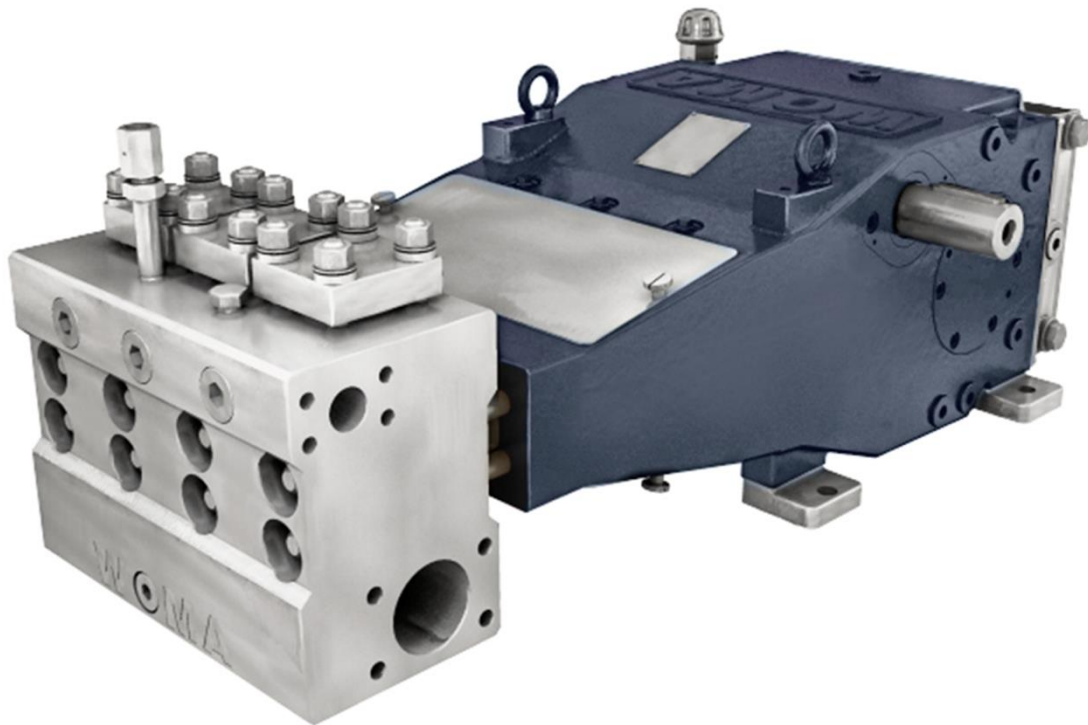


# High-pressure pump 190ARP

The type 190ARP high-pressure pump provides a max. operating pressure of 320 bar and a max. flow rate of 392 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 up to gear size 250 can be ordered as a favorable cast variant or as a robust NIRO variant (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.	360 kg GGG pump head 390 kg NIRO pump head
Inlet pressure connection GGG pump head		IG 3"
Inlet pressure connection NIRO pump head		3,000 psi SAE 3" hole pattern M16; 106.4x61.9
Pressure connection GGG pump head		IG 1 ¼"
Pressure connection NIRO pump head		6,000 psi SAE 1 ¼" hole pattern M14; 66.7x31.8
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.	809 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

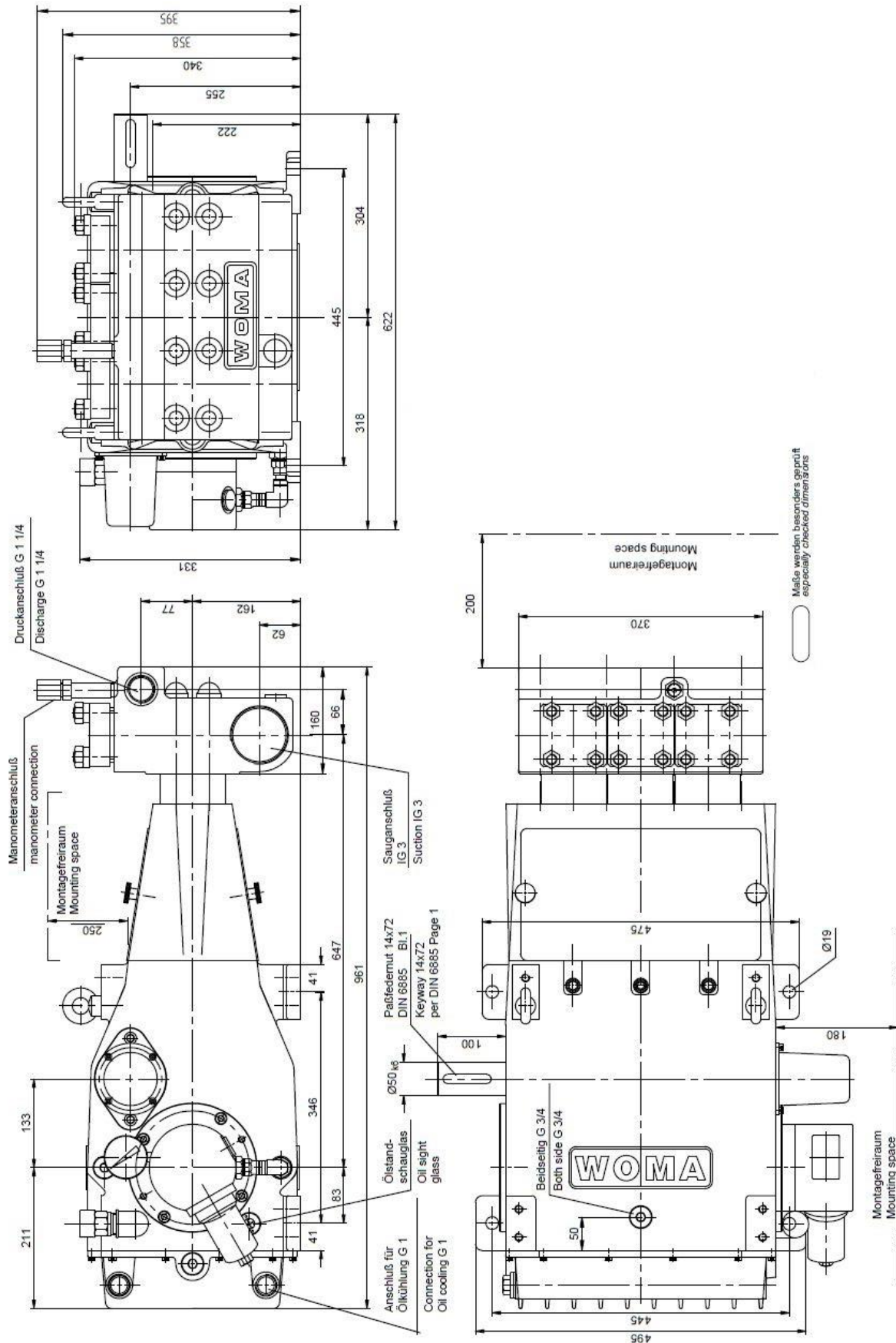
Performance variants**										
Pinion shaft		Crank shaft	P50		P55		P60		P65	
1,500 [1/min]	1,800 [1/min]		320 bar* ***		250 bar		250 bar		210 bar	
Gear ratio		[1/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]	[kW]	[l/min]
	4.25	424*	136	229	130	279	155*	332	153	392*
4.25		353	114	191	108	233	129	277	128	326

\* Maximum values of the pump

\*\* Technical changes reserved

\*\*\* only available in NIRO variant

## Overview pump 190ARP GGG



## Overview pump 190ARP NIRO

