

# High-pressure pump 1002

The type 1002 high-pressure plunger pump provides a max. operating pressure of 750 bar and a max. flow rate of 171 l/min.



The high-pressure plunger pumps of the 2-series with operating pressures up to 750 bar and flow rates up to approx. 224 l/min, are ideal for the cleaning of pipes and tube bundles, vessels and containers. Variant V of the 2-series has been specially developed for applications with elevated inlet pressure.

The sealing system of this plunger pump is particularly service-friendly due to fewer wearing parts and easy maintenance. The ceramic plungers used are highly resistant to acidic and basic fluids. Alternatively, the pump is available with coated steel plungers for increased wear resistance and resistance to thermal shocks. The sealing water system used prevents leakage, enables a higher durability for the high-pressure seals and counteracts the ingress of air. As a result, the 2-series offers a high price-performance ratio even in rough working conditions.

<b>Technical data</b>		
Weight	approx.	254 kg (with splash lubrication system) 264 kg (with pressure oil lubrication)
Inlet pressure connection		G 1 ½"A
Pressure connection with flange		2 x aM24x1,5 und 1 x aM36x2 2 x G1/2"A und 1 x G3/4"A 1 x iM30x1,5
Cooling water connection		G 1"A
Crankshaft	max. min.	500 1/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.	365 Nm
Moment of inertia J	i = 3.00 i = 3.63	0.015 kgm <sup>2</sup> 0.011 kgm <sup>2</sup>
Centrifugal moment GD <sup>2</sup>	i = 3.00 i = 3.63	0.59 Nm <sup>2</sup> 0.43 Nm <sup>2</sup>
Delivery medium inlet pressure	min.	1.5 bar (2.0 bar at < 170 l/min)
Pump head type 2	max.	5.0 bar
Pump head type 2-V	min.	3.0 bar
	max.	8.0 bar
Permissible pressure amplitude	max.	± 2.0 bar
Flow temperature	min. max.	+5 °C +45 °C (higher temperatures on request)
Flow inlet requirement	min.	1.5x nominal feed rate of the pump, dependent on the conversion set
Emission sound pressure level according to DIN EN ISO 11203		>80 dB(A)
Oil capacity of transmission end	approx.	6 l
Oil viscosity ISO VG under DIN 51517-2 or -3		320 mm <sup>2</sup> /s
Oil pressure lubrication		2.5 - 5.0 bar (optional / performance related)
Oil pressure set value overflow valve		5.0 bar (optional / performance related)
Oil filter fineness		0.025 mm (optional / performance related)
Oil temperature	max. Set value	80 °C 60 - 70 °C
Heat exchanger cooling water requirement	appr.	5 - 10 l/min
Heat exchanger cooling water temperature	min. max.	+5 °C +45 °C
Heat exchanger cooling water pressure	min. max.	1.5 bar 10 bar

Performance variants**												
Pinion shaft		Crank shaft	P22		P26		P35		P40		P45	
1,500 [1/min]	1,800 [1/min]		750 bar*		550 bar		300 bar		230 bar		180 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
3.00		500*	54	38	56	54	57	102	58*	134	57	171*
	3.63	496	54	38	56	54	57	101	57	133	57	169
3.63		413	45	31	47	45	47	84	48	111	48	141

\* Maximum values of the pump

\*\* Technical changes reserved



