EPDM
Packing gland:	PTFE Soft packing safe for use with foodstuffs	–
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.

Important Information!

When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range.




When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Lutz Eccentric screw pump B70V 25.2 and 50.1

for viscosities from 1 - 100,000 mPas

Pump tube			B70V					Product detail
Size			25.2	25.2	25.2	50.1	50.1	50.1
Seal	Packing gland (St) Mechanical seal (MS)		MS	MS	St	MS	MS	St
Drive shaft	Torsion shaft (TS) Universal joint shaft (UJ)		TS	UJ	UJ	TS	UJ	UJ
Delivery rate*	up to l/min.		25	25	25	50	50	50
Delivery head*	up to bar		10	10	10	8	8	8
Temp. of medium**	max. °C		140	140	140	140	140	140
Material pump tube			1.4571	1.4571	1.4571	1.4571	1.4571	1.4571
Immersion tube diameter	mm		54	54	54	54	54	54
Pressure joint	Outer thread		G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2
Weight	kg		7	7	7	7	7	7
Length***	mm		1100	1100	1100	1100	1100	1100
Stator NBR light (Tmax. 80 °C)	Order No.		—	—	—	0172-501	0173-511	0173-501
Stator Viton® (Tmax. 140 °C)	Order No.		—	—	—	0172-502	0173-512	0173-502
Stator PTFE (Tmax. 140 °C)	Order No.		0172-254	0173-264	0173-254	0172-504	0173-514	0173-504
B70V HD-D Stator PTFE (Tmax. 140 °C)	Order No.			0173-266			0173-516	



* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator

Combination of packing gland and torsion shaft on request.

** with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)

*** Special length 500 - 2000 mm on request (version with joint shaft only)

● Explosion proof eccentric screw pump approved Category 1 / 2 (acc. to ATEX)
for pumping inflammable liquids of the explosion group IIA (B70V) or IIB (B70V HD-D) and temperature class T4



Choice of motors

Motors with cable terminal box		For B70V - 25.2 and B70V - 50.1		
Type		0.75 kW, 700 1/min.	1.1 kW, 700 1/min.	1.1 kW, 900 1/min.
Protection class/Weight		IP 55 17.3 kg	IP 55 21 kg	IP 55 21.1 kg
Order No.		0172+815	0172+826	0172+818
Motors with protection switch		For B70V - 25.2 and B70V - 50.1		
Type		0.75 kW, 700 1/min.	1.1 kW, 700 1/min.	1.1 kW, 900 1/min.
Protection class/Weight		IP 54 17.3 kg	IP 54 21 kg	IP 54 21.1 kg
Order No.		0172+814	0172+825	0172+817
Motors, explosion proof		For B70V - 25.2 and B70V - 50.1		
Type		0,65 kW, 700 1/min.	1,0 kW, 900 1/min.	
Protection class		II 2 G EEx e II T3	II 2 G EEx e II T3	
Protection class/Weight		IP 54 20 kg	IP 54 20 kg	
Order No.		0172-813	0172-816	
Motors with frequency converter		For B70V - 25.2 and B70V - 50.1		
Type		0,75 kW, 0-900 1/min.	1,1 kW, 0-900 1/min.	
Protection class/Weight		IP 54 15 kg	IP 54 20 kg	
Order No.		0172-768	0172-767	



Three-phase motor
230/400 V, 50 Hz
Efficiency level IE 2
(≥ 0.75 kW) according
to directive 2005/32/EC.

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

Compressed air motor		For B70V - 25.2 / 50.1
Type		8 DA , 1.7 kW, 900 1/min., weight 14 kg operating pressure at 6 bar, air consumption 130 Nm³/h, 102 db (A)
Air supply thread		G 1/2
Order No.		0172-823



Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

Lutz Drum and Container Pumps

Eccentric screw pump B70V 75.1



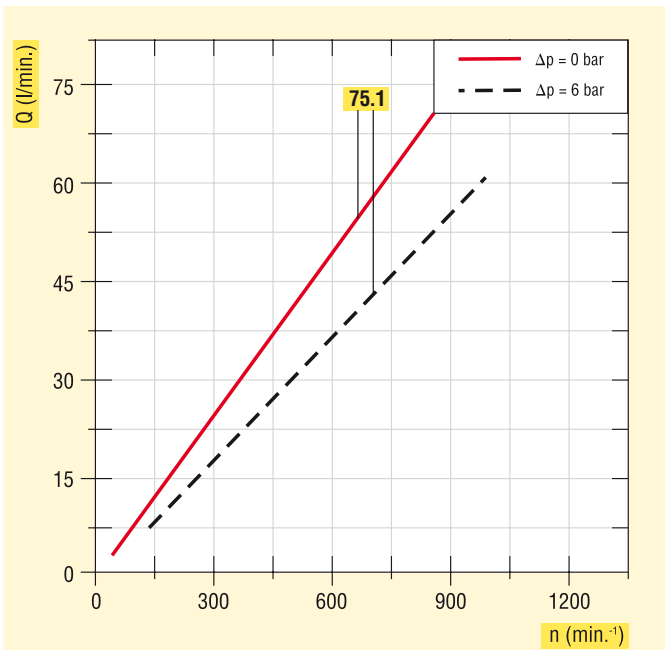
Materials (coming into contact with the pumped medium) B70V 75.1

Housing:	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)
Seals:	FPM (Viton®)
Mechanical seal:	Carbon/CrMo-Casting, Viton®
Drive shaft:	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.


Important Information!

Viscosity range from aqueous to fluidity range.



Lutz Eccentric screw pump B70V 75.1

for viscosities from 1 - 100,000 mPas

Pump tube		B70V	Product detail
Size		75.1	
Seal	Mechanical seal (MS)	MS	
Drive shaft	Universal joint shaft (UJ)	UJ	
Delivery rate*	up to l/min.	75	
Delivery head*	up to bar	8	
Temp. of medium**	max. °C	140	
Material pump tube		1.4571	
Immersion tube diameter	mm	54	
Pressure joint	Outer thread	G 1 1/2	
Weight	kg	7	
Length***	mm	1100	
Stator NBR light (Tmax. 80 °C)	Order No.	0173-561	
Stator Viton (Tmax. 140 °C)	Order No.	0173-562	
Stator PTFE (Tmax. 140 °C)	Order No.	0173-564	

* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator

** with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)

*** Special length 500 - 2000 mm on request (version with joint shaft only)

Choice of motors

Motors with cable terminal box		For B70V - 75.1	
Type		1.1 kW, 700 1/min.	1.5 kW, 700 1/min.
Protection class/Weight		IP 55 21 kg	IP 55 33 kg
Order No.		0172+826	0172-761
			0172+829
Motors with protection switch		For B70V - 75.1	
Type		1.1 kW, 700 1/min.	1.5 kW, 700 1/min.
Protection class/Weight		IP 54 21 kg	IP 54 33 kg
Order No.		0172+825	0172-760
			0172+828
Motors with frequency converter		For B70V - 75.1	
Type		1.5 kW, 0-900 1/min.	
Protection class/Weight		IP 54 34 kg	
Order No.		0172-766	

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

efficiency level IE 2 (≥ 0.75 kW) according to directive 2005/32/EC.

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



Compressed air motor		For B70V - 75.1
Type		8 DA, 1.7 kW, 900 1/min., weight 14 kg
Air supply thread		operating pressure at 6 bar, air consumption 130 Nm³/h, 102 db (A) G 1/2
Order No.		0172-823

Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).



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Lutz Drum and Container Pumps

Eccentric screw pump B70V 120.1



New

Materials (coming into contact with the pumped medium)

B70V 120.1

Housing:	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)
Seals:	FPM (Viton®)
Mechanical seal:	wc/wc, Viton®
Drive shaft:	Stainless steel (1.4571)
Stator material:	NBR light, PTFE

Viton® is a registered trademark of DuPont Performance Elastomers.

* alternative mechanical seal pairing on request.

Range 1:

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

Range 2:

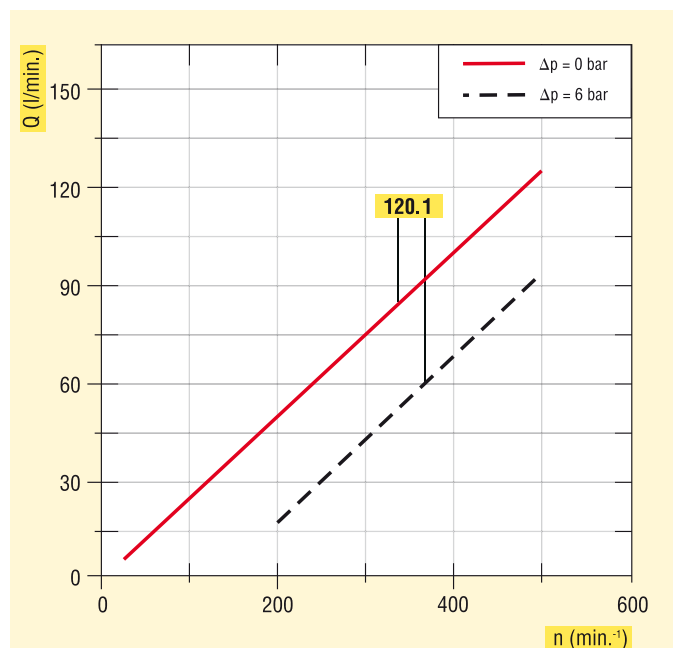
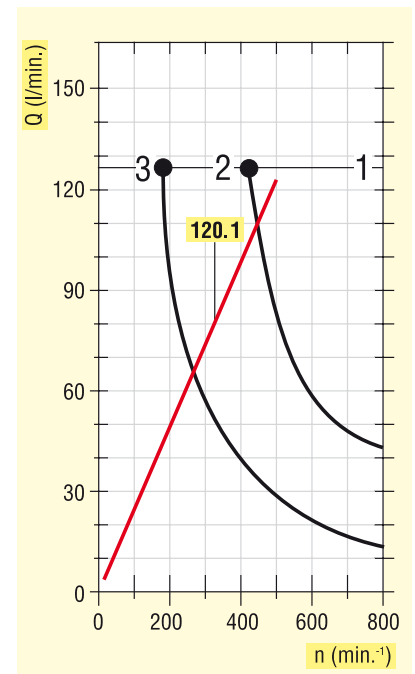
Abrasive and viscous fluids such as pulps, adhesives, paints, inks, etc.
 $\eta < 20,000 \text{ mPas}$

Range 3:

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


Viscosity range:

Up to limit of flowability



Lutz Eccentric screw pump B70V 120.1

for viscosities from 1 - 120,000 mPas

Pump tube		B70V	Product detail
Size		120.1	
Category 1 / 2 (acc. to ATEX)		no	
Seal	Mechanical seal (MS)	MS	
Drive shaft	Universal joint shaft (UJ)	UJ	
Delivery rate*	up to l/min.	120	
Delivery head*	up to bar	6	
Temp. of medium**	max. °C	140	
Material pump tube		1.4571	
Immersion tube diameter***	max. mm	131	
Pressure joint	Outer thread	Tri Clamp DN 50 (DIN 32676)	
Weight	kg	15	
Length****	mm	1100	
Stator NBR light (Tmax. 80 °C)	Order No.	0175-201	
Stator PTFE (Tmax. 140 °C)	Order No.	0175-204	

* Determined with water at 20 °C, three-phase motor (600 rpm and 700 rpm) and elastomer stator

** with PTFE Stator

*** required bung hole Ø 133 mm

**** Special length 500 - 2500 mm on request

Choice of motors

Drive motors

Three-phase motors 230/400 V, 50 Hz, efficiency level IE 2, protection class IP 55 with cable terminal box, protection switch or integrated frequency converter.

Special voltages, frequencies, protection class on request.

Connection dimensions

acc. IEC 34 part 7
size B14 type M100



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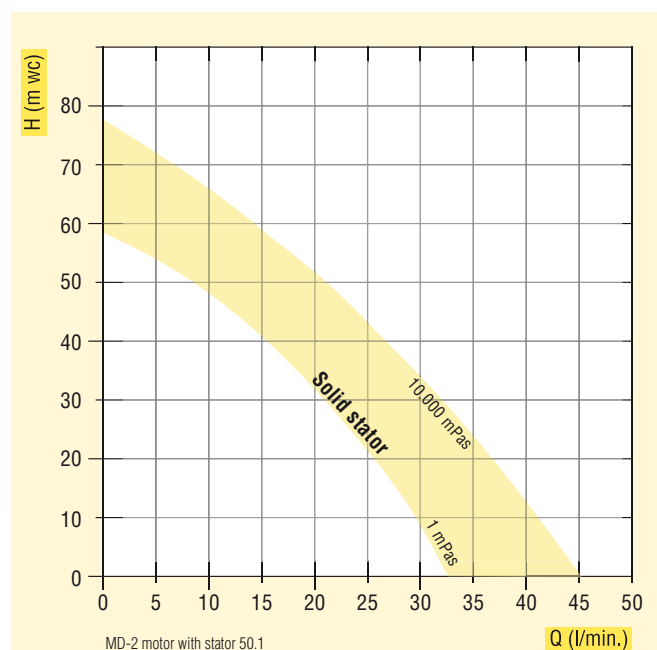
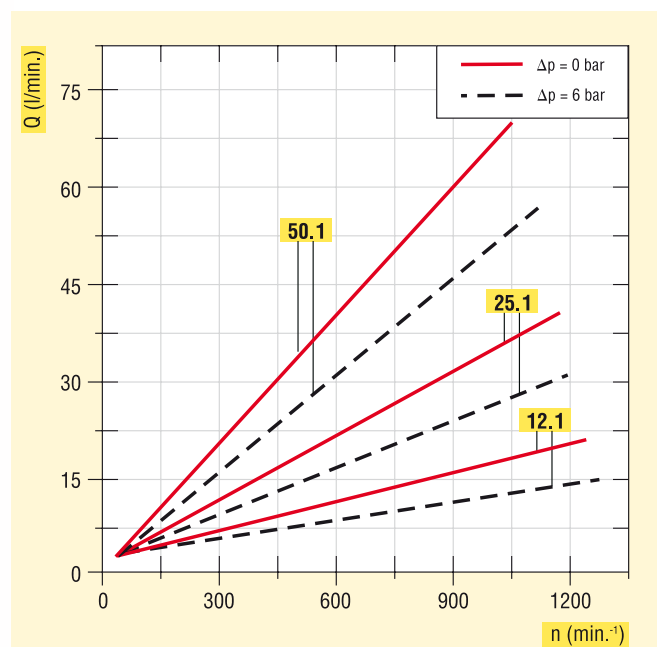
B70V-H-SR Sanitary 12.1, 25.1 and 50.1



Materials (coming into contact with the pumped medium)


B70V-H-SR Sanitary 12.1/25.1/50.1

Housing:	Stainless steel (1.4404)
Rotor:	Stainless steel (1.4571)
Seals:	EPDM
Mechanical seal:	Carbon/SiC/EPDM (optional SiC/SiC/EPDM)
Drive shaft:	Stainless steel (1.4571)
Stator material:	PTFE , EPDM (Size 50.1)



Lutz Eccentric screw pump

B70V-H-SR Sanitary 12.1, 25.1 and 50.1 for viscosities up to 30,000 mPas

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

* Determined with water at 20 °C, three-phase motor (900 rpm)

** Special length on request

Choice of motors

Universal motors non-ex. proof	MI-4	MI-4-E	MA II 3	MA II 5	MA II 7
Type	500 W, 230 V	500 W, 230 V	460 W, 230 V	575 W, 230 V	795 W, 230 V
Protection class/Weight	IP 24 2.8 kg	IP 24 2.8 kg with speed contr.	IP 54 4.6 kg	IP 54 5.4 kg	IP 54 6.6 kg
Order No. (without low-voltage release)	0030-000	0030-001	0060-000	0060-001	0060-002
Order No. (with low-voltage release)	–	–	0060-008	0060-009	0060-010

Motors in special voltages and frequencies on request.



