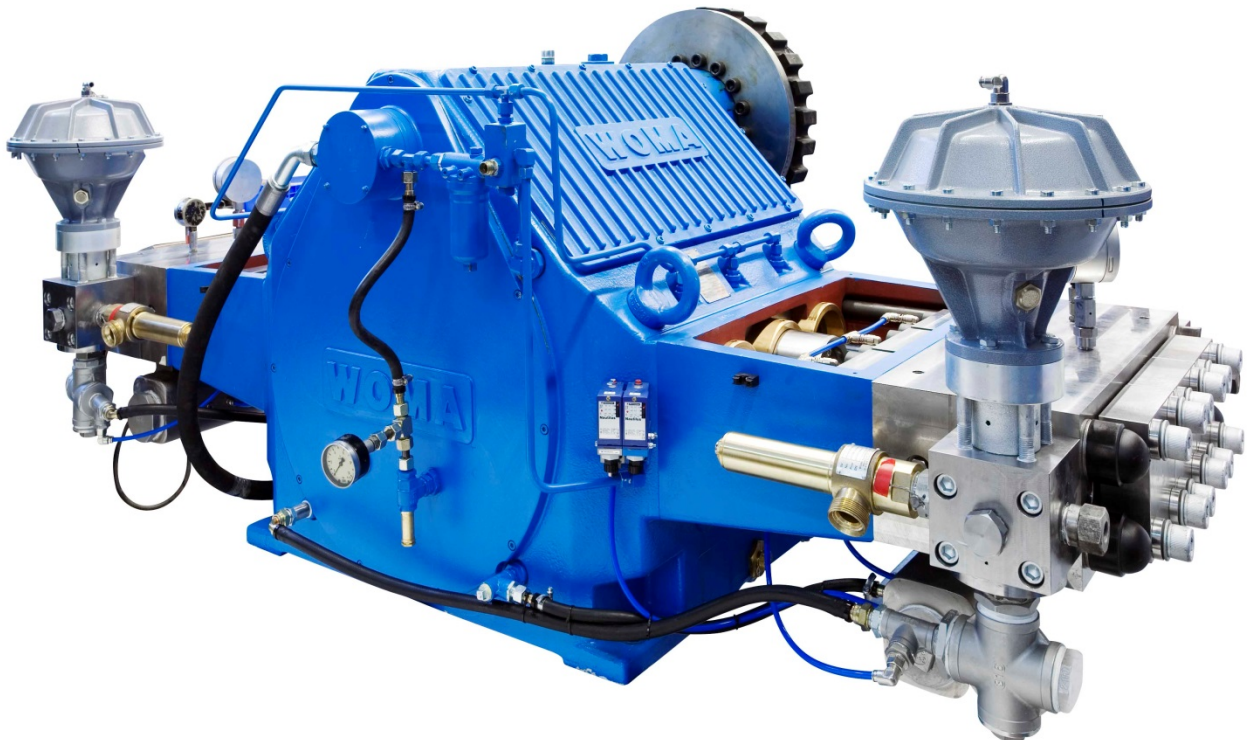


# High-pressure pump 1000Z

The type 1000Z high-pressure pump provides a max. operating pressure of 1,400 bar and a max. flow rate of 744 l/min.



With operating pressures of up to 1,500 bar and nominal flow rates of up to 744 l/min, the Z-series is the ideal pump for industrial cleaning as well as for paint removal and descaling.

Proper guidance of the plunger ensures a long service life of the sealing system. The used sealing water system prevents leakage, allows for a particularly high durability of the high-pressure seals and counteracts the intrusion of air. The central valve design of the pump results in a high volumetric efficiency. Pumps with an operating pressure of 1,000 bar or more are equipped with carbide plungers, which ensure a long service life and thus low maintenance costs.

On request, the availability of an ATEX version can be checked.

Technical data		
Weight	approx.	2,470 kg
Inlet pressure connection		IG 3"
Pressure connection with flange		M24x1.5 M42x2
Cooling water connection		G ½"
Crankshaft	max. min.	500 1/min Depends on operation parameters
Drive shaft		Diameter 75mm k6, Clutch mounting with clamping set
Torque at drive shaft	max.	4,810 Nm
Moment of inertia J	i = 3.00 i = 3.69 i = 4.23	1.197 kgm <sup>2</sup> 0.924 kgm <sup>2</sup> 0.777 kgm <sup>2</sup>
Centrifugal moment GD <sup>2</sup>	i = 3.00 i = 3.69 i = 4.23	46.97 Nm <sup>2</sup> 36.26 Nm <sup>2</sup> 30.48 Nm <sup>2</sup>
Inlet pressure	min. max.	1.5 bar 5.0 bar
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 11200		>80 dB(A)
Oil capacity of transmission end	approx.	45 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
Oil pressure set value overflow valve		5.0 bar
Oil filter fineness		0.025 mm
Oil temperature	max. Set value	80 °C 60 - 70 °C
Heat exchanger cooling water requirement	appr.	20 - 30 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	P30		P35		P40		P45		P50	
1,500 [1/min]	1,800 [1/min]		1,400 bar*		1,100 bar		850 bar		700 bar		560 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
3.00		500*	651	256	707	354	723	469	760*	598	756	744 *
	3.69	488	635	250	690	345	705	457	741	584	737	726
	4.23	426	554	218	602	301	615	399	646	509	643	633
3.69		407	529	208	575	288	588	381	618	486	614	605
4.23		355	462	181	502	251	513	332	539	424	536	527

\* Maximum values of the pump

\*\* Technical changes reserved

## Overview pump 1000Z

