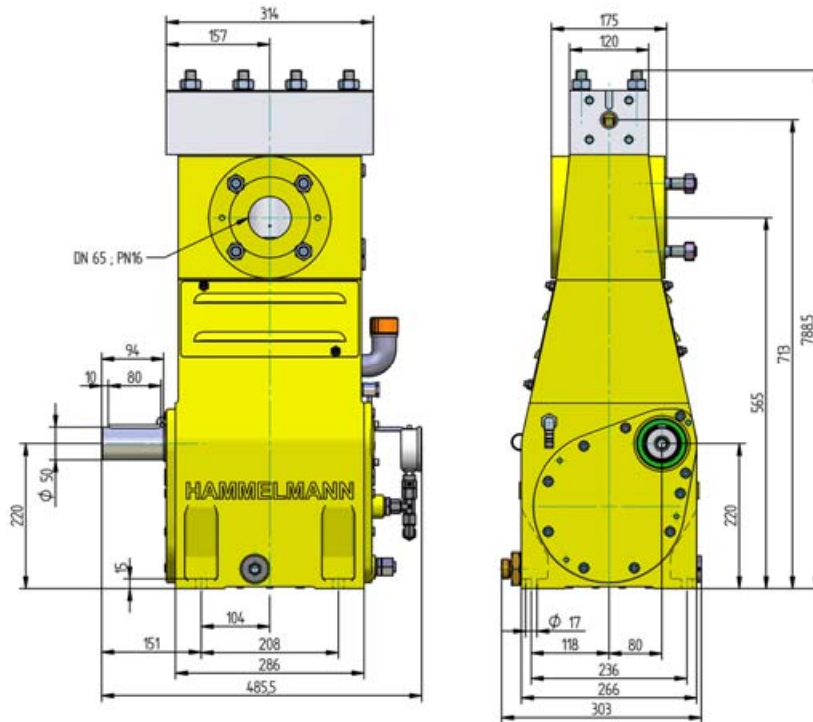


HDP 75 process plunger pump

Hammelmann process pumps are built to operate at continuous maximum duty. Just compare the crankshaft speed, average plunger speed, plunger diameter and power rating.

High pressure pump

Weight: approx. 240 kg



Features

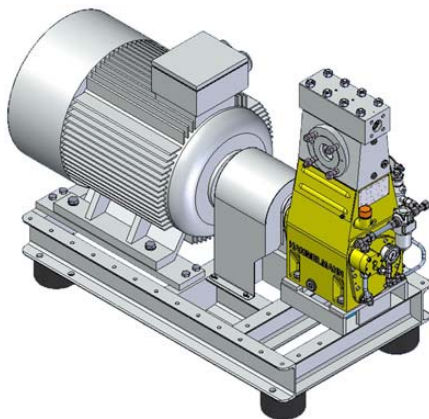
- Power ratings up to 45 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

Quality and reliability

- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Twin helical integral reduction gear with crankshaft supported by 2 bearings
- Pressurised oil lubrication system incorporating an oil pump and oil cooler/filter unit
- Bellows form hermetic seal between the suction chamber and crank section
- Bronze or stainless steel suction chamber
- Solid ceramic or tungsten carbide plungers
- Stainless steel pump head free of alternating stress
- Choice of performance and pumped medium specific seal and pump head assemblies

Stationary unit with electric motor

Length: 1502 mm
Width: 720 mm
Height: 1105 mm
Weight: approx. 1150 kg at 45 kW



Main dimensions without accessories such as pulsation damper, safety valve etc. Relevant drawings and weights available on request.



TA-Luft (Clean Air) certified to VDI 2440

In the Zero Emission design the pumped fluid is hermetically sealed within the pump preventing leakage to atmosphere during operation.



The bellow system is gastight.

HDP 75 series, technical data

Performance parameters

Q [m³/hr.]*	Required power rating [kW]**				D	r.p.m.	
	22	30	37	45		n 1	n 2
Operating pressure [bar]							
0,29	2200	3000	3000		12	1000	420
0,34	1840	2500				1000/1200	490
0,45	1410	1930	2380		15	1000	420
0,53	1180	1600	1980	2410		1000/1200	490
0,66	1040	1420	1750		17,5	1000	420
0,78	860	1180	1450	1770		1000/1200	490
0,87	790	1080	1340		20	1000	420
1,02	660	900	1100	1350		1000/1200	490
1,05	660	900	1100		22	1000	420
1,24	550	750	920	1120		1000/1200	490
1,27	550	750	930		24	1000	420
1,49	460	620	770	940		1000/1200	490
1,50	470	640	790		26	1000	420
1,76	390	530	660	800		1000/1200	490
2,00	350	480	590		30	1000	420
2,35	290	400	490	600		1000/1200	490
2,75	260	350	440		35	1000	420
3,23	210	290	360	440		1000/1200	490
3,63	200	270	340		40	1000	420
4,26	160	220	280	340		1000/1200	490
4,60	150	210	270		45	1000	420
5,39	130	170	220	260		1000/1200	490
5,68	130	170	210		50	1000	420
6,66	105	140	180	210		1000/1200	490
6,87	105	140	180		55	1000	420
8,06	85	120	150	180		1000/1200	490

* At pressures over 2000 bar approx. 5% of the flow rate is lost due to the compressibility factor of water

* m³/hr. = Water as measurement fluid
Flow rates can vary with type of medium

** Electric motor

D = Piston/Plunger dia. [mm]

n1 = Motor r.p.m.

n2 = Crankshaft r.p.m.

Conversion table

Rating 1 kW = 1.4 HP

Op. pressure 1 bar = 14.5 psi

Flow rate 1 l = 0.264 US gallon

1 l = 0.22 mp. gallon

- Rod force: 43 kN
- Stroke: 40 mm
- Mean piston speed at n₂
420 r.p.m. = 0,56 m/sec
490 r.p.m. = 0,65 m/sec

