

# High-pressure pump 190Z

The type 190Z high-pressure pump provides a max. operating pressure of 1,500 bar and a max. flow rate of 112 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.	350 kg
Inlet pressure connection		IG 1 ½"
pressure connection with flange		M24x1.5 M36x2 G ½"
Cooling water connection		IG 1"
Crankshaft	max. min.	424 1/min Depends on operation parameters
Drive shaft		Diameter 50mm k6, feather key DIN 6885 Sheet 1, A14 x 9 x 72
Torque at drive shaft	max.	779 Nm
Moment of inertia J		0.0294 kgm <sup>2</sup>
Centrifugal moment GD <sup>2</sup>		1.152 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.	8 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	approx.	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	P24		P26		P28		P30		P35	
1,500 [1/min]	1,800 [1/min]		1,500 bar*		1,300 bar		1,150 bar		1,000 bar		720 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
	4.25	424*	138	50	142	59	146	70	147*	81	147	112*
4.25		353	115	42	118	49	122	58	123	67	122	93

\* Maximum values of the pump

\*\* Technical changes reserved

# Overview pump 190Z