Compressed air motors	MD-1	MD-2	MD-3
Type	400 W	400 W	400 W
Operating pressure:	6 bar	6 bar	6 bar
Weight	1.1 kg	1.5 kg	2.1 kg
Order No.	0004-087	0004-088	0004-090



Accessories

	Order No.
Hose connection	DN 38 to Tri-Clamp DN 50 0172-746
Adapterfitting Tri-Clamp DN 50	to thread DIN 11851 Rd 78 x 1/6 (DIN 405) 0172-747
Fastener bracket Tri-Clamp	DN 50 (DIN 32676) 1.4401 with seal EPDM 0172-745
Discharge spout Tri-Clamp DN 50	0172-748
Pump foot	for drum inliner 0172-771

B70V-H-D Sanitary 12.1, 25.1, 25.2, 50.1

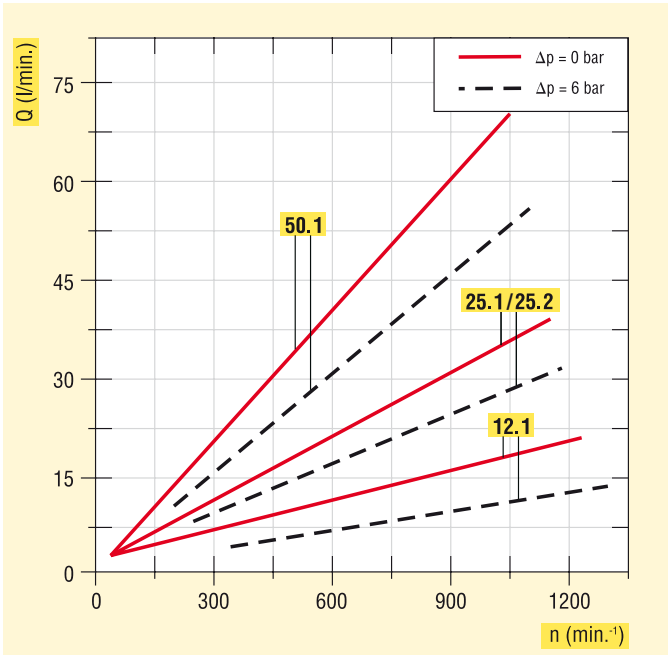


Materials (coming into contact with the pumped medium)

B70V-H-D Sanitary 12.1/25.1/25.2/50.1	
Housing:	Stainless steel (1.4404)
Rotor:	Stainless steel (1.4571)
Seals:	EPDM
Mechanical seal:	Carbon/SiC/EPDM (optional SiC/SiC/EPDM)
Drive shaft:	Stainless steel (1.4571)
Stator material:	PTFE, EPDM (Size 50.1)




Equipped with mounting strap and motor quick coupling as standard.



Lutz Eccentric screw pumps

B70V-H-D Sanitary 12.1, 25.1, 25.2 and 50.1 for viscosities up to 100,000 mPas

Pump tube		B70V-H-D Sanitary				Product detail
Size		12.1	25.1	25.2	50.1	
Seal	Mechanical seal (MS)	MS	MS	MS	MS	
Delivery rate*	up to l/min.	12	25	25	50	
Delivery head*	up to bar	6	6	10	8	
Temp. of medium	max. °C	100	100	100	100	
Material pump tube		1.4404	1.4404	1.4404	1.4404	
Immersion tube diameter	mm	54	54	54	54	
Pressure joint	Tri-Clamp**	DN 50	DN 50	DN 50	DN 50	
Weight	kg	7	7	7	7	
Length**	mm	1100	1100	1100	1100	
Stator EPDM	Order No.	–	–	–	0172-506	
Stator PTFE	Order No.	0172-007	0172-127	0172-257	0172-507	

* Determined with water at 20 °C, three-phase motor (900 rpm) ** Special length on request

Choice of motors

Motors with protection switch		For B70V-H-D Sanitary - 12.1		For B70V-H-D Sanitary - 25.1	
Type		0.55 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min.	0.75 kW, 900 1/min.
Protection class/Weight		IP 54 16.5 kg	IP 54 11 kg	IP 54 16.5 kg	IP 55 17 kg
Order No.		0172-750	0172-752	0172-750	0172-753
Motors with frequency converter		For B70V-H-D Sanitary - 12.1		For B70V-H-D Sanitary - 25.1	
Type		0.55 kW, 0-900 1/min.		0.55 kW, 0-900 1/min.	0.75 kW, 0-900 1/min.
Protection class/Weight		IP 54 13.5 kg		IP 54 13.5 kg	IP 54 15 kg
Order No.		0172-755		0172-755	0172-756
Motors with protection switch		For B70V-H-D Sanitary - 25.2		For B70V-H-D Sanitary - 50.1	
Type		0.75 kW, 700 1/min.		1.1 kW, 900 1/min.	
Protection class/Weight		IP 54 17 kg		IP 54 21.5 kg	
Order No.		0172-751		0172-754	
Motors with frequency converter		For B70V-H-D Sanitary - 25.2		For B70V-H-D Sanitary - 50.1	
Type		0.75 kW, 0-900 1/min.	1.1 kW, 0-900 1/min.	1.1 kW, 0-900 1/min.	
Protection class/Weight		IP 54 15 kg	IP 54 20 kg	IP 54 20 kg	
Order No.		0172-756	0172-757	0172-757	



Three-phase motor
230/400 V, 50 Hz,
RAL 9001,
Efficiency level IE 2
(≥ 0.75 kW) according
to directive 2005/32/EC.
Special voltages,
frequencies, protection
classes on request.

Compressed air motors		For B70V - 12.1	For B70V - 25.1	For B70V - 25.2 / 50.1
Type		4 DA, 0.45 kW, 900 1/min., Weight 5 kg, operating pressure at 6 bar, air consumption 55 Nm³/h,	6 DA, 1.0 kW, 900 1/min., Weight 10 kg, operating pressure at 6 bar, air consumption 80 Nm³/h,	8 DA, 1.7 kW, 900 1/min., Weight 14 kg, operating pressure at 6 bar, air consumption 130 Nm³/h,
Air supply thread		87 dB (A) G 3/8	87 dB (A) G 1/2	102 dB (A) G 1/2
Order No.		0172-821	0172-822	0172-823



Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

Accessories	Order No.
Hose connection	DN 38 to Tri-Clamp DN 50
Adapterfitting Tri-Clamp DN 50	to thread DIN 11851, Rd 78 x 1/6 (DIN 405)
Fastener bracket Tri-Clamp	DN 50 (DIN 32676) 1.4401 with seal EPDM
Discharge spout Tri-Clamp DN 50	
Pump foot	for drum inliner
	0172-746
	0172-747
	0172-745
	0172-748
	0172-771

B70V-H-D Sanitary 75.1

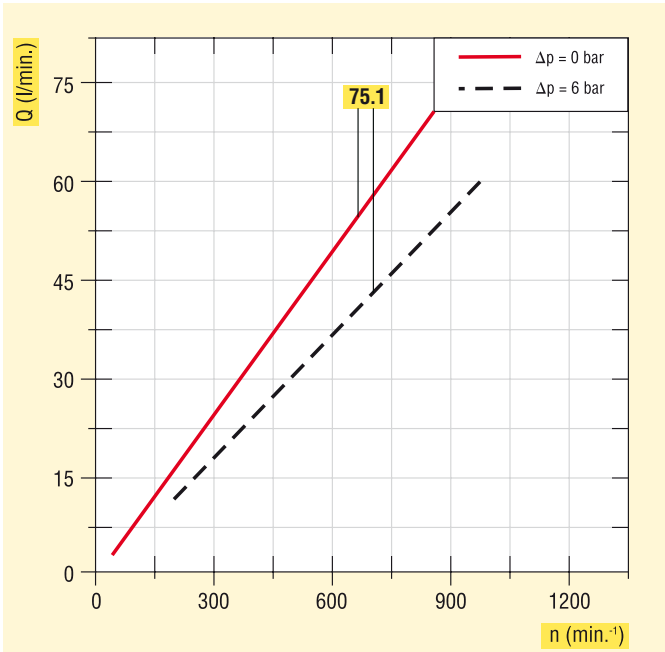


Materials (coming into contact with the pumped medium)

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




Equipped with mounting strap and motor quick coupling as standard.



Lutz Eccentric screw pumps

B70V-H-D Sanitary 75.1 for viscosities up to 100,000 mPas

Pump tube		B70V-H-D Sanitary	Product detail
Size		75.1	
Seal	Mechanical seal (MS)	MS	
Delivery rate*	up to l/min.	75	
Delivery head*	up to bar	6	
Temp. of medium	max. °C	100	
Material pump tube		1.4404	
Immersion tube diameter	mm	54	
Pressure joint	Tri-Clamp	DN 50	
Weight	kg	7	
Length**	mm	1100	
Stator PTFE	Order No.	0172-557	

* Determined with water at 20 °C, three-phase motor (900 rpm)

** Special length on request

Choice of motors

Motors with cable terminal box		For B70V-H-D Sanitary - 75.1	
Type		1.5 kW, 700 1/min.	1.5 kW, 900 1/min.
Protection class/Weight		IP 55 33 kg	IP 55 30 kg
Order No.		0172-763	0172-765
Motors with protection switch		For B70V-H-D Sanitary - 75.1	
Type		1.5 kW, 700 1/min.	1.5 kW, 900 1/min.
Protection class/Weight		IP 54 33 kg	IP 54 30 kg
Order No.		0172-762	0172-764
Motors with frequency converter		For B70V-H-D Sanitary - 75.1	
Type		1.5 kW, 0-900 1/min.	
Protection class/Weight		IP 54 34 kg	
Order No.		0172-758	



Three-phase motor
230/400 V, 50 Hz,
RAL 9001,
Efficiency level IE 2
(≥ 0.75 kW) according
to directive 2005/32/EC.
Special voltages,
frequencies, protection
classes on request.

Compressed air motors		For B70V - 75.1
Type		8 DA, 1.7 kW, 900 1/min., Weight 14 kg, operating pressure at 6 bar, air consumption 130 Nm³/h,
Air supply thread		102 dB (A) G 1/2
Order No.		0172-823



Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

Accessories		Order No.
Hose connection	DN 38 to Tri-Clamp DN 50	0172-746
Adapterfitting Tri-Clamp DN 50	to thread DIN 11851, Rd 78 x 1/6 (DIN 405)	0172-747
Fastener bracket Tri-Clamp	DN 50 (DIN 32676) 1.4401 with seal EPDM	0172-745
Discharge spout Tri-Clamp DN 50		0172-748
Pump foot	for drum inliner	0172-771

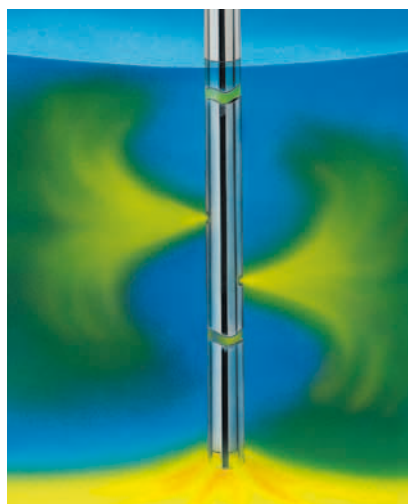
From the laboratory to the production



The new Lutz B2 Vario Pump comes with more features and benefits to meet the needs of working in clean and quiet environments. The speed-controllable motor and the new nozzle in the set version permits small quantities of liquids to be transferred safely and quietly. The modular construction permits effortless servicing without special tools.



Ignoring waste and costs are things of the past. The RE pump provides the solution for reducing waste and avoiding costs through product loss and waste disposal. Use of the RE means less than 0.1 litre is left in a standard 200 litre drum.



When it comes to handling emulsions or suspensions which tend to settle out at the bottom of the containers, the MP, mixing and pumping tube, is an invaluable aid in ensuring that your liquids are gently re-mixed and homogenised.





The new Lutz Battery Pump B1 for convenient and safe transfer of small liquid amounts with the battery-powered laboratory pump from Lutz. The Pump is also available as a complete pump set with accessories – incorporates the reliable and tested drum pump technology.



Economy

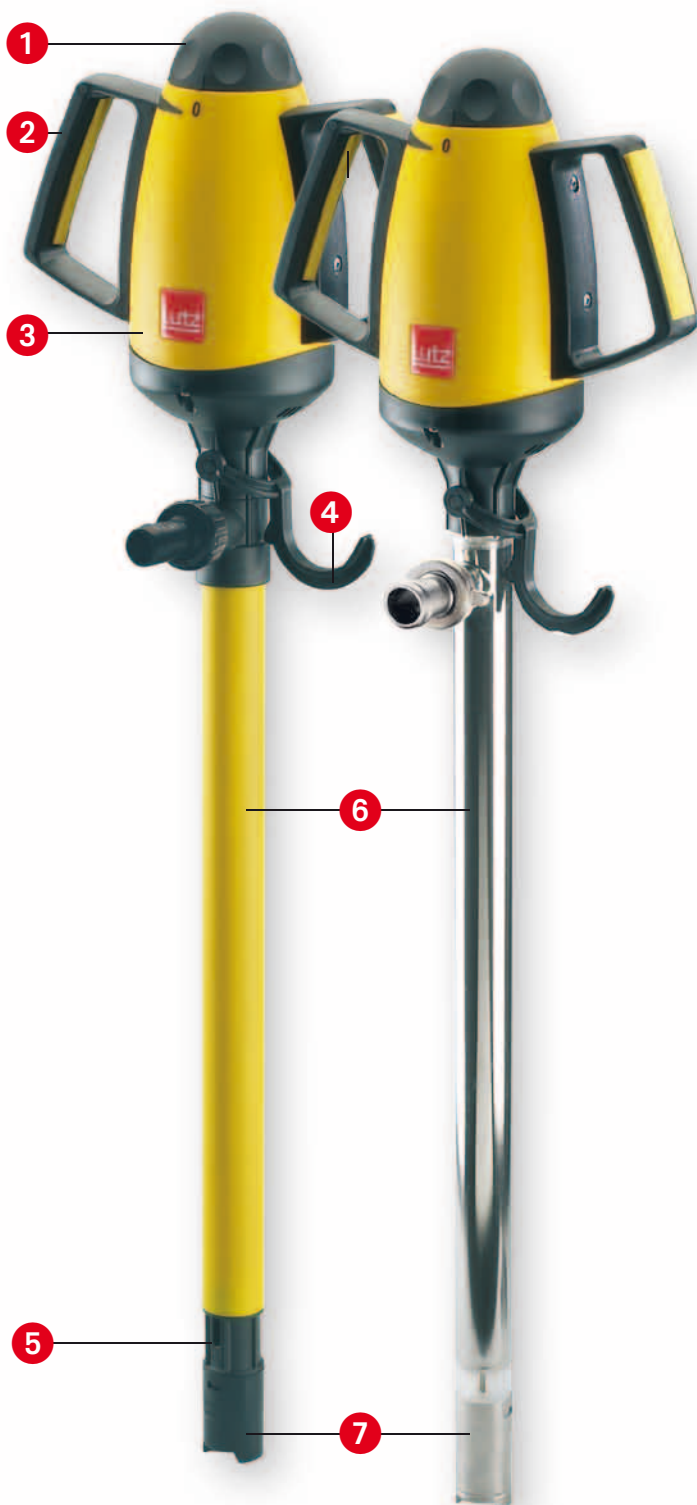
The days are shorter and maybe we should pause for reflection. Is there something we may have overlooked? Costs perhaps? Our specialised pumps economically take care of the light tasks, as well as those involving expensive, toxic or simply dangerous liquids. We do not leave much to chance, including your budget.

Our sets provide a complete solution, no need to hunt for the extra accessory. With our modular system, all our motors are interchangeable with our pump tubes.



