

# **High-pressure pump** 700Z

The type 700Z high-pressure pump provides a max. operating pressure of 1,500 bar and a max. flow rate of 435 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.



## **HYDRO** SERVICE

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Technical data									
Weight	approx.	1,430 kg							
Inlet pressure connection		IG 3"							
-		M24x1.5							
Pressure connection with flange		M36x2							
		M42x2							
Cooling water connection		G ½"							
Crankshaft	max.	545 1/min							
	min.	Depends on operation parameters							
Drive shaft		Diameter 70mm k6,							
Drive shart		feather key DIN 6885 Sheet 1, A20 x 12 x 100							
Torque at drive shaft	max.	2,719 Nm							
Moment of inertia J	i = 3.30	0.491 kgm²							
	i = 3.45	0.473 kgm²							
Centrifugal moment GD <sup>2</sup>	i = 3.30	19.26 Nm²							
	i = 3.45	18.55 Nm²							
Inlet pressure	min.	1.5 bar							
	max.	5.0 bar							
Pressure amplitude	max.	± 2.0 bar							
Flow temperature	min.	+5 °C							
	max.	+45 °C (higher temperatures on request)							
Flow inlet requirement	min.	1.5x nominal feed rate of the pump,							
Emission sound pressure level		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 I							
Oil viscosity ISO VG under DIN 515	17-2 or -3	320 mm²/s							
Oil pressure lubrication		2.5 - 5.0 bar							
Oil pressure set value overflow valv	е	5.0 bar							
Oil filter fineness		0.025 mm							
Oil temperature	max.	80 °C							
	Set value	60 - 70 °C							
Heat exchanger cooling water requi	irement appr.	10 - 20 l/min							
Heat exchanger cooling water temp	erature min.	+5 °C							
	max.	+45 °C							
Heat exchanger cooling water press	sure min.	1.5 bar							
	max.	10 bar							

Performance variants**													
Pinion	shaft	Crank	P30		P35		P40		P45		P50		
1,500 [1/min]	1,800 [1/min]	shaft	1,500	1,500 bar*		1,300 bar		1,000 bar		800 bar		650 bar	
Gear	ratio	[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	
	3.30	545	408	149	486	206	496	273	507	349	513*	435*	
	3.45	522	390	143	465	197	474	261	485	334	491	416	
3.30		455	340	124	405	171	413	227	423	291	428	362	

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



### **Hydroservice LLC**

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## Overview pump 700Z

