

### TANKER TRUCK PUMPS



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### CLEVERLY DESIGNED DOWN TO THE VERY LAST DETAIL THE BÖRGER TANKER TRUCK PUMP

You can find Börger rotary lobe pumps on many tanker trucks The high quality, the compact and low-on-space design and the option of reversing the pump are the reason why the Börger pump is the ideal tanker truck pump.



With the wide range of 25 pump sizes, a large selection of equipment and additional parts, Börger is able to build rotary lobe pumps which are perfectly suited for every single tanker truck. Liquid as well as viscous or abrasive pumped media can be conveyed easily. Even solids and chemically aggressive media do not pose a problem.

Rotors made of different materials, pump casings made of grey cast iron, steel, stainless steel or aluminium and mechanical seals made of many different material combinations only give an idea of the Börger variety of materials.



#### FILLING AND DRAINING THROUGH ONE PIPELINE

Börger rotary lobe pumps are reversible, they can convey medium in both directions. This allows for a space- and weight-saving pipeline design.





#### CANTILEVERED DESIGN FOR MAXIMUM EASE OF MAINTENANCE

Our rotary lobe pumps feature a cantilevered shaft design. This way, all wear parts can be replaced very easily through the quick-release cover – for extremely short downtimes.

*MIP®* is an unrivaled concept which reduces maintenance times and downtimes.

#### ROTOR VARIETY

Large selection of high-quality rotors for almost pulsation-free pumping of the medium. Just the removable lobe tips of the patented "Unique" rotor have to be replaced in case of wear.



## EXTENDED SERVICE LIFE DUE TO CASING PROTECTION

The casing protection plates and liners protect the pump casing from wear caused by solids (e.g. sand or stones) and can be replaced in a matter of minutes. The casing protection is available in different materials.

### FURTHER ADVANTAGES

- + Self-priming
- + Reversible pumping
- + Short-term dry-run capability
- + Compact design with minimum space requirements
  - + 25 pump sizes with flow rates of up to 1,440 m³/h
    - + Quick filling and emptying
  - + ATEX-compliant design upon request
    - + Chemically resistant



#### **ROBUST BLOCK DESIGN**

All 25 pump sizes feature dedicated, non-segmented pump casings and rotors in single-piece construction. This block design makes the pumps more robust and durable and ensures a virtually unlimited service life.





#### INTERMEDIATE CHAMBER AND SHAFT SEALS

The oil in the large-volume intermediate chamber cools and lubricates the seals and ensures the highest degree of safety. The ideal mechanical seal is selected depending on the medium.

Our single-acting mechanical seals ensure the highest degree of safety. For challenging applications, individual shaft seal solutions are used.

#### RESISTANT TO SOLIDS

The pump is resistant to solids. Conveying sludges or media containing sand is no problem.



#### SIZES AND PERFORMANCE DATA

#### DRIVEN BY A HYDRAULIC MOTOR

Pump types [selection]	Hydraulic motor [ orbital motor ] [ccm]	Flow rate [	at 600 rpm ]		Oil quantity [ at 600 rpm ]	
		[l/min]	[m³/h]	Pump pressure [ bar ]	[l/min]	Oil pressure [ bar ]
AN 40	80	233	14	6.0	55	130
AN 70	80	283	23	4.0	55	130
PL 200	100	1,080	65	5.0	60	160
PL 300	125	1,620	95	4.5	80	160
CL 390	200	2,340	140	5.0	125	160
CL 520	200	3,120	185	3.5	125	160
FL 776	160	5,080	305	2.3	100	200
FL 776	200	5,080	305	2.9	125	200
FL 1036	200	6,750	405	2.2	125	200
FL 1036	250	*5,580	*335	2.8	*130	200
FL 1036	210**	6,750	405	2.5	130	190
EL 1550	210**	9,170	550	2.2	130	230
EL 1550	240**	9,170	550	2.5	150	230
EL 2250	340**	12,080	725	2.5	210	220

