DRUM PUMPS

FOR EACH LIQUID THE RIGHT DRUM PUMP







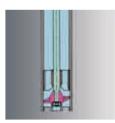
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Advantages of grün-drum pumps





mechanical seal



singlestage design



sealless



multistage design

singlestage design

no inner-tube
easily accessible shaft
easy to clean
solid shaft
mechanical seal

- big discharge flows
- multistage design
- lower noise
- more stages possible, gives more pressure
- with feed-screw
- for medium-viscous liquids
- smooth pumping of liquids
- low noise with three-phase motor



feed-screw



quick release coupling



magnetic coupling



quick release coupling



rigid connection

- quick release coupling
- speedy connection
- robust design
- rugged bow-gear couplingsuitable for aggressive
 - environments
- magnetic coupling
- hermetically sealed
- for gaseous and dangerous liquids
- no leakage
- Eccentric screw barrel pump with quick release coupling
- removable drive motor
- easy and safe handling with the separate pump tube
- no lifting device necessary
- it's possible to drive several pump tubes with only one motor
- rigid connection of drive motor and pump tube

Traditional drum pumps

Drum pumps with mechanical seal

	Applications	 PP for aggressive liquids like acids, caustics, vegetable oils, paints PVDF highly aggressive liquids like concentrated or mixed acids, SS acids, caustics, fruit-juices, milk, paints, thin-bodied oils, HC highly aggressive liquids like concentrated or heated acids and solvents, 			
	Pump tubes	tube: seal: immersion depth:	polypropylene (PP), polyvinylidenefluoride (PVDF), stainless steel (SS) or Hastelloy C4 (HC) mechanical seal 700, 1000, 1200 mm and special immersion depth		
	Drive motors	electrical: pneumatical:	$\begin{array}{l} p310 \ = \ 520 \ Watt, \ 230 \ Volt \ / \ 50 \ Hz, \ 115 \ Volt \ / \ 60 \ Hz \\ p400 \ = \ 850 \ Watt, \ 230 \ Volt \ / \ 50 \ Hz, \ 115 \ Volt \ / \ 60 \ Hz \\ d600 \ = \ 600 \ Watt \ at \ 6 \ bar \ compressed \ air \end{array}$		
	Performance	delivery rate delivery head viscosity	max. 175 l/min max. 22 mWS max. 700 mPas		

Modern multipurpose drum pumps

Sealless drum pumps			
	Applications	 PP for aggressive liquids like acids, caustics, vegetable oils, paints PVDF highly aggressive liquids like concentrated or mixed acids, SS acids, caustics, fruit-juices, milk, paints, thin-bodied oils, HC highly aggressive liquids like concentrated or heated acids and solvents, 	
	Pump tubes	tube: seal: immersion depth:	polypropylene (PP), polyvinylidenefluoride (PVDF), stainless steel (SS) or Hastelloy C4 (HC) sealless 700, 1000, 1200 mm and special immersion depth
	Drive motors	electrical: pneumatical:	$\begin{array}{l} p310 = 520 \mbox{ Watt, } 230 \mbox{ Volt / } 50 \mbox{ Hz, } 115 \mbox{ Volt / } 60 \mbox{ Hz} \\ p400 = 850 \mbox{ Watt, } 230 \mbox{ Volt / } 50 \mbox{ Hz, } 115 \mbox{ Volt / } 60 \mbox{ Hz} \\ d600 = 600 \mbox{ Watt at } 6 \mbox{ bar compressed air} \end{array}$
	Performance	delivery rate delivery head viscosity	max. 150 l/min max. 21 mWS max. 800 mPas

For toxical liquids

Drum pumps with magnetic coupling ...