Lutz Drum and Container Pumps

B2 Vario (polypropylene or stainless steel)



Materials (coming into contact with the pumped medium)

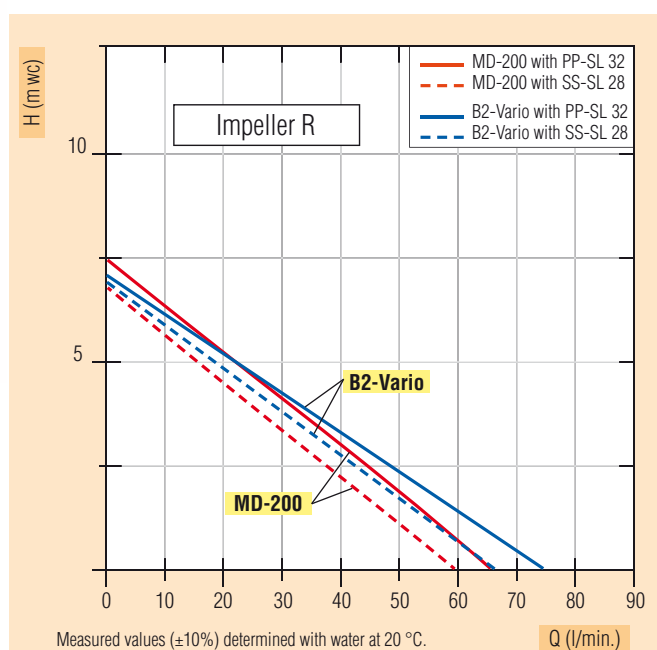
Lutz B2 Vario PP-SL	Lutz B2 Vario SS-SL
Housing: PP/PVDF	Stainless steel (1.4571)
Impeller: PP	ETFE
Seals: none	none
Mechanical seals: none	none
Bearing: ETFE/PTFE	ETFE/PTFE
Drive shaft: Hastelloy C	Stainless steel (1.4571)

- 1 Ultra quiet variable speed motor with safety cut-out
- 2 Ergonomically designed handles
- 3 Direct coupled motor for easy servicing
- 4 Hanger for nozzle
- 5 Chemically resistant plain bearing
- 6 Modular design sealless pump tube with improved hydraulics
- 7 Replaceable pump foot

IP 24
CE




Also available with
air driven motor MD-200



Lutz B2 Vario (polypropylene or stainless steel)

for the laboratory and research sector

Pump		Lutz B2 Vario PP-SL 32	Lutz MD-200 PP-SL 32	Product detail
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	PP	
	Impeller	PP	PP	
Type of Impeller		R	R	
Category 1 / 2 (acc. to ATEX)		no	no	
Immersion tube diameter: up to mm		32	32	
Hose connection:	Nominal diameter mm	19	19	
	Outer thread	G 1	G 1	
Delivery rate*	up to l/min.	75	65	
Delivery head*	up to m wc	7	7	
Temperature of medium:	up to °C	- 15 up to + 50	-15 up to + 50	
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	2.0 - 2.3	
Length: 500 mm	Order No.	0201-500	0201-560	
Length: 700 mm	Order No.	0201-501	0201-561	
Length: 1000 mm	Order No.	0201-502	0201-562	

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

Special lengths, other voltages and frequencies on request.

Pump		Lutz B2 Vario SS-SL 28	Lutz MD-200 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	PP
	Impeller	ETFE	PP
Type of Impeller		R	R
Category 1 / 2 (acc. to ATEX)		no	no
Immersion tube diameter: up to mm		28	28
Hose connection:	Nominal diameter mm	19	19
	Outer thread	G 1	G 1
Delivery rate*	up to l/min.	68	60
Delivery head*	up to m wc	6.5	6
Temperature of medium:	up to °C	- 15 up to + 90	-15 up to + 90
Viscosity**	up to mPas	300	350
Density	up to kg/dm ³	1.3	1.3
Weight (kg)	motor+pump tube	2.9 - 3.5	2.0 - 2.3
Length: 500 mm	Order No.	0201-510	0201-570
Length: 700 mm	Order No.	0201-511	0201-571
Length: 1000 mm	Order No.	0201-512	0201-572

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

Special lengths, other voltages and frequencies on request.



1

2

3

4

Lutz Drum and Container Pumps

Pump tube RE-PP (polypropylene)

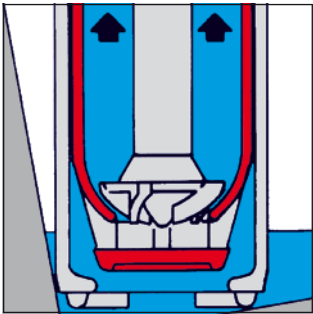


Materials (coming into contact with the pumped medium)

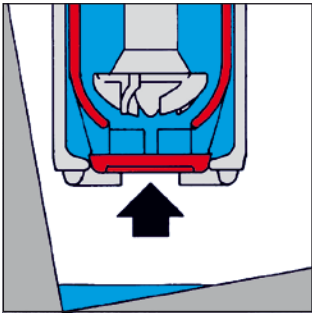
RE-PP-MS	
Housing:	PP
Impeller:	PP
Sealing pot:	PP
Seals:	Viton®
Mechanical seal:	Carbon, ceramic, Viton®, HC-4 (2.4610)
Bearing:	Pure carbon
Drive shaft:	Stainless steel (1.4571)

Viton® is a registered trademark of DuPont Performance Elastomers.

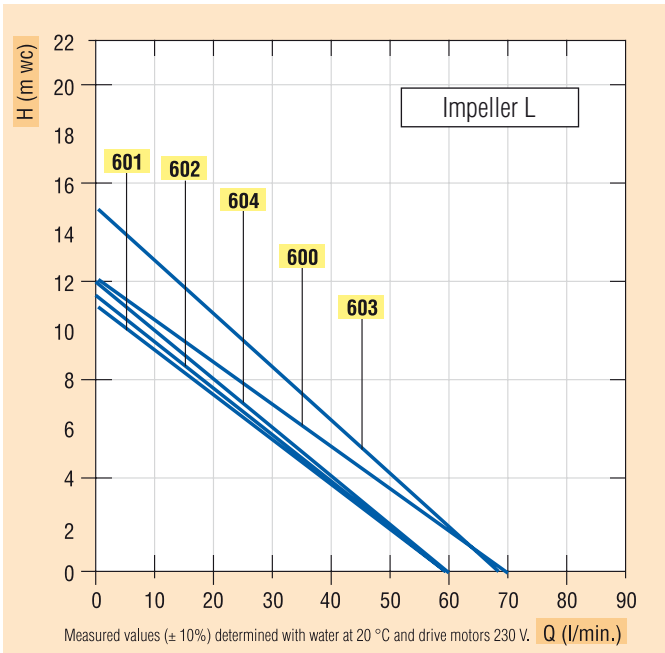
Function



The Sealing pot is open – the liquid is pumped out.




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







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

Pump tube RE-PP (polypropylene)

for complete drum drainage of corrosive and neutral liquids

Pump tube		RE-PP MS	Product detail
Type of impeller		L	
Category 1 / 2 (acc. to ATEX)		no	
Immersion tube diameter:	up to mm	40	
Temperature of medium:	up to °C	50	
Material:	Pump tube	PP	
	Impeller	PP	
Hose connection:	Nominal diameter mm	19-32	
	Outer thread	G 1 1/4	
Length: 700 mm***	Order No.	0103-020	
Length: 1000 mm***	Order No.	0103-021	
Length: 1200 mm***	Order No.	0103-022	

Choice of motors				Operating data		
	MI-4	MI-4-E		Characteristic curve no.	600	
	-	with speed controller		Delivery rate* up to l/min.	70	
Output:	500 W	500 W		Delivery head* up to m wc	12	
Voltage:	230 V	230 V		Viscosity** up to mPas	1000	
				Density**** up to kg/dm³	1.6	
Order No.	0030-000	0030-001		Weight (kg) motor + pump tube	4.0	
	MA II 3			Characteristic curve no.	601	
Output:	460 W	460 W		Delivery rate* up to l/min.	60	
Voltage:	230 V	230 V		Delivery head* up to m wc	11	
LVR:	no	yes		Viscosity** up to mPas	800	
				Density**** up to kg/dm³	1.7	
Order No.	0060-000	0060-008		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	Delivery rate* up to l/min.	60	
Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	11.5	
LVR:	no	yes	no	Viscosity** up to mPas	1200	
			acid-proof	Density**** up to kg/dm³	2.0	
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	6.6	
	MA II 7			Characteristic curve no.	603	Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. It's recommended when pumping hazardous liquids.
Output:	795 W	795 W		Delivery rate* up to l/min.	69	
Voltage:	230 V	230 V		Delivery head* up to m wc	15	
LVR:	no	yes		Viscosity** up to mPas	1000	
				Density**** up to kg/dm³	2.0	
Order No.	0060-002	0060-010		Weight (kg) motor + pump tube	7.8	
	MD-1	MD-2		Characteristic curve no.	604	
Output:	400 W	400 W		Delivery rate* up to l/min.	60	
Operating Pressure:	6 bar	6 bar		Delivery head* up to m wc	12	
				Viscosity** up to mPas	1000	
				Density**** up to kg/dm³	2.0	
Order No.	0004-087	0004-088		Weight (kg) motor + pump tube	2.7	

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

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

Special voltages and frequencies on request.

Lutz Drum and Container Pumps

Pump tube RE-SS (stainless steel)



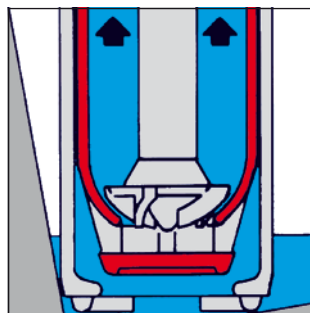
Pump tubes in physiologically safe version (FDA)

All materials coming into contact with the pumped medium are FDA approved materials.

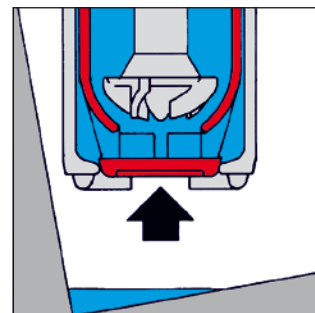
Materials (coming into contact with the pumped medium)

RE-SS-MS	
Housing:	Stainless steel (1.4571)
Impeller:	ETFE
Sealing pot:	ETFE/stainless steel (1.4571)
Seals:	FEP coated
Mechanical seal:	Carbon, ceramic, PTFE, HC-4 (2.4610), stainless steel (1.4571)
Bearing:	Pure carbon
Drive shaft:	Stainless steel (1.4571)

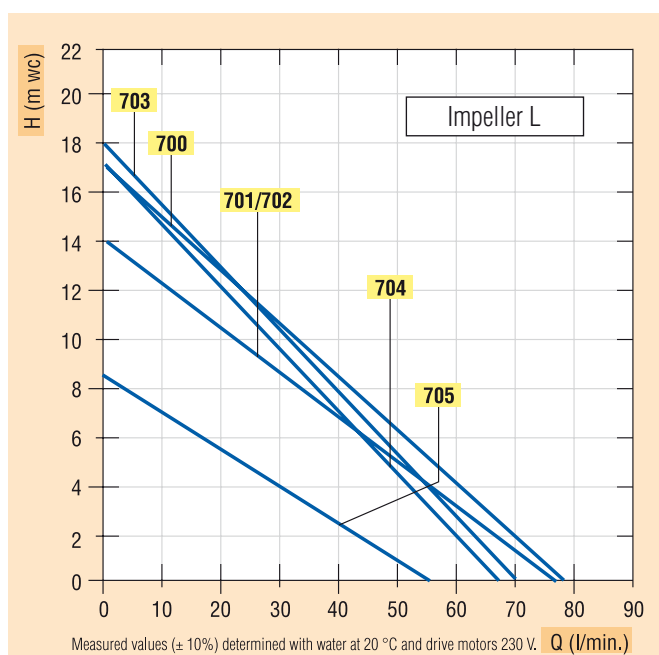
Function



The Sealing pot is open – the liquid is pumped out.




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




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


Pump tube RE-SS (stainless steel)

for complete drum drainage of corrosive and neutral liquids


Pump tube		RE-SS MS	Product detail
Type of impeller		L	
Category 1 / 2 (acc. to ATEX)		yes	
Immersion tube diameter:	up to mm	41	
Temperature of medium:	up to °C	100	
Material:	Pump tube	1.4571	
	Impeller	ETFE	
Hose connection:	Nominal diameter mm	19-32	
	Outer thread	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	
-	with speed controller			
Output:	500 W	Delivery rate* up to l/min.	78	
	500 W	Delivery head* up to m wc	17	
Voltage:	230 V	Viscosity** up to mPas	700	
	230 V	Density**** up to kg/dm³	1.4	
Order No. 0030-000 0030-001		Weight (kg) motor + pump tube	6.0	


MA II 3	Characteristic curve no.	701	
Output: 460 W			
Voltage: 230 V	Delivery rate* up to l/min.	77	
LVR: no	Delivery head* up to m wc	14	
yes	Viscosity** up to mPas	500	
Order No. 0060-000 0060-008	Density**** up to kg/dm³	1.6	
	Weight (kg) motor + pump tube	7.8	

	MA II 5	MA II 5	MA II 5 S		
Output:	575 W	575 W	575 W	Characteristic curve no.	702
Voltage:	230 V	230 V	230 V	Delivery rate* up to l/min.	77
LVR:	no	yes	no	Delivery head* up to m wc	14
			acid-proof	Viscosity** up to mPas	900
				Density**** up to kg/dm³	1.8
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	8.6

MA II 7	Characteristic curve no.	703	
Output: 795 W			
Voltage: 230 V	Delivery rate* up to l/min.	70	
LVR: no	Delivery head* up to m wc	18	
yes	Viscosity** up to mPas	700	
Order No. 0060-002 0060-010	Density**** up to kg/dm³	1.9	
	Weight (kg) motor + pump tube	9.8	

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

MD-1	MD-2	Characteristic curve no.	704	
Output: 400 W	400 W			
Operating Pressure: 6 bar	6 bar	Delivery rate* up to l/min.	68	
Order No. 0004-087 0004-088		Delivery head* up to m wc	17	
		Viscosity** up to mPas	700	
		Density**** up to kg/dm³	1.8	
		Weight (kg) motor + pump tube	4.7	

B4/GT	Characteristic curve no.	705	
Output: 750 W			
Voltage: 230/400 V	Delivery rate* up to l/min.	55	
Protection	Delivery head* up to m wc	8.5	
Switch: no	Viscosity** up to mPas	600	
yes	Density**** up to kg/dm³	2.2	
Order No. 0004+019 0004+067		Weight (kg) motor + pump tube	14.0

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

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

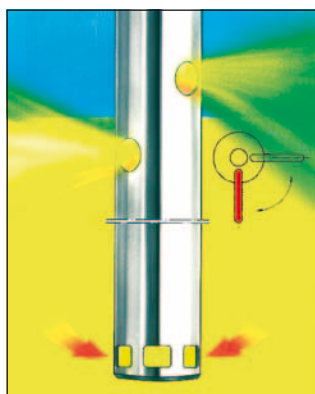
Special voltages and frequencies on request.

Lutz Drum and Container Pumps

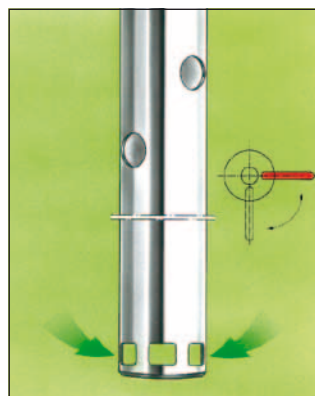
Pump tube MP-PP (polypropylene)



Function



Mix/Pump



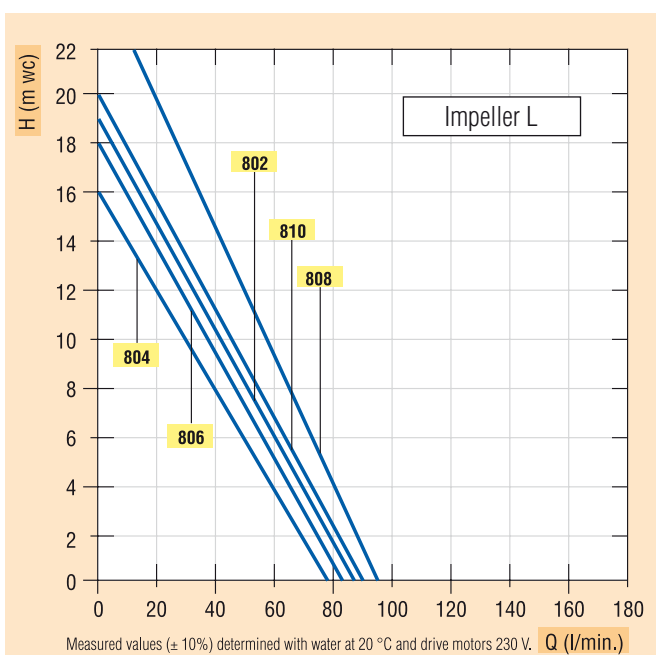
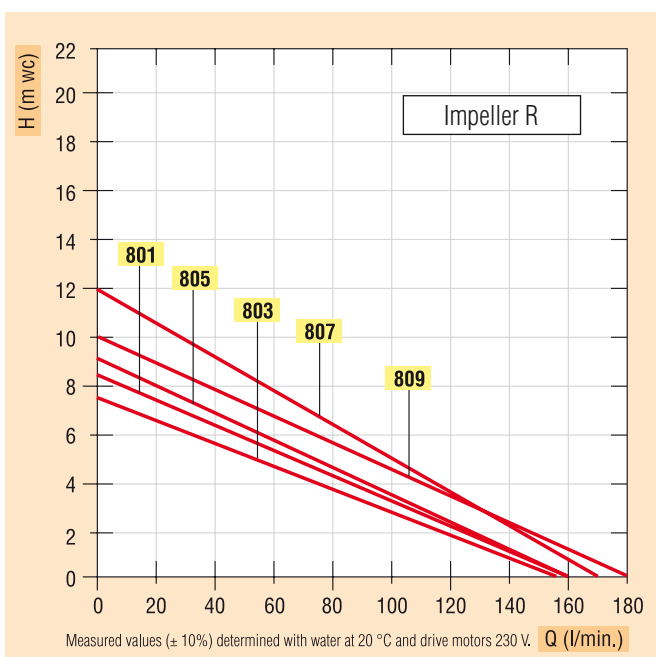
Pump

Materials (coming into contact with the pumped medium)

MP-PP-MS


Housing:	PP/PVDF
Impeller:	PP
Seals:	Viton®
Mechanical seal:	Carbon, SiC, Viton®, HC
Bearing:	ETFE/PTFE
Drive shaft:	Stainless steel (1.4571)




Viton® is a registered trademark of DuPont Performance Elastomers.



