

High Pressure Pump Series HDP 750

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 750 kW
- Vertical 5 cylinder design
- Wide variety of complementary ancillaries

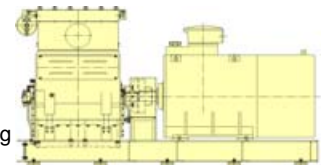
Quality and reliability

- 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
- Twin helical integral reduction gear with crankshaft supported by 4 bearings
- Pressurised oil lubrication system with oil cooler/filter



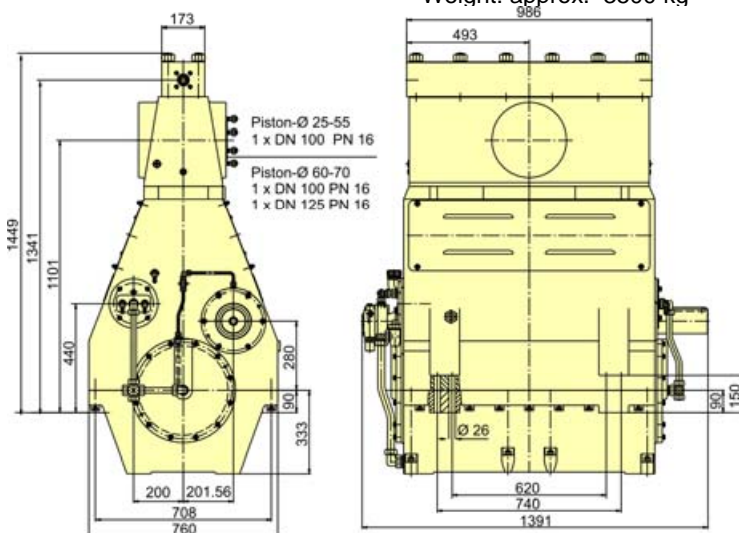
Stationary unit with electric motor

Length: 4000 mm
Width: 1800 mm
Height: 2000 mm
Weight: approx. 10000 kg at 750 kW



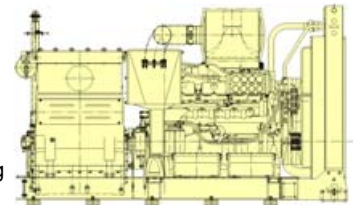
High pressure pump

Weight: approx. 3500 kg



Stationary unit with diesel engine

Length: 4350 mm
Width: 2100 mm
Height: 2350 mm
Weight: approx. 8300 kg at 750 kW



Main dimensions without accessories such as suction line, pressure regulator etc. All shown as right side drive. Detailed dimensional drawings and weights available on request.

HDP 750 series, technical data

Calculated performance parameters (Rights reserved to modify design)

Q [l/min]	Required power rating [kW]						D	r.p.m.	
	500	560	600	650	700	750		n 1	n 2
Operating pressure [bar]									
88	3000						28	1500	315
105	2500	2800	3000					1500/1800	380
123	2200	2450	2600	2850	3000			2100	445
128	2100	2350	2500	2700	2950	3000		1800	465
121	2200	2450	2500				30	1500/1800	380
141		2100	2300	2450	2500			2100	445
148		1950	2200	2350	2500			1800	465
139	1850	2000					35	1500	315
166	1500	1700	1800	2000	2050			1500/1800	380
194	1300	1500	1600	1700	1850	2000		2100	445
203	1250	1400	1500	1650	1750	1900		1800	465
183	1400	1600					40	1500	315
220	1150	1300	1400	1500	1600			1500/1800	380
256	1000	1150	1200	1300	1400	1500		2100	445
268	980	1100	1150	1250	1350	1450		1800	465
234	1100	1250					45	1500	315
281	930	1030	1100	1200	1250			1500/1800	380
328	810	900	970	1050	1100	1200		2100	445
342	770	860	930	1000	1080	1150		1800	465
292	910	1020					50	1500	315
350	750	840	900	980	1020			1500/1800	380
409	650	730	780	850	910	980		2100	445
427	620	700	750	810	870	940		1800	465
357	750	840					55	1500	315
429	620	690	740	810	840			1500/1800	380
500	540	600	650	700	750	810		2100	445
522	510	580	620	670	720	770		1800	465
430	630	710					60	1500	315
516	520	580	620	680	710			1500/1800	380
601	450	510	540	590	630	680		2100	445
628	430	480	520	560	610	650		1800	465
509	540	600					65	1500	315
611	440	500	530	580	600			1500/1800	380
713	380	430	460	500	540	580		2100	445
745	370	410	440	480	520	550		1800	465
591	460	520					70	1500	315
709	380	430	460	500	520			1500/1800	380
827	330	370	400	430	460	500		2100	445
864	320	350	380	410	440	480		1800	465
772	350	400					80	1500	315
926	290	330	350	380	390			1500/1800	380
1080	250	280	300	330	350	380		2100	445
1128	240	270	290	310	340	360		1800	465
977	280	310					90	1500	315
1172	230	260	280	300	310			1500/1800	380
1367	200	220	240	260	280	300		2100	445
1428	190	210	230	250	270	290		1800	465
1206	230	250					100	1500	315
1447	180	210	220	240	250			1500/1800	380
1688	160	180	190	210	230	240		2100	445
1763	150	170	180	200	220	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