	Applications	suitable for pumping toxic, gaseous and hazardous liquids due to being hermetically sealed with no leakage.				
	Pump tubes	tube: immersion depth:	polypropylene (PP), polyvinylidenefluoride (PVDF), stainless steel (SS) or Hastelloy C4 (HC) 700, 1000, 1200 mm and special immersion depth			
	Drive motors	electrical: pneumatical:	$\begin{array}{l} p310 = 520 \mbox{ Watt, } 230 \mbox{ Volt } / \ 50 \mbox{ Hz, } 115 \mbox{ Volt } / \ 60 \mbox{ Hz} \\ p400 = 850 \mbox{ Watt, } 230 \mbox{ Volt } / \ 50 \mbox{ Hz, } 115 \mbox{ Volt } / \ 60 \mbox{ Hz} \\ d600 = 600 \mbox{ Watt at } 6 \mbox{ bar compressed air} \end{array}$			
	Performance	delivery rate delivery head viscosity	max. 175 l/min max. 22 mWS max. 50 mPas			

For each problem the right solution.

For inflammable liquids

Explosion-proof drum pumps in stainless steel and HC



Applications	SSinflammable liquids according to VbFHChighly aggressive and inflammable liquids		
Pump tubes	tube: seal: immersion depth:	stainless steel (SS) or Hastelloy C4 (HC) mechanical seal or sealless 700, 1000, 1200 mm and special immersion depth	
Drive motors	electrical: pneumatical:	$\begin{array}{l} {\sf Ex700}\ =\ 700\ {\sf Watt},\ 230\ {\sf Volt}\ /\ 50\ {\sf Hz}\ ({\sf ATEX})\\ {\sf Ex700}\ =\ 700\ {\sf Watt},\ 115\ {\sf Volt}\ /\ 60\ {\sf Hz}\ ({\sf ATEX})\\ {\sf d600}\ =\ 600\ {\sf Watt}\ {\sf at}\ 6\ {\sf bar}\ compressed\ {\sf air}\ ({\sf ATEX})\\ \end{array}$	
Performance	delivery rate delivery head viscosity	max. 150 l/min max. 17 mWS max. 800 mPas	

For mixed liquids

Mixing drum pumps in PP and stainless steel				
	Applications	PP aggressive emulsions, dispersions and suspensionsSS paints and lacquers and other mixed and inflammable liquids		
	Pump tubes	tube: seal: immersion depth:	polypropylene (PP) or stainless steel (SS) sealless 700, 1000, 1200 mm and special immersion depth	
	Drive motors	electrical: explosion-proofed: pneumatical:	$\begin{array}{l} p310 = 520 \mbox{ Watt, } 230 \mbox{ Volt } / \mbox{ 50 Hz, } 115 \mbox{ Volt } / \mbox{ 60 Hz} \\ p400 = 850 \mbox{ Watt, } 230 \mbox{ Volt } / \mbox{ 50 Hz, } 115 \mbox{ Volt } / \mbox{ 60 Hz} \\ Ex700 = 700 \mbox{ Watt, } 230 \mbox{ Volt } / \mbox{ 50 Hz, } 115 \mbox{ Volt } / \mbox{ 60 Hz} \\ d600 = \mbox{ 600 Watt } at \mbox{ 6 bar compressed air} \end{array}$	
	Performance	delivery rate delivery head viscosity	max. 145 l/min max. 21 mWS max. 800 mPas	

For complete drum emptying

Comlete-drainage drum pump in PP and stainless steel



Applications	00	e liquids like acids, caustics, vegetable oils, paints, galvanic liquids, cs, fruit-juices, milk, paints, thin-bodied oils,
Pump tubes	tube: seal: immersion depth:	polypropylene (PP) or stainless steel (SS) mechanical seal 700, 1000, 1200 mm and special immersion depth
Drive motors	electrical: pneumatical:	$\begin{array}{l} p310 = 520 \mbox{ Watt, } 230 \mbox{ Volt } / \mbox{ 50 Hz, } 115 \mbox{ Volt } / \mbox{ 60 Hz} \\ p400 = 850 \mbox{ Watt, } 230 \mbox{ Volt } / \mbox{ 50 Hz, } 115 \mbox{ Volt } / \mbox{ 60 Hz} \\ d600 = 600 \mbox{ Watt at } 6 \mbox{ bar compressed air} \end{array}$
Performance	delivery rate delivery head viscosity	max. 80 l/min max. 16 mWS max. 700 mPas