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

Pump tube MP-PP (polypropylene)

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

Choice of motors			Operating data						
	MI-4	MI-4-E	Characteristic curve no.	801	802	801	802		
	-	with Speed controller	Delivery rate* up to l/min.	160	87	160	87		
			Delivery head* up to m wc	8,5	19	8,5	19		
Output:	500 W	500 W	Viscosity** up to mPas	150	500	150	500		
Voltage:	230 V	230 V	Density**** up to kg/dm³	1.1	1.4	1.1	1.4		
Order No.	0030-000	0030-001	Weight (kg) motor + pump tube	4.1	4.1	4.1	4.1		
	MA II 3		Characteristic curve no.	803	804	803	804		
Output:	460 W	460 W	Delivery rate* up to l/min.	155	78	155	78		
Voltage:	230 V	230 V	Delivery head* up to m wc	7.5	16	7.5	16		
LVR:	no	yes	Viscosity** up to mPas	160	500	160	500		
			Density**** up to kg/dm³	1.2	1.6	1.2	1.6		
Order No.	0060-000	0060-008	Weight (kg) motor + pump tube	5.9	5.9	5.9	5.9		
	MA II 5	MA II 5	MA II 5 S	Characteristic curve no.	805	806	805	806	
Output:	575 W	575 W	575 W	Delivery rate* up to l/min.	160	83	160	83	
Voltage:	230 V	230 V	230 V	Delivery head* up to m wc	9	18	9	18	
LVR:	no	yes	no	Viscosity** up to mPas	350	800	350	800	
			acid-proof	Density**** up to kg/dm³	1.3	1.8	1.3	1.8	
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	6.7	6.7	6.7	6.7	
	MA II 7			Characteristic curve no.	807	808	807	808	<p>Low-voltage release (LVR): Prevents the pump from starting up again without warning after a power failure. It's recommended when pumping hazardous liquids.</p>
Output:	795 W	795 W		Delivery rate* up to l/min.	170	95	170	95	
Voltage:	230 V	230 V		Delivery head* up to m wc	12	25	12	25	
LVR:	no	yes		Viscosity** up to mPas	350	800	350	800	
				Density**** up to kg/dm³	1.4	1.9	1.4	1.9	
Order No.	0060-002	0060-010		Weight (kg) motor + pump tube	7.9	7.9	7.9	7.9	
	MD-1	MD-2		Characteristic curve no.	809	810	810	809	
Output:	400 W	400 W		Delivery rate* up to l/min.	180	90	180	90	
Operating Pressure:	6 bar	6 bar		Delivery head* up to m wc	10	20	10	20	
				Viscosity** up to mPas	600	850	600	850	
				Density**** up to kg/dm³	1.3	1.8	1.3	1.8	
Order No.	0004-087	0004-088		Weight (kg) motor + pump tube	2.8	2.8	2.8	2.8	

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

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

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

Special voltages and frequencies on request.

Lutz Drum and Container Pumps

Pump tube MP-SS (stainless steel)



Pump tubes in physiologically safe version (FDA)

All materials coming into contact with the pumped medium are FDA approved materials.

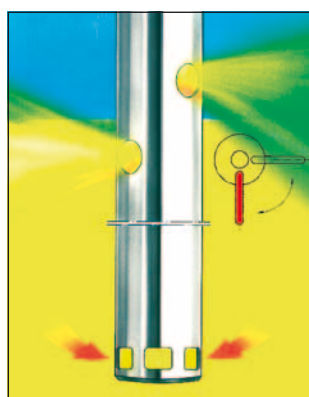
Materials (coming into contact with the pumped medium)

MP-SS-MS

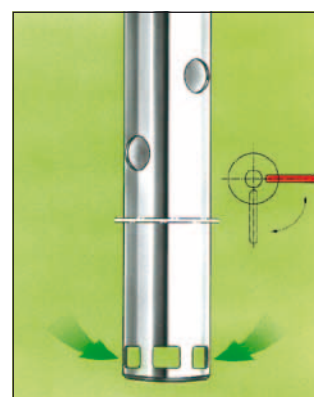
Housing:	Stainless steel (1.4571)
Impeller:	ETFE
Seals:	Viton® (FEP coated)
Mechanical seal:	Carbon, ceramic, PTFE, Stainless steel (1.4571), HC-4 (2.4610)
Bearing:	Pure carbon
Drive shaft:	Stainless steel (1.4571)

Viton® is a registered trademark of DuPont Performance Elastomers.

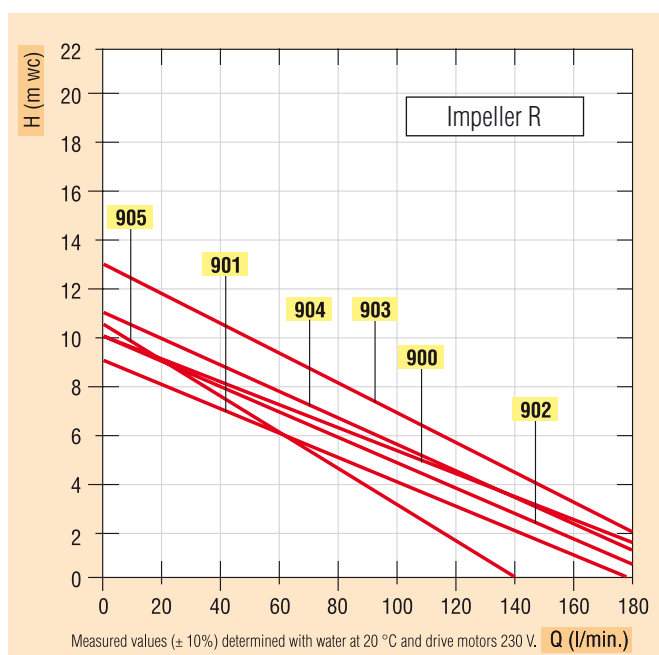
Function



Mix/Pump




Pump



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

Pump tube MP-SS (stainless steel)

for mixing and pumping of corrosive and neutral liquids

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

Choice of motors Operating data

MI-4	MI-4-E		
-	with speed controller	Characteristic curve no.	900
Output: 500 W Voltage: 230 V	500 W 230 V	Delivery rate* up to l/min.	210
		Delivery head* up to m wc	10
		Viscosity** up to mPas	350
		Density**** up to kg/dm³	1.1
Order No.	0030-000 0030-001	Weight (kg) motor + pump tube	6.0



MA II 3			
Output: 460 W	460 W	Characteristic curve no.	901
Voltage: 230 V	230 V	Delivery rate* up to l/min.	178
LVR: no	yes	Delivery head* up to m wc	9
		Viscosity** up to mPas	200
		Density**** up to kg/dm³	1.2
		Weight (kg) motor + pump tube	7.8
Order No.	0060-000 0060-008		



	MA II 5	MA II 5	MA II 5 S		
Output:	575 W	575 W	575 W	Characteristic curve no.	902
Voltage:	230 V	230 V	230 V	Delivery rate* up to l/min.	190
LVR:	no	yes	no	Delivery head* up to m wc	10
			acid-proof	Viscosity** up to mPas	550
				Density**** up to kg/dm³	1.3
Order No.	0060-001	0060-009	0060-091	Weight (kg) motor + pump tube	8.6

MA II 7			
Output: 795 W	795 W	Characteristic curve no.	903
Voltage: 230 V	230 V	Delivery rate* up to l/min.	210
LVR: no	yes	Delivery head* up to m wc	13
		Viscosity** up to mPas	400
		Density**** up to kg/dm³	1.4
		Weight (kg) motor + pump tube	9.8
Order No.	0060-002 0060-010		

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

MD-1	MD-2		
Output: 400 W	400 W	Characteristic curve no.	904
Operating Pressure: 6 bar	6 bar	Delivery rate* up to l/min.	200
		Delivery head* up to m wc	11
		Viscosity** up to mPas	400
		Density**** up to kg/dm³	1.3
Order No.	0004-087 0004-088	Weight (kg) motor + pump tube	4.7



B4/GT			
Output: 750 W	750 W	Characteristic curve no.	905
Voltage: 230/400 V	230/400 V	Delivery rate* up to l/min.	140
Protection		Delivery head* up to m wc	10.5
Switch: no	yes	Viscosity** up to mPas	400
		Density**** up to kg/dm³	2.0
		Weight (kg) motor + pump tube	14.0
Order No.	0004+019 0004+067		



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

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

Special voltages and frequencies on request.

Lutz Pump Sets

Ready for action



Set 1

For aqueous fluids

Imm. depth: 500 mm Order-No.
Imm. depth: 700 mm Order-No.
Imm. depth: 1000 mm Order-No.

**Lutz B2 Vario
PP-SL 32**

0205-020
0205-021
0205-022

**Lutz MD-200
PP-SL 32**

0205-065
0205-066
0205-067

**Lutz MD-300
PP-SL 32**

on request
on request
on request

Consisting of:

Pump, Lutz-nozzle, 2 x hose clips 3/4", 1.5 m PVC hose 3/4", wall bracket

Density:	max. 1.3 kg/dm ³	max. 1.3 kg/dm ³	max. 1.5 kg/dm ³
Viscosity:	max. 300 mPas	max. 300 mPas	max. 500 mPas
Delivery rate:	max. 75 l/min. (22 l/min.)*	max. 65 l/min. (22 l/min.)*	max. 85 l/min. (22 l/min.)*
Delivery head:	max. 7 m wc	max. 7 m wc	max. 7 m wc

Air driven motor MD-200/MD-300
also available with pump tube in aluminium



Set 2

For aqueous fluids

Imm. depth: 500 mm Order-No.
Imm. depth: 700 mm Order-No.
Imm. depth: 1000 mm Order-No.

**Lutz B2 Vario
SS-SL 28**

0205-030
0205-031
0205-032

**Lutz MD-200
SS-SL 28**

0205-075
0205-076
0205-077

**Lutz MD-300
SS-SL 28**

on request
on request
on request

Consisting of:

Pump, Lutz-nozzle, 2 x hose clips 3/4", 1.5 m PVC hose 3/4", wall bracket

Density:	max. 1.3 kg/dm ³	max. 1.3 kg/dm ³	max. 1.5 kg/dm ³
Viscosity:	max. 300 mPas	max. 350 mPas	max. 500 mPas
Delivery rate:	max. 68 l/min. (22 l/min.)*	max. 60 l/min. (22 l/min.)*	max. 85 l/min. (22 l/min.)*
Delivery head:	max. 6.5 m wc	max. 6 m wc	max. 12 m wc



**Set 3
Set 4**

Set 3

For thin-bodied alkalis

Imm. depth: 1000 mm Order-No.
Imm. depth: 1200 mm Order-No.

0205-101
0205-102

Set 4

For thin-bodied acids

0205-111
0205-112

Consisting of:

Motor MI-4, pump tube PP 41-L-SL SS (Set 3), PP 41-L-SL HC (Set 4), 2 x hose connection PP 3/4", 2 m PVC fabric hose 3/4", 2 x hose clips 3/4", nozzle PP with sealing FEP (Set 3), nozzle PP (Set 4), drum adapter PP

Density:	max. 1.4 kg/dm ³
Viscosity:	max. 500 mPas
Delivery rate:	max. 85 l/min. (50 l/min.)*
Delivery head:	max. 19 m wc



Set 5

For highly aggressive acids and alkalis

Imm. depth: 1000 mm Order-No.
Imm. depth: 1200 mm Order-No.

0205-201
0205-202

Consisting of:

Motor MA II 5, pump tube PVDF 41-L-SL, hose connection PTFE 3/4", 2 m special chemical hose 3/4", 2 x hose clips 3/4", nozzle PVDF, hose connection turnable, drum adapter PP

Density:	max. 1.8 kg/dm ³
Viscosity:	max. 800 mPas
Delivery rate:	max. 80 l/min. (50 l/min.)*
Delivery head:	max. 17 m wc

* 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). Customized sets available on request.

For light viscous mineral oil products

Imm. depth: 1000 mm Order-No. **0205-301**

Consisting of:

Motor MI-4, pump tube Alu 41-L-SL, hose connection Alu 1", 2 m PVC fabric hose 1", 2 x hose clips 1", nozzle aluminium, hose connection brass 1", drum adapter PP

Density: max. 1.4 kg/dm³
 Viscosity: max. 500 mPas
 Delivery rate: max. 85 l/min. (50 l/min.)*
 Delivery head: max. 19 m wc

Set 6



For easily flammable hydrocarbons

Imm. depth: 1000 mm Order-No. **0205-401**

Consisting of:

Motor ME II 3, pump tube SS 41-L-SL, 2 x hose connection brass, 2 m solvent hose 3/4", nozzle brass/PTFE, equipotential bonding cable, drum adapter PP (without ex plug)

Density: max. 1.6 kg/dm³
 Viscosity: max. 350 mPas
 Delivery rate: max. 95 l/min. (60 l/min.)*
 Delivery head: max. 14 m wc

Set 7



For all hazardous fluids

Imm. depth: 1000 mm Order-No. **0205-411**

Consisting of:

Motor ME II 3, pump tube SS 41-L-SL, 2 x hose connection SS, 2 m universal chemical hose 3/4", nozzle SS with sealing FEP, equipotential bonding cable, drum adapter PP (without ex plug)

Density: max. 1.6 kg/dm³
 Viscosity: max. 350 mPas
 Delivery rate: max. 95 l/min. (60 l/min.)*
 Delivery head: max. 14 m wc

Set 8



Set 9

Suitable for complete drum drainage for easily flammable hydrocarbons

Imm. depth: 1000 mm Order-No. **0205-501**

Consisting of:

Motor ME II 3, pump tube RE-SS 41-L-MS, 2 x hose connection brass, DN 19, 2 m solvent hose 3/4", nozzle brass/PTFE, equipotential bonding cable, drum adapter PP (without ex plug)

Density: max. 1.6 kg/dm³
 Viscosity: max. 500 mPas
 Delivery rate: max. 77 l/min. (45 l/min.)*
 Delivery head: max. 14 m wc

Set 10

Suitable for complete drum drainage for all hazardous fluids

Order-No. **0205-511**

Consisting of:

Motor ME II 3, pump tube RE-SS 41-L-MS, 2 x hose connection SS, DN 19, 2 m universal chemical hose 3/4", nozzle SS with sealing FEP, equipotential bonding cable, drum adapter PP (without ex plug)

Set 9

Set 10



* 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). Customized sets available on request.