\* at 500 rpm \*\* with radial piston motor

#### DRIVEN BY A PTO SHAFT - 2-speed manual gearbox

Pump types [ selection ]	Stage   [ 1.28:1 ]    [ 2.30:1 ]	Flow rate [ PTO shaft 540 rpm ]		Flow rate [ PTO shaft 750 rpm ]		Flow rate [ PTO shaft 1000 rpm ]	
		rpm [pump]	[l/min]	rpm [pump]	[l/min]	rpm [pump]	[l/min]
FL 776	Discharging I	420	3,610	590	5,070	-	-
	Discharging II	230	1,980	330	2,840	430	3,700
FL 1036	Discharging I	420	4,790	590	6,730	-	-
	Discharging II	230	2,620	330	3,760	430	4,900
EL 1550	Discharging I	420	6,510	590	9,150	-	-
	Discharging II	230	3,570	330	5,120	430	6,670
EL 2250	Discharging I	420	9,450	590	13,280	-	-
	Discharging II	230	5,180	330	7,430	430	9,680

DRIVEN BY A PTO SHAFT – 4-speed manual gearbox Three gear reductions for discharging and one reverse gear for filling. The PTO shaft does not have to be reconnected for filling.

Pump types [ selection ]	Stage I [ 3.21 : 1 ] II [ 2,27 : 1 ] III [ 1,60 : 1 ]	Flow rate [ PTO shaft 540 rpm ]		Flow rate [ PTO shaft 750 rpm ]		Flow rate [ PTO shaft 1000 rpm ]	
		rpm [pump]	[l/min]	rpm [pump]	[l/min]	rpm [pump]	[l/min]
FL 776	Discharging I	170	1,460	230	1,980	310	2,670
	Discharging II	240	2,060	330	2,840	440	3,780
	Discharging III	340	2,920	470	4,040	*630	5,420
	Filling	410	3,530	570	4,900	*760	6,540
FL 1036	Discharging I	170	1,940	230	2,620	310	3,530
	Discharging II	240	2,740	330	3,760	440	5,020
	Discharging III	340	3,880	470	5,360	*630	7,180
	Filling	410	4,670	570	6,500	*760	8,660
EL 1550	Discharging I	170	2,640	230	3,570	310	4,810
	Discharging II	240	3,720	330	5,120	440	6,820
	Discharging III	340	5,270	470	7,290	*630	9,770
	Filling	410	6,360	570	8,840	*760	11,780
EL 2250	Discharging I	170	3,830	230	5,180	310	6,980
	Discharging II	240	5,400	330	7,430	440	9,900
	Discharging III	340	7,650	470	10,580	*630	14,180
	Filling	410	9,230	570	12,830	*760	17,100

\* max. speed 600 rpm

# WHEN EVERY GRAM COUNTS THE NEW LIGHT-WEIGHT PUMP

With our new light-weight pump, we achieve a weight reduction of up to 54 per cent compared to the pumps used before, while maintaining the same flow rate. This allows our customers to obtain a higher maximum load volume and saves energy.



#### SIZES AND PERFORMANCE DATA OF THE LIGHT-WEIGHT PUMP

#### DRIVEN BY A HYDRAULIC MOTOR

Hydraulic mot Pump types [orbital moto [selection] [ccm]	Hydraulic motor	Flow rate			Oil quantity		Weight (oil-filled)
	(orbital motor) [ccm]	at 600 rpm [l/min]	at 600 rpm [m³/h]	Pump pressure [ bar ]	at 600 rpm [ l/min ]	Oil pressure [ bar ]	incl. motor [kg]
FL 1036	200	6,750	405	2.2	125	200	184
FL 1036	250	*5,580	*335	2.8	*130	200	185
EL 1550	210**	9,170	550	2.2	130	230	296
EL 1550	240**	9,170	550	2.5	150	230	298

\* at 500 rpm \*\* with radial piston motor



