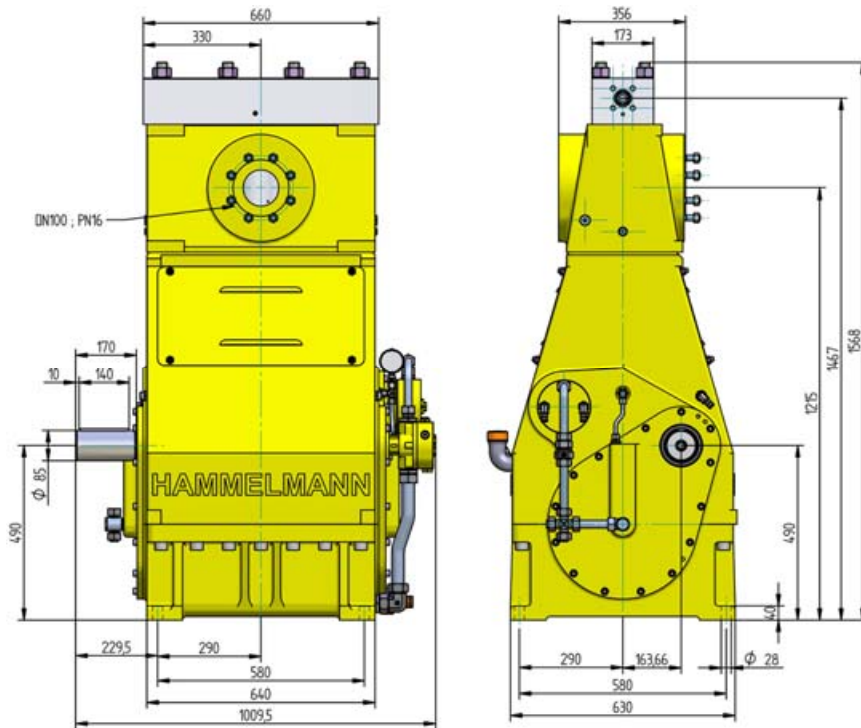


HDP 485 process plunger pump

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: 1960 kg



Features

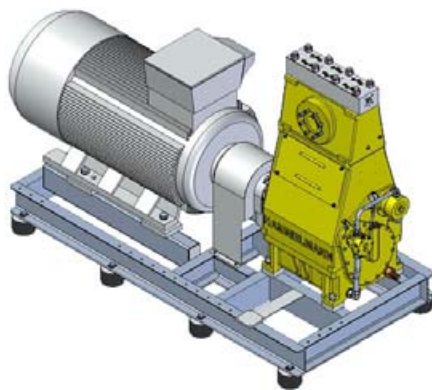
- Power ratings up to 400 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

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: 2896 mm
Width: 1330 mm
Height: 1910 mm
Weight: approx. 5600 kg at 355 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 bellows system is gastight.

HAMMELMANN[®]

HDP 485 series, technical data

Performance parameters

Q [m³/h]*	Required power rating [kW]**					D	r.p.m.	
	200	250	315	355	400		n 1	n 2
	Operating pressure [bar]							
2,11	2900	3000				28	1000	210
2,53	2400	3000					1000/1200	255
3,08	2000	2500	3000				1200/1470	310
3,64	1680	2100	2650	3000			1420/1730	365
3,32	1870	2080				35	1000	210
3,99	1530	1920	2080				1000/1200	255
4,86	1270	1590	2000	2080			1200/1470	310
5,75	1080	1350	1700	1920	2080		1420/1730	365
4,39	1430	1590				40	1000	210
5,27	1170	1470	1590				1000/1200	255
6,42	970	1220	1530	1590			1200/1470	310
7,60	830	1030	1300	1470	1590		1420/1730	365
5,62	1130	1260				45	1000	210
6,74	930	1160	1260				1000/1200	255
8,21	770	960	1210	1260			1200/1470	310
9,72	650	820	1030	1160	1260		1420/1730	365
7,01	920	1020				50	1000	210
8,41	750	940	1020				1000/1200	255
10,25	620	780	980	1020			1200/1470	310
12,13	530	660	830	940	1020		1420/1730	365
8,57	760	840				55	1000	210
10,29	620	780	840				1000/1200	255
12,53	510	640	810	840			1200/1470	310
14,83	440	550	690	780	840		1420/1730	365
10,31	630	710				60	1000	210
12,37	520	650	710				1000/1200	255
15,08	430	540	680	710			1200/1470	310
17,84	370	460	580	650	710		1420/1730	365
12,23	540	600				65	1000	210
14,90	440	550	600				1000/1200	255
17,88	370	460	580	600			1200/1470	310
21,15	310	390	490	550	600		1420/1730	365
14,18	470	520				70	1000	210
17,02	380	480	520				1000/1200	255
20,74	320	400	500	520			1200/1470	310
24,53	270	340	420	480	520		1420/1730	365
16,28	400	450				75	1000	210
19,53	330	420	450				1000/1200	255
23,80	270	340	430	450			1200/1470	310
28,16	230	290	370	410	450		1420/1730	365
18,52	360	400				80	1000	210
22,22	290	360	400				1000/1200	255
27,08	240	300	380	400			1200/1470	310
32,04	200	260	320	360	400		1420/1730	365
23,44	280	310				90	1000	210
28,13	230	290	310				1000/1200	255
34,27	190	240	300	310			1200/1470	310
40,55	160	200	250	290	310		1420/1730	365
28,94	230	250				100	1000	210
34,72	180	230	250				1000/1200	255
42,31	150	190	240	250			1200/1470	310
50,06	130	160	200	230	250		1420/1730	365
35,01	190	210				110	1000	210
42,02	150	190	210				1000/1200	255
51,20	130	160	200	210			1200/1470	310
60,57	110	130	170	190	210		1420/1730	365
41,67	160	170				120	1000	210
50,00	130	160	170				1000/1200	255
60,93	105	130	170				1200/1470	310
72,08	90	115	140	160	170		1420/1730	365

* 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.

- Rod force: 200 kN
 - Stroke: 100 mm
- Mean piston speed at n₂
210 r.p.m. = 0,70 m/sec
255 r.p.m. = 0,85 m/sec
310 r.p.m. = 1,03 m/sec
365 r.p.m. = 1,22 m/sec



Pump head in "High Flow" design for piston diameters of 90 mm and above

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