Choice of motors

Electric driven



Type	Nominal voltage V	Frequency Hz	Nominal power W	Weight kg	Order-No. (with Low voltage-release)	Order-No. (without Low voltage-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

With or without speed controller



Type	Nominal voltage V	Frequency Hz	Nominal power W	Weight kg	Order-No. (with Low voltage-release)	Order-No. (without Low voltage-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
	220-230	50	540-575	5.4	-	0060-091
MA II 5 S	100-120	50-60	510	5.4	-	0060-094
	220-230	50	790-795	6.6	0060-010	0060-002
MA II 7	100-120	50-60	700	6.6	0060-018	0060-046



Type	Nominal voltage V	Frequency Hz	Nominal power 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
	110	50	510	6.3	-	0050-004
	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

IP 55 available at additional cost. With or without low voltage-release



IP 54/IP 55 CE

Type	Nominal voltage V	Frequency Hz	Nominal power W	Weight kg	Order-No. (Cable terminal box)	Order-No. (Protection switch)
B4/GT	230-400	50	750	10.0	0004+019	0004+067

For continuous operation

Choice of motors

Air driven

Type	Operating pressure bar	Nominal power W	Weight kg	Order-No.
MD-1	6	400	1.1	0004-087
MD-2	6	400	1.5	0004-088
MD-3	6	400	2.1	0004-090



MD-1



MD-2



MD-3



Type	Operating pressure bar	Nominal power W	Weight kg	Order-No.
MD-200	6	200	0.8	0004-160
MD-300	6	300	0.9	0004-170



MD-200
(Internal muffler)



MD-300
(External muffler)



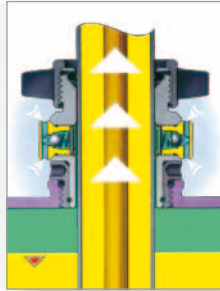
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2

3

4

Getting started



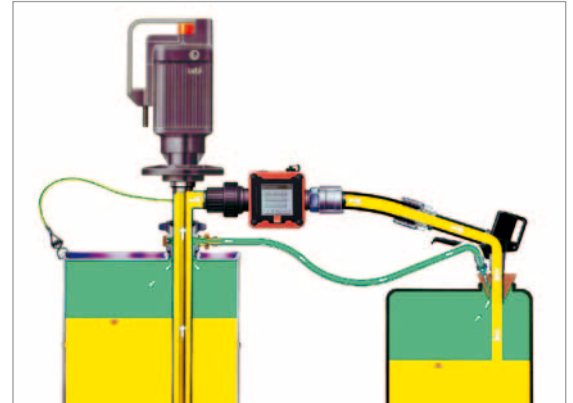
In keeping with our philosophy of making life safe and simple, we have a complete range of accessories available for you.

From the humble wall bracket to protect your pump, connectors to fit your hose size, to bonding and grounding wires to protect your employees, nothing has been overlooked.

To reduce the risk of spillage, we have nozzles available in five different materials, polypropylene, PVDF, stainless steel, brass and aluminium.

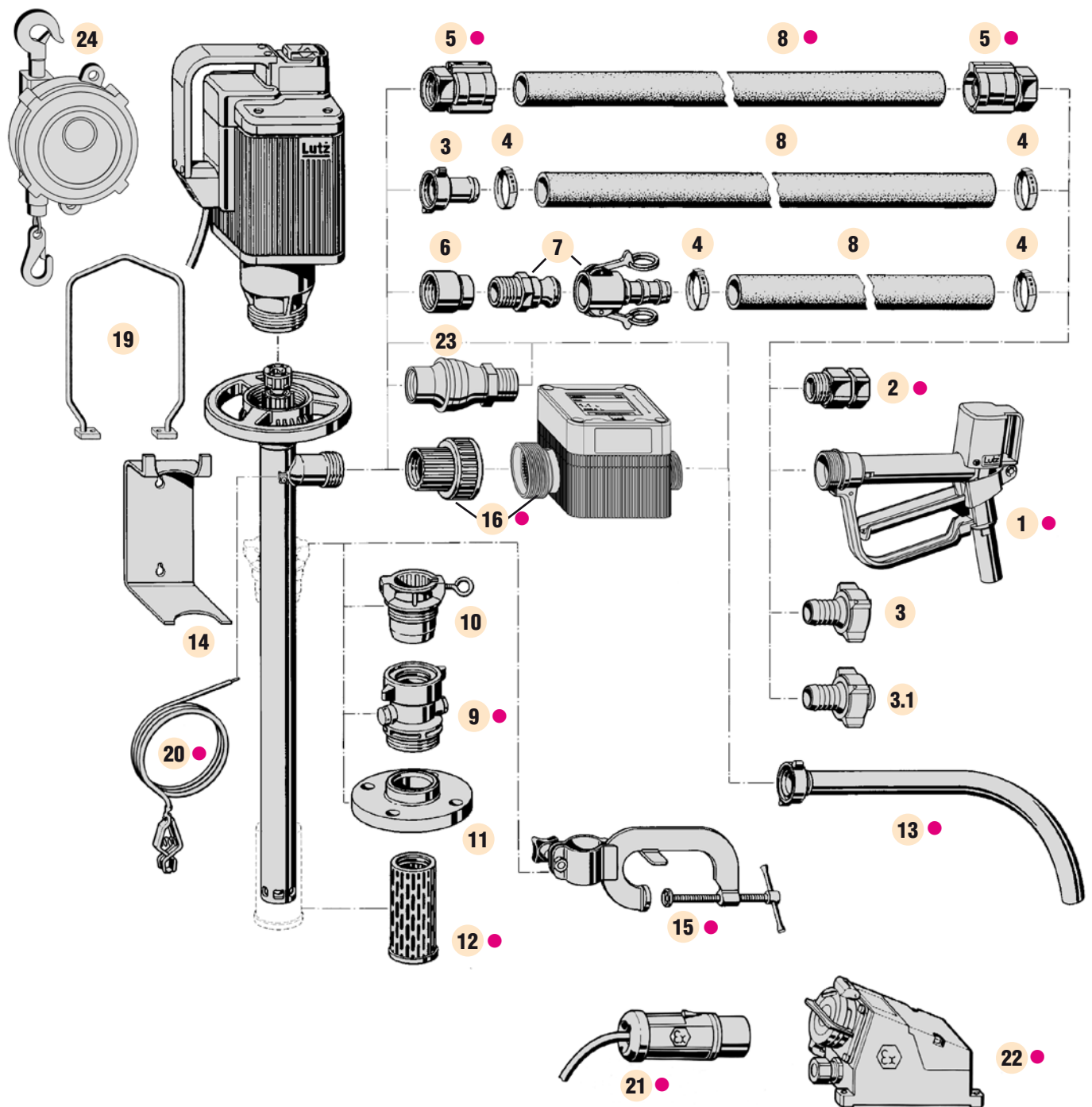
To avoid fumes or emissions from drums or containers, we have specialised drum adapters, and when it comes to accurate measurement or process control, we have a full range of flow meters to cater to your needs. The latter not only cover thin and thick fluids, but also flammable and explosive liquids.

EMIGA: emission proof drum adapters



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. When pumping or storing hazardous liquids in the container, any harmful gases or vapours present remain in a closed system. The pressures inside and outside of the vessel are compensated. This means that the vessel does not collapse even when fast emptying is required.

- ✓ 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 that is needed is a single drum adapter with two integrated valves.
- ✓ For flexible operation with nozzle or stationary operation by fixed union.
- ✓ A check valve is integrated into the gas displacement pipe, to prevent back-flow.
- ✓ For fixed installations the thread and diameter sizes can be supplied to match the container opening.
- ✓ For IBC containers suitable container caps are available.
- ✓ Larger dimensioned air valves are available for emptying of 1000 l vessels.



- 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 ● Explosion proof plug
- 22 ● Explosion proof socket
- 23 Check valve
- 24 Hoist

● For the delivery of easy flammable liquids (e. g. ethanol, petrol) or in hazardous locations

For more information please have a look into our accessories leaflet.

When is necessary?



However, it is an unavoidable necessity at many industrial locations to run electrical equipment in an explosive atmosphere. The precautions that have to be taken against an explosion occurring are stipulated by the national or other authorities responsible for safety. These authorities lay down constructional requirements for the electrical equipment and issue specifications with respect to their installation and operation.

If we were to go into the subject of „explosion protection“ with all its guidelines and specifications and all the protective measures that are derived from them, this would more than exceed the scope of our catalogue. Nevertheless, we would like to include a few explanations and make a few statements with respect to the basics of this subject.

The prerequisite for a potential explosion hazard is the development of an explosive atmosphere. Such an atmosphere can arise wherever flammable gases or liquids are manufactured, processed, transported and stored. Particularly in chemical factories, refineries, storage tank installations, paint factories, filling stations, etc., it is possible for such hazardous locations to exist. These are locations in which explosive atmospheres with potentially dangerous levels can arise due to the environmental and operational conditions that prevail. Consequently, there is an explosion hazard.

The term „explosion“ is understood as being a rapidly occurring combustion process for which three essential conditions must be prevalent simultaneously: flammable gases, oxygen (air) and an ignition source such as the ignition sparks of electrical equipment (brush sparking).

In addition to the concepts of „electrical equipment“, „hazardous locations“ and „explosive atmosphere“ mentioned above, another important factor is the ignition temperature of a combustible substance. This is the lowest measured temperature of a heated wall, located in a test apparatus, at which the combustible substance mixed with air is still capable of igniting itself. The flammable gases and vapours of flammable liquids are classified according to their ignition temperature.

The term „type of enclosure“ refers to measures built into electrical equipment during manufacture to prevent this equipment from igniting the explosive atmosphere in which it is located. As a result, electrical equipment is categorised into groups and classes in accordance with the European norms. According to EN/IEC 60079-0, electric drum and container pumps for use in hazardous locations belong to Group II (Explosion Group II).

Designation	Euro Norm	Explanation	Area of Application
Ex d	EN/IEC 60079-1	Explosion proof enclosure: Parts that are capable of igniting an explosive atmosphere are enclosed in a special housing. Should an explosion occur within, it is so designed that it can withstand the resultant pressure.	Zones 1 + 2
Ex e	EN/IEC 60079-7	Increased-safety enclosure: Measures have been taken to provide a greater degree of safety by preventing impermissibly high temperatures and the generation of sparks or arcing.	Zones 1 + 2
Ex i	EN/IEC 60079-11	Intrinsic safety: Circuit in which it is not possible for a spark or thermal effect to arise which could cause a specific explosive atmosphere to ignite.	Zones 1 + 2, Zone 0 after special test
Ex m	EN/IEC 60079-18	Encapsulation: The potential source of a spark is encapsulated.	Zones 1 + 2



Safety

When it comes to keeping warm, we make sure you are not in the fire. Our pumps and motors are certified to the latest ATEX standards and offer protection against hazardous and highly flammable liquids, or hazardous environments. Your safety is our concern.



A subdivision of Group II into A, B and C is also stipulated for a number of types of enclosure, whereby the flammability of gases and vapours belonging to Group IIA is the lowest and that of gases and vapours in Group IIC the highest. Consequently, we have had our explosion proof drum and container pumps tested in this group. The temperature class of a piece of electrical equipment is dependent on the maximum surface temperature measured at an ambient temperature of 40 °C. The classes range from T1 to T6.

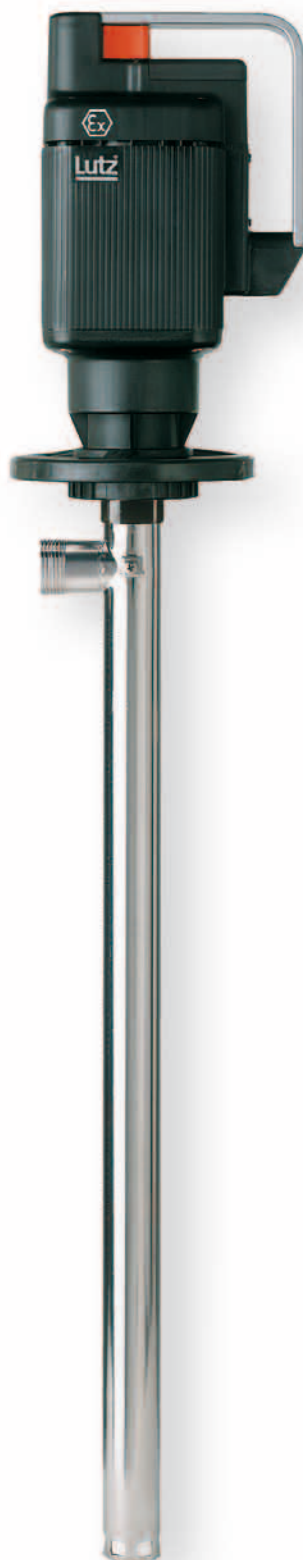
Of the various types of enclosure possible, only „explosion proof enclosure“ (EN/IEC 60079-1), „increased-safety enclosure“ (EN/IEC 60079-7) and „intrinsic safety“ (EN/IEC 60079-11) are of relevance to Lutz electric drum pumps.

The Lutz ME II motors are explosion proof in accordance with European standards EN/IEC 60079-0, EN/IEC 60079-1 and EN/IEC 60079-7 and approved for protection class Ex de IIC T6. In addition to these safety features, the version with double insulation also ensures additional safety for equipotential bonding. Live components are isolated from the accessible external surfaces and from the pump tube.

Lutz Drum and Container Pumps



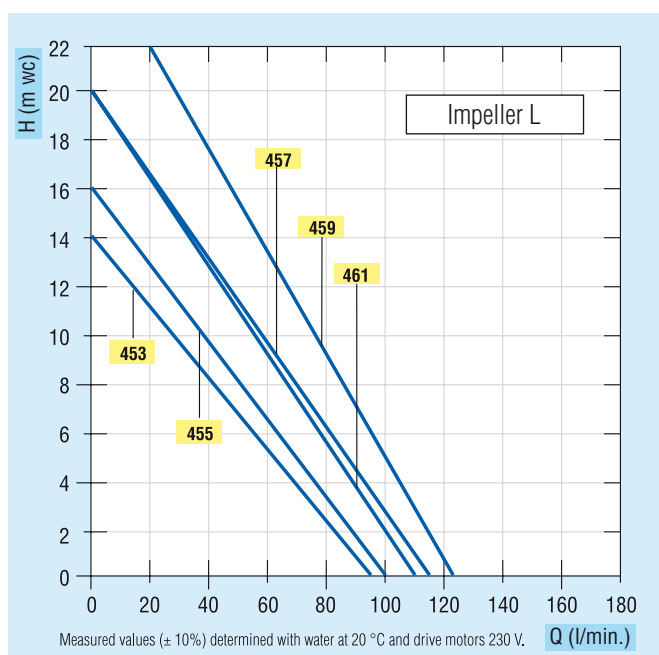
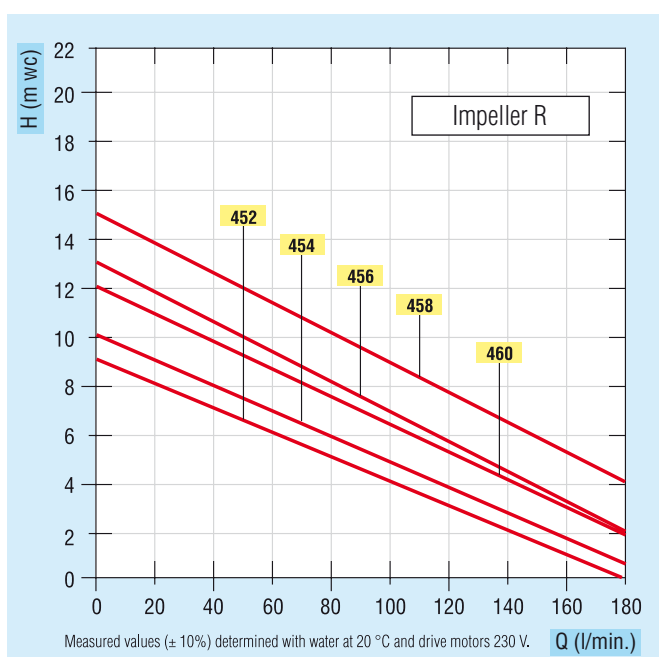
Pump tube SS (stainless steel)



Materials (coming into contact with the pumped medium)

	SS-MS	SS-SL
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Impeller:	ETFE	ETFE
Seals:	Viton®	none
Mechanical seal:	Carbon, ceramic, Viton®, Stainless steel	none
Bearing:	Pure carbon	Pure carbon
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)


Viton® is a registered trademark of DuPont Performance Elastomers.



