

## High-pressure pump 1003

The type 1003 high-pressure pump provides a max. operating pressure of 150 bar and a max. flow rate of 257 l/min.



Operating pressures up to 250 bar and nominal flow rates of up to 403 l/min make the high pressure pumps of the 03-series a specialist for descaling as well as for sewer and pipe cleaning.

The sealing system of this plunger pump is particularly service-friendly due to fewer wearing parts and easy maintenance. The ceramic plungers used are extremely resistant to acidic and basic fluids. Alternatively, the pump is available with coated steel plungers that offer increased wear resistance and resistance to thermal shocks. These features, together with the favorable price-performance ratio, make the pumps of the 03-series a good choice.



Technical data							
Weight	approx.	255 kg					
Inlet pressure connection		IG 3"					
Pressure connection		IG 1 ¼"					
Cooling water connection		IG 1"					
Crankshaft	max.	500 1/min					
	min.	Depends on operation parameters					
Drive shaft		Diameter 40mm k6, feather key DIN 6885 Sheet 1, A12 x 8 x 70					
Torque at drive shaft	max.	375 Nm					
Moment of inertia J i = 3.00		0.015 kgm²					
	i = 3.63	0.011 kgm <sup>2</sup>					
Centrifugal moment GD <sup>2</sup>	i = 3.00	0.59 Nm <sup>2</sup>					
	i = 3.63	0.43 Nm <sup>2</sup>					
Inlet pressure	min.	1.5 bar					
Dragging graplitude	max.	5.0 bar					
Pressure amplitude Flow temperature	max. min.	± 2.0 bar +5 °C					
Flow temperature	max.	+45 °C (higher temperatures on request)					
		1.5x nominal feed rate of the pump,					
Flow inlet requirement	min.	dependent on the conversion set					
Emission sound pressure level according to DIN EN ISO 11200		>80 dB(A)					
Oil capacity of transmission end	approx.	61					
Oil viscosity ISO VG under DIN 51		320 mm²/s					
Oil pressure lubrication		2.5 - 5.0 bar	(optional / performance related)				
Oil pressure set value overflow val	ve	5.0 bar	(optional / performance related)				
Oil filter fineness		0.025 mm	(optional / performance related)				
Oil temperature	max.	80 °C					
·	Set value	60 - 70 °C					
Heat exchanger cooling water requ	uirement approx.	5 - 10 l/min					
Heat exchanger cooling water tem	perature min.	+5 °C					
	max.	+45 °C					
Heat exchanger cooling water pres	ssure min.	1.5 bar					
	max.	10 bar					

Performance variants**								
Pinior	shaft	Crank	P50		P55			
1,500 [1/min]	1.800 [1/min]	shaft	150 bar*		125 bar			
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]		
3.00		500*	59	211	60*	257*		
	3.63	496	59	210	59	254		
3.63		413	49	175	49	212		

<sup>\*</sup> Maximum values of the pump \*\* Technical changes reserved



## **Overview pump 1003**