GLP25 - for many applications

NEW - the innovative	and mobile	laboratory /	industry pump	
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	Applications	extra liquids:	non inflammable liquids, acids and basis low concentrated, fluids of medium viscosity (colours, emulsions, dispersions, suspensions, oils) inflammable liquids when ATEX is not required (special laboratory conditions) pumping heavy and viscous liquids only in small quantities, motor temperature is limited	
	Motor	electric:	max. 160 W, 230 Volt / 50 Hz	
13 CB	delivery rate	0 - 30 l/min wit	th discharge tube	
F 8	pump units	wetted materi length of tube		
Click-joint	different container sizes		discharge tube, nozzle	
For medium-v	viscosity liq	uids		

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GUARANTE

Feed-screw drum pumps in PP und stainless steel

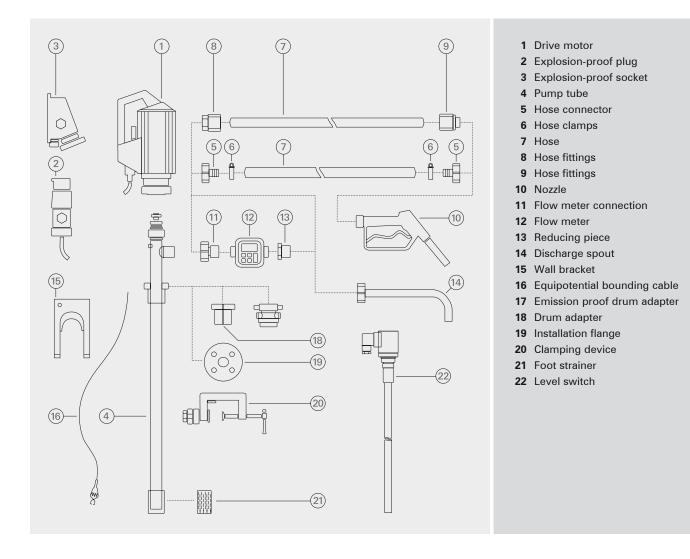
	Applications	 PP aggressive medium-viscosity liquids and paints, vegetable oils, cosmetics, SS paints, lacquers, fruit-juices, oils, vegetable oils, cosmetics, foods, 		
	Pump tubes	tube: seal: immersion depth:	polypropylene (PP) or stainless steel (SS) mechanical seal or sealless 700, 1000, 1200 mm and special immersion depth	
	Drive motors	electrical: pneumatical:	$\begin{array}{l} p400=850\mbox{ Watt, }230\mbox{ Volt / }50\mbox{ Hz, }115\mbox{ Volt / }60\mbox{ Hz, }(universal\mbox{ motor})\\ pd500=0,37\mbox{ kW, single }230\mbox{ V / }50\mbox{ Hz or three-phase }400\mbox{ V / }50\mbox{ Hz}\\ d600=600\mbox{ Watt at }6\mbox{ bar compressed air} \end{array}$	
	Performance	delivery rate delivery head viscosity	max. 65 l/min max. 10 mWS max. 1500 mPas	

For high-viscosity liquids

Eccentric screw drum pumps in stainless steel

	Applications	for pumping high-viscosity liquids like resin, paints, lacquers, glue, oil, soap, shampoo, ointment, honey, sirup, tomato paste, fruit concentrate, molasse, glucose,				
6	Pump tubes	tube: stators: seal: immersion depth:	stainless steel (SS) NBR, NBR-light, FPM, PTFE mechanical seal or packing gland 1000 mm and special immersion depth			
2	Drive motors other on demand	rigid or quick relea electrical: pneumatical:	tse coupling 0,37 – 1,5 kW, 700 or 900 rpm, 400 Volt / 50 Hz 0,5 – 1,1 kW, up to 1000 rpm at 6 bar compressed air			
	Performance	delivery rate delivery head viscosity	max. 50 l/min max. 12 bar max. 100.000 mPas			

Accessories



grün-pumpen gmbh

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