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

Pump tube SS (stainless steel)

for highly inflammable liquids

Pump tube		SS-MS		SS-SL		Product detail
Type of impeller		R	L	R	L	
Category 1 / 2 (acc. to ATEX)		yes	yes	yes	yes	
Immersion tube diameter:	up to mm	41	41	41	41	
Temperature of medium:	up to °C	100	100	100	100	
Material:	Pump tube	1.4571	1.4571	1.4571	1.4571	
	Impeller	ETFE	ETFE	ETFE	ETFE	
Hose connection:	Nominal diameter mm	19-32	19-32	19-32	19-32	
	Outer thread	G 1 1/4	G 1 1/4	G 1 1/4	G 1 1/4	
Length: 700 mm***	Order No.	0151-000	0151-003	0150-000	0150-003	
Length: 1000 mm***	Order No.	0151-001	0151-004	0150-001	0150-004	
Length: 1200 mm***	Order No.	0151-002	0151-005	0150-002	0150-005	
Length: 1400 mm***	Order No.	–	–	0150-113	0150-108	
Length: 1500 mm***	Order No.	–	–	0150-114	0150-109	
Length: 1600 mm***	Order No.	–	–	0150-115	0150-110	
Length: 1700 mm***	Order No.	–	–	0150-116	0150-111	
Length: 2000 mm***	Order No.	–	–	0150-117	0150-112	

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



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



* Determined with water at 20 °C

** Determined with oil

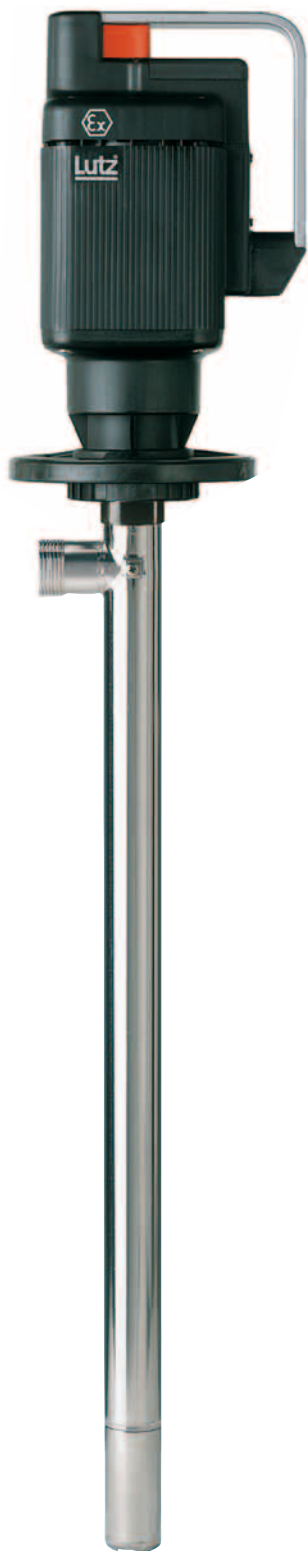
*** Special lengths
200–2500 mm on request

**** 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.

Lutz Drum and Container Pumps

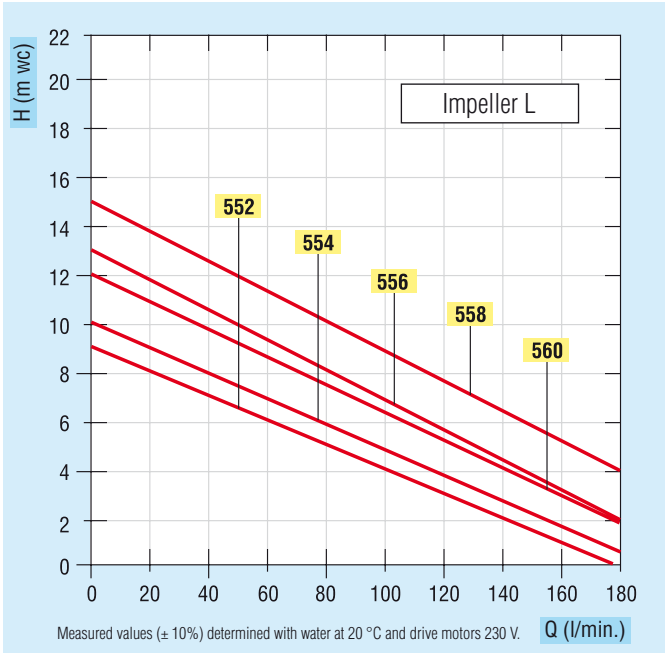
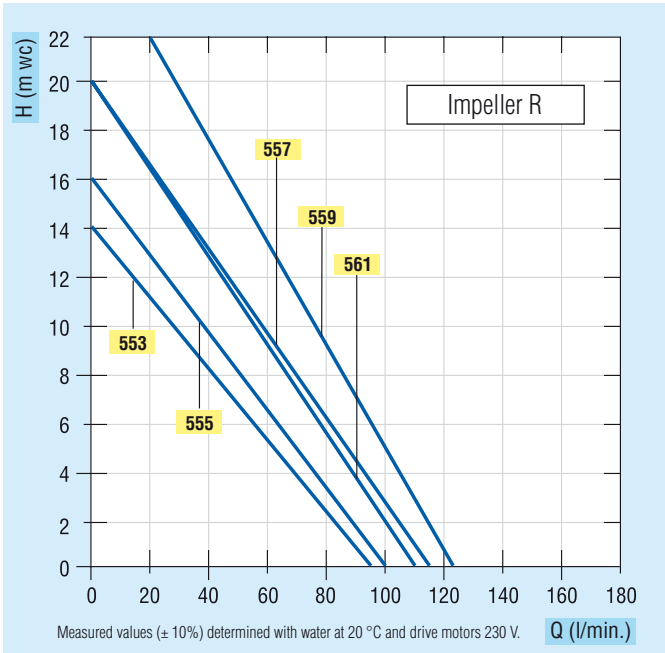
Pump tube HC (Hastelloy C)



Materials (coming into contact with the pumped medium)

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


Viton® is a registered trademark of DuPont Performance Elastomers.



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 HC (Hastelloy C)

for highly inflammable chemicals

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

Choice of motors				Operating data			
ME II 3				Characteristic curve no.	553	552	
Output:	460 W	460 W		Flow rate*	up to l/min.	95	178
Voltage:	230 V	230 V		Delivery head*	up to m ws	14	9
LVR.:	yes	no		Viscosity**	up to mPas	350	200
				Density****	up to kg/dm³	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 m ws	16	10
LVR.:	yes	no		Viscosity**	up to mPas	700	550
				Density****	up to kg/dm³	1.8	1.3
Order No.	0050-001	0050-017		Weight (kg)	Motor + pump tube	11.1	11.1
ME II 7				Characteristic curve no.	557	556	
Output:	795 W	795 W		Flow rate*	up to l/min.	115	210
Voltage:	230 V	230 V		Delivery head*	up to m ws	20	13
LVR.:	yes	no		Viscosity**	up to mPas	500	400
				Density****	up to kg/dm³	1.9	1.4
Order No.	0050-002	0050-018		Weight (kg)	Motor + pump tube	12.3	12.3
ME II 8				Characteristic curve no.	559	558	
Output:	930 W	930 W		Flow rate*	up to l/min.	123	243
Voltage:	230 V	230 V		Delivery head*	up to m ws	26	15
LVR.:	yes	no		Viscosity**	up to mPas	750	650
				Density****	up to kg/dm³	1.9	1.4
Order No.	0050-042	0050-041		Weight (kg)	Motor + pump tube	12.3	12.3
MD-1 MD-2 MD-3				Characteristic curve no.	561	560	
Output:	400 W	400 W	400 W	Flow rate*	up to l/min.	110	210
Operating-				Delivery head*	up to m ws	20	12
pressure:	6 bar	6 bar	6 bar	Viscosity**	up to mPas	500	400
				Density****	up to kg/dm³	1.8	1.3
Order No.	0004-087	0004-088	0004-090	Weight (kg)	Motor + pump tube	5.9	5.9



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



* 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.

Lutz Drum and Container Pumps



Pump tube RE-SS (stainless steel)

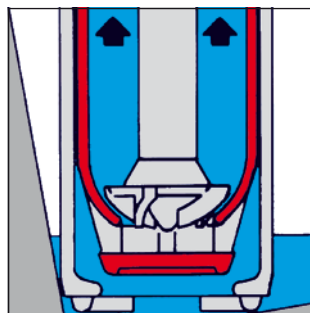


Materials (coming into contact with the pumped medium)

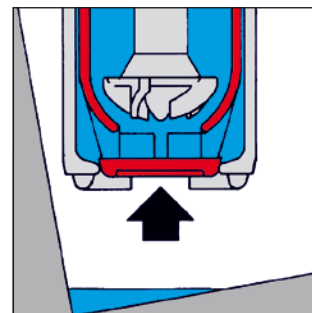
RE-SS-MS

Housing:	Stainless steel (1.4571)
Impeller:	ETFE
Sealing pot:	ETFE/stainless steel (1.4571)
Seals:	FEP coated
Mechanical seal:	Carbon, ceramic, PTFE, HC-4 (2.4610), stainless steel (1.4571)
Bearing:	Pure carbon
Drive shaft:	Stainless steel (1.4571)

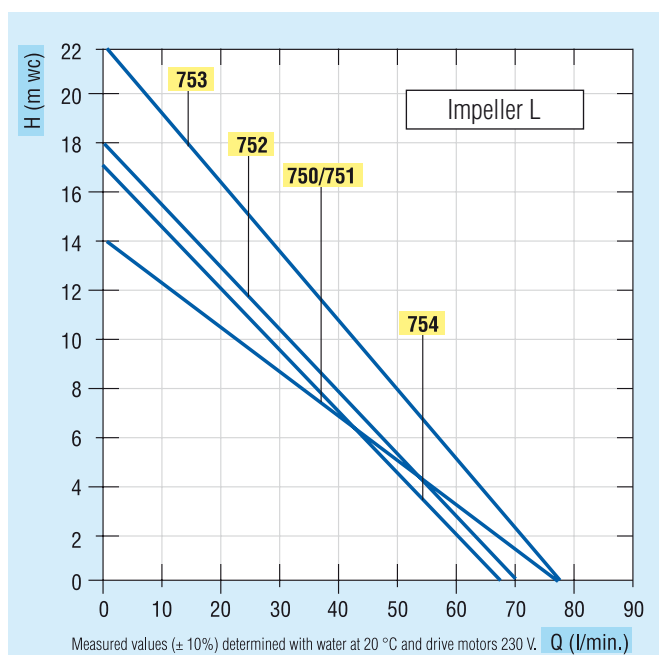
Function



The Sealing pot is open – the liquid is pumped out.




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



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

Pump tube RE-SS (stainless steel)

for complete drum drainage of highly inflammable liquids

Pump tube		RE-SS MS	Product detail
Type of impeller		L	
Category 1 / 2 (acc. to ATEX)		yes	
Immersion tube diameter:	up to mm	41	
Temperature of medium:	up to °C	100	
Material:	Pump tube	1.4571	
	Impeller	ETFE	
Hose connection:	Nominal diameter mm	19-32	
	Outer thread	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	Delivery rate* up to l/min.	77
Voltage:	230 V	230 V	Delivery head* up to m wc	14
LVR:	yes	no	Viscosity** up to mPas	500
			Density**** up to kg/dm³	1.6
Order No.	0050-000	0050-016	Weight (kg) motor + pump tube	9.0
ME II 5			Characteristic curve no.	751
Output:	580 W	580 W	Delivery rate* up to l/min.	77
Voltage:	230 V	230 V	Delivery head* up to m wc	14
LVR:	yes	no	Viscosity** up to mPas	900
			Density**** up to kg/dm³	1.8
Order No.	0050-001	0050-017	Weight (kg) motor + pump tube	9.9
ME II 7			Characteristic curve no.	752
Output:	795 W	795 W	Delivery rate* up to l/min.	70
Voltage:	230 V	230 V	Delivery head* up to m wc	18
LVR:	yes	no	Viscosity** up to mPas	700
			Density**** up to kg/dm³	1.9
Order No.	0050-002	0050-018	Weight (kg) motor + pump tube	11.1
ME II 8			Characteristic curve no.	753
Output:	930 W	930 W	Delivery rate* up to l/min.	78
Voltage:	230 V	230 V	Delivery head* up to m wc	22
LVR:	yes	no	Viscosity** up to mPas	950
			Density**** up to kg/dm³	1.9
Order No.	0050-042	0050-041	Weight (kg) motor + pump tube	11.1
MD-1	MD-2	MD-3	Characteristic curve no.	754
Output:	400 W	400 W	Delivery rate* up to l/min.	68
Operating Pressure:	6 bar	6 bar	Delivery head* up to m wc	17
			Viscosity** up to mPas	700
			Density**** up to kg/dm³	1.8
Order No.	0004-087	0004-088	Weight (kg) motor + pump tube	4.7
	0004-090			



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.

Lutz Drum and Container Pumps



Pump tube MP-SS (stainless steel)



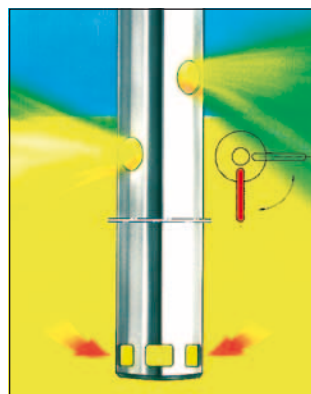
Materials (coming into contact with the pumped medium)

MP-SS-MS

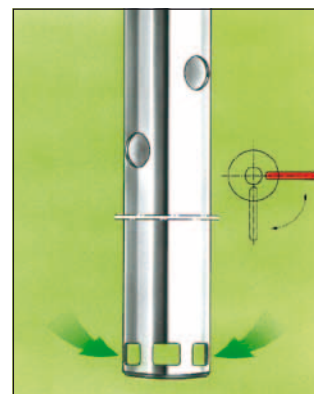
Housing:	Stainless steel (1.4571)
Impeller:	ETFE
Seals:	Viton® (FEP coated)
Mechanical seal:	Carbon, ceramic, PTFE, Stainless steel (1.4571), HC-4 (2.4610)
Bearing:	Pure carbon
Drive shaft:	Stainless steel (1.4571)

Viton® is a registered trademark of DuPont Performance Elastomers.

