

# Lutz Pump Sets

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

### For concentrated acids and alkalis

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

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

### Pump Set Acids and Alkalis

with motor MA II 3 or MA II 5 externally ventilated

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

### Motor MA II 5

Density (kg/dm <sup>3</sup> )	Viscosity (mPas)	Delivery rate (l/min.)	Delivery head (m wc)
1.8	800	83 (50)	17

Max. temperature of medium 100 °C


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



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




# Lutz Drum and Container Pumps


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

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

## Choice of motors

## Operating data

	<b>MI 4</b>	<b>MI 4-E</b>	Characteristic curve no.	201	200	201	200	
	-	with speed controller	Flow rate* up to l/min.	87	160	87	160	
	Output: 500 W	500 W	Delivery head* up to mWS	19	8.5	19	8.5	
	Voltage: 230 V	230 V	Viscosity** up to mPas	500	150	500	150	
			Density:**** up to kg/dm <sup>3</sup>	1.4	1.1	1.4	1.1	
	Order No. <b>0030-000</b>	<b>0030-001</b>	Weight (kg) Motor + pump tube	4.5	4.5	4.5	4.5	
	<b>MA II 3</b>		Characteristic curve no.	203	202	203	202	
	Output: 460 W	460 W	Flow rate* up to l/min.	78	155	78	155	
	Voltage: 230 V	230 V	Delivery head* up to mWS	16	7.5	16	7.5	
	LVR.: no	yes	Viscosity** up to mPas	500	150	500	150	
			Density:**** up to kg/dm <sup>3</sup>	1.6	1.2	1.6	1.2	
	Order No. <b>0060-000</b>	<b>0060-008</b>	Weight (kg) Motor + pump tube	6.3	6.3	6.3	6.3	
	<b>MA II 5</b>	<b>MA II 5</b>	<b>MA II 5 S</b>	Characteristic curve no.	205	204	205	205
	Output: 575 W	575 W	575 W	Flow rate* up to l/min.	83	160	83	160
	Voltage: 230 V	230 V	230 V	Delivery head* up to mWS	18	9	18	9
	LVR.: no	yes	no	Viscosity** up to mPas	800	350	800	350
			acid proof	Density:**** up to kg/dm <sup>3</sup>	1.8	1.3	1.8	1.3
	Order No. <b>0060-001</b>	<b>0060-009</b>	<b>0060-091</b>	Weight (kg) Motor + pump tube	7.1	7.1	7.1	7.1
<p>Low-voltage release (LVR.): Prevents the pump from starting up again without warning after a power failure. It is recommended when pumping hazardous liquids.</p>	<b>MA II 7</b>		Characteristic curve no.	207	206	207	206	
	Output: 795 W	795 W	Flow rate* up to l/min.	95	170	95	170	
	Voltage: 230 V	230 V	Delivery head* up to mWS	25	12	25	12	
	LVR.: no	yes	Viscosity** up to mPas	800	350	800	350	
			Density:**** up to kg/dm <sup>3</sup>	1.9	1.4	1.9	1.4	
	Order No. <b>0060-002</b>	<b>0060-010</b>	Weight (kg) Motor + pump tube	8.3	8.3	8.3	8.3	
	<b>MD1xL</b>	<b>MD2xL</b>	Characteristic curve no.	209	208	209	208	
	Output: 1000 W	1000 W	Flow rate* up to l/min.	116	216	116	216	
	Operating pressure: 6 bar	6 bar	Delivery head* up to mWS	36	16	36	16	
		infinitely varied	Viscosity** up to mPas	1000	1000	1000	1000	
			Density:**** up to kg/dm <sup>3</sup>	2.8	2.8	2.8	2.8	
	Order No. <b>0004-725</b>	<b>0004-735</b>	Weight (kg) Motor + pump tube	3.1	3.1	3.1	3.1	

