

High Pressure Pump Series HDP 480

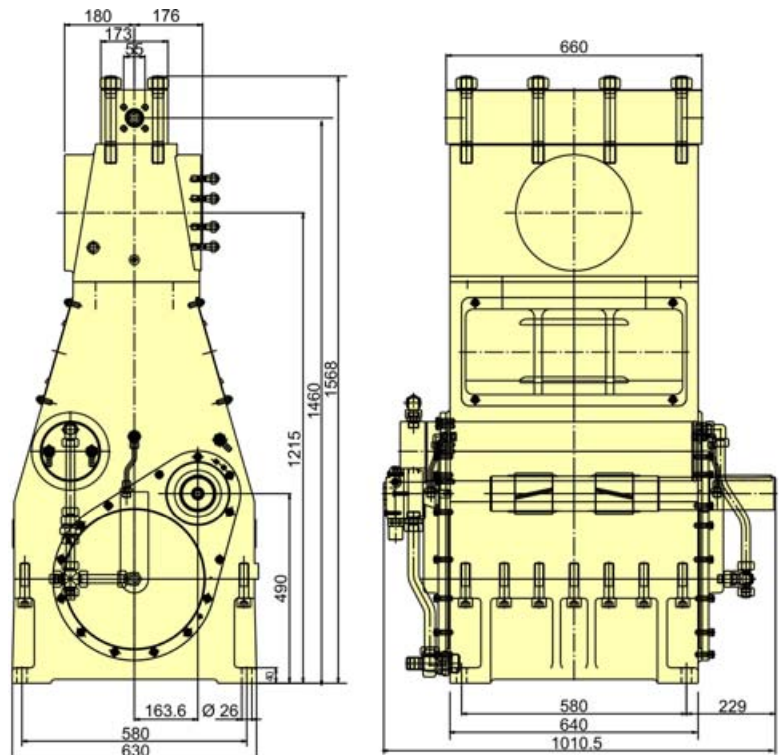
Hammelmann high pressure pumps are built to operate at the continuous maximum duty stated in the performance parameters. Just compare the crankshaft speed, average plunger speed, plunger diameter and power rating.

Features

- Power ratings up to 450 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

Quality and reliability

- Stainless steel stress free pump head
- Cross head piston bellows seal
- Choice of 'application specific' seal assemblies
- Solid ceramic or tungsten carbide plungers
- Choice of bronze or stainless steel suction chamber
- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Crankshaft supported by 2 bearings and incorporating twin helical speed reducing gears
- Pressurised oil lubrication system with oil cooler/filter



High pressure pump

Weight: 1960 kg

HDP 480 series, technical data

Calculated performance parameters (Rights reserved to modify design)

Q [l/min]	Required power rating [kW]				D	r.p.m.		
	300	350	400	450		n 1	n 2	
	Operating pressure [bar]							
53	3000				28	1500	315	
63	2550	2950	3000			1500/1800	380	
74	2200	2550	2900	3000		2100	445	
77	2100	2450	2750	3000		1800	465	
73	2200	2500			30	1500/1800	380	
85		2200	2500			2100	445	
89		2100	2450	2500		1800	465	
83	1850	2050			35	1500	315	
100			1550	1800		2050	1500/1800	380
116			1300	1550		1750	2100	445
122			1250	1450		1700	1900	1800
110	1400	1600			40	1500	315	
132	1150	1350	1550	1600		1500/1800	380	
154	1020	1200	1350	1500		2100	445	
160	980	1150	1300	1450		1800	465	
140	1100	1250			45	1500	315	
168	930	1080	1200	1250		1500/1800	380	
197	810	940	1080	1200		2100	445	
205	770	900	1030	1150		1800	465	
175	920	1020			50	1500	315	
210	760	880	1000	1020		1500/1800	380	
245	650	760	870	980		2100	445	
256	630	730	830	940		1800	465	
214	760	840			55	1500	315	
257	620	720	830	840		1500/1800	380	
300	540	630	720	810		2100	445	
313	520	600	690	770		1800	465	
258	640	710			60	1500	315	
309	520	610	690	710		1500/1800	380	
361	450	530	600	680		2100	445	
377	440	500	580	650		1800	465	
306	540	600			65	1500	315	
367	450	520	590	600		1500/1800	380	
428	390	450	510	580		2100	445	
447	370	430	490	550		1800	465	
354	470	520			70	1500	315	
425	380	440	510	520		1500/1800	380	
496	330	390	440	500		2100	445	
518	320	370	420	480		1800	465	
463	360	400			80	1500	315	
556	290	340	390	400		1500/1800	380	
648	250	290	340	380		2100	445	
677	240	280	320	360		1800	465	
586	280	310			90	1500	315	
703	230	270	310			1500/1800	380	
820	200	230	270	300		2100	445	
857	190	220	250	290		1800	465	
723	230	250			100	1500	315	
868	190	220	250			1500/1800	380	
1013	160	190	210	240		2100	445	
1058	150	180	200	230		1800	465	

- Rod force: 200 kN
 - Stroke: 100 mm
- Mean piston speed at n₂
- 315 r.p.m. = 1,06 m/sec
 - 380 r.p.m. = 1,27 m/sec
 - 445 r.p.m. = 1,48 m/sec
 - 465 r.p.m. = 1,54 m/sec

D = Piston/Plunger dia. [mm]
n1 = Motor/Engine r.p.m. [1/min]
n2 = Crankshaft r.p.m. [1/min]

Conversion table
Rating 1 kW = 1.34 HP
Op. pressure 1 bar = 14.5 psi
Flow rate 1 l = 0.264 US gallon
1 l = 0.22 Imp. gallon