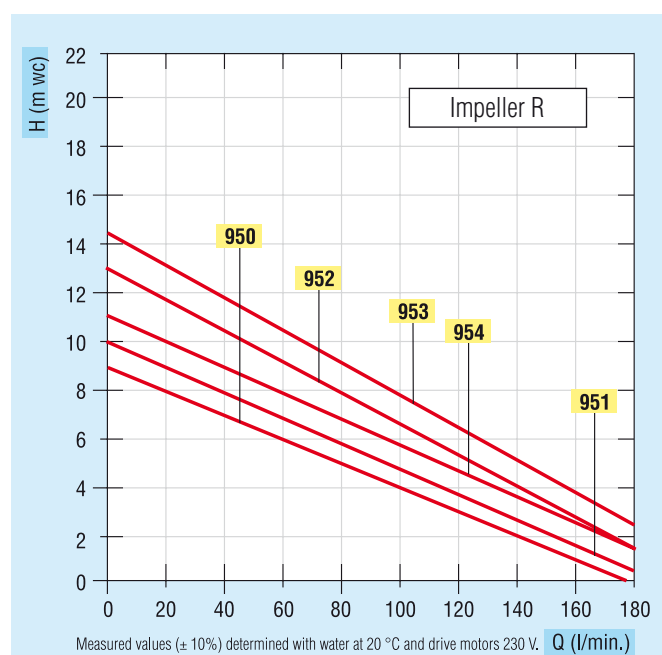
Function



Mix/Pump




Pump



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

Pump tube MP-SS (stainless steel)

for mixing and pumping of highly inflammable liquids

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

Choice of motors			Operating data	
ME II 3			Characteristic curve no.	950
Output:	460 W	460 W	Delivery rate* up to l/min.	178
Voltage:	230 V	230 V	Delivery head* up to m wc	9
LVR:	yes	no	Viscosity** up to mPas	200
			Density**** up to kg/dm³	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	Delivery rate* up to l/min.	190
Voltage:	230 V	230 V	Delivery head* up to m wc	10
LVR:	yes	no	Viscosity** up to mPas	550
			Density**** up to kg/dm³	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	Delivery rate* up to l/min.	210
Voltage:	230 V	230 V	Delivery head* up to m wc	13
LVR:	yes	no	Viscosity** up to mPas	400
			Density**** up to kg/dm³	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	Delivery rate* up to l/min.	216
Voltage:	230 V	230 V	Delivery head* up to m wc	14.5
LVR:	yes	no	Viscosity** up to mPas	650
			Density**** up to kg/dm³	1.4
Order No.	0050-042	0050-041	Weight (kg) motor + pump tube	11.1
MD-1	MD-2	MD-3	Characteristic curve no.	954
Output:	400 W	400 W	400 W	200
Operating Pressure:	6 bar	6 bar	6 bar	11
			Viscosity** up to mPas	400
			Density**** up to kg/dm³	1.3
Order No.	0004-087	0004-088	0004-090	Weight (kg) motor + pump tube
				4.7



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



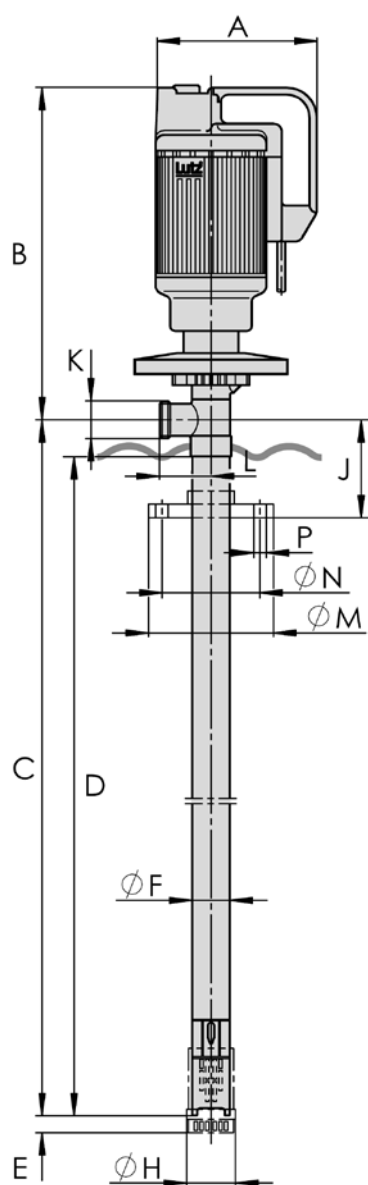
* Determined with water at 20 °C
** Determined with oil

*** 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.

Table of dimensions drum and container pumps



- A** Width of motor
- B** Motor to discharge centre
- C** Foot of pump to discharge centre
- H** Foot strainer diameter
- M** Flange diameter
- D** Immersion length
- J** Flange bottom to centre of discharge
- N** Pitch circle diameter
- E** Base of pump foot to base of strainer
- K** Discharge outer thread
- P** Bolt centre flange diameter
- F** Pump tube diameter
- L** Pump centre to discharge end

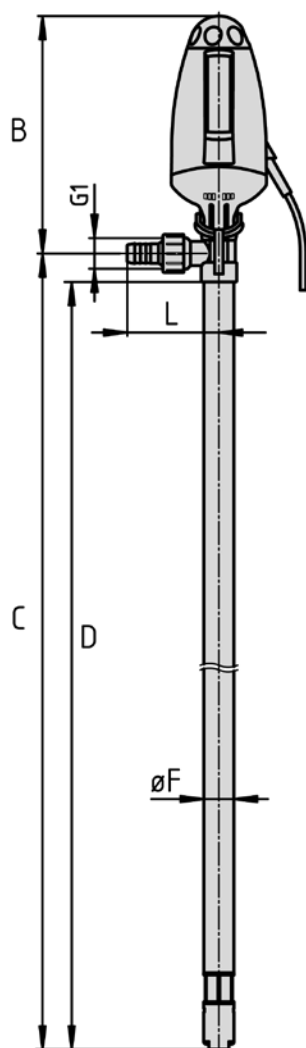
Pump tubes	C			D			E	ØF	ØH	J	K	L	ØM	ØN	P
Immersion depth	700	1000	1200	700	1000	1200									
PP 41	701	1001	1201	656	956	1156	22	41	56	110	G 1 1/4	58	140	110	4 x Ø14
PVDF 41	701	1001	1201	656	956	1156	22	41	56	110	G 1 1/4	58	140	110	4 x Ø14
Alu 41	701	1001	1201	656	956	1156	22	41	56	80	G 1 1/4	58	140	110	4 x Ø14
SS 41	700	1000	1200	660	960	1160	3	41	55	80	G 1 1/4	56	140	110	4 x Ø14
HC 42	–	1009	1209	–	960	1160	22	42	56	80	G 1 1/4	56	140	110	4 x Ø14
RE PP	714	1014	1214	598	898	1098	–	41	–	–	G 1 1/4	58	–	–	–
RE SS	680	980	1180	640	940	1140	–	41	–	–	G 1 1/4	56	–	–	–
MP PP	–	1001	1201	–	901	1101	–	50	–	–	G 1 1/4	58	–	–	–
MP SS	–	975	1200*	–	935	1160*	–	41	–	–	G 1 1/4	56	–	–	–

*Dimension is referred to Immersion depth 1225

Motors	A	B								
		PP 41	PVDF 41	Alu 41	SS 41	HC 42	RE PP	RE SS	MP PP	MP SS
MI-4	162	316	316	316	322	322	314	346	316	346
MA II 3	179	357	357	357	363	363	355	387	357	387
MA II 5	179	372	372	372	378	378	370	402	372	402
MA II 5S	179	392	392	392	398	398	390	422	392	422
MA II 7	179	396	396	396	402	402	394	426	396	426
ME II 3	179	377	377	377	383	383	375	407	377	407
ME II 5	179	392	392	392	398	398	390	422	392	422
ME II 7/8	179	416	416	416	422	422	414	446	416	446
MD-1 (Ex)	100	211	211	211	217	217	209	241	211	241
MD-2 (Ex)	159	239	239	239	245	245	237	269	239	269
MD-3 (Ex)	180	245	245	245	251	251	243	275	245	275
B4/GT-750-IP54	205	392	392	392	398	398	390	422	392	422
B4/GT-750-IP54 with protection switch	265	392	392	392	398	398	390	422	392	422

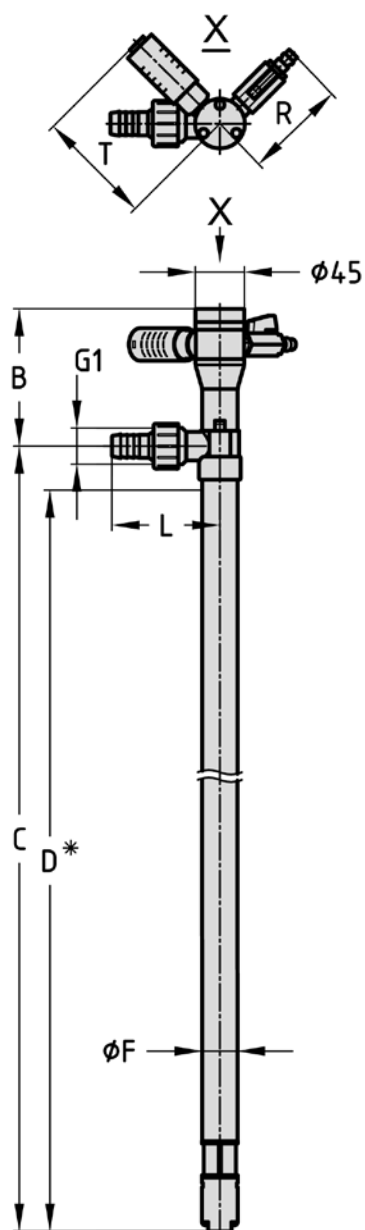
Dimensions in mm

**Dimensional drawing
Lutz B2 Vario**



	B	C			D			ØF	L
		500	700	1000	500	700	1000		
Lutz B2 Vario PP-SL 32	255	500	700	1000	460	660	960	32	98
Lutz B2 Vario SS-SL 28	266	490	690	990	450	650	950	28	83

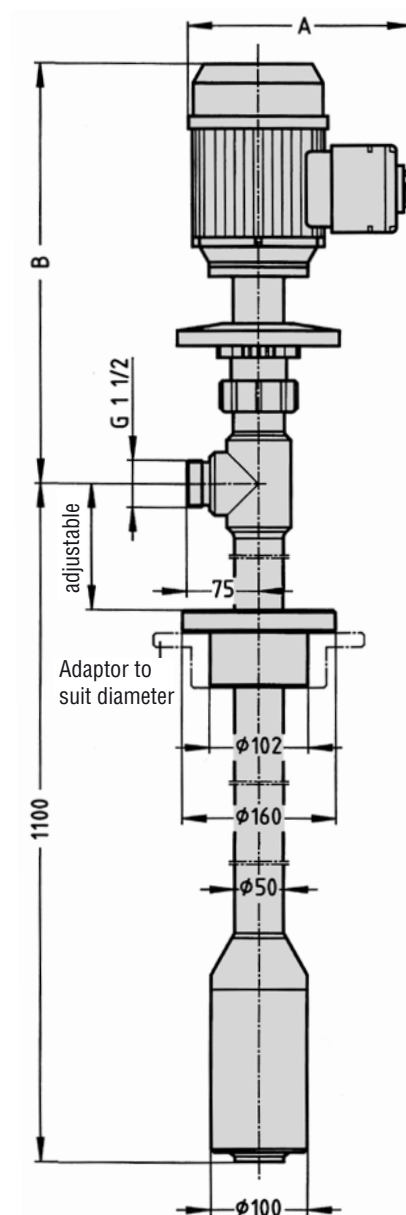
**Dimensional drawing
Lutz B2 MD-200/MD-300**



	B	C	D	F	L	R	T
Lutz B2 MD-200 PP	133	1000	960	32	98	91	—
Lutz B2 MD-200 Alu	133	1000	960	32	98	91	—
Lutz B2 MD-200 SS	145	990	950	28	83	91	—
Lutz B2 MD-300 PP	125	1000	960	32	98	91	104
Lutz B2 MD-300 Alu	125	1000	960	32	98	91	104
Lutz B2 MD-300 SS	137	990	950	28	83	91	104

*utilisable immersion depth

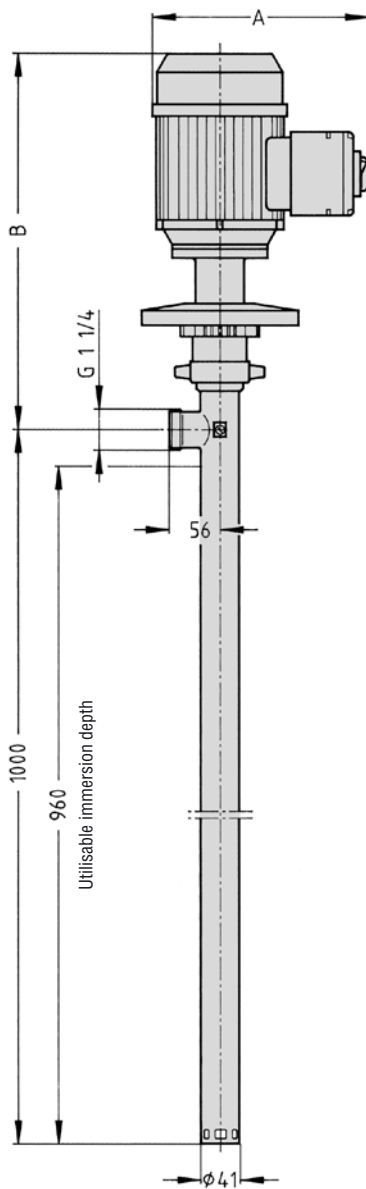
**Dimensional drawing
Container pump B50**



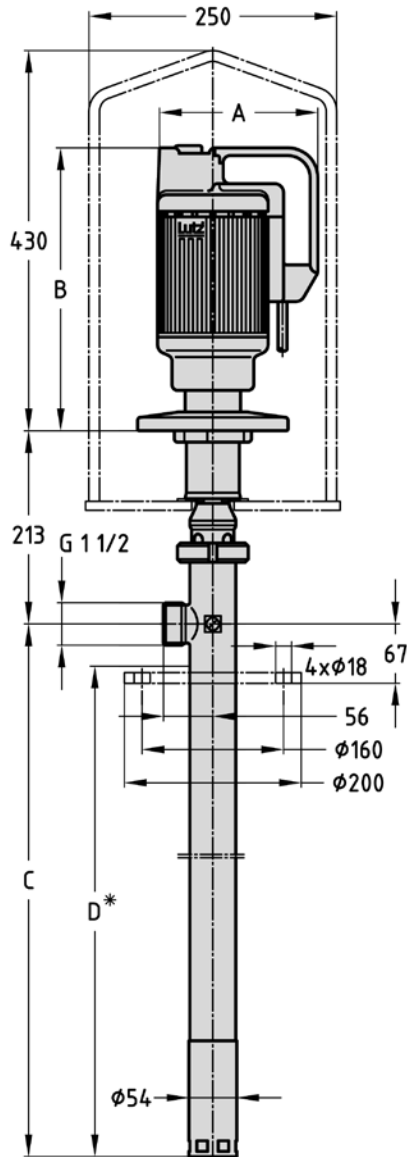
Output	Frame size	A	B
0.55 kW	M 71	236	442
0.75 kW	M 80	255	478

Dimensions in mm

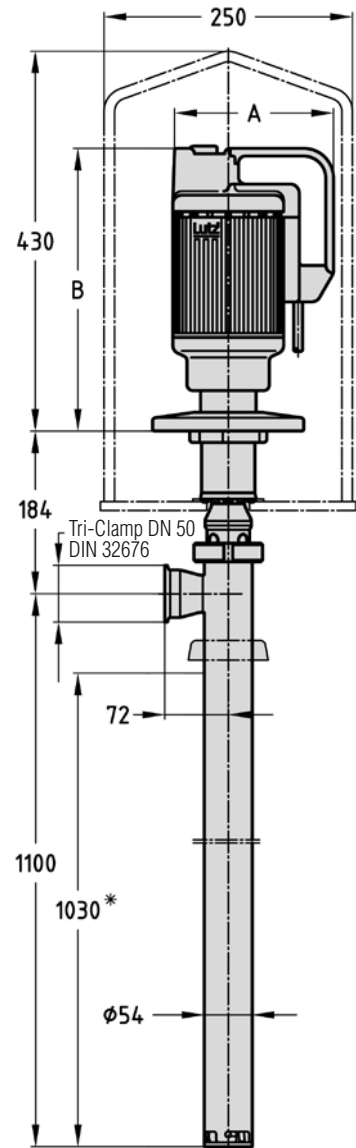
Dimensional drawing Eccentric screw pump HD-E



Dimensional drawing eccentric screw pump B70V-SR 12.1-50.1



Dimensional drawing Eccentric screw pump B70V-H-SR Sanitary 12.1-50.1



Condenser motor	A	B
Frame size M 80	255	435

	A	B	C	D
			1000	1100
MA II 3	179	301		
MA II 5	179	316		
MA II 5 S	179	336		
MA II 7	179	340		
ME II 3	179	321		
ME II 5	179	336		
ME II 7	179	360		
ME II 8	179	360		
MI-4	162	260		
MD-1 (Ex)	100	155		
MD-2 (Ex)	159	183		
MD-3 (Ex)	180	189		
12.1			1030	985
25.1			1030	985
50.1			1130	1085