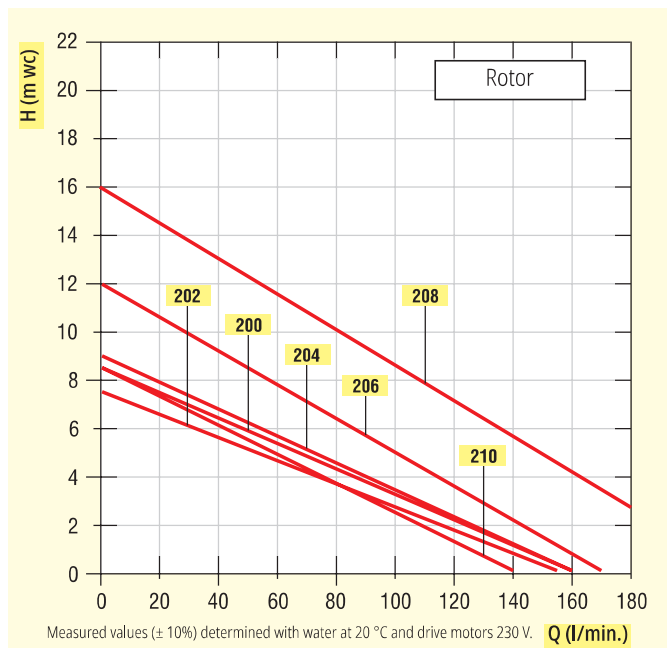
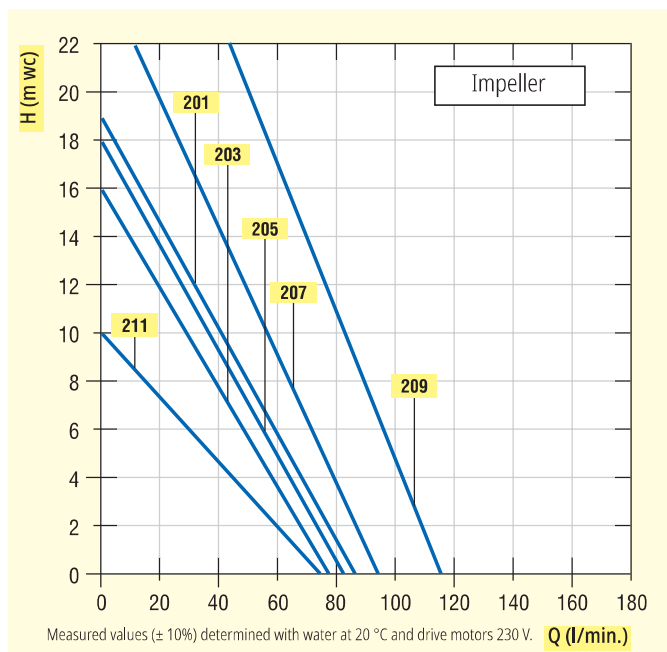
	<b>B4/GT</b>		Characteristic curve no.	211	210	211	210
	Output: 750 W	750 W	Flow rate* up to l/min.	75	140	75	140
	Voltage: 230/400 V	230/400 V	Delivery head* up to mWS	10	8.5	10	8.5
	Protection switch no	yes	Viscosity** up to mPas	400	400	400	400
			Density:**** up to kg/dm <sup>3</sup>	2.2	2.0	2.2	2.0
	Order No. <b>0004-050</b>	<b>0004-052</b>	Weight (kg) Motor + pump tube	12.5	12.5	12.5	12.5

# Pump Tube PVDF (polyvinylidene fluoride)

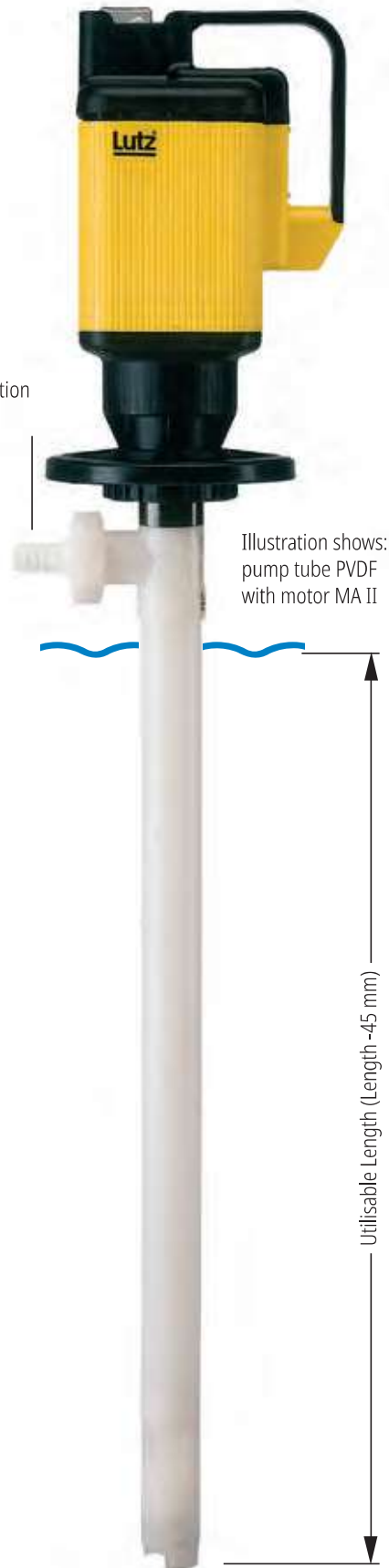
for highly corrosive chemicals and neutral liquids

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

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



Accessories  
hose connection  
see page 83



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



Suitable range of accessories  
see pages 80-96