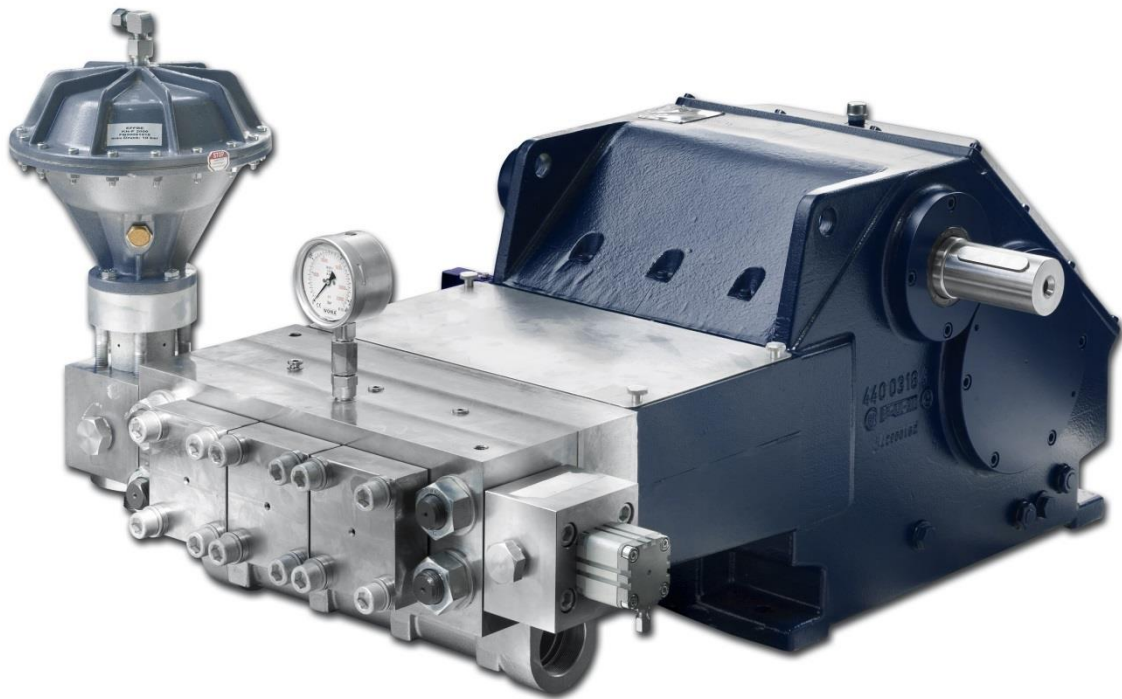


# High-pressure pump 400Z

The type 400Z high-pressure pump provides a max. operating pressure of 1,500 bar and a max. flow rate of 380 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.	980 kg
Inlet pressure connection		IG 2 ½"
Pressure connection		M24x1.5 M36x2 M42x2
Cooling water connection		G ½"
Crankshaft	max. min.	507 1/min Depends on operation parameters
Drive shaft		Diameter 70mm k6, feather key DIN 6885 Sheet 1, A20 x 12 x 100
Torque at drive shaft	max.	1,802 Nm
Moment of inertia J	i = 2.96 i = 3.60	0.167 kgm <sup>2</sup> 0.135 kgm <sup>2</sup>
Centrifugal moment GD <sup>2</sup>	i = 2.96 i = 3.60	6.54 Nm <sup>2</sup> 5.29 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.	30 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.	10 - 20 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	P26		P28		P30		P35		P45		P50	
1,500 [1/min]	1,800 [1/min]		1,500 bar*		1,300 bar		1,150 bar		850 bar		500 bar		400 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
2.96		507*	264	97	268	113	275	131	281*	182	278	306	276	380*
	3.60	500	261	95	265	112	271	129	277	179	274	302	272	375
3.60		417	217	79	221	93	226	108	231	149	229	252	227	312

\* Maximum values of the pump

\*\* Technical changes reserved