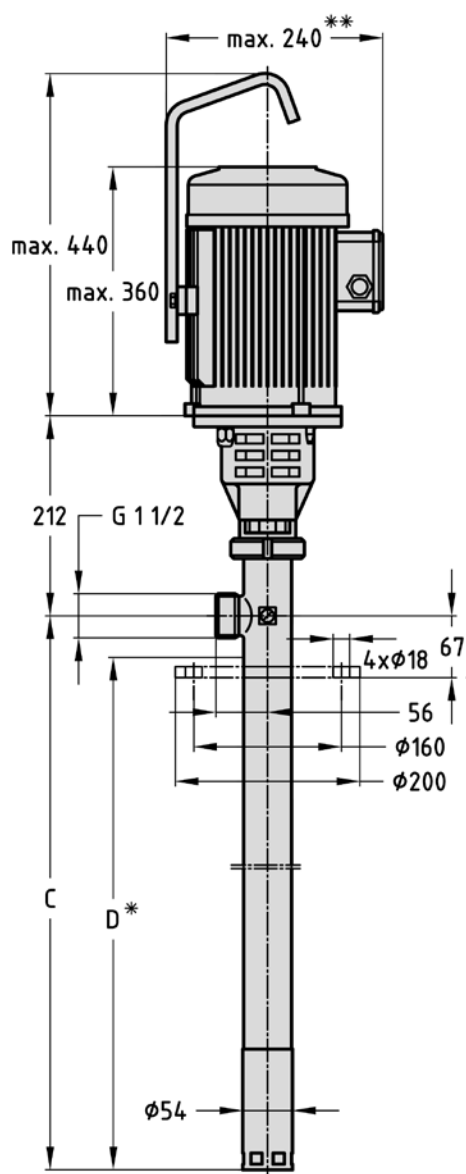
*utilisable immersion depth

	A	B
MA II 3	179	301
MA II 5	179	316
MA II 5 S	179	336
MA II 7	179	340
MI-4	162	260
MD-1 (Ex)	100	155
MD-2 (Ex)	159	183
MD-3 (Ex)	180	189

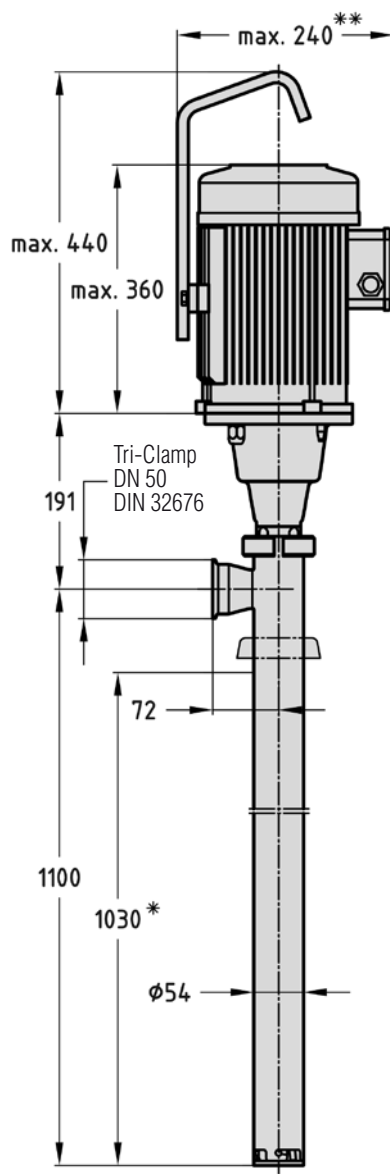
*utilisable immersion depth

Dimensions in mm

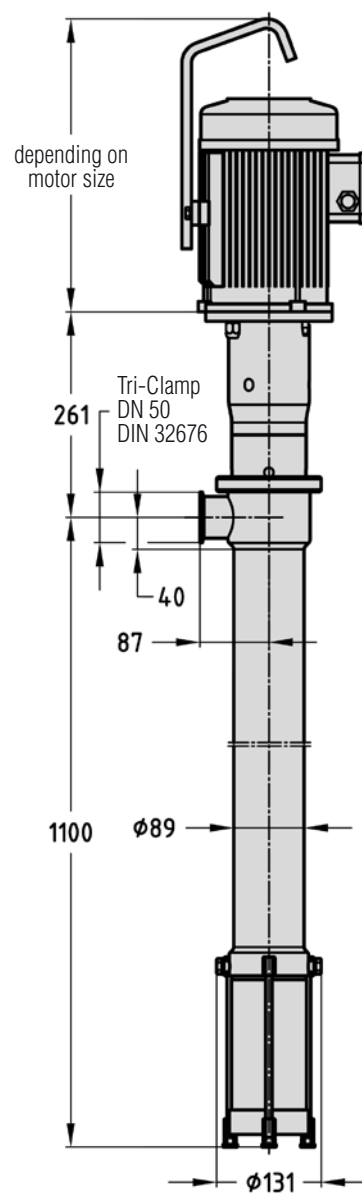
**Dimensional drawing
Eccentric screw pump
B70V-D 12.1-75.1**



**Dimensional drawing
Eccentric screw pump
B70V-H-D Sanitary 12.1-75.1**



**Dimensional drawing
Eccentric screw pump
B70V 120.1**



Size	12.1	25.1	25.2	50.1	75.1
Immersion depth	1000	1000	1100	1100	1100
C	1035	1035	1135	1135	1135
D	990	990	1090	1090	1090

*utilisable immersion depth

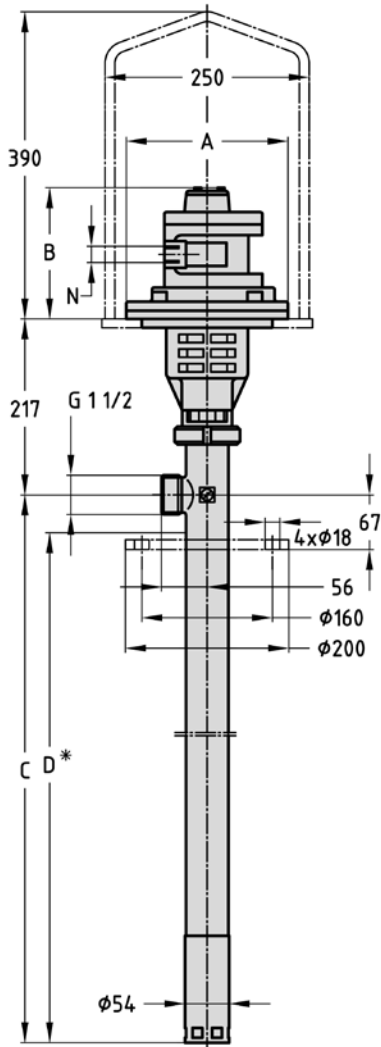
**dimension max. 350 with frequency converter or protection switch

*utilisable immersion depth

**dimension max. 350 with frequency converter or protection switch

Dimensions in mm

**Dimensional drawing
Eccentric screw pump
B70V 12.1-75.1
(compressed air)**



	A	B	C		D		N
			1000	1100	1000	1100	
4 DA	Ø 160	117					G 3/8
6 DA	Ø 200	163					G 1/2
8 DA	Ø 200	199					G 1/2
12.1			1030	—	985	—	
25.1			1030	—	985	—	
25.2			—	1130	—	1085	
50.1			—	1130	—	1085	
75.1			—	1130	—	1085	

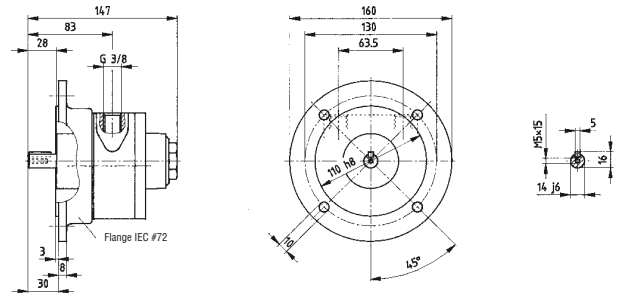
*utilisable immersion depth

Dimensional drawing of flanges for eccentric screw pump B70V

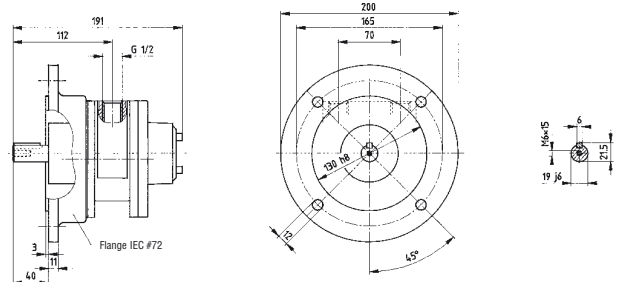
Motor connecting dimensions Frame size V18	Standard construction 90 S	Adapter flange for three-phase motors	Adapter flange for compressed air motors (6 DA and 8 DA)
Shaft diameter	14 mm, 19 mm, 24 mm	28 mm	19 mm, 24 mm
Shaft length	30 - 50 mm	60 mm	40 mm, 50 mm
Order No.	—	0172-850	0172-851

**Dimensions of compressed air motors
for eccentric screw pump B70V**

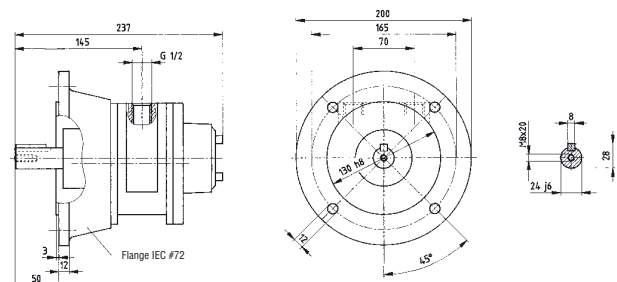
Type 4 DA



Type 6 DA



Type 8 DA



Customer Service

To ensure that you can operate and service your Lutz pump or motor, where ever you are, or else need some more information concerning your purchase, we have available on the internet under the title 'Service', test and CE Confor- mity certificates, spare part lists, data sheets and dimensional drawings, all of which may be downloaded. If you have misplaced your operating manual or need a second copy, we would be pleased to send you another. In any

case should you feel more comfortable calling or writing to us directly for any advice, please do so. We look forward to hearing from you.

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

PTB

EC-TYPE-EXAMINATION CERTIFICATE
(Translation)

(1) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - Directive 94/9/EC

(2) EC-type-examination Certificate Number: **PTB 00 ATEX 1117**

(4) Equipment: Universal motor type ME II for driving barrier and tank pumping stations

(5) Manufacturer: Lutz Pumpen GmbH & Co. KG

(6) Address: Erlenstr. 5-7, D-97877 Wertheim, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 8 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex I to the Directive.

The examination and test results are recorded in the confidential report PTB-Ex 00-15243.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50114:1997 + A1 + A2 EN 50118:1994 EN 50019:1994

(10) If the sign "CE" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

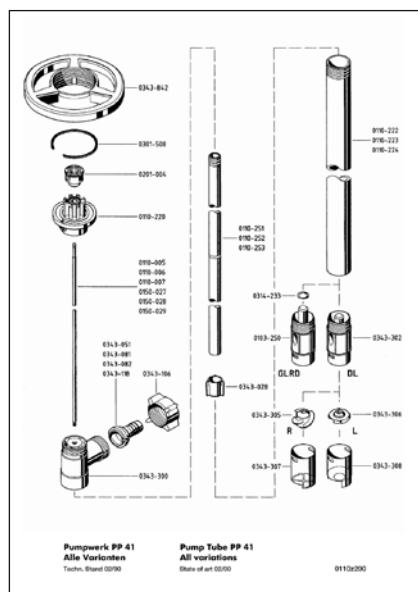
(12) The marking of the equipment shall include the following:
II 2 G EEx de IIC T4, T5 or T6

Zertifizierungsstelle Explosionschutz Braunschweig, January 23, 2001
By order: L.S.
(signature)
Dr.-Ing. H. Wieringer
Direktor und Professor

sheet 1/3

EC-type-examination Certificate without signature and official stamp shall not be used. This certificate may be divided into individual parts. Copies or reproductions are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.
Physikalisch-Technische Bundesanstalt • Bundesallee 110 • D-38110 Braunschweig

Test certificate



Spare part list

Motordatenblatt/
Motor data sheet

Lutz
Die Fluid Manager

Art.-Nr./Art.-No.: 0060-000
0060-008

Benennung/Description: **Motor MA II 3 220-230V 50Hz**

1	Nennleistung	Rated power	0.43-0.48	kW
2	Einschaltdauer (ED)	Cycle duration factor (CDF)	100	%
3	Spannung	Voltage	220-230	V
4	Nennstrom	Rated current	2.35	A
5	Anlaufstrom	Starting current	7.8	A
6	Drehzahl	Speed	8000-9500	min ⁻¹
7	Frequenz	Frequency	50	Hz
8	Wirkungsgrad η	Efficiency η	61	%
9	Leistungsfaktor cos ϕ	Power factor cos ϕ	0.83-0.84	
10	Nennmoment	Rated torque	0.3	Nm
11	Anzugmoment	Breakaway torque	1.8	Nm
12	Massenträgheitsmoment	Moment of inertia of rotor	0.25×10^{-3}	kgm ²
13	Motorschutzart IP	Protection type motor IP	54	
14	Schutzklasse	Protection class	I	
15	Zündschutzart	Method of explosion protection	-	
16	Isolationsklasse	Insulating class	F	
17	Umgebungs-temperatur	Max. ambient temperature	25	°C
18	Kabeltyp	Type of cable	H05RN-F	
19	Querschnitt	Size	3 x 1	mm ²
20	Gewicht	Net. weight	4.6	kg
21	Schallleistungspegel	Sound intensity level	siehe Beiblatt	dB(A)

Bemerkungen/Remarks:
zu 18: Bei höheren Umgebungstemperaturen erfolgt eine Reduzierung der Maximalleistung (Power Derating) oder der Wirkungsabstimmung.

zu 19: In case of higher ambient temperatures a power derating as well as a reduction of the winding derating results.

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Internet: <http://www.lutz-pumpen.de>, e-mail: info@lutz-pumpen.de

Data sheet

Lutz
Die Fluid Manager

D Betriebsanleitung 5-12
PUMPERWERKE
für Fass- und Behälterpumpen

GB Operating Instructions 13-20
PUMP TUBES
for Drum and Container Pumps

Typ/Type

PP 41-8-GLRD	Alu 41-L-DL
PP 41-L-GLRD	Niro 41-8-GLRD
PP 41-8-DL	Niro 41-L-GLRD
PP 41-L-DL	Niro 41-8-DL
PVDF 41-8-GLRD	Niro 41-L-DL
PVDF 41-L-GLRD	HC 42-8-DL
PVDF 41-8-DL	BE-PP-GLRD
PVDF 41-L-DL	BE-Niro-GLRD
Alu 41-8-GLRD	NP-PP-GLRD
Alu 41-L-GLRD	NP-Niro-GLRD
Alu 41-8-DL	

Bitte vollständig lesen! Betriebsanleitung lesen!
Read the operating instructions before start up!

Vor Wartung Wartungsdokumentation
Before maintenance for future reference

ATEX 100

Operating instruction

Professional Fluid Management

Founded in 1954 Lutz Pumpen has distinguished itself by producing quality products, and has built up a sound reputation for safety in the pumping field led by its expertise in the drum and container market. Successively, other products have been added in order to cater to the needs of our customers. We are indebted to all our loyal customers who have often been the source of our many innovations, as we sought to provide them with the solutions they required.

In this brochure, we would like to take this opportunity to give you an overview of our product range. Naturally, we welcome any enquiries you may have, so please do not hesitate to contact us or one of our offices or distributors for further help or assistance.

Lutz is represented world wide in over sixty countries. Our distributors are trained by us and are ready to assist you.

To find out more please see our web site www.lutz-pumpen.de



Lutz representation world wide:

Argentina		
Aserbajdschan		
Australia	Indonesia	
Austria	Iraq	
Belarus	Ireland	
Belgium	Iceland	
Bosnia and Herzegovina	Italy	
Brazil	Japan	
Bulgaria	Kasachstan	
Canada	Korea	
Chile	Lithuania	
China	Luxembourg	
Croatia	Macedonia	
Cyprus	Malaysia	
Czechia	Mexico	
Denmark	Montenegro	
Egypt	Netherlands	
Finland	New Zealand	
France	Norway	
Ghana	Peru	
Great Britain	Philippines	
Greece	Poland	
Hong Kong	Portugal	
Hungary	Rumania	
India	Russia	
	Saudi Arabia	
		Serbia
		Singapore
		Slovakia
		Slovenia
		South Africa
		Spain
		Sri Lanka
		Sweden
		Switzerland
		Syria
		Taiwan
		Thailand
		Tunisia
		Turkey
		Turkmenistan
		Ukraine
		U.A.E.
		USA
		Usbekistan
		Venezuela
		Vietnam



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