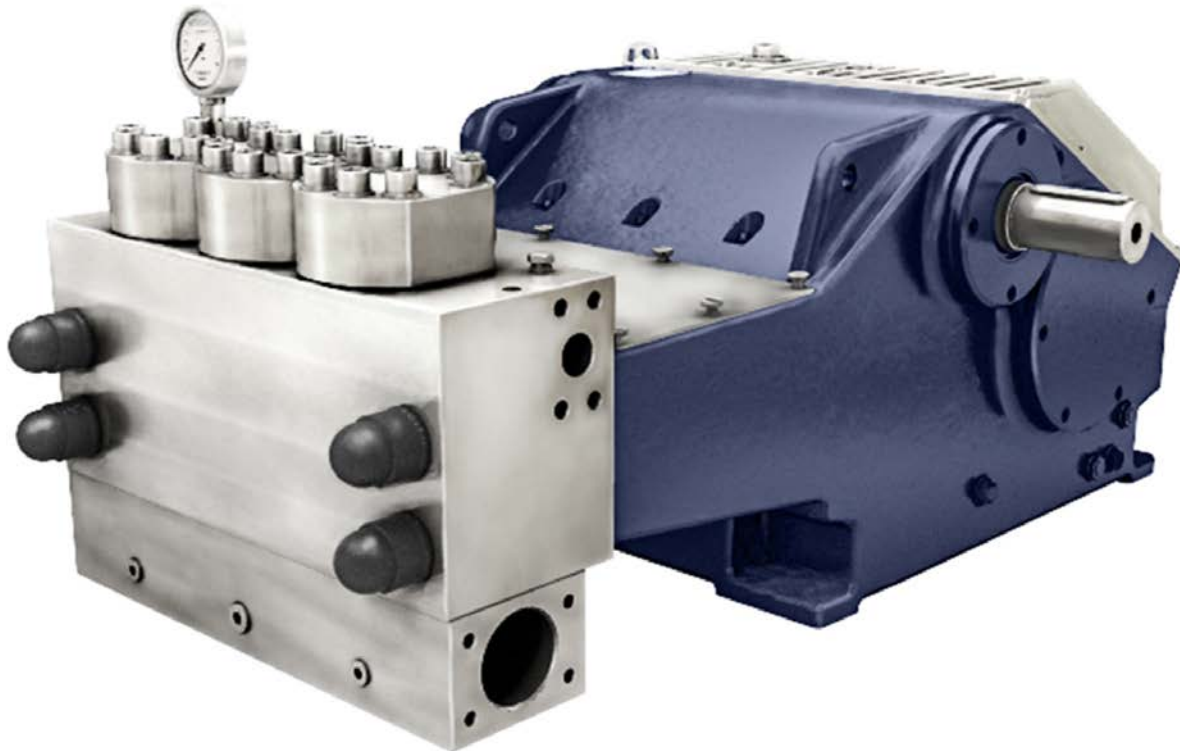


High-pressure pump 550ARP

The type 550ARP high-pressure pump provides a max. operating pressure of 400 bar and a max. flow rate of 819 l/min.



The ARP-series has operating pressures up to 400 bar and nominal flow rates up to approx. 1,680 l/min.

A special feature of this series is the high reliability also in the conveying of media contaminated with granular or fibrous solids up to a solids concentration of 3,000 mg/l and a grain size of up to 300 µm. This series is particularly suitable for sewer and pipe cleaning as well as descaling in the steel industry. The pump head of the ARP series consists of robust stainless steel (see figure); on request, the use of super duplex steels can also be tested for maximum resistance (deviation of the technical data, if applicable).

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

Technical data		
Weight	approx.	1,500 kg
Inlet pressure connection		3,000 psi SAE 4" hole pattern M16; 130.2x77.8
Pressure connection		6,000 psi SAE 2" hole pattern M20; 96.8x44.4
Cooling water connection		G ½"
Crankshaft	max. min.	455 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.	2,868 Nm
Moment of inertia J	i = 3.30	0.491 kgm ²
	i = 3.96	0.411 kgm ²
	i = 4.60	0.327 kgm ²
Centrifugal moment GD ²	i = 3.30	19.26 Nm ²
	i = 3.96	16.14 Nm ²
	i = 4.60	12.80 Nm ²
Inlet pressure	min. max.	4.0 bar 6.0 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 ² /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	P60		P65		P70		P75	
1,500 [1/min]	1,800 [1/min]		400 bar*		400 bar*		330 bar		290 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
3.30	3.96	455*	384	518	451*	608	435	710	440	819*
	4.60	391	331	446	388	523	374	611	379	705
3.96		379	320	431	376	506	362	592	367	682
4.60		326	276	371	324	436	312	509	316	587

* Maximum values of the pump

** Technical changes reserved

Overview pump 550